

UNIVERSITY GRANTS COMMISSION

AGENDA AND PROCEEDINGS

NO-206

PART-II

28TH MAY 1978

CONFIDENTIAL

UNIVERSITY GRANTS COMMISSION

...

Minutes of the 205th meeting of the University
Grants Commission held on April 24, 1978.

...

The following were present:

| | | |
|------------------------------|-----|---------------|
| Professor Satish Chandra | ... | Chairman |
| Professor B. Ramachandra Rao | ... | Vice-Chairman |
| Shri P. Sabanayagam | ... | Member |
| Professor R.P. Bambah | ... | Member |
| Professor S.S. Saluja | ... | Member |
| Dr. Chandran D.S. Devanesen | ... | Member |
| Dr. Amrik Singh Cheema | ... | Member |
| Prof (Miss) A.J. Dastur | ... | Member |
| Shri R.K. Chhabra | ... | Secretary |

Shri G. Ramachandran, Professor S. Gopal and Professor S. Maqbool Ahmed regretted their inability to attend the meeting.

SECRETARIAT

Additional Secretary

Dr. D. Shankar Narayan

Joint Secretaries *

Dr. J.N. Kaul
Shri S. Viswanath

Deputy Secretaries

Shri I.C. Menon
Dr. S.C. Goel
Dr. S.P. Gupta
Dr. T.N. Hajela
Shri Y.D. Sharma
Shri A.B. Gupta
Shri M.P. Balakrishnan
Shri L.R. Mal

Finance Officer

Shri B.S. Tyle

Item No. 1: To receive minutes of the Commission's meeting held on March 20, 1978.

...

The minutes of the meeting of the Commission held on March 20, 1978 were confirmed.

Item No. 2: (a) To approve the action taken on certain matters.
(b) To receive the items of information.
(c) To approve the statement of proposals which could not be accepted by the Commission.

...

(a) The Commission approved the action taken on items listed in Appendix 1*.

(b) This was noted.

The Commission desired that the Government of India be requested to provide similar facilities to the universities/institutions in the matter of import of scientific equipment as have been given to the Indian Institute of Technology.

(c) This was noted.

Item No. 3: To approve the statement of grants released after the meeting of the Commission held on March 20, 1978.

...

The Commission approved the grants released after the meeting of the Commission held on March 20, 1978 (Appendix II*)

Item No. 4: To receive the statement of expenditure incurred by the UGC during the year 1977-78 upto March 31, 1978.

...

This was noted

The Commission observed that a fairly large part of expenditure is incurred in the last quarter of the year and desired that the universities be asked to approach the Commission for release of funds as and when the expenditure is either incurred or committed and not wait till the end of the financial year.

Item No. 5: To receive a statement indicating the progress of issue of utilisation certificates during the period ending March 31, 1978.

...

This was noted

Item No.6: To consider the recommendations made at the meeting of the Committee appointed to advise the Commission on the Code of Conduct for teachers in universities/colleges held on February 21, 1973.

...

The Commission requested the Chairman to discuss in the first instance the report of the Committee with the President and such other members of the Standing Committee as he may desire, of the Association of Indian Universities. The Commission authorised the Chairman to take further action in the light of discussions.

Item No.7: To consider a reference from the Government of Panjab regarding the date from which five year period may be counted for obtaining minimum qualifications in respect of existing lecturers.

...

The Commission reiterated its earlier recommendation that the qualifications prescribed for Lecturers consequent upon the revision of scales of pay should not be made to apply to the persons appointed before January 1, 1973.

It was further noted that the qualifications for the post of Lecturers as prescribed by the Commission were communicated to the State Governments on February 20, 1975. The Commission was of the view that persons appointed as Lecturers after March 1, 1975 who did not fulfil the minimum qualifications prescribed for recruitment to the post of Lecturers be expected to attain these qualifications within a period of five years from the date of notification of the revised scales of pay by the State Government concerned.

Item No.8: To consider a reference from the Ministry of Education and Social Welfare regarding transferring the existing scheme of National Integration Samitis to the UGC.

...

The Commission agreed 'in principal' to take over henceforth the responsibility of implementation of the existing scheme of National Integration Samitis in universities and colleges so far implemented by the Ministry of Education & Social Welfare, Government of India. It was agreed that the manner in which the scheme would be implemented be decided as part of the Plan schemes of the UGC.

Item No.9: To consider the question of allowing students to appear privately in university examinations.

...

The Commission desired that the question of allowing students to appear privately in various university examinations may be considered

with the help of a Committee. The Commission was of the view that such facilities may be provided on a selective basis and limited to a few universities in each region. It was further noted that such a facility may not be provided by the unitary universities.

Item No.10: To consider the report of the Committee appointed by the Commission to examine the proposal to declare Dayalbagh Educational Institute, Dayalbagh, Agra as an Institute deemed to be University under section 3 of the UGC Act.

...

The Commission accepted 'in principal' the recommendations of the Committee which examined the proposal to declare Dayalbagh Educational Institute, Dayalbagh, Agra, as comprising of the D.E.I. Women's Training College, the DEI REI Degree College and DEI Engineering College, Dayalbagh, and agreed to recommend to the Central Government that the proposed Institute may be declared as an Institution deemed to be university under Section 3 of the UGC Act, 1956. The Commission was of the view that the proposed Institute would provide facilities for the restructured undergraduate courses and the postgraduate courses as already existing and that no new postgraduate course would be started without the prior concurrence of the Commission. It was agreed that the Central Government be requested that if the recommendations of the UGC are accepted and a decision is taken to issue the necessary notification, it would be necessary to discuss with the State Government the financial arrangements for the maintenance and development of the proposed Institute and also the Memorandum of Association and Rules of the proposed Institute.

Item No.11: To consider the report of the Visiting Committee appointed to examine the fifth plan proposals in Engineering & Technology of Birla Institute of Technology & Science, Pilani.

.....

The Commission accepted the recommendations of the Committee appointed to examine the Fifth Plan proposals in Engineering and Technology of Birla Institute of Technology and Science, Pilani and agreed to provide assistance as under:

| | | |
|----|-----------------------------|------------------|
| 1. | Spillover | Rs. 34,61,660 |
| 2. | Library building | Rs. 3,00,000 |
| 3. | Library Books & Journals | Rs. 6,00,000 |
| 4. | Equipment | Rs. 10,00,000 |
| 5. | Computer | Rs. 20,00,000 |
| 6. | Seminars, Conferences | <u>1,00,000</u> |
| | Total | <u>74,61,660</u> |

The Commission also agreed to the reappropriation of funds for the library building as recommended by the Visiting Committee.

The Commission further desired that a review of the Practico School Programme introduced by the Institute may be undertaken.

Item No.12: To consider the recommendations made by the Committee constituted by the Commission to evaluate the proposal of the Department of Physics, Rajasthan University for the establishment of a Centre for the Development of Physics Education.

....

The Commission was concerned to know the difficulties experienced by the University Departments regarding the revision of syllabus and introduction of new experiments in B.Sc curriculum of the University in the absence of proper representation of the teachers of the University Departments on the Boards of Studies.

The Commission accepted in principle the recommendations of the Committee for setting up a Centre of Physics Education in the Department of Physics, Rajasthan University and agreed to provide over the next three years a non-recurring grant of Rs. one lakh and a recurring grant of upto Rs.2.60 lakhs as given in Appendix III provided:

- (a) The University modifies the relevant provision for constitution of the Board of Studies so as to provide for an adequate representation to the teachers of the University Departments on it; and
- (b) obtains necessary assurance from the State Government that at the end of three years, the recurring expenditure would be taken over as committed expenditure and the activities of the Physics Education Centre would be continued on the University's own resources.

....

Item No.13: To consider the proposal of the Department of Biological Sciences - Madurai University for the purchase of an Electron Microscope as a Central facility for the University outside the V Plan allocation.

....

The Commission accepted the proposal of the Department of Biological Sciences, Madurai University for the purchase of an Electron Microscope as a central facility for the University and agreed to provide a sum of Rs.10 lakhs for this purpose outside the fifth plan allocation.

Item No.14: To consider the report of the Committee to the Jawaharlal Nehru University for assessing the additional needs of the School of Computer and System Sciences.

The Commission generally accepted the report of the Committee to assess the additional needs of the School of Computer and System Sciences of the Jawaharlal Nehru University and agreed to provide assistance as below:

| | |
|--------------------|-------------|
| Books and Journals | Rs. 2 lakhs |
| Furniture | Rs.20,000 |
| Equipment | Rs.10,lakhs |

Item No.15: To consider the report of the Committee appointed by the University Grants Commission to consider the proposals relating to the School of Physical Sciences , School of Environmental Sciences and the School of Life Sciences of the Jawaharlal Nehru University.

The Commission generally accepted the recommendations of the Committee relating to the School of Physical Sciences, School of Environmental Sciences and School of Life Sciences and desired that the report may be sent to Jawaharlal Nehru University for necessary action. The Commission agreed to provide assistance for purchase of equipment as below:

| | |
|--------------------------------------|----------------|
| 1. School of Life Sciences | Rs. 8.61 lakhs |
| 2. School of Environmental Sciences. | Rs. 4.00 lakhs |

Item No.16: To consider a proposal from the Jawaharlal Nehru University for the establishment of a Publication Unit.

The Commission expressed its inability to accept the proposal of Jawaharlal Nehru University for the establishment of a publication unit and agreed that the University, if it so desires, include this in its next plan proposals.

Item No.17: To consider the proposal of the Department of Psychology, Utkal University which has been selected as a Department of Special Assistance for additional posts of Six Lecturers.

The Commission agreed to support the Department of Psychology, Utkal University towards the creation of three additional posts of Lecturers under the Departments of Special Assistance programme. The Commission expressed its inability to accept the proposal of the University to convert the posts of Research Associates into that of Lecturers.

Item No.18: To consider the proposal of the Poona University for the sanction of a post of a Professor of Philosophy of Science for the Department of Philosophy.

....

The Commission accepted the proposal of the Poona University for sanction of a post of Professor of Philosophy of Science for the Department of Philosophy under Fifth Plan on the usual conditions.

Item No.19: To consider the proposal of the Bombay University regarding construction of a building at the Regional Instrumentation Centre, Bombay.

....

The Commission noted that the Maharashtra Government have agreed to undertake construction of the buildings of the universities in Maharashtra and levy a departmental charge of $4\frac{1}{2}\%$. The Commission desired that the Bombay University be advised to approach the Department of Atomic Energy to reduce the departmental charges to $4\frac{1}{2}\%$ per cent as in the case of the State Government.

The Commission could not accept the proposal of the Bombay University to reimburse an amount of Rs.2,21,500 towards the development charges already incurred by the university.

With regard to the provision of external services, the University be requested to indicate the details of items to be covered under external services for which a provision of 20 per cent of the civil cost has been suggested.

Item No.20: To consider the recommendations made by the Committee appointed by the Commission to consider the question whether honorarium and/or additional staff should be included in the budget approved for COSIP and COHSIP.

The Commission accepted the suggestions made by the Committee with regard to provision of honorarium and/or additional staff for the University department taking up Leadership Projects under COSIP AND COHSIP. The recommendations made by the committee are given in Appendix IV.

Item No.21: To consider the recommendations made by the Committee constituted by the Commission to evaluate the work done by the Department of Physics, Nagpur University under COSIP-ULP during the I Phase and to consider further proposal for undertaking follow-up activities during the next two years.

....

The Commission accepted the recommendations of the Committee regarding the second phase follow-up activities of the COSIP-ULP in physics in the Department of Physics, Nagpur University and

agreed to provide the grants over the next two years as indicated in Appendix V.

Item No.22: To consider the report of the Committee appointed by the Commission to examine the proposal of the Department of Philosophy, Poona University for participating in the University Leadership Programme.

....

The Commission agreed to invite the Department of Philosophy Poona University, to participate in the University Leadership Programme and approved the grants as indicated in Appendix VI.

Item No.23: To consider the proposal received from the Department of Geological Sciences, Jadavpur University, Calcutta for the implementation of inter-regional Programme of ULP in Geology under COSIP.

....

The Commission desired that a Committee may examine and make recommendations with regard to the implementation of the inter-regional programme of ULP in Geology under COSIP at Jadavpur University.

Item No.24: To consider the proposal of the Madras University for the development and creation of inter-collegiate facilities for the use of various colleges located in the Metropolitan City of Madras.

....

Consideration of this item was postponed.

Item No.25: To consider the report of the Committee on Autonomous Colleges appointed by the Madras University for granting autonomy to its affiliated Colleges.

....

The Commission agreed to give its concurrence to the proposal of Madras University to confer autonomous status on (1) St. Joseph's College Tiruchirapalli (2) Regional Engineering College, Tiruchirapalli and (3) Sri Avinashilingam Home Science College, Coimbatore subject to the conditions as stipulated by the Madras University.

The Commission agreed to provide assistance to these colleges on 100% for purposes of strengthening their faculty and academic programmes and administrative support required to enable these colleges to function as autonomous institutions. The assistance of the Commission would be available for a period of five years in the first instance and each college would be required to submit proposals for the consideration of the Commission.

Item No.26: To receive a note on the working of the Committee appointed by the UGC to review matters on (i) Teacher Pupil Ratio (ii) working of the Tutorials and Preceptorials Scheme (iii) Strength of Physical Directors and reorganisation of courses which do not attract sufficient number of students.
.....

The Commission noted that in accordance with the Ordinance XIII of the Ordinances of the University, no whole-time teacher appointed by the University or any college shall be required to do teaching work, whether lecturing or tutorial or laboratory work, for a number of working periods of 50 minutes each exceeding eighteen or for more than fifteen hours in all, during each week. The Commission agreed that in the absence of the University agreeing to prescribe the minimum work-load of teachers, the committee appointed to review the teacher pupil ratio in the colleges of the Delhi University for purposes of maintenance grant may take into account that a lecturer would be expected to take atleast 18 periods of 50 minutes each during each week.

Item No.27: To consider further a proposal from the Bombay University regarding grants for books and equipment to the Colleges under the Metropolitan Plan.
.....

The Commission accepted the proposal of Bombay University to provide Rs.20,000 for equipment to all Colleges in the jurisdiction of the Bombay University which decide to introduce life science programme at the undergraduate level as suggested by the University. The amount may be met out of the provision of Rs.1 crore made under the scheme for metropolitan colleges.

Item No.28: To consider the proposal of the S.P College, Poona for the setting up of an Audio Visual Centre under 'COHSSIP'.
.....

The Commission agreed to provide a grant of Rs.38,366 to S.P college Poona, towards the cost of alterations in the existing hall which houses the audio-visual centre set up by the College under the COHSSIP. It was noted that the total grant available to the College for COHSSIP for 1977-78 will now be Rs.1,14,116 against the ceiling of Rs. one lakh.

Item No.29: To consider a proposal from the Tata Institute of Social Sciences, Bombay for instituting free stipends for Scheduled Castes/Tribe students in the Institute.
.....

Consideration of this item was deferred.

Item No.30: To consider the question of framing guidelines for award of Degrees 'Honoris Causa' by Universities.

....

It was noted that the universities have laid down general guidelines for award of the degree 'Honoris Causa'. It was felt that it may be difficult to suggest detailed guidelines which may be made applicable uniformly in all the universities. However, the Commission was of the view that the universities be advised that normally the proposals for award of 'Honoris Causa' degree should have the approval of the Academic Council and the Executive Council/Syndicate before they are referred to the Chancellor for concurrence.

Item No.31: To consider the question of providing financial support to universities and colleges for field work by post-graduate and undergraduate Geology students.

....

The Commission desired that the question of providing assistance to the universities and colleges for enabling students to take up the field work in different subjects may be referred to the Planning Group.

Item No.32: To consider the question of constitution of a separate panel in Statistics.

....

The Commission could not accept the suggestion for constituting a separate Panel in the subject of Statistics. The Commission desired that the existing Panel in Mathematics and Statistics may be further strengthened by addition of more experts in the field of Statistics.

Item No.33: To consider the report of the Committee which examined the Departmental Research Programme received from the Department of Geography Calcutta University.

....

The Commission on the basis of the report of the Committee agreed to provide to the Department of Geography, Calcutta University, the assistance as indicated in Appendix VII for taking up major departmental research programmes over the next three years.

Item No.34: To consider the recommendations of the Committee appointed to work out the details of the support that may be given by the UGC for the establishment of College Development Council in the Universities.

....

The Commission generally accepted the recommendations of the Committee as indicated in Appendix VIII and desired that these may be referred to the Planning Group.

The Commission accepted the other recommendations of the Committee as given in Appendix IX and agreed to provide assistance to the universities which set up such College Development Councils. As recommended by the Committee, the assistance of the Commission which will be on 100 per cent basis would be available initially for a period of three years, after which the scheme may be reviewed. It was noted that where more than one College Development Council is set up in a University, assistance would be made available only for one Coordinator/Dean/Director to be appointed.

Item No.35: To consider a proposal from Vice-Chancellor, Panjab University, for assistance for attending the meeting of International Union of Pure and Applied Chemistry to be held in France in May, 1978.

....

The Commission noted that some Vice Chancellors are invited to attend international academic conferences in their personal capacity and that it may be difficult for them to take advantage of the provision made under the unassigned grant for this purpose. The Commission felt that it may be possible for it to consider such requests on merit of each case and provide assistance on 100 per cent basis for travel and maintenance. Accordingly, the Commission accepted the proposal from the Vice Chancellor, Panjab University to participate in the meeting of the Committee of Teaching of Chemistry of the International Union of Pure and Applied Chemistry to be held in France in May 1978.

Item No.36: To consider certain establishment matters of the University Grants Commission.

....

- (1) Recommendations made by the Selection Committee for Class I posts at the meeting held on March 21, 1978 for recruitment to the cadre of Education Officer.
- (2) Report of the Working Group constituted to consider the question of mechanising the process of tabulation of data collected by the 'Information and Statistical' Division of the UGC from various universities and colleges and to determine the machine-room and other technical staff required to deal with the work.
- (3) Reference received from the Ministry of Education & Social Welfare for making reservation of vacancies for the physically handicapped in the office of the UGC and the Central Universities.

(1) The Commission accepted the recommendations of the Selection Committee for Class I posts made at its meeting held on March 21, 1978

and approved the following candidates in order of merit for recruitment to the cadre of Education Officer in the Office of the U.G.C.

1. Dr. Harnandan Singh
2. Dr. C.B.S.R Sharma
3. Dr. Chander Prakash Srivastava
4. Dr. L.S Mehra
5. Dr. Dipos Ghosh
6. Dr. Hari Mohan

(2) The Commission accepted the recommendations made in the report by the Working Group appointed for mechanising the process of tabulation of data collected by the 'information & statistical' division of the UGC. The Commission inter-alia also decided that a Computer Unit may be set up under this Division (to be headed by a Divisional Head as usual instead of J.S(Stat) as indicated in the report and agreed that:

- i) The post of Systems Analyst (Rs.1500-1800) may be created and filled by deputation for a period of two years and on abolition thereafter, the sanctioned strength of the cadre of Senior Statistical Officer may be increased by one.
- ii) The existing post of Section Officer (Grade II) - Stat. may be abolished and the sanctioned strength of the cadre of Junior Statistical Officer may be increased by one.
- iii) Two posts of Programme Assistant (Rs.550-900) and one post of Technical Assistant (Rs.425-700) may be created.
- iv) The existing three cadres of Sorter Operator (Rs.330-560), Coder (Rs.330-560) and Key Punch Operator (Rs.260-400) may be merged into one cadre to be designated as Machine Operator-cum-Coder (Rs.330-560) and the strength fixed at 8 (including one leave reserve.)
- v) Sanctioned strength of the cadres of Statistical Assistant (Rs.425-700) and Key Punch Operator (Rs.260-400) may be reduced by five and one respectively by abolition of the posts.

(3) The Commission considered the reference and the clarification received from the Ministry of Education & Social Welfare on the subject of reservation of vacancies for the physically handicapped in services in the office of the UGC and the Central Universities and decided that so far as the office of the Commission is concerned, the reservations may be made in the cadres of Lower Division Clerk and Pecn. only which are filled by direct recruitment, to the extent of 3% for the orthopaedically handicapped only by way of inter-se exchange of vacancies reserved for physically handicapped persons.

With regard to the reference to be made to the Ministry of Education & Social Welfare for 'dereservation' or inter-se exchange in the case of physically handicapped, the Commission desired that this matter may be discussed with the Ministry.

Item No.37: To note the date and place for the next meeting of the Commission.

....

It was noted that the next meeting of the Commission will be held on 29-30th May 1978 at Shillong.

Item No.38: To consider the recommendations of the Committee constituted for the award of Junior Research Fellowships and Scholarships for Post-graduate studies in Science and Humanities including Social Sciences to the Students belonging to Scheduled Tribes of Border Hill Areas.

....

The Commission agreed that the applications already received from students in Ladakh under the scheme of Junior Research Fellowships and Scholarships for students in the border hill areas may be considered and decision taken by the Chairman. The objectives and scope of the scheme may be reviewed.

Item No.39: To consider the recommendations made by the Publication Committee about providing assistance to the Universities for publication of quality journals.

....

The Commission agreed that assistance may be provided to the universities for publication of quality journals upto a maximum of Rs.5,000 per annum initially for three years for a journal. The amount of assistance may be met by the universities out of the funds placed at their disposal for publication of research work including doctoral thesis. Assistance to a journal may be determined on the merits of each case keeping in view the suggestions made by the Advisory Committee in this regard.

Item No.40: To consider the question of fixing the duration for which assistance be provided to the Universities for Junior Research Fellowships allocated to them on the recommendations of the V Plan Visiting Committees.

....

The Commission agreed that the Universities may select candidates for award of junior research fellowships allocated on the recommendations of the V Plan Visiting Committees by March 31, 1979 and no selection be made for award of these fellowships after this date. The Commission

may provide assistance to the universities for all fellows selected by March 31, 1979 up to the end of their tenure as per fellowship rules.

Item No.41: To consider a note regarding payment of grants towards research projects approved by the Science Panels in respect of Universities which are yet to be brought under section 12-A of the UGC Act.
.....

Consideration of this item was deferred.

Item No.42: To consider the proposal from the Indian School of Mines Dhanbad for the construction of a building for the Executive Development Centre.
.....

The Commission desired that the Indian School of Mines be advised to include the proposal in its next Plan programme.

Item No.43: To consider the proposal of the Indian School of Mines Dhanbad for starting a regular B.Tech(Mining Machinery) Degree Course.
.....

. . . The Commission desired that the Indian School of Mines be advised to include the proposal in its next Plan programme.

Item No.44: To consider the proposal from the Madras University for financial assistance towards the appointment of additional teaching staff for development of Post-graduate Studies outside V Five Year Plan allocation.
.....

The Commission agreed to provide assistance to the Madras University towards the creation of additional teaching posts of one Professor, Six readers and eleven lecturers in the various departments as given in Appendix X on the usual terms and conditions.

Item No.45: To consider the proposal of the K.S Darbhanga Sanskrit University for setting up two Departments (i) Education (Shiksha Vibhag) and (ii) Prachin Itihas, Sanskriti, Purana evam Samajshastra.
.....

The Commission desired that the University be advised to include the proposal in its next Plan programme.

Item No.46: To receive the minutes of the meeting of the Standing Advisory Committee on Area Studies held on 29th March, 1978.

....

The Commission accepted the recommendations made by the Standing Advisory Committee on Area Studies as given in Appendix XI.

Item No.47: To consider a proposal from the M.S University, Baroda for Colombo Plan assistance for the Post-graduate diploma course in Low Cost Housing.

....

The Commission agreed that the proposal of M.S University of Baroda for Colombo Plan assistance for the postgraduate diploma course in Low Cost Housing may be recommended to the Government of India.

(R.K.Chhabra
Secretary

(Satish Chandra
Chairman

Appendix III to Item No. 12

Support approved to the Department of Physics,
Rajasthan University, Jaipur for the establish-
ment of Centre for development of Physics
Education.

.....

Non-recurring:

1. Equipment

Workshop and test equipment Rs. 1,00,000

Recurring (Per annum) for 3 years upto (1980-81)

| | | |
|---|-----|-----------------------------|
| 1. Development of equipment including materials. | Rs. | 75,000 |
| 2. Technical Staff | Rs. | 30,000 |
| 3. Clerical and Administrative staff | Rs. | 15,000 |
| 4. Academic Staff (Visiting Faculty) | Rs. | 75,000 |
| 5. Contact Programmes (Rajasthan University, Colleges), publication printing. | Rs. | 50,000 |
| 6. Contingency-working expenses | Rs. | 15,000 |
| Total Recurring estimated p.a. | | <hr/> Rs. 2,60,000 <hr/> |

The actual recurring grant, however, would be determined after taking into account the income from the sale of equipment and other materials developed under this programme on a net deficit basis, and after providing 25% of sale proceeds for a revolving fund to be built up for further development and production/sales.

Appendix IV to Item No. 20

The recommendations of the Committee accepted by the Commission:-

i) The additional staff to be appointed under COSIP-ULP should be recruited on a permanent basis and at the successful conclusion of the ULP duration, should be absorbed in the department initially as a charge on next plan allocation and subsequently as a part of the maintenance grant.

ii) In view of varying situations and needs of programmes the ULP proposals may be considered in a flexible manner and budgetary provisions made to suit best to each situation, instead of in a routine or a uniform pattern of funding.

iii) Until such time the entire question of honorarium to be paid to teachers in respect of various other schemes initiated by the Commission is considered and guidelines are formulated for making the extension activities as integral part of the work-load of the teachers in the universities and colleges and this culture becomes accepted by the academic community and the State Governments, the existing pattern of funding for ULP activities may be continued. The need of providing either additional staff and/or honorarium to the existing staff may be decided keeping in view the particular situation and nature of programmes to be undertaken by the different ULPs.

iv) In the budgets for the programme (a) where honorarium is provided the total amount available for a first phase of three years should not exceed Rs. 45,000/-; and Rs. 30,000/- for a two-year second phase follow-up activities. The expenditure could be adjusted according to the needs over the total duration of first or the second phase by the department concerned; (b) where additional staff is approved, it should generally be at the level of lecturers and only in very exceptional cases, the question of providing posts higher than this level could be considered while providing any new ULP projects henceforth. The number of such posts to be created should generally not exceed two in number.

Appendix V to Item No.21

Support approved for the department of Physics,
Nagpur University for COSIP - ULP - II Phase.

| | Rs. |
|---|----------|
| 1. Development of Laboratory equipment and teaching aids for colleges | 1,00,000 |
| 2. Teaching Staff | 50,000 |
| 3. Workshop facilities for development work | 25,000 |
| 4. Reference Library at University Department | 10,000 |
| 5. Short-term Institutes & Refresher courses, curriculum discussion groups. | 1,00,000 |
| 6. Publication (Initial/revolving fund) | 25,000 |
| 7. Office Staff | 20,000 |
| 8. Visits to colleges | 20,000 |
| 9. Miscellaneous | 10,000 |

Total: 3,60,000

(for a period 2 years)

Appendix VI to Item No.22

Support approved and recommended by the UGC
for the Department of Philosophy, Poona
University, Poona for participation in the
University Leadership Programme.

A. RECURRING

| | |
|--|--------------------|
| 1. Lecturers - 2 | |
| 2. Visiting Professor - 1 | Rs. 30,000/- p.a. |
| 3. Administrative & Technical Support | Rs. 15,000/- p.a. |
| 4. Honorarium to Faculty | Rs. 15,000/- p.a. |
| 5. Visits of University Teachers to colleges and vice-versa | Rs. 10,000/- p.a. |
| 6. Summer Institutes for college teachers (6 to 8 weeks) as per UGC norms. | Rs. 40,000/- p.a. |
| 7. Short-term courses round the year (about 1 week) | Rs. 110,000/- p.a. |
| 8. Stationery, papers/stencils, etc. | Rs. 10,000/- p.a. |
| 9. Contingency | Rs. 5,000/- p.a. |

Total Recurring p.a.
(other than two posts of Lecturers). Rs.1,35,000/- p.a.

Total Recurring for 3 years
(other than 2 posts of Lecturers) Rs.4,05,000/-

B. NON-RECURRING

| | |
|---|--------------|
| 1. <u>Library Books & Journals for Colleges</u> | |
| a) @ Rs.1,000/- per college for 33 colleges | Rs. 33,000/- |
| b) @ Rs.3,000/- per college for 27 colleges | Rs. 81,000/- |

p.t.o.

| | |
|---|-----------------------|
| c) Pool Library (including 10% for library furniture & equipments) | Rs. 35,000/- |
| d) Equipments including typewriters (Logical Notation - IBM) | Rs. 25,000/- |
| Total Non-Recurring: | <u>Rs. 1,74,000/-</u> |
| Grand Total (Recurring other than 2 posts of Lecturers) + Non-Recurring: | Rs. 5,79,000 |

Appendix VII to Item No. 33

Departmental Research Support approved for
Geography Department, Calcutta University

Non-Recurring

| (I) <u>Equipment etc.</u> | Rs. |
|--|----------|
| i) Laboratory Apparatus (pH meter testing kits, calculator etc.) | 45,000 |
| ii) Aerial Photographs Double mirror stereoscope etc. | 40,000 |
| iii) Cartographic Material stationery etc. | 20,000 |
| iv) Topo-sheets | 5,000 |
| (II) Motor Laboratory van | 1,10,000 |
| (III) Field Laboratory Van | 80,000 |
| (III) Publication of the report Thematic Maps with annotations | 20,000 |
| Total: | 2,21,000 |

Recurring for 3 years (upto 1980-81)

| | |
|---|--|
| i) Research Personnel: | |
| a) Research Associate - 1 (Rs.1,000/- P.M. consolidated) |) Actuals on basis of appointments made. |
| b) Senior Research Fellows -3 | |
| c) Junior Research Fellows -6 | |
| d) Assistant Cartographer-1 (Rs.400/- p.m. fixed) | |
| ii) TA/DA (for field staff and consultants) | 45,000 (Total ceiling for 3 yrs.) |
| iii) Contingency & working expenses | Rs.15,000 (-do-) |

Appendix VIII to Item No.34

Recommendations of the Committee appointed to work out the details of the support that may be given by the UGC for the establishment of College Development Council in Universities.

.....

1. It was noted that the Commission has recently released basic grants to the universities for disbursement to the arts, science and commerce colleges for the purchase of books and journals and scientific equipment. It was felt that this was a welcome step towards the decentralisation of disbursement of grants and more involvement of universities in the developmental process for the improvement of standards in the colleges. It was recommended that the Commission may also decentralise the process of release of such grants like establishment of students aid fund and book bank in colleges, student amenities etc. through the Universities. It would, however, be necessary to ensure that grants released to the universities for disbursement to colleges for various schemes are not held/locked up in the universities/for their own needs, but are properly and expeditiously disbursed to the colleges according to the guidelines laid down by the UGC.
2. It was noted that due to the paucity of matching share a large number of colleges are not taking advantage of the UGC assistance made available for the development proposals requiring matching contribution from the college managements. The colleges are not in a position to raise their contribution through private donations, nor can they raise the tuition fee from the students and expenses towards the salaries of the teaching staff having been increased with the introduction of revised pay scales of teachers. A suggestion was made that the colleges may charge developmental fee from the students, the income from which may be utilised as a matching contribution for claiming UGC assistance for various development projects.
3. Some of the state governments have decided to undertake the responsibility of direct payment of salary of teaching and non-teaching staff of the colleges receiving grant-in-aid from the government. The UGC, it was noted, is collecting the necessary information in this regard from the state governments.
4. UGC provides assistance to the colleges for the development, expansion and improvement of existing facilities in the colleges and not for fulfilling the affiliation conditions laid down by various universities.
5. It was noted that as per the recent amendment in the UGC Act, colleges set up after 17.6.1972 and granted temporary affiliation by the universities have not been declared fit to

receive central assistance. Such colleges should be permanently affiliated to the universities for being eligible for UGC assistance. Arising out of this, it was observed that as per the procedures obtaining in universities, various categories of affiliations are granted viz. temporary, provisional, affiliated upto a specified period etc.etc and a long span of a number of years elapses before a college is granted permanent affiliation. The Committee recommended that the UGC may request the universities to rationalise the procedure of granting permanent affiliation, so that the colleges are not debarred from claiming UGC assistance on this account. It was however, felt that with a view to maintaining high standard of collegiate education affiliation condition should be strictly enforced at the time of granting affiliation as well as thereafter.

6. In the colleges the UGC provides assistance
It was noted that for special/quality improvement schemes like COSIP, COHSIP etc., and for the development of facilities in the postgraduate departments/for approved projects on cent per cent basis, as in the case of university teaching departments. The Committee however, recommended that the UGC may liberalise its pattern of assistance and provide assistance for a large number of developmental scheme on 100% basis even for undergraduate programmes.
7. It was felt that there was very little interaction and collaboration between the academic faculty working in the university teaching departments and at the colleges. With a view to improving and raising the standard of higher education in the country, it is imperative that there is continuous channel of communications between the academic facilities in the universities and colleges and that the existing facilities in the universities are shared and made available to the college teachers also. The University faculty may spend some time in the college departments at regular intervals and similarly the teachers from the colleges may also work in the university departments and make use of the research and other facilities. A system of regular feedback should be developed.

Appendix IX to Item No. 34

Recommendations of the committee appointed to work out the details of the support that may be given by the UGC for the establishment of College Development Council in Universities as accepted by the Commission.

.....

1. There obtains presently some machinery for affiliation and inspection of colleges, laying down of courses of study, conduct of examinations etc. in the universities. In addition to the existing machinery, there was an urgent need for creating an appropriate body at the university headquarter for ensuring the proper planning and integrated development of affiliated colleges and to provide the colleges necessary help and guidance. The establishment of the College Development Council with the active and willing participation of various academic and administrative constituents, as envisaged by the UGC is a welcome step in the direction of improvement of standards of higher education. The efforts of such a body will bear fruit only if fullest cooperation and help is ensured between the existing machinery in the universities and the proposed College Development Council. In fact, the College Development Council should serve as a vital link between the UGC, University, Colleges and State Education Department.
2. The College Development Council may consist of the Vice-Chancellor, Coordinator/Director/Dean of the Council, a few senior teachers of the University teaching departments particularly those who have taken up COSIP/COHSIP etc. some principals of affiliated colleges, a few teachers from affiliated colleges, and a representative of the State Government. The total membership of the Council should not exceed 30.
3. The Coordinator/Director/Dean of the College Development Council may be appointed by the syndicate on the recommendations of the Vice-Chancellor. He may be given a fixed salary between Rs. 2,000 to Rs. 2,500 per mensem. He may be appointed on contract for a tenure of three years extendable by one more term only, but not beyond the age of 65 years, when he would retire.
4. The College Development Council may meet at regular intervals at least twice in an academic year, to review the implementation of various programmes and activities.
5. The College Development Council would serve as an academic guide to the college system on the one hand and on the other hand to ensure inter-action between the academic facilities

in the university departments to the teachers in the colleges. To fulfil this objective the College Development Council may take in consultation with the University or other other bodies concerned, all such steps as it may think fit for the promotion coordination and raising the standard of education in college, and for the purpose of performing its function it may:-

- (a) function as a policy making body in regard to proper planning and integrated development of colleges;
- (b) conduct surveys of all the affiliated colleges, districtwise, with a view to preparing and maintaining an up-to-date profile on each college under the university, reviewing the existing facilities and identifying the needs and gaps that need to be filled for the development of colleges and make such information available to the UGC and other concerned bodies;
- (c) advise the university on all matters relating to development of affiliated colleges, such as provision of adequate facilities -academic and physical - for raising the standard of learning, teaching and research and its periodic evaluation for enabling the university to maintain reasonable continuity of policy in regard to development of colleges;
- (d) prepare a perspective plan for the development and opening of new colleges, to enable the university and state education authorities to take long term decisions on the planning and development of colleges and may advise the university on matters relating to different disciplines taught in colleges at different levels of university education;
- (e) advise the university in regard to rationalisation and implementation of university's policy on affiliation of colleges;
- (f) keep close contact with the colleges with a view to helping them in their proper development, selection of teachers, student amenities, proper utilisation of grants and efficient implementation of UGC approved projects and reforms viz. examination reform, courses, COSIP, COHSIP, restructuring of courses to make them more relevant and significant not only to students, but also to the region as a whole by assessing social transformation and regional development.
- (g) review the facilities for postgraduate departments of colleges in terms of the norms prescribed by the UGC, and assist those having the potential of coming up to the norms within a few years.
- (h) help in the selective development of some colleges to remove regional imbalances; and also assist the colleges to realise their potential and in identification of colleges for autonomous status;

- (i) evaluate and assess the impact of UGC grants utilised by the colleges for the implementation of various development projects;
 - (j) ensure that the UGC grants released to university for disbursement to colleges are not held/locked up or utilised by the university for its own purposes, and also ensure that these grants are properly and expeditiously disbursed to colleges for specified purposes according to the guidelines laid down by the Commission;
 - (k) obtain from the colleges and furnish to the Commission utilisation certificates and completion documents in respect of UGC grants released/dispursed to colleges through the university, and help in monitoring the UGC programmes implemented by the affiliated colleges;
 - (l) ensure close and continued contact and interaction between the academic faculties at the university teaching departments and at the colleges;
 - (m) review the inspection reports of the colleges and suggest remedies for the defects and irregularities reported.
 - (n) perform such other functions as may be prescribed or as may be deemed necessary by the university for advancing the cause of collegiate education as may be incidental or conducive to the discharge of the above functions.
6. The College Development Council may be responsible to the Vice-Chancellor and send periodic reports to the UGC about the impact of UGC programmes. It may be desirable to lay down the functions of the College Development Council in the Statutes/ Ordinances of the Universities.
7. The University Grants Commission may provide adequate grants to meet the expenditure on:-
- (a) the salary and allowances paid to the Coordinator/Director/Dean.
 - (b) the salary and allowances for one post of Stenographer appointed by the University in the prevalent senior scale to assist the Coordinator in the discharge of his duties and the work of the council.
 - (c) actual TA and DA according to the university rules to the members for the meetings of the Council, its Committees and sub-committees and approved field work of the Coordinator alongwith his Stenographer.

8. The University will provide for adequate accomodation, furniture and fittings, stationary, typing machines, roneo facilities, secretariate and class IV staff and other facilities from its own resources for the efficient and smooth functioning of the College Development Council.

Appendix X to Item No. 44.

Additional teaching posts agreed to for the Madras University.

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| <u>Sl.No.</u> | <u>Department</u> | <u>Professor</u> | <u>Reader</u> | <u>Lecturer.</u> |
|---------------|---|------------------|---------------|------------------|
| 1. | Sociology | - | - | 1 |
| 2. | Commerce | - | - | 1 |
| 3. | English | - | - | 1 |
| 4. | Telugu | - | - | 1 |
| 5. | Kannada | - | - | 1 |
| 6. | Malayalam | - | - | 1 |
| 7. | Hindi | - | 1 | - |
| 8. | Anthropology | - | 1 | 1 |
| 9. | Geography | - | 1 | 1 |
| 10. | Statistics | - | 1 | - |
| 11. | School of Chemistry (Comprising Organic , Physical, Inorganic , and Analytical Chemistry) | - | 1 | 1 |
| 12. | Biochemistry | - | 1 | - |
| 13. | Nuclear Physics | 1 | - | 1 |
| 14. | Theoretical Physics | - | - | 1 |
| | Total | 1 | 6 | 11 |

Appendix XI to Item No. 46

University Grants Commission

1. The North Bengal University may not confine studies to Tibet and Bhutan. It may have flexibility to undertake studies on regions in Himalayas.
2. A sub-committee may examine the proposals received from universities for administrative, ministerial and library staff for the Area Studies Centres.
3. The Chairman, UGC and Chairman of the Standing Advisory Committee on Area Studies may appoint a sub-committee to consider the requirements of the universities to be met out of the Ford Foundation grant. In the utilisation of the Ford Foundation assistance for area studies, lower priority may be given to acquisition of books, as facilities through open general licence are already available for the import of books from abroad.
4. The following universities may undertake depth studies on Pakistan in the area indicated against each:

| <u>University</u> | <u>Area of Study</u> |
|-------------------|---------------------------|
| Panjabi & Lucknow | Economic Development |
| Rajasthan | Modern History & Politics |
| Panjab | Language and Literature |
| Bombay | Sindhi |

5. Calcutta University may be assisted for setting up a Centre for South East Asian Studies for undertaking studies on Bangladesh, Burma and Thailand.
6. The proposal of Osmania University for setting up a Centre of West Asian Studies is not acceptable.
7. The Osmania University may be provided assistance for developing expertise on the developing countries around the Indian Ocean on urban and regional planning. The university may involve other social sciences departments in this programme and send a detailed proposal which may be examined by the Commission and requisite assistance provided.
8. The proposal of Utkal University for undertaking studies on South East Asia and pefific islands may be deferred.
9. The Ministry of Education and Social Welfare may be informed that Calcutta University would be assisted for setting up a Centre of Area Studies on Bangla Desh, Burma and Thailand

and Madras University is already undertaking programmes of depth studies on Sri Lanka. These centres are required to undertake studies on the civilisation, culture, history geography and economy of the area concerned.

10. A committee may visit the centre of West Asian Studies, Aligarh Muslim University to examine its requirements for staff and other items. However, to meet its pressing requirements the university may be provided a professorship in political development and an amount of Rs.25,000 for publications.

11. The JNU may utilise its existing resources for undertaking studies on Central and Southern Africa.

12. The Committee noted that the JNU has already approached the Japan Foundation for assistance and the Commission may itself consider this matter in the light of general guidelines for assistance from foreign foundations. However, any assistance to JUN from Japan Foundation should not be at the cost of the programme of Japanese Studies of Delhi University for which the Government of Japan are already committed to provide assistance.

CONFIDENTIAL

UNIVERSITY GRANTS COMMISSION

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Meeting:

Dated : 24th April, 1978

Item No. 11: To consider the report of the Visiting Committee appointed to examine the Fifth Plan proposals in Engineering and Technology of Birla Institute of Technology and Science, Pilani.

To examine proposals received from the Birla Institute of Technology and Science, Pilani for the development of its departments of Engineering and Technology, the Commission appointed a Visiting Committee consisting of the following:

1. Prof. R. Misra
Department of Mechanical &
Industrial Engineering,
Indian Institute of Technology
Kharagpur.
2. Prof. M.A. Pai
Department of Electrical Engg.
Indian Institute of Technology,
Kanpur.
3. Prof. A.K. Basu
Department of Civil Engineering
Indian Institute of Technology
New Delhi.
4. Prof. M. Raja Rao
Department of Chemical Engineering
Indian Institute of Technology
Bombay.
5. Prof. S.K. Banerjee
Department of Pharmaceutical Sciences
M.S. University of Baroda
Baroda.

The Committee visited the Birla Institute of Technology and Science, Pilani on 22nd-23rd November, 1977. Unfortunately Prof. Misra expired at Pilani on 23rd November, 1977 due to sudden heart failure. Prof. M.A. Pai could not go to Pilani with the Visiting Committee.

P.T.O.

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A copy of the report of the Visiting Committee is enclosed as Annexure.*

Against the allocation of Rs. 75 lakhs the Visiting Committee has recommended proposals to the extent of Rs. 74,61,660/- after taking into account the spill-over of Rs. 34,61,660/- from fourth five year plan. The main observations and recommendations of the Visiting Committee are as follows:-

1. With the introduction of Practice School Programme it appears that the research activity at the institute has not kept up the pace it had before the introduction of this programme. While the Institute does have some research projects, it gives the impression of becoming more and more a general institution than a specialised one. The Institute may consider the question of striking a synthesis of producing practical engineers and research oriented engineers. This is desirable as more and more students are now joining post-graduate courses and also registering for Ph.D. in various engineering institutions.
2. After going around various Departments of Engineering & Technology, the Committee was satisfied with the work being done at the undergraduate level but at the post-graduate level, there is much to be desired.
3. With the amalgamation of various departments into divisions, it is but natural that they are losing their individual identity but it is also to note that they are now in a better position to take up inter-disciplinary programmes.
4. The Institute has recently given revised UGC scales to its staff and in some cases at the senior level, scales are even better than those recommended by the UGC. But while implementing these new scales, the Institute had to curtail its staff and that was achieved by amalgamation of various departments into divisions.
5. The members of the Committee went round the hostels and were satisfied with the arrangements for boarding and lodging. However, the Committee could not meet the students or teachers due to the sudden demise of Professor Misra.

P.T.O.

- 6. The Committee feels that it would be better if in future, Plan requirements of the B.I.T.S., Pilani are assessed by a single Committee rather than separately for Science, Humanities, Engineering & Technology.

A summary of the financial recommendations of the Committee is given below:-

| | | |
|-----------------------------|-----|------------------|
| 1. Spillover | Rs. | 34,61,660 |
| 2. Library Building | Rs. | 3,00,000 |
| 3. Library Books & Journals | Rs. | 6,00,000 |
| 4. Equipment | Rs. | 10,00,000 |
| 5. Computer | Rs. | 20,00,000 |
| 6. Seminars, Conferences | Rs. | 1,00,000 |
| Total | Rs. | <u>74,61,660</u> |

As regards the amount of Rs. 20 lakhs recommended for replacement of Computer, the Committee had pointed out to the Institute that expenditure on Computers is usually met by the Commission outside the Plan allocation. The Institute authorities however, stated that because of the highest priority attached to replacement of Computer, they were prepared to forgo other development programmes so as to keep this provision.

The matter is placed before the Commission for consideration.

AS(SA)/DS(CE)

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Report of the Visiting Committee on Fifth
Five Year Plan Development proposals in
Engineering & Technology of Birla Institute
of Technology & Science, Pilani (Rajasthan)

To examine the proposals received from the Birla Institute of Technology & Science, Pilani for the development of its Departments of Engineering & Technology during the Fifth Five Year Plan, the University Grants Commission set up a Visiting Committee consisting of the following:-

1. Professor R Misra,
Department of Mechanical & Industrial Engineering,
Indian Institute of Technology,
Kharagpur.
2. Professor MA Pai,
Department of Electrical Engineering,
Indian Institute of Technology,
Kanpur.
3. Professor AK Basu,
Department of Civil Engineering,
Indian Institute of Technology,
New Delhi.
4. Professor M Raja Rao,
Department of Chemical Engineering,
Indian Institute of Technology,
Bombay.
5. Professor SK Banerjee,
Department of Pharmaceutical Sciences,
MS University of Baroda,
Baroda.

Officer of the Commission

Sri BR Kwatra,
Assistant Secretary,
University Grants Commission,
New Delhi.

The Committee visited the Birla Institute of Technology and Sciences, Pilani on 22nd-23rd November, 1977. Professor MA Pai could not go to Pilani with the Visiting Committee.

The Committee could have the benefit of the expert advice of Professor R Misra on 22nd November, 1977 only as early on 23rd morning due to sudden heart failure, he was snatched away from the land of livings.

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The Committee visited the laboratories, workshops, library and hostels and had detailed discussions with the Director, Deputy Directors, Registrar and other faculty members.

History:

In the year 1901, Seth S. Birla started a Pathshala with only one teacher for educating his grandsons, Shri GD Birla and late Shri RD Birla. The Pathshala became a High School in 1925 and an Intermediate College in 1929. The Birla Education Trust was founded in the same year. The Intermediate College developed into a Degree College in 1943. In 1947, this College was raised to postgraduate standard. In 1950, Pharmacy courses were started and in 1952, it was bifurcated into College of Arts and the College of Science, Commerce and Pharmacy.

During the Second World War, the Government of India established a Technical Training Centre at Pilani for supply of Technicians for Defence Services and Industries. At the end of the war, the Birla Education Trust decided to convert this Centre into an Engineering College. Thus, degree courses in Electrical and Mechanical Engineering were started in 1946 and a Master's course in Electronics was introduced in 1955. A degree course in Civil Engineering was started in 1959 and Chemical Engineering in 1963. Master's courses in Civil, Electrical and Mechanical Engineering were introduced in 1965 and Chemical Engineering in 1968. In 1964, all the Birla Institutions at Pilani, viz. Birla College of Arts, Birla College of Science, Commerce and Pharmacy and Birla College of Engineering were merged into one institution known as Birla Institute of Technology & Science, Pilani. The Government of India in the Ministry of Education declared (on 27th June, 1964) the Birla Institute of Technology & Science, Pilani as a deemed University under Section 3 of the UGC Act.

Since 1973-74 the Institute has introduced Five/Four year Integrated Programme through which all students are now admitted to the Institute rather than to any particular course. Irrespective of the degree where duration varies from four to five years beyond the Higher Secondary stage, students follow the same integrated programme at the core level. The programme which a student ultimately gets is determined through a process of branching which takes place at the end of the first year and at the end of later years as determined by the upto date performance of a student, his preference and availability of seats in the various programmes. For the integrated programmes, there is an alternate stream known as Practice School Option wherein the objective is to relate education to the professional world. For this stream, students are required to pursue the training in selected industries and areas of professional activity.

The following programmes are being offered at the Institute at present:

(10/1)

I. Five Year Integrated Programmes with or without practice school leading to:

- (a) BE (Hons.) in (i) Chemical, (ii) Civil, (iii) Electrical & Electronics, (iv) Mechanical Engg.
- (b) MA (Hons.) in (i) Economics, (ii) English, (iii) Hindi
- (c) MMS (Master of Management Studies)
- (d) M.Sc.(Hons) in (i) Biological Sciences, (ii) Chemistry, (iii) Mathematics, (iv) Physics.
- (e) B. Pharm (Hons.) (Four Year Programme)

II. Two-Year Master's Programmes with Practice School or without leading to:

- (a) M.E. in (i) Chemical, (ii) Civil, (iii) Electrical & Electronics, (iv) Mechanical Engineering.
- (b) M. Pharm.
- (c) M.Sc.(Tech.) in Computer Science
- (d) M.Sc.(Tech.) in Instrumentation
- (e) M.Sc. (Tech.) Masoun Studies.
- (f) M.Sc.(Tech.) in Science & Technology Development.

A statement showing the enrolment of students to various courses in engineering, science and humanities during the period 1964-65 to 1977-78 is enclosed as Appendix-I. Another statement showing the number of undergraduate and postgraduate students passed out at the end of the sessions 1973-74, 1974-75, 1975-76 and 1976-77 is enclosed as Appendix - II.

The Institute authorities claimed that after the switch over to integrated programmes, the quality of students joining the Institute has considerably improved. This is supported by the following figures:

| Year | No. of applicants | No. of those with I Div. | No. of those admitted | Minimum % of the student admitted | No. of Rank holders admitted to assigned programmes | No. of science Talent Scholars admitted to M.Sc.(Hons.) |
|----------------|-------------------|--------------------------|-----------------------|-----------------------------------|---|---|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
| 1973-74 I Sem. | 1793 | 1311 | 484 | | | |
| II Sem. | 253 | 144 | 58 | 70.97 | 16 | 21 |

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| | 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|---------|---------|------|------|-----|-------|----|----|
| 1974-75 | I Sem. | 2010 | 1514 | 487 | - | - | - |
| | II Sem. | 444 | 303 | 42 | 73.30 | 8 | 24 |
| 1975-76 | I Sem. | 1992 | 1707 | 424 | | | |
| | II Sem. | 480 | 365 | 76 | 78.61 | 23 | 34 |
| 1976-77 | I Sem. | 2667 | 2256 | 469 | | | |
| | II Sem. | 367 | 283 | 44 | 78.50 | 25 | 41 |

From 1966 to 1976, the BITS, Pilani has produced only 11 Ph.Ds in engineering and technology as detailed below:-

| Year | Pharmacy | Chemical Engineering | Electrical Electronics Engg. | Mechanical Engineering | Total |
|--------------|----------|----------------------|------------------------------|------------------------|-------|
| 1966 to 1970 | | - | N I L | - | |
| 1971 | - | - | 1 | - | 1 |
| 1972 | - | - | 2 | - | 2 |
| 1973 | - | - | - | - | - |
| 1974 | 1 | 1 | 1 | - | 3 |
| 1975 | - | - | - | - | - |
| 1976 | 1 | - | 2 | 2 | 5 |
| | 2 | 1 | 6 | 2 | 11 |

The total sanctioned strength of teaching staff of the Institute is 267 as per details given in Appendix III. Against this the number of teachers in position as on 1-7-1976 was 202. With restructuring the system and development of inter-disciplinary courses, it has become difficult to know the sanctioned strength and staff in position of any one department as the Institute rules do not restrict the appointments to a particular department. However, viewed from the total student teachers ratio and the courses being offered, the average contact hours of teaching

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staff come to 11 per week. Under the circumstances, a stage seems to have come when development schemes/proposals of the BITS, Pilani, should be assessed for all the departments together instead of Humanities & Social Sciences and Sciences and Engineering and Technology separately.

Fourth Plan Schemes:

During the fourth five year plan, the University Grants Commission approved several schemes like development of under-graduate course in Chemical Engineering, development of post-graduate course in Pharmacy etc. Out of fourth plan schemes, the Institute has a spillover of Rs. 34,61,660/- which has to be adjusted against the fifth plan allocation of Rs. 75 lakhs. A statement giving details of the spillover is enclosed as Appendix IV. The Committee feels that the Institute should take steps to utilise the funds made available as quickly as possible and avoid such huge spillover as it seriously hinders the overall development of the Institute.

Practice School:

[It was] started in January 1973 when the first round the year practice station accommodating 12 engineering students and 4 engineering faculty members was started at Hindalco, Renukoot. In 1975 the programme facilities were increased to accommodate the entire student strength and at present the Institute is operating 42 practice stations supervised by about 50 staff members drawn from various faculties. The host organisations are said to be paying stipends to the students for their work.

The Practice School envisages practice by a student, in his profession before graduation, through direct involvement in problem solving efforts, concerned with solving practical problems, making improvements and serving immediate needs of the environment. This is more or less based on the practice of internship by medical graduates before getting the degree. The Practice School differs from the present engineering practical training and sandwich programmes in the sense that, firstly, it introduces a component of cognitive method of education, as against narrative method, as an integral part of the degree requirements in the University system, and secondly, it requires full-time faculty participation alongwith the students at the practice stations. Before the arrival of students at such stations, the faculty prepares a problem in consultation with the host organisation. The problems identified are such that, while on the one hand, they satisfy educational requirements, on the other hand, they are either of current or future interest to the host organisation. Students work on these problems in interdisciplinary teams with one of the students acting as the leader

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who has the total responsibility of planning, scheduling and implementing steps to the solution. The time requirements of the Practice School are accommodated within the normal duration of the degree course through planned integration of the courses.

The Practice School has been implemented in all the disciplines of the 5-year and 4-year integrated programmes leading to the degrees of BE(Hons), M.Sc.(Hons), MA(Hons) and B.Pharm.(Hons). It has also been extended to postgraduate programmes in engineering, museum studies, instrumentation, computer science and Pharmacy. The Practice School in engineering science and humanities disciplines is of a total duration of about 8 months each consisting of two components. B. Pharm (Hons.), M.Pharm(Hons.), ME(Hons) and M.Sc.(Hons.) practice programmes consist of only one component of 5½ months duration. The first component of the programme for BE(Hons), M.Sc.(Hons) and MA(Hons) students, designated as Practice I is of about 2 months duration and is implemented during the summer between third and fourth years. The second component of practice school in 5-year integrated programmes, designated as Practice II, as well as practice programmes in B Pharm.(Hons) and Postgraduate programmes in Computer Science, Pharmacy, Engineering, Instrumentation and Museum Studies are implemented during one of the semesters in the respective final years. These components are so staggered as to ensure that a practice station is operative round the year.

Fifth Plan proposals and recommendations

During the Fifth Five Year Plan, the Birla Institute of Technology and Science, Pilani, proposes to strengthen the Practice School Programme, expand library facilities and replace the computer. Against the allocation of Rs.75 lakhs made by the Commission, the Institute gave the following proposals:

| | Rs. |
|-------------------------------|--------------------|
| (1) Spillover | 34.62 lakhs |
| (2) Library Books & Journals | 1.00 lakh |
| (3) Additional staff | 1.43 lakhs |
| (4) Practice School Programme | 1.80 lakhs |
| (5) Computer Replacement | 30.00 lakhs |
| (6) Library Building | 3.00 lakhs |
| (7) Miscellaneous | 2.31 lakhs |
| Total | <u>74.16 lakhs</u> |

The reasons for large spillover are late sanction of schemes during Fourth Plan and also slow implementation due to very busy schedule of the staff and their involvement in the Practice School System. However, the Institute assured that early steps would be taken to wipe out this spillover as early as possible.

Regarding working of the Practice School Programme, the Committee was informed that there has not been much feedback to assess the popularity of this Programme as also the comparability of the students coming out of this programme with the students produced by the Indian Institutes of Technology. Therefore, the Committee feels that a careful evaluation must be done by educational researchers to evaluate the programme in a scientific manner. Apparently, the Committee was impressed by this programme as it answers the often repeated complaints that a typical undergraduate has no confidence to tackle problems of real life. Industries like Hindlaco, Centur Rayons, the Central Bank of India, Union Bank of India, ECIL are stated to have appreciated the performance of the BITS students. But it is necessary that a careful evaluation of the Practice School Programme is done before any assistance is given for this purpose.

LIBRARY:

The Library has at present about 1,50,000 volumes and subscribes about 1100 journals. It has 360 reading seats and remains open for more than 12 hours a day. The Library is well-equipped with reprography facilities including magnaprint, Reader Document Viewer, Photocopier, Multilith Offset Press and Robertson Vertical Camera. However, the Library appears to be jam-packed and there is no scope for expansion. The Committee found that due to shortage of accommodation books were heaped on floor in one of the rooms. The Institute, therefore, proposed that in place of separate building for the Department of Pharmaceutical Sciences recently approved by the Commission, the Institute may be allowed to construct a new building for the Library involving an expenditure of about Rs.30 lakhs. The Institute would meet this expenditure by utilising the grant of Rs.6 lakhs sanctioned for a new building for the Department of Pharmaceutical Sciences; Rs.6 lakhs sanctioned on the recommendation of the General Committee for a building for the Department of Biological Sciences and Rs.3 lakhs out of the allocation of Rs.75 lakhs made for Engineering & Technology during Fifth Five Year Plan. The Institute would provide necessary accommodation to the Department of Biological Sciences in the existing space occupied by the Library with minor additions and alterations.

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The Committee feels this is a reasonable demand and may be agreed to.

The Institute has asked for an amount of Rs.1 Lakh only towards purchase of library books, journals and back volumes during the Fifth Five Year Plan. The Committee, however, feels that this is too little an amount and Institute should spend more funds on this important activity. The Institute may also buy multiple copies of textbooks and provide the same to the students free of cost on sessional basis. The Committee, therefore, recommends a grant of Rs.6.00 lakhs for library books and journals during the Fifth Plan.

EQUIPMENT

The Institute has not asked for any equipment grant during the Fifth Plan. For this the members of the Committee were told that the Institute has already acquired a number of items from the assistance available from Ford Foundation and also has a large spillover out of equipment grants which would help it to purchase additional items of equipment needed during Fifth Plan. The Committee feels that a minimum provision of Rs.10 lakhs should be made towards purchase/replacement of equipment for the engineering departments so as to update the laboratory facilities for undergraduate instruction and postgraduate research and consultancy work. This is against a grant of Rs.12.62 lakhs already sanctioned by the Commission during Fifth Plan as basic/adhoc grants out of which an amount of Rs.5.25 lakhs only has been paid so far.

COMPUTER

The Institute presently has a 1130 IBM Computer which has reached saturation point in terms of its utility. Since considerable student and research use as well as processing of student grades and administrative task are done through the computer, the existing computer is not sufficient. Moreover, in any modern institution, a computer of reasonable memory and high speed is an essential part of teaching and research. Computer programming is presently a required course in the undergraduate programme and if the students have to solve some of the design problems of industry in their Practice School, exposure to computer is a must. To obtain fast turn around times, the existing computer is not sufficient. It would not be out of place to say that computer use has become a way of life in the B.I.T.S., Pilani. The Institute has made a provision of Rs.30 lakhs in its Fifth Plan proposals towards replacement of the computer.

It was pointed out to the Institute authorities that Commission provides assistance for purchase/replacement of computer outside the Plan funds and it may not be advisable on the part of the Institute to incur so much expenditure on

replacement of computer out of Plan funds. The Institute authorities, however, stated that it is because of the highest priority attached to replacement of computer that they are prepared to forego all other development programmes for this purpose. The Committee, therefore, feels that the Institute does require a bigger and faster computer to meet its requirements of education and research. An amount of Rs.20.00 lakhs is recommended for this purpose.

Miscellaneous

For a number of items usually called working expenses connected with the running of an institution such as attendance of seminars/conferences, etc. and upkeeping at the Practice School Stations, consumables for the running of the various labs and centre facilities, the Committee recommends an amount of Rs.1.00 lakhs during the Fifth Plan.

GENERAL OBSERVATIONS

1.. With the introduction of Practice School Programme, it appears that the research activity at the Institute has not kept up the pace it had before the introduction of this programme. While the Institute does have some research projects, it gives the impression of becoming more and more a general institution than a specialised one. The Institute may consider the question of striking a synthesis of producing practical engineers and the research oriented engineers. This is desirable as more and more students are now joining postgraduate courses and also registering for Ph.D. in various engineering institutions. The products of B.I.T.S. are likely to be found academically ill-equipped in view of the longer time spent on non-formal education.

2. There is an urgent need to have a proper evaluation of the Practice School Programme, as there has been criticism in the Press against this programme that it offers a soft option for a degree.

3. After going around various Departments of Engineering & Technology, the Committee was satisfied with the work being done at the undergraduate level but at the postgraduate level, there is much to be desired.

4. With the amalgamation of various departments into divisions, it is but natural that they are losing their individual identity but it is also to note that they are now in a better position to take up inter-disciplinary programmes.

5. The Institute has recently given revised UGC scales to its staff and in some cases at the senior level, scales are even better than those recommended by the UGC. But while implementing these new scales, the Institute had to curtail its staff and that was achieved by amalgamation of various departments into divisions.

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5. The members of the Committee went round the hostels and were satisfied with the arrangements for boarding and lodging. However, the Committee could not meet the students or teachers due to the sudden demise of Professor Misra.

6. The Committee feels that it would be better if in future plan requirements of the B.I.T.S., Pilani are assessed by a single committee rather than separately for Science, Humanities, Engineering & Technology.

7. The Institute should take effective steps to utilize the funds made available as quickly as possible so as to avoid huge spillover to the next plan as it seriously hinders the overall growth and development of the Institute.

A summary of the financial recommendations of the Committee is given below :-

| | |
|-------------------------------|---------------|
| 1. Spillover | Rs. 34,61,660 |
| 2. Library Building | Rs. 3,00,000 |
| 3. Library Books & Journals | Rs. 4,50,000 |
| 4. Equipment | Rs. 10,00,000 |
| 5. Computer | Rs. 20,00,000 |
| 6. Seminars, Conferences etc. | Rs. 1,00,000 |
| | <hr/> |
| | Rs. 74,61,660 |
| | <hr/> |

The Committee puts on record its gratefulness to the Director, the Registrar and other faculty members of the B.I.T.S. for their hospitality and cooperation in its work.

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APPENDIX I

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Statement showing enrolment of students to various courses in Engineering, Sciences and Humanities during the period 1964-65 to 1977-78.

| | <u>Under Graduate</u> | <u>Post Graduate</u> | <u>Ph.D.</u> | <u>Total</u> |
|-------------|-----------------------|----------------------|--------------|--------------|
| 1964-65 (E) | 1272 | 17 | - | 1289 |
| (S) | 228 | 120 | 18 | 366 |
| (H) | 86 | 20 | - | 106 |
| | <u>1586</u> | <u>157</u> | <u>18</u> | <u>1761</u> |
| 1965-66 (E) | 1440 | 48 | 1 | 1498 |
| (S) | 218 | 145 | 19 | 382 |
| (H) | 4 | 18 | 1 | 23 |
| | <u>1671</u> | <u>211</u> | <u>21</u> | <u>1903</u> |
| 1966-67 (E) | 1519 | 70 | 1 | 1590 |
| (S) | 259 | 149 | 30 | 438 |
| (H) | 29 | 34 | 1 | 64 |
| | <u>1807</u> | <u>249</u> | <u>32</u> | <u>2088</u> |
| 1967-68 (E) | 1620 | 88 | 1 | 1709 |
| (S) | 293 | 141 | 38 | 472 |
| (H) | 60 | 53 | 7 | 120 |
| | <u>1973</u> | <u>282</u> | <u>46</u> | <u>2301</u> |
| 1968-69 (E) | 1539 | 84 | 19 | 1642 |
| (S) | 364 | 199 | 53 | 616 |
| (H) | 81 | 49 | 15 | 145 |
| | <u>1984</u> | <u>232</u> | <u>87</u> | <u>2303</u> |
| 1969-70 (E) | 1363 | 83 | 13 | 1459 |
| (S) | 304 | 116 | 61 | 481 |
| (h) | 89 | 46 | 15 | 150 |
| | <u>1756</u> | <u>245</u> | <u>89</u> | <u>2090</u> |
| 1970-71 (E) | 1257 | 108 | 16 | 1381 |
| (S) | 288 | 144 | 42 | 474 |
| (H) | 106 | 65 | 13 | 184 |
| | <u>1651</u> | <u>317</u> | <u>71</u> | <u>2039</u> |

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| | | | | | |
|---------|------------------------------|------|-----|--------|------|
| 1971-72 | (E) | 1172 | 165 | 25 | 1362 |
| | (S) | 303 | 183 | 56 | 542 |
| | (H) | 101 | 89 | 19 | 209 |
| | | 1576 | 437 | 100 | 2113 |
| 1972-73 | (E) | 1269 | 160 | 30 | 1459 |
| | (S) | 212 | 196 | 59 | 467 |
| | (H) | 73 | 94 | 19 | 186 |
| | | 1554 | 450 | 108 | 2112 |
| 1973-74 | | 1668 | 289 | 22 (E) | - |
| | 5yr/4yr Integrated programme | | | 48 (S) | - |
| | | | | 17 (H) | - |
| | | 1668 | 289 | 87 | 2044 |
| 1974-75 | | 1799 | 186 | 17 (E) | - |
| | 5yr/4yr Integrated Programme | | | 52 (S) | - |
| | | | | 21 (H) | - |
| | | 1799 | 186 | 90 | 2075 |
| 1975-76 | | 1838 | 129 | 30 (E) | - |
| | 5yr/4yr Integrated Programme | | | 38 (S) | - |
| | | | | 20 (H) | - |
| | | 1838 | 129 | 88 | 2055 |
| 1976-77 | | 1973 | 63 | 25 (E) | - |
| | 5yr/4yr Integrated Programme | | | 45 (S) | - |
| | | | | 18 (H) | - |
| | | 1973 | 63 | 88 | 2124 |
| 1977-78 | | 2107 | 49 | 17 (E) | - |
| | 5yr/4yr Integrated Programme | | | 35 (S) | - |
| | | | | 13 (H) | - |
| | | 2107 | 49 | 65 | 2221 |

E = Engineering
S = Science
H = Humanities

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APPENDIX-II

Statement of Undergraduate and Postgraduate students passed out at the end of the session 1973-74, 1974-75, 1975-76 and 1976-77

| Discipline | 1973-74 | | 1974-75 | | 1975-76 | | 1976-77 | |
|--------------------------------|---------|------|---------|------|---------|------|---------|------|
| | U.G. | P.G. | U.G. | P.G. | U.G. | P.G. | U.G. | P.G. |
| Chemical Engg. | 38 | 9 | 41 | 14 | 39 | 6 | 44 | 11 |
| Civil Engg. | 22 | 2 | 35 | 3 | 25 | - | 22 | - |
| Electrical Engg. | 42 | 7 | 53 | 6 | 38 | 7 | 10 | 4 |
| Electronics Engg. | 43 | 11 | 38 | 9 | 42 | 10 | 24 | 5 |
| Electrical & Electronics Engg. | - | - | - | - | 20 | - | 50 | - |
| Mechanical Engg. | 51 | 9 | 57 | 15 | 51 | 54 | 50 | 12 |
| Pharmacy | 34 | 9 | 21 | 19 | 27 | 10 | 29 | 1 |
| Management | - | 36 | - | - | - | 17 | 39 | - |
| Sc. (Tech) Electronics | - | 17 | - | 12 | - | 14 | - | 1 |
| Sc. (Tech.) Computer | - | - | - | 8 | - | 6 | - | 7 |
| Sc. (Tech.) Instrumentation | - | - | - | 6 | - | 7 | - | 2 |
| Sc. (Tech.) Museum Studies | - | - | - | 4 | - | 6 | - | 4 |
| Arts | 21 | - | 8 | - | - | - | - | - |
| Science | 22 | - | 26 | - | 6 | - | - | - |
| Bio-Science | - | 17 | 1 | 3 | - | 1 | 5 | - |
| Chemistry | - | 25 | - | 2 | - | 7 | 10 | - |
| Mathematics | - | 1 | - | 1 | - | 2 | 8 | - |
| Physics | - | 19 | - | - | - | 7 | 9 | - |
| Economics | - | 3 | - | - | - | 5 | 6 | 5 |
| Hist. & Pol. Science | - | 3 | - | - | - | - | - | - |
| English | - | 2 | - | - | - | - | - | - |
| | 273 | 170 | 280 | 82 | 248 | 109 | 306 | 37 |

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APPENDIX-III

| Name of the Discipline. | Sanction strength before BITS became deemed University | | | | Additional posts sanctioned by UGC during III/IV Plan | | | | Existing sanctioned staff | | | | |
|------------------------------|--|-----------|------------|----------|---|-----------|-----------|----------|---------------------------|-----------|-----------|-----------|------------|
| | P | AP | L | A/L | P | AP | L | AL | P | AP | L | AL | Tot. |
| | Tutors | | | | | | | | | | | | |
| Chemical Engg. | - | - | - | - | 2 | 6 | 5 | - | 4 | 6 | 3 | - | 13 |
| Civil Engg. | 2 | 2 | 8 | - | 2 | 3 | 2 | - | 8 | 4 | 9 | - | 21 |
| Electric & Electronics Engg. | | | | | | | | | 13 | 17 | 12 | 5 | 47 |
| Electrical | 2 | 3 | 7 | - | 2 | 6 | 7 | - | | | | | |
| Electronics | 2 | 1 | 7 | - | 2 | 3 | 1 | - | | | | | |
| Instrumentation. | - | - | - | - | - | 1 | - | - | 1 | - | - | - | - |
| Mechanical Tech (Material) | 3 | 3 | 12 | - | 2 | 8 | 10 | - | 7 | 10 | 6 | 9 | 32 |
| Biological Sc. | | | | | | 1 | | | 7 | 16 | 5 | 9 | 15 |
| Botany | 1 | 1 | 4 | - | - | - | - | - | | | | | |
| Zoology | 1 | 1 | 4 | - | - | - | - | - | | | | | |
| Chemistry | 1 | 4 | 10 | 1 | - | - | 2 | - | 4 | 8 | 8 | 3 | 23 |
| Mathematics | 3 | 1 | 12 | 1 | - | 2 | 2 | - | 9 | 5 | 7 | 1 | 22 |
| Pharmacy | 1 | 3 | 5 | - | 2 | 4 | 2 | 4 | 4 | 6 | 3 | 4 | 17 |
| Physics | 2 | 1 | 13 | - | - | - | 2 | - | 6 | 6 | 14 | 1 | 27 |
| Economics | 1 | - | 2 | - | - | - | - | - | 2 | 1 | - | - | 3 |
| Humanastic Studies | | | | | | | | | - | 1 | 6 | - | 7 |
| History & Pol. Sc. | 1 | - | 5 | - | - | - | - | - | | | | | |
| Philosophy | - | - | 1 | - | - | - | - | - | | | | | |
| Social Scs. | - | - | 2 | - | - | - | 1 | - | | | | | |
| Languages | | | | | | | | | 3 | 5 | 18 | 1 | 27 |
| English | 2 | - | 19 | 1 | - | - | 1 | - | | | | | |
| Modern Lan. | 1 | - | 5 | - | - | - | - | - | | | | | |
| Management (Commerce) | - | - | - | - | - | - | - | - | 3 | 3 | 5 | - | 11 |
| Music & Fine Arts | - | - | 1 | - | - | - | - | - | - | - | 1 | - | 1 |
| Total: | 24 | 21 | 122 | 3 | 12 | 34 | 35 | 4 | 68 | 78 | 97 | 24 | 267 |

BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE, PILANI
SCHEME-WISE SPILLOVER STATEMENT FROM IVTH PLAN

| <u>Name of De-artment & purpose.</u> | <u>Approved cost.</u> | <u>UGC share</u> | <u>Grant paid upto 31.3.74</u> | <u>Spillover to Vth Plan.</u> | <u>Grant paid from 1.4.74 to 31.3.77</u> |
|--|-----------------------|------------------|--------------------------------|--|--|
| Development of P.G. courses in Engg. & Technology Staff & maintenance & Lib. | 14,85,000 | 14,85,000 | 1,75,000 | 10,75,000 (approx.) upto 31.12.76 (on the basis of actual statement of expenditure) | 9,00,000 |
| Equipment, Library, Furniture & Fittings. | 5,10,000 | 5,10,000 | 50,000 | 4,60,000 | 4,60,000 |
| <u>P.G. Course in Pharmacy</u> | | | | | |
| Staff & maintenance | 5,85,000 | 5,85,000 | - | 5,85,000 | 1,91,000 |
| Building | 6,00,000 | 6,00,000 | - | 6,00,000 | - |
| Equipment | 3,00,000 | 3,00,000 | - | 3,00,000 | 1,68,658.41 |
| Library | 10,000 | 10,000 | - | 10,000 | 10,000.00 |
| <u>Degree Course in Chemical Engg.</u> | | | | | |
| Staff & Maintenance | 9,72,250 | 4,86,125 | 66,500 | 4,19,625 | 24,479 (on the basis of actuals less income upto completion) |
| <u>Introduction of M.E. Courses.</u> | | | | | |
| Staff & maintenance | 18,71,000 | 18,71,000 | 10,86,000 | 12,034.14 (Actuals completion of 5 years) | 617 (Full & final after deducting unspent balance) |

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VTH PLAN SCHEMES

| S. No. | Scheme | Approved Cost | UGC Share | Grants paid upto 31-3-1977 |
|--------------------|--------|---------------|-----------|-------------------------------|
| <u>BASIC GRANT</u> | | | | |
| Equipment | | 12,62,000 | 12,62,000 | 5,25,000 |
| Books & Journals | | 4,48,000 | 4,48,000 | 1,85,000 |

UNIVERSITY GRANTS COMMISSION

Meeting :

Dated : 24th April, 1978.

Item NO.42: To consider the recommendations made by the Committee constituted by the Commission to evaluate the proposal of the Department of Physics, Rajasthan University for the Establishment of a Centre for the Development of Physics Education.

The Department of Physics, Rajasthan University Jaipur has been implementing the University Leadership Project in physics under the College Science Improvement Programme since 1971. After completion of the first and second phases of the programme, Professor Saraf submitted a proposal for the establishment of a Centre for the development of Physics education as a follow up of COSIP-ULP activities. It was decided that an Expert Committee consisting of following members may examine the proposal:-

1. Professor B.M. Udgaonkar,
TIFR, Bombay.
2. Professor B. Sanjeevaiah,
Head of the Department of Physics,
Mysore University,
Mysore.
3. Shri A.G. Deshmukh,
Education Officer,
UGC, New Delhi.

The Committee visited the department on 6th February, 1978 and had detailed discussions with Professor Saraf, Professor Lokanathan and other staff members involved in COSIP-ULP activities. The report of the Committee is attached Annexure.*

The main observations/recommendations of the Committee are given below:-

1. The Committee felt that the work relating to development of new experiments and fabrication of equipment for this purpose has been extremely successful.

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2. The Committee after considering the progress made in the implementation of COSIP-DLP activities was convinced that the department has shown its originality and has been recognised in India and abroad as a good centre for the development of physics experiments and the Commission should support further programmes at the Department for the next 5 years.
3. The Department should concentrate on activities relating to the design and development of new experiment and fabrication of equipments required for the purpose and preparation of good literature (theory and laboratory courses) required for undergraduate physics teaching.
4. The financial recommendations of the Committee are as follows:-

Non-recurring:

1. Equipment

Workshop and test equipment . . Rs. 1,00,000.

Recurring (per annum)

| | | | |
|----|--|-----|--------|
| 1. | Development of equipment including materials | Rs. | 75,000 |
| 2. | Technical Staff | Rs. | 30,000 |
| 3. | Clerical and Administrative Staff | Rs. | 15,000 |
| 4. | Academic Staff (Visiting faculty) | Rs. | 75,000 |
| 5. | Contact programmes (Rajasthan University colleges), Publication, printing. | Rs. | 50,000 |
| 6. | Contingency-working expenses | Rs. | 15,000 |

| | |
|-----------------------------------|--------------|
| Total Recurring Estimated p.a. | Rs. 2,50,000 |
|-----------------------------------|--------------|

| | |
|-----------------------------|---------------|
| Total (NR+R) for five years | Rs. 14,00,000 |
|-----------------------------|---------------|

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The recurring part could be taken over by the University State Government after the period of 5 years so that the activities are continued on a permanent basis. The assurance regarding this should be obtained. The recurring grant to be approved could be paid after taking into account the income from the sale of equipment and other materials, on a net deficit basis after making a suitable allowance for the revolving fund.

The matter is placed before the Commission for consideration.

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Report of the Expert Committee which visited the Department of Physics, Rajasthan University, Jaipur, to evaluate the proposal for establishment of Centre for the Development of Physics Education.

A proposal was received from Professor B.Saraf, Physics Department, Rajasthan University, Jaipur for the establishment of Centre for the development of Physics education as a follow-up of the COSIP-University Leadership Project in Physics. It was decided that an Expert Committee may be constituted to examine the proposal and submit its report to the Commission. The Expert Committee consisting of following members visited the department on 6th February, 1978:-

1. Professor B.M. Udgaonkar,
Tata Institute of Fundamental Research,
Bombay.
2. Professor B. Sanjeevaiah,
Mysore University,
Mysore.
3. Shri A.G. Deshmukh,
Education Officer,
UGC, New Delhi.

The Committee had detailed discussions with Professor Saraf, Professor Lokanathan, Professor D.P. Khandelwal, Visiting Professor and other staff members involved in the COSIP-ULP activities. The Committee also met Dr. Bhandari, Head of the Department, separately.

The University Grants Commission in February, 1971 invited the department of Physics, Rajasthan University to take up the University Leadership Project for the improvement of undergraduate physics education in the affiliated colleges of Rajasthan University. For the I Phase of this programme an allocation of Rs. 10 lakhs was approved. The main activities undertaken during the I phase of the programme were as follows:-

1. Development of text Material and supporting literature.
2. Development of new experiments, including fabrication of equipment for this purpose.
3. Teacher contact programmes.

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On successful completion of the I Phase, the work of the department was evaluated by an expert Committee and the II phase programme was approved in November, 1975. The total allocation of Rs. 4.25 lakhs, was approved for the II phase programme. In the II phase, the work undertaken during the I phase was continued. Subsequently, in November, 1977 an ad-hoc grant of Rs. 2 lakhs was released for continuation of ULP activities. The Commission has so far released a grant of Rs. 16.03 lakhs out of total allocation of Rs. 16.25 lakhs. In addition to this the department has received an amount of about Rs. 2.10 lakhs by sale of equipment and books. The detailed report of the work done in II phase is attached as appendix.

The work done by the department especially design of experiments and fabrication of equipment has been appreciated all over India and also abroad. Professor Saraf was specially invited to demonstrate the equipment at Trieste before the participants from French speaking countries attending a Summer Institute there under the auspices of the International Centre for Theoretical Physics. This set of equipment was subsequently purchased by UNESCO and presented to a teacher training college in Senegal. Exhibition of this equipment has also been arranged in several places in India, including some IIT's and also at regional conferences organised under the COSIP. Since November, 1977 orders worth Rs. 1.25 lakhs have been received for purchase of these equipments from the colleges all over India. One book pertaining to the experiments developed under ULP has been brought out by the department. Its second edition is under print, and work is at an advanced stage on a second book. The department has now invited Professor D.P. Khande~~l~~wal for participating in this programme as a visiting Professor and help in preparation of books and other material under the programme. The Committee, after the discussions with the staff members involved in the programme, felt that the work relating to development of new experiments and fabrication of equipment for this purpose has been extremely successful and deserves continued support.

However, because of administrative problems in the present act up at the university, the revision of syllabus, and introduction of new experiments in the B.Sc. curriculum of the university has met with difficulties. The Committee noted with concern that no staff member of the department is at present a member of the Board

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of Studies in Physics. Hence, it has not been possible to introduce new experiment developed by ULP as a part of syllabus of B.Sc. course. It is difficulty for a university department to play the expected leadership role vis-a vis the college system unless it has adequate representation on the Board of Studies. The Committee discussed this matter with the Vice-Chancellor and he agreed that the situation needs to be remedied. The Committee also discussed with the Vice-Chancellor other administrative difficulties which have unfortunately hampered the progress of ULP activities. The Vice-Chancellor assured that he would try to remove these difficulties.

The Committee was also informed that at present, 10 posts in the Physics Department are lying vacant, as a result of State Government restrictions on filling up the posts. The State Government considers only the teaching work-load for determining total staff strength. The physics department, Rajasthan University is at present operating three special programmes of UGC viz:

- i) University Leadership Project.
- ii) Science Education Centre and
- iii) Major Research Project in Material Science.

The Committee would urge the State Government to take into account the work involved in the implementation of these schemes. The extension activities carried out by the Department under ULP and the Science education Centre must be included as work-load for determining the teaching staff requirements of the department. Similarly the staff requirements for building a viable research group taking advantage of the UGC support for a major research Project must not be lost sight of.

The university should take urgent steps to fill up all these posts. While doing so, it should take into account the specific requirements of the above three programmes. Persons selected on the basis of the needs of these programmes would be able to share in the normal teaching activities of the department also, without any difficulty.

The Committee after considering the progress made in the implementation of COSIP-ULP activities was convinced that the department has shown its originality and has been recognised in India and abroad as a good centre for the

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development of physics experiments. The Committee feels that the Commission should support further programmes at the Department for the next 5 years. Taking into account the experience of the last few years, it would be desirable that the department concentrate on activities relating to design and development of new experiments and fabrication of equipment required for the purpose, and preparation of good literature (theory and laboratory courses) required for undergraduate physics teaching. The programmes relating to interaction with colleges affiliated to Rajasthan University may be continued on limited basis. The Department may also be encouraged to organise advanced level all-India Institutes on Laboratory Development, under the Faculty Improvement Programme of the U.G.C. In the course of the next few years, while operating this programme, the university leadership project could also try to devote part of its efforts to the improvement of postgraduate laboratories.

The Committee then examined the requirements as submitted in the proposal. The department has asked for an allocation of Rs. 4 lakhs for construction of buildings including hostels for teachers; working space for . . . laboratories and lecture halls etc. The Rajasthan University is operating 3 University Leadership Projects in science subjects and 2 in Humanities. In addition a number of departments have been approved for taking up the teacher fellowship programme. The committee was given to understand that at present about 80 teacher fellows are working in the university. In view of this fact, the committee feels that instead of considering the need for a teachers hostel arising out of an individual ULP programme, the UGC may consider a consolidated proposal from the university under the Academic Complex scheme of the UGC. The university may be asked to submit such a proposal, taking into account the needs of the ULP programmes as well as the FIP programme.

In the 5th Plan period a building involving Rs. 4 lakhs has already been approved for the physics department, with the UGC share as Rs. 2 lakhs. The University is having some difficulty in obtaining the State Government approval for its full share. The University may take up the matter with the State Government so that the entire building involving Rs. 4 lakhs could be constructed.

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At present, space is provided for the ULP activities in the existing physics department and also in the central workshop. The Central workshop would now be part of the USIC. It should be possible for the ULP programme to continue to use this space in the workshop building. After the construction of the new building approved as a part of 5th Plan development schemes, the university should provide equivalent space (about 250 sq. meters) for continuation of ULP activities either in the new building or the present building, For the Science Education Centre also some space (preferably contiguous) would be required. In course of time attempts should be made to integrate the activities of ULP and Science Education Centre, as some staff members would be involved in both the projects, and both have strong extension dimension. The Committee has not recommended any allocation for building here, as it is assumed that the space required for this purpose will be provided by the university within the present and new building of the physics department.

The Committee considered the requirements of the teaching and other staff for the purpose. Needs for permanent staff should be taken care of by filling the existing vacancies at an early date. In the Committee's view, in a project like this, it would be desirable to have some visiting faculty in addition to the permanent teaching staff. The Committee would like to recommend an allocation of Rs. 75,000/- p.a. for inviting teachers for periods of few months or longer, depending upon the requirements for writing of books, development of new experiments, advanced level institutes etc.

The Committee is not making any provision for advanced level institutes to be organised on an all-India basis every year for college teachers, as this could be provided separately by the Commission as a part of its Faculty Improvement Programme. The Committee has recommended an annual allocation of Rs. 75,000/- for activities of development of new experiments and fabrication of equipment. The allocation is based on actual expenditure figures for this purpose during last few years. After development of equipment, the department could fabricate it on a larger scale for supply to colleges on payment. In working out the sale price, some allowance should be made for

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requirements for future development programmes. At present the equipment is sold at cost price. The additional amount thus obtained could be kept separately, to create a revolving fund for future.

The books produced under ULP has now been passed on to commercial publishers for publication. It is proposed to follow this practice for books to be produced in future. The Committee was happy to note that the ULP was anxious to ensure that while using a commercial publisher the books are available at reasonable price to students.

The Committee would like to recommend to the Commission that following grants may be provided for continuation of ULP activities by the department of physics, Rajasthan University for the next five years. The recurring part could be taken over by the University/State Government after this period so that the activities are continued on a permanent basis. An assurance regarding this should be obtained.

Non- recurring

1. Equipment

Workshop and test equipment Rs.1,00,000

Recurring (per annum)

- | | | |
|----|---|------------|
| 1. | Development of equipment including materials | Rs. 75,000 |
| 2. | Technical Staff | Rs. 30,000 |
| 3. | Clerical and Administrative Staff | Rs. 15,000 |
| 4. | Academic Staff (Visiting Faculty) | Rs. 75,000 |
| 5. | Contact programmes (Rajasthan Univ.) Colleges), publication, printing). | Rs. 50,000 |
| 6. | Contingency-working expenses | Rs. 15,000 |

Total Recurring - Rs.2,60,000
estimated p.a.

p.t.o.

The actual recurring grant, however, would be determined after taking into account the income from the sale of equipment and other materials developed under this programme on a net deficit basis, and after making suitable allowance for a revolving fund.

The Committee is grateful to Vice-Chancellor, the staff members of the department of Physics, for the cooperation given for the work of the Committee.

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UNIVERSITY LEADERSHIP PROJECT IN PHYSICS
(Sponsored by the University Grants Commission)

REPORT OF WORK DONE IN THE
SECOND (FOLLOW-UP) PHASE
(April, 1975-October, 1977)

Department of Physics
University of Rajasthan, Jaipur

November 28, 1977

BABULAL SARAF
Co-ordinator

UNIVERSITY LEADERSHIP PROJECT IN PHYSICS, UNIVERSITY
OF RAJASTHAN, JAIPUR

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A report on the work done during the Second Phase,
April, 1975-October, 1977

I. GENERAL

The University Leadership Project was formally granted to this department vide letter No. 20-123/70(S.III) dated 4.3.1971 of the UGC. The objective was to work for the improvement of Physics teaching at the undergraduate level.

The first report submitted in April, 1975 outlined the tasks completed by then and also those in progress. It will be relevant and useful to outline them briefly.

(a) Development of Text Material and Supporting Literature:

Effective presentation of different physical concepts was given top priority. The task was completed for 1 year, a syllabus was prepared, designed to ensure that the latest ideas in the field would be given to the undergraduate student in terms of elementary principles. Text material was ready with multiple consultation with and participation of teachers and advice from experts.

For II and III year classes, a Berkeley-based course was introduced, after consultation with teachers in 3 'workshops'. Two volumes on this material were mimeographed, apart from notes, questions, lab. notes etc.

Two monographs-one on 'Fission and Fusion' other on 'Kinematics and Interaction'-were prepared by teachers. But the experts advised that the first was unsuitable for publication and the other needed revision.

(b) Development of New Experiments:

A number of experiments were developed, designed and fabricated in electricity, mechanics, statistical physics and optics. Special emphasis was on making these quantitative. Equipment for each experiment was designed and fabricated, keeping an eye on low cost, durability and dependability and depth in educative value.

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For the experiments on Electricity, a complete set of equipment was supplied to 64 colleges under the Rajasthan University and 9 centres outside Rajasthan. The relevant book 'Physics Through Experiment, Vol. I' was published and about 600 copies of it were distributed widely for use.

Two 'workshops' of teachers were organised to acquaint teachers in colleges in Rajasthan and COSIP colleges elsewhere about these experiments. The equipment was also demonstrated at Anand, Delhi University, I.I.T. Delhi, Kurukshetra, Chandigarh, I.I.T. Kanpur, Agra etc.

(c) Teacher Contact Programme:

Several Summer Schools and 'workshops' of teachers were organised to discuss and prepare text materials for new syllabi. The material prepared at these workshops was supplied to all the college libraries in Rajasthan.

(d) Other Programs:

A list of good books for physics teaching was prepared and sent to all libraries, and arrangement was made that all the libraries had copies of these books.

A proposal for making charts, graphs and films for physics teaching was initiated. Similarly an outline plan for a new pattern of examinations was initiated.

(e) Personnel:

While all the work was done employing part-time services of teachers, it was recorded that a nucleus of competent full-time personnel was necessary to reap full benefits from the work:

(f) Expenditure:

The total amount of Rs. 10.00 lacs was spent under the following heads:

| | <u>Rupees in lakhs</u> |
|--|------------------------|
| 1 Help to colleges in Equipment | 3.50 |
| 2 Teacher contact programs and text material | 2.03 |
| 3 Academic staff (including technical) | 0.96 |
| 4 Establishment | 0.37 |
| 5 Development | 0.30 |
| 6 Assets in hand | 2.84 |
| | <hr/> <u>10.00</u> |

Thus the largest part (items 1 & 6) 63.4% went into the cost of equipment and the next largest (items 2 & 5) 23.3% in teacher contact and development. The cost of academic staff and establishment was only 13.3%.

II OUR APPROACH

We had started with a comprehensive program covering all aspects of physics education. But experience showed that one had to assign priorities picking up those areas which would influence the physics education the most by providing such help as may not be otherwise available and by creating an environment in which a snow-ball growth may take place. One major result of this analysis is that good syllabi would not run without matching textbooks, and good textbooks could not be written and published until some syllabi took reasonably stable status. Now such a task needed a full-time team with somewhat wider scope than just one university. In contrast, in the case of developing equipment for Physics education the development of prototypes of exciting and educative series of experiments can proceed quite independent of the other constraints within a University and such developments could influence physics education far beyond the boundaries of one University.

Therefore our approach in this second phase of ULP work was to concentrate heavily on the laboratory and demonstration equipment. The development of curriculum was kept at a low key and was directed towards an integrated Honours course. Teacher contact was limited to visiting the colleges. Work on areas like examination reform, support to college libraries and development of charts, graphs and films were kept in abeyance.

III THE WORK DONE:

The work undertaken by ULP Jaipur group in the second phase is being described below under different headings. In each case a background note is given to bring out the significance of the work done and also future projections are given in brief.

1 Mode of Teaching and Teaching Material:

Efforts made towards an integrated curriculum for the 3 years course and development of related text material could meet only partial success. One reason for this is the constitution of the

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Board of Studies in which the ULP does not have a direct voice. It appears that the environment is not yet ripe for a major overall structural change. This is due partly to the fact that the state of neighbouring universities affects every university and partly to the inherent resistance to change unless the atmosphere in all the departments in the university is also in that direction.

All the same the following steps were taken in this direction in the period under report:

- i) An integrated 3 years syllabus for B.Sc. (Hons.) was finalised (Annexure A) and teaching in it started from July, 1976 with an intake of 25 students per year. In July, 1977 another college has taken up B.Sc. (Hons.) so that we now have two samples of students for trial of this course.
- ii) The ULP developed experiments were made part of the laboratory exercises for the B.Sc. (Hons.) course.
- iii) For the non-Honours students some ULP experiments were formally introduced as regular part of their laboratory.

The response appears encouraging. To get the feed-back from colleges we have recently assigned work to specific teachers to seek information on a proforma (Annexure-B).

2. Supplementary Reading Material:

The basic idea was to produce rapid reader type monographs giving a comprehensive coverage of specific areas in a language quite within the grasp of an undergraduate level student and at the same time of interest to the post-graduate student on the one side and an intellectual in other science or in society. However, the first efforts did not take the desired direction. Either the language did not depart much from a formal text-book (boards of them already in the market) or the contents and approach did not much the 'general reader' idea. All the same, the following write-ups were completed

in the period under report and are under scrutiny:

- (1) Random events
- (2) Electrodynamics
- (3) Mechanics

We have now decided to prepare quite detailed guidelines for these monographs and also to choose a set of available monographs as models. After that on each chosen area a complete outline of coverage will be prepared by a group before the work of actual writing is started. Initial steps in this direction have been taken and in the next year we hope to have 4 to 5 monographs ready for publication.

3. Development of new instructive experiments:

This has been a major task undertaken by our group and we are happy to record that in this direction we have been able to break significant ground. It must be emphasised that our approach has been not to work for some change here and some there, or for just copying what has already been done elsewhere, or for transposition of experiments from M.Sc. or Engg. classes to the undergraduate lab.

We have, concentrated on developing experiments in the pyramid style, so that the students' experience and education could built quite high on firm foundations. The experiments of electrical networks involving some 50 exercises on 7 network boards, represent our approach. The whole framework is one never tried out anywhere else, and ideas like that of using vector diagrams and deducing phase relations finding the resistive part of a capacitor or an inductor, or of measuring phases by mixing with a coherent potential are original.

We briefly describe below what has been achieved in this second phase in this direction.

(a) The linear air-track:

Several quantitative experiments on potentials and oscillations were designed on the aluminium air track fabricated by us. Later on a perspex linear air-track was conceived designed and fabricated, so that in using magnet-magnet interactions electromagnetic

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damping may not cause difficulty. This development was a major break-through because (i) it increased the precision by an order of magnitude and (ii) allowed magnetic interactions to be used, which opened up areas not available for spring interactions.

Of particular note is the fact that a complete series of quantitative experiments have been developed around this perspex air-track starting from simple momentum conservation and going up to passage through potential wells and potential hills, including scattering and time delay measurements. This series, like the electrical network series has depth hitherto not reached by any integrated design of experiments that we know of.

(b) Oscillators:

Rigid pendulum type oscillators have been designed with very high Q with arrangement for coupling two oscillators and measuring not only amplitudes but relative phase in an ingenious way and for 'maintaining' one oscillator. The comprehensive design and fabrication leads to in-depth study of damping studying couple of oscillators and maintained oscillations. The quantitative analysis shows for instance that damping force is proportional to the nth power of velocity where $n \neq 1$, as often assumed. The forced oscillations and resonance can be studied with quite high Q values with precision.

(c) The Digital Timer:

For all the experiments on the air-track and oscillators we need measurements of very short time intervals. With appropriate sensing system of triggers one could go to fractions of a millisecond with around 1% accuracy. This timer was developed in all details and now we have a very dependable timer at a cost about half of the cost of those available elsewhere and capable of functioning in four-different modes.

(d) Transmission Line and Wave Apparatus:

The phase delay and transmission factor in a single loop system studied with Network Boards earlier, has been extended to multi-loop systems, so that one can trace from step to step the phase change and amplitude.

The wave apparatus comprising a series of dumb-ball oscillators coupled through a steel tape, has been used for quantitative measurements of dependence of wave-velocity on various parameters, reflection and impedance matching, scattering etc.

(e) Other experiments:

Several other experiments have been developed up to quantitative stage. Notable among them is an experiment on a magnet falling through a metal cylinder, where the approach of limiting velocity is studied in detail. In another experiment the conservation of angular momentum is studied by isolating a rotating system with another rotor mounted in it. The statistics board developed earlier has also been subjected to expensive use to study various kinds of statistical distributions.

Some experiments on optics and some on thermodynamics are still at the early stages of design. In fact for optics we have been able to make the first trial of experiments with single and multiple slits and with lasers. But they are yet to reach a stage of dependable quantitative measurements.

4. Publication of books on the new experiments developed:

"Physics Through Experiments Vol. I" was already published in the first phase. The book received wide welcome and excellent reviews. A new edition of this book is now in the Press with a regular publisher so that wide publicity may come in the natural course and ULP may not be burlened with the cost. This involved detailed re-examination of all the expenditure and careful editing of the text. Simultaneously we have initiated a program involving in-depth study of experiments on the 6 network-boards at the classroom level by actual teachers in affiliated colleges. The response has been very warm and as many as 44 teachers came forward to undertake this work. We have assigned work to 36 teachers, making 18 teams of 2 each and setting three independent teams for experiments on each Board. Incidentally this will also mean intensive teacher contact and orientation towards the ULP experiments,

For the second volume we have moved about half-way. A booklet entitled "Experiments and Equipment" was prepared and printed describing the equipment developed and experiments conducted on the linear air track: the oscillators, the wave apparatus and the transmission line, Lissajous figures, the statistics board etc. The purpose of this publication was to seek comments from the academic community before a formal students book is prepared. Now, the experiments related with motion will form the subject matter of "Physics Through Experiment, Vol. 2 Motion: aperiodic and periodic". This book is presently under preparation and is expected to be published in the next 3 to 4 months. The essential data with all the analysis have already been collected.

The third and possibly a fourth volume will cover experiments on Optics, Statistics and Thermodynamics. For Statistics there is enough material for a smaller volume. For the rest we will have to await completion of the design and fabrication of Optics and Thermodynamics experiments. Whether experiments on Atomic Physics can also be included in this is not presently clear.

5. Contacts with Teachers and Students:

In the second phase orientation progress for teachers were not conceived. Instead the emphasis was on contacting teachers and students at different colleges and University centres to have intimate interaction and feed-back. During the period under report 17 colleges and 9 university centres and advanced research centres (see annexure C) were visited by this ULP staff to demonstrate its equipment to teachers and student group and to discuss matters with fellow physicists. This has led to remarkable results while teachers in colleges have become more keenly aware of the petiness of their present lab. equipment in relation to what can be done with these ULP developed equipment, the teachers at advanced centres have worked up to the need for doing something in this direction at their own places, rather than limit to textual materials only.

6. Visit to Trieste:

Professor Guinier of Universite de Paris had expressed interest in the contribution made by ULP

Jaipur in developing new experiments. As a result the French Govt. invited the Director to arrange an exhibition of the equipment before the participants from French-speaking countries attending a Summer Institute at Trieste. The French Govt. supported the transshipment of the equipment and the travel of the Director in volume and quality of work. The Director requested the UGC to extend a further support for the visit of one of our colleague and the UGC generously acceded to this.

The equipment was presented in full working form before the participants along with an explanatory lecture. It is notable that inspite of the language barrier (English-French) the participants numbering about 60 from 30 different countries, fully appreciated the depth, the simplicity of the apparatus and its totally indigeneous character. Professor Salaam, the Director of the Centre at Trieste, spent several hours seeing the equipment and the various experiments and he was very much excited and was appreciative of the quality of the work-academic, technical and presentation. He immediately recommended to UNESCO to buy the equipment and present it to a Teachers' Training College in Senegal so that a multitude of teachers could see them in due course. We only hope that this collaboration of academic contributions and their utilisation among the so-called developing countries will gain momentum, since it has intense cultural potential too, apart from the educational value. We are sure it will receive support from sponsoring agencies like UNESCO and the concerned Governments.

The Director utilised this opportunity to visit two neighbouring countries for the study of Science Museums and he also visited the UNESCO headquarters at Paris and the Nuffield Centre at London. Dr. Robinson at UNESCO and Professor Rogers of Nuffield Centre were very much delighted to learn about the equipment developed at and academic contribution of the group at Jaipur, although only the written literature about the experiments was presented to them.

We are told that the Oxford International Conference-due July, 1978-will especially focus attention on the role of laboratory experiments towards physics education. That will provide another good opportunity to us for an international presentation of India's achievements. Assessment from

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international gatherings—especially in Science areas goes a long way in establishing the real value of our modest contributions.

7. Participation in Conferences:

Apart from contacts with Teachers and students the equipment was demonstrated at special conferences where people had specifically gathered for just such purpose and where critical assessment and comments could be had. The material was thus presented at the Shillong University, the Mysore University the Western Zone COSIP Conference, Ahmednagar and the Principals' Conference of Rajasthan at Jaipur.

8. Equipment Supply to Institutions:

A major task of this ULP has been the supply of fabricated equipment to institutions for use. In this second phase this emphasis continued, because the real test of an equipment is in its regular use in several laboratories. Equipment was supplied to a large number of institutions. (Annexure-D). An amount of Rs. 1,96,443/75 was obtained from this supply. This is apart from about Rs. 52,600/- yet to be realised (Annexure-E).

IV THE PERSONNEL:

For work in the ULP the Director continued to be an honorary worker, although this does not appear to be uniform practice in all ULP and some decision by the UGC itself is needed on this anomalous state.

Part-time services of some teachers of the department were utilised on the basis of an honorarium of Rs. 200/- p.m. each. The number of such teachers on the average was five. Besides these Prof. Lokanathan from the department served in an advisory capacity with quite active participation. As recorded in the last report, the extensive work involved needs full-time and competent persons and we are trying to secure the services of some on these lines for the future. With that arrangement specific tasks may be got done on assignment basis with better results.

Contacts with eminent physicists has been our constant effort so that we may benefit by their critical examination and advice as also suggestions in new directions. During the period under report

a steady stream of eminent physicists from India and from foreign countries visited the ULP laboratory and benefited us by their advice. Notable among them are Bardeen and Guinier.

V. ADVISORY COMMITTEE:

The advisory committee of ULP Jaipur comprises of the following:-

- 1 Dr. Narendra Nath,
Kurukshetra University.
- 2 Dr. A.K. Ghatak,
I.I.T. Delhi.
- 3 Dr. S. Lokanathan
Rajasthan University
- 4 Shri Sewa Singh
Govt. College
Sriganganagar
- 5 Shri B.L. Paliwal
Govt. College
Kotputli (Raj.)
- 6 Dr. S. Saraf,
Co-ordinator
ULP

The committee had two meetings in the period under report.

VI Expenditure:

The budget allocation for the second phase (follow-up) was Rs. 3.5 lakhs to which was added a carry over of 0.6 lakhs from the first phase and an additional sanction of 0.75 lakh for mini-bus. As against, this we incurred a total expenditure of Rs. 76.85 lakhs under broad heads shown below (full-details in Annexure F):

| | | |
|-------------|--|---------------------------|
| | <u>Expenditure between 25-4-75 to 31-10-77</u> | |
| <u>Item</u> | <u>Allocation</u> | <u>Actual Expenditure</u> |

- | | | |
|--|---------------|---------------|
| 1. Developmental work with regard to curriculum material as well as laboratory and demonstration equipment, etc. | Rs. 1.50 lakh | Rs. 4.50 lakh |
|--|---------------|---------------|

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| | <u>Rs. in lakhs</u> | |
|--|---------------------|-------|
| 2. University/College Teachers/ Students' contact programs | 0.50 + 0.75 | 0.78 |
| 3. Provision for teacher fellowships and support- ing technical and work- shop staff and other staff | 1.00 | 0.97 |
| 4. Other activities | 0.50 | 0.60 |
| | <hr/> | <hr/> |
| | 4.25 | 6.85 |
| | <hr/> | <hr/> |

It will be noted that the expenditure on laboratory and workshop materials for the lion's share of expenses during this phase. This represents the approach discussed under head II. In retrospect, we find that the shift in emphasis has been rewarded amply because a distinct dent has been made in this field of developing and multiplying the equipment.

The sources from which the money came are as follow:

| | | |
|-------------------------|-----|--------------------------------|
| Carry over from I phase | Rs. | 0.60 lakhs |
| U.G.C. | Rs. | 4.25 lakhs (As detailed above) |
| Sale of ULP Equipment | Rs. | 1.96 lakhs *(vide Annexure D) |
| Misc. | Rs. | 0.04 lakh |
| | | <hr/> |
| | Rs. | 6.85 lakhs |
| | | <hr/> |

* We have to receive about Rs. 0.52 lakhs further for supplies already made.

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SYLLABUS FOR B.Sc. (HONS.) PART II-1978

| <u>Two papers</u> | <u>Duration</u> | <u>Internal assessment</u> | <u>External assessment</u> | <u>Min. pass marks</u> |
|-------------------|-----------------|----------------------------|----------------------------|------------------------|
| Paper III | 3 Hrs. | 30 | 70 | 80 |
| Paper IV | 3 Hrs. | 30 | 70 | 80 |

Hons. Paper III-Interactions and fields:-

The following chapters are prescribed from the book 'Fundamental University Physics' by Marcelo Alonso and Edward J. Finn by Addison and Wesley Reading Massachusetts (1971):-

Vol. I - 13

Vol. II - 14, 15, 16, 17

Notes:

1. All odd numbered problems are included for part First Honours Course. It is expected that examiners will choose a reasonable selection from these problems in setting question papers. Minor variations in these problems may be permitted without changing the basic features of the problems.

Every year the Board of studies will specify which problems are included in the course.

2. The meaningful units will be chapter-wise, e.g. unit 1 will be chapter 1, unit 2 will be chapter 2, and so on.

Hons. Paper IV-Waves:

The following chapters are prescribed from the book 'Fundamental University Physics' by Marcelo Alonso and Edward J. Finn published by Addison and Wesley, Reading Massachusetts (1971):-

Vol. II:- 18, 19, 20, 21, 22, 23, 24

Notes:-

1. All odd numbered problems are included for part First Honours Course. It is expected that examiners will choose a

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a reasonable selection from these problems in setting question papers. Minor variations in these problems may be permitted without changing the basic features of the problems.

Every year the Board of Studies will specify which problems are included in the course.

2. The meaningful units will be chapter-wise e.g. unit 1 will be chapter 9, unit 2 will be chapter 10 and so on.

PHYSICS PRACTICAL 'B'

| <u>Practical</u> | <u>Sessional Test</u> | <u>Day to Day work</u> | <u>Final Exam.</u> | <u>Min. pass Marks</u> |
|------------------|-----------------------|------------------------|--------------------|------------------------|
| Practical 'B' | 30 | 30 | 40 | 40 |

Students are expected to perform at least 15 experiments in each of I and II years, and 25 experiments in the III year. At least half of these experiments are expected to be from the following list. The institution may introduce upto 50% experiments of their choice and communicate the list to the Convener, Board of Studies.

The following list of experiments is based mainly on the equipment designed and developed by the University Leadership Projects in Physics, University of Rajasthan. In due time the ULP will give a list of 15 experiments for each of I and II year and 25 for III year out of the following list:-

Expt. on linear track:-

- 1 Constant velocity motion
- 2 Accelerated motion
- 3 Harmonic motion
- 4 Anharmonic motion
- 5 Potential energy curves and energy conservation
- 6 Elastic collisions and conservation laws
- 7 Inelastic collisions.

Expt. with simple oscillator:

- 8 Variation of time period with amplitude
- 9 Composition of two perpendicular S.H.M.
- 10 Frequency response
- 11 Damping and 'Q' value
- 12 Phase curves

Expt. with coupled oscillator:

- 13 Excitation of normal modes and frequency measurement
- 14 Period of energy transfer as a function of coupling strength

Expts. with Torsional wave apparatus:

- 15 Velocity of wave propagation
- 16 Excitation of normal modes—both ends open, one end open.

Expts. with Electricity boards:

- 18 Study of source impedance
- 19 Study of RC Circuit with DC
- 20 Study of RC Circuit with AC non-sinusoidal
- 21 Study of RC Circuit with AC sinusoidal
- 22 LR circuit with DC
- 23 LCR circuit with DC
- 24 Phase measurement
- 25 Faraday's law of em induction
- 26 Phase relationship of RC with ultra freq. AC
- 27 L.C. Transmission line
- 28 RC transmission line
- 29 Velocity dependent force and measurement of terminal velocity
- 30 Study of interference pattern by 1, 2, 3, 4, 5, 6, 7.....slits.
 - (a) circular hole
 - (b) single slit

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- 32 Study of Bragg diffraction
- 33 Michelson interferometer
- 34 Study of Thermo e.m.f.
- 35 Change of B.P. of a liquid with pressure
- 36 Rydberg constant from a given spectrum of hydrogen
- 37 Expt. for displacement current
- 38 Study of Radiation pattern from a dipole quadrupole

Expts. with Statistical boards:

- 39 Study of Gaussian and poisson distribution
- 40 Study of correlations
- 41 Study of Random decay law
- 42 A model Boltzmann canonical distribution
- 43 Experimental verification of the first law of thermodynamics by discharging a condenser
- 44 Efficiency of a Carnot engine

Expts. with G.M. Counter

- 45 Characteristics of a G.M. Tube
- 46 Study of Random decay law and determination of half life
- 47 Dead time measurement
- 48 e/m by helical method
- 49 e by Millikan's method
- 50 Determination of Planck's constant
- 51 Frank and Hertz experiment using a Thyatron
- 52 Intensity distribution in interference and diffraction patterns with a laser
- 53 Characteristics of a semi-conductor diode
- 54 Characteristics of a transistor
- 55 Band gap measurement
- 56 Design of a power supply with different filters.

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- 57 Design of an amplifier and study of its frequency response
- 58 Lissajous figure using G.R.O.
- 59 Determination of absorption coefficient of different materials for acoustic waves.

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Annex - 'B'

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UNIVERSITY LEADERSHIP PROJECT IN PHYSICS

(SPONSORED BY : UNIVERSITY GRANTS COMMISSION)

Department of Physics
University of Rajasthan, Jaipur,
Date : October 29, 1977,

Dear Friend,

We are very happy that in response to our invitation several teachers have come forth to participate in the programme for "improvement of ULP Equipment" by working on one of the six network boards. The list of different groups whose offer has been accepted and the Board number assigned to each group is enclosed with this letter for general information.

A copy of the proforma in which the report on the concerned Board is to be submitted is also enclosed. For those who are assigned work on a Board, I would urge that the most important column is A, which involves the doing of all the experiments related with the Board and presentation of the data and graphs. This is because comments under all other headings also will ultimately depend on this. Column F is optional, of course. It is also to be noted that all suggestions have to be quite specific. We are seeking advice from actual teachers - not just general comments.

The report is to be submitted in duplicate and preferably in typed form. The last date by which the report must reach us is January 12, 1978. The dead-line is important because the assessment committee will get going immediately after that date, so as to arrive at its conclusions in a week's time.

If there are any queries please do not hesitate to ask us. But the dead-line will not be extended in any case.

For those who are not assigned work on a Board, this literature is sent to let them know what kind of advice/information we are interested in. Some of them may, without detailed working, have experience and ideas whose communication can be of great value to us. They are requested to write to us in depth without a proforma, the last date for receipt still being January 12, 1978.

With kindest regards,

Sincerely yours
B. Saraf
Coordinator.

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Expt. K

Expt. L

B. On the Range of Parameters and quality of Components

(i) Do you find the number and the range of the resistors, capacitors, inductors, etc. adequate to bring out the relevant educative aspects? Any suggestions for extension or curtailment may be given, with reasons.

(ii) Is the rating and tolerance of components and their quality satisfactory? Any suggestions for change?

(iii) How about the meters and their conversion ranges?

.....

C. On the Design of the Board

(i) Is the design and size of the Board suitable for handling, working and understanding?

(ii) Does the lay-out of the components need change? If so, the proposed lay-out must be attached as an appendix.

D. On Improvement or Extension of Analysis.

(i) Are some suggested experiments too trivial (for students too advanced, or too overlapping? Specify with reasons?

(ii) Any suggestions to improve or extend the experiments with the present Board? You may give full details in a separate annexure.

(iii) Any useful experiments which can be added with small additions/modifications in the Board?

p.t.o.

E. General Questions

(i) Is your college using this Board in regular Classes ? Yes/No.

(ii) Which experiments from the Book are covered in the class work at your college? A/B/C/D/E/F/G/H/I/J/K/L/M/N .

(iii) Are the experiments in (ii) above done as part of one, two or three experiments. One/Two/Three

(iv) Can you fabricate a copy of this Board at your college if the components and materials are given to you? -Yes/No

If the answer is yes, how many hours you think you will need to complete the work -Hours

If the answer is No, Specify what facilities are not available for such a work at your college.

F. New Suggestion Invited.

You are free to write anything about this Board and its experiments that is not covered by the questions above.

You are also invited to write any specific ideas you have in mind concerning exciting and new experiments in thermodynamics, optics, atomic Physics, etc. Some outline will be needed- not just naming. Such outlines may be given in an Annexure. (incidentally, we have developed several experiments on "Linear Motion-periodic and non-periodic" and a book on them forming volume II of the series "Physics Through Experiment" will be out in February, 1978).

List of Annexures :

Place: Signatures of the reporting Teachers

Dated: 1. College Name: 2.

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LIST OF INSTITUTIONS VISITED

A. College within Rajasthan University.

1. Govt. College, Ajmer.
2. Dayanand College, Ajmer.
3. Gov. College, Kotputli.
4. Govt. College, Tonk.
5. Govt. College, Dasua.
6. S.K. College, Sikar.
7. Govt. College, Sikar.
8. Govt. College, Kaladera.
9. Govt. College, Bharatpur.
10. Govt. College, Kishngarh.

B. College outside Rajasthan University:

1. D.S.B. Govt. College, Nainital.
2. S.D. College, Muzaffarnagar.
3. P.P.N. College, Kanpur.
4. Christ Church College, Kanpur.
5. Govt. Raja College, Kanpur.
6. D.A.V. College, Muzaffarnagar.
7. National Academy, Mussorie.

C. Universities and Advanced Centres:

1. G.B. Pant Agriculture University, Pantnagar.
2. Meerut University, Meerut.
3. Kurukshetra University, Kurukshetra.
4. I.I.T., Delhi.
5. Punjab University, Chandigarh.
6. I.I.T. Bombay.
7. Delhi University, Delhi.
8. I.I.T., Kanpur.
9. Physical Research Labs., Ahmedabad.

D. Conferences:

1. Shillong: COSIP East Regional Conference.
2. Mysore: COSIP South Regional Conference.
3. Ahmednagar: West Regional COSIP Conference.
4. Jaipur: Principals' Conference of Rajasthan.

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Annexure-D

Details of receipts from Sale of ULP Equipment
(25.4.75 till 31.10.77)

| | | | |
|-----|---|----|-----------|
| 1. | D.B.B. Govt. College, Nainital. | Rs | 6,648.75 |
| 2. | I.I.T., Delhi. | Rs | 28,820.00 |
| 3. | I.I.T. Bombay. | Rs | 23,000.00 |
| 4. | Agra College, Agra. | Rs | 6,285.00 |
| 5. | M.B. Patel Science College, Anand; | Rs | 4,016.10 |
| 6. | University college, Kurukshetra. | Rs | 8,230.00 |
| 7. | V.S.S.D. College, Kanpur. | Rs | 3,500.00 |
| 8. | Christ Church College, Kanpur. | Rs | 3,750.00 |
| 9. | M.R. Engineering College, Jaipur. | Rs | 235.00 |
| 10. | St. Edmund's College, Shillong. | Rs | 8,900.00 |
| 11. | Govt. College, Ajmer. | Rs | 19,010.00 |
| 12. | P.P.N. College, Kanpur | Rs | 6,520.00 |
| 13. | S.D.College, Muzaffarnagar. | Rs | 2,730.00 |
| 14. | St. John's College, Agra. | Rs | 8,840.00 |
| 15. | Kurukshetra University. | Rs | 5,505.00 |
| 16. | S.K. College, Sikar. | Rs | 549.00 |
| 17. | Govt. College, Sikar. | Rs | 1,704.00 |
| 18. | Dayanand College, Ajmer. | Rs | 7,310.00 |
| 19. | Meerut College, Meerut. | Rs | 10,900.00 |
| 20. | D.A.V.College, Chandigarh. | Rs | 4,688.60 |
| 21. | Govt. Raja Degree College, Rampur. | Rs | 4,120.00 |
| 22. | New Science College, Hyderabad. | Rs | 2,480.00 |
| 23. | G.B.Pant Agriculture University, Pantnagar. | Rs | 8,134.00 |
| 24. | Majaraja's College, Jaipur. | Rs | 19,989.30 |
| 25. | K.G.K. College, Moradabad. | Rs | 579.00 |

Rs.1,96,443.75

Annexure-E

Details of Dues from Institutions for Supply of ULP
Equipments.

(As on 31.10.77)

| | | | |
|----|---|----|-----------|
| 1. | Maharaja's College, Jaipur. | Rs | 2,125.00 |
| 2. | Aligarh Muslim University, Aligarh. | Rs | 1,500.00 |
| 3. | North-Eastern Hill University, Shillong | Rs | 22,980.00 |
| 4. | University of Roorkee, Roorkee. | Rs | 3,030.00 |
| 5. | School of Physics, Trieste, Italy (Approximate figure) | Rs | 23,000.00 |

Rs 52,635.00

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STATEMENT OF EXPENDITURE AND ACCOUNTS UPTO 31.10.1977

| Item | Upto 24.4.75 | Between 25.4.75 to 31.10.1977 | Total |
|--|--------------|----------------------------------|--------------|
| 1 Laboratory materials | 5,42,755.52 | 4,22,248.37 - 38,356.58* | 9,26,647.31 |
| 2 Workshop materials | 24,889.03 | 66,522.03 | 91,411.06 |
| 3 Stationery | 39,674.77 | 13,315.99 | 52,990.76 |
| 4 Printing | 14,010.00 | 21,657.37 | 35,667.37 |
| 5 Books | 45,169.22 | 3,859.16 | 49,028.38 |
| 6 Contingency | 18,876.82 | 21,261.97 | 40,138.79 |
| 7 Seminars for teachers | 1,00,105.96 | - | 1,00,105.96 |
| 8 T.A. & D.A. | 30,728.51 | 19,103.82 | 49,832.33 |
| 9 Part-time Lecturers | 53,060.92 | 18,500.00 | 71,560.92 |
| 10 Tech. Assistants | 46,778.82 | 32,403.93 | 79,182.75 |
| 11 Workshop Machines | 12,987.19 | 33,932.19 | 46,919.38 |
| 12 Office staff | 16,600.76 | 11,459.70 | 28,060.46 |
| 13 Vehicle Expenses | - | 4,767.07 | 4,767.07 |
| 14 Vehicle cost | - | 54,471.59 | 54,471.59 |
| | 9,45,637.52 | 6,85,146.61 | 16,30,784.13 |
| 15 Expenses on Trieste visit of the Director with ULP equipment. + | | | 22,083.36 |
| GRAND TOTAL | | | 16,52,867.49 |

* Equipment transfer to COSIP and Physics Department of Rajasthan University (Annexure...H)

+ Rs. 30,641.27 less amount debited to SEC A/c, Rs. 8,557.01
(See Annexure....G)

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STATEMENT OF INCOMES UPTO 31.10.1977

Expected from U.G.C.

| | | |
|---|-----|---------------------|
| In I phase | Rs. | 10,00,000.00 |
| In II Phase | Rs. | 3,50,000.00 |
| For mini bus | Rs. | 75,000.00 |
| Receipts from sale of ULP Books | Rs. | 967.00 |
| Receipts from sale of equipment upto 24.4.75 | Rs. | 14,536.00 |
| Receipts from sale of equipment later till 31.10.1977 | Rs. | 1,96,443.75 |
| | Rs. | <u>16,36,946.75</u> |

Less amount spent on SEC account and to be recovered (Trieste visit)

| | | |
|-----|---|---------------------|
| Rs. | - | 8,557.91 |
| Rs. | | <u>16,28,388.84</u> |

Suspence accounts and cash in hand

| | | |
|-----|--|---------------------|
| Rs. | | 24,478.65 |
| Rs. | | <u>16,52,867.49</u> |

ANNEXURE.....H

DETAILS OF EQUIPMENT TRANSFER FROM ULP PHYSICS TO COSIP AND PHYSICS DEPARTMENT

| | | |
|---|-----|------------------|
| Transfer to COSIP, Maharaja's College, Jaipur | Rs. | 18,696.58 |
| Transfer to Physics Department, University of Rajasthan, Jaipur | Rs. | 9,660.00 |
| | Rs. | <u>28,356.58</u> |

Details of receipts from sale of ULP Books

| | | |
|----------------------------------|-----|-----------------|
| Received | Rs. | 967.00 |
| Due (Maharaja's College, Jaipur) | Rs. | 120.00 |
| | Rs. | <u>1,087.00</u> |

CONFIDENTIAL

UNIVERSITY GRANTS COMMISSION

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Meeting:

Dated : April 24, 1978

Item No. 13: To consider the proposal of the Department of Biological Sciences, Madurai University for the purchase of Electron Microscope as a central facility for the University outside the Vth Plan allocation.

The Commission at its meeting held on 23rd August, 1977 while accepting the report of the Visiting Committee which examined the proposal of the Department of Biological Sciences, Madurai University for participating in the programme of Special Assistance to Selected Science Departments agreed that the proposal of the department for the purchase of Electron Microscope may be considered separately and if the same is agreed it could be used as a central facility for the university. The recommendations of the Expert Committee which visited the Department of Biological Science, Madurai University report about the Electron Microscope are re-produced below:-

"The request is also a request for an electron Microscope and supporting equipment like Ultra-Microtome and Shadowing Unit. While addition of Electron Microscope would certainly add further dimension to research potential in fields of Immunology, Plant Microphogenesis, Microbiology and Molecular Biology, it is clear that this equipment cannot be covered in the funds available under the Special Assistance Programme. The Committee is of the opinion that under the Special Assistance Programme a grant of Rs. 2,50,000/- to cover the equipment other than electron microscope and accessories should be available. A special grant to cover the cost of the electron microscope, ultra-microscope and shadowing unit may be given by UGC which may perhaps be accommodated within the Fifth Plan UGC development grant in the second and third priorities."

The Vice-Chancellor of Madurai University has now requested the Commission to provide additional grant of about Rs. 10 lakhs to meet the cost of procurement and installation of a suitable Electron Microscope. The university has submitted the cost estimates furnished by 2 firms for the electron microscope which can be used by all the departments of the university. The cost of the Philips equipment is about Rs. 14.5 lakhs while the other to be supplied by JEEL (Japan) would be to about Rs. 13.5 lakhs for the barest minimum requirements. The

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university will also be able to provide about Rs. 4 lakhs from the equipment grant to various departments and grant sanctioned for the CISL. The university will also be providing building space, physical plant facilities, air-conditioning from the university's own funds. In addition to this the Vice-Chancellor has requested that an amount of about of Rs. 10 lakhs may be provided by the Commission.

The matter regarding provision of separate allocation of Rs. 10 lakhs to Madurai University for obtaining the electron microscope outside the Fifth Plan allocation is placed before the Commission for consideration.

EC(SRI)

CONFIDENTIAL

UNIVERSITY GRANTS COMMISSION

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Meeting:

Dated : 24th April, 1978

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Item No. 14: To consider the report of the expert Committee to the Jawaharlal Nehru University for assessing the additional needs of the School of Computer and System Sciences.

The Jawaharlal Nehru University in March, 1976 approached the Commission for additional funds over and above the 5th Plan allocation for equipment for the School of Computer and System Sciences. The matter was considered by the Commission in its meeting held on 29th April, 1976 vide item No. 21 (d) when the Commission desired that this may be referred to the Computer Committee of the University Grants Commission. The Computer Committee in its meeting held on 24th August, 1976 observed as under:-

"The Committee considered the proposal of the Jawaharlal Nehru University for upgrading its P-1020 computer system at an additional cost of Rs. 18-55 lakhs. The Committee was of the view that P-1020 system should be mainly used for students training functions and inhouse research needs and emphasis could be laid upon software development, data base and concepts of information storage and retrieval. The Committee then scrutinised the additional items of equipment proposed by the Jawaharlal Nehru University and felt that it would be desirable for a Committee to visit J.N.U. and make appropriate recommendations. The Committee may consist of Col. A. Balasubramanian of Electronics Commission Shri Khandekar of Delhi University Computer Centre and Dr. D. Shankar Narayan of the University Grants Commission. The Committee's recommendations may be acted upon by the Commission without waiting for these to be considered by the Computer Committee".

2. The above resolution of the Committee was accepted by the Commission in its meeting held on 18th October, 1976, vide item no.10.

p.t.o.

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*p 162-176

3. The Committee referred to above, visited the J.N.U. on 10th March, 1977 and held discussions with the Vice-Chancellor, Faculty of the School, research students and officers of the University. A copy of the report of the Committee is attached Annexure.*

5th Plan Sanctions and progress made so far

The Commission made the following sanctions for the School of Computer and System Sciences of the J..N.U during the 5th Plan period.

(a) Non-Recurring:

- (1) Books Rs.2.00 lakhs
- (2) Equipment* Rs.10,00 "
- (3) Furniture Rs.0.30 "
- (4) Maintenance of Computer Rs.4.00 "

(b) Staff

- 4 Professors One each in simulation and modelling theory Decision Optimisation Theory, Information Systems and Computer Systems (Software).
- 4 Associate Professors One each in Numerical Analysis Statistics/ Mathematics Programming, Computer Systems (Software) and Abstract Systems Theory.
- 6 Assistant Professors One each in the area of Decision Optimisation, Simulation and Modelling Numerical Analysis systems Programming, Application Programming and Operation Research.
- 9 Others
 - 1 Computer Systems Manager
 - 2 Maintenance Engineers
 - 2 Machine Operators
 - 2 Punch Operators
 - 1 Input/Output Lab.Scheduler
 - 1 Disk Librarian.

*Excluding the cost of Computer R-1020.

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The position of the appointments made and the other expenditure incurred/committed so far by the University is given below:

(a) Appointments Made:

| <u>Professor</u> | <u>Associate Professor</u> | <u>Assistant Professor</u> |
|------------------|----------------------------|----------------------------|
| * (4) 1" | *(4) 1" | *(6) 2" |

* Posts sanctioned

" Posts filled/offered so far.

(b) Non-recurring

| <u>Description</u> | <u>Amount sanctioned</u> (Rupees %%) | <u>Amount spent</u> in Lakhs. | <u>Amount committed</u> |
|---|---|----------------------------------|-------------------------|
| 1. Equipment | 30.00 %% | 27.50 | 9.10 |
| 2. Books & Journals | 2.00 | - | 2.00 |
| 3. Furniture | 0.30 | 0.60 | - |
| 4. Maintenance | - | 0.12 | 0.05 |
| <u>5. Stationery:</u> | | | |
| a) Tapes | - | 0.80 | 1.20 |
| b) Disks | - | 0.20 | 0.50 |
| c) Cards | - | 0.25 | 0.75 |
| d) Paper | - | 0.35 | 0.65 |
| e) Ribbon | - | 0.15 | 0.25 |
| f) Spare parts | - | - | 10.00 |
| g) Testing instruments & other accessories for the development of the laboratory. | - | - | 6.00 |

%% Including the Computer.

Additional Proposals:

The J.N.U had made the following additional proposals for this School for the consideration of the Commission:

- (A) Staff
- 1 Professor
 - 2 Associate Professor
 - 1 Assistant Professor

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(B) Non-Recurring:

| | |
|-----------------------|-----------------|
| i) Equipment | Rs. 20.00 lakhs |
| ii) Furniture | Rs. 0.20 lakhs |
| iii) Books & Journals | Rs. 4.00 lakhs |

The present Committee has made the following observations:

- (1) The Committee stressed to expedite the filling up of the posts already sanctioned without any further delay. This was also discussed by the Committee with the Vice-Chancellor who also agreed with the Committee. No additional staff has been recommended.
- (2) The Commission had already sanctioned the following technical posts on the basis of the recommendations of the Visiting Committee:

| | |
|-----------------------------|---|
| 1. Computer Systems Manager | 1 |
| 2. Maintenance Engineers | 2 |
| 3. Machine Operators | 2 |
| 4. Punch Operators | 2 |
| 5. I/O Job Scheduler | 1 |
| 6. Disk Librarian | 1 |

The Committee could not appreciate as to how the University had appointed 5 Engineers against the Commission's sanction of only 2 posts of Maintenance Engineers. The Committee felt that the staff sanctioned by the Commission was adequate enough to run and maintain the system for one shift. The Committee was also of the view that the University may not introduce more shifts at this stage and take all possible measures to operate one shift effectively.

- (3) The University had made a proposal of Rs. 6 lakhs for the running of the computer. The Committee felt that a provision of Rs. 1.5 lakhs per annum for the maintenance of the system already sanctioned by the Commission on the recommendations of the Visiting Committee is adequate enough and the University should be able to manage within that amount. No additional amount is recommended.
- (4) The Committee was strongly of the view that a Working Group of Experts be appointed by the University immediately to formulate its 6th Plan proposals keeping in view the Charter of the University and the programme of other schools of the University.

(5) The School of Computer and System Sciences of the University should devote itself to the task of training teachers and the students in the University in system analysis and programme. It would be extremely important for the School to interact effectively with the other schools of the University in particular the Schools of Social Sciences and other computer centres in Delhi.

Subject to the above general observations, the Committee has made the following recommendations:

(a) Books & Journals:

The Visiting Committee had recommended a sum of Rs.4 lakhs in three priorities for books/journals - 1st priority Rs.2.00 lakhs, 2nd priority Rs.1.00 lakhs and 3rd priority Rs. 1.00 lakh. Against this, the university has already committed Rs. 2.00 lakhs. In view of this, the Committee suggests that the recommendations made by the Visiting Committee under 2nd and 3rd priorities may be accepted so that a further grant of Rs. 2.00 lakhs be made for this purpose.

(b) Furniture:

The University has requested for a sum of Rs.20,000 more for furniture. The Visiting Committee recommended this amount under 2nd priority. The Committee has recommended that the university may be assisted to the tune of Rs. 20,000 towards the purchase of furniture.

(c) The Commission had sanctioned the following amounts for equipment for the School:.

| | |
|--------------|--------------|
| 1st Priority | Rs. 30 lakhs |
| 2nd Priority | Rs. 5 lakhs |
| 3rd Priority | Rs. 5 lakhs |

The Committee has recommended that it would be enough for the University to have items of equipment like Key to Tape Unit (2) Card Reader (1) Oscilloscopes (2) 15 MHZ Multimeter (2) I.C Tester Transister Tester, Wire-wrap for which the Commission may agree to provide funds as recommended by the Visiting Committee under second and third priorities indicated above. The Committee felt that the request of the University for purchase of a graphic display unit with a built in computer is not justified on the basis of present activities and usage of computer system.

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The Committee emphasised that the School of Computer and system Sciences should consolidate its present activities and expedite the appointments of the Faculty. The Committee was further of the opinion that this may not be the appropriate time for the University to establish an electronic laboratory in the School of Computer and System Sciences.

In Delhi, there are many computers and it would be worthwhile if the School of Computer and System Sciences of the University coordinate with them. The Committee suggests that the University may work out a suitable programme of collaboration with other computer centres in Delhi.

The recommendations of the Committee are summarised as under

| | |
|------------------|---|
| Books & Journals | Rs. 2 lakhs (provided under 2nd and 3rd priorities of the 5th Plan visiting Committee's recommendations) |
| Furniture | Rs. 20,000/- Provided under 2nd priority of the 5th Plan Visiting Committee's recommendations) |
| Equipment | Rs. 10 lakhs (which had been provided under 2nd and 3rd priorities - 5 lakhs each by 5th Plan Visiting Committee) |

The matter is placed before the Commission for consideration.

AS (B5a)/DS (D5)

Report of the Expert Committee to the Jawaharlal Nehru University for assessing the additional needs of the School of Computer & System Sciences.

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COMMITTEE AND VISIT

1. The Jawaharlal Nehru University in March, 1976 approached the Commission for additional funds over and above the 5th plan sanctions for equipment for its School of Computer and System Sciences. The matter was considered by the Commission in its meeting held on 29th April 1976 when the Commission desired that this may be referred to the Computer Committee of the UGC. The Computer Committee in its meeting held on 24th August, 1976 observed as under:-

"The Committee considered the proposal of the JNU for upgrading its R-1020 computer system at an additional cost of Rs.18.55 lakhs. The committee was of the view that R-1020 system should be mainly used for students training functions and inhouse research needs and emphasise could be laid upon software development, data base and concepts of information storage and retrieval. The Committee then scrutinised the additional items of equipment proposed by the JNU and felt that it would be desirable for a committee to visit JNU and make appropriate recommendations. The committee may consist of Col.A.Balasubramanian of Electronics Commission Shri Khandekar of Delhi University Computer Centre and Dr. D Shankar Narayan of the UGC. The Committee's recommendations may be acted upon by the Commission without waiting for these to be considered by the Computer Committee"-

2. The above resolution of the committee was accepted by the Commission in its meeting held on 18th October, 1976.

3. The committee referred to above visited the JNU on 10th March, 1977 and held discussions with the Vice-Chancellor, Faculty of the School, research students and officers of the University. The Committee also went round the building of the School of Computer and System Sciences and saw the functioning of the Computer R-1020. The Committee was assisted in its work by Dr. ML Mehta of the UGC Office.

Background:

4. The School of Computer and System Sciences of the JNU was established in the 4th plan period, but was able to initiate its programmes only in the 5th plan, beginning with the academic session 1975-76.

The programmes envisaged by the School would prepare the students with a background in computer and information processing suitable either for a career in computers or for further studies in Computer Science including theoretical foundation of Computer Science, programming languages and systems, computer applications besides providing for either a career in teaching or further appropriate studies in mathematics which could lead to a suitable career in application of mathematics if desired. The School has also envisaged other short-term courses which would initiate inter-disciplinary programmes and cater to the needs of the existing ones. Besides, courses would also be given which are of serious nature and which are recommended by different Schools as parts of the respective academic programmes. There are also plans to start schemes for training the students, faculty and others.

5. The School of Computer and System Sciences started offering short-term courses beginning the monsoon semester of 1975-76. The courses offered were in (a) basic mathematical concepts (13), (b) computer system organisation (19) and (c) computer software (15). The figures within brackets indicate the student enrolment in each course. In the winter semester, two more courses were offered. These were (a) numerical analysis and (b) computing system.

6. One Ph.D. student was admitted in 1975 and the M.Phil. programme was started in July 1976. In the M.Phil. programme, each M.Phil. student is required to write a thesis in a suitable area and is expected to go through a scheme of course work described below:

- Digital Computer Organisation.
- Principle of Mathematical Analysis.
- Discrete Structure in Mathematics.
- Simulation and Problem Solving.
- Numerical Analysis.
- Graph Theory.
- Topics in Software I.
- Topics in Software II.

7. Students of the School in general are expected to learn the programming languages through such courses and are expected to use them in writing their own programmes as may be necessary. Besides, students are required to attend seminars and participate in the discussions.

8. The research interest of the School are in the areas of finits group theory, algebraic coding theory, automatic theory, algebraic systems theory, applications of mathematical logic to pattern recognition, bio-medical engineering, foundations of mathematics and linguistics. The faculty has produced research papers and also participated in national and international conferences.

9. In M.Phil. currently one student is working on a problem in group theory and another one in the area of pattern recognition. Of the remaining two - one has chosen to work on micro-processors and the other one in the general areas of software. The Ph.D. student is working in the general area of control.

10. The focus of the School at present is to provide the computer service facility and user consultancy. The Computer Centre personnel have been providing consultancy in languages and in the development of standard programming techniques in the research and project works sponsored by the university. The School of Social Sciences has been potential user of the computer facilities because of the data they handled for conducting population studies, development work, economic analysis, regional planning and regional surveys. Standard programmes have been developed for the following techniques:

- i) Simple and Multiple Regression.
- ii) Factor Analysis.
- iii) Correlation and Canonical Correlation.
- iv) Simple and Complex Matrix Methods etc.

11. Consultancy has been provided for various projects undertaken by the university which have been sponsored by the UGC/NCERT/CSIR/ICSSR.etc. (Annexure I). Nature of jobs of the External users currently being handled by the JNU staff areas under:-

- i) Inventory Control (ITC)
- ii) Payroll (ITC)
- iii) Financial Accounting (Bank Reconciliation), (DCCS)

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- iv) Distribution (NDDV).
- v) Building of data base for library Science (INSDOC)
- vi) Development of basi payroll package.

5th Plan sanctions and progress made so far:

12. The Commission made the following sanctions for the School of Computer and System Sciences of the JNU during the 5th plan period:

(a) Non-recurring:

- | | |
|-----------------------------|-----------------|
| (1) Books | Rs. 2.00 lakhs |
| (2) Equipment* | Rs. 10.00 lakhs |
| (3) Furniture | Rs. 0.30 lakhs |
| (4) Maintenance of Computer | Rs. 4.00 lakhs |

(b) Staff:

- | | |
|------------------------|--|
| 4 Professors | One each in simulation and Modelling theory Decision Optimisation Theory, Information systems and Computer Systems (Software). |
| 4 Associate Professors | One each in Numerical Analysis Statistics/ Mathematics Programming Computer Systems (Software) and Abstract Systems Theory. |
| 6 Assistant Professors | One each in the area of Decision Optimisation Simulation and Modelling Numerical Analysis Systems Programming, Application Programming and Operation Research. |

* Excluding the cost of Computer R-1020.

Staff contd...

- 9 Others
 - 1 Computer System Manager.
 - 2 Maintenance Engineers.
 - 2 Machine Operators.
 - 2 Punch Operators.
 - 1 Input/Output Lab. Scheduler.
 - 1 Disk Librarian.

13. The position of the appointments made and the other expenditure incurred/committed so far by the university is given below:

(a) Appointments Made:

| <u>Professor</u> | <u>Associate Professor</u> | <u>Assistant Professor</u> |
|------------------|----------------------------|----------------------------|
| *(4) 1" | *(4) 1" | *(6) 2" |

* Post sanctioned

* Post filled/offered so far.

(b) Non-recurring:

| <u>Description</u> | <u>Amount Sanctioned</u> | <u>Amount Spent</u> | <u>Amount Committed</u> |
|-----------------------|--------------------------|---------------------|-------------------------|
| | (RUPEES IN | | LAKHS) |
| 1. Equipment | 30.00** | 27.50 | 9.10 |
| 2. Books & Journals | 2.00 | - | 2.00 |
| 3. Furniture | 0.30 | 0.60 | - |
| 4. Maintenance | - | 0.12 | 0.05 |
| 5. <u>Stationery:</u> | | | |
| i) Tapes | - | 0.80 | 1.20 |
| ii) Disks | - | 0.20 | 0.50 |
| iii) Cards | - | 0.25 | 0.75 |

** Including the Computer.

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| | | | | |
|------|--|---|------|-------|
| iv) | Paper | - | 0.35 | 0.65 |
| v) | Ribbon | - | 0.15 | 0.25 |
| vi) | Spare parts | - | - | 10.00 |
| vii) | Testing instruments & other accessories - for the development of the laboratory | - | - | 6.00 |

ADDITIONAL PROPOSALS:

14. The JNU has made the following additional proposals for this school, for the consideration of the Commission:

| | |
|-----------|-----------------------|
| (a) Staff | 1 Professor |
| | 2 Associate Professor |
| | 1 Assistant Professor |

(b) Non-recurring:

| | |
|------------------------|-----------------|
| (i) Equipment | Rs. 20.00 lakhs |
| (ii) Furniture | Rs. 0.20 lakhs |
| (iii) Books & Journals | Rs. 4.00 lakhs |

The proposals are summarized in Annexure-2. The list of instrument is given in Annexure-3.

15. The following justification has been made by the university in support of its proposals:-

(i) The School is considerably handicapped in the absence of adequate data proportion facilities which need to be strengthened expeditiously so that the Computer Centre could be put to productive use to its required capacity. Facilities such as analogue computing, Hybridization, interface facilities, XY-Plotters Interacting machine such as Plato and Tektronics are extremely essential for the growth of the Computer Centre.

(ii) The Computer Centre of the JNU has been planned to be a separate science oriented centre,

offering computer facilities to all teaching and research departments of the university as well as to the Electronic Commission and outside users.

The school has identified equipment as per lists appended with the report and according to the university these are extremely essential for generating inputs to keep the computer busy.

16. Some of the problems faced by the School of Computer and System Sciences as stated by the University are as under:-

(i) The present single shift is inadequate to take care of the present load. The details of the load on the computer are given in Annexure-4.

(ii) There is a lack of manuals, programmes and lack of facility for inhouse training. There are problems connected with the maintenance which are essentially due to (a) lack of adequate number of personnel in different categories (b) non-availability of certain spares (c) lack of maintenance manuals (d) recurrent hardware troubles with regard to card reader, magnetic tape drive and the line printer.

(iii) Limitation of the M.Phil. programme in scope. It was stated that it is necessary to broaden the base of the programme to cover a wider spectrum so as to include training on (1) system software development (2) application programming (3) computer system and architecture (4) planning of information system.

There is a shortage of space in the School, and the university desires that the service staff should be provided accommodation on the campus.

17. In this connection the Committee also took note of the following:

(a) The Vice-Chancellor, Professor BD Nagchaudhry in his letter addressed to the Chairman, UGC, made the following observation with regard to the School of Computer & System Sciences:

"Due to the good offices of the UGC, we got partial assistance for the purchase of a Riyadh 1020 Computer, basically a small and conceptually not a contemporary machine. While the

machine has enabled us to make a start on the School of Computer and Systems Sciences, it cannot be the basis of the entire teaching and research activities of the School. The danger that we run is that unless we generate suitable research and teaching activities, the machine becomes a tool for calculations for sundry purposes and not the nucleus of mathematical research, operations research and systems analysis studies. To generate these activities we have taken a certain bold and calculated risk is not entering into contract for maintenance and servicing of the computer. While this is going to be very good for training purposes, it will hardly be possible to sustain such activities if certain facilities, such as analogue computing, hybrid interface facilities, XY plotters, interacting systems (such as pl₂to or Tektronix) are either purchased or developed. We propose to reduce costs by developing and building some facilities and would need your support for funds both to develop and purchase some of these facilities?

- (b) The Visiting Committee to the JNU made the following observations about School of Computer and System Sciences in its report:-
- (i) The School of Computer and Systems Sciences is essential to support the educational and research programmes at the university. The areas of computer sciences and systems sciences are important both in terms of advancing our basic understanding of many fields of human endeavour and in providing us with techniques of great power for these fields.
- (ii) To support such programmes of study, the university will need certain inhouse facilities such as currently provided by the R-1020 computer, but in addition the university would also need access to larger computer systems in the country. The area of interest in the university are also closely related to the activities of the proposed National Information Centre which is designed to develop methodologies in organising information systems in support of national planning and decision making. The university, therefore, will

find it to its advantage to closely associate itself with the NIC and provide a complementary role of training high level information and systems scientists for the Centre besides undertaking research projects in information systems analysis.

- (iii) The Committee is of the view that the School of Computer Sciences should devote itself to the task of training the teachers and the students in the university in Systems Analysis and Programming to be able to utilise facilities in the university for the various programmes. The Centre should also have core staff who have expertise in information systems organisation, model building and analysis to be able to help the other schools in undertaking large data based projects. The School of Computer Sciences should collaborate with the other schools, such as, the schools of social sciences, International Studies, Languages and the newly created School of Theoretical and Environments Sciences as well as School of Life Sciences to build up computer-based applications both on the facilities available in the university as well as large facilities at the National Information Centre or elsewhere.
- (iv) The activities of the School of Computer Sciences should be drawn up so as to build up expertise in the country in these areas of application in which currently there are very significant gaps.
- (v) Further the School would need ancillary equipments such as card handling trays, magnetic tapes and disk cabinets trollys, special stationery, maintenance tools and test benches and equipments and general supplies such as tapes cards, special stationery. For this, the Committee recommends a provision of Rs.5 lakhs under the 'first priority' for the remaining period of the plan.
- (vi) Provision should also be made for the hardware maintenance of the system of the order of about Rs.1.5 lakhs per year.

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(c) The comments made by the university on the report of the Visting Committee are as under:

- (i) No mention at all has been made about provision for hardware developments in the school of Computer & Systems Sciences. It is also surprising to note that the Committee did not consider it important even to recommend creation of faculty position in such important and relevant areas like Algebra and Probability to Computer Sciences. Repeated emphasis on creation of a systems Sciences Group gives the impression that perhaps the sole objective of the School of Computer and Systems Sciences is to gear its activities to the needs of the proposed National Information Centre only rather than laying emphasis on the balanced development of its academic and research programmes.
- (ii) Out of the allocation of Rs. 30 lakhs, the R-1020 system alone has cost the university over Rs. 27-5 lakhs and as a result we are left with hardly any amount for acquiring the ancillary facilities including the data preparation equipment which is extremely essential for generating sufficient inputs so that the Computer could be put to the productive use to its optimum capacity.
- (iii) The Visting Committee in its report has failed to provide adequate number of maintenance, developmental and operational staff so as to ensure optimum utilisation of the Computer even to the extent of two shifts a day.
- (iv) It would be virtually impossible to meet all maintenace and operational expenses of the Computer Centre during the entire plan period out of the meagre allocation of Rupees four lakhs recommended by the Visiting Committee and which according to the modest estimates needed to be raised to the order of at least Rs. 10.00 lakhs.

(d) The Visiting Committee made the following recommendations about the School in its report:

| | PRIORITY | | |
|-----------------------|----------|-----|-----|
| | 1st | 2nd | 3rd |
| a) <u>Recurring :</u> | | | |
| Professor | 4 | - | - |
| Associate Professor | 4 | - | - |

contd.....

| <u>Recurring contd...</u> | <u>1st</u> | <u>2nd</u> | <u>3rd</u> |
|---------------------------|------------|------------|------------|
| Assistant Professor | 6 | - | - |
| Others | 9** | - | - |
| | <u>23</u> | <u>-</u> | <u>-</u> |

(b) Non-recurring: (Rupees in lakhs)

| | | | |
|----------------|--------------|-------------|-------------|
| Equipment* | 30.00 | 5.00 | 5.00 |
| Books/Journals | 2.00 | 1.00 | 1.00 |
| Furniture | 0.30 | 0.20 | - |
| Maintenance | 4.00 | - | - |
| Total : | <u>36.30</u> | <u>6.20</u> | <u>6.00</u> |

- ** Others:
- 1 Computer Systems Manager
 - 2 Maintenance Engineers
 - 2 Machine Operators
 - 2 Punch Operators
 - 1 Input/output job scheduler
 - 1 Disk Librarian.

* including cost of Computer.

The present Committee makes the following observations and recommendations:

- (i) The Committee noted that the Commission had sanctioned a faculty of 14 members for the School at the different levels. The Committee was also told that 6 appointments have been made and offers have also been given to another 5 persons at the various levels. The Committee feels that the School should be able to function smoothly with the existing staff already sanctioned. What is really needed is to expedite the filling up of the posts already sanctioned without any further delay. The Committee discussed this point with the Vice-Chancellor who also agreed with the Committee. No additional staff is recommended by the Committee.
- (ii) The Committee was given to understand that of the operative time of 800 hours since 1st May, 1977, the machine had about 300 hours of down time. Out of the 300 hours of non-operation of the machine, about 150 hours are due to various

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troubles or defects of the computer system itself. The Committee was also told that no help or assistance was available to the computer centre either from the Bulgarians who supplied the computer or from the computer maintenance corporation or from any other source with the result that the university's own technical staff had to remove the difficulties of the machine. The University does not appear to have entered into any maintenance contract with the suppliers. The Committee noted that the Commission has already sanctioned the following technical posts on the basis of the recommendations of the Visiting Committee.

- 1. Computer Systems Manager ... 1
- 2. Maintenance Engineers ... 2
- 3. Machine Operators ... 2
- 4. Punch Operators ... 2
- 5. I/O Job Scheduler ... 1
- 6. Disk Librarian ... 1

The Committee understand that the university has already made 10 appointments which includes 5 engineers, 3 senior technical assistants and 2 junior technical assistants. The Committee could not, however, appreciate as to how the university could appoint 5 engineers when the Commission had sanctioned only 2 posts of maintenance engineers. The Committee thus finds that the staff already appointed by the university is not in accordance with the sanctions of the UGC which were based on the recommendations of the 5th Plan Visiting Committee to the university. The Committee suggests that the university should in the first instance appoint the staff as sanctioned by the Commission. The Committee is also of the opinion that the staff sanctioned by the Commission is adequate enough to run and maintain the system for one shift.

(iii) The Committee noted that the university is keen to run more than one shift. In this connection, the committee took note of the various difficulties being faced by the university in the running of the system. The Committee is therefore of the view that unless these difficulties are solved and the appointments to the various posts are made, the university may not introduce more shifts at

this stage and should take all possible measures so as to see that the one shift which is now being run by the university operates effectively.

- (iv) The university has made a proposal of Rs. 6 lakhs for the running of the computer. The Committee noted that the Commission has already agreed to a provision of Rs. 1.5 lakhs per annum for the maintenance of the system as recommended by the V Plan Visiting Committee. The Committee feels that this amount is adequate enough and the university should be able to manage the expenditure within this amount. No additional amount is recommended by the Committee.
- (v) The Committee noted that the School has made a beginning only very recently. Even the appointments of the faculty are yet to be completed. It is extremely important for the school to chalk out a well thought-out programme in line with the philosophy of the university. The Committee is strongly of the view that a Working Group of experts be appointed by the university immediately to formulate its 6th Five Year Plan proposals keeping in view the charter of the university and the programmes of the other schools of the university.
- (vi) The Committee took note of the observations made by the Visiting Committee to the university on this school in its report and fully endorses the recommendations made by the V Plan Visiting Committee. The school of computer and system sciences of the university should devote itself to the task of training teachers and the students in the university in system analysis and programming. It would be extremely important for the school to interact effectively with the other schools of the university in particular the school of social sciences and other computer centres in Delhi.
- (vii) Subject to the above general observations the Committee makes the following recommendations:

a) Books and Journals:

The Visiting Committee had recommended a sum of Rs. 4 lakhs in three priorities for books/journals - 1st priority Rs. 2.00 lakhs, 2nd priority Rs. 1.00 lakh and 3rd priority Rs. 1.00 lakh. Against this, the university has already

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committed Rs. 2.00 lakhs. In view of this the committee suggests that the recommendations made by the Visiting Committee under 2nd and 3rd priorities may be accepted so that a further grant of Rs. 2.00 lakhs be made for this purpose.

b) Furniture:

The university has requested for a sum of Rs. 20,000 more for furniture. The Visiting Committee recommended this amount under 2nd priority. The university may be assisted to the tune of Rs. 20,000 towards the purchase of furniture.

c) The Committee noted that the Visiting Committee in its report had recommended the following for equipment for the school:

| | | | |
|--------------|-------|--------------|-------|
| 1st priority | | Rs. 30 lakhs | |
| 2nd priority | ... | Rs. 5 lakhs | |
| 3rd priority | ... | Rs. 5 lakhs | |

The Committee was given to understand that the Commission has already sanctioned funds under 1st priority to the university and the university has already incurred Rs. 27.50 lakhs under this head and has made a further commitment of Rs. 9.10 lakhs.

The over all additional requirements now made by the university are to the tune of Rs. 20 lakhs. The Committee recommends that the Commission may agree to provide additional funds as recommended by the Visiting Committee under 2nd and 3rd priorities. This amount, the Committee feels will be enough for the university to have items of equipment like key to Tape unit (2), card reader (1), Oscilloscopes (2)-15 MHZ, Multimeter (2) I.C. Tester, Transister Tester, Wire-wrap. The Committee feels that the request of the university for the purchase of a graphic display unit with a built in computer is not justified on the basis of present activities and usage of computer system.

(viii) The Committee would further like to emphasise that school of Computer and System Sciences before expanding its activities should consolidate its present activities and expedite the

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appointments of the faculty. The Committee also feels that the school should formulate a well-thought programme of its activities keeping in view the charter of the university. The Committee is of the opinion that this may not be the appropriate time for the university to establish an electronic laboratory in the school of Computer and System Sciences.

- (ix) In Delhi, there are many computers and it would be worthwhile if the School of Computer and System Science of the University coordinates with them. The Committee suggests that the university may work out a suitable programme of collaboration with other computer centres in Delhi.

The Committee puts on record its thanks to Dr. B.D. Nagchaudhuri, Vice-Chancellor, J.N.U., the Faculty of the School and the Officers of the university for facilitating the the visit of the Committee.

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UNIVERSITY GRANTS COMMISSION

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Meeting:

Dated: 24th April, 1978

Item No.15 : To consider the report of the Committee appointed by the University Grants Commission to consider the proposals relating to the School of Physical Sciences, School of Environmental Sciences and the School of Life Sciences of the Jawaharlal Nehru University.

At its meeting held on 18th October, 1976 (Item No.12), the Commission while considering the proposal of the Jawaharlal Nehru University for establishment of a School of Physical Sciences in the University felt that to have an integrated view of the additional requirements of the university, a committee be appointed to consider additional proposals received from the University keeping also in view the academic programmes of the Delhi University with a view to bringing about effective-co-ordination between the two Universities. Accordingly, a Committee with Prof. B.M. Udgaonkar as Convenor and Professors R.P. Bambah, A.R. Verma, C.N.R. Rao, Hari Narain and D.Siddiqi as members, was appointed to consider the proposals made by the University for the establishment of School of Physical Sciences, Life Sciences and Environmental Sciences.

For the establishment of these three Schools, the Jawaharlal Nehru University had suggested programmes involving a sum of Rs. 107-04 lakhs for both non-recurring and recurring items- Rs. 54.40 lakhs for the School of Physical Sciences, Rs. 31.65 lakhs for the School of Life Sciences and Rs. 20.99 lakhs for the School of Environmental Sciences. The Committee had a number of meetings and also visited the University and the Schools in July and August 1977 and held discussions with the vice-Chancellor, the Deans and faculty members. A copy of the Report of the Committee is at Appendix. * The following are the general observations/recommendations of the Committee:-

1. It was noted that the Commission has already allocated a sum of Rs.691 lakhs approximately for the various programmes of development of the

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University. This included a sum of Rs. 20 lakhs for equipment for the school of Environmental Sciences and Rs. 17.5 lakhs for the school of Life sciences. These allocations have been fully spent/committed by both the Schools.

2. The recommendation of the 5th Plan visiting Committee that the University may explore to develop a special type of instrumentation facility to be made use of, by all the schools keeping in view the inter-disciplinary nature of the programmes has not been pursued and immediate steps in this direction are required to be taken for developing a co-ordinated approach to use the costly facilities provided in the university.
3. No cogent case has been presented by the University for additional staff in relation to well-knit research programmes in major thrust areas and no additional staff is considered necessary in terms of the teaching needs alone. A special responsibility rests with the University to set the pace in interdisciplinary programmes in the national university system. With this in mind, the following specific recommendations have been made by the Committee in respect of the activities of the three Schools:
4. School of Life Sciences:

(a) The school of Life Sciences established in 1971 has started multi-disciplinary programmes in Life Sciences leading to M.Sc., M.Phil. and Ph.D. degrees. The faculty has 20 members having expertise in developmental biology, plant bio-chemistry, Physiology, radiation biology, Photo-biology and membrane studies, genetics, bio-physics, botany and Zoology.

A proposal for 6 additional positions has been made for the School. It was noted that 8 faculty positions have already been sanctioned in the 5th Plan (4 Professors, 2 Associate Professors and 2 Assistant Professors) but only 4 of these could be filled up so far. The University has appointed 4 fellows and has emphasized that these positions were needed to regularise these appointments. In the Committee's view, no additional positions are required to be created for this purpose. The Committee also could not accept the proposal of the University for additional staff members.

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- (c) There is, however, a need to induct senior people to strengthen the over all cohesiveness and directivity. In case the University is able to identify outstanding scientific and makes a proposal for creating more senior positions for such identified scientists, it may be favourably considered by the Commission. The equipment needs in relation to the broad research areas of Biology- radiation biology, Plant Bio-Chemistry, Physiology including memberan studies, developmental biology, neuro biology including neuro-chemistry and microbiology-were assessed and the Committee recommends a provision of Rs.8.61 lakhs for purchase of equipment listed in Annexure-VI of the report.
- (d) The Committee was unable to understand how there has been a committed expenditure of Rs.40.9 lakhs on equipment against a grant of Rs. 17.5 lakhs sanctioned for the School of Life Sciences by the Commission.
- (e) For any other requirements including design and fabrication of special equipment, the University may approach the Sciences Research Council of the Commission, C.S.I.R., D.S.T.etc. with suitable research projects.

5. School of Environmental sciences:

- (a) This School, established in 1974 started functioning in July 1975. The five areas where work has been started are Mathematical Modelling, River Basin Studies, Mineral Resources and Management, Eco-systems process and Interaction between Bio-responses to different environmental conditions.
- (b) At present there are 16 members on the staff and one Professor is likely to join soon from the N.E.E.R.I. The Commission has sanctioned 4 Professors, 5 Associate Professors 6 Assistant Professors and 4 technical staff members for this School in the current Plan. In order to strengthen the activities of this School, 23 additional positions have been sought by the University. The University

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has also sought assistance of Rs. 25.86 lakhs for equipment/instruments in addition to the sum of Rs. 20 lakhs already sanctioned.

- (c) The M.Sc. programme has been started contrary to the recommendation of the 5th Plan Visiting Committee and the working group on the Schools appointed by the University itself. The University has agreed to discontinue this programme. The students who are in the second year of the M.Sc. course after completing the M.Sc. course be admitted to M. Phil. course in the School provided they satisfy the admission criteria on suitable fellowships.
- (d) There was no evidence of any co-ordination obtaining among the various faculty members of the School. The five areas of thrust selected need re-thinking so that it would fit in with the objectives of the School and the University. The philosophy and programme of work of this School require discussion in detail by the faculty members and the School may organise seminar activity regularly which would help in organising programmes of research work and courses, better. A typical eco system be identified and integrated studies by the entire faculty be initiated in the same region with emphasis on different aspects of environment. These studies would need field laboratory and computer inputs and such an approach can bring the much needed integration of activities of the staff members and better appreciation of environmental problems both academic as well as applied. It will also be useful to plan and strengthen the future activities of the School for the 6th Plan. The School of Environmental Studies should consolidate and sharpen the focus of their activities by fully utilising the resources already available before thinking of enlarging their activities by doubling the faculty and financial requirements for equipment.
- (e) Prof. Dave has moved to the School of Environmental Sciences from the School of Life Science. A sum of Rs. 4 lakhs towards the equipment needs of his programme has been recommended by the Committee. The University should let him keep the laboratory equipment he was using in his previous school.

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6. School of Physical Sciences:

The Committee has endorsed the views of the 5th Plan Visiting Committee namely "it was premature to consider a proposal for the School of Physical Sciences and that such a proposal has not been considered in depth by working groups. The University had yet to develop fully the programmes for its School of Life Sciences and Environmental Sciences." The School of Environmental Sciences is yet to identify its focal points. The creation of a School of Physical Sciences is, therefore, likely to disturb the process of crystallisation and stabilisation of all inter-disciplinary programmes in the School of Environmental Sciences. The Committee was also not clear why the Jawaharlal Nehru University should start a programme in Material sciences or Energy Studies when such programmes are being developed elsewhere, in particular Energy is being actively pursued in the IIT, Delhi. The University is at present planning to undertake feasibility study with regard to the proposed School of Physical Sciences by appointing one or two persons. This can be done by the University by inviting some distinguished scientists as Visiting Professors without any commitment from the UGC; that the proposed school would be established in the next plan period. Considering the weakness of planning and co-ordination with regard to the the school of Environmental Sciences, the Committee feels that any proposal from the University for a Centre for Energy Studies or a Centre for Studies of Materials as part of School of Physical Sciences should be entertained by the UGC only if the University comes up with a detailed feasibility report taking into account the factors indicated by the Committee.

7. General Facilities:

The University has proposed that it may be allowed to go ahead with the processing of the import of an electron microscope and the funds for this may be treated as a first charge on the 6th plan allocation of the University. The Committee while supporting the general idea as above has indicated that such facilities would then have to be provided to all the Universities and they would have to be identified to that effect by the UGC provided there

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is justification for providing for such an instrument in terms of the research programmes, ongoing or contemplated and the non-availability of such an instrument in the vicinity. The Committee has noted the availability of several electron microscopes at the various institutions in Delhi.

In summary the recommendations of the Committee are as follows:-

| | |
|---|---------------------------------------|
| 1. School of Life sciences | Rs.8.61 lakhs for Equipment |
| 2. School of Environmental Sciences. | Rs.4,00 lakhs for <u>Equipment</u> |
| Total : | <u>Rs.12.61 Lakhs</u> |

The matter is placed before the Commission for consideration.

A.S. (D5a)/DS (D5)

SIK

Report of the Committee appointed by the U.G.C. to consider the proposals relating to the School of Physical Sciences, School of Environmental Sciences and the School of Life Sciences of the Jawaharlal Nehru University.

APPOINTMENT OF THE COMMITTEE

1. The Jawaharlal Nehru University made a proposal to the U.G.C. for the establishment of the School of Physical Sciences in the University. This was considered by the Commission in its meeting held on 18th October, 1976 when the Commission resolved as under :-

"The Commission considered the proposal of the Jawaharlal Nehru University, for establishing the School of Physical Sciences in the University. The Chairman mentioned that he had since received another letter from the Vice-Chancellor with regard to other requirements of the University during the current Plan period. The Commission felt that, to have an integrated view of the additional requirements of the University, a Committee may be appointed to consider the proposals received from the University and if necessary, to review also the existing proposals accepted within the allocation indicated to the University. The Committee may also, while making recommendations, keep in view the academic programmes of the Delhi University so as to bring an effective co-ordination between the two universities".

In pursuance of the above resolution of the Commission, a Committee consisting of the following was constituted :-

1. Professor B.M. Udgaonkar
Tata Institute of Fundamental Research
Bombay.
2. Professor R.P. Bambah
Department of Mathematics
Panjab University
Chandigarh.
3. Professor A. R. Verma
Director
National Physical Laboratory
New Delhi.
4. Professor C.N.R. Rao
Department of Chemistry
Indian Institute of Science
Bangalore.
5. Dr. Hari Narain
Director
National Geophysical Research Institute
Hyderabad.

6. Professor O. Siddiqi
Tata Institute of Fundamental Research
Bombay.

Professor C.N.R. Rao was unable to participate in the work of the Committee.

The Committee was assisted in its work by Dr. M.L. Mehta of the UGC Office.

3. The Committee met on 8th February, 6th July and 10th August, 1977. The meeting on the 8th February, 1977 was held in the UGC Office and on 6th July and 10th August, 1977, the Committee, besides, meeting in the office of the U.G.C., also visited the J.N.U. and the Schools of Life and Environmental Sciences. The Committee had detailed discussions with Dr. B.D. Nag Chaudhry, Vice-Chancellor, JNU and with the Deans and faculty members of the Schools of Life Sciences and Environmental Sciences. The Committee also went round the laboratories of both the Schools. In the School of Environmental Sciences, the Committee had an opportunity of meeting the students.

4. The financial implications of the proposals made by the University involved a sum of Rs. 107.04 lakhs for the remaining period of the Vth Five Year Plan as detailed below :-

| S.No. | SchooL. | Non-Recurring. | Recurring** | Total |
|-------|------------------------------|-------------------|-------------|--------|
| | | (Rupees in lakhs) | | |
| 1. | Physical Sciences(I)* | 42.50 | 11.90 | 54.40 |
| 2. | Life Sciences (II)* | 27.15 | 4.50 | 31.65 |
| 3. | Environmental Sciences(III)* | 14.16 | 6.83 | 20.99 |
| | Total: | 83.81 | 23.28 | 107.04 |

* These are the numbers of Annexures where the details of the proposals are given.

** The recurring expenditure has been worked out for a period of $1\frac{1}{2}$ years.

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5. The Commission has already separately sanctioned funds to the tune of Rs.80-46 lakhs to Jawaharlal Nehru University, subsequent to the sanctioning of funds on the basis of the recommendations of the V Plan Visiting Committee.

5. The Committee was supplied the following material by the UGC Office at the beginning of its work :-

- (1) Fifth Plan proposals originally made by the University.
- (2) Observations made by the Fifth Plan Visiting Committee in its report on the University.
- (3) Sanctions made by the Commission on the basis of the recommendations of the Visiting Committee, as also the sanctions made later on.
- (4) Copy of the letter dated October 9, 1976 from the Vice-Chancellor, Jawaharlal Nehru University, to the Chairman, U.G.C. commenting on the report of the Fifth Plan Visiting Committee.
- (5) Proposals of the University to establish a School of Physical Sciences.
- (6) Additional proposals made by the University along with their justification.
- (7) Report of the working groups in the Schools of Life and Environmental Sciences.

APPROACH

6. The Committee at its meeting on 8.2.1977, took note of all the observations made in the above papers and decided to adopt the following line of approach :-

- (1) It would be desirable to know more about the progress of interdisciplinary approach in each School and how far the faculty in the Schools is committed to such an approach.
- (2) It would be desirable to know how far the recommendations made by the various working groups set up by the University or by UGC Committees have been actually implemented by the various Schools/Centres of the University.
- (3) The University may therefore, be requested to send a consolidated note about the progress made by the Schools so far, especially in establishing a coordinated approach, and also indicating the problems faced by the Schools in achieving their goals.

- (4) One may ascertain the major thrust areas of research in each School, the available expertise and facilities for such areas, the existing gaps and the proposals of the University to fill them. The total needs - men and material - would have to be considered in the light of such a perspective to be provided by the University, keeping in view (a) the limitations on the availability of trained personnel and resources, (b) that less than two years of the Fifth Five Year Plan are left and (c) that the University should not duplicate the work being done by other universities or research institutions in Delhi.
- (5) The University may be requested to send the report of the working group on the School of Physical Sciences.
- (6) The role of the proposed new School of Physical Sciences may be considered in relation to the over-all structure and activities of the University and to the objectives with which the Schools of Life Sciences and Environmental Sciences were created; the possible impact of the creation of such a School on the inter-disciplinary programmes should be assessed.

VIEWS OF VICE-CHANCELLOR & OTHERS

7. The Vice-Chancellor, Deans and faculty of the two schools in the course of their discussions with the Committee made the following general observations :-

- (1) The Schools of Life and Environmental Sciences at the J.N.U. are new experiments with emphasis on inter-disciplinary approach. It will take time for the Schools to develop an integrated unified approach in the areas of Life Sciences and Environmental Sciences.
- (2) There is an urgent need for sound foundation in both the Schools of Life Sciences and Environmental Sciences.
- (3) The Schools should stress a few selected areas of research, with emphasis on an inter-disciplinary approach.
- (4) The University does not contemplate the creation of any departments in the Schools.
- (5) There would be no duplication of the academic activities of the Schools vis-a-viz Delhi University or other teaching and research institutions in Delhi.
- (6) A substantial portion of the Foundation grant had lapsed for reasons beyond the control of the University which was in the initial stages of its establishment at that time. The proposals of the Schools essentially relate to their establishment and not to development.

8. GENERAL OBSERVATIONS

The Committee makes the following general observations:

- (1) The Commission had allocated a sum of Rs.6.00 crores for the Fifth Plan development proposals of the University. The sanctions originally made by the UGC on the basis of the report of the Visiting Committee are given in Annexure 4. The Commission has also separately sanctioned funds to the tune of Rs.80.46 lakhs subsequent to the sanctioning of the funds on the basis of the recommendations of the Visiting Committee. The Committee understands that the proposals already accepted by the Commission, if fully implemented by the University, will involve a non-recurring expenditure of Rs.631.41 lakhs in addition to the recurring expenditure on posts, fellowships and the other administrative and supporting staff actually appointed. This does not include (a) provision for equipment, staff and maintenance expenditure for the School of Computer and System Sciences, (b) expenditure on 50% of the faculty housing sanctioned by the Commission outside the plan allocation and (c) funds for the quarters of the essential staff whose services require them to remain on the campus.
- (2) The Jawaharlal Nehru University had included a sum of Rs.20 lakhs for equipment for the School of Life Sciences and an equal amount for the School of Environmental Sciences in its Fifth Five Year Plan proposals originally made to the Commission. The Commission has sanctioned Rs.20 lakhs for the School of Environmental Sciences and Rs.17.5 lakhs for the School of Life Sciences. These funds have been fully spent/committed by both the Schools.
- (3) The Committee noted that the "Chandy Committee" on JNU in its report made to the UGC in October, 1976 had observed that "the University may explore to develop a special type of central instrumentation facility which could be made use of by all the Schools at the University, keeping in view the inter-disciplinary nature of the programmes of teaching and research. This needs a careful study of the programmes and the quipment required". The Committee notes that no efforts had been made by the University in this regard. The Committee feels that immediate steps should be taken by the University for developing a co-ordinated approach to the use of costly facilities in the University. The University may constitute a working group to work out the details.

- (4) The Chandy Committee had observed that "A large number of areas are being pursued for the purpose of research in both the Schools, all of which cannot be supplied with elaborate equipment facilities at this stage on account of severe limitations of financial resources. It is essential to identify a few areas in each School in which there is to be a major thrust....." The University did not seem to have given much consideration to this recommendation of the Chandy Committee. Both the Schools had listed a rather large number of research areas. The present committee also tried to impress upon the faculty of the two Schools the importance of defining a few thrust areas in each School, and of defining their needs on the basis of requirements of these areas rather than on the basis of teaching needs. In the Committee's view no additional staff is necessary in terms of the teaching needs alone. On the other hand, no cogent case was presented by the University for additional staff in relation to well-knit research programmes in major thrust areas, which they were requested to define during the discussions at the first visit to the University 6th July, and again on 10th August. Both the schools have now reached a viable size. At this stage, it would be desirable for both the Schools to sharpen their academic perspectives and to identify a few (not more than 3 or 4) major thrust areas for research so that they may be able to make an impact in these areas, keeping in view the limited resources available. Such an exercise should form the basis of development during the next Plan period.
- (5) The Schools should function around a few viable research groups, keeping in view the goal of inter-disciplinary research as envisaged by the university in its Act and the objectives of the Schools. The needs of the Schools now are to be considered by and large in the light of their research programmes, and the teaching needs should largely be met from the existing staff which is adequate in number. The Committee is of the view that in these Schools, which are expected to emphasise inter-disciplinary programmes, the faculty members should be able to teach the various courses at the foundation level without having to recruit specialists merely for giving such courses.
- (6) The M.Phil and Ph.D. students are under the guidance of individual teachers, and only in a very few cases under the guidance of more than one member of the faculty in the School of Environmental Sciences. This does not appear to promote the kind of multi-

disciplinary training in research which is one of the major charters of the Jawaharlal Nehru University. There has to be a more cohesive thinking and planning of academic activities and programmes in the Schools, so as to derive maximum benefits from the varied expertise available. Regular weekly seminars, in which research students would also participate, could provide a forum not only for reporting on the current status of the environmental and life sciences and on on-going activities in the Schools, but also for evolving inter-disciplinary interests and programmes. There is an urgent need to adopt all possible measures in the Schools so as to develop greater integrated thinking.

(7) The Committee spent full two days at the University, most of the time with the Faculty in the two Schools, discussing academic support they needed. Neither School expressed a need for a School of Physical Sciences from the point of view of providing a support to their teaching/research programmes.

(8) In the view of the Committee, the next few years will be crucial for the future of these Schools (and so for Science at JNU). They now have a core staff and have reached a reasonable size. The commitment of the present staff to inter-disciplinary programmes, and their ability to define integrated perspectives for their respective Schools, will determine the character of these Schools for years to come, and also whether the "grand design of inter-disciplinary work" (Vice-Chancellor's letter dated 9.10.1976) will, in practice, work out. No steps should, therefore, be taken, which are likely to come in the way of crystallisation and stabilisation of inter-disciplinary programmes at the University. Failure of inter-disciplinary approach at JNU is likely to have an adverse effect on the attempts to introduce inter-disciplinary programmes elsewhere in the country. Therefore, a special responsibility rests with the JNU to set the pace for inter-disciplinary programmes in the national university system.

The committee makes the following observations and recommendations on the various proposals made by the university.

(a) SCHOOL OF LIFE SCIENCES:

10. The School was started in 1971. It provides courses leading to the degree of M.Sc., M.Phil and Ph.D. The growth of students and faculty is given in the following table :-

| Year. | 70-71 | 71-72 | 72-73 | 73-74 | 74-75 | 75-76 | 76-77 |
|----------|-------|-------|-------|-------|-------|-------|-------|
| Students | 2 | 26 | 42 | 53 | 63 | 85 | 82 |
| Staff | 2 | 6 | 8 | 10 | 10 | 18 | 18 |

The research interest of the faculty, papers published, and research projects in hand, are given in Annexure 5.

11. Staff sanctioned during the Fourth Plan period and the appointments made upto 31st March, 1974 are given below :-

| | <u>Professor</u> | <u>As so. Professor</u> | <u>Asstt. Prof.</u> |
|----------------------|------------------|-------------------------|---------------------|
| Sanctioned | 4 | 10 | 7 |
| Filled as on 31.3.74 | 3 | 8 | 3 |

Posts which were filled up to 31st March, 1974 formed the part of committed expenditure under "Maintenance Grant" and the posts which could not be filled up as on 31st March, 1974 were treated as lapsed.

The position of utilisation of the Fifth Plan sanction is as under :-

| S.No. | Item. | Fifth Plan Visiting Committee recommendations. | | | Sanctions already made. | Progress of implementation. | |
|-------|-----------|--|------|------|-------------------------|---|-------|
| | | Priority | | | | | |
| | | I | II | III | | | |
| 1. | Staff. | 4P | - | - | As under Ist Priority | 1 P, 2 As so. P, 1 Asstt. Prof. appointed as on 4.2.77. One Fellow appointed against Professor. | |
| | | 2 As so. P | - | - | | | |
| | | 2 Asst. P | - | - | | | |
| | | <u>(Rupees in lakhs.)</u> | | | | <u>Spent Committed.</u> | |
| 2. | Books. | 1.50 | 1.00 | 1.00 | 1.50 | 3.13 | 0.55 |
| 3. | Equipment | 7.50 | 5.00 | 5.00 | 17.5 | 15.27 | 17.07 |
| 4. | Furniture | 0.10 | 0.10 | - | 0.10 | - | - |

The Committee was told by the Dean of the School of Life Sciences on 10th August, 1977 that the amount of expenditure already committed for the purchase of equipment as on date was Rs. 40.9 lakhs.

12. The proposals made by the University are given in Annexure-2. The Vice-Chancellor, Dean and Faculty of the School gave the following justification in support of the proposals :-

- (a) The School had not been able to utilise fully the foundation grant during the IV Plan period.
- (b) Seven areas were needed for teaching at M.Sc. level, and there had to be a minimum of four persons in each of these disciplines.
- (c) An expenditure of Rs. 40.9 lakhs was already committed for expenditure.

13. The Committee makes the following observations :-

- (1) The school which began in 1971 has established multi-disciplinary programmes in Life Sciences leading to M. Sc., M.Phil and Ph. Ds degrees.
- (2) The faculty of the school, which consists of 20 members represents expertise in developmental biology, plant biochemistry, physiology, radiation biology, photobiology and membrane studies, genetics, bio-physics, botany and Zoology. Research is being carried out by the faculty and their research students, more or less on an individual basis in these areas.
- (3) The School admits students with a bachelor's degree in Physical or biological sciences, to the M. Sc. course. This is welcome.
- (4) The needs of the School had to be assessed in terms of the current faculty and its programmes, and not on the basis of grants which had lapsed at the end of the IV Plan period.
- (5) The University had made a proposal for six additional faculty positions at various levels, for the School. The Commission had already sanctioned eight faculty positions for the School in the Fifth Plan, of which only four could be filled up so far as stated on page 10. The University has appointed four fellows and emphasized that positions were needed to regularise these appointments. In the Committee's view, no additional positions need to be created for this purpose. It should be possible to adjust these fellows against the total faculty positions already sanctioned. The University also made a case on the basis of formula

of 4 staff members in each of 7 areas. The Committee could not subscribe to such a formula.

- (6) The Committee, however, feels that there is a need to induct senior people to strengthen the overall cohesiveness and directivity of the School. The Committee recommends that in case the University is able to identify such outstanding scientists for being inducted into the School during the Fifth Plan period and makes a proposal for creating more senior positions for such identified scientists, it may be favourably considered by the Commission.
- (7) For the purpose of assessing the urgent needs of research equipment and facilities, the Committee felt that these needs must be assessed in relation to the current or proposed research activities and interests of the members of the department. After considerable discussion the faculty agreed to group their research activities in the following broad areas of Biology: (i) Radiation Biology (ii) Plant Biochemistry, Physiology, including Membranes (iii) Developmental Biology, (iv) Neuro-Biology including Neuro-Chemistry and (v) Microbiology. The names of the members of the faculty interested in these are given /areas in Annexure 5. The interests of some of the members of the faculty, however, have very naturally, an overlap between these areas.
- (8) The Committee tried to assess the equipment needs in relation to the requirements of above five groups of activities. On the basis of the discussions held and the priorities given by the members of the faculty, the Committee recommends, a provision of Rs.8.61 lakhs as detailed in Annexure 6, for additional equipment which is urgently needed in the School of Life Sciences, during the Fifth Plan period. For any other requirements including assistance towards design and fabrication of special equipment, mentioned by some members of the faculty, they may apply to SRC of the UGC, CSIR, DST etc. with appropriate research projects.
- (9) The Committee could not understand, even after a long discussion, the case made for equipment grant on the basis of a committed expenditure of Rs.40.9 lakhs. It appeared at the end of the discussions that this equipment had already been acquired by the University out of its funds, and that the equipment which the faculty was pressing for with the Committee (for which Rs.8.61 lakhs are recommended above) was over and above what had been listed under Rs.40.9 lakhs.

(b) SCHOOL OF ENVIRONMENTAL SCIENCES:

14. The School of Environmental Sciences was established in December 1974. It initiated its doctorate programmes from the academic year 1975-76.

The growth of student enrolment and staff strength is given in the following table:

| <u>Year</u> | <u>1974-75</u> | <u>1975-76</u> | <u>1976-77</u> |
|-------------|----------------|----------------|----------------|
| Students | 14 | 44 | 46 |
| Staff | 7 | 12 | 13 |

The Commission sanctioned posts of 4 Professors, 4 Associate Professors and 3 Assistant Professors for the School during the Fourth Plan period. None of the posts could be filled during the Fourth Plan and hence lapsed.

15. The sanctions made during the Fifth Five Year Plan period and the progress of implementation of the schemes is given below:

| S. No. | Item | Recommendations | | | Sanctioned already | Progress of implementation |
|--------|--|---------------------|------|------|--------------------|----------------------------|
| | | I | II | III | | |
| | | (priority) | | | | |
| 1. | Faculty | 4 Prof | - | - | As under | * |
| | | 5 Ass. | | | 1st | |
| | | Prof. | - | - | priority | |
| | | 6 Asstt. | | | | |
| | | Prof. | - | - | | |
| | | <u>Rs. in lakhs</u> | | | <u>Spent</u> | <u>Committed</u> |
| 2. | Books | 2.00 | 1.00 | 2.00 | 2.00 7.93 | 0.56 |
| 3. | Equip- ment | 10.00 | 5.00 | 5.00 | 20.00 17.00 | 3.00 (as on 2.6.77) |
| 4. | Furni- ture | 0.30 | 0.20 | - | 0.30 | - |
| * | Post of 2 Professors, 4 Associate Professors and 9 Assistant Professors have been filled. 3 extra posts of Assistant Professors have been filled against the higher posts. | | | | | |

The details including the research interests of the faculty of the School are given in Annexure-7. The titles of the M.Phil dissertations which have been completed are given in Annexure-8 and those which are under various stages of completion are given in Annexure-9. The research papers published by the faculty after joining the School are given in Annexure-10.

16. The University has requested 23 new faculty positions (Vice-Chancellor's letter dated 23.5.1977) and Rs.25.86 lakhs for equipment/instruments outside the V Plan grants, for the School of Environmental Sciences.

(a) The items of equipment are stated to be required for special studies proposed to be undertaken in the applications of physics, chemistry, geology, ecology, biology and physiology to problems related to the environment. It includes special equipment required for stimulation of different environmental conditions as well as the equipment required in connection with field studies.

(b) The additional faculty is stated to be required:

(1) for teaching of a large number of compulsory and optional papers at the M.Sc. and M. Phil levels.

(2) to spend a considerable time in the field both for instructional as well as research purposes.

17. The Committee makes the following observations:

(1) The School of Environmental Sciences in the Jawaharlal University was established in December, 1974 and started functioning in July, 1975. The activities of this School "were supposed to be inter-disciplinary with an effort to integrate the Physical Sciences with Earth and Bio-Sciences to understand the problems of environment for proper management of the natural resources and for the health of human beings "

(2) The proposals of the School list five major areas where work has already been initiated and requirements of staff and equipment for the same have been projected:

The five areas are:

- (A) Mathematical Modelling
- (B) River Basin Studies.
- (C) Mineral Resources and Management
- (D) Eco-Systems Processes.
- (E) Interactions between Bio-Responses to different Environmental Conditions.

The Committee feels that the purpose of evolving coherent thrust programmes B & C may be combined and so also D & E. It also recommends that mathematical modeling activities should largely relate to (B & C) or (D & E) rather than be un-connected with them.

(3) The School presently has 16 members on the staff and another Professor is likely to join shortly from the NEERI. The existing faculty of the school and areas of their interest (from among those listed in para (2) are indicated below:

| | | |
|-----------------------------|---|------------|
| Physics | 3 | Area A |
| Geology and Geochemistry | 3 | Area B & C |

| | | | |
|--------------|---|---|------------------|
| Chemistry | 2 | | Area B, C, D & E |
| Physiology | 1 | ! | |
| Biochemistry | 1 | ! | D & E |
| Biophysics | 1 | ! | |
| Ecology | 1 | ! | |
| Physics | 1 | ! | |
| Physiology | 2 | ! | Area E |
| Biochemistry | 1 | ! | |

The University has requested 23 additional faculty positions i.e. more than doubling of the faculty. It has also given a requirement of Rs.25.86 lakhs for equipment/instruments, in addition to the Rs.20 lakhs already sanctioned.

(4) The University had started teaching programmes at the M.Sc. level in three streams of Environmental Sciences (a) Physical Stream, (2) Geological Stream and (3) Biological Stream. The Committee noted that the teaching programmes in these three streams were to a large extent conventional M.Sc. courses in Physics, Geology and Biology, with some addition of Environmental Sciences. The Committee was informed that the School found this necessary because they were not sure of job opportunities for the products, and so wanted that the option be open to their M.Sc.s to continue in their conventional disciplines, after M.Sc.

The University had introduced the M.Sc. teaching programme in the School, contrary to the recommendations made by the 5th Plan Visiting Committee of the UGC and also by the working group on the Schools appointed by the University itself. The Vice-Chancellor, Dean and Faculty members stated that the programmes had to be introduced due to the pressure from the students and it would be difficult to discontinue this programme at this stage because of the likely agitation from the students. They, however, agreed that on academic grounds the M.Sc. programme should be discontinued, and the School should concentrate on M. Phil and Ph.D. programmes only. It was stated that some students (about 18) are in the second year of the course, and they would be worried about their future if the course was discontinued. The Committee suggested that these students who are in the second year of the M.Sc. course could, after completing M.Sc., be admitted to the M. Phil course in the School, provided they satisfy the admission criteria, and suitable fellowships may be given to them to enable them to continue their studies leading to the M. Phil degree. It was not desirable to perpetuate the course, with which they themselves were not happy, on such non-academic considerations.

The suggestion of the Committee to discontinue the M.Sc. teaching programme and not to admit fresh students to it during the academic year 1977-78, was accepted by the faculty and the Vice-Chancellor.

5. The Committee notes from the appendices to the proposals that 10 research topics had been completed at M.Phil/Ph.D. level, by 10 students during 1975-76, under the supervision of various faculty members.

Sixteen M. Phil dissertations were at various stages of completion at the time of the visit of the Committee.

The M. Phil studies undertaken so far neither show any integration among the few selected topics which have been undertaken for research nor indicate a well thought-out approach to undertake environmental studies through coordinated effort. The studies carried out so far include widely divergent topics such as "water Chemistry of the Ganga River", "Some investigation on flat plate Solar Water Heater", "Responses of Plants to heavy metal pollution", "Geochemistry of ultramafic rocks of Kolar schist belt", "Pattern of sedimentation in Lake Chilka", "Study of Van der Pol equation and its applications" and so on. The present approach seems to be that each individual faculty member takes two or three M. Phil/Ph.D. students with him and decides his own research projects without any obvious relationship or integration even among his own topics of research. Coordination among the projects of the various faculty members is not at all evident.

6. The M.Sc./M.Phil/Ph.D. students who met the Visiting Committee on August 10, 1977 expressed their fears that their courses did not indicate an integrated approach. They were also keen that the M.Phil/Ph.D. programmes should be much more directly related to real-life environmental problems in the country.

7. The basic objectives of J.N.U. were stated to be "to create an institution of excellence for (i) promoting inter-disciplinary studies, (ii) providing integrated courses in humanities, social sciences, science and technology, and (iii) creating in teachers and students an awareness and understanding of the social needs of the country and to prepare them for fulfilling such needs."

The two years experiences of the School of Environmental Sciences, though rather short to judge its effectiveness, does point to the fact that things have not moved in the directions towards fulfilment of the basic objectives. The Fifth Five Year Plan proposals of the School of Environmental Sciences had indicated certain linkages (vide Schedule-11A of V Plan proposals). It is obvious that necessary integration within the School itself has not been forthcoming, leave along the desired linkages with Schools of Life Sciences and Social Sciences.

With the addition to Dr. Dave from NEERI, the School of Environmental Sciences will have three very senior and competent persons as Professors. It is suggested that these senior persons alongwith the other members of the faculty should discuss in detail the philosophy and the programme of work which need to be initiated in the School, to fulfil the objectives of the J.N.U. and to make an impact towards appreciation of problems of environmental sciences. The five areas of thrust selected need re-thinking and further concretisation of ideas to fit in the objectives of the School and the University.

8. The Committee notes that the School does not yet have any regular seminar activity. A regular seminar activity should help the school in defining or converging upon the focal point(s) around

which the programmes of research work and courses may be organised.

9. It is suggested for consideration that a typical eco-system such as a specific water shed or a lake or an isolated self-contained region be identified, and integrated studies by the entire faculty be initiated in the same region with emphasis on different aspects of the environment such as:

- (a) Geomorphological, meteorological, geological, chemical, zoological, botanical and microbial aspects;
- (b) Space and time variations in all these studies;
- (c) Functional studies like energy circuits, biogeochemical cycles, food chains, control mechanisms, etc;
- (d) The ways in which man-made actions disturb the functional mechanisms of the eco-system;
- (e) Problem of design and synthesis of such eco-systems;
- (f) Pollutants and health effects; and
- (g) Sharpening of tools of environmental management through operational research and mathematical modelling.

All these studies would need a good mixture of field, laboratory and computer inputs. Available data from the Government agencies will need to be critically studied to plan for collection of additional data. Possibly the existing faculty could undertake most of these studies with certain inputs from the Schools of Life and Social Sciences over the remaining period of the Fifth Five Year Plan, with marginal additions of staff and equipment wherever considered essential. Such marginal inputs could come from research schemes that may be financed by UGC or DST. Such an approach could possibly bring a much needed integration of activities of the staff members and better appreciation of the environmental problems, both academic as well as applied. An experience of this type will also be useful to plan and strengthen the future activities of the School for the Sixth Plan period.

10. The Committee feels that the School of Environmental Sciences of the J.N.U. should consolidate and sharpen the focus of their activities by fully utilising the resources already available to them before thinking of enlarging their activities by doubling the faculty and the financial requirements for equipment and instruments during the remaining 1½ years of the present plan period.

11. Professor H.K. Das has recently been moved to the School of Environmental Sciences from the School of Life Sciences. The Committee recommends Rs. 4 lakhs towards the equipment needs of his programme, including a 54-L-5-50 centrifuge. The University should also let him keep the laboratory equipment he was using in the previous School.

(C) The proposed School of Physical Sciences

The proposal of the University to establish a School of Physical Sciences was discussed by the Committee with the Vice-Chancellor in its meeting with him on 10th August, 1977. The Vice-Chancellor emphasised the importance of developing basic disciplines in Physical Sciences, and stated that the absence of basic Physical Sciences in the University had been a serious lacuna in the growth of the University. He stressed the importance of Physical Sciences for providing an **infrastructure** to back-up the Schools of Environmental Sciences, Life Sciences and Computer Sciences. He also stated that the proposed School would provide a focal point for a healthy inter-action to the very few physical, mathematical and chemical scientists, who today found themselves isolated in the Schools of Life, Environmental and Computer Sciences.

The Vice-Chancellor mentioned that the idea was not to grow separate Departments of Physics, Chemistry and Mathematics, but a combined School of Physical Sciences which would not give the conventional Physics, Chemistry or Mathematics Courses that other Universities give. He mentioned Energy and Material Science as possible areas for the School of Physical Sciences.

... The Committee feels that the view expressed by the Fifth Plan Visiting Committee, namely that it was premature to consider a proposal for the School of Physical Sciences and that the proposal had not been considered in depth by Working Groups, continues to be valid. It also continues to be true that the University had yet to develop fully the programmes of the Schools of Life Sciences and Environmental Sciences and especially the School of Environmental Sciences had yet to identify its focal point(s). Creation of a School of Physical Sciences at this stage is likely to disturb the process of crystallisation and stabilisation of interdisciplinary programmes in the School of Environmental Sciences. Further, it was not clear why J.N.U. should also start a programme (Centre) in Material Sciences or Energy Studies when such programmes are being developed elsewhere in the country. In particular, Energy is being actively pursued in the neighbouring I.I.T.

The Vice-Chancellor, in the course of the discussion, stated that the University for the present wanted to undertake a feasibility study with regard to the proposed School of Physical Sciences, by appointing one or two persons. The Committee feels that this can be done by inviting some distinguished scientists as Visiting Professors for carrying out such studies, without any commitment from the U.G.C. that the proposed School would be established during the next plan period. Considering the weakness of planning and co-ordination with regard to the School of Environmental Sciences, the Committee feels that any proposal from the University for a Centre for Energy Studies or Centre for the Studies of Materials (as part of a School of Physical Sciences) should be entertained by the U.G.C. only if the University comes up with a detailed feasibility report, which also takes into account the factors discussed above.

(d) GENERAL FACILITIES

The School of Life Sciences and the School of Environmental Sciences have requested for some major instruments to be used as Central Facility. In particular, an electron microscope was mentioned, and the University requested that in view of the long time required for processing, the University may be allowed to go ahead with the processing of the import of an Electron-microscope during the Fifth Plan period and that the funds for this purpose may be treated as a first charge on the Sixth Plan allocation of the University.

The Committee would support the general idea of such pre-processing as advance action on VI Plan. However, (a) such a facility for re-processing would then have to be provided to all universities and all universities would have to be notified to that effect by the U.G.C. (b) in each case, a proper justification would have to be provided by the University concerned, in terms of the research programmes (on-going or contemplated.) and the non-availability of the instrument in the vicinity.

The Committee has not examined in detail the request for an electron microscope from this point of view. It notes, however, that there are several electron microscopes available at various institutions in Delhi.

Annexure-1

SCHOOL OF PHYSICAL SCIENCES

1976-77 1977-78 1978-79 Total

1. FACULTY POSITIONS

| | | | | | |
|----------------------|----------------------|---|---|---|----|
| Professors | } in the ratio of | 8 | 7 | 5 | 20 |
| Associate Professors | | | | | |
| Assistant Professors | | | | | |

1:2:1

2. STUDENTS INPUT

| | | | | |
|-----------------------------------|---|----|----|----|
| At the level of postgraduate i.e. | 5 | 15 | 20 | 40 |
| M.Phil./Ph.D. | | | | |

3. TEACHING STAFF

| | | | | |
|---|---|---|---|---|
| a) Sr. Technical Staff | 3 | 2 | 1 | 6 |
| b) Jr. Laboratory " | 4 | 2 | 2 | 8 |
| c) Other supporting staff (including secretarial staff) | 3 | 2 | - | 5 |

4. NON-RECURRING EXPENDITURE

* Teaching Aid scientific equipment etc.

| | | | | |
|--|------|-----|-----|---------------------|
| 1. N.M.R. Spectrometer | | | | Rs. 8.00 lakhs. |
| 2. Neutron source system (including the counter and detector system) | | | | Rs. 2.00 " |
| 3. Meteorological equipment (with speed and wind directions indicators, rain pressure and temperature gauges, hydrometer, pyranometer) | | | | Rs. 2.00 " |
| 4. Electron micro probe system | | | | Rs. 12.00 " |
| 5. Equipment for remote sense picture analysis (electronic photo comparator, signal averager, computer interface) | | | | Rs. 3.00 " |
| 6. Vacuum deposition and sputtering unit. | | | | Rs. 3.00 " |
| 7. ESR Unit. | | | | Rs. 3.00 " |
| 8. Miscellaneous | | | | Rs. 2.00 " 35 lakhs |
| 9) Library books and journals | 1.50 | 3.0 | 3.0 | 7.50 " |

| | <u>1976-77</u> | <u>1977-78</u> | <u>1978-79</u> | <u>Total</u> |
|---|----------------|----------------|----------------|--------------|
| 3. <u>RECURRING EXPENDITURE</u> | | | | |
| a) Lab. running expenses | 1.0 | 2.0 | 2.0 | 5.00 lakhs |
| b) Fellowships and Research Associateships. | 0.5 | 2.0 | 2.5 | 5.00 " |

Note: The above items of equipment have been identified from the point of view of optimum utilisation by all schools and science disciplines. It has also been ascertained that none of the above items of equipment are available with IIT, Delhi or with schools of Life Sciences and Environmental Sciences at the Jawaharlal Nehru University.

The faculty and the students of the two institutions, viz. Jawaharlal Nehru University and the IIT, Delhi would share the laboratory facilities on the two campuses.

Additional proposals - School of Life Sciences

.....

(A) Recurring :

*Faculty positions: 2 posts of Professors, 2 posts of Associate Professors and 2 posts of Assistant Professors; 13 technical/laboratory staff positions and 6 supporting staff.

..... *(Details attached)

(B) Non-recurring:

| | | |
|------------------|-----|-----------------|
| Equipment | ... | Rs. 22.50 lakhs |
| Furniture | ... | Rs. 0.15 " |
| Books & Journals | ... | Rs. 4.50 " |

(C) The University vide its letter of May 10, 1977 made another proposal for minimum staff required for Animal House, Tissue Culture Centre and for Green House (Botanical Garden) as worked out by a Committee consisting of three outside experts besides the Dean, School of Life Sciences and Chaired by the Rector. The requirements are as under:-

| | | | |
|-------------------------------------|-----|----|---------------|
| 1. Curator | ... | 1 | Rs. 700-1600* |
| 2. Assistant Garden Superintendent. | ... | 1 | Rs. 550-900 |
| 3. Garden Asstt. | ... | 1 | Rs. 425-700 |
| 4. Junior Asstt. cum Typist. | ... | 1 | Rs. 260-400 |
| 5. Malis | ... | 10 | Rs. - |
| 6. Incharge Animal House. | ... | 1 | Rs. 700-1600* |
| 7. Caretakers | ... | 6 | Rs. 196-232 |

* (The pay scales as given above are given by the University).

SCHOOL OF LIFE SCIENCES

Statement showing the teaching posts sanctioned by the University Grants Commission and minimum staff required for the School as on 2.2.1977.

| | Develop- mental Biology. | Radiation Biology. | Plant Physiology. | Molecular Biology. | Micro- Biology. | Cell Biology. | Behav- ioural Sciences. | Total |
|---|--------------------------------|-----------------------|----------------------|-----------------------|--------------------|------------------|-------------------------------|-------|
| Staff in position as on dated 16.9.1976. | 2 | 3 | 3 | 4 | 2 | 3 | 1 | 18 |
| Minimum staff requirements. | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 28 |
| Total positions already sanctioned by U.G.C. inclusive of 4th & 5th Plans. | | | | | | | | 22* |
| Net additional staff required. | | | | | | | | 6 |

* 4 vacant posts are being filled up.

SCHOOL OF LIFE SCIENCES

Technical/Laboratory staff in the School of Life Sciences as on 2.2.1977.

| | No. of posts sanctioned under Maintenance (Non-Plan). | | Minimum staff required due to increase in academic/ research/lab. activities. | Net additional required during plan period. |
|-------------------------|---|-------------------------|---|---|
| | 15 | | 28 | 13 |
| Technician Grade-I | - 3 | Technician Grade-I | - 3 | |
| Technician Grade-III | - 3 | Technician Grade-III | - 3 | |
| Research Assistant | - 1 | Research Assistant | - 1 | |
| Sr. Lab. Assistant. | - 2 | Sr. Lab. Assistant | - 8 | Sr. Lab. Asstt. |
| Photographer-cum-Artist | - 1 | Photographer-cum-Artist | - 1 | Sr. Lab. Attendant |
| Sr. Lab. Attendant | - 3 | Sr. Lab. Attendant | - 5 | Lab. Attendant |
| Laboratory Attendant | - 2 | Laboratory Attendant | - 7 | |

Annexure-3

Additional proposals - school of Environmental Sciences-
JAWAHARLAL NEHRU UNIVERSITY

.....

(A) Recurring:

3 Professors, 4 Associate Professors,
3 Assistant Professors, 21 technical/
laboratory staff and 8 supporting staff.

.....
(Details attached)

(B) Non-recurring:

| | | |
|------------------|-----|------------------|
| Equipment | ... | Rs. 10.00 lakhs. |
| Furniture | ... | Rs. 0.16 " |
| Books & journals | ... | Rs. 4.00 " |

SCHOOL OF ENVIRONMENTAL SCIENCES

| | <u>PHYSICAL</u> | <u>GEOLOGICAL</u> | <u>BIOLOGICAL/ECOLOGICAL</u> | <u>SUPPORTING</u> | <u>TOTAL</u> |
|-------------------------------------|--|--|---|--|--------------|
| | Mathematical Bioscience Theoretical Ecology, Meteorology/Atmospheric Physics, Chemical and Biochemical processes in earth and application of spectroscopic nuclear and chemical techniques to problems of environmental stability and imbalance. | Geophysical, Geochemical processes in the earth & oceans, structural and Engg. Geology as applied to hazards and instabilities and other distortions, Resource and Exploration Geology, Mathematical and Computer Modelling. | Environmental Physiology, General Ecology (Pop. Ecology), Environmental Biophysics, Environmental Biochemistry, Taxonomy, Microbial Ecology, Population dynamics, Ecology, of hill slopes and inland water. | Physical, Chemistry, Soil Chemistry, Organic Chemistry, Environmental Planning/System Analysis, Environmental Management, Instrumentation, Statistics. | |
| Sanctioned | 5 | 3 | 2 | 5 | 15 |
| Minimum staff required. | 6 | 5 | 6 | 8 | 25 |
| Additional faculty positions sought | 1 | 2 | 4 | 3 | 10 |
| | (in Energy Physics) | (1 in Geo.Chem., and 1 in Hydrology) | (1 in Bio-Maths. 1 in General Ecology, 1 in Environmental Biochemistry 1 in Environmental Biochemistry) | (2 in Environmental Instrumentation, & 1 in Environmental Resource Management) | |

NET ADDITIONS : Ten (10)

REQUIREMENT OF THE TECHNICAL/LABORATORY STAFF FOR THE SCHOOL OF ENVIRONMENTAL SCIENCES AS ON 2.2.1977.

| DISCIPLINE/AREA | BRIEF DESCRIPTION OF LABORATORIES. | STAFF REQUIREMENTS | STAFF SANCTIONED BY UGC | GAP |
|-------------------|--|--------------------|-------------------------|-----|
| Earth Sciences. | Geochemistry and X-ray Micrology Environmental and Sedimentology Geology Cartography and Photo-interpretation Labs. Geophysics/Hydrology | 6 | - | - |
| Bio-Sciences. | Physiology/Biochemistry, Biophysics, Ecology. | 6 | 4 | 14 |
| Physical Sciences | Environmental Monitoring Energy, Electronics/Instrumentation Environmental Pollution and Analytical Labs. | 6 | | |

Jawaharlal Nehru University

(Approved allocation - 5th Plan period)

a) 1st Charge

| | |
|------------------------------|---------------------|
| Spill-over | Rs. 322.00 lakhs |
| Basic grants | Rs. 12.50 " |
| Schemes already approved (*) | Rs. 23.00 " |
| Total : | <u>Rs. 357.50 "</u> |

b) New allocations

i). Non-recurring & Misc.

| | |
|---------------|---------------------|
| Books | Rs. 27.75 lakhs |
| Equipment | Rs. 36.75 " |
| Furniture | Rs. 5.95 " |
| Building | Rs. 85.00 " |
| Miscellaneous | Rs. 38.00 " |
| Total | <u>Rs. 193.45 "</u> |

ii) Recurring

a) Faculty & Technical staff

- 30 Professors
- 29 Associate Professors
- 41 Assistant Professors
- 25 Others

b) Administrative & supporting staff including Deputy Librarian

| | | |
|-----------------------------|-----------------|-------------------|
| 3 Assistant Librarians | Rs. 16.00 lakhs | } For Plan period |
| 3 Semi Professional Asstts. | | |

c) Fellowships/ Scholarships Rs. 15.00 "

* This excludes Rs. 20 lakhs already approved and paid for installation of computer

| Sl. No. | Major Thurst Area | Name of the Faculty Member | Research Problems presently in hand | Research Project in hand | No. of M.Phil/ Ph.D. students produced in SLS | No. of Research papers published in School from 1970 to 1977 | No. of research students being guided. |
|---------|---|--|-------------------------------------|--------------------------|--|--|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1. | Radiation Biology | Prof. P.N. Srivastava) Dr. P.C. Kesavan) Dr. A.R. Rao) Dr. Shobha Goyle) | As per Appendix 'A' | As per Appendix 'B' | i) M.Phil awarded-46 ii) Ph.D. awarded- 9 | 102 | i) Ph.D. 47 as on 19th August, 1977 ii) M.Phil. The School has offered admission to 29 students for M.Phil course for the current academic year 1977-78 |
| 2. | Developmental Biology | Prof. Sivatosh Mookerjee) Dr. Sipra Guha Mukherjee) Dr. S. Chatterjee) Dr. S.K. Sopory) | | | | | |
| 3. | Neuro biology including Neuro Chemistry | Dr. M. Habibulla) Dr. R. Singh) Dr. Najma Baquer) Dr. M. Amin) | | | | | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|----|--|--|---|---|---|---|---|
| 4. | Microbiology | Dr. A. Datta } Dr. K.C. Upadhyaya } Dr. A. K. Verma | | | | | |
| 5. | Plant Bio- Chemistry, Physiology including membranes | Dr. Rajendra Prasad } Dr. P. Mohanty } Dr. G.S. Singhal } | | | | | |

Appendix 'A'

JAWAHARLAL NEHRU UNIVERSITY
SCHOOL OF LIFE SCIENCES

| <u>S.No.</u> | <u>Title of the Project</u> | <u>Funding Agency</u> | <u>Principal Investigator</u> |
|--------------|--|------------------------------------|--|
| 1. | Modification of gamma-ray-induced oxygen-dependent and independent components of damage in <u>Hordeum vulgare</u> | Department of Atomic Energy | Dr. P.C. Kesavan |
| 2. | Studies on the kinetics of decay of radiation-induced oxygen-sensitive and-insensitive sites in relation to chemical radio-protection and radiosensitization | University Grants Commission | Dr. P.C. Kesavan |
| 3. | Effect of light and hormones on the control of enzyme synthesis in higher plants | University Grants Commission | Dr. Sipra Guha Mukherjee, & Dr. S. Sopory |
| 4. | "Utilisation of Haploids for improvement of economically important plants " | University Grants Commission | Dr. Sipra Guha Mukherjee |
| 5. | Regulation of aminosugar metabolism in <u>Candida albicans</u> , the causative | Indian Council of Medical Research | Dr. Asis Datta |
| 6. | Studies on the transport of amino acids and sugars in the membrane vesicles and soheroplasts of pathogenic and non-pathogenic strains of yeasts | University Grants Commission | Dr. Asis Datta and Dr. Rajendra Prasad |
| 7. | Stress of the Environmental Pollutants on the Neurobiological mechanisms | | Dr. M. Habibulla, Dr. Najma Zaheer Baquer, and Dr. M. Amin |

JAWAHARLAL NEHRU UNIVERSITY
SCHOOL OF LIFE SCIENCES

RESEARCH PROBLEMS

| Sl. No. | Title of Thesis |
|---------|--|
| 1. | Studies on the Radioprotection of Normal and Cancerous Tissues by MPG in mice. |
| 2. | Studies on the biochemical aspects induced by Tritiated water in mice during pre-natal and post-natal development. |
| 3. | Role of RNA in the regeneration process in Hydra. |
| 4. | Studies on the origin and functions of Bleoharissimin in <u>Blepharisma</u> . |
| 5. | Certain metabolic aspects of the modification of Gamma-ray induced oxidic and anoxic components of Damage in <u>Hordeum vulgare</u> . |
| 6. | Effects of radiation on certain metabolic processes in <u>Drosophila melanogaster</u> . |
| 7. | Studies on Genetic Toxicology of Environmental Agents |
| 8. | Comparative assessment of the nature of the immediate oxygen effect in the pro- and Eucaryotes. |
| 9. | Adaptive Responses of some Diptera to different Ecological conditions. |
| 10. | Specificity and non-specificity in response reaction of a cell under stress of physical agents. |
| 11. | Some studies on the structure and properties of Biomembranes using model systems. |
| 12. | Biochemical and Biophysical changes under Water Stress in Barley. |
| 13. | Changes in the absorption and scattering proteins of barley chloroplasts during stress induced senescence. |
| 14. | Studies on gibberellin-induced enzyme release in barley seeds. |
| 15. | Studies on isolation and fusion of Protoplasts. |
| 16. | In vitro studies on the haploid induction in higher plants. |
| 17. | Studies on stress in relation to Nitrate reductase |
| 18. | Aging induced alterations of Photochemical functions of chloroplast membranes : Study of the role of a typical growth regulator (kinetic) on membrane structure and function |

19. Metabolic and regulatory role of Macromolecules in Neuronal Function : A study of the changes associated with the Electrical Stimulation in the Sciatic Nerve of Frog.
20. Studies of Neurometamorphosis in an insect.
21. Induction and catabolic repression of Enzymes of Amino Sugar Metabolism in Candida albicans.
22. Studies on structure and function of yeast chromatin.
23. Biogenesis of MRNA and its translation in yeast.
24. Studies on the cytogenetic activity of some common fungicide in higher plants.
25. Studies on the effect of some Neuropharmacological Drugs on the brain Homogenates.
26. Phytochrome regulation of peroxidase activity in Zea mays.
27. Photoregulation of Nitrate reductase and Nitrate reductase in Lenna Paniccostata.
28. Some studies on the interaction of UV and irradiated DNA nucleolist - one with intercal-cative dyes.
29. Effect of cobalt chloride on macromolecular synthesis in Escherichia coli.

In addition to the above eighteen students admitted during the Academic year 1976-77, will be registering themselves for the award of Ph.D. degree in the month of August-September, 1977.

Equipment

| | |
|---|---------------------|
| Ultramicrotome (LKB) | Rs. 2,10,000 |
| High Frequency Oscilloscope | Rs. 70,000 |
| Storage Oscilloscope for Neurophysiology and accessories | Rs. 50,000 |
| Pyramitome | Rs. 44,000 |
| Shaking Water baths | Rs. 30,000 |
| Table Top Centrifuges | Rs. 25,000 |
| Micromanipulators | Rs. 20,000 |
| Co incubator | Rs. 20,000 |
| 2 Electrometer probes 2 | Rs. 16,000 |
| Stimulators (S 44) 2 | Rs. 15,000 |
| Heating-cooling bath | Rs. 11,000 |
| Picoammeter | Rs. 10,000 |
| Waring Blender | Rs. 10,000 |
| Liquid nitrogen refrigerator | Rs. 9,000 |
| Programmable electronic shutter | Rs. 8,000 |
| Refractometer | Rs. 7,000 |
| Peristaltic Pump | Rs. 6,000 |
| Other miscellaneous equipment | Rs. 2,00,000 |
| Special consumable requirements of molecular biology and biochemistry | <u>Rs. 1,00,000</u> |
| Total | <u>Rs. 8,61,000</u> |

| Sl. No. | Name & Designation | Discipline | Thrust Area | Remarks |
|---------|---|------------|-------------|---------|
| 16. | Dr. Jitendra Bahari, Assistant Professor | Physics | E | |

A - Mathematical Modelling

B - River Basins Studies

. . . . C.- Minerals , Resources and Management

D - Eco system Processes

E - Interactions between Bio-response to different environmental conditions.

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4/9

Research InterestExisting Faculty of the School of Environmental SciencesJAWAHARLAL NEHRU UNIVERSITY

| Sl. No. | Name and Designation | Discipline | Thrust Areas: (*) | Remarks |
|---------|--|------------------------------------|-------------------|-------------------|
| 1. | Professor B. Bhatia, Dean | Physiology | D & E | |
| 2. | Professor H.K. Das, Professor | Biochemistry | E | |
| 3. | Dr. (Mrs.) Anjali Mookerjee Associate Professor | Biophysics | D & E | |
| 4. | Dr. V. Asthana, Associate Professor | Geology / Oceanography | B & C | |
| 5. | Dr. L. K. Pande, Associate Professor | Physics | A | |
| 6. | Dr. C.K. Varshney, Associate Professor | Ecology | D & E | |
| 7. | Dr. V. Subramanian, Associate Professor | Geochemistry | B & C | |
| 8. | Dr. V. Rajamani, Assistant Professor | Mineralogy/ Resource Geology | B & C | |
| 9. | Dr. J. Subba Rao, Assistant Professor | Physics | A | |
| 10. | Dr. (Mrs.) Kasturi Datta, Assistant Professor | Biochemistry | D & E | Temporary post |
| 11. | Dr. R. Subramanian, Associate Fellow | Physiology | E | --do-- |
| 12. | Dr. (Mrs.) J.D. Sharma, Assistant Professor | Physiology | E | --do-- |
| 13. | Dr. A.K. Bhattacharya, Assistant Professor | Chemistry | B, C, D. & E | |
| 14. | Dr. D.K. Banerjee Assistant Professor | Chemistry | B, C, D & E | |
| 15. | Dr. G.P. Malik, Assistant Professor | Physics | A | |

* Please see foot note at page 2

| Sl. No. | Name of the Scholar | Title of M.Phil Dissertation | Name of the Supervisor/s |
|---------|----------------------------|--|--------------------------------------|
| 1. | Bhat Nalini Tarnath (Smt.) | "On prey-Predator Models in Mathematical Ecology" | Dr. K.C. Gupta |
| 2. | Garg, J.K | "Responses of Plants to Sulphur Dioxide - A Review" | Dr. C.K. Varshney |
| 3. | Haque M.D. Asraul | "Some Aspects of Productivity in C & C Type of Plants" 3 4 | Dr. C.K. Varshney |
| 4. | Hasan, Masroor | "Semi Classical Treatment of Multi Mode Laser System" | Prof. S.N. Biswas |
| 5. | Jayaraman, S. | "Water Chemistry of the Ganga River" | Dr. V. Subramanian |
| 6. | Nijhawan, Remu (Miss) | " Factors Influencing Hypoxic Hypothermia in Rats" | Dr. B. Bhatia |
| 7. | Sang, A.L. (Miss) | "Analysis of Data on Competition and Predation between various Biological Species" | Prof. S.N. Biswas & Dr. A. Mookerjee |
| 8. | Sinha, Somdatta (Miss) | " An Analysis of Biochemical Oscillators" | Dr. J. Subba Rao |
| 9. | Suresh, M | "Some Investigation on Flat Plate Solar Water Heater" | Dr. J.S. Vaishya |

- 36 -

M. Phil Dissertations Under
Various Stages of Completion

School of Environmental Sciences

Annexure 9

| Sl. No. | Name of the Student | Name of the Supervisor | Topic of Dissertation |
|---------|----------------------|---|--|
| 1. | Sh.K.V.A., Ramaiah | Dr.(Mrs.)A. Mookerjee | Effect of Environmental Stresses on Beet Root Tissue |
| 2. | Kum. Ira Datta | Dr. C. K. Varshney | Responses of Plants to Heavy Metal Pollution |
| 3. | Sh. A.K. Attri | Dr. (Mrs.) A. Mookerjee | Effect of Environmental Carcinogenes at Genetic Level in context with Cellular Proliferation Pattern |
| 4. | S.K. Bhatia | Dr. J. Behari | Biological Effects of Microwave Radiation |
| 5. | Kum. Anuradha Sinha | Prof. B. Bhatia Supervisor Dr. Mrs. K. Dutta Co-Supervisor | Responses of Rats with Experimental Diabetes to Acute Hypoxia |
| 6. | S. Manickam | Dr. V. Asthana | Aspects of Sedimentation in the Jamuna River Basin |
| 7. | R.A. Dalavi | V. Subramanian | Application of Thermo-dynamic Concepts to the Study of some Water-Mineral Equilibrium in the Jamuna River. |
| 8. | A.K. Biyani | Dr. V. Subramanian | Hydrogeochemistry of Ground Water in the Delhi Region |
| 9. | K. Shiv Kumar | Dr. V. Rajamani | Geochemistry of Ultra-mafic Rocks of Kolar Schist Belt |
| 10. | B.P. Pandey | Dr. V. Asthana | Pattern of Sedimentation in Lake Chilka |
| 11. | Kum. Zehra Hamid | Dr. J. Subba Rao | Application of Information Theory to some Aspects of Evolution |
| 12. | Kum. Prem Lata Ahuja | Prof. B. Bhatia Supervisor Dr. (Mrs.) K. Datta Co-Supervisor | Responses of Normoglycaemic Hyperglycaemic and Hypoglycaemic Rats to Thermal Stress. |

-
- | | | | |
|-----|----------------|-----------------------------|--|
| 13. | C.S. Auluck | Dr. J. Subba Rao | A Mathematical Model of Excitable Membranes |
| 14. | Gahalain, S.S. | Dr. C.K. W shney | Nitrogen fixation in Non-Leguminous Plants - A Review" |
| 15. | Shama, S.C. | Dr. L.K. Pande | A Study of of Van der Pol Equation and its Application |

SCHOOL OF ENVIRONMENTAL SCIENCES

JAWAHARLAL NEHRU UNIVERSITY

LIST OF PUBLICATIONS OF FACULTY MEMBERS OF
SCHOOL OF ENVIRONMENTAL SCIENCES DURING THEIR
STAY AT UNIVERSITY

1. PROFESSOR B. BHATIA:

1. Effect of cold exposure on diurnal variations of food and water intake in rats. Selected Topics in Environmental Biology. Interprint Publications and Pergamon Press, U.K., 1977.
2. Urine output and blood ADH in rats under different grades of hypoxia. Selected Topics in Environmental Biology. Interprint publication and Pergamon Press, U.K., 1977.
3. Significance of changes in urine output on acute exposure to hypoxia. Proc. of the Krogh centenary Symposium on Capillary Exchange, Pulmonary Oedema and Respiratory Adaptation. 1977.
4. Interactions between hypoxic and thermal stress with particular reference to thermoregulatory mechanism. Selected Topics in Environmental Biology. Interprint Publication and Pergamon Press, 1977.
5. Reduction of pore area of Avian egg shell as an adaptation to altitude. Proceedings of the National Academy of Sciences, USA, 74: 3095-3098, 1977.
6. Book:
Selected Topics in Environmental Biology. Interprint Publications (1975) and Pergamon Press, U.K., 1977 by B. Bhatia G.S. Chhina and Baldev Singh.
7. Monographs on Environmental Biology, Editors: B. Bhatia and C.K. Varshney: (a) Indices of Heat Stress by N.C. Majumdar. (b) Energetics of Indian Agriculture by Roger Mitchell (in press);

2. PROFESSOR J.M. DAVE:

1. "Status of research on sulphur in air" at Dubrovnic, U.N.E.P. Conference. September 5, 1977.
2. "Environmental pollution from some pulp and paper in industries in India". U.N.E.P. Conference in Paris, February 19, 1978.

3. PROFESSOR H.K. DAS:

1. Synthesis and degradation of proteins during wheat endosperm development, Phytochemistry, 15 (1976) 1101.

p.t.o.

- 2. Amino Acid Starvation in *Escherichia coli* K-12: Characteristics of the Translation Process, *J. Bacteriol.* 126 (1976) 1042.
- 3. Synthesis of inactive B-galactosidase during amino acid starvation in *Escherichia coli* K-12 *F.E.B.S. Letters*, 81 (1977) 299.
- 4. Incorporation of specific amino acids as markers of cell differentiation, *Cell Differentiation*, 6(1977) 47.

4. Dr. C.K. VARSHNEY:

PAPERS

- 1. C.K. Varshney (1975): Aquatic weeds and water resources development. Proceedings of Second World Congress. International Water Resources Association, New Delhi, India, P. 293-297.
- 2. C.K. Varshney (with J.K. Garg): Plant Responses to sulphur dioxide pollution. Critical Reviews in Environmental Control, U.S.A. (accepted for publication).
- 3. C.K. Varshney (with K.P. Singh) (1976): Survey aquatic weed problem in India. In C.K. Varshney (Ed.) Aquatic weed in South East Asia: Proceedings of the Regional Seminar on Aquatic Weeds. Dr. W. Junk Publishers, the Hague.
- 4. C.K. Varshney (1978): The Politics of Natural Disaster. The case of the Sahel Drought: Glanz, Michael H. (Ed.), Praeger Publishers, New York - A Review, *International Studies* (in press).
- 5. C.K. Varshney (1978): Problem of sulphur dioxide pollution (Abstract) - Presented at the Seminar on Genetic Effects of Environmental Agents held at Hyderabad.
- 6. C.K. Varshney (1978): Himalayan Ecology (Abstract). Paper presented at Resources, Development and Environment of Himalayan Region. Organised by D.S.T., Government of India from 10th to 12th April, 1978.

BOOKS

- 1. C.K. Varshney (Ed.) (1976): Aquatic Weeds in South East Asia. Proceedings of the Regional Seminar on Aquatic Weeds. Dr. W. Junk Publishers, The Hague.
- 2. C.K. Varshney (in collaboration with four other co-authors): The Unsteady State: The Problem of Growth Culture and Environment Hawaii University Press, U.S.A.

Monographs on Environmental Biology, Editors: C.K. Varshney and B. Bhatia:

- 3. Indices of Heat Stress by N.C. Majumdar. Interprint, New Delhi.
- 4. Energetics of Indian Agriculture by Roger Mitchell (in press). Interprint.

5. Dr. (Mrs.) ANJALI MOOKERJEE:

1. Adsorption Characteristics and some physico-chemical studies on nucleoprot-amine-Ind. J. Biochem. Biophys. Vol. 14, p. 21-25, 1976 (with S.N. Upadhyay, D.S.L.)
2. Effect of Nickel on macromolecular Synthesis in E.coli K. 12 (1978) Current Science (in press)(with Chitrita Guha, School of Life Sciences).
3. Effect of Temperature on the dielectric pattern of DNA-Actinomycin-D Complex (Biopolymers-in press), 1978 (with A.K. Attri).
4. Stabilising effect of divalent metallic cations on membranes against thermal and gamma-irradiation damages. Ind. J. of Exptl. Biology, 1978(in press)(with K.V.A. Ramaiah).
5. Electron microscopic observations on thermal denaturation of Reconstituted nucleoprotamine. Ind. J. Exptl. Biology 1978 (in press).
6. Electron Microscopic Observations on the Microspheres of Amoeba Proteus (with Sivatosh Mookerjee and Utpal Mallik School of Life Sciences). 8th International Congress on Electron Microscopy, Canberra, 1974, Vol. 2, p. 714.
7. Conformational Changes of Native and Reconstituted Nucleoprotamine by Heat and Gamma-Irradiation (with S.N. Upadhyay, D.S.L.), 1976, Nucleus, Vol. 19, p. 172.
8. Adsorption Profile of Native and Irradiated DNA at Solid-liquid Interface (with Ravi V.J. Chari, School of Life Sciences), 1975, Ind. J. Biochem. Biophys, p. 219.
9. Effect of Gamma-irradiation on dye-DNA binding (with Rita Mukhopadhyay, School of Life Sciences), 1976. Int. J. Radiation Biology, Vol. 30, p. 543.

6. Dr. V. SUBRAMANIAN:

1. Subramanian, V. and Dalavi, R. (1978): Denudation by Indian Rivers. Man and Environment. V.2P
2. Subramanian, V. (1978): Input by Indian Rivers into World Oceans. Proc. In.AC.Sc. (in press).
3. Subramanian V. (1978): Pathways of Metals in Estuaries Marine Geology. (In press)

4. Dr. V. Subramanian (1977): Role of Chitin and other organics in the Transport of Metals to World Oceans. in: Chitin, edited by R. Mizarrelli, M.I.T. Press, Mass, U.S.A.
 5. Dr. V. Subramanian: Suspended Sediments in World Rivers in Lecture Notes on Sediment Problems in relation to Water Resources, I.I.T., Kanpur, V. 2, p. 1-15
 6. Dr. V. Subramanian (1978): Stream Erosion in the Himalayas Himalayan Geology, Geology. (In press).
 7. Dr. V. Subramanian: A Geochemical Model for Phosphate Mineralisation in Marine Environment. Sp. Pub. Geol. Sur. Ind. (In Press).
 8. Dr. V. Subramanian (1977): Water Chemistry of some Westerly Rivers of India, Quaternary Environment. P. 55-56,
 9. Dr. V. Subramanian (1976): Factors affecting the Concentration of Fe, Mn and Ni in Natural Waters. Hydrological Problems, V. 2, PCI-C14.
 10. Dr. V. Subramanian: Water Chemistry of St. Lawrence estuary. Jour. Hydrology. V. 28, p. 341-355.
 11. Dr. V. Subramanian: Methodology of XRF studies of Suspended Sediments in Estuarine Waters. Marine Geology. V. 22, P. 1-6.
 12. Dr. V. Subramanian (197): Experimental Modelling of Interelemental Relationship in Natural Ferromanganese Materials. Canadian Mineralogist. V. 10, P. 32-39.
7. Dr. (Mrs.) KASTURI DATTA:
1. Datta, K.: Effect of dietary threonine Supplementation on tyrosine toxicity in the rats. J. Nutrition. 107 1575-1582 (1977).
 2. Datta, K. : Hepatic induction of threonine dehydratase and tryptophan pyrrolase in tyrotoxic rats. Experientia, 33, 1018 (1977)

8. Dr. R. SUBRAMANIAN. - 42 -

1. Urine output and blood ADH in rats under different grades of hypoxia. In Selected Topics in Environmental Biology. Edited by Professor B. Bhatia et al. Interprint Publications, New Delhi, 1976, p.325-332.
2. Significance of the changes in urine output on acute exposure to hypoxia. In Respiratory Adaptations, Capillary Exchange and Reflex Mechanisms. Edited by A.S. Paintal and P.Gill Kumar, V.P. Chest Institute, New Delhi, 1977p.244-252.

9. Dr. J. SUBBA RAO :

NIL

10. Dr. G.P. MALIK:

NIL

11. Dr. D.K. BANERJEE:

NIL

12. Dr. V. RAJAMANI:

1. Partitioning of Pt-group elements between Sulfide and Basaltic melts. Gol. Soc. America.V.9(1977)
2. A Geochemical model for the composition of Ni-Cu sulfide deposits associated with Komatiites. ECGS-UNESCO-IGCP. Sym. on "Archean Geochemistry"(1977).
3. Partitioning of Fe, Co, Ni and Cu between sulfide Liquid and basaltic melts and Composition of Ni-Cu Sulfide Deposits. Economic Geology.V.73 (1978).
4. Recent Advances in the Geological and Geochemical Exploration for Magmatic Sulfide Deposits. Nat. Seminar. Resources Engg. and Technology, I.I.T., Bombay(1977)(Abstract).

13. Dr. (Mrs.) J.D. SHARMA

1. Cardiac Output of Indian men by the Indirect Fick Principle. Indian Journal of Physiology and Pharmacology, January, 1978.

....6/-

14. Dr. L.K. PANDE :

1. Ecosystems with three species: One-prey-and-two-predator System in an exactly Solvable model (accepted for publication).
2. Feedback control Systems and their possible periodic Solutions (with J. Subba Rao and S.N. Biswas) (accepted for publication).
3. Constraints for periodicity in the N-Step feedback control Systems (with J. Subba Rao and S.N. Biswas) (accepted for Publication).

15. Dr. A.K. BHATTACHARYA :

1. Bhattacharya, A.K. (1975): A Critical Review on Chemical and Microbiological Changes under Permanent Manurial Trials and Fixed Crop Rotation Experiments- Proceedings of the VII Annual Workshop meeting of A.C.A.R. Coordinated Scheme on Microbiological decomposition and recycling of Farm and City Wastes, Poona, 1975.

16. Dr. JITENDRA BEHARI :

1. Hall effect in Bone: In: Proceedings of International Symposium on Biomolecular Structure, Conformation, Function and Evolution. University of Madras, January, 1978.
2. Biopotentials in Bone. In: Proceedings of International Symposium on Biomedical Engineering held at I.I.T and A.I.I.M.S., New Delhi, February, 1978.
3. Dielectric Parameters of lung tissue at microwave frequencies. In: Proceedings of International Symposium on Biomedical Engineering held at I.I.T., New Delhi, February, 1978.
4. Photovoltaic effects in irradiated bone. In: Proceedings of Symposium on Biomedical Engineering to be held at Hyderabad, June, 1978.

2. Microwave Absorption in Collagen. Proceedings of National Conference on Medical Physics and Medical Instrumentation held at A.I.I.M.S., New Delhi, September, 1972.

17. Dr. V. ASTHANA:

1. ASTHANA, V. (1972): Oil Pollution and the Concept of Contingency Planning (Abstract): Symposium on Human of the Atmosphere, Land and Water, Andhra University, Waltair, .
2. ASTHANA, V. (1972): Imperialism: Science and Technology, International Seminar on Imperialism, Social Transformation and Independence, New Delhi, March, 1972.
3. ASTHANA, V. (1975): Problems and Issues in Coastal Zone Management: Symposium on Modern Concepts in Geography, Kanpur University.
4. ASTHANA, V. (1976): Mineral Resources of the Sea-bed beyond the Continental Margin, Proceedings of the Seminar on the Law of the Sea-bed, Jawahar Lal Nehru University, December, 1976 (in press).
5. ASTHANA, V. (1977) : "Process of Sedimentation in Intra Coastal Region" to be presented at a Seminar on "Quaternary Geology of Western India" held in Baroda, November 21-23, 1977.

CONFIDENTIAL

UNIVERSITY GRANTS COMMISSION

180

Meeting:

Dated : April 24, 1978

Item No. 16 : To consider a proposal from the
Jawaharlal Nehru University for the
establishment of a Publication Unit.

The Jawaharlal Nehru University has sent a proposal for establishing a publication unit in the university and has requested for the creation of the following posts:-

1. Chief Editor in the scale of Rs.1500-2000.
2. Assistant Editor in the scale of Rs.700-1300.

A copy of the Jawaharlal Nehru University's letter No.Aca.I/dated 15th February, 1978 in this connection is enclosed as annexure-I.*

The Commission has a scheme of financial assistance for the publication of learned/research work including the doctoral thesis during the 5th plan period. The Jawaharlal Nehru University has been allocated Rs.60,000 for the year 1977-78 for this purpose. A copy of the guidelines for the implementation of the scheme for financial assistance to universities for the publication of learned/research work including the doctoral thesis, during the 5th plan period is enclosed as annexure II.@

The Executive Council of the University has set up a publication committee to consider proposals and make recommendations regarding the publication of journals and other publications of the university. That committee has recommended that there should be a separate publication unit.

The Jawaharlal Nehru University has stated that most of the Schools of studies in the university are concerned generally with post-graduate, doctoral, and post-doctoral work and are research-oriented. The school of International Studies has a quarterly of its own, International Studies and the School of Languages publishes half-yearly, the Journal of the School of Languages. Both these journals have established a very sound reputation. International Studies especially has, during the last two decades, built up a fairly substantial readership in all the English-speaking countries of world. It is a research journal that has pioneered in our country the publication of research papers in the field of world affairs.

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The University has decided to develop a comprehensive programme for the publication of the research being carried out in the different centres of studies and carry it out with the help of a separate publication unit. The University has further stated that it is only fair that the research done under the auspices of the university should go out under the imprint of the University.

It may be stated that the present Editorial and other staff already available under 'Publications' for the School of International Studies is as under:-

- 1) Editor of Publications (Rs.1100-1600)
- 2) Proof Reader
- 3) Steno-Typist.

It has been proposed to integrate the above staff into the proposed "Publications Unit".

With the creation of two posts proposed by the JNU the total staff available in the proposed Publication Unit would be as under:-

- 1) Chief Editor Scale (Rs.1500-2000)
- 2) Editor of publications (Rs.1100-1600)
- 3) Assistant Editor (Rs.700-1300)
- 4) Proof Reader
- 5) Steno-Typist.

The proposal of the University is placed before the Commission for consideration.

ASD5/DSD5

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Copy of Letter No.Aca.I/ dated 15th February, 1978
from Shri Anjni Kumar, Registrar, Jawaharlal Nehru
University, New Delhi, to Secretary, UGC, New Delhi

Kindly refer to letter No.F.2-21/77(D.5-1) dated 4th January 1978 regarding the financial assistance offered by the UGC for the publication of learned/research work, including doctoral theses, during the Fifth Plan Period.

Publication of research is the one major activity in which the University has not yet made appreciable headway. The University, therefore, welcomes the emphasis placed on publication by the UGC and wishes to avail itself of the facilities provided by the UGC.

The Executive Council of the University has set up a publication committee to consider the proposals and make recommendations regarding the publication of journals, and other publications of the University. The Committee has now recommended that there should be a separate Publication Unit. quite a few of the Doctoral theses submitted to the University by its students, and the monographs prepared by the faculty members have had to be published outside with the help of publishing houses and other commercial organisations. Most of them have been published without professional editing and under terms and conditions not quite favourable to the authors.

Most Schools of Studies in our University are concerned generally with post-graduate, doctoral, and post-doctoral work. The School of Languages publishes a quarterly of its own, International Studies, and the Journal of the School of Languages. Both these journals have established a very sound reputation. International Studies especially has, during the last two decades, built up a fairly substantial readership in all the English-speaking countries of world. It is a research journal that has pioneered in our country the publication of research papers in the field of world affairs.

The University is anxious to help its students and teaching staff in publishing their researches with a view to encouraging them in their academic and intellectual pursuits. It has, therefore, decided to develop a comprehensive programme for the publication of the research being carried out in the different Centres of Studies and carry it out with the help of a separate publications Unit. It is only fair that the research done under the auspices of the University should go out under the imprint of the University. It would also then elicit better attention from the academic world.

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The Publication Committee has recommended that the Publications Unit must have, among other things, the following posts to start with:

1. Chief Editor in the pay scale of Rs.1500-2000 - 1
2. Junior Editor in the pay scale of Rs. 700-1300 - 1
3. Sr. Stenographer - 1
4. Jr. Asstt-cum-Typist 1
5. Daftri 1
6. Messenger 1

It is proposed that the posts already sanctioned under "publications" for the school of International Studies (viz the former Indian School of International Studies) should be integrated into the proposed Publications Unit. These posts are three in numbers: (1) Editor of Publications (Rs.1100-1600); (2) Proof-Reader; and (3) Steno-Typist.

Paragraph 9 of the Guidelines for the implementation of the UGC Scheme of Assistance to Universities for the publication of Learned/Research work including Doctoral Theses, stipulates that the University may avail itself of the services of professional people for the editing, referencing, spacing, etc., of manuscripts from the point of view of quality and presentation. It is felt that it is impossible to maintain a uniform style in regard to these matters and consistently ensure a fairly high standard unless we have our own editorial staff. It is not convenient to refer each manuscript to some professional editor on an ad hoc basis. If some editorial posts are created in the proposed publications Unit, the University can select and appoint people with the requisite background and qualifications and ensure through them that high and uniform standards are maintained.

The post of Chief Editor is especially important, and at the initial stage of organising the publications Unit itself, because the University needs a senior person to advise on, and competently carry out, the organisation of the Unit on proper lines, lay down norms, help formulate the style and format of our publications, and supervise the work of the editors with authority.

It is important that both for the editorial posts and for the post of Chief Editor such persons should be appointed as possess a literary background and a clear command over the English language as manifested in their own writings and publications. They should also be persons with a fairly wide range of interests and acquainted with the basic trends of thought and research in different disciplines, so that they may be able to handle the highly specialised manuscripts with a competence worthy of the high standards that the University wants its publications to display. It is also desirable that they should possess an academic rather than a commercial background for such a background would facilitate their support with the scholars. Editing manuscripts of a highly specialised nature calls for mutual consultation and co-operation between the scholars concerned and the editorial staff,

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The University will be grateful if the sanction of the University Grants Commission is communicated to the creation of the following posts:-

1. Chief Editor in the scale of Rs.1500-2000.
2. Assistant Editor in the scale of Rs.700-1300.

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Guidelines for the Implementation of Scheme of Assistance to Universities for the Publication of Learned/Research Work including Doctoral Theses during Fifth Plan period.

1. The University Grants Commission scheme of assistance to Universities/Colleges teachers for the publication of learned/research work including doctoral theses, is by way of supplementing the work of private publishers and not by way of replacing the private publisher in bringing out high quality publication.
2. A learned research work to be assisted under the scheme should be one that breaks new ground and is useful as reference material for honours and postgraduate studies.
3. Theses accepted for doctoral degree may be considered for assistance for publication under the scheme only within a period of ten years after its submission.
4. A specific ratio of assistance be fixed for assistance for learned research works and doctoral theses. The allocation made to a university under the scheme be utilised by the universities normally on the basis of 2/3rd for doctoral theses and 1/3rd for other learned research works.
5. Repetitive publication should not be considered under the scheme for assistance. Assistance would be available once only for the initial publication. The publication should be printed in India only.
6. The University may either publish the works under its supervision and control or get these published through reputed publishers. Payments towards the cost of a publication should not be made to the author, but directly to the publisher by the university. The author could be consulted regarding the publisher, if it is not done through university press.
7. The authors should not be asked to make any financial contribution towards publication of their approved work.
8. The universities may follow, the Indian Copy Right Act for deciding the question of Copy Right of the works approved for publication grant.
9. With a view to ensuring a high academic standard the universities should take utmost care in making proper selection of learned research works and theses for publication. The manuscripts should be got assessed by experts, usually by two (other than the examiners) in that particular field. The university may also avail of the services of professional people for editing, referencing spacing etc. of the manuscripts

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from the point of view of quality and presentation and may meet expenditure in this regard out of the grant allocated for publication

10. Besides seeking the advice of commercial interests while selecting a manuscripts for publication, the universities may consider the desirability for appointing sole and/or regional selling agents/distributors.

11. The amount of subsidiary for publication of a thesis should not exceed Rs.5,000/- unless the university is itself publishing the thesis on its own, in which case it may meet actual expenses on its publication.

12. Where assistance to a publication is substantial, the university should undertake it as its publication and a major part of the money realised through sale (after making provision of royalty to author, Commission to retailers etc.) should be credited to this fund for publications so that it can support more books to be published. The money obtained through sales of books published with UGC support should not be used by the universities as a general sources of revenue.

13. There should be proper coordination among the agencies providing financial assistance for similar purposes, i.e. ICHR, ICSSR, NBT, Indian Institute of Advanced Study, Simla. To avoid duplication of assistance, the universities should provide a column in the proforma inviting proposals indicating whether a particular scholar has approached any other organisation for financial assistance for the same publication and if so, with what results?

14. The publication of catalogues, critical additions of rare manuscripts and research/reference manuals costing more than Rs.20,000/- would be considered on merits outside the general scheme of the UGC on all India basis after the work has been examined by the Commission with the help of experts.

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UNIVERSITY GRANTS COMMISSION

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MEETING:
DATED : 24th April, 1978

Item No: 17 To consider the proposal of the Deptt.
of Psychology, Utkal University which
has been selected as a Deptt. of Special
Assistance for Additional posts of Six
lecturers.

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There is a request from the Department of Psychology
Utkal University which has been selected as a Deptt.
of Special Assistance for additional posts of four
lecturers and for conversion of 2 of the 4 posts of
research associates to those of 2 lecturers. In all,
the Department has made a case for 6 additional
lecturers. The justification given for additional
posts is indicated in Professor R.Rath's letter
enclosed Annexure 1.*

*p 188-189

The support recommended and approved by the
University Grants Commission for the Department of
Psychology, Utkal University as a D.S.A is indicated
in Annexure II@

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The matter is placed before the Commission for
consideration.

E.O.(HR)/J.S.(I)

Copy of letter No. 254/Psy/179/78 dated February 10, 1978 addressed to The Secretary, UGC by Dr. R. Rath Senior Professor & Head, Post Graduate Deptt. of Psychology, Utkal University, Bhubaneswar.

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The University Grants Commission has kindly provided many posts of Research Staff under the scheme of DSA. It has also provided three posts of Reader under the scheme. But somehow there has been no post of Lecturer under this scheme. There had been no provision for the post of Lecturer in the Fifth Plan scheme also. At present the Department has three Professors and five posts of Reader, but there are only seven lecturers. But we need some posts of Lecturer for the following reasons:

(1) In the light of the report of the UGC in connection with the improvement of teaching and research, this department has introduced all the relevant changes in respect of teaching and research from the session 1977-78. The seminars in psychology recommended that at M.A level there should be specialisation in different specific areas and teaching in specialised areas should be done in the second part of the M.A course. So from the next year this will have a great impact on the teaching and supervision work of the teaching staff. Specialisation also includes dissertation for candidates and that requires extensive supervision work. There are about 60 students in each year and if we select at least 30 students for dissertation/ at least for the good students the purpose of specialisation may be defeated. Hence, there is a need of increasing the teaching staff at the lower level i.e. at the level of Lecturer.

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(2) The UGC has also requested this department to implement the Leadership programme and we are planning to start the work from 1978-79 session. We propose to organise specialised courses and prepare reading materials for the undergraduate teachers.

(3) M.Phil course is being introduced from the session 1978-79 and the students doing this course require constant supervision in field work and specialised practice which is absolutely necessary for them.

Thus, the work load for the Department in the shape of field supervision, individualised guidance, preparation of reading materials for the undergraduate teachers will increase enormously from July 1978. So we need at least four more teachers to provide continuous supervision of such work. It is also reasonable to expect to have one and a half times more junior staff compared to the senior staff whose number is 8 at present.

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Although we have four Research Associate in the Department yet their continuity for long is uncertain as the State Government has already introduced UGC Pay scale for the undergraduate teachers. Since these posts are temporary for five years and only best students are selected for the purpose they are likely to leave the Department whenever they get posts in the undergraduate colleges. So I would like to suggest that two of the four Research Associate posts may be converted into Lecturship in order to guarantee continuity of research and teaching.

I, therefore, request the UGC to create four new post of lecturers and convert two posts of Research Associates into full time lectureship. An early decision may be taken in this direction so that teaching and oher academic programmes mentioned above may be planned before July 1978.

Support Recommended and Approved by the University Grants Commission for the Department of Psychology, Utkal University under special Assistance Programme.

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- (a) 1 Reader in Educational Psychology (he should have a postgraduate degree both in education and in Psychology)
1 Reader with specialisation in Cognitive Growth or Children and
1 Reader with specialisation in Social Psychology
- (b) 3 Research Associates may be provided to the Deptt. and they will be associated with specific research projects.
- (c) (i) 4 Senior Research Fellows at any one time.
(ii) 4 Junior Research Fellows at any one time.
- (d) 8 National Scholarships each year (according to the UGC rules 50% of these fellowships are to be earmarked for students coming from outside the state where the university is located. But in this case we recommend that 75% of the scholarships may be earmarked for outside students)
- (e) 6 teachers fellowships each year.
- (f) The department receives a large number of teachers from Indian and other universities. But we understand it has been difficult to consolidate this programme on an institutional basis for want of funds. We recommend a sum of Rs. 30,000/-p.a for this purpose.
- (g) (i) Administration & Technical Staff Rs.20,000 p.a
(ii) Library books & Journals Rs.25,000 "
(iii) Research & Field work Rs.25,000 "
(iv) Publications Rs.20,000 "
(v) Miscellaneous Expenditure Rs.10,000 "
- (h) Other Items(Non-Recurring)
(i) Equipment Rs.1,00,000
(ii) Building(space for the departmental library,2 seminar rooms and space for academic staff) 5,000 sq.ft Rs.2,50,000
(iii) Furniture, Fixtures & Fittings 50,000
(iv) Books & Journals Rs.1,50,000

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UNIVERSITY GRANTS COMMISSION

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Meeting:

Dated: 24th April, 1978

Item No. 18 :To consider a proposal of Poona University for sanction of a post of Professor of Philosophy of Science for the Department of Philosophy.

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On the recommendations of the Visiting Committee the Commission inter alia approved the following facilities for the department of Philosophy, Poona University:-

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| Equipment | Rs. 8,000 |
| Books | Rs. 20,000 |
| Indian Philosophical Quarterly | Rs. 25,000 |
| Reader | One |
| Lecturer | One |

The University has utilized major part of the grant approved for books and equipments. No information however has been received about the appointment of teachers against the posts approved.

The Vice-Chancellor, University of Poona has now sent a proposal for sanction of a Professor in Philosophy of Science. It has been stated that a proper unification of patterns of development for (i) Analytical and logical Methodologies (ii) Inter-disciplinary contact with the Sciences, Natural and Social; and (iii) Revitalization of logical, epistemological and philosophical problems and concepts of Philosophical traditions requires the service of a Professor in Philosophy of Science. The expenditure on the post will be met, as stated by the university, within the budget approved by the Commission for the Philosophy Department under the 5th Five Year Plan for teaching post. A copy of the letter received from the Vice Chancellor dated 5th March, 1978 is enclosed as Annexure.

The matter is placed before the Commission for Consideration.

DS (D4)/AS (D4)

Annexure to Item No.18

Copy of letter No. Nil dated 15th March, 1978 from Sh. D.A. Dabholkar, Vice-Chancellor, University of Poona addressed to Prof. Satish Chandra, Chairman, UGC. (192)

Subject: sanction of a Post of Professor of Philosophy of Science (including Social Sciences) for the Department of Philosophy.

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Dear Professor Satish Chandra,

I invite your kind attention to the letter dated August 21, 1977 (a copy of which is enclosed) from the head of the Department of Philosophy, to the Secretary, University Grants Commission regarding revised proposals of the Department of Philosophy for the Fifth Plan. In his letter, the Head of the Department of Philosophy had explained that the Department of Philosophy is focussing on three major lines of development.

1. Development of Analytical and Logical Methodologies.
2. Inter-disciplinary contact with the Sciences, Natural and Social.
3. Re-vitalization of logical, epistemological and Philosophical problems and concepts of our own Philosophical traditions.

The Head of the Department of Philosophy had further stated that a proper unification of these patterns of development is needed and that the post of a Professor in Philosophy of Science holds the key to the achievement of such a unified pattern and accordingly he had made the proposal for sanction of a professorship in Philosophy of Science. The expenditure on the post will be within the budget sanctioned by the UGC. to the Philosophy Department of the University under the Fifth Five Year Plan for the teaching posts.

The Department is already having post-graduate instruction in Philosophy of Natural and Social Sciences as well as Philosophy of Mind and also a conceptually oriented courses of Economic Concepts and Problems. Besides teaching the Department has shown a decided interest and concern for inter disciplinary research; I might mention that the department had recently organised a Seminar on the Concept of Entrepreneur. I am

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of the opinion that the Department of Philosophy has shown initiative in this regard and I feel that the plans of the Department should be given institutional support. The achievements of the Department has won a measure of recognition from the U.G.C. and it is also regarded as a promising Centre of Philosophical studies in the country today.

Hence the University shall be grateful if the UGC could kindly sanction the post of a Professor in Philosophy of Science (including social Sciences). I am sure that such sanction would provide a much needed help to a developing Department.

With regards,

ENCLOSURE

Copy of letter No. Nil dated 21st August, 1977 from Professor S.S. Barlingay, Poona University addressed to the Secretary UGC, New Delhi.

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Subject: Fifth Five Year Plan proposals Department
of Philosophy University of Poona.

I submit herewith the revised proposals for the development of the Department of Philosophy, University, of Poona, to be included in the Fifth Five year plan proposals for consideration by the UGC for the sake of clarity, the present proposals are organised under three sections. In Section A, I give the essential gist of the present proposals; the demands made therein therefore, could be taken to be proposals of top priority. In section B, I give the rationals of the proposals; herein I shall spell out why the major demands made in Section A are considered as vitally important for the envisaged growth and development of our Department. In Section C, I shall spell out the concrete financial implications of these proposals and also indicate out second and third priorities.

Section A:

In our original proposals for developmental assistance under the Fifth Five Year Plan, we had submitted a budget of Rs. 12,61,800/- as required assistance for our department. In this original proposal we had asked for one Professor in Philosophy of Science as also three Readers etc. But in the letter No. PU/Dev/D-1-A/11509 dated 21st November, 1973, the University had asked us to revise our proposals and submit a smaller budget. Accordingly taking into consideration only the most essential of our needs we pared down our proposals and submitted a budget for Rs. 17,31,900/- (Phil/73-74/3071 dated 26th November 1973). As far as staff requirements are concerned in this revised budget we had asked for one Professor, two Readers etc. The other items of assistance asked for pertained to Research Assistance, Fellows, Books, Equipments etc. These schemes were approved by the University with some delitions "that is two Readers and Three Lecturers only were approved of by the University) as part of the Fifth Five Year Plan for our department. However, the Visiting Committee of the UGC sanctioned one Reader and two Lecturers out of proposals.

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I now understand that the University is preparing to contact the U.G.C. as well as the State Government for sanctioning such claims of the department as were included in the Fifth Five Year Plan proposals, approved by the University but not sanctioned by the Visiting Committee of the UGC and also that the UGC may make available additional assistance from the amounts already earmarked by the UGC for the Poona University. Hence it becomes necessary for us to resubmit our plan proposals. It is in this context that I am now putting up the present scheme. Herein I may be permitted to mention that taking due account of the most vital factor necessary, in my opinion, for the proper development of the Department of philosophy the essence of the present scheme is the imperative need of sanctioning the post of a Professor in philosophy of Science. This should be taken to be our priority demand and in Section B, I shall try to show why we need Assistance from the UGC under this form. Of course, we require also other items of Assistance and in section C, accordingly, I present a total picture of our requirements, which may be considered by the UGC.

Section B.

The Developmental perspective of the Department:

Considering the existing structure of the Department, the pattern of growth already started, the possibilities of the situation and the objectives of the discipline of Philosophy in the Social Cultural and scientific contexts of our country today, I am of the opinion that:

1. Development of Analytical and logical Methodologies.
2. Inter-disciplinary contact with Science, Natural and Social.
3. Revitalization of the Logical, Epistemological and Philosophical problems and concepts of our own Philosophic tradition.

Not only are these our primary objectives, but we must achieve a unifide pattern of inter-relation between these aims. Hence the key to success lies in ensuring the unifaction of aims and only the post of a Professor in Philosophy of Science could give us the possibility of such a unification. For, it is in the area of philosophy of science that methodologica, inter-disciplinary and revitalizing concerns merge. Hence our primary demand is for the sanction of a Professorship in Philosophy of Science.

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Section C:

As indicated above our primary need is for the sanction of a Professorship in Philosophy of Science. The financial implication of this would be Rs. 98,200/- for the total plan period. We have been asking for this sanction right from our original proposals and we again reemphasise this demand. If, however, this could not be sanctioned we have to indicate our second priority which would be a request for the sanctioning of one Reader and one Lecturer (in addition to the post already sanctioned) in view of the post of a Professor. However, considering that there are only two years left in the plan period the actual requirements for the implementation of the post of professorship is Rs. 41,200/-. We would also like to point out that we were sanctioned Rs. 3.5 lakhs, and 1.5 lakhs for the University Department and the Pratap Centre respectively by the University. We now request that the unutilized portion of these amounts may be permitted to be used against the post of a Professor and for purchase of books equipments etc. In case either of the the above two proposals could not be accepted by the UGC. or cleared by the State Government I request that we may be permitted to utilize the amount for necessary equipment, books periodicals etc, as shown below :-

Rs. 60,000/- for books and back volumes of the journals.

Rs. 38,000/- for equipment and furniture,

Thanking you,

Confidential

UNIVERSITY GRANTS COMMISSION

Meeting

Dated 24th April 1978

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Item No.19: To consider the proposal of the Bombay University regarding construction of a building for the Western Regional Instrumentation Centre, Bombay

The Standing Committee of the Commission for Instrumentation Centres recommended an amount of Rs.24.94 lakhs for 1977-78 out of the total of about Rs.38.5 lakhs envisaged for the period 1977-79 for the setting of of Western Regional Instrumentation Centre at Bombay University, outside the Vth Plan allocation. This was accepted by the Commission. The estimates of Rs. 24.94 lakhs included a provision of Rs.10,00,000/- towards the cost of a building and Rs. 50,000/- for its furniture.

In the estimates received from the University a provision of Rs.2,19,345 @ 14.25% on all items has been made for departmental charges demanded by the Engineering section of the Department of Atomic Energy, Govt.of India. Provision also has been made at the rate of 20% for external services. Further the University has decided to allot a fully developed plot with facilities of road, water supply etc. for housing the Regional Instrumentation Centre for which the University incurred, out of its own resources, an expenditure of Rs.2,21,500/- and has requested the Commission to reimburse this amount in addition to the estimated cost of Rs.17,32,000/- for construction of a building. A copy of the Vice Chancellors letter of 31st October, 1977 is attached as Annexure*

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The Commission generally admits 5% of cost for Architects fee (including supervision charges and clerk of works) and external services each. It may not be possible to agree to provide provision for external services beyond our norms. The Commission also does not admit the amount incurred for the development of land. It is also understood that the Maharashtra Govt. has decided that all building projects costing more than Rs. 3.00 lakhs for the universities in the state may be constructed by the PWD for which only 4½% will be levied by the State Government.

However, in view of the special nature of the building requiring services of the best available Engineering personnel, the Commission may consider if the request of the University of Bombay for sanction of the departmental charges, charges for the external services beyond the UGC norms and reimbursement of the expenditure incurred on development of land may be accepted.

The matter is placed before the Commission for consideration.

Annexure to Item No. 19

Copy of letter No. Nil dated 31st
October, 1977 from Shri Ram Joshi
University of Bombay to the Vice-
Chairman, University Grants Commission.

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Subject: Setting up of a Regional Instrumentation
Centre at Bombay University.

I may recall our last meeting in Bombay when we discussed the proposed building of the Western Regional Instrumentation Centre being set up at the University of Bombay. As discussed, then, I am sending herewith plans and proforma estimate (Appendix I)* for the buildings, prepared by the Civil Engineering Division of the Department of Atomic Energy, Government of India. The University decided to entrust the work of the design and execution of this project to the Department of Atomic Energy because of their vast experience in building science laboratories with good workmanship and early completion.

2. The Commission has earlier approved in principle the feasibility report on the Regional Instrumentation Centre forwarded by the University vide Commission's letter No. F.16-7/75 (SR)/D4a) dated 18th March, 1977. In the report the requirement of about 15,300 sq.ft. for the phase I of the Centre was envisaged on the basis of the programme to be undertaken. As regards the Estimated cost it was worked out on the basis of the prices then prevailing. The Estimated cost previously communicated was Rs. 11,36,385/- for building work including Air-Conditioning and Rs. 1,13,495/- for furnishing the building.

3. It will be seen from the proposal now enclosed herewith that in planning the building, efforts are made to stick up to the area originally communicated to the Commission, except for an increase of about 600 sq.ft. The excess area is partly due to the provision of the corridor of about 300 sq. ft. connecting the main laboratory building with the workshop as it was advised by experts to maintain adequate distance between the workshop and the laboratory, which will house delicate instruments, so as to avoid electrical noises

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* Not enclosed.

and mechanical vibrations. The remaining excess, which is minor is due to the metric conversion of the dimensions. The utilisation of the area and justifications for it as furnished by Dr. A.V. Patankar, Project Officer are also enclosed for better appreciation.

4. You will see from the proforma estimate, that inspite of the efforts made to adhere to the approved area, the cost of the building has worked out to Rs. 15,12,723.00 resulting in an increase of cost of the building by about Rs. 4.47 lakhs. This of course includes the cost of air-conditioning the area for R&D laboratory as envisaged in the report. The break up of the estimated cost towards civil, electrical (Internal and External) and public Health i.e. plumbing and sanitary (Internal & External) is shown in Appendix-II.* I had discussion with Dr. Patankar and the Chief Engineer of the Department of Atomic Energy in regard to the increase in the cost of the building and the reasons for the excess given by them are mainly as under :-

1. Civil Construction Cost:-

The Civil construction cost given in the feasibility report was based on the prices and labour charges existing about a year ago. The cost of good quality work today is nearly Rs. 60/- per sq. ft. The D.A.E. normally purchase materials in bulk for various works as per their programmes and can thus hold the price of construction near about Rs. 58.5 per sq. ft.

2. Internal Water supply and sanitary installation

In view of the present escalation of prices of quality materials and labour, it is not possible to restrict the cost of internal water supply a sanitary installation at 2.5% of the cost of work as specified in the feasibility report. It is also the experience of the University that in the buildings completed in the Fourth Plan period this cost was exceeded and it was not been possible to adhere to this norm of 2.5%.

3. Internal Electrification:

The internal electrification cost works out to about 17.25% of the civil cost, instead of the 12.5% as stipulated in the norms. The increase of 5% is due to the fact that almost every room, excepting the administration and the library, needs power points. In particular R&D and development laboratories, and
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* Not enclosed.

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the workshop are the main areas where it is necessary to provide power lines reasonably close to have an easy access to the supply.

4. External services and drainage:

These services are dictated mainly by the site conditions prevailing and cannot apply uniformly to all buildings. The cost of this item at 5% of the civil cost as per norms of the Commission, may perhaps be justified for a bigger building. In the case of a small building like that of the R.I.C., there is no way left to bring this cost down since it provides for the just requirement. It is therefore, necessary to consider the actual cost of these services instead of the percentage of the cost of the building.

5. Air-Conditioning of R & D area:

The provision made in the feasibility report, towards the Air-conditioning was on adhoc basis. Considering the experience of the University regarding the installation of the Air-conditioning for Computer Centre of the area of 1000/- sq.ft. which has costed Rs. 1.26 lakhs, the provision of Rs. 1.38 lakhs for a bigger area of 1400 sq.ft. is more realistic and reasonable.

5. Besides the cost of building you will also see that the professional charges as stipulated in the feasibility report are well below those adopted by the D.A.E. The department has fixed agency charges at 14½% which will cover the design and execution of civil, structural, public health, electrical and air-conditioning services as also administrative and accounts support for the work. I am given to understand that the C.P.W.D. which is also a Central Government department follow similar practice for agency work.

6. In the above, I have attempted to make clear the following main facts on which I would like the decision of the Commission.

- a) Approval of the plans.
- b) Approval for the enhancement of the estimated cost over that already approved by the Commission in view of the reasons given above.

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- (c) Approval for the University to entrust the work of the building to the Civil Engineering Division of Department of Atomic Energy for design, and execution of the project in view of their expertise in building scientific laboratories and also for the payment of agency charges at 14½% as stipulated in the estimate.
- (d) Since the Department of Atomic Energy to whom the design and execution the work is being entrusted is a Central Government department, the University may kindly be exempted from the condition regarding forwarding certificate from P.W.D. that the rates provided in the Estimate are as per P.W.D. schedule of rates and also the forwarding of premium certificate while requesting the realising of the funds. In effect, I would request the U.G.C. to accept the certificate issued by the D.A.E. in both the cases.

7. I am anxious to see that the first phase of the building consisting of the workshop and the laboratory is completed and ready for occupation before the onset of the monsoon i.e. before June, 1978 as desired by the Commission in its letter dated 18th March, 1977. The Department of Atomic Energy has informed me that they will be able to complete the first phase provided they are permitted to go ahead with the preparation of detailed estimate, preparing tenders and calling of tenders etc. soon. I request you to kindly take the necessary steps at the Commission's end for obtaining the approval for the building and communicate it to the University as soon as possible.

8. In order to facilitate the starting up of work immediately, on the receipt of Commission's approval the University has also decided to allot a fully developed plot with facilities of Road, water supply etc. for locating the Regional Instrumentation Centre. Since the plot was developed out of the University's funds, the University desires that the Commission, should reimburse the cost of development which normally precedes the construction work and which has not been included in the Estimate now forwarded to you. The cost of the development is about Rs.2,21,500/-

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for which the approval of the Commission is also requested, over and above the Estimated cost forwarded herewith.

With best regards,

Copy forwarded to Dr. A.V. Patankar, Project Officer, Western Regional Instrumentation Centre, Vidyanagari Campus Kalina, Santacruz (East), Bombay-400098.

Copy to the Registrar, University of Bombay, for information.

Copy to the University Engineer, for information and necessary action.

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UNIVERSITY GRANTS COMMISSION

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Meeting:

Dated : April 24, 1978

Item No. 20: To consider the recommendations made by the Committee appointed by the Commission to consider the question whether honorarium and/or additional staff should be included in the budget approved for COSIP and COHSIP.

The Commission at its meeting held on 17th October, 1977 (Item No. 6(46)) while considering the recommendations of the Standing Advisory Committee for the College Science Improvement Programme resolved that the question whether honorarium and/or additional staff should be included in the budget approved for the implementation of the COSIP/ULP Programmes may be examined further by a committee. Accordingly a committee consisting of the following members was constituted:-

- 1 Prof. R.P. Bambah
Panjab University
- 2 Prof. B.M. Udgaonkar
T.I.F.R.
Bombay
- 3 Prof. M.S. Swami
Bangalore University
- 4 Prof. A. Gnanam
Madurai University
- 5 Prof. B.L. Saraf
Rajasthan University

The meeting of the committee was held in the office of the University Grants Commission on 21st February, 1978. A copy of the proceedings of that meeting is enclosed as Annexure-1.

The main comments/recommendations of the committee are as follows:-

- i) The committee agreed with the present thinking of the Commission that the additional staff

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to be appointed under COSIP-ULP should be recruited on a permanent basis and at the successful conclusion of the ULP duration, should be absorbed in the department initially as a charge on next plan allocation and subsequently as a part of the maintenance grant.

ii) The Committee felt that in view of varying situations and needs of programmes the ULP proposals may be considered in a flexible manner and budgetary provisions made to suit best to each situation, instead of in a routine or a uniform pattern of funding.

iii) The Committee would like to recommend to the Commission that until such time the entire question of honorarium to be paid to teachers in respect of various other schemes initiated by the Commission is considered and guidelines are formulated for making the extension activities as integral part of the work-load of the teachers in the universities and colleges and this culture becomes accepted by the academic community and the State Governments, the existing pattern of funding for ULP activities may be continued. The need of providing either additional staff and/or honorarium to the existing staff may be decided keeping in view the particular situation and nature of programmes to be undertaken, by the different ULPs.

iv) The Committee would like to suggest (a) where honorarium is provided in the budget the total amount available for a first phase of three years should not exceed Rs. 45,000/-; and Rs. 30,000/- for a two-year second phase follow-up activities. The expenditure could be adjusted according to the needs over the total duration of first or the second phase by the department concerned; (b) where additional staff is approved, it should generally be at the level of lecturers and only in very exceptional cases, the question of providing posts higher than this level could be considered while providing any new ULP projects henceforth. The number of such posts to be created should generally not exceed two in number.

The matter is placed before the Commission for consideration.

EO(SR I)

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Minutes of the meeting of the Committee appointed by the Commission to consider the question whether honorarium and/or additional staff should be included in the budgets for implementation of the University Leadership Projects under COEIP and COSSIP

A meeting of the above Committee was held in the University Grants Commission on 21st February 1978. The following were present:

1. Professor B. Ramachandra Rao,
University Grants Commission.
 2. Professor R.P. Bambah,
Panjab University.
 3. Professor A.Gnanam,
Madurai University.
 4. Professor B.L. Saraf,
Rajasthan University.
 5. Dr. D.Shankar Narayan
 6. Dr. J.N. Kaul
 - & 7. Shri A.G. Deshmukh
- |
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|
- U.G.C.

Professor M.S. Swami was unable to attend. Professor B.M. Udgaonkar, who could not be present at the meeting, had communicated his views to Professor Bambah and also to the Vice-Chairman and these were taken note of during the discussions.

The Committee had before it information with regard to the amounts so far approved in respect of ongoing university leadership projects in Science subjects for either appointing additional staff required to release sufficient time of the existing staff to participate in the various activities taken up in the COEIP-ULP or on annual provision of grant for payment of some honorarium to the staff taking up the responsibilities for various programmes initiated under the COSIP-ULP. The Committee was informed that the present feeling in the Commission was that the academic community should be willing to undertake such responsibilities for extension programmes without expecting any additional payments for such work since teaching, research and extension should become integral parts of the responsibilities of the academic community

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in the universities. The members of the Committee no doubt appreciated this approach, but felt that it would take some time before this new culture pervaded into our university system and was accepted by the community. Accordingly, it would not be appropriate at this stage to consider in isolation, the question of desirability of paying honorarium for the COSIP/COHSSIP only, without reference to the other programmes of the Commission where academic community received honorarium for such work, e.g. summer institutes, seminars, workshops, bookwriting programmes, evaluation of manuscripts in book writing projects etc.

The individual members present at the meeting and whose departments had implemented the COSIP-ULP programmes informed the pattern followed by them in this matter. It should be recognised that the need for either appointing additional staff or for paying some honorarium for persons contributing substantially to the success of the COSIP activities, would depend very much upon the context of each department, the nature of activities undertaken, the size of the operations involved and the time required to be spent on them by different staff members in the department. The size of staff members may find it unnecessary to appoint additional staff for this purpose, or even to involve everyone of the staff members in the activities of the COSIP; on the other hand, small departments with limited staff may find it necessary to appoint additional personnel and in some cases even to pay to the existing staff, honorarium for specific jobs done by them. It would not, therefore, be appropriate to prescribe any one uniform approach to a variety of situations obtaining in the different universities and departments invited to take up ULP activities. The major concern of a sponsoring organisation like the UGC, concerned with improvement of educational standards, should, therefore, be with regard to deciding the extent of motivation and ensuring maximum participation by the departments concerned and evaluate the resultant beneficial impact of the ULP activities for improvement of undergraduate education. As such, the instruments to be used, the methods by which participation of the staff is ensured and the manner in which the colleges are made to benefit should be let to be decided by individual departments in the context of their own programmes and responsibilities. The Commission could only lay down some general guidelines which could be kept in view in this regard and overview and evaluate the activities periodically so that their efforts are in conformity with the ULP objectives.

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The Committee agreed with the present thinking of the Commission that any additional staff to be appointed for purposes of taking up ULP activities should be recruited on a permanent basis and at the successful conclusion of the ULP tenure, such staff should be absorbed in the department initially as a charge on the next Plan allocations to the universities concerned and subsequently as a responsibility of the University/State Government concerned for maintaining these posts. This would enable continuous interaction with colleges and establish channels of communication for better standards. Appointing such staff would be advantageous in the case of small to medium sized departments with less than, say, 20 staff members which are still in the growth phase; on the other hand, in the case of departments with large staff members of over 20, additional staff positions may not be warranted at all.

The Committee fully recognised the fact that the success of the ULP programmes and the resultant impact on improvement of undergraduate education in the subjects concerned would necessarily depend upon the level of motivation and also concern of the department as a whole towards improvement of undergraduate instruction in the affiliated colleges. Nevertheless one cannot expect an ideal situation of a uniform level of motivation and concern in all departments and universities invited to undertake such programmes. It would therefore, be prudent to take note of such varying situations and to consider the ULP proposals in a flexible manner and provide for budgetary provision in a manner most suited to each situation and within certain limitations, rather than attempt at a uniform pattern of funding or for that matter even suggest a set of uniform activities to be taken up by all the ULPs. In the context of the experience gained so far from the Science ULPs, certain new patterns, such as, inter-university ULPs, inter-regional multi-university ULPs have also been envisaged and in such specialised situations, the decision should be based on merit of each case rather than on basis of an urge for a uniform pattern and bureaucratic methods.

The Committee was informed that Professor Udgaonkar, who was unable to attend the meeting, had suggested that the Committee may consider three specific issues, viz., (a) the need for making extension activities of all kinds as an integral part of the work of the academic community;

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(b) allowing the ongoing ULP centres to continue with the presently agreed financial arrangements for either additional staff/or honorarium to existing staff members; and (c) in the case of the new programmes to be accepted henceforth only a provision should be made for appointing additional staff members and no budgetary provision may be given for payment of honorarium. These suggestions of Professor Udgaonkar were considered in the context of what is stated above, arising out of the discussions of the Committee. The Committee could not agree that at any given time there could be two sets of ULPs, some with the existing financial arrangements and others only with provision for additional staff positions. The Committee also took note that even at present where the academic staff is required to organise specialised courses, curriculum discussion meetings, teaching workshops etc., during the summer vacations, the staff associated with such programmes were being paid honorarium on the same pattern as in the case of the general summer institutes etc.

On consideration of all aspects of the question referred to it, the Committee felt that it should recommend to the Commission that until such time the entire question of honorarium in respect of various schemes initiated by the UGC is considered and guidelines are formulated for making extension activities as integral part of the workload of the teachers in the universities and colleges and this culture becomes accepted by the academic community and the state governments, the existing pattern of funding for the ULP activities may be continued. The needs of providing for either additional staff/or honorarium to the existing staff may be decided keepint in view the size of the department, the nature of activities to be taken up, the dimensions of the work involved with reference to the number of colleges to be covered, the time to be spent by the faculty members for the different activities initiated under COSIP and other relevant aspects. The Committee, however, would like to suggest that (a) where honorarium is provided in the budget, the total amount available for a first phase of three years should not exceed Rs. 45,000/-; and Rs. 30,000/- for a two-year second phase follow-up activities. The expenditure could be adjusted according to the needs over the total duration of first or the second phase, by the department concerned; (b) where additional staff is approved, it should generally be at the level of

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lecturers and only in very exception cases,
the question of providing posts higher than this
level could be considered while approving any new
University Leadership Programme projects henceforth.
The number of such posts to be created should
generally not exceed two in number.

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CONFIDENTIAL

UNIVERSITY GRANTS COMMISSION

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Meeting:

Dated : 24th April, 1978.

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Item No.21: To consider the recommendations made by the Committee appointed by the Commission to evaluate the work done by the Department of Physics, Nagpur University under COSIP- ULP during the I Phase and to consider further proposal for undertaking follow-up activities during the next two years.

The University grants Commission in March, 1974 invited the Department of Physics, Nagpur University to take up the University Leadership project in COSIP and an allocation of Rs. 8 lakhs was approved for I phase of the programme for a period of 3 years. The Department completed the I Phase programme and submitted a proposal for taking up the follow-up programme. It was decided that an Expert Committee consisting of following members may evaluate the progress of implementation of the I Phase and give its recommendations regarding II phase programme.

1. Professor B. Saraf,
Rajasthan University, Jaipur.
2. Professor B. Sanjeevaiah,
Head of the Department of Physics,
Mysore University, Mysore.
3. Shri AG Deshmukh,
Education Officer,
UGC, New Delhi.

The Committee visited the Department on 8th February, 1978 and had detailed discussions with Professor PL Khare and other staff members involved in the COSIP-ULP programme. The report of the Committee is attached as Annexure*

The main recommendations/observations of the Committee are given below:-

1. The Committee on the basis of discussions with the university department staff members and the affiliated college teachers and also on scrutiny of the report was convinced that the department of Physics has done good work in the I phase and would like to recommend to the Commission that the Department may be provided assistance for continuation of the programme during the II phase.

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2. The Department should give emphasis on all the branches of the physics in the II phase of the programme, in writing of books, fabrication of equipments etc.

3. The programme of direct participation of students from affiliated colleges in the ULP activities should be extended to colleges outside the Nagpur city.

The final recommendations of the Committee for taking up this programme during next 2 years are given below:-

| | |
|---|---------------------|
| 1. Development of Laboratory equipment and teaching aids for colleges. | Rs. 1,00,000 |
| 2. Teaching Staff | 50,000 |
| 3. Workshop facilities for development work | 25,000 |
| 4. Reference Library at University Department | 10,000 |
| 5. short-term Institutes & Refresher courses, CLM discussion groups. | 1,00,000 |
| 6. publication (Initial fund) | 25,000 |
| 7. Office staff | 20,000 |
| 8. Visits to colleges | 20,000 |
| 9. Miscellaneous | 10,000 |
| Total: | <u>Rs. 3,60,000</u> |

(For a period of 2 years)

The matter is placed before the Commission for consideration.

EO(SR-I)

Report of the Committee which visited the Department of Physics, Nagpur University for evaluation of the I Phase COSIP activities and recommend the follow-up proposal.

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The University Grants Commission in March, 1974 invited the Department of Physics, Nagpur University to take up the University Leadership Project under COSIP for improvement of undergraduate physics instructions in affiliated colleges. An allocation of Rs.8 lakhs was approved for this purpose for a period of 3 years. The distribution of this allocation was as follows:-

Activities/Programmes

| <u>University Department</u> | <u>Amount</u> |
|--|-----------------------|
| 1. Staff (Academic), for writing books, developing syllabus, curriculum & demonstration apparatus etc. | 1,00,000/- |
| 2. Summer Institute/Seminars etc. | 1,50,000/- |
| 3. Workshop | 75,000/- |
| 4. Reference Library | 30,000/- |
| 5. Publication & Stationary | 50,000/- |
| 6. Office expenditure | 25,000/- |
| <u>Colleges' Requirements:</u> | |
| 7. Laboratory & Library improvement | 3,00,000/- |
| 8. Other expenses | 70,000/- |
| TOTAL: | <u>Rs. 8.00.000/-</u> |

The first phase of this programme was completed in 1977 and the department submitted a proposal for taking up the II phase programme. It was decided that an Expert Committee consisting of following members may visit the Department to evaluate the progress of implementation of the first phase and recommend grants for the second phase of the programme.

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1. Professor B Saraf,
Rajasthan University,
Jaipur.
2. Professor B Sanjeevaiah,
Department of Physics,
Mysore University,
Mysore.
3. Shri AG Deshmukh,
Education Officer,
UGC, New Delhi.

The Committee visited the department of physics on 8th February, 1978 and had detailed discussions with Professor PL Khare and other staff members involved in the COSIP Programme. Professor Mande, Director of the UIP was out of India. The Committee also met few teachers from affiliated colleges participating in this programme and discussed the impact of this programme on teaching of physics at undergraduate level in the colleges.

During the first phase of the programme, the main activities of the department were as follows:-

1. Revision of syllabus
2. Production of text-books and other materials.
3. Supply of equipment to colleges.
4. Refresher courses for college teachers.

The programme covered about 35 colleges having about 140 teachers. The department organised a convention of Physics teachers in February, 1975 and on the basis of these discussions the syllabus for B.Sc. course was completely revised. In the new syllabus, topics like solid state physics, wave mechanics have been introduced for the first time. The Department has so far produced two text books on 'Solid State Physics' and 'Elementary Wave Mechanics'. Three more text books on 'Electronics', 'Atomic Physics' and 'Molecular Physics' are under preparation. The department is also producing teachers guide to elaborate the topics covered under the new syllabus. The department has produced 5 resource books on projects on semi conductor electronics. These books and materials have been distributed to all the colleges in cyclostyled form. In preparation of these books, number of college teachers were involved. These books were first tried and revised on the basis of feed back from the colleges and would be now printed.

(For a period of 5 years)

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The department has fabricated some items of equipment and supplied to the colleges. The units to be given to the colleges are designed by the ULP laboratories and are actually assembled and tested by the college teachers. The department has produced some charts and models. About 200 slides on various topics have been prepared for class-room demonstrations. Model questions on different topics have been compiled after discussions with the college teachers. It is proposed to finalise the work of question banks and evaluation programme in a convention of physics teachers to be arranged soon. The department has so far organised 3 summer institutions for training of college teachers. About 120 teachers have already participated in these institutions. During these summer institutes, teachers were asked to assemble the equipment developed by the ULP which was later on given to the colleges. The senior members of the university department have visited various colleges and discussed the topics in the class-rooms in the presence of the teachers. The department helps colleges to maintain the equipment, built the core library. A reference library has been provided in the department for the use of the students and teachers from the affiliated colleges.

The committee had detailed discussions with the teachers from affiliated colleges about their experience of the ULP activities. The teachers expressed their happiness over the ULP progress and informed the Committee that they would like the programme to be continued in II Phase. The programme has definitely helped in improvement of physics teaching in the colleges. The committee then discussed the programme of distribution of equipment and books to colleges through the ULP. The teachers were informed about Commission's present thinking that instead of ULP supplying the equipment and books, the college could purchase it directly from the ULP from the UGC college development grants (Rs. 5 lakhs scheme). The college teachers expressed their difficulty that many colleges of Nagpur University are not eligible for UGC grant under the Rs. 5 lakhs scheme. In this area there are 10 colleges having only science faculty and these colleges do not fulfil the UGC norm of minimum 400 student enrolment in degree classes. The teachers urged that the present practice of supply of books and equipment to colleges through the ULP should be continued in view of peculiar problem of colleges in this region. The teachers were particularly happy with the new programme of direct student contact by the ULP teachers. Under this programme, which has been started recently, the local colleges were asked to depute 2 or 3 best students for participation in seminar discussions arranged in university department. This has helped many students to clear their difficulties. The JIP staff is also made aware of difficulties faced by the physics teachers in teaching the course.

(2/5)

The Committee then discussed the programmes proposed by the department to be taken up during the next phase. The Committee on the basis of discussions with the concerned teachers and on scrutiny of reports was convinced that the department of physics has done very good work in the first phase and would like to recommend continuation of the programme during the II phase also. The Committee would like to suggest the change in the emphasis now being given on the development of equipment in electronics only. During the II phase other branches of physics should be covered. In book writing programme attempts should be made to write books on all topics covering the entire syllabus. The present programme of students participation could be extended to colleges outside the Nagpur city also. Such seminars and discussions could be arranged in 2 or 3 selected places outside Nagpur so that the students from other colleges could also participate. As regards the problem of fulfilling minimum enrolment condition for UGC grant, the committee feels that this is a general problem which the colleges could take up through ULP/Vice-Chancellor with the UGC.

Considering the new programmes to be undertaken, the committee would like to recommend the following grant for continuation of this programme for next 2 years.

| | |
|--|---------------------|
| 1. Development of Laboratory equipment and teaching aids for colleges | Rs. 1,00,000 |
| 2. Teaching Staff | 50,000 |
| 3. Workshop facilities for development work | 25,000 |
| 4. Reference library at university department | 10,000 |
| 5. Short-term Institutes & Refresher courses, Curriculum discussion groups | 1,00,000 |
| 6. Publication (initial fund) | 25,000 |
| 7. Office Staff | 20,000 |
| 8. Visits to colleges | 20,000 |
| 9. Miscellaneous | 10,000 |
| Total:- | <u>Rs. 3,60,000</u> |

(For a period of 2 years)

UNIVERSITY GRANTS COMMISSION

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Meeting:

Date : 24th April, 1978

Item No.22: To consider the report of the Committee appointed by the UGC to examine the proposal of the Department of Philosophy, Poona University, Poona for participation in the University Leadership Programme.

The proposal received from the Department of Philosophy, Poona University, Poona for participation in the University Leadership Programme was referred to a committee consisting of the following members:

1. Professor Daya Krishna,
Department of Philosophy,
Rajasthan University,
Jaipur.
2. Professor R.C. Pandeya,
Department of Philosophy,
Delhi University,
Delhi.
3. Prof.(Miss) Roop Rekha Verma
Department of Philosophy,
Lucknow University,
Lucknow.

The Committee visited the Department of Philosophy, Poona University, Poona on the 3rd of December; 1977. Professor Daya Krishna could not join the committee because of some unavoidable circumstances. A copy of the report of the committee is attached (Annexure)*

The Committee has made the following main observations and recommendations:

The staff of the Department of Philosophy, Poona University, Poona consists of two professors, one reader and three lecturers.

There are 60 colleges under the university where either logic and/or philosophy is taught. Of these, 27 colleges offer both logic and philosophy and in six colleges special

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philosophy courses are given. The university also runs the Pratap Centre of Philosophy at Amalner where a library is maintained. At present, there is hardly any specific facility available for college teachers to improve their academic qualifications and knowledge. Majority of colleges have no good library either for teachers or even for students. Non-availability of standard reading material in Marathi, the language of instruction in undergraduate classes, was another cause of general discomfort among teachers. The Department has got a good collection of books and has sufficient space for this purpose. Several workshops, seminars and symposia have been organised during the last five years for college teachers and the syllabus has been periodically revised.

A quarterly journal is being published by the department. There are 10 teacher fellows and several research scholars working in the Department on different problems.

The committee felt that immediate steps should be taken to improve libraries and to provide necessary reference material to teachers, both in English and Marathi. Since the University Department has selected Symbolic Logic and Indian Philosophy as two major areas for intensive study and research, adequate assistance should be provided to college teachers to learn these two subjects or to make their knowledge up-to-date.

The committee strongly feels that the Department of Philosophy, Poona University, Poona may be invited for participation in the University Leadership Programme and recommends the following support to the department for the above purpose:

| <u>A. Library Books & Journals</u> <u>for colleges</u> | <u>Estimated Expenditure</u> <u>for a period of 3 years</u> |
|---|--|
| 1) @ Rs.1,000/- per college for 33 colleges | Rs. 33,000/- |
| 2) @ Rs.3,000/- per college for 27 colleges | Rs. 81,000/- |
| 3) Pool Library (including 10% for Library Furniture & Equipments). | Rs. 35,000/- |
| B. TA/DA to university teachers for visiting colleges | Rs. 10,000/- |

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C. Organisation of Refresher Courses

1) 2 courses for a period of 6 months each with not more than 10 teachers in each course. Payment of second class rail fare and Rs.250/- p.m. to each of the participants as maintenance allowance.

Rs. 32,000/-

2) Salary of the substitutes

Rs.1,40,000/- (@ Rs.7000 for 6 months for 20 teachers)

3) Short-term courses for 80 participants. (6 to 8 weeks duration)

Rs. 8,000/-

Maintenance Allowance @ Rs.400/- per participant

Rs. 32,000/-

D. Staff:

- 1. Professor-1
- 2. Research Assistant-1
- 3. Visiting Professor-1
- 4. Library Assistant - 1
- 5. Administrative and Technical Support

Rs. 72,000/-
Rs. 42,000/-
Rs. 30,000/-
Rs. 21,600/-
Rs. 15,000/-

E. Stationery, Papers/Stencils

Rs. 30,000/-

F. Contingencies

Rs. 6,000/-

G. Typewriter (Logical Notation-IBM)

Rs. 18,000/-

H. Electronic Stencil Cutter

Rs. 21,000/-

Rs.6,26,600/-

The matter is placed before the Commission for consideration.

AS(HR)/JS(I)

Report of the Committee appointed by the UGC to examine the proposal of the Department of Philosophy, Poona University for participation in the University Leadership Programme. (219)

The Committee consisting of the following members appointed by the University Grants Commission to examine the proposal of the Department of Philosophy, Poona University, Poona for participation in the University Leadership Programme visited the Department on the 3rd December, 1977. The members of the Committee were:-

1. Professor R. C. Pandeya, Delhi
2. Prof(Miss) Roop Rekha Verma, Lucknow.

Prof. Daya Krishna of Jaipur could not join the Committee. The Committee was assisted by Shri C.M. Ramachandran, Assistant Secretary, UGC.

The members of the Committee held discussions with Professor S.S. Barlingay, Head of the Department and other members of his Department. They also met some teachers of Colleges. The members called on the Vice-Chancellor and the Registrar of the University.

The Committee noted that there are 60 colleges under the University where either logic or philosophy is taught. Out of these in 27 colleges, both logic and philosophy are being taught and in six colleges special philosophy are given. The University also runs the Pratap Centre of Philosophy at Amalner where a library is maintained. At present there is hardly any specific facility available for college teachers to improve their academic qualifications and knowledge. Majority of colleges have no good library either for teachers or even for students. Many college teachers pointed out that they found it difficult to teach the new courses introduced recently, in the absence of refresher training and good library. Non-availability of standard reading material in Marathi, the language of instruction in undergraduate classes, was another cause of general discomfort among teachers.

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The University Department has two professors (one for Philosophy in general and one Professorship in Jainism is financed from endowment funds), one Reader and three Lecturers. The Department has got a good collection of books and has sufficient space for this purpose. Several workshops, seminars and symposia have been organised during the last five years.

A quarterly journal is being published by the Department. There are 10 teacher Fellows and several research scholars working on different problems.

There are quite a few senior teachers in Colleges who have made substantial contributions to teaching and researches of contemporary literature and journals in prestigious institutions like Fergusson College, Poona. They felt as if they were alienated from the main stream of philosophy.

The Committee therefore felt that immediate steps should be taken to improve libraries and to provide necessary reference material to teachers, both in English and Marathi. Since the University Department has selected Symbolic Logic and Indian Philosophy as two major areas for intensive study and research, adequate assistance should be provided to college teachers to learn these two subjects or to make their knowledge upto date. It is in this context that the Committee made the following recommendations:-

Recommendations. A. Library Books and Journals

- (i) There are 33 colleges where only logic is taught. The Committee thought that these colleges be given Rs.1000/- each to purchase books specifically in Logic.
- (ii) There are 27 colleges where both Logic and general philosophy are taught. These colleges be given Rs.3,000/- each to improve their libraries.
- (iii) There should, in addition, be a Pool Library located in the Department which should exclusively serve the needs of college teachers by lending them books and supplying them reference material both

in English and Marathi. The material may be prepared by the members of the Department with the help, if necessary, of other experts available.

Note: The Department should prepare a list of books suitable for colleges. The colleges may be asked to purchase books from this list. It should be the duty of the Department to ensure that proper books are actually procured and are being properly used by College teachers.

B. Senior teachers of the University Department should visit a college for not less than two weeks at a time. They may hold model classes of regular students, hold discussions with teachers and participate in all other academic activities of the college visited. Since Colleges have senior teachers on staff, care should be taken not to send a person from the Department who is himself not sufficiently senior in relation to teachers of a college he is deputed to visit.

C. Organisation of Refresher Courses

(a) The Department should in course of three years organise 2 long term courses of 6 months each. Ten teachers should be selected for each course. Special training courses should be designed for these participants and they should be given opportunity to participate in academic activities of the Department. They may in addition prepare research papers but they should not engage themselves in full time research leading to the award of a degree.

These teachers should be paid second class rail fare and be given Rs. 250/- per month as maintenance allowance, for the period of the course. In order to facilitate the participation of teachers from Colleges, respective colleges may be given grant to appoint substitutes in the place of teachers attending this course, in case the rules of the UGC permit.

(b) In addition, the Department may organise intensive short-term refresher courses of 6 to 8 weeks duration for about 80 teachers. Selected teacher may be paid second class rail fare and a consolidated sum of Rs. 400/- as maintenance allowance, if permissible under the UGC rules.

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The University should, as far as possible, provide single accommodation to all the teachers selected for long-term and short-term courses.

D. Staff:

The Committee recommends that the effective implementation of this programme requires that the Department should have one Professor to cope with the additional work. The area of specialization should be decided by the University in consultation with the Department.

One Research Assistant may be necessary to help in preparing reading and reference material. One library Assistant will be required to look after the proposed Pool Library.

The Committee also recommends that a Visiting Professor from outside the University of Poona be invited for short duration to give series of specialized lectures and to hold seminars.

E. Equipments:

Since the Department is specializing in Symbolic Logic, one electric typewriter with logical notations should be given.

Increased work of duplication will require one Electric Stencil Cutter.

Though the Department wanted one Xerox Copying machine but it was felt that the Commission may give this equipment to the University, if they so desire, and its services may be available to many Departments participating in this or similar programmes.

Financial Estimates:

| <u>A. Library Books & Journals</u> <u>for Colleges</u> | <u>Estimated Expenditure</u> <u>for a period of 3 years</u> |
|---|--|
| 1) @Rs.1,000/- per college for 33 colleges. | Rs.33,000/- |
| 2) @ Rs.3,000/- per college for 27 colleges. | Rs.81,000/- |

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| | | |
|----|--|--|
| 3) | Pool Library (including 10% for Library Furniture & Equipments) | Rs. 35,000/- |
| B. | TA/DA to university teachers for visiting colleges. | Rs. 10,000/- |
| C. | <u>Organization of Refresher Courses</u> | |
| 1) | 2 courses for a period of 6 months each with not more than 10 teachers in each course. Payment of second class rail fare and Rs.250/- p.m. to each of the participants as maintenance allowance. | (100X20+250X6) Rs. 32,000/- |
| 2) | Salary of the substitutes | Rs.1,40,000 (Rs.7000/- for 6 months for 20 teachers) |
| 3) | Short-term courses for 80 participants (6 to 8 weeks duration) - | Rs. 8,000/-(80X100) |
| | Maintenance Allowance @ Rs.400/- per participant | Rs. 32,000/- |
| D. | <u>Staff:</u> | |
| | 1) Professor - 1. | Rs. 72,000/- |
| | 2) Research Assistant-1 | Rs. 42,000/- |
| | 3) Visiting Professor-1 | Rs. 30,000/- |
| | 4) Library Assistant-1 | Rs. 21,600/- |
| | 5) Administrative & Technical Support | Rs. 15,000/- |
| E. | Stationery, Papers/Stencils | Rs. 30,000/- |
| F. | Contingencies | Rs. 6,000/- |
| G. | Type writer (Logical Notation - IBM) | Rs. 18,000/- |
| H. | Electronic Stencil Cutter | Rs. 21,000/- |
| | | <hr/> Rs.6,26,600/- <hr/> |

Approved Sd/- R.R. Verma
31/3/1978

CONFIDENTIAL

UNIVERSITY GRANTS COMMISSION

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Meeting:

Dated : 24th April, 1978.

Item No. 23: To consider the proposal received from the Department of Geological Sciences, Jadavpur University, Calcutta for the implementation of inter-regional programme of ULP in Geology under COSIP.

The University Grants Commission has decided that in the case of Geology since the number of colleges teaching Geology at undergraduate level are limited, the University Leadership Project in Geology under COSIP may be initiated on regional basis. In consultation with the Geology Panel and the Standing Committee on COSIP, it was decided that such a programme may be undertaken by (1) the Department of Geology, Mysore University for the colleges in Southern and Western Regions and (2) by the Department of Geological Sciences, Jadavpur University for the colleges in Northern and Eastern Regions. The proposal received from the Department of Geology, Mysore University, has already been approved by the Commission at its meeting held on 20th February, 1978 (Item No. 52).

The proposal received from the Department of Geological Sciences, Jadavpur University, for the implementation of the U.L.P. in Geology for the colleges in Northern and Eastern Regions has been prepared after detailed discussions with the college teachers at the convention organised on 2-3 December, 1977 by the Department at Jadavpur University.

The activities proposed to be undertaken under ULP in Geology, include Organisation of short-term refresher courses for teachers in specific disciplines; comprehensive training in field work; preparation of laboratory manuals, charts preparation of standard sets of hand specimens (rocks, minerals and fossils,) thin and polished sections and field and laboratory photographs; organisation of extension lectures, seminars/symposia/group meetings;

publication of standard text books/reviews; publication of news letter; provision of documentation facilities; updating of under-graduate curriculum from time to time; text modules and Central library facilities. U.L.P. Coordinator would be Prof. Bankim Mukherjee, Head of the Department;

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The proposal was examined and following Schedule of expenditure spread over a period of three years is suggested for approval.

| | | |
|-----|--|----------------------|
| (a) | Instrument of laboratory and library, and instructional museums in participating colleges (60) | Rs. 5,00,000 |
| (b) | Field work training for colleges | Rs. 2,00,000 |
| (c) | Short-term courses etc. | Rs. 3,00,000 |
| (d) | Preparation and publication of Books/reading materials etc. | Rs. 50,000 |
| (e) | Preparation of Charts/Models/Museum specimens etc. for supply to colleges: | Rs. 60,000 |
| (f) | Publication of COSIP News Letter: . . . | Rs. 15,000 |
| (g) | Augmenting University Department facilities for training: | Rs. 1,00,000 |
| (h) | Additional staff as may be required for coordination of activities under ULP: | Rs. 1,00,000 |
| (i) | Supporting technical & other staff | Rs. 30,000 |
| (j) | Contact visits to participating colleges: | Rs. 30,000 |
| (k) | Contingencies: | Rs. 15,000 |
| | Total for 3 years period: | <u>Rs. 14,00,000</u> |

The activities are to be undertaken on an inter-university basis for the entire Northern and Eastern Regions, and would be reviewed periodically with regard to budgetary requirements as progress is made in this regard.

The matter is placed before the Commission for consideration.

E.O. (SR-I)

UNIVERSITY GRANTS COMMISSION

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Meeting:

Dated: 24th April, 1978.

Item No.24 : To consider the proposal of the Madras University for the development and creation of inter-collegiate facilities for the use of various colleges located in the Metropolitan City of Madras.

.....

With a view to promoting the development of undergraduate education, keeping in view the special problems of the Metropolitan Cities and need for coordination of development facilities and proper maintenance of standards of undergraduate instructions, the Commission allocated an amount of Rs.1 crores to the University of Madras and requested the University to draw up a coordinated plan for the development of colleges located in the city of Madras. It was also mentioned in the letter that the plans of any one college should not generally exceed Rs.5 lakhs as UGC share except in exceptional cases. A copy of the letter addressed to the Vice-Chancellor in this regard is enclosed as (Annexure-I) @

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In response to this letter the university sent proposals which are given in (Annexure-II).% Of these proposals, the following were accepted for implementation by the University:

| <u>Name of the project</u> | <u>Estimated cost/UGC share</u> |
|--|---------------------------------|
| 1. (a) Two extension libraries (one in the North and the other in the South) | Rs. 20,00,000/- |
| (b) Text-books and reference books (The books to be purchased when the buildings are near completion) | Rs. 10,00,000/- |

* In the beginning the sharing basis for building projects was 50:50 and for other programmes 75:25, but subsequently it was changed to 100% for all items.

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| | |
|---|-----------------------|
| II. A Central Hall as a study room for poor residents. (Books to be provided later). | Rs. 4,00,000/- |
| III. Inter-Collegiate Hostel for 240 residents. | Rs. 12,00,000/- |
| | <hr/> |
| | Total Rs. 46,00,000/- |

It would thus be observed that of Rs. 1 crore allocated to the university for providing Inter-Collegiate facilities, proposals worth Rs. 46 lakhs have been accepted and balance of Rs. 54 lakhs is still available. Accordingly the University of Madras has sent the following proposals within the amount of Rs. 47 lakhs.

| <u>Name of the project</u> | <u>Estimated Cost</u> |
|----------------------------|-----------------------|
|----------------------------|-----------------------|

- | | |
|--|--------------|
| 1. Postgraduate Science Lab. in Physics and Chemistry at A.C. College Campus (Rs. 17 lakhs-Non-Recurring plus Rs. 2 lakhs recurring) | Rs. 19 lakhs |
|--|--------------|

p 234-238 Details of the proposals are given in (Annexure-III)

- | | |
|-------------------|--------------|
| 2. Science Museum | Rs. 28 lakhs |
|-------------------|--------------|

@p 239-244 Details of the proposal may kindly be seen at (Annexure-IV)@

In this connection, it may be stated that the grants under the programme are to be used for the development of undergraduate education keeping in view the special problems of the metropolitan cities and need for coordination of development facilities.

The matter is placed before the Commission for consideration.

DS(DI)

SECRETARY

UNIVERSITY GRANTS COMMISSION

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D.O.No.F.7-1/74(P/CP)

31st May/3rd June, 1975.

Dear.....

As you are aware, the Commission has already communicated the guidelines for preparation of development proposals, in the two priorities within Rs.5 lakhs as UGC's share, by the eligible colleges affiliated to universities for improvement of undergraduate educational facilities during the Fifth Five Year Plan. The Commission has indicated that its assistance for development of colleges during the Fifth Plan Period will be primarily for strengthening the faculty, for improving library and laboratory facilities and for providing workshop and other similar facilities which will enable colleges to achieve and maintain proper standards.

The Commission has also considered the problems of development of colleges in metropolitan cities where there is a concentration of large students population as in the cities of Bombay, Calcutta, Delhi and Madras; the Commission is aware that in view of the varying nature of the problems of concentration the schemes for development will have to be planned in some what different settings in respect of the colleges in Metropolitan city of Bombay/Calcutta/Madras would be requested to draw up a co-ordinated plan for their development within an amount to draw up a co-ordinated plan for their development within an amount of Rs. One/Two/One crores in two priorities first 75%. These grants would be mainly used for the development of undergraduate education keeping in view the special problems of the Metropolitan city and need for co-ordination of development facilities and proper maintenance of standards of undergraduate instruction. The plans for any one college should not generally exceed Rs.5 lakhs as UGC share except in exceptional cases.

I am, therefore, writing this letter to you to indicate to the Commission the colleges that will be covered under this programme and send a co-ordinated plan for these colleges programmes as early as convenient.

The colleges will not therefore be required to send separate proposals under the general scheme for improvement of undergraduate educational facilities within Rs.5 lakhs per college. The University may if it so desires set up a committee to prepare guided cooperative programme for the development of these colleges. If desired the Commission shall be glad to be associated with this Committee.

I would be grateful for your suggestions in this connection.

With kind regards,

Yours sincerely,
Sd/-
(R.K. Chhabra)

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RUPEE ONE CRORE METROPOLITAN COLLEGES DEVELOPMENT PLAN
SHARING BASIS OF THE UNIVERSITY GRANTS COMMISSION

(Based on the broad guidelines of the University Grants Commission on the pattern of assistance to colleges for Development of Post-Graduate and Under-Graduate Education)

| Scheme | Estimate | UGC's Share | Counterpart contribution from the State Government |
|--|---------------|-------------|--|
| | Rs | Rs | Rs |
| 1. A Central Film Library at the Madras University Library with out-posts in the two extension libraries. | | | |
| <u>A. Non-Recurring:</u> | | | |
| i) Building (including fittings and furniture etc.) | 50% 10,70,000 | 5,35,000 | 5,35,000 |
| ii) Equipment | 75% 11,40,000 | 8,55,000 | 2,85,000 |
| <u>B. Recurring:</u> | | | |
| i) Salaries, Wages etc. | 50% 3,00,000 | 1,50,000 | 1,50,000 |
| 2. Two extension libraries one in the South and the other in the North Madras (North Madras extension library will also have a reading room for poor students) | | | |
| i) Buildings (Two) at Rs.10 lakhs each. | 50% 20,00,000 | 10,00,000 | 10,00,000 |

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| Scheme | Estimate | UGC's share | Counterpart contribution from the State Government. |
|--|----------------|-------------|---|
| ii) For text books and reference books for two libraries (at Rs.10 lakhs each) | 75% 20,00,000 | 15,00,000 | 5,00,000 |
| 3. A Central Hall as a Study room for poor students | | | |
| <u>A. Non-recurring:</u> | | | |
| i) Building (including furniture etc.) | 50% 4,16,100 | 2,08,050 | 2,08,050 |
| <u>B. Recurring:</u> | | | |
| i) Staff salaries for 2 years at Rs.30,217.90 per year | 50% 60,436 | 30,218 | 30,218 |
| ii) Books | 75% 1,00,000 | 75,000 | 25,000 |
| 4. P.G. Science Laboratories in Physics and Chemistry at A.C. College Campus | | | |
| <u>A. Non-Recurring:</u> | | | |
| i) Building and Furniture | 50% 5,00,000 | 2,50,000 | 2,50,000 |
| ii) Equipment | 100% 12,00,000 | 12,00,000 | 50,000 @ |
| <u>B. Recurring:</u> | | | |
| i) Staff salary for 2 years | 100% 1,00,000 | 1,00,000 | — |

@The UGC's assistance for equipment under the scheme "Development of P.G. Studies in Humanities and Sciences is 100%.

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| | | | | |
|---|-----|-----------|----------|-----------|
| ii) Consumables for 2 years | 50% | 1,90,000 | 50,000 | 50,000 |
| 5. A Counselling and Guidance Centre | | | | |
| 1. Stationery Printing etc. for 3 years | | 25,000 |) | |
| 2. Counselling | | 25,000 |) | |
| 3. Visits and Liaison | | 25,000 |) | |
| 4. Audio Visual Equipments | | 65,000 |) | 5,00,000* |
| 5. Psychological testing | | 65,000 |) | |
| 6. Special Projects (for 3 years) | | 30,000 |) | |
| 7. Special Publications and Charts | | 50,000 |) | |
| 8. Up Keep of the Bureau (for 3 years) | | 15,000 |) | |
| 9. Staff Salaries | | 2,00,000 |) | |
| 6. Science Museum | | | | |
| i. Non-Recurring; | | | | |
| i) Building | 50% | 12,00,000 | 6,00,000 | 6,00,000 |
| ii) Equipment | 75% | 10,00,000 | 7,50,000 | 2,50,000 |
| iii) Books and Films | 75% | 3,00,000 | 2,25,000 | 75,000 |

*The items mentioned above do not come under the approved items of the UGC. However, as the proposal relates to Students Amenities the sharing basis is taken as 100%.

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2. Recurring:

| | | | | |
|--|-----|----------|--------|--------|
| i) Staff | 50% | 1,50,000 | 75,000 | 75,000 |
| ii) Consumables | 50% | 50,000 | 25,000 | 25,000 |
| iii) Contingencies and Maintenance | 50% | 1,00,000 | 50,000 | 50,000 |

7. Computer Laboratory
and computer time
for City Colleges.

A. Non-Recurring:

| | | | | |
|---------------------------------------|------|-----------|-----------|----------|
| i) Building including Furniture | 50% | 45,000 | 22,500 | 22,500 |
| ii) Equipments | .75% | 17,20,000 | 12,90,000 | 4,30,000 |
| iii) Miscellaneous | 100% | 5,000 | 5,000 | -- |

B. Recurring:

| | | | | |
|--|--|--------|----|---------|
| i) Maintenance charges, Stationery etc. | | 95,000 | -- | *95,000 |
|--|--|--------|----|---------|

8. Inter Collegiate
Hostel for 240
students

| | | | | |
|---------------------------------|-----|-----------|----------|----------|
| i) Building and Furniture | 50% | 12,00,000 | 6,00,000 | 6,00,000 |
|---------------------------------|-----|-----------|----------|----------|

9. A fleet of two
buses and four
mini buses for
use of all
colleges.

| | | | | |
|--|------|----------|----------|----|
| | 100% | 6,00,000 | 6,00,000 | -- |
|--|------|----------|----------|----|

* The UGC does not give grant for Maintenance
of Buildings.

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10. Students Health Centre

A. Non-Recurring:

| | | | | |
|------------------------------------|-----|----------|----------|----------|
| i) Building | 50% | 6,00,000 | 3,00,000 | 3,00,000 |
| ii) Equipment Furniture etc. | 75% | 3,00,000 | 2,25,000 | 75,000 |

B. Recurring:

| | | | | |
|---|-----|----------|----------|---------|
| i) Salaries to staff | 50% | 1,56,000 | 78,000 | 78,000 |
| ii) Basic Common Medicine and drugs | | 1,00,000 | 1,00,000 | -- |
| iii) Maintenance of Building and other equipment | | 36,000 | -- | 36,000* |

*The UGC does not give grant for Maintenance of Buildings.

Annexure III to Item No.24

Proposals submitted by Dr. P.M. Mathews:
Intercollegiate Facility Postgraduate
Laboratory for Physics and Chemistry.

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1. Objectives:

It is generally acknowledged that the provision of new types of laboratory equipment and apparatus required for keeping up with the advance of Science into ever newer areas, not to mention the ever-increasing sophistication in any given area, calls for funds in such quantities as are quite beyond the means of individual colleges. Many items of equipment needed for practical courses (let alone research equipment) are so expensive that prospectus of funding to furnish the various colleges with such equipment are leak - even if the duplication involved could be fully justified.

It is proposed therefore that a well equipped laboratory to serve teachers, PG students and to a lesser extent undergraduate students of city colleges be set up at a cost of Rs.25 lakhs.

2. Location:

The Science Campus of the University undoubtedly offers the best location for such a laboratory. The members of University Departments, with expertise in a variety of areas of the subjects concerned as well as in the operation and maintenance of sophisticated instruments, could provide invaluable back-up support to the proposed laboratory. The prospect of greatly increased contacts and collaboration between the collegiate community and the scientists of the University Departments must also be considered as a strong motivating factor.

3. Types of facilities to be provided:

3.1. Proposals for the following types of facilities (explained in the covering letter to the questionnaire - see Appendix A) have met with unanimous approval from the colleges responding to the questionnaire.

- (i) Research equipment of interest to colleges

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- (ii) Apparatus/equipment for PG level practicals
- (iii) Facility for project work by PG/UG students
- (iv) Ancillary facilities.

It is expected that teachers will make use of some or all of these facilities.

3.2 It is not proposed to provide for regular practical classes of a routine nature for large numbers of undergraduate students. (A suggestion in the questionnaire that a limited number of advanced practicals might be held met only with lukewarm response. The emphasis in the responses was on facilities for a small number of bright students - which can be provided).

3.3 It is considered necessary that transportation between the college concerned and the intercollegiate laboratory be made available to groups of students (especially from colleges situated in far parts of the city) and teachers accompanying them, in order to encourage effective use of the laboratory by all colleges. A bus is proposed to be acquired for this purpose.

4. Details of proposals:

The broad features are the following:

4.1. A building of about 5500 sq.ft. is to be put up in the Science Campus (Guindy) of the University)

4.2. The lab. and equipment may be placed under the overall charge of the Professor of the CSIL. One person of the rank of Reader is to be appointed full time for looking after all routine matters pertaining to the lab. (It is expected that interested staff members from the physics and chemistry departments will co-operate with him in setting up programmes relating to their speciality). The Reader and supporting staff (Technicians, Attenders etc) may be appointed by the University. A provision for consumables is also to be made by the University.

4.3. Decisions on programmes of instruction, scheduling, and all other policy matters may be entrusted to an Advisory Committee consisting of:

- (i) The Conveners of the Schools of Physics and Chemistry.

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(ii) One PG Professor each in Physics and Chemistry from the affiliated colleges, by rotation, to serve for one year at a time.

(iii) Two undergraduate professors, of whom at least one must be from a Women's college, by rotation, to serve for one year at a time.

(No college shall have more than one member on the advisory committee at any time).

4.4. Allocations recommended for the different components of the programme are as follows:

A. NON-RECURRING

I. Building and Furniture

| | |
|-----------------------|-----------------|
| Building (550 sq.ft.) | Rs. 3,70,000 |
| Air conditioning | 30,000 |
| Furniture | <u>1,00,000</u> |

5.00 lakhs

II. Equipment

For Physics Lab.

| | |
|---|--------|
| Microwave equipment | 40,000 |
| Nuclear Instruments | 60,000 |
| Oscilloscopes and other electronic equipment | 40,000 |
| Spectroscopy including spectrometer, laser source, etc. | 80,000 |
| X-ray equipment | 80,000 |
| Low temperature Facility | 70,000 |
| Solid state lab. facility | 65,000 |
| Electromagnets, accessories | 50,000 |

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| | |
|--|--------------------------|
| High vacuum equipment, thin film facility | Rs. 70,000 |
| Photography | 15,000 |
| Miscellaneous, lab. manuals etc. | <u>30,000</u> 6.00 lakhs |

For Chemistry Lab.

| | |
|--|--------------|
| Infrared spectrophotometer | Rs. 1,00,000 |
| UV-Vis spectrophotometer | 50,000 |
| NMR spectrometer (to be fabricated) | 1,00,000 |

Other major equipment such as:

| | |
|---|-----------------|
| Photochemicals reactor | |
| Gas Chromatograph | |
| Catalytic regenerator | |
| P-H meters (Research type) | |
| Ice making machine | |
| Magnetic susceptibility unit including balance | |
| Thermogravimetric balance | 2,40,000 |
| High vacuum set up | 15,000 |
| Glass ware | 25,000 |
| Glass blowing equipment | 20,000 |
| Small items for fabricating new equipment (e.g. relays, Sunvic controls etc.) | 25,000 |
| Miscellaneous items (heating mantles, aire oven, thermostats etc.) | 25,000 |
| | <u>6,00,000</u> |

R. RECURRING

Staff: The Professor of the OSIL is to be in overall charge

Full time staff to be appointed:

| | | | |
|-------------|---|---|---------------------|
| Reader | : | 1 | |
| Technicians | : | 2 | |
| Attenders | : | 3 | |
| Driver | : | 1 | Rs. 50,000 p. a. |
| Consumables | | | Rs. 50,000 p. a. |
| Total | | | <u>Rs. 1,00,000</u> |

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This work out to Rs.2 lakhs for the two years 1977-78 and 1978-79 of the Fifth Plan. (It is not expected that the lab. could come into operation before 1977-87). Separate provision may be made for this amount or if this is not possible the allocation suggested for equipment may be reduced correspondingly.

SCIENCE AND TECHNOLOGY MUSEUM

I. INTRODUCTION

The second half of the twentieth century witnesses the increasing importance of the role of science and technology in the Social, Cultural and Economic life of a society. This is true of the advanced as well as the developing nations. It is therefore necessary to incorporate, in the educational programme of a society, measures that would disseminate scientific and technological information and promote understanding of these areas of knowledge among as large sector of the public as possible. Science and Technology Museums play a useful role in this regard. It will, not only collect, preserve and display artifacts of science and industry, but will also make efforts to attract visitors, organise educational activities, and promote learning. It will help in widening the scientific outlook of the new generation; supplement the science and technology education imparted in schools and colleges, and make the younger generation understand and appreciate the impact of the scientific and technological development. Educationally advanced nations have made considerable use of this medium, and countries like the U.S.A., Japan, U.S.S.R. and other have well equipped and carefully designed museums of science and technology, or Halls of Science, and they are often designated. Even in India, we have the Visvesvaraya Industrial and Technological Museum at Bangalore and the Birla Technological and Industrial Museum, Calcutta. A similar facility in Madras is overdue, and measures must be taken to establish one as early as possible.

II. OBJECTIVES AND FUNCTIONS

In the existing stage of development of India, the objectives of a Museum of Science and Technology can be stated as follows:

1. to portray, the growth of science and technology and their application to improve the human environment and living

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- ii. to popularise science and technology among the general public in the urban and rural areas.
- iii. to supplement the formal science education given in the schools.
- iv. to render assistance to Universities, technical institutions, schools and colleges in planning science centres, model rooms and in training personnel for museum profession.
- v. to train teachers in the art and craft of improving teaching aids for science instruction with a view to improving the quality of science education in the state.
- vi. to design, develop and fabricate prototype demonstration equipment, and scientific teaching aids for furtherance of science education.
- vii. to collection, restore and pre_serve important historical objects which represent landmarks in the development of science and technology.
- viii. to conduct research in the historical growth and development of science and technology in India.

The museum, designed to achieve the above objectives, will consist of prototype articles, models, diagrams, slides, and films, which are intended to explain the various developments in an appropriate sequence and order or arrangement. The areas of knowledge involved are many and they have to be grouped under certain general heads. The educational and training activities contemplated would require workshop, instruction and library facilities. A brief consideration of the important sections to be incorporated is given in the following:

The basic sciences constitute the substratum for the entire edifice of technological development and therefore, a well designed section on 'Physical Sciences' is necessary. The importance of the environment to human health and happiness, the factors contributing to the ecological balance, the development in life sciences and their impact on human progress are important factors, and must be incorporated in a judicious way in a section devoted to "Life Sciences, Environment and Health". Technological development, and industrial progress are based

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on the identification, mining and processing of natural resources. Geography, Geology, Geophysics, Minerals, and their exploitation, constitute an important area of knowledge, and must be portrayed in a section devoted to "Earth Sciences".

India still is a country of agriculture; the agricultural practices are in a process of steady transformation and significant progress has been made to the application of scientific methods and tools to the agricultural practice. Hybridisation, seed technology, fertiliser development, mechanisation, food preservation, cattle development, dairy technology, and related activities, have great significance, and a section devoted to "Agriculture" is essential.

... A section on "Industry" is an obvious requirement and this will naturally be the biggest of the sections. It will have subdivisions dealing with the following:

- i. Chemical industries
- ii. Electrical Power generation, transmission and distribution.
- iii. Electronics and communication; radio, television; space communication; satellites etc.
- iv. Machinery and mechanical systems
- v. Transport - road; rail; water and air

It has been mentioned earlier that the facilities available in the museum must be utilised and taken advantage of for training science instructors in making models and demonstration units. A good workshop is needed for this purpose. The museum can, with advantage take up extension work by establishing regional science centres away from its location and arranging mobile science and technology exhibitions. The museum may, very effectively co-operate with the existing technical institutions at the polytechnic and college level in this endeavour. These activities will be the responsibility of a section devoted to instruction, training, and extension work. The museum therefore will consist of the following six divisions;

- i. Physical sciences

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- ii. Life Sciences, Environment and Health
- iii. Earth Sciences
- iv. Agriculture
- v. Industry
- vi. Instruction, Training and Extension

An important adjunct, and a relatively independent unit in the museum complex is a planetarium with a seating capacity of about 200 persons. This would only involve capital expenditure on buildings and equipment; thereafter it will be self supporting. A detailed report on the establishment of a planetarium has already been prepared and sent to the Government of Tamil Nadu by the Director of Technical Education.

III. PHYSICAL FACILITIES AND ORGANISATION

The proposed museum of Science and Technology may be located in the capital of the State; i.e. Madras City. It is desirable to locate it in an environment that is in harmony with the objectives of the museum. It must also be accessible with reasonable ease. Since a large number of people, including school children will visit the museum open space, rich in shade giving trees is a necessary requirement. The area required will be around 10.0 Hectares (25 acres).

To conserve space, the building may be put up in three floors and each floor may have an area of about 3700 sq.m. In all, the building requirement for the present will be 11100 sq.m. The museum will be a growing organisation, and additional facilities can be added as the need arises, and funds become available. The building programme should make space available for the workshop, library, auditorium, photography room, lounges, catering and refreshment section, ticket counters, information office, lodging for watch and ward and administrative offices. These units, obviously, must be planned in a judicious manner to facilitate efficient functioning and aesthetic appeal.

The workshop will have three sections namely machine shop and carpentry; electronics shop and an art and modeling studio. These must be provided with the requisite equipment, based on the categories of work intended to be performed in these sections.

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It is contemplated that in the design of various exhibits maximum advantage will be taken of the use of tapes, slides, and films that could be operated by the visitors themselves at nominal cost for getting detailed explanation.

As mentioned earlier, extension work, by way of using "mobile exhibit vans", will be an important activity of the museum, and to this ends, specially designed exhibits mounted on vehicles, and models that lend themselves to easy transportation for organising exhibitions in regional centres are to be provided for.

IV. ORGANISATION

The organisational set up would be mostly on the basis of what obtains in the existing museums at Bangalore and Calcutta. The museum will be in charge of Chief Scientist, who will be the Director. He will be assisted by a band of staff coming under three major categories namely:

- i. Scientific
- ii. Technical, and
- iii. Administrative

The staff required under each of them will be approximately as follows:

DIRECTOR - 1.

| <u>SCIENTIFIC</u> | <u>TECHNICAL MECHANICAL WORKSHOP</u> | <u>ADMINISTRATIVE</u> |
|--|--|--|
| 1. Scientific Officers incharge of six divisions | Foreman (Technical Assistant) 6 | Administrative Officer 1 |
| | Mechanics 4 | Senior Accountant 1 |
| 2. Scientific Assistants (including guides) | Design Assistant 1 6 Draughtsman 2 | Store Keeper 1 Caretaker-cum-overseer 1 |

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ART SECTION

| | | | | | |
|---|---|-------------------------|---|----------------------------------|---|
| 3. Information Officer. | 1 | Head of Arts Section | 1 | Assistant, Clerks and Stenos | 6 |
| 4. Scientific Assistants (Library etc.) | 2 | Technical Assistants | 2 | Chowkidars, Peons, and Gardeners | 7 |
| | | Modellers | 2 | | |
| | | Artists | 2 | | |
| | | Photo lettering Artists | 2 | | |

ELECTRICAL SECTION

| | |
|----------------------------|---|
| Head of Electrical Section | 1 |
| Technical Assistants | 1 |
| Electrical Foreman | 1 |
| Mechanics | 5 |

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The staff pattern suggested above may need revision depending on the requirements to be proposed by the Director of the Museum. The initial recurring expenditure on staff salary has been restricted to Rs. 1.50 lakhs per annum to provide for the inescapable requirements.

V. FINANCIAL IMPLICATIONS

It is assumed that land of 25 acres will be made available by the State Government free of cost.

| NON RECURRING | Rs. in Lakhs |
|--|--------------|
| 1. Building with a plinth area of 3000 sq.m. (First phase) ... | 12.00 |
| 2. Equipment | |
| i. Models and Exhibits ... | 10.00 |
| ii. Books and films ... | 3.00 |
| Total: | <u>25.00</u> |
| RECURRING: | |
| 1. Staff ... | 1.50 |
| 2. Consumables ... | 0.50 |
| 3. Contingencies & Maintenance ... | 1.00 |
| Total: | <u>3.00</u> |

CONFIDENTIAL

UNIVERSITY GRANTS COMMISSION

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Meeting:

Dated : 24-4-1978

Item No. 25: To consider the report of the Committee on
Autonomous Colleges appointed by the Madras
University for granting autonomy to its
affiliated colleges:

The Commission at its meeting held on 18th October, 1976 considered the proposal of Madras University for granting autonomy to five of its affiliated colleges viz. (i) Madras Christian College, Madras, (ii) PSG College of Technology, Coimbatore (iii) PSG Arts College, Coimbatore, (iv) Loyola College, Madras (v) Postgraduate Deptts. of Chemistry and Economics of Vivakananda College, Madras and agreed to give its concurrence to the proposal of the Madras University (item No.19). It was, however, noted that the autonomous status would be conferred by the University on the colleges after relevant provision to enable the university to do so has been made in the Act of the university. The Commission also agreed to provide assistance to these colleges on 100% basis after the conferment of autonomous status for purposes of strengthening their faculties and other administrative support required to enable these colleges to function as autonomous institutions.

Subsequently, the state Government informed that the Madras University Act has been amended and it shall come into force w.e.f. 1st March, 1978.

Now the Madras University has forwarded the proposal for granting autonomy to 3 more colleges namely (i) St. Joseph's College, Tiruchirapalli (ii) Sri Avinashilingam Home Science College, Coimbatore and (iii) Regional Engineering College, Tiruchirapalli. The terms and conditions of their functioning as autonomous colleges would be the same as applicable to the other five colleges.

On the financial side the university has recommended that the following assistance may be provided to these colleges:

- | | |
|---|--|
| 1. St. Joseph's College, Tiruchirapalli; | (Rs.1.00 lakh per annum for (1) additional staff; (2) training of existing staff; (3) public lecture on current topics with audio-visual aids and cyclostyling text, (4) functional literacy programme; and (5) expenses for meeting of academic bodies) |
|---|--|

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2. Regional Engineering College, Tiruchirapalli; Rs.1.2 lakhs per annum for library and collaboration with industry and Rs.37,500/- per annum for the cost of travel for the academic board, faculty board and boards of examiners and their committees.
3. Sri Avinashilingam Home Science College, Coimbatore. Rs.1.00 lakh per annum for meeting both the programmes and autonomy costs, particularly relating to the conduct of examinations.

The minutes of the final meeting of the committee appointed by the University with UGC's representatives on it, and its general conclusions are at Annexure.

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In this connection, it may be stated that the Vice-Chancellor vide its letter of March 20, 1978 informed that "the State Government is about to approve the granting of autonomy to the three colleges. The colleges are pressing me for an early decision which now awaits your approval from the Commission. They need a decision in order to print their prospectus, prepare their staff and make other arrangements for autonomy from July, 1978".

The matter is placed before the Commission for consideration.

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Annexure to Item No.25

UNIVERSITY OF MADRAS

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THE VICE-CHANCELLOR

No.V.8.
January 3, 1978

To

1. BM Udgaonkar
2. Dr. G Rangaswami
3. Mr CG Rangabashyam
4. Prof. GR Damodaran
5. Prof. PS Mani Sundaram
6. Mr. ANA Abdus Samad
7. Dr. GS Laddha
8. Prof. SR Govindarajan
9. Dr. A Ramesh

cc. The principal, St. Joseph's Colloge, Tiruchirapalli
The Representative of the Management
Committee on autonomous colleges St. Joseph's College,
Tiruchirapalli, 2nd January 1978 Decisions

On the basis of the revised proposals submitted in relation to comments made by the Committee at its meeting on 19th september 1977 (See Doc.No.V. 1459), it is recommended that St. Joseph's Colloge, Tiruchirapalli, be granted the status of an autonomous colloge, subject to the following conditions:

1. The annual recurring expenditure of the autonomous college be met first from drawing on the grant available to it of upto Rs.8 lakhs for undergraduate education, the grant available for postgraduate education, and the basic grant made available recently. In addition, a grant of Rs.1.00 lakh be made available to the colloge for (i) additional staff, (ii) training of existing staff, (iii) public lecture on current topics with audio-visual aids and cyclostyling text, (iv) functional literacy programme, and (v) expenses for meeting of academic bodies.
2. The Language programme be made more functional both in terms of the medium of instruction and be used as a means of introducing students to Tamil translations of outstanding literatures in other languages. The B.A. course for Tamil and English be termed in that form, and the word 'Literature' be removed from both.
3. The Foundation courses be enlarged and adapted to the conditions in the region.
4. The membership of Boards of Studies be increased to 8 persons on the average.
5. Curricular Planning Boards be called to undertake the elaboration of the curricula for each course in accordance with the recommendations of the committee accepted by the colloge, and the revised document sent to the University for circulation to the members of the Committee before the middle of March.

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6. The Ph.D. and M.Phil. programmes do not belong to the autonomous sector of the college.

7. The Pre-University Course will not be part of the autonomous college, and will only be continued for one more year 1978-79 on a reduced basis.

Sd/- Vice-Chancellor

UNIVERSITY OF MADRAS

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THE VICE CHANCELLOR

No.V.9
January 3, 1978

To

1. Prof. BM Udgaonkar
2. Dr. G Rangaswami
3. Mr CG Rangabashyam
4. Prof. GR Damodaran
5. Prof. PS Mani Sundaram
6. Mr AKA Abdus Samad
7. Dr. GS Ladha
8. Prof. WF Vijayaraghavan

c.c. The Principal, Regional Engineering College
The Representative of the Management

COMMITTEE ON AUTONOMOUS COLLEGES
REGIONAL ENGINEERING COLLEGE, TIRUCHIRAPALLI
MEETING HELD ON 2ND JANUARY 1978
DECISIONS

On the basis of the revised proposals submitted in light of the recommendations and comments of the Committee at its meeting on 19th September 1977 (see Doc. No.V.1460), it is recommended that the following Departments of the Regional Engineering College, Tiruchirapalli, be recognised as autonomous from the academic year 1978-79:

1. Civil Engineering
2. Mechanical Engineering
3. Electrical & Electronics Engineering
4. Electronics & Communication Engineering
5. Metallurgical Engineering
6. Industrial Engineering
7. Chemical Engineering
8. Applied Science and Basic Science Departments
9. Department of Management.

The autonomy will be subject to the following conditions.

1. The new course proposed in Environmental Engineering be reconsidered in light of its being spread through all Departments of Engineering.
2. The relation of the new courses to man-power demands and the sponsored candidates from the public sector undertakings be borne in mind both in devising the courses and in making changes in them from time to time. In this regard, over-specialised

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courses be avoided in view of the modern trends in engineering science education. Also the operation of the Credit System as a means of providing flexibility to candidates in choosing various options should be borne in mind.

3. The College can start any branch of engineering/technology/science/humanities within the existing infrastructure on the approval of its Academic Board keeping the University informed.
4. Rural Development Engineering programme should be related to the local rural problems.
5. The M.Phil. and Ph.D. programmes do not belong to the autonomous sector.
6. The university will be represented on the Governing Council by the Vice-Chancellor and another representative or two of his nominees. The Governing Council should be reconstituted every five years.
7. In the Academic Board two members of the Governing Council from among themselves will be members. The Academic Board will meet at least twice in a year.
8. The Examinations and Awards Committee will not be an authority of the college, its functions being carried out by the Academic Board, which may constitute a Committee to carry out these functions.
9. On the financial needs for autonomy, the non-recurring expenditure of Rs.6.4 lakhs is an item which the college will take up with its Management - the Central and State Governments.
10. For helping in its autonomous development, it is recommended that the college request Rs.1.2 lakhs for library and collaboration with industry, and Rs.37,500/- indicated under the cost of travel for the Academic Board, Faculty Board and Boards of Examiners and their committees.

Sd/- Vice-Chancellor

UNIVERSITY OF MADRAS

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THE VICE CHANCELLOR

No. V. 15
January 3, 1978

To

1. Prof. RM Udgaonkar
2. Dr. G Rangaswami
3. Mr CG Rangabashyan
4. Prof. GR Damodaran
5. Prof. PS Mani Sundaram
6. Mr AKA Abdus Samad
7. Dr. GS Laddha
8. Sr. Juliet Irene
9. Dr. F Theophilus

c.c. The Principal, Sri Avinashilingam Home Science College
The Representative of the Management

COMMITTEE ON AUTONOMOUS COLLEGES
SRI AVINASHILINGAM HOME SCIENCE COLLEGE, COIMBATORE
3RD JANUARY 1978
DECISIONS

On the basis of the revised proposals submitted in relation to the decisions of the Committee at its meeting on 20th September 1977 (see Doc. No. V. 1461), the Committee recommends that Sri Avinashilingam Home Science College for women, Coimbatore, be granted autonomous status as from 1978-79, subject to the following conditions:

1. The suggestions concerning 'Dietetics' curriculum being moved from Unit 5 to Unit 3 of the Home Science curriculum, and the elaboration of Unit 3 under Biochemistry to cover enzymes that work in the living body, be taken into account in the final formulation.
2. The examination procedures, while based on University principles, be not subject to the approval of the University.
3. The subjects English and Tamil be so designated without adding the term 'literature'.
4. The autonomous college authorities be -
 - a) a Governing Body of upto 15 including two representatives

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b) an Academic Council of up to 40 including four representatives of the University, and

c) Boards of Studies with a minimum of 4 including experts from outside the college and one from the University.

5. The Pre-University Course will be dropped from 1978-79, or, if it is not, to continue for that year only with a reduced intake.

6. The budget for the autonomous status should be so developed that the college draws on its normal entitlement of upto Rs.8 lakhs and the basic grant from the UGC. The Committee recommends that the UGC make available an additional Rs.1.00 lakh for meeting both the programmes and autonomy costs, particularly relating to the conduct of examinations.

Sd/- Vice-Chancellor

UNIVERSITY OF MADRAS

THE VICE CHANCELLOR

No. V.16
January 3, 1978

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To

1. Prof. BM Udgaonkar
2. Dr. G Rangaswami
3. Mr CG Rangabashyam
4. Prof. CR Demodaram
5. Prof. PS Mani Sundaram
6. Mr AKA Abdus Samad
7. Dr. GS Laddha

COMMITTEE ON AUTONOMOUS COLLEGES.
3RD JANUARY 1978
GENERAL CONCLUSIONS

1. The Committee recommends that the syndicate request the concurrence of the State Government and the UGC for conferment of autonomous status as from the academic year 1978-79 on -

1. St. Joseph's College, Tiruchirapalli
2. Sri Avinashilingam Home Science College, Coimbatore.
3. Regional Engineering College, Tiruchirapalli
(Nine Postgraduate Departments only)

2. The Committee recommends that the Syndicate approve the attached draft letter from the University to each of the autonomous colleges as the condition for conferment of autonomy. The draft is based on statutes for autonomous colleges approved by the senate.

3. It is recommended that the University organise a two-day Seminar for the 8 autonomous colleges during May-June 1978, at which each of these colleges be represented by the Principal and four teachers for the purpose of exchanging views on their courses of study, admission of students, teaching methods and the evaluation system in order to ensure maintenance of high common standards. The UGC might be invited to be represented at the meeting by its Chairman and the member serving on the Joint Committee, Dr. BM Udgaonkar.

Sd/- Vice-Chancellor

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4. The College/College with Postgraduate Department having autonomous status shall set up Boards of studies in the subjects concerned and an Academic Council.
5. The decision of the Academic Council, constituted by the College, on academic matters shall generally be implemented by the Managing Body of the College, on which there shall be a representative of the University.
6. The Board of Studies set up by the College shall have external experts including an expert from the University.
7. The Academic Council constituted by the College shall involve faculties of the college at all levels and a specialist appointed by the University, and the decisions taken by the body within the frame-work of these terms and conditions will not be subject to any further ratification by the Academic Council or any other statutory bodies of the University.
8. Admission of students to courses of studies offered by the College/Postgraduate Department ofof the college shall conform to the minimum qualifications laid down by the University for the Courses of Study concerned, subject to rules . . . of reservation for candidates belonging to scheduled caste, scheduled tribe and backward classes laid down by the State Government from time to time.
9. The degrees/diplomas of the University shall be conferred on the students of the College/Postgraduate Department of..... of the College passing the examinations of the College/Postgraduate Departments of of the College, but the name of the college shall be indicated in the Diploma issued to them.
10. The College/postgraduate Department ofof the College has been conferred the status of autonomy for a period of five years from the academic yearin the first instance, subject to review of the functioning of the College/Postgraduate departments ofof the College, at the end of three years.
11. It shall be competent for the syndicate to extend the period beyond five years on an application made by the college.
12. The Syndicate shall have power to revoke the autonomy conferred at any time after scrutiny and after giving due notice of such intention to the college concerned before the expiry of the period mentioned in 10 Supra, in the case of deteriorating standards or for any other good cause.
13. Notwithstanding the conferment of autonomous status on the college/Postgraduate Department of of the College, all

provisions of the Act, the Statutes, the Ordinances, and the Regulations of the University shall be applicable to the College/ Postgraduate Department ofof the College, except those relating to matters specified in these terms and conditions. The University shall continue to exercise its general power of supervision over the College/Postgraduate department of of the College.

14. The College shall pay to the University a sum of Rs.5,000/- being the application fee prescribed for the grant of Autonomous Status.

In communicating the above, I am to request you to let me have your reply regarding acceptance of the terms and fulfilment of the conditions prescribed by the University as detailed above.

Yours faithfully,

Sd/- Registrar

CONFIDENTIAL

UNIVERSITY GRANTS COMMISSION

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Meeting:

Dated: 24th April, 1978.

Item No. 26 : To receive a note on the working of the Committee appointed by the University Grants Commission to review matters on (i) teacher-pupil ratio (ii) working of the tutorials and preceptorials scheme; (iii) Strength of Physical Directors and (iv) re-organisation of courses which do not attract sufficient number of students.

In December, 1973 the Commission appointed a Committee in consultation with the Delhi University to review the matters regarding teacher-pupil ratio, working of tutorials and preceptorials scheme, strength of Physical Directors and re-organisation of courses which do not attract sufficient students in respect of the colleges affiliated to the University of Delhi and receiving maintenance and development grants from the University Grants Commission.

The Committee has since submitted its report on working of tutorials and preceptorials scheme, strength of Physical Directors and re-organisation of courses which do not attract sufficient number of students, but it has yet to finalise its report on teacher-pupil ratio.

The Commission at its meeting held on 2nd June, 1975 (Item No.12) while considering the report of the said Committee on matters relating to strength of Physical Directors and re-organisation of courses which do not attract sufficient number of students in colleges of Delhi University, "desired that the views of the Delhi University may be obtained on the recommendations made by the Committee appointed by it on matters relating to strength of Physical Directors and re-organisation of courses which do not attract sufficient number of students in the colleges of the University. The Commission further desired that the Delhi University be advised to suggest to the colleges not to appoint staff against the posts likely to fall vacant in courses which do not attract sufficient number of students till the matter has been reviewed by the university."

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Accordingly, the comments of the Delhi University were invited and these were reported to the Commission vide items No.2(a)(10) and 2(a)(5) at its meeting held on 19th July, 1976 and 16th May, 1977 respectively.

The Commission at its meeting held on 9th September, 1974 (item No.6) considered the report of the said Committee on the matter relating to tutorials and preceptorials in Delhi colleges and resolved as under:

"The Commission considered the report of the Committee which was appointed with the concurrence of the Delhi University to report on the working of tutorials and preceptorials in colleges of the Delhi University. The Commission noted that on the basis of information supplied by the colleges that the scheme for tutorials and preceptorials had not been working satisfactorily. It was agreed that the report of the Committee may be forwarded to the Delhi University for its consideration.

The Commission was of the view that preceptorials are an important component and it would be desirable that they are linked with internal assessment. In view of the limited resources available, the size of the tutorials/discussion groups may be 10-15 for Honours and 20-30 for pass course students. The Chairman mentioned that the ordinances of the Delhi University provide that the teachers may not have more than 18 periods of 50 minutes each per week. The Commission was of the view that the Delhi University may review this so as to prescribe not only a maximum, but also a minimum teaching load for each category of staff."

In accordance with the above resolution, the Delhi University was informed that since tutorials and preceptorials are an important component of teaching, it would be desirable that they are linked with internal assessment. It was requested if the size of tutorials/discussion groups may be limited to 10 to 15 for honours and 20-30 for Pass course student. Besides this, the University was requested that ordinance XIII of the ordinances of the Delhi University provides no whole time teacher appointed by the university or by any college shall be required to do teaching work whether lecturing or tutorials or laboratory work for a number of working periods of 50 minutes each exceeding or for more than 15 hours in all during each work and therefore, it was requested to review the above provision of the ordinance so as to prescribe not only a maximum but also a minimum teaching load for each category of staff.

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The Sen Committee while recommending the pay scales of teachers expressed its views on the workload of teachers as under:

"The work load of all university and college teachers should be the same and not less than 40 hours a week. This will include preparation for teaching, actual class-room teaching correction and examination work (including invigilation), research, tutorials and guidance to students, extra-curricular activities, and administrative and professional work. While some of this work can be done at home, every teacher should be required to be present in his Department for a specified time every working day and be available for consultation by students. Physical facilities for the purpose should be provided. The precise 'mix' of these activities in the work of any given teacher will vary from time to time and will be distributed by the Principal/Head of the Department concerned.

No hard and fast rules can be laid down regarding the work-load. However, while discussing the annual budget and strength of his faculty, the Chairman/ Head of the Department will have to convince the Dean/Principal that the average load in his department is comparable to that in other institutions in the country or outside. In the distribution of work, the following among others, should be given due consideration: (i) that young people are given enough time to help in their growth and achievement of potential particularly in the first five years of their service; (ii) that people with research students have adequate time to look after them; and (iii) that the share of 'pleasant' as well as 'unpleasant' work is equitable.

If certain people like to have an extra load at certain times in the year in return for no or little teaching work at some other time, they may be accommodated if this does not cause any serious difficulty in the programme of the department. No member should leave the university in the middle of the session. In case the session is divided into semesters and terms, this restriction may apply to the corresponding period, provided the member has given adequate notice to the university. The 'maximum' work-load should be the same in all Departments and for all teachers. It suggested that the UGC may have this examined in detail with the help of a Committee."

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The Government of India agreed the revised pay scales of teachers w.e.f. 1.1.1973 subject to the conditions which among other things included the work-load for teachers, submission of plan of work etc. The Commission while conveying the revised pay scales of teachers informed the Central universities that instructions regarding work-load for teachers/submission of plan of work etc. would be issued separately. The Commission therefore, in January, 1975 communicated to the universities for prescribing the work-load of teachers as under:

"The Commission agreed that the recommendations of the Sen Committee in this regard be communicated to the universities and keeping this in view, they may indicate the number of periods etc. per week a teacher is expected to take. The Commission was further of the view that while no doubt some work is done at home, it should however be ensured by the universities that the teacher is present and is available to students at least 20 hours a week on the official premises of the university/college and further no teacher is expected to do more than three hours of lecturing in a day. These may be circulated to the universities as guidelines and the detailed rules may be framed by each university."

The Delhi University considered the recommendations of the Commission on work-load and conveyed the resolution of the Academic Council as under:

"The Academic schedules at this University have over the years been framed in such a way that every teacher is generally available on the campus for at least 20 hours a week. It is also ensured that teaching programme of every teacher is so spread out that none has to lecture for more than 3 hours in one day. If proper facilities e.g. the departmental rooms, teachers offices for personal contact with students, rooms for departmental libraries and seminars could be provided, it should be possible for teachers to spent more hours on the campus in a really useful and academically fruitful manner."

The work of the Committee so far as it relates to the question of teacher-pupil ratio has not been finalised. The Committee has held a series of meetings and the last meeting of the Committee was held on the 18th August, 1977. A copy of the minutes of the meeting held on 18th August, 1977 is enclosed as Annexure I*

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The Delhi University was also requested to send the information on the following points for purpose of finalisation of the report of the Committees:

- i) No. of periods prescribed by the University separately for lectures/tutorials/preceptorials and practicals to enable the colleges to complete the prescribed course of study (course-wise, subject-wise);
- ii) The rationale as to how the teacher-pupil ratio of 1 : 10 for the B.Sc. Hons. courses has been arrived at by the University and suggested to the Commission for consideration;
- iii) minimum work-load prescribed per week for a teacher.

It has not been possible for the university to send the above information for one reason or the other. The Vice-Chancellor in his letter dated 11th March, 1978 has now informed as under:

"The University Grants Commission had appointed a Committee to look into the questions of working of internal assessment scheme, the problem of DPE's as well as the teacher-pupil ratio etc. for this University. The interim report of this Committee had already been submitted and approved by the Commission and the University has taken action in accordance with the decision taken by our Academic Council and the Executive Council on those interim reports. The last part of the terms of reference, as stated above, related to the teacher-pupil ratio. The Committee held series of meetings and certain information was sought in the first instance which was supplied by the University representative, Dean of Colleges, who is a member of this Committee. In a subsequent meeting, the Committee decided to collect information from all the colleges concerning teacher-pupil ratio. This information was also collected through the University and was duly submitted to the Commission. In one of the meetings, the Committee agreed to watch the effect of 10+2+3 scheme and to wait till the picture had become clear. But subsequently, the Commission asked for further information on the following points on the recommendation of this Committee:

1. Number of periods prescribed by the University

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separately for lectures/tutorials/preceptorials and practicals to enable the colleges to complete the prescribed courses to study (course-wise, subject-wise).

2. The rationals as to how the teacher-pupil ratio of 1:10 for the B.Sc. honours courses has been arrived at by the University.
3. Minimum work-load prescribed per week for a teacher.
4. Maximum strength of class prescribed for the B.A./B.Sc. Classes (Pass & Honours) separately for lectures & practical classes.

You will notice that one of the points mentioned above on which information was required by this Committee through the Commission was on "Minimum work-load prescribed per week for a teacher". While the Commission asked for information on the above points including the issue of minimum work-load, a separate communication was received from the Secretary of the Commission on 12th May, 1977 (D.O. No. F.4-56/74(D5c),) asking us that the University should review its Ordinances so as to prescribe not only a maximum but also a minimum teaching load for teachers. This letter of the Commission's Secretary was referred to a Sub-Committee of the Academic Council by me and you can appreciate that as a result consideration of the whole issue ensued within the University by itself. The report of the Sub-Committee was placed on the Agenda of the Academic Council and for various reasons it could not be taken up in some of the meetings. It was, therefore, natural that the University could not send replies to the above queries of the University Grants Commission since one of the items under query was under the consideration of the Academic Council. As for the rest of the items were concerned, they were referred to the Deans of various faculties and various faculties and Committees are in process of deliberations on these issues.

You would, therefore, kindly appreciate that in view of the initiation of the process of discussions at various levels in the University, e.g. Academic Council & Faculties, on the above issues, certain delay was bound to take place. I can, assure you that there was no attempt

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on our part to with-hold any information or cause any delay in supplying it to the Commission. I also feel that in a way it is good that the University has been afforded an opportunity to discuss these issues at various levels and I can confident that our deliberations will certainly go a long way in helping the University Grants Commission and its Committee in formulating its recommendations. I trust that you will kindly appreciate the position of the University in this regard."

17' It is understood that the report of the Sub-Committee (Annexure-II) appointed by the Academic Council referred to above was considered by the Academic Council who have accepted the same.

The matter is reported to the Commission.

AS (D-5) / D.S. (D-5)

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Minutes of the meeting of the committee on
teacher-pupil ratio held on 18th August, 1977.

.....

The meeting was attended by the following:

1. Rev. Fr. Lancelot Pereira
Principal
St. Xavier's College
Bombay
2. Professor H.J. Sharma
Chairman
Commission for Scientific and
Technical Terminology,
New Delhi
3. Shri Triyogi Narain
Deputy Secretary
Ministry of Education & Social Welfare
New Delhi
4. Shri R.N.P. Sinha
Deputy Financial Adviser
Ministry of Finance
New Delhi.
5. Shri Mohinder Singh
Dean of Colleges
Delhi University
Delhi

Shri R.K. Chhabra, Secretary, UGC, Dr. M.L. Mehta,
Deputy Secretary, UGC and Shri V.M. Seth, Assistant Secretary,
UGC also attended the meeting.

At the outset, the Dean of Colleges, Delhi University,
Shri Mohinder Singh pointed out that in the last meeting
it was concluded that the present teacher-pupil ratio
may continue in view of the introduction of 10+2+3 pattern
of education in Delhi. The university may watch the
progress of introduction of this system and then review
the present teacher-pupil ratio. It was explained
that after he had left the last meeting, it was pointed
out to the Committee that it would be desirable for
the Committee to finalise its deliberation particularly
in view of a reference made about this in the annual
report of the UGC. It was in view of this that the

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meeting of the Committee had been convened again. The Committee was informed that with the approval of the Chairman the UGC office had already requested the Delhi University to supply the following information; in order to enable the Committee to finalize its deliberations:

- (i) Minimum workload prescribed per week for a teacher.
- (ii) The maximum strength of a class as prescribed by the Delhi University at the Pass and Honours levels in the B.A., B.Com., and B.Sc. classes separately for lectures and practical classes.
- (iii) The teacher-pupil ratio prescribed by the University in a practical class at B.Sc. Pass & Hons. levels.
- (iv) Number of periods prescribed by the university separately for lectures, tutorials/preceptorials and practicals to enable the college to complete the prescribed course of study (course-wise, subject-wise).

The information received from the University was brought to the notice of the Committee.

The Committee noted that information supplied by the Delhi University was not complete with a view to enable the Committee to finalise its deliberations. It was further agreed that the Delhi University may again be requested to supply the following information:

- (i) Maximum strength of a class as prescribed by the Delhi University at the Pass and Hons. levels at the B.A./B.Com. and B.Sc. classes separately for lectures and practical classes.
- (ii) Number of periods prescribed by the university separately for lectures, tutorials/preceptorials and practicals to enable the colleges to complete the prescribed course of study (course-wise, subject-wise).
- (iii) The rationale of suggesting the teacher-pupil ratio of 1:10 for the B.Sc. honours classes in science to the UGC.

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The Dean of Colleges assured the Committee that the requisite information will be sent to the Commission at the earliest. The Committee finally agreed that it may meet again/some time during the second week of September, 1977 if the information from the University of Delhi, was received by that time.

...

UNIVERSITY OF DELHI
MINUTES

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A meeting of the Sub-Committee of the Academic Council was held on Thursday the 1st September, 1977 at 11.00 a.m. in the Vice-Chancellor's Committee Room in the University to consider the question of prescribing minimum and maximum teaching load for each category of teaching staff of the University as well as the Colleges referred to by the University Grants Commission vide letter No.D.O.F.4-56/74(D-5c) dated 11th May, 1977.

The following were present:-

1. Prof. U.N. Singh (Chairman)
2. Professor K.B. Rohtagi
3. Sri Mohinder Singh
4. Sri Rudder Dutt.
5. Mrs. R.A. Menon
6. Sri Y.N. Trehan
7. Sri P.N. Arora
8. Dr.V.S. Varma

Prof. R.S. Sharma, Dr. B.M. Bhatia and Dr.M.M. Sharma did not attend the meeting.

The suggestion of the University Grants Commission to prescribe minimum teaching load for each category of teachers as contained in its letter No.D.O.F.4-56/74(D-5c) dated 11th May, 1977 addressed to the Vice-Chancellor was discussed by members of the Committee at length and after considering the pros and cons of the suggestion, the Committee finally resolved to recommend:

"The Committee strongly feels that the question of prescribing a minimum teaching load for teachers is fraught with serious consequences, more so, in view of the introduction of 10+2+3 Scheme in terms of retrenchment of teachers. There is a need for a wider discussion on the question of work-load of teachers, particularly in view of the fact that they are expected to do quality research work in addition to teaching work. It is, therefore, highly inappropriate to discuss the question at this stage. The Committee rejects the idea of prescribing minimum teaching load as suggested by the University Grants Commission."

Delhi-7
September 1, 1977

Sd/-
U.N.Singh
Chairman

C O N F I D E N T I A L

UNIVERSITY GRANTS COMMISSION

Meeting:

Dated: 24th April, 1978

Supplementary note to item No. 26

The Commission has received a note on the minimum
Work load for teachers, from Dr. Govind Rai Chaudhry
.....
a member of the Executive Council, Delhi University,
which is attached as Annexure III.

Annexure III to Item No.26

PRESS RELEASE
MINIMUM WORK LOAD FOR TEACHERS
DELHI UNIVERSITY ADEQUATES RESPONSIBILITY

The Delhi University Act of 1922 has been amended from time to time by the Parliament in Keeping with the requirements and needs of the Society. The University has an obligation to serve the needs of the society and must not function counter to the social objectives and national interest, notwithstanding the autonomy conferred on it by the Parliament. It may, however, be kept in view that the autonomy of the University is limited by the terms of the Act, Statutes and Ordinances and the University cannot act contrary to law, which has brought it into existence. This proposition makes it unambiguously clear that the University through its various authorities (specified in the Section 17 of the Delhi University (Act) has to provide for instruction in such branches of learning as it may think fit, to prescribe courses of study, to institute teaching posts and lay down qualifications, the mode of recruitment of teachers and their service conditions, to conduct examinations and award degrees to the successful candidates. The University Act further states (vide Section 30) that the emoluments, terms and conditions of service of teachers of the University would be provided by the Ordinances. The Ordinance XIII of the University envisages maximum teaching or tutorial/laboratory work for a number of working-periods of fifty minutes each not exceeding eighteen or for not more than fifteen hours in all, during the week. This is neither a difficult nor a heavy assignment by any stretch of imagination. But sadly enough, even this is not fully implemented and enforced. Actually, work-load of teachers including tutorials and preceptorials is much less than 15 hours per week for most of the teachers since, as things stand today, tutorial and preceptorial classes are not held at all, or certainly not treated with any seriousness.

In the light of these observations, the recent controversy about prescribing of maximum or also a minimum workload for each category of staff of the University and the constituent colleges in response to the University Grants Commission letter No. (D.O.F.4-56/74 CD-5C dated the 12th May, 1977 and in compliance with the Sen Committee Recommendations stipulating 39 hours work load per week on introduction of new revised pay scales of Rs. 700-1600 for teachers has, unfortunately, brought

p.t.o.

CONFIDENTIAL

UNIVERSITY GRANTS COMMISSION

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p.t.o.

the University to public admonition, disrespect and criticism. The recent token fast for 24 hours engineered and organised by the D.U.T.A. President, Shri O.P. Kohli, and a few of his colleagues of the D.U.T.A. Executive Committee and staged by a handful of temporary-adhoc appointed teachers concerned and their supporters, was wholly ill-conceived and inspired obviously from ulterior motives. One wonders how the President of DUTA can act with such short sightedness and in such an irresponsible manner. It is indeed regrettable that fearing trouble from DUTA, the Academic Council has decided "that the question of prescribing minimum work load for the teachers is fraught with serious consequences, more so in view of the introduction of (10+2+3) scheme, in terms of retrenchment of temporary and adhoc appointments, in various constituent colleges of the University recruited during the academic session", which is now coming to an end. The main plea put forward by the Academic Council is that the teachers are required to do quality research work in addition to the teaching work is patently absurd, as most of the teachers are expected simply to do teaching, research work being supplementary and undertaken by a tiny minority only. Strange enough, the quality of research work has not been defined by the Academic Council. Neither has it been considered it necessary to mention how many teachers are actually doing quality research work. There are many Research Associates (Most of them with doctorate degrees in their discipline), who are teaching and also carrying out the quality research in 6 advanced centres of learning in the University now for many years, but their pay-scales is lower than that of the teachers teaching undergraduate classes in Colleges (i.e. Rs.700-1300) notwithstanding the fact that their work load is much more than 15 hours a week. What have the University authorities done for them? It is unfortunate that in its anxiety to help some temporary teachers of the Delhi University who may stand retrenched in the event of minimum work load being defined and prescribed has in one stroke, the Academic Council has acted against national interest. The University should not fight shy of meeting the matter squarely. It has to serve the public cause and satisfy the public on the point that public money is not being drained away for extraneous or otherwise non-academic considerations. I do not mean to say that the retrenchment of temporary teachers should not be our concern or their cases of retrenchment

be treated casually or lightly, but at the same time it should be our paramount duty that national interest must not be sacrificed or jeopardised, while placating to Zonal/local or class interests. So far as the permanent teachers are concerned, their retrenchment is merely hypothetical question in the event of the introduction of 10+2 +3 scheme. As far as the retrenchment of those who are temporary or hold adhoc appointments, the University has to view the problem in the totality of academic concerns. It must not decide any matter, or allowed to be brow-beaten by pressure groups operating, under various disguises in the University, unless, of course, its sole concern is to save some high-ups from a possible direct action on account of their previous wrong policies or excesses in the recent past.

The University like any other public institution, Organisation or Research Establishment in the country is governed by certain norms, by a set of service rules. Code of Conduct for its members or persons in its employment, their duties and privileges being prescribed within defined limits. The University teachers cannot by any stretch of imagination be an exception to this salutary rule. Somehow some of us are under the wrong impression that the established norms and service rules do not govern us and they can be defied with impunity.

Above all, all those who are advocating and agitating for temporary/adhoc appointees working at present to be absorbed in substantive posts on the basis of student-teacher ratio of 1977-78 enrolment, conveniently forget that by doing this they would be blocking the entry of those scholars who were engaged in doctoral research work and who did not give up research to take up temporary appointments of short duration. 180 scholars had been pursuing research work for the last 3-4 years, and who got their doctorate degrees on 4th of March, 1978. They are also set against the interest of those who would be getting merit-positions in various examination in the University this year or in subsequent years. Do they mean to reward with permanent posts to the under-qualified or insufficiently qualified persons employed at present, some of them not even having come through the Selection Committees. Must they depart from established norms and practices and lower teaching standards in the pursuit of non-academic considerations? It is here that the maximum harm is

done by the Academic Council decision regarding their inability to fix minimum work-load for teachers is revealed in all its nakedness. Such a demand amounts to in the first place that the University and its constituent colleges should be treated as a sacred cow. It is not bothered about the problem that if there is not statutory minimum teaching load and no prescribed duty hours for teachers in the colleges and in the University departments, how can the recruitment of teachers be regulated and on what basis? How can the Government Institutions, autonomous institutions, and research establishments and other Organisations in the country like Atomic Energy Commission, Agriculture Research Institutes, C.S.I. Research Laboratories, Defence Research Laboratories and other Centres of higher learning and research enforce compliance of service rules and code of conduct for their employees? How is the Government at the centre and in the States going to enforce work-load for teachers in Secondary Schools? How is the non-academic staff (which demands parity with the teachers) in the constituent colleges and the University departments going to be governed? Would it not amount to creating unsurmountable difficulties for the Government at the Centre, University Grants Commission and the State Governments? In its eagerness to please certain interests by taking such a decision, the Academic Council does not even realise that in the event of no fixed minimum work-load being prescribed for teachers, the University Grants Commission would be within its right to apply the 18 period per teacher rule in calculating the student-teacher ratio. Won't such a situation lead to greater retrenchment and thus cause real heartburn among the teachers.?

The pay-scale recommended by the Sen Commission constituted by the University Grants Commission and implemented in Delhi University is much higher than that recommended by the III pay Commission for Scientists and other Government employees with much higher qualifications and length of service than most of the teachers employed in the Colleges. The teachers are getting all allowances such as D.A., A.D.A., H.R.A., L.T.C., Children Education allowance and C.C.A., and are now enjoying pensionary benefits also. The

retirement age for a government employee is invariably 58 and any extension or re-employment is generally out of question whereas the retirement age in the Colleges and in the University is 60, followed by unhindered prospects of re-employment for a period upto 5 years. This is a unique feature of the service conditions of the teacher, not available to any other services in the country under the central government or under the State governments.

If there are no fixed hours of duty or no minimum work-load for the teachers teaching Arts and Social Sciences subjects, what would happen to teachers engaged in Professional Colleges (Medical and Engineering) who are required to be on duty from 9 A.M. to 4 P.M. daily? More than 60% of the teachers in the Constituent Colleges of the University are taking B.A. (Pass), B.Sc. (Pass) and B.Com. classes and the results of these classes in the University examinations generally vary from 45 to 50%. This huge number of failures, year after year, is a colossal national waste which the country can ill-afford. The observations made by an elected student representative in the Academic Council meeting, on the basis of a survey conducted by him on the subject, that the workload for teachers is generally not more than 8 to 12 hours a week is not without substance. It is no doubt true that some of the teachers are running teaching shops, some have accepted paid assignments outside the college and the University departments, and some are engaged in business and most of them are not interested in pursuing research. It is also true that some teachers play chess, some cards in the college Staff rooms and a few others go to the class-room only to take attendance to prove their presence. There was a Professor in the University who did not take any class for fifteen years. I support his contention on the basis of my experience of forty years of University life. Still the Academic Council fights shy of defining the minimum workload for a teacher, and seeks shelter behind specious reasons to cover up its patent irresponsibility?

Qualifications and eligibility requirements for appointment of a Lecturer in any constituent college and Guidelines for calling candidates for interview have been changed five times during the last three years to suit vested interests and for their selection. These qualifications prescribed by the University are not in conformity with the qualifications and eligibility requirements laid down by the University Grants Commission. Communications from the UGC to adopt its qualifications have been of no avail and ignored.

It seems that those who can manage to collect handful of persons, shout slogans, demonstrate and threaten hunger strikes and token fasts can get all their demands, reasonable and unreasonable, conceded by the authorities. It is sad that the authorities are too ready to succumb to pressures in order to remain in saddle, following the path of least resistance. No wonder, the credibility of the authorities is extremely low and yet this does not stop them from acting in a manner which exhibits that they have become immune to all criticism. It is sad that conviction, much less support for the right cause, is no longer considered necessary. Nobody seems to bother as to what people think about them, or what opinion they held regarding their performance or their interest in the cause of education. Most of them seem to swim with the tide rather than take firm stand against unreasonable and unethical demands. Their bonofides, their integrity, is suspected. They are accused of serious lapses and abuse of power and authority but still they wish to cling to office.

It is pitiable that every body knows that all is not well with the University and the constituent colleges but nothing concrete is being done to ensure the well-being of the University. DUTA and DUSU have been agitating for Visitor's level inquiry for the last 10 months. The demand has been anandoned by the DUTA and DUSU for reasons best known to them. I had sent a memorandum of 22 pages to the Shah Commission but nothing has come out of this so far.

... If this is not desecration of the temple of learning what else is it could be? If it is now abject surrender and sell-out what else it could be termed? I think it should be our, simple moral responsibility that if we cannot run the Institution in a meaningful manner, we should quit rather than be a party to destroying it.

The constituent colleges and the University departments cannot live in isolation. It is true that their accountability is Nil at present. Appeasement of dominant groups, anxiety for our own position rather than for the welfare of the Institution seems to be upper most in our thoughts and actions. Expediency rules our functioning and our decisions. One fails to understand how a Vice-Chancellor or a Pro-Vice-Chancellor of a Central University are bye-pass and turn shown so lightly the recommendation of a High Power Committee which formulated service conditions and qualifications for recruitment of teachers in the colleges and the Universities in the country as a whole. If this is going to be the fate of recommendations of the University Grants Commission Committee after the implementation of new grades in a Central University (like Delhi University, wholly financed by the U.G.C.), one wonders what would be state of affairs in hundred and twentyfive other State Universities. It is high time that all those who are concerned with the well-being and welfare of the Educational Institutions, the Central Government, The Ministry of Education and the University Grants Commission take stocks of the situation and do not allow politicians to have a field day, throwing to the wind all academic traditions, values and norms for their selfish and narrow interests.

The poisonous weeds must be uprooted in the interest of the health of the garden. Once they strike root, they will go so deep and spread so wide that they would render the entire soil unproductive. The man in public will develop hatred for the teaching community in place of the respect it has enjoyed in the past. The University must set healthy traditions and follow just practices. The University Grants Commission must not lose its control over the situation. The Government must be extra vigilant about all such unacademic influences and activities as may undermine their very moral foundations of our society.

Sd/-

(Dr. Govind Rai Chaudhry)
Member Executive Council
University of Delhi, Delhi-110007.

CONFIDENTIAL

UNIVERSITY GRANTS COMMISSION

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Meeting:

Dated : 24th April, 1978.

Item No. 27 To consider further a proposal from the Bombay University regarding grants for books and equipment to colleges under the Metropolitan Plan.

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The University Grants Commission approved the implementation of various schemes for utilisation of the grants of Rs. 1 crore allocated by it for creation of inter-collegiate facilities for use of colleges in Arts, Science and Commerce in greater Bombay during the Fifth Plan.

The Bombay University requested the Commission to sanction a grant of Rs. 5 lakhs each for Books and equipment on cent-percent basis of the allocation made for Library-cum-reading room and scientific equipment respectively. The University further requested for approval of an additional grant for equipment to be given for Life Sciences at the Colleges @ Rs. 20,000 for each college located inside and outside Greater Bombay i.e. all colleges teaching life sciences in the Jurisdiction of the Bombay University. The matter was considered by the Commission at its meeting held on 22nd/23rd August, 1977 (Item No. 25). The Commission could not accept the proposal of the University for utilizing the grant available for the development of central facilities for Metropolitan Colleges for purchase of Books and equipment in the manner proposed. The Commission further desired that the individual college might seek assistance for the purpose under the general programme of assistance for the development of colleges. The decision of the Commission was intimated to the University.

The Vice-Chancellor University of Bombay has again stressed the need of providing a sum of Rs. 5 lakhs each for Books and equipment for Metropolitan Colleges out of Rs. 1 crore approved by the Commission for the development of Metropolitan Colleges in Greater Bombay. A copy of the letter received from the Vice-Chancellor, Bombay University dated 14th-15th February, 1978 is enclosed as Annexure.*

It may be added in this connection that an on account basic grant of Rs. 17.52 lakhs (being 50% of

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the total amount of Rs. 35.04 lakhs to be paid) has been sanctioned to the Bombay University for distribution to Arts, Science and Commerce Colleges affiliated to the University towards purchase of essential library Books and laboratory equipment. The new requirements of colleges for purchase of library books and laboratory equipment due to introduction of the 3 year integrated degree course may be perhaps met by the colleges out of this grant.

The matter is placed before the Commission again for consideration.

AD (D-4a/DS: (D-4)

Annexure to Item No.27

Copy of letter No. Nil dated 14th February, 1978
from Shri Ram Joshi Vice-Chancellor University of
Bombay to Professor Satish Chandra, UGC.

(27°)

Please refer to my letter dated 14th June, 1977, and
the Commission's letter No.F.21-2/77(D+C) dated 27th
September, 1977, in reply thereto.

2. As stated in my letter, the Commission conveyed its approval, in Principle, for implementation of the various schemes which were submitted to it for utilization of the grant of Rs. one crore allocated by it for creation of inter-collegiate facilities for use of several colleges in Arts, Science and Commerce in Greater Bombay during the Fifth Plan period. As requested by the Commission, steps have been taken to prepare detailed proposals. The detailed proposals will be forwarded to the Commission as soon as possible.

3. The University has decided to introduce three-year integrated B.A., B.Sc. and B.Com., degree courses and the First Year courses have been brought into force from the current academic year 1977-78. The syllabuses of the First Year of the three-year integrated courses have been completely revised.

4. It is necessary for the colleges to improve and up-date their libraries and laboratories. I have, therefore, to request you kindly to arrange to sanction payment of grants of Rs. 5.00 lakhs for books and Rs. 5.00 lakhs for equipment on a hundred per cent basis out of the allocation of Rs. one crore approved by the Commission. The grants will be disbursed to the concerned colleges for the purposes mentioned above.

5. Life Sciences is one of the new disciplines introduced in the courses of study for the three-year integrated B.Sc. degree. Ten colleges in Greater Bombay have been permitted to teach this new subject. The colleges will need modern specialised equipment for the teaching of this branch of study. The University is very keen that this newly introduced subject of Life Sciences be taught with the aid of properly equipped modern laboratories but the colleges on their own will not be able to provide such equipment. It is, therefore, proposed to make an allocation of Rs. 20,000/- to each of the colleges which have decided to teach Life Sciences. I shall be grateful if you kindly arrange to sanction payment of a grant of Rs. 2.00 lakhs, in addition to Rs. 5.00 lakhs mentioned in para 4 above, for being made available to the ten colleges for purchase of scientific equipment for teaching Life Sciences.

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6. There are nine colleges outside Greater Bombay which will also be teaching the new subject of Life Sciences. I have to request you kindly to be so good as to arrange to sanction a grant of Rs.20,000/- to each of these nine colleges also.

7. The assets created out of the grant of Rs. one crore will be the assets of the University and they will be accounted for by the University. The colleges will be requested to maintain registers of assets created out of the Commission's grants received through the University. Every college will be requested to give an undertaking that the facilities which will be created out of the grants sanctioned by the University Grants Commission for integrated development of colleges and creation of inter-collegiate facilities for use of several colleges in Arts, Science and Commerce will be made available to students of other colleges also.

8. I shall be grateful if you kindly arrange to place this proposal before the Commission for favourable consideration at its next meeting.

With regards.

CONFIDENTIAL

UNIVERSITY GRANTS COMMISSION

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Meeting:

Dated: 24th April, 1978.

Item No. 28 : To consider the proposal of the S.P. College, Poona for setting up of an Audio Visual Centre under "COHSSIP".

S.P. College, Poona, a constituent college of the University of Poona has been a participant in the COHSSIP scheme. It is a full-fledged Degree College - with six well developed departments in the Science Faculty and twelve in the Faculties of Arts and Social Sciences. Besides, the College does Postgraduate teaching in Chemistry and Geography on the science side and in the Economics, Psychology and Philosophy on the Humanities side.

The College has completed a three-year 'COSIP' scheme and has taken up a follow up programme. The College has completed two years' work under the COHSSIP scheme and the third year work is nearing conclusion.

Within a period of 2 COHSSIP years, special studies on 35 thinkers belonging to different disciplines have been prepared by the college. About 15 to 20 thinkers would be studied in the year 1977-78. The COHSSIP has thus enabled the college to build up a Thinkers' Library - covering over fifty illustrious thinkers required to be studied in terms of the University syllabi.

"Mahatma Gandhi" was chosen as an inter-disciplinary project in the year 1975-76. The college has a fine collection of 16 useful papers on Mahatma Gandhi - highlighting different aspects of Gandhiji's work from the points of view of different disciplines.

For the year 1976-77, Marx was the inter-disciplinary project. Here also the college has about 15 well prepared essays ready. Dr. B.R. Ambedkar has been taken up as a similar project by the college in the current year.

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Besides, each department did undertake independent departmental projects. During the 2 years (1975-77) about 68 projects have been completed.

It has been stated by the college that the COHSSIP did help them in undertaking experiments in respect of teaching methods. The programme has been of particular assistance in intensifying the tutorial work through seminar.

The college has sent a proposal for the setting up of an Audio Visual Centre incorporating a language Laboratory catering the needs of all the departments in the college. The proposed centre would involve a total expenditure of Rs.76,916/- or say Rs.77,000/- as detailed below:

| | |
|---|------------|
| 1) Cost of Alterations in the existing Hall. | Rs. 38,366 |
| 2) Cost of Equipments | Rs. 33,750 |
| 3) Technical & Administrative Staff | Rs. 4,800 |

Rs. 76,916

Or say Rs.77,000/-

An annual grant of Rs.42,000/- was sanctioned to the S.P. College, Poona for implementation of COHSSIP against the annual ceiling of Rs.1,00,000/-. The College has completed two years of COHSSIP and this is the final year of the programme. The grant sanctioned above included an amount of Rs.3,000/- for language laboratory and Rs.1,550/- for Audio Visual Aids. The college has stated that this provision is too inadequate for the purpose. The college has already started a rudimentary laboratory.

The Commission has already accepted the proposal of the college for the setting up of an Audio Visual Centre under COHSSIP and has approved a grant of Rs.38,350/- for the year 1977-78, for the cost of equipments and for technical and administrative staff etc. The college was requested to send the details of the kind of alterations which they propose to make in the existing hall so as to house the Audio Visual

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Centre. The College has indicated the following details of the structural alterations in the existing hall to house the proposed Audio-Visual Centre.

1. The construction of a cabin for fixing the equipment.
2. Providing false ceiling under the ridge-roofing.
3. Providing wood pelmets for curtains for doors and windows and heavy material.
4. Curtains for keeping out light.
5. Providing electrification for the equipment, lighting and ventilation to the hall.
6. Providing fire extinguishers in the hall and cabin.
7. Providing Black Boards.

The estimates for the above work amount to Rs.40,000/-. If this additional grant is sanctioned to the college, this will be within the ceiling of Rs.2 lacs for the first two years of the COHSSIP but will exceed the ceiling of Rs. One lac for the second year.

The matter is placed before the Commission for consideration.

AS(HR)/JS(I)

CONFIDENTIAL

UNIVERSITY GRANTS COMMISSION

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Meeting:

Dated : April 24, 1978

Item No. 29: To consider a proposal from the Tata Institute of Social Sciences, Bombay for instituting free stipends for Scheduled Castes/Scheduled Tribes students in the Institute

The Tata Institute of Social Sciences, Bombay, an institution deemed to be a university, has sent a proposal for instituting stipends of Rs. 250/- per month for Scheduled Castes/Scheduled Tribes students studying at the Institute. An extract from the letter received from the Institute is reproduced below:-

Your letter of even number dated November 3/5, 1977 was considered by the Academic Council of the Institute and the Council suggested the following:-

- i) The applicants from scheduled castes and scheduled tribes need not be charged a fee for the Prospects (Rs. 6/-) and application fee (Rs. 10/-).
- ii) S.C./S.T. applicants for admission be paid second class railway fare for attending the interview and may also be provided with free lodging and boarding during the admission test and interview.
- iii) They may be exempted from all deposits (other than Dining Hall Deposit) which students are required to maintain with the Institute after admission.
- iv) Additional freeships may be provided for them, where necessary.

These recommendations of the Academic Council were referred to the Governing Board at its meeting held on Friday, the 13th January, 1978. While presenting the recommendations of the Academic Council to the Governing Board the Director explained that the

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total number of applications received from S.C./S.T. students for the Social Work degree course is lower than 20% of the number admitted. He said that scheduled caste students who complete their college education can often get reasonably good position in government and are, therefore, not motivated to apply for M.A. degree courses. We must, therefore, find ways of encouraging a larger number of students from the S.C./S.T. to apply for the M.A. in Social Work and Personnel Management.

The Secretary, Department of Education, Govt. of India, who was present at the Governing Board meeting, suggested that we should explore possibilities of being able to institute full stipends for scheduled caste and scheduled tribe students studying at the Institute. The Governing Board liked the idea and have desired that the Institute approach the U.G.C. with a request for instituting full stipends of Rs. 250/- p.m. to enable about 15 S.C./S.T. students to be admitted to the Institute every year. This number works out to between 15 and 20 per cent of the total number of students admitted annually to the Institute.

You are requested to kindly consider the recommendations of the Board and communicate the Commission's decision so that if stipendary assistance is to be made available, this can be made known to prospective candidates through an announcement at the time applications are invited from prospective students to the Institute next year."

The Commission ascertained from the Institute whether the Scheduled Castes/Scheduled Tribes students get or are not eligible for scholarships from the State Govt. under the scheme of award of scholarships to Scheduled Castes/Scheduled Tribes students. The Institute has informed the following:-

"As already stated in my earlier D.O. letter No. Admn.13/7567/77 dated November 8, 1977, our problem is in getting sufficient number of SC/ST candidates who are eligible for admission to our courses. From our past experience during admission it is seen that only those SC/ST candidates who belong to the slightly affluent class apply for admission and others belonging to the poorer

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categories do not even apply as they find it very costly.

Details about the present students and number of SC and ST students studying in the two courses are appended below:-

| Courses | No. of students | No. of students belonging to | |
|---|-----------------|------------------------------|------------------|
| | | Scheduled Castes | Scheduled Tribes |
| 1) <u>M.A. Social Work</u> | | | |
| First Year | 58 | 1 | 1 |
| Second year | 52 | 1 | 1 |
| 2) <u>M.A. Personnel Mgmt. & Industrial Relations</u> | | | |
| First Year | 24 | 1 | 1 |
| Second year | 26 | 4 | 0 |
| Total | 161 | 7 | 3 = 10 |

It may be seen from the above that out of 161 students there are only 10 SC/ST students and out of these only one student is getting scholarship and applications of two students are pending.

The Academic Council recommended to offer certain concessions to attract sufficient number of SC/ST candidates which are stated in our letter No. Admn.13/9365/78 dated January 17, 1978. When these recommendations were considered by the Governing Board, the Director gave his experience in getting sufficient number of candidates belonging to the SC/ST. On the basis of the experience narrated by the Director the Secretary, Department of Education, Govt. of India who was present at the Governing Board meeting suggested that we should explore possibilities of being able to institute full stipends for SC and ST students studying at the Institute. Hence the Commission has been approached vide our letter of January 17, 1978 containing the recommendations.

The matter is placed before the Commission for consideration.

CONFIDENTIAL

UNIVERSITY GRANTS COMMISSION

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Meeting:

Dated : 24th April, 1978

Item No. 30 : To consider a reference from the Ministry of Education and Social Welfare regarding formulation of guidelines for the award of degree 'Honoris Causa' by the universities.

The Ministry of Education and Social Welfare have asked the Commission to formulate the guidelines for the award of the degree 'Honoris Causa' by the universities in view of the assurance given by the Union Education Minister in the Rajya Sabha in reply to a parliament question in the matter. A copy of the proceedings of the debate in this respect in the Rajya Sabha on April 6, 1977 is enclosed Annexure-I. *

The Commission accordingly requested the universities to intimate the criteria and the procedure at present followed by them for the award of degree 'Honoris Causa'. A statement indicating the replies received from the universities in this respect is enclosed Annexure-II.@ It would be seen that the universities which award such degrees have requisite provision in their Act.

The matter is placed before the Commission for consideration.

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प्रश्न संख्या 20

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श्री प्रकाशवीर शास्त्री : श्रीमान, मैंने यह प्रश्न इस दृष्टि से किया था कि पीछे कुछ इस प्रकार की घटनाएँ घटी हैं कि लोगों ने अपने राजनीतिक पदों का लाभ उठाते हुए चौथी और पाँचवी क्लास पास वालों ने भी डाक्टरेट की उपाधियाँ लीं और सरकारी कर्मचारियों को आदेश दिया कि हमारे नाम के साथ यह डाक्टर शब्द अवश्य लगाया जाए । इस तरह से विश्वविद्यालयों द्वारा जो सम्मानित उपाधियाँ दी जाती हैं उनका दुरुस्योग होता है । मैं चाहता हूँ कि शिक्षाविदों का एक सम्मेलन बुलाकर भविष्य के लिए कोई पद्धति या परम्परा निर्धारित करें, इस दिशा में शिक्षा मंत्रालय क्या सोच रहा है ?

DR. PRATAP CHANDRA CHUNDER :

Sir, the Honourable Member has touched a very sore point in our public life because politics actually touches every aspect of our life. I could appreciate the apprehensions that he expressed before this august House. As at present, different universities have different rules contained in their statutes concerning the award of these degrees, and there are already some checks and balances in these statutes. Any change in the Statutes can be sponsored by the universities themselves. Of course, these matters may come up before the visitor, and the Education Department will act as the Secretariat for the Visitor who is the Acting President at the present moment. If these matters actually come up before the Visitor, then only the Education Secretariat can intervene. Otherwise, universities being autonomous bodies, this is somewhat difficult at the present moment.

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6.4.77/chaitra 16, 1899 (Saka)
Uncorrected -Not for publication

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प्रश्न संख्या 20 -(कृपशः)

श्री प्रकाशवीर शास्त्री : मैं शायद अपनी बात पूरी तरह समझ नहीं पाया । जैसे कहना यह है कि इसमें सन्देह नहीं कि विश्वविद्यालय स्वायत्त संगठन है, लेकिन स्वायत्त संगठनों के लिए भी कोई नीतियां होती हैं, उन नीतियों में शिक्षा मंत्रालय कोई गाइडलाइन दे सकता है, सेवा निर्धारित तो कर सकता है कि जो सम्मानार्थ उपाधियां इस प्रकार से दी जायें उनके लिए यह होना चाहिये । अगर अब तक नहीं है तो भविष्य के लिए आप कुलपतियों का कोई सम्मेलन बुलाकर, देश के प्रसिद्ध शिक्षा शास्त्रियों का सम्मेलन बुलाकर किसी निश्चय पर तो पहुंचे, मैं तो यह चाहता हूँ ।

DR. PRATAP CHANDRA CHUNDER:

As I already said - perhaps, it was not clear -as the Act stands at the present moment, the Central Government has no direct control over the state universities and with regard to Central universities also the Government is bound by the Acts. Of course, the Acts may be changed and if it is the suggestion of the Honourable Member that we should change the Acts the suggestion might be looked into and examined carefully by the Ministry.

प्रश्न संख्या 20 - (कृपशः)

श्री प्रकाशवीर शास्त्री : यूनिवर्सिटी ग्रांट्स कमीशन डायरेक्ट शिक्षा मंत्रालय के अन्तर्गत आता है । यूनिवर्सिटी ग्रांट्स कमीशन तो प्रान्तों के विश्व-विद्यालयों को पैसा भी देता है । तो यह कहना कि वे स्वायत्त संगठन हैं, या उनका शिक्षा मंत्रालय से सीधा सम्बन्ध नहीं है, यह जिम्मेदारी से थापना है । नियम अगर अब तक नहीं बनाये तो आगे के लिए कोई रखाये लीचिये कि इस प्रकार से जो उपाधिया दी जाती है उनका दुरुपयोग न हो सके ।

DR PRATAP CHANDRA CHUNDER: Sir, I have already stated the present statutory position. The Honourable Member may himself give some concrete suggestion how we can have this matter changed. As you know, Sir, education is now a Concurrent subject. So, these matters can be gone into by the Central Government and the Honourable Member himself may also initiate some private legislation in this behalf.

SMT. SUMITRA G. KULKARNI (Gujarat): Sir, if I have understood the Honourable Minister correctly, there appears to be no consistent policy followed in this matter by each university. If that be so, Sir, will the Honourable Minister, as suggested by the Honourable Member, Shri Prakash Veer Shastri, at least now.

consider appointing a commission or some senior educationist of this country for deciding as to how

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Question No. 20 (contd.)

the Honoris Causa degrees could be awarded and evolve a uniform policy, because it is admitted that in the previous years a number of such awards have been taken or given to people who are not quite worthy of that honour. I will not say that they were not, but still that is questionable and we may not go into that matter. But, it is very essential that we should not avoid this problem and we should face it squarely with the university Grants Commission also. And, particularly now that it is a Concurrent subject, it is the greater responsibility of the Education Ministry to tackle this issue and straighten it up once and for all. Will the Hon. Minister assure this House that he will seriously consider this proposal?

DR. PRATAP CHANDRA CHUNDER: Sir, it has been repeated several times that the universities are autonomous bodies and in their statutes, the rules for conferment of honorary degrees are absolutely different. And yesterday in my statement, I have made it clear before this august House that the Government has no intention to interfere unduly with the autonomy of the universities. we believe that these **universities** are run by responsible people. So, if in any particular case, there is something to complain about, that might be agitated elsewhere rather than in this august House.

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श्री नागेश्वर प्रसाद शाही : श्रीमान, श्री यशोदय ने अभी तक जो विभिन्न प्रश्नों के संबंध में जवाब दिया है उससे साफ़ जाहिर है कि यह जनता पार्टी की सरकार के मिनिस्टर का जवाब नहीं है बल्कि किसी लिबरल पार्टी के मिनिस्टर का जवाब है । श्री यशोदय इस बात को अवाएड करना चाहते हैं कि वह शिक्षा के मामले में कोई री-स्कूल सुधार की बात सोच रहे हैं या नहीं । श्री यशोदय, यह स्वीकार करते हुए कि एजुकेशन अब कस्टीडियुशन में कोर्टेड सब्जेक्ट हो गया है, कोई नीति निर्धारण की बात नहीं कर रहे हैं । अभी तक 30 साल में भारत सरकार शिक्षा के मामले में कोई नीति निर्धारण करने में असफल रही है ।

श्री उपस्थापित : आपका प्रश्न उस प्रश्न में नहीं उठता । उसी प्रश्न से संबंधित अपना प्रश्न पूछिये ।

श्री नागेश्वर प्रसाद शाही : मैं श्री यशोदय से जानना चाहता हूँ कि क्या यह इस संबंध में कोई गाइडेंस राज्य सरकारों को और विभिन्न विश्वविद्यालयों को देने को तैयार है ? स्वायत्त संस्थाओं को गाइडेंस दी जा सकती है, डाइरेक्टिव दी जा सकती है । एजुकेशन मिनिस्टरों को यह परम्परा अधिकार है कि स्वायत्त संस्थाओं को और विभिन्न विश्वविद्यालयों को अपनी गाइडेंस दे । क्या श्री यशोदय इस संबंध में कोई डेफिनेट गाइडेंस विश्वविद्यालयों को देने की बात सोच रहे हैं ताकि इसका दुरुपयोग न हो ? कुछ ऐसे अप्पार, कुछ दूसरे ऐसे लोग डी० लिट० और पी० एच० डी० की डिग्रियां ले जाते हैं जो कि डिजर्व नहीं करते ।

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DR. PRATAP CHANDRA CHUNDER: I do not disagree with the Hon. Member when he says that guidelines can be indicated. Certainly guidelines can be formulated and suitable directions may be given. But where I disagree with him is when he says that the Janata Party has not indicated its educational policy. In fact, in my statement before you, Sir, I have indicated this policy and I have stated that we would lay more emphasis on the removal of illiteracy rather than on higher education. Of course, higher education is very important. But, at the same time, we notice that more than 200 million people are still illiterate. Therefore, this Government in pursuance of its declared policy will lay more emphasis on fundamental and other education.

SHRI NAGESHWAR PRASAD SHAHI: What about removal of corruption in universities?

श्री उपसभापति : आगला प्रश्न डा० लोकेश चन्द्र । (ends)

Statement showing the criteria and the procedure followed by the Universities for the award of degree 'Honoris Causa'.

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CENTRAL UNIVERSITIES :

1. Aligarh University

POWERS IN RESPECT OF GRANTING AND WITHDRAWING DEGREES

1. The Executive Council may, by resolution passed by a majority of not less than two-thirds of the members present and voting :-

- (a) on the recommendation of Academic Council, make proposals to the Chancellor for the conferment of honorary degrees;
- (b) withdraw any ordinary degree or diploma conferred by the University; and
- (c) with the sanction of the Chancellor, withdraw any honorary degree.

2. Notwithstanding anything contained in clause (1), in cases of urgency, the Chancellor, may, on the recommendations of the Executive Council alone, confer an honorary degree.

The degree of D. Litt., D.Sc., LL.D. or D.Th. may be conferred, Honoris Causa upon distinguished persons in recognition of their outstanding contribution to knowledge of their meritorious services in the cause of education in accordance with Statute 31(1) (a) and (2).

2. Banaras Hindu University Statute 39 :

- (1) The Degree of Doctor of Letters (D.Litt.), or Mahamahopadhyaya, Honoris Causa, shall be conferred upon such persons as have

Banaras Hindu University
Contd.

contributed substantially to the advancement of Literature, Philosophy, Art, Music, Painting or any other subject assigned to the Faculty of Arts, or for conspicuous service rendered by them to the cause of education.

(2) The Degree of Doctor of Science (D.Sc.) Honoris Causa shall be conferred upon such persons as have contributed substantially to the advancement of any branch of science or technology or to planning, organising or developing scientific and technological institutions, in the country.

(3) The Degree of Doctor of Laws (LL.D.) Honoris Causa shall be conferred upon persons, who are distinguished lawyers, judges or jurists, statesmen or have made noteworthy contribution to public good.

The procedure for conferring the Degree of D.Litt., D.Sc., LL.D. Honoris Causa is as follows :

(i) The Vice-Chancellor recommends name/names for the award of Honorary Degree/Degrees to the Academic Council. The proposal after it is accepted by the Academic Council is forwarded to the Chancellor for ratification.

(ii) The Chancellor may, in special or urgent cases, act on the recommendation of the Vice-Chancellor and accept proposal for the award of Honorary Degrees.

(iii) The Honorary Degree may be conferred either at the Annual Convocation of the University or at a Special Convocation convened for the purpose.

3. Delhi University

Guidelines being followed by the University in this regard are given below :

(a) The University might confer the Degree of Science (D.Sc.)/Literature (D.Litt.)/Law (LL.D.) and D.C.L. (Doctor of Civil Law) honoris causa on the following two categories of persons :

- i) Distinguished scholars, men of letters and creative artists within India and outside, who have achieved national/international recognition in their respective fields.
- ii) Statesmen reputed for their scholarship and or their direct personal contribution to international understanding.

(b) There will be a standing committee in the University to consider all suggestions for such conferment. Normally, not more than two Special Convocations will be held by the University in the course of an academic year.

(c) Suggestions for conferment of the degree should reach the University at least 6 weeks in advance of the date on which the conferment is proposed.

Statute No. 24 :

4. Jawaharlal Nehru University

Any proposal for the conferment of honorary degrees shall be made by the Academic Council to the Executive Council, and the proposal if accepted by the Executive Council, shall require the assent of the Court before submission to the Chancellor for confirmation.

Statute No. 25:

The Academic Council may, by a special resolution passed by a majority of not less than two-thirds of the members present and voting, withdraw any degree or

Jawaharlal Nehru
University Contd.

academic distinction conferred on,
or any certificate or diploma
granted to any person by the
University for good and sufficient
cause.

Statute No.29:

5. Hyderabad University

(1) The Executive Council may, on
the recommendation of the
Academic Council and by a reso-
lution passed by a majority
of not less than two-thirds of
the members present and voting,
make proposals to the visitor
for conferment of honorary
degrees :

Provided that in case of . . .
emergency, the Executive Council
may, on its own, make such
proposals.

(2) The Executive Council may, by
a resolution passed by a
majority of not less than
two-thirds of the members
present and voting, withdraw,
with the previous sanction
of the visitor, any honorary
degree conferred by the
University.

The University has not yet laid
down the criteria for award of
Honorary degrees. However, it is
anticipated that the Academic
Council and the Executive Council,
while making proposals in this
regard will take into consideration
eminent position and attainments
of the persons recommended for such
academic distinction. Convocation
for award of degrees has not so far
been held at this University.

6. North Eastern Hill
University

The University has not laid down
any guidelines for award of
degrees 'Honoris Causa'.

7. Viswa Bharati

Statute No.22 :

- (1) All proposals for the conferment of honorary degrees shall be initiated by the Upacharya (Vice-Chancellor) who, after consultation with the Siksha Samiti (Academic Council) and the Karma Samiti (Executive Council) shall submit the same to the Acharya (Chancellor) for confirmation:

Provided that, in case of urgency, the Acharya (Chancellor) may act on his own initiative, and confer the degrees.

- (2) Any honorary degree conferred by the University, may, with the previous sanction of the Acharya (Chancellor), be withdrawn by the Karma-Samiti (Executive Council).

STATE UNIVERSITIES:

1. Agra University

The Executive Council constitutes a sub-committee of its members to suggest the names of eminent educationists for being awarded the degree. The Committee, after considering the contribution of a person in the cause of education or research, recommends the names to the council. These names are considered by the Executive Council and the persons thought fit by it are recommended to the Chancellor. After receiving the assent of the Chancellor, the persons are awarded honorary degrees at the University Convocation.

2. Allahabad University

(a) The Degree of Doctor of Letters (D.Litt.) or Mahamahopadhyaya, Honoris Causa, may be conferred upon such persons as have contributed substantially to the advancement of Literature, Philosophy, Art, Music, Painting or any other subject assigned to the faculty of Arts, or for conspicuous services rendered by them to the cause of education.

(b) The degree of Doctor of Science (D.Sc.), Honoris Causa, may be conferred upon such persons as have contributed substantially to the advancement of any branch of science or technology or to planning organising or developing scientific and technological institutions in the country.

(c) The degree of Doctor of Laws (LL.D.), Honoris Causa, may be conferred upon persons, who are distinguished lawyers, judges or jurists, statesmen or have noteworthy contribution to the public good.

The Executive Council may, suo motu or on the recommendation of the Academic Council by a resolution

Allahabad (contd.)

passed by a majority of its total membership and also of not less than two-thirds of the members present and voting submit a proposal for conferment of honorary degree to the Chancellor for confirmation under Section 10(2):

Provided that no such proposal shall be submitted in respect of a person who is a member of any authority or body of the University.

3. Andhra University

With reference to the Commission's letter cited, I am to state that the question of prescribing criteria and guidelines for the conferment of Honorary degrees is being considered at a conference of the 5 Vice-Chancellors in the State and that the decision arrived at will be intimated to the Commission as soon as it is received.

4. Annamalai University

1. The University shall have power to confer honorary or ad eundem degrees or other distinctions in the manner prescribed; and statutes shall be framed for such purpose.

Honorary Degrees:

Statute:

2. Every proposal for the conferment of honorary degrees shall be subject to the confirmation of the Chancellor.

All proposals for the conferment of honorary degrees shall be made by the Syndicate and shall be placed before the Senate for its assent. No proposal shall be made by the Syndicate unless it be on the recommendation of not less than two-thirds of the members of the Syndicate. After the Senate assents to the proposal, the Syndicate shall submit the same to the Chancellor for confirmation.

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Annamalai (contd.)

Provided that in case of urgency the Chancellor may act on the recommendation of the Syndicate only.

The diploma or certificate for an Honorary Degree shall be signed by the Chancellor.

5. Assam Agricultural University.

Conferment of Honorary Degrees : The Board of Management shall on the recommendation of the Academic Council subject to confirmation by the Chancellor have the power to confer Honorary Degree at a convocation or in absentia on persons who have distinguished themselves in the fields of Agricultural education or research or extension and have rendered outstanding services to the Indian Agriculture.

2. All proposals for the conferment of Honorary Degree shall be considered by a committee consisting of the Vice-Chancellor and the Deans of the Colleges, if accepted by the committee shall be placed before the Academic Council.

6. Awadesh Pratap Singh University

Statute No. 14 Honorary Degree (Refer section 35 (g) - A proposal for conferment of Honorary Degree may be made by the Standing Committee of the Academic Council unanimously. It shall be placed before a committee consisting of the Kulpati, a nominee of the Kuladhipati and the Dean of the Faculty concerned. If the committee unanimously recommends that an honorary degree be conferred on any person on the ground that he is, in its opinion a fit and proper person to receive such degree, its recommendation shall be placed before the Academic Council. On approval by the Academic Council it shall go before the Executive Council.

A.P. Singh (contd.): If not less than two third of the members of the Executive Council recommends and when their recommendation is supported by a majority of not less than two thirds of the members present and voting at a meeting of the court, such majority being not less than one-half of the total membership of the court, for the time being, the Court may, if such recommendation is confirmed by the Kuladhipati, confer on such person the honorary degree so recommend :

Provided that, in case of urgency, the Kuladhipati may act on the recommendation of the Executive Council.

Provided that, in cases of emergency such proposal may be confirmed by Kuladhipati if the said committee's recommendation has been approved by the Executive Council.

7. Bangalore University: Honorary Degree or other Distinctions:

91. The Senate may confer the following Honorary degrees under Section 55 of the Act :

| | |
|----------------------|---------|
| Doctor of Law | LL.D. |
| Doctor of Letters | D.Lit. |
| Doctor of Literature | D.Litt. |
| Doctor of Science | D.Sc. |

92. Honorary degree shall be conferred only at a Convocation and may be taken in person or in absentia.

93. The presentation of persons at the Convocation on whom honorary degrees are to be conferred, shall be made by the Vice-Chancellor or by a person nominated by the Syndicate for the purpose. The Vice-Chancellor or the persons nominated by the Syndicate as the case may be shall while presenting the persons on whom the honorary degrees are to be conferred read a citation.

Bangalore (contd.) 94. The diploma or a certificate for an honorary degree shall be signed by the Chancellor.

8. Berhampur
University

145.(1) The Senate may, subject to the approval of the Chancellor in each case, confer any of the following honorary degrees upon a person on the ground that, by reason of his eminence and attainment or contribution to the cause of learning or education, he is a fit and proper person to receive such degree :

| | |
|----------------------|-----------|
| Doctor of Laws | (LL.D.) |
| Doctor of Literature | (D.Litt.) |
| Doctor of Science | (D.Sc.) |

Provided that no proposal to confer an honorary degree shall be brought before the Chancellor unless it is passed by not less than two-thirds of the member of the Syndicate at a meeting and subsequently confirmed by a vote of not less than two-thirds of the Senate at a meeting.

2. Honorary degrees shall be conferred only at a Convocation and may be taken in person or in absentia.

3. The person upon whom an honorary degree is to be conferred shall be presented by the Dean of the respective Faculty and in the case of a person who has been approved by the Chancellor for the Degree of LL.D. by the Vice-Chancellor.

Provided that if the Degree of LL.D. is to be conferred on the Vice-Chancellor he shall be presented by the Dean of Faculty of Law, provided also that in case the degree of D.Litt. or D.Sc. is to be conferred on the Dean of the respective Faculty he shall be presented to the Chancellor by the Vice-Chancellor.

4. Ordinarily, and in accordance with clause (1) the honorary degree

Berhampur (contd.)

of LL.D. shall be conferred on persons who have attained eminence in public affairs, the honorary degree of D.Litt. on persons who have attained eminence by virtue of contribution to learning or education and the honorary degree of D.Sc. on persons who have attained eminence by virtue of contribution to science and an established place in the scientific world.

5. The forms for the honorary degrees shall be prescribed by the Syndicate.

9. Bhopal University: Statute No. 14 - Honorary Degree. A proposal for conferment of Honorary Degree may be made by the Standing Committee of the Academic Council unanimously. It shall be placed before a committee consisting of the Kulapati, a nominee of the Kuladhipati and the Dean of the Faculty concerned. If the Committee unanimously recommends that a honorary degree be conferred on any person on the ground that he is, in its opinion a fit and proper person to receive such degree, its recommendation shall be placed before the Academic Council. On approval by the Academic Council it shall go before the Executive Council.

If not less than two-third of the members of the Executive Council recommend and when their recommendation is supported by a majority of not less than two-third of the members present and voting at a meeting of the Court such majority being not less than one-half of the total membership of the Court, for the time being, the Court may, if such recommendation is confirmed by the Kuladhipati, confer on such person, the honorary degree to recommended:

p.t.o.

Bhopal (contd.):

Provided that, in cases of urgency, the Kuladhipati may act on the recommendation of the Executive Council.

Provided further that, in cases of emergency such proposal may be confirmed by Kuladhipati if the said Committee's recommendation has been approved by the Executive Council.

10. Bidhanchandra
Krishi
Viswavidyalaya:

This Viswa Vidyalaya has not formulated yet Criteria and the procedures for the award of "Doctoris Honoris Causa".

11. Bihar University:

1. (i) On the recommendation of not less than two-thirds of the members of the Syndicate at a meeting, the Senate, may if two-thirds of the members present and voting at a meeting of the Senate support the recommendation, resolve to confer any of the following honorary degrees upon a person on the ground that he is, by reason of eminent position and attainment or by virtue of his contribution to learning or knowledge or eminent service to the cause of education, a fit or proper person to receive any such degree :

| | |
|----------------------|-----------|
| Doctor of Laws | (LL.D.) |
| Doctor of Literature | (D.Litt.) |
| Doctor of Science | (D.Sc.) |

(ii) Every resolution shall be subject to confirmation by the Chancellor.

2. Honorary degrees shall be conferr only at a Convocation and may be taken in person or in absentia.

3. The presentation of the persons a the Convocation on whom honorary degrees are to be conferred shall be made by the Vice-Chancellor.

Statute-55:

12. Bombay University: The Executive Council may consider and recommend to the Senate the conferment of an honorary degree or other academic distinction on any person, without requiring him to undergo any test or examination, on the ground solely that he, by reason of his eminent position, attainments and public service, is a fit and proper person to receive such degree or other academic distinction, and such recommendation shall be deemed to have been duly passed if supported by a majority of not less than two-thirds of the members present at the meeting of the Senate, being not less than one-half of its total membership:

Provided that, the Executive Council shall not entertain or consider any proposal in that behalf without the Vice-Chancellor having obtained the previous approval of the Chancellor."

As regards the procedure, the honorary degree is conferred at a Convocation. This University awards only one honorary degree namely the degree of LL.D. (Doctor of Laws). The general convention in regard to the making of the recommendation for the conferment of the honorary degree is that, the Executive Council makes the recommendation unanimously. This University has been very sparing by tradition, in the conferment of the LL.D. degree which it considers as the highest honour in its gift.

13. Burdwan University: The Executive Council sponsors the names of persons who may be awarded Doctorate Degree 'Honoris Causa' at the annual convocation. The names are placed before "The University" for approval and then the persons whose names have been approved by "The University" are awarded D.Litt./D.Sc. "Honoris Causa".

14. Bundelkhand
University

All proposals for conferment of honorary degree shall be made by the Executive Council and shall require the assent of the Court before submission to the Chancellor.

Provided that in cases of urgency the Chancellor may act on the recommendation of the Executive Council only.

Provided further that no honorary degree shall be conferred on anyone who is a member of the Court or of any other University Authority or body.

..... 15. Calcutta University Under Section 20(1)(VI) of Calcutta University Act, 1966. the Senate of this University has been empowered "to confer honorary degrees or other academic distinctions and under Section 23(1) (XXIII) of the same Act, the Syndicate has been given the power to recommend to the Senate the conferment of honorary degrees and other academic distinctions". The recommendation on the subject is generally made by the Syndicate on consideration of a proposal made by one of its members for conferment of an honorary degree on any person who is considered eminently suitable for that purpose by virtue of his position and achievements.

The honorary degree is actually conferred at a convocation of the University after the recommendations of the Syndicate and the Senate are confirmed by the Chancellor. At the Convocation the honorary degree is conferred by the Chancellor on the recipient on the latter's being presented to him by the Vice-Chancellor.

16. Calicut University: (1) On the recommendation of the Syndicate, an honorary degree may be conferred on any distinguished person approved by the University who, by reason of his eminent position and attainments or by virtue of his contributions to learning or eminent services to the cause of education, is a fit and proper person to receive such a degree, provided that such recommendation is accepted by not less than two thirds of the members present at a meeting of the Senate and is confirmed by the Chancellor.

Provided that it shall be competent to the Chancellor to award honorary degrees in special cases, on the recommendation of the Syndicate alone.

(2) Honorary degrees shall be conferred only at a convocation, and may be taken in person or in absentia.

(3) The presentation at the Convocation of person on whom honorary degree are to be conferred shall be made by the Vice-Chancellor or in his absence by a member of the Senate nominated by the Syndicate.

(4) The diploma or certificate for Honorary degree shall be signed by the Chancellor.

(5) The following shall be the degrees to be conferred as Honorary degrees:

- | | |
|-------------------|---------|
| Doctor of Science | D.Sc. |
| Doctor of Letters | D.Litt. |
| Doctor of Law | LL.D. |

(6) Convocation of the body corporate of the University for the purpose of conferring Honorary degrees shall be summoned by the Chancellor at such time and on such dates as the Chancellor may appoint for the purpose.

Calicut (contd.):

(7) The Chancellor or the Pro-Chancellor or in the absence of both the Vice-Chancellor shall preside at the Convocation.

(8) The Registrar shall notify the date of the Convocation at least 4 weeks before the date fixed for the Convocation.

(9) The Chancellor may address or appoint an eminent person to address the Convocation.

(10) Officers of the University shall appear for the Convocation in the academic robes prescribed for them by the statutes.

(11) There shall be a meeting of the Senate preliminary to the Convocation, at which the graces of the Senate shall be supplicated on behalf of the candidate/candidates for admission to the degree/degrees by the Vice-Chancellor or his nominee.

(12) When all the graces have been passed, Registrar the members of the Senate and the Syndicate, the deans of faculties the Vice-Chancellor, the Pro-Chancellor and the Chancellor shall proceed in procession to the hall at which the degrees are to be conferred. When all have taken their seats the Chancellor shall rise up and mention the purpose of the Convocation.

The Vice-Chancellor or any member nominated by him shall the cause the citation to be presented to the Senate before the convocation about the candidate.

(13) After the citation the Chancellor shall admit the candidate/candidates to the degree/degrees.

Calicut (contd.):

(14) After the conferment of the degree/degrees the Registrar shall lay the record of Honorary degrees that have been conferred before the Chancellor who shall sign the same.

(15) An address may then be made by the candidate/candidates on whom degree has been conferred.

(16) The address being ended or if there is no address after the record has been signed the Chancellor shall dissolve the convocation.

(17) The Convocation being dissolved the Chancellor, the Pro-Chancellor, the Vice-Chancellor the Deans of Faculties, members of the Syndicate and Senate and the recipient of the degrees shall retire in procession.

17. Chandrasekhar Azad University of Agriculture & Technology:

This is a new University and regulations for the award of degrees "Honoris Causa" are yet to be framed.

18. Cochin University:

On the recommendation of the Syndicate, an honorary degree may be conferred on any person who, by reason of his eminent position and attainments or by virtue of his contribution to learning or eminent services to the cause of education, is a fit and proper person to receive such a degree, provided that such recommendation is accepted by not less than two-thirds of the members present at a meeting of the Senate and is confirmed by the Chancellor.

Provided that it shall be competent to the Chancellor to award honorary degrees in special cases, on the recommendation of the Syndicate alone.

Honorary degrees shall be conferred only at a Convocation, and may be taken in person or in absentia.

Cochin (contd.):

The presentation at the Convocation of persons on whom honorary degrees are to be conferred shall be made by the Vice-Chancellor or, in his absence, by a member of the Senate nominated by the Syndicate.

The diploma or certificate for an honorary degree shall be signed by the Chancellor.

The following shall be the degrees to be conferred as Honorary Degrees:

| | |
|-------------------|---------|
| Doctor of Science | D.Sc. |
| Doctor of Letters | D.Litt. |
| Doctor of Laws | LL.D. |

19. Gauhati University: All proposals for the conferment of honorary degrees shall be made by the Academic Council to the Executive Council and shall require the assent of the Court before submission to the Chancellor for confirmation.

Provided that, in cases of emergency the Chancellor may act on the recommendation of the Executive Council only.

Any honorary degree conferred by the University may, with the previous approval of the two-thirds of the members present at any meeting of the Court and the sanction of the Chancellor, be withdrawn by the Executive Council.

20. Garhwal University: The matter is under the consideration of the University.

21. Gorakhpur University:

14.0(a) The degree of Doctor of Letters (D.Litt.) or Mahamahopadhyaya, Honoris Causa may be conferred upon such persons as have contributed substantially to the advancement of Literature, Philosophy, Art, Music, Painting or any other subject

Gorakhpur (Contd.):

assigned to the faculty of Arts, or for conspicuous services rendered by them to the cause of education.

(b) The degree of Doctor of Science (D.Sc.) Honoris Causa, may be conferred upon such persons as have contributed substantially to the advancement of any branch of science or technology or to planning, organising or developing scientific and technological institutions in the country.

(c) The degree of Doctor of Laws (LL.D. Honoris Causa) may be conferred upon persons, who are distinguished lawyers, judges or jurists, statesmen or have noteworthy contribution to the public good.

14.02 The Executive Council may, suo motu or on the recommendation of the Academic Council by a resolution passed by a majority of its total membership and also of not less than two-thirds of the members present and voting submit a proposal for conferment of honorary degree to the Chancellor for confirmation under Section 10(2):

Provided that no such proposal shall be submitted in respect of a person who is a member of any authority or body of the University.

22. GB Pant University of Agriculture & Technology:

Special Convocation Procedure for the Honorary Degrees of the University.

A special convocation for conferment of the Honorary Degrees of the University shall be held on such date and time as may be fixed by the Vice-Chancellor.

p. t. o.

23. Gujarat University: Statute: 177 - In the case of persons recommended under the provisions of section 45 of the Act, the procedure for the conferment of such honorary degrees or awards at a Convocation shall be the same as followed in the case of those who become eligible under the provisions of Statute 175 for the award of degrees or diplomas as the result of their passing respective examinations therefor.

Section - 45 : On recommendation of the Academic Council, if not less than two-thirds of the members of the Executive Council recommend that an honorary degree, title or other academic distinction be conferred on any person on the ground that he is in their opinion, by reason of eminent position and attainments, a fit and proper person to receive degree, or other academic distinction and when their recommendation is supported by a majority of not less than two-thirds of members of the court present at a meeting of the court, such majority comprising not less than one-half of the members of court, and the recommendation is conferred by the Chancellor the court may confer on such person the honorary degree, or other academic distinction so recommended without requiring him to undergo any examination.

23. Gujarat Ayurved University:

If not less than two-thirds of the members of the Syndicate recommend that an honorary degree, or other academic distinction be conferred on any person on the ground that he is in their opinion, by reason of eminent position and attainments a fit and proper person to receive such degree or other academic distinction and where their recommendation is supported by a majority of not less than two-thirds of the

Gujarat Ayurved (Contd): members of the Senate present at a meeting of the Senate, such majority comprising not less than one-half of the members of the Senate, and the recommendation is confirmed by the Chancellor, the Senate may confer on such person the honorary degree or other academic distinction so recommended without requiring him to undergo any examination.

Statute - 152: Every person who passes an examination for a degree or diploma of the University shall be eligible on payment of a prescribed fee, to be admitted to the respective degree or diploma in person or in absentia at his option.

Statutes - 154: In the case of persons recommended under the provision of the Section 39 of the Act, the procedure for the conferment of such honorary degrees or awards at a Convocation shall be the same as followed in the case of those who become eligible under the provisions of Statute 152 for the award of diplomas as the result of their passing the respective examinations therefor.

A degree of Doctor of Literature (Ayurved) (D.Litt) Ayurved Honoris Causa shall be conferred upon such persons as have rendered service to the cause of Ayurvedic Education.

25. Gujarat Agricultural University:

(a) The University shall subject to confirmation by the Chancellor have power to confer Honorary degrees and other academic distinctions on the recommendations of the Academic Council.

(b) All proposals for conferment of Honorary degrees shall be made to the committee consisting of the

Gujarat Agricultural University (Contd.):

Vice-Chancellor and Deans/Associate Deans and shall, on acceptance by the committee be placed before the Academic Council and Board of Management for approval.

(c) The proposal, after approved by the Board shall be submitted to the Chancellor for confirmation.

The Academic Council has prescribed proforma so that necessary proposal is required to be submitted which is to be submitted to the Academic Council for consideration.

The proforma will include following information.

1. Name & address of the person to whom Honorary degree to be conferred.
2. Birth date:
3. Educational Qualifications:
(From Secondary School to College Degree Year & University Class from which degree obtained.
4. Experience
Details Period from to To Period of Experience
Year Month
A. Education
B. Research.
C. Extension Education.
D. Others
5. Details of achievements made under Education, Research and Extension Education.
6. Publication Papers and Books
7. Membership of National & International Societies.
8. Effect of achievement on National and International on products level.
9. Honorary Degree/Awards received for achievements.
Details Degree/Award Period

Gujarat Agricultural University (contd.):

10. Recommendations of Deans and Associate Deans.

11. Recommendation for Academic Council.

After receipt of report in above proforma the matter will be discussed in meeting of Deans and Associate Deans and then Academic Council.

26. Guru Nanak Dev University:

Where the Vice-Chancellor and not less than two-thirds of the other members of the Syndicate recommend that an Honorary Degree be conferred on any person on the ground that he is, in their opinion, by reason of eminent position and attainments, a fit and proper person to receive such a degree and where the recommendation is supported by not less than two-thirds of the Fellows present at a meeting of the Senate and is confirmed by the Chancellor, the Senate may confer on such person the Honorary Degree so recommended without requiring him to undergo any examination:

Provided that in cases of urgency the Chancellor may act on the recommendation of the Syndicate only.

27. Haryana Agricultural University:

1. The University shall, subject to confirmation by the Chancellor have the power to confer honorary degrees and other academic distinctions on the recommendations of the Academic Council.
2. All proposals for the conferment of honorary degrees shall be made to the Committee consisting of the Vice-Chancellor and the Deans of the Colleges and, if accepted by the Committee, shall be placed before the Academic Council and the Board of Management for approval before submission to the Chancellor for confirmation.

28. Himachal Pradesh
University:

Ordinance 41.1 : All proposals for the conferment of honorary degrees shall be considered by a Committee of the Deans of all the Faculties. This Committee shall examine in which Faculty the degree, if any, should be awarded. If the majority of the Deans present and voting approve the conferment of the honorary degree, the Vice-Chancellor shall report the proposal to the Academic Council for further action under Statute 20 of the First Statute of the University. The proposal shall not, however, be subject to debate either in the Academic Council or in the Court, but if necessary, it may be put to vote and a decision taken by secret ballot in the Academic Council or in the Court."

Statute - 20: Honorary Degrees -
(1) All proposals for the conferment of Honorary Degrees shall be made by the Academic Council to the Executive Council, and shall require the assent of the Court before submission to the Chancellor for confirmation.

Provided that, in cases of urgency the Chancellor may act on the recommendation of the Executive Council only.

(2) Any Honorary Degree conferred by the University may with the previous approval of two-thirds of members of the Court and the sanction of the Chancellor be withdrawn by the Executive Council

29. Indira Kala
Sangeet
Visvavidyalaya.

1. Every proposition for the conferment of an Honorary Degree is first considered by a Committee consisting of the Vice-Chancellor, the Rector, if any, and the Deans of Faculties. The Criteria followed by the Committee is as mentioned below;

- Indira Kala (Contd.): The Committee shall consider if the person proposed:
1.
 - i. is distinguished for his learning; or
 - ii. has rendered eminent services to the cause of education; or
 - iii. has, by his munificence promoted the cause of education; or
 - iv. has rendered outstanding public service in other ways, and is otherwise fit in all respect for the conferment of the degree.
 2. If after such consideration, it commends the proposition to the acceptance of the Shiksha Samiti its report shall be placed before Shiksha Samiti alongwith the proposition.
 3. If the committee is of opinion that it is advisable to drop all further proceedings relating to the proposition the opinion shall be communicated to member giving notice of the proposition and no further action shall be taken in the matter unless he confirms in writing his intention to move the proposition in which case the proposition shall be placed before the Shiksha Samiti along with the proceedings of the committee on the subject.
 4. All propositions for the conferment of the Honorary Degree shall be put to vote (i) without discussion and (ii) by ballot.
 5. No propositions for the conferment of an Honorary Degree shall be declared to have been passed by the Shiksha Samit, unless a majority of not less than two-third of the members present at the meeting vote in its favour.
- II. 2. If the above committee recommends then only proposals are considered by the Academic Council for recommendation to the Executive Council.

Indira Kala (contd)

3. If the Executive Council accepts the recommendations it forwards its recommendations to the University Court.

4. If the University Court okayes the proposals, they are then submitted to the Chancellor for final approval.

Statute-14(Refer Section 35(g):

30. Indor University:

A proposal for conferment of Honorary Degree may be made by the Standing Committee of the Academic Council unanimously. It shall be placed before a committee consisting of the Kulapati, a nominee of the Kuladhipati and the Dean of the Faculty concerned. If the Committee unanimously recommends that an honorary degree be conferred on any person on the ground that he is, in its opinion, a fit and proper person to receive such degree, its recommendation shall be placed before the Academic Council. On approval by the Academic Council it shall go before the Executive Council.

If not less than two-thirds of the members of the Executive Council recommend and when their recommendation is supported by a majority of not less than two-thirds of the members present and voting at a meeting of the Court, such majority being not less than one-half of the total membership of the Court, for the time being, the Court may, if such recommendation is confirmed by the Kuladhipati, confer on such person, the honorary degree so recommended.

Provided that, in cases of urgency, the Kuladhipati may act on the recommendation of the Executive Council.

Indore University
(Contd.)

Provided further that, in case of emergency such proposal may be confirmed by Kuladhipati if the said Committee's recommendation has been approved by the Executive Council.

31. Jabalpur University: There exists a provision in Section 35(g) of the Madhya Pradesh Vishwavidyalaya Adhiniyam, 1973, under which a Unified Statute No.14 has been framed by the Co-ordination Committee which is applicable to all universities in Madhya Pradesh.

Statute No. 14 - Honorary Degree - Refer Section 35 (g) - A proposal for conferment of Honorary Degree may be made by the Standing Committee of the Academic Council unanimously. It shall be placed before a committee consisting of the Kulpati, a nominee of the Kuladhipati and the Dean of the Faculty concerned. If the Committee unanimously recommends that an honorary degree be conferred on any person on the ground that he is, in its opinion, a fit and proper person to receive such degree, its recommendation shall be placed before the Academic Council. On approval by the Academic Council it shall be go before the Executive Council.

If not less than two-thirds of the members of the Executive Council recommend and when their recommendation is supported by a majority of not less than two-thirds of the members present and voting at a meeting of the Court such majority being not less than one-half of the total membership of the Court, for the time being, the court may, if such recommendation is confirmed by the Kuladhipati, confer on such person, the honorary degree so recommended.

- Jabalpur (Contd.): Provided that, in cases of urgency, the Kuladhipati may act on the recommendation of the Executive Council.
- Provided further that, in cases of emergency such proposal may be confirmed by Kuladhipati if the said committee's recommendation has been approved by the Executive Council.
32. Jadavpur University: The University has no guideline covering the rules for award of degree of Honoris Causa. Generally the Dean or the Deans of Faculties in consultation with the Vice-Chancellor forwards the name/s of the person/s to the University for award of the degree.
33. Jammu University: The University have a provision in the University Act, but no criteria or procedure has been laid down so far.
34. Jawaharlal Nehru Krishi Vigyan Vishwavidyalaya: The Academic Council examines the proposal for award of degrees Honoris Causa. The Council shall, thereafter, forward to the Board of Management through the Vice-Chancellor the result of such examination. The Board shall make such recommendations to the Chancellor as it deems to be in the best interests of the Vishwavidyalaya.
35. Jawaharlal Nehru Technological University: Statute - XIII - Conferment of Honorary Degrees and Academic Distinctions.
1. Authorities competent to recommend and approve awards. The Council shall have power, on the recommendations of the Academic Development Board, and subject to confirmation by the Chancellor, to confer honorary degrees and other academic distinctions on persons by

Jawaharlal Nehru
Technological (contd.): virtue of their eminence and attainments in industry or contributions to the cause of learning in Science, engineering, technology, architecture, fine arts or have established position in the industrial/scientific world and who are considered fit and proper to receive such honorary degrees.

2. Proposals for Awards - How to be processed - All proposals of the Academic Development Board for conferment of honorary degrees and distinctions shall be made to a Committee consisting of the Vice-Chancellor and two other members appointed by the Council. The Council, before approving the proposal of the Academic Development Board and its submission to the Chancellor for confirmation, shall take the opinion of the said committee.

3. Conferment of Awards - The honorary degrees or distinctions shall be conferred at convocation and may be taken in person or in absentia.

4. Presentation of Award at Convocation - The presentation at a convocation of persons on whom honorary degrees are to be conferred shall be made by the Vice-Chancellor or by any other person nominated by the Council for the purpose.

5. Council empowered to make Rules for convocations - The Council shall have the authority to make or alter the rules of procedure to be followed at such convocation.

36. Jiwaji University: A proposal for conferment of Honorary Degree may be made by the Standing Committee of the Academic Council unanimously. It shall be placed before a committee consisting of the Kulapati, a nominee of the Kuladhipati and the Dean of the Faculty concerned. If the Committee unanimously recommends that a honorary degree be conferred on any person on the ground that he is, in its opinion a fit and proper person to receive such degree, its recommendation shall be placed before the Academic Council. On approval by the Academic Council it shall go before the Executive Council.

If not less than two thirds of the members of the Executive Council recommend and when their recommendation is supported by a majority of not less than two-thirds of the members present and voting at a meeting of the Court such majority being not less than one-half of the total membership of the court, for the time being, the court may, if such recommendation is confirmed by the Kuladhipati, confer on such person, the honorary degree so recommended;

Provided that, in cases of urgency, the Kuladhipati may act on the recommendation of the Executive Council.

Provided further that, in cases of emergency such proposal may be confirmed by Kuladhipati if the said Committee's recommendation has been approved by the Executive Council.

37. Jodhpur University: Honorary Degree - Statute 16(1)

All proposals for the conferment of honorary degrees shall be made by

Jodhpur (contd.): the Academic Council to the Syndicate and shall require the assent of the Senate before submission to the Chancellor for confirmation:

Provided that, in the cases of urgency, the Chancellor may act on the recommendation of the Syndicate only.

Honorary Degree Statute 16(2):

Any honorary degree conferred by the University may, with the previous approval of the two-thirds of the members of the Senate and the sanction of the Chancellor be withdrawn by the Syndicate.

38. Kakatiya University:

The University has not so far conducted the first convocation after the Postgraduate Centre has been upgraded as Kakatiya University. Guidelines have not been laid down for the award of degrees "Honoris Causa". After the rules are formed, they will be communicated to UGC.

39. Kanpur University:

14.01 (A) The Degree of Doctor of Letters (D.Lit.) or Mahamahopadhyaya Honoris Causa, may be conferred upon such persons as have contributed substantially to the advancement of Literature, Philosophy, Art, Music Painting or any other subject assigned to the faculty of Arts or for conspicuous services rendered by them to the cause of education.

(B) The degree of Doctor of Science (D.Sc.) honoris causa, may be conferred upon such persons as have contributed substantially to the advancement of any branch of science or technology or to planning, organising or developing scientific and technological institution in the country.

Kanpur (Contd.):

(C) The degree of Doctor of Laws (LL.D.) Honōris Causa, may be conferred upon persons who are distinguished lawyers, judges or jurists or statesmen who have noteworthy contribution to the public good.

14.02 The Executive Council may, suo moti, or on the recommendation of the Academic Council by a resolution passed by a majority of its total membership and also of not less than two thirds of the members present and voting submit a proposal for conferment of Honorary degree to the Chancellor for confirmation under Section 10(2).

Provided that no such proposal shall be submitted in respect of a person who is a member of any authority or body of the university.

40. Karnatak
University:

Section - 59 : Honorary Degrees:
If not less than two-thirds of the members of the Syndicate recommend that an Honorary Degree or academic distinction be conferred on any person on the ground that he is, in their opinion, by reason of eminent attainment and position, fit and proper to receive such degree or academic distinction the Senate may, by a resolution, decide that the same may be conferred on the person recommended.

41. Kashmir
University:

No Statutes have been prescribed by the University for the award of "Honoris Causa" degrees as yet.

42. Kashi Vidyapith:

The Executive Council suo moto or on the recommendation of the Academic Council by a resolution passed by a

Kashi Vidyapith (contd) majority of its total membership and also of not less than two-third of the members present and voting, submits a proposal for conferment of honorary degree, to the Chancellor for confirmation under Section 10(2) of the UP State Universities Act. No such proposal is submitted to the Chancellor in respect of a person who is a member of any authority or body of the university. After the confirmation from the Chancellor is received the Honoris Causa Degree of D.Litt. is awarded to the person in the University's Convocation.

43. Kerala University:

1. Person on whom Honorary Degrees may be conferred : On the recommendation of the Syndicate, an honorary degree may be conferred on distinguished persons approved by the University who, by reason of their eminent position and attainments or by virtue of their contribution to learning or eminent services to the cause of education, are fit and proper persons to receive such a degree, subject to the condition that such recommendation is accepted by not less than two-thirds of the members present at a meeting of the Senate and is confirmed by the Chancellor:

Provided that it shall be competent for the Chancellor to award honorary degrees in special cases, on the recommendation of the Syndicate alone.

2. Conferment : Honorary degrees shall be conferred only at a Convocation, and may be taken in person or in absentia.

3. Presentation of persons : The presentation at the Convocation of the person on whom honorary degrees are to be conferred shall be made by the Vice-Chancellor or, in his

Kerala (contd.):

absence, by a member of the Senate nominated by the Syndicate.

4. Authentication : The diploma or certificate for an honorary degree shall be signed by the Chancellor.

5. Degrees to be conferred : The following shall be the degrees to be conferred as Honorary Degrees:

| | |
|-------------------|---------|
| Doctor of Science | D.Sc. |
| Doctor of Letters | D.Litt. |
| Doctor of Laws | LL.D. |

44. Kerala Agricultural University:

1. An honorary degree of Doctor of Science may be conferred on any person who, by reason of his eminent position and attainment or by virtue of his contribution to learning or eminent services to the cause of education is a fit and proper person to receive such a degree.

2. The Academic Council may, of its own motion or on a reference made to it, recommended the conferment of honorary degrees. The recommendation of the Academic Council shall be placed before the Executive Committee. The recommendations of the Executive Committee and the Academic Council shall be placed before the General Council and the General Council shall accept the recommendation by not less than two-thirds of the members present and voting in the meeting of the General Council. Every proposal to confer honorary degrees shall require confirmation by the Chancellor.

Provided that it shall be competent for the Chancellor to award honorary degrees in special cases, on the recommendations of the Academic Council and Executive Committee.

Kerala Agricultural
(contd.)

3. Honorary degrees shall be conferred only at a convocation and may be taken in person or in absentia.

4. The presentation at the convocation of a person on whom honorary degree is to be conferred, shall be made by the Vice-Chancellor or in his absence, by a member of the General Council nominated by the Executive Committee.

5. The certificate for an honorary degree shall be signed by the Chancellor.

Honorary Degree

45. Konkon Krishi
Vidyapeeth:

Statute No. 40 -/ If on the recommendations of the Academic Council, not less than two third of the members of the Executive Council recommend that an honorary degree, or other Academic distinction such as 'Krishi Ratna' be conferred on any person on the ground that he/she is in their opinion by reason of eminent position and attainments a fit and proper person to receive such degree, or other academic distinction and where their recommendation is supported by a majority of not less than two-third of the members of the court present and voting at a meeting of the court, such majority comprising not less than one-half of the members of the court and the recommendation is confirmed by the Chancellor, the Court may confer on such person the honorary degree or other academic distinction so recommended without requiring him/her to undergo any examination.

46. Kumaon University:

1. All proposals for conferment of honorary degree shall be made by the Executive Council and shall require

Kumaon (contd.):

the assent of the Chancellor for confirmation.

Provided that in case of urgency the Chancellor may act on the recommendation of the Executive Council only.

2. Any honorary degree conferred by the University may, with the previous approval of the Senate and the sanction of the Chancellor, be withdrawn by the Executive Council.

47. Kurukshetra
University:

Ordinance XVIII - Honorary Degrees -

Where the Vice-Chancellor, and not less than two-thirds of the other members of the 'Shiksha-Samiti' (Academic Council), recommend that an Honorary Degree be conferred on any person on the ground that he is, in their opinion, by reason of eminent position and academic attainments, a fit and proper person to receive such a degree, and the recommendation is approved by the Chancellor, the 'Shiksha-Samiti' (Academic Council) may confer on such person the honorary degree, so recommended, without requiring him to undergo any examination.

48. Lucknow
University:

Copy of Clauses 14.01 and 14.02 of the First Statutes:

14.01 (a) The Degree of Doctor of Letters (D.Litt) or Mahamahopadhyaya, Honoris Causa may be conferred upon such persons as have contributed substantially to the advancement of Literature, Philosophy, Art, Music, Painting or any other subject assigned to the faculty of Arts, or for conspicuous services rendered by them to the cause of education.

Lucknow (contd.):

(b) The degree of Doctor of Science (D.Sc.) Honoris Causa, may be conferred upon such persons as have contributed substantially to the advancement of any branch of science or technology or to planning organising or developing scientific and technological institutions in the country.

(c) The degree of Doctor of Laws (LL.D.) Honoris Causa may be conferred upon persons, who are distinguished lawyers, judges or jurists, statesmen or have noteworthy contribution to the public good.

14.02 The Executive Council may, suo motu or on the recommendation of the Academic Council by a resolution passed by a majority of its total membership and also of not less than two-thirds of the members present and voting submit a proposal for conferment of honorary degree to the Chancellor for confirmation under section 10(2):

Provided that no such proposal shall be submitted in respect of a person who is a member of any authority or body of the University.

p. t. o.

49. Madras University

The Senate may, on the recommendations of not less than two-thirds of the members of the Syndicate, confer any of the following honorary degrees upon a person on the ground that he is by reason of eminent position and attainments or by virtue of his contribution to learning or eminent services to the cause of education, a fit and proper person to receive such degree;

Doctor of Laws (LL.D.)
Doctor of Literature (D.Litt.)
Doctor of Science (D.Sc.)

2. Honorary Degrees shall be conferred only at a Convocation, and may be taken in person or in absentia.

3. The presentation of persons at the Convocation on whom Honorary Degrees are to be conferred shall be made by the Vice-Chancellor or in the absence of the Vice-Chancellor by a person nominated by the Syndicate.

50. Madurai University

1. The Senate may, on the recommendation of not less than two-thirds of the members of the Syndicate, confer any of the following honorary degrees upon a person on the ground that he is, by reason of eminent position and attainments or by virtue of his contribution to learning or eminent services to the cause of education, a fit and proper person to receive such degree :

Doctor of Laws (LL.D.)
Doctor of Literature (D.Litt.)
Doctor of Science (D.Sc.)

2. Honorary Degrees shall be conferred only at a Convocation and may be taken in person or in absentia.

51. Magadh University

13.(i) On the recommendation of not less than two thirds of the members of the Syndicate and the Academic Council each the Senate may, if two thirds of the members present and voting at a meeting of the Senate support the recommendation resolve to confer any of the following honorary degrees.

Upon a person on the ground that he is by virtue of his contribution to learning or knowledge or eminent service to the cause of education, a fit and proper person to receive any such degree :

- Doctor of Law (LL.D.)
- Doctor of Literature (D.Litt.)
- Doctor of Science (D.Sc.)

(ii) Every such resolution shall be subject to confirmation by the Chancellor.

14. Honorary degrees shall be conferred by the Chancellor only at a Convocation and may be taken in person or in absentia.

15. The presentation of the persons at the Convocation on whom honorary degrees are to be conferred shall be made by the Vice-Chancellor.

16. Notwithstanding anything contained above if for any reason the Chancellor is unable to be present at the Convocation the honorary degrees shall be conferred by the Vice-Chancellor and presentation of the persons shall be made by the Deans of the Faculties concerned or by such person as may be decided by the Vice-Chancellor.

52. M.S. University of Baroda. Section 46 of the University Act:
If not less than two-thirds of the members of the Syndicate recommend that an honorary degree, or other academic distinction be conferred on any person on the ground that he is, in their opinion, by reason of eminent position and attainment, a fit and proper person to receive such degree, or other academic distinction, and where such a recommendation is supported by a majority of not less than two-thirds of the members of the Senate, present at the meeting of the Senate, the Senate may confer on such person the honorary degree, or other academic distinction so recommended and without requiring him to undergo any examination.
53. Maharishi Dayanand University, Rohtak. The University has not so far laid down any procedure/ guidelines on the subject cited above.
Statute 39:
54. Mahatma Phule Krishi Vidyapeeth. If, on the recommendation of the Academic Council, not less than two-thirds of the members of the Executive Council recommend that an honorary degree, or other academic distinction be conferred on any person on the ground that he/she is in their opinion, by reason of eminent position and attainments, a fit and proper person to receive such degree, or other academic distinction and where their recommendation is supported by a majority of not less than two-thirds of the members of the Court present at a meeting of the Court, such majority comprising not less than one-half of the members of the Court and the recommendation is confirmed by the Chancellor, the Court may confer on such person the honorary degree or other academic distinction so recommended without requiring her to undergo any examination.

55. Marathwada University. The Marathwada University Act, 1974, lays down under Section 55 that the Executive Council may consider and recommend to the Senate the conferment of an honorary degree or other academic distinction on any person, without requiring him to undergo any test or examination, on the ground solely that he, by reason of his eminent position, attainments and public service, is a fit and proper person to receive such degree or other academic distinction and such recommendation shall be deemed to have been passed if supported by majority of not less than two-thirds of the members present at the meeting of the Senate, being not less than one-half of its total membership provided that, the Executive Council shall not entertain or consider any proposal in that behalf without the Vice-Chancellor having obtained the previous approval of the Chancellor. Although a few Honoris Causa degrees have been conferred by this University under the Marathwada University Act, 1958, no Honoris Causa degree has been conferred under the provisions of Section 55 of the Marathwada University Act, 1974 (New Act). According to the new Act the power to confer honoris causa degree is vested in the Senate, whereas conferring other degrees, diplomas and other distinction on graduates of this University is vested in the Executive Council.

p.t.o.

56. Marathwada
Agricultural
University

If on the recommendation of the Academic Council not less than two-thirds of the members of the Executive Council recommend that an honorary degree, or other distinction such as "Krishi Ratna" be conferred on any person on the ground that he is in their opinion, by reason of eminent position and attainments, a fit and proper person to receive such degree, or other academic distinction and where their recommendation is supported by a majority of not less than one-half of the members of the Court and the recommendation is confirmed by the Chancellor, the Court may confer on such person the honorary degree, or other academic distinction so recommended without requiring him to undergo any examination.

57. Meerut University 14.01
- (1) The Degree of Doctor of letters (D.Litt.) or Mahamahopadhyaya, Honoris Causa may be conferred upon such persons as have contributed substantially to the advancement of Literature, Philosophy, Art, Music, Painting or any other subject assigned to the faculty of Arts, or for conspicuous services rendered by them to the cause of education.
 - (2) The degree of Doctor of Science (D.Sc.) Honoris Causa, may be conferred upon such persons as have contributed substantially to the advancement of any branch of science or technology or to planning, organising or developing scientific and technological institutions in the country.

Meerut University
Contd.

(3) The degree of Doctor of Laws (LL.D.) Honoris Causa may be conferred upon persons, who are distinguished lawyers, judges or jurists or statesmen who have noteworthy contribution to the public good.

14.02. The Executive Council may, suo motu or on the recommendation of the Academic Council by a resolution passed by a majority of its total membership and also of not less than two-thirds of the members present and voting submit a proposal for conferment of honorary degree, to the Chancellor for confirmation under Section 10(2):

Provided that no such proposal shall be submitted in respect of a person who is a member of any authority or body of the University.

14.04. Every proposal for the withdrawal of an honorary degree shall require previous sanction of the Chancellor.

58. Mithila University. 13(1)(i) On the recommendation of not less than two-thirds of the members of the Syndicate at a meeting, the Senate may, if two-thirds of the members present and voting at a meeting of the Senate support the recommendation, resolve to confer any of the following honorary degrees upon a person on the ground that he is, by reason of eminent position and attainment or by virtue of his contribution to learning or knowledge or eminent service to the cause of education, a fit or proper person to receive any such degree :

Mithila University
Contd.

Doctor of Laws (LL.D.)
Doctor of Literature (D.Litt)
Doctor of Science (D.Sc.)

(ii) Every such resolution shall be subject to confirmation by the Chancellor.

14. Honorary degrees shall be conferred only at a Convocation and may be taken in person or in absentia.
15. The presentation of the persons at the Convocation on whom honorary degrees are to be conferred shall be made by the Vice-Chancellor.

59. Mysore University

1. The Senate may resolve on the recommendations of the Syndicate at a meeting at which not less than two-thirds of the total members of the Syndicate concur to confer any of the following** Honorary Degrees upon a person on the ground that he is by virtue of his contribution to learning or knowledge or distinguished service to the cause of education or country, a fit and proper person to receive such degrees :

** Honorary degrees of
Doctor of Laws LL.D. (Honoris Causa)
Doctor of Literature D.Litt. - do -
Doctor of Science D.Sc. - do -

2. Honorary degrees shall be conferred only at a convocation annual or special, and may be taken in person or in absentia.
3. The presentation of persons at the convocation on whom honorary degrees are to be conferred be made by the Vice-Chancellor.
4. The Diploma or a certificate for an honorary degree shall be signed by the Chancellor and the Vice-Chancellor.

p.t.o.

Mysore University
Contd.

The procedure outlined in the Statutes relating to the annual convocation shall apply mutatis mutandis in the case of conferment of Honorary degrees also except that in the latter case of recipient of the Hon. degree may be allowed to make a brief address after receiving the degree and be a member of the convocation.

60. Nagpur University

The Executive Council may consider and recommend to the Senate the conferment of an honorary degree or other academic distinction on any person without requiring him to undergo any test or examination on the ground solely that he, by reason of his eminent position attainments and public service, is a fit and proper person to receive such degree or other academic distinction and such recommendation shall be deemed to have been duly passed if supported by a majority of not less than two-thirds of the members present at the meeting of the Senate, being not less than one half of its total membership.

Provided that the Executive Council shall not entertain or consider any proposal in that behalf without the Vice-Chancellor having obtained the previous approval of the Chancellor.

61. Narendra Deo Univ.
of Agriculture &
Technology.

The matter is under the consideration of the University.

62. Orissa University of Agriculture & Tech. 25(1).
The Board shall, subject to the confirmation by the Chancellor have power to confer Honorary Degrees and other Academic distinctions on the recommendations of the Academic Council on persons, who by virtue of their eminence and attainments or contributions to the cause of learning and science or their established position in the scientific world are fit and proper persons to receive Doctor of Science (D.Sc.)
2. All proposals for the conferment of Honorary Degrees shall be made to a committee consisting of Vice-Chancellor and Deans of Faculties and if accepted by the Committee, shall be placed before the Academic Council and the Board for approval before submission to Chancellor for confirmation.
 3. Honorary Degree shall be conferred only at a convocation, and may be taken in person or in absentia.
 4. The person on whom an Honorary Degree is to be conferred shall be presented to the Chancellor by the Vice-Chancellor.
 5. The diploma or certificate for an honorary degree shall be signed by the Chancellor.
63. Panjab University
Honorary Degrees : Where the Vice-Chancellor and not less than two thirds of the other members of the Syndicate recommend that an honorary degree be conferred on any person on the ground that he is, in their opinion, by reason of eminent position and attainments, a fit and proper person to receive such a degree and where their recommendation is supported by not less than two thirds of the Fellows present at a

Panjab Univ. Contd.

meeting of the Senate and is confirmed by the Chancellor, the Senate may confer on such person the honorary degree so recommended without requiring him to undergo any examination.

64. Panjab Agricultural University

1. The University shall, subject to confirmation by the Chancellor have the power to confer honorary degrees and other academic distinctions on the recommendations of the Academic Council.

2. All proposals for the conferment of Honorary degrees shall be made to the Committee consisting of the Vice-Chancellor and the Deans of the Colleges and, if accepted by the Committee, shall be placed before the Academic Council and the Board of Management for approval before submission to the Chancellor for confirmation.

65. Poona University

"Section 55. Honorary degrees :

The Executive Council may consider and recommend to the Senate the conferment of an honorary degree or other academic distinction on any person, without requiring him to undergo any test or examination, on the ground solely that he, by reason of his eminent position, attainments and public service, is a fit and proper person to receive such degree or other academic distinction, and such recommendation shall be deemed to have been duly passed if supported by a majority of not less than two thirds of the members present at the meeting of the Senate, being not less than one-half of its total membership :

Provided that, the Executive Council shall not entertrain or

Poona Univ. Contd.

consider any proposal in that behalf without the Vice-Chancellor having obtained the previous approval of the Chancellor.

66. Punjabi University

Where the Vice-Chancellor and not less than two-third of the other members of the Syndicate recommend that an honorary degree be conferred on any person on the ground that he is, in their opinion, by reasons of eminent position and attainments, a fit and proper person to receive such a degree and, where the recommendation is supported by not less than two-third of the Fellows present at a meeting of the Senate and is confirmed by the Chancellor, the Senate may confer on such person the honorary degree so recommended without requiring him to undergo any examination:

Provided that, in cases of urgency, the Chancellor may act on the recommendation of the Syndicate only.

Statute No.77 :

67. Punjabrao Krishi Vidyapith

If, on the recommendation of the Academic Council, not less than two-thirds of the members of the Executive Council recommend that an honorary degree, or other distinction such as "Krishi Ratna" be conferred on any person on the ground that he is in their opinion, by reason of eminent position and attainments, a fit and proper person to receive such degree, or other academic distinction and where their recommendation is supported by a majority of not less than two-thirds of the members of the Court present a meeting of the Court, such majority comprising not less than one-half of the members of the Court and the recommendation is confirmed by the Chancellor, the Court may sanction conferral of the honorary degree

Punjabrao Krishi
Vidyapith Contd.

or other academic distinction so recommended on such a person without requiring him to undergo any examination.

68. Rabindra Bharati

The University recommends names of persons who have made creative contribution in the field of Fine Arts or Humanities for the conferment of degrees 'Honoris Causa'. The said recommended names are then forwarded to the Chancellor of the University for acceptance. The recommended persons so accepted by the Chancellor are awarded degrees 'Honoris Causa'.

69. Rajasthan University

Sub-Section (3) of Section 4 of the University of Rajasthan Act empowers the University to confer honorary degrees on approved persons for which Section 34-A of the said Act lays down the following Standing Committee :

- i) Vice-Chancellor
- ii) The Chief Justice of the High Court of Rajasthan
- iii) The Dean of the Faculty concerned.

Sub-Section (2) of Section 34-A further lays down that no honorary degree shall be conferred on any person un-less the proposal for the conferment thereof has been :-

- a) originally made by the said committee;
- b) approved of by the Syndicate;
- c) passed by the Senate, and
- d) confirmed by the Chancellor;

Provided that, in cases of emergency, such proposal may be confirmed by the Chancellor on the recommendation of the said committee after the recommendation has been approved by the Syndicate.

- Rajasthan Univ. Contd. Statute 39 of the University Hand Book Pt. II lays down that the University may confer the following honorary degrees :
1. D.Litt.
 2. D.Sc.
 3. LL.D.
70. Rajindra Agricultural University. No rules and regulations have yet been framed by the University for award of degree 'Honoris Causa'.
71. Ranchi University. 345. If the Vice-Chancellor and not less than two-thirds of the other members of the Syndicate present and voting at a meeting recommend that an honorary degree be conferred on any person on the ground that he is, in their opinion, by reason of his eminence and attainments, or contribution to the cause of learning or education, a fit and proper person to receive such a degree, and where their recommendation is supported by not less than two-thirds of the members present and voting at a meeting of the Senate, and is confirmed by the Chancellor, the Senate may confer on such person an honorary degree so recommended without requiring him to undergo any examination :
- Provided that, in cases of urgency, the Chancellor may act on the recommendation of the Vice-Chancellor and the Syndicate only.
346. The following shall be the honorary degrees :
1. Doctor of Science (Sc.D.)
 2. Doctor of Literature (Litt.D.)
 3. Doctor of Laws (LL.D.)
347. The honorary degrees shall be conferred only at a convocation and may be taken in person or in absentia.

Ranchi Univ.
contd.

348. The person on whom the honorary degree is conferred shall be presented to the Chancellor by the Vice-Chancellor.

349. The diploma for a honorary degree shall be signed by the Chancellor.

72. Ravi Shankar
University

Statute 14, Sec. 35(g) refers

A proposal for conferment of Honorary Degree may be made by the Standing Committee of the Academic Council unanimously. It shall be placed before a committee consisting of the Kulpati, a nominee of the Kuladhipati and the Dean of the Faculty concerned. If the committee unanimously recommends that an honorary degree be conferred on any person on the ground that he is, in its opinion, a fit and proper person to receive such degree, its recommendation shall be placed before the Academic Council. On approval by the Academic Council it shall go before the Executive Council.

If not less than two-thirds of the members of the Executive Council recommend and when their recommendation is supported by a majority of not less than two-thirds of the members present and voting at a meeting of the Court such majority being not less than one-half of the total membership of the Court, for the time being, the Court may, if such recommendation is confirmed by the Kuladhipati, confer on such person, the honorary degree so recommended.

Provided that, in cases of urgency, the Kuladhipati may act on the recommendation of the Executive Council.

Ravi Shankar University
Contd. Provided further that, in cases of emergency such proposal may be confirmed by Kuladhipati if the said Committee's recommendation has been approved by the Executive Council.

73. Rohilkhand Univ. (1) All proposals of conferment by Bareilly. Honoris Causa Degree shall be made by the Executive Council and shall require the assent of the Chancellor for confirmation : Provided that in cases of urgency the Chancellor may act on the recommendation of Executive Council only.

Any Honoris Causa Degree conferred by the University may, with the previous approval of the Senate . . and sanction of the Chancellor, be withdrawn by the Chancellor.

74. Roorkee University. Regulation for the Award of Degree of D.Engg./D.Sc. (Honoris Causa).

If not less than 2/3rd members of the Academic Council, recommend that an Honorary Degree be conferred on any person on the ground that he is, in their opinion, by reason of eminence and attainments, a fit and proper person to receive such a degree, and where their recommendation is supported by not less than 2/3rd of the members present at a meeting of the Syndicate, and is confirmed by the Chancellor, the University may confer on such person the Degree of D.Engg./D.Sc. (Honoris Causa).

Procedure :

1. For the award of the Honorary Degree, the proposal must be sent to the Registrar supported by at least two members of the Syndicate.

Roorkee Univ. contd.

2. The proposal should also be accompanied by the bio-data of the person so proposed and any other relevant information strengthening the proposal.

3. The proposal should be sent to the Registrar by the 15th August every year, for award of the Degree at the subsequent Convocation.

4. These proposals will be screened by a Committee consisting of the Vice-Chancellor; and not less than four Professors nominated by the Academic Council for a period of 3 years. The committee may co-opt other members, if necessary.

5. The report of this committee will be submitted to the Academic Council which will then make recommendations to the Syndicate.

75. Sambalpur
University

Part V.

Honorary degrees, Convocation
and Academic Robes

Chapter XV

Honorary Degrees.

145.(1) The Senate may, subject to the approval of the Chancellor in each case, confer any of the following honorary degrees upon a person on the ground that, by reason of his eminence and attainment or contribution to the cause of learning or education, he is a fit and proper person to receive such degree :

Doctor of Laws (LL.D.)

Doctor of Literature (D.Litt.)

Doctor of Science (D.Sc.)

Provided that no proposal to confer an honorary degree shall be brought before the Chancellor

Sambalpur University
Contd.

unless it is passed by not less than two-thirds of the members of the Syndicate at a meeting and subsequently confirmed by a vote of not less than two-thirds of the Senate at a meeting.

(2) Honorary degrees shall be conferred only at a Convocation and may be taken in person or in absentia.

The person upon whom an honorary degree is to be conferred shall be presented by the Dean of the respective Faculty and in the case of a person who has been approved by the Chancellor for the degree of LL.D., by the Vice-Chancellor.

(4) Ordinarily, and in accordance with clause (1) the honorary degree of LL.D. shall be conferred on persons who have attained eminence in public affairs, the honorary degree of D.Litt. on persons who have attained eminence by virtue of contribution to learning or education, and the honorary degree of D.Sc. on persons who have attained eminence by virtue of contribution to Science and an established place in the Scientific world.

(5) The forms for the honorary degrees shall be prescribed by the Syndicate.

76. Sampurnanand
Sanskrit
Vishwavidyalaya

The degrees (Honoris Causa) are conferred by the University under the act on such persons as have substantially contributed to the advancement of learning or conspicuously served the cause of Sanskrit Education, in the manner laid down in the statutes.

Sampurnanad Sanskrit
Vishwavidyalaya Contd.

The proposal of such conferment is made by the Vidwat parisad to the Karya Parishad for confirmation. Such degrees are awarded at the annual convocation or a special convocation convened for the purpose, as and when the approval of the chancellor on the said proposals (confirmed by the Karya Parishad) is received.

77. Sardar Patel
University

Section 36 : If not less than two-thirds of the members of the Syndicate recommend that an honorary degree be conferred on any person on the ground that he is in their opinion, by reason of eminent position and attainments, a fit and proper person to receive such a degree and where their recommendation is supported by not less than two-thirds of the Fellows present at a meeting of the Senate and is confirmed by the Chancellor, the Senate may confer on such person the honorary degree so recommended without requiring him to undergo any examination. Statute 14 Sec. 35(g) refers :

78. Saugar University

A proposal for conferment of Honorary Degree may be made by the Standing Committee of the Academic Council unanimously. It shall be placed before a committee consisting of the Kulpati, a nominee of the Kuladhipati and the Dean of the Faculty concerned. If the committee unanimously recommends that an honorary degree be conferred on any person on the ground that he is, in its opinion, a fit and proper person to receive such degree, its recommendation shall be placed before the Academic Council. On approval by the Academic Council it shall go before the Executive Council.

If not less than two-thirds of the members of the Executive Council

Saugar Univ. Contd.

recommend and when their recommendation is supported by a majority of not less than two-thirds of the members present and voting at a meeting of the Court such majority being not less than one-half of the total membership of the Court, for the time being, the Court may, if such recommendation is confirmed by the Kuladhipati, confer on such person, the honorary degree so recommended.

Provided that, in cases of urgency, the Kuladhipati may act on the recommendation of the Executive Council.

Provided further that, in cases of emergency such proposal may be confirmed by Kuladhipati if the said Committee's recommendation has been approved by the Executive Council.

79. Saurashtra
University

Following are guidelines for
awarding Honours Degree

Statute 155 : In case of persons recommended under provisions of Section 46 of the Act, the procedure, for conferment of such honorary degree or awards at a meeting or a convocation shall be the same as followed in the case of those who become eligible under the provisions of Statute 153 for the award of degrees or diplomas as a result of their passing the respective examinations therefore.

Section 46 of the Saurashtra
University Act 1965.

If not less than two-thirds of the members of the Syndicate recommend that an honorary degree

Saurashtra University
Contd.

or other academic distinction be conferred on any person on the ground he is in their opinion, by reason of eminent position and attainment a fit and proper person to receive such degree or other academic distinction and where their recommendation is supported by a majority of not less than two-thirds of the members of the Senate present at a meeting of the Senate, such majority comprising not less than one half of the members of the Senate, and the . . . recommendation is confirmed by the Chancellor, the Senate may confer on such person the honorary degree or other academic distinction so recommended without requiring him to undergo any examination.

80. Shivaji University

Section 55. The Executive Council may consider and recommend to the Senate the conferment of an honorary degree or other academic distinction on any person, without requiring him to undergo any test or examination, on the ground solely that he, by reason of his eminent position, attainments and public service, is a fit and proper person to receive such degree or other academic distinction, and such recommendation shall be deemed to have been duly passed if supported by a majority of not less than two-thirds of the members present at the meeting of the Senate, being not less than one half of its total membership :

Provided that the Executive Council shall, not entertain or consider any proposal in that behalf without the Vice-Chancellor having obtained the previous approval of the Chancellor.

81. South Gujarat
University

Section 46. If not less than two-thirds of the members of the Syndicate recommend that an honorary degree, or other academic distinction be conferred on any person on the ground that he is in their opinion, by reason of eminent position and attainments a fit and proper person to receive such degree or other academic distinction and where their recommendation is supported by a majority of not less than two-thirds of the members of the Senate present at a meeting of the Senate, such majority comprising not less than one-half of the members of the Senate, and the recommendation is confirmed by the Chancellor, the Senate may confer on such person the honorary degree or other academic distinction so recommended without requiring him to undergo any examination.

82. Sri Venkateswara
University

Section 19. The Syndicate shall be the executive authority of the University and shall have power :

xx xx xx

(u) to recommend to the Chancellor on the motion of the Vice-Chancellor, the conferment of honorary degrees and other Academic distinctions.

Accordingly on the recommendations of Vice-Chancellor the Syndicate considers the matter and recommends to the Chancellor confirmation of Honorary Degrees on distinguished persons. After obtaining approval of the Chancellor, Honorary Degrees are conferred on the persons at the convocation.

p.t.o.

83. Tamilnadu Agricultural
University

Honorary degree and other
Academic Distinctions :

Statute 26(1) : The Honorary Degree of Doctor of Science shall be conferred upon a person on the ground that he is by reason of eminent position and attainments or by virtue of his contribution to learning or eminent services to the cause of Agricultural Education, Research and Development, a fit and proper person to receive such a degree.

(2) The Board shall, subject to prior approval by the Chancellor, have powers to confer the Honorary Degree and other Academic distinctions, on the recommendations of the Academic Council, with atleast a two-third majority of the members present at the meeting.

(3) All proposals for the conferment of the Honorary Degree and other academic distinctions shall be made by a Committee consisting of the Vice-Chancellor and the Deans which shall be placed before the Academic Council and the Board for recommendation before submission to the Chancellor for approval.

(4) The Honorary Degree shall be conferred at a Convocation, or at a Special Convocation, and may be taken in person or in absentia.

(5) The presentation of persons at the Convocation on whom the honorary degree is to be conferred shall be made by the Vice-Chancellor or by a person nominated by the Vice-Chancellor.

8+. Udaipur University

Statute 56. Conferment of Honorary Degrees :

(1) The University may confer the following degrees, Honoris Causa in the prescribed form on persons who, by virtue of their eminence and attainments or contributions to the cause of learning, education, and science or their established position in the scientific or literary world, are fit and proper persons to receive such degrees :

- i. D.Lit.
- ii. D.Sc.
- iii. LL.D.

(2) There shall be a Standing Committee for the conferment of Honorary Degrees consisting of the following namely :

- i. The Vice-Chancellor
- ii. The Chief Justice of the High Court of Rajasthan, and
- iii. The Chairman of the faculty concerned.

(3) No honorary degree, diploma or other academic distinctions shall be conferred on any persons unless the proposal for the conferment thereof has been

- a. originally made by the said committee
- b. approved by the Executive Committee.
- c. passed by the Board of Control, and
- d. confirmed by the Chancellor

Provided that in cases of emergency, such proposal may be confirmed by the Chancellor on the recommendation of the said committee, if the recommendation has been approved by the Executive Committee.

Udaipur University
Contd.

(4) All degrees, Postgraduate degrees, diplomas and Honorary degrees, as aforesaid shall be conferred by the University at a Convocation or in absentia.

(5) The Convocation for conferring the aforesaid degrees shall be held at least once every year on a date to be fixed by the Chancellor in consultation with the Board.

57. Withdrawal of Degrees etc :-
The Academic Council may be resolution passed with the concurrence of not less than 2/3rd of the members voting, withdraw any degree; postgraduate degree, diploma or any honorary degree or any other academic distinction conferred by the University.

Provided that no such resolution shall be moved without giving an opportunity of showing cause against the proposed withdrawal to the candidate concerned.

85. University of
Agricultural
Sciences,
Bangalore.

At present the university has Statutory provision to award of degrees in this university. Further this University has not yet evolved any procedure for award of 'Honoris Causa'.

86. Utkal University

Statute No.145.

(1) The Senate may subject to the approval of the Chancellor in each case, confer any of the following Honorary Degrees upon a person on the ground that by reason of his eminence and attainment or contribution to the cause of learning or education, he is a fit and proper person to receive such degree.

Doctor of Laws (LL.D.)
Doctor of Literature (D.Litt.)
Doctor of Science (D.Sc.)

Utkal University
Contd.

Provided that no proposal to confer an Honorary Degree shall be brought before the Chancellor unless it is passed by not less than two-thirds of the members of the Syndicate at a meeting and subsequently confirmed by a vote of not less than two thirds of the Senate at a meeting.

(2) Honorary Degrees shall be conferred only at a convocation, and may be taken in person or in absentia.

(3) The person upon whom an honorary degree is to be conferred shall be presented by the Dean of the respective Faculty and in the case of a person who has been approved by the Chancellor for the Degree of LL.D., by the Vice-Chancellor.

(4) Ordinarily, and in accordance with clause (1) the honorary degree of LL.D. shall be conferred on persons who have attained eminence in public affairs, the honorary degree of D.Litt on persons who have attained eminence by virtue of contribution to learning or educations, and the honorary degree of D.Sc. on persons who have attained eminence by virtue of contribution to science and an established place in the scientific world.

(5) The forms for the honorary degrees shall be prescribed by the Syndicate.

87. Vikram University

Statute No.14.
Honorary Degree
(Refer Section 35(g)).

A proposal for conferment of Honorary Degree may be made by the Standing Committee of the Academic

Vikram Univ. Contd.

Council unanimously. It shall be placed before a committee consisting of the Kulpati, a nominee of the Kuladhipati and the Dean of the Faculty concerned. If the committee unanimously recommends that an honorary degree be conferred on any person on the ground that he is, in its opinion, a fit and proper person to receive such degree, its recommendation shall be placed before the Academic Council. On approval by the Academic Council it shall go before the Executive Council.

If not less than two-thirds of the members of the Executive Council recommend and when their recommendation is supported by a majority of not less than two-thirds of the members present and voting at a meeting of the Court such majority being not less than one-half of the total membership of the Court, for the time being, the Court may, if such recommendation is confirmed by the Kuladhipati, confer on such person, the honorary degree so recommended :

Provided that, in cases of urgency the Kuladhipati may act on the recommendation of the Executive Council.

Provided further that, in cases of emergency such proposal may be confirmed by the Kuladhipati if the said committee's recommendation has been approved by the Executive Council.

As regards the criteria no specific guidelines have been laid down. The award of Honoris causa degree is considered by the Academic Council and the Executive Council and the recommendations are confirmed by the Kuladhipati.

INSTITUTIONS DEEMED TO BE UNIVERSITIES :

- | | |
|--|--|
| 1. Gandhi Gram Rural Institute, Gandhigram, Distt.- Madurai. | They are not awarding degrees 'Honoris Causa'. |
| 2. Gujarat Vidyapeeth, Ahmedabad. | The Gujarat Vidyapeeth do not award any degrees 'Honoris Causa' |
| 3. Indian Agricultural Research Institute, New Delhi. | No system for award of such degrees. |
| 4. Indian Institute of Science, Bangalore. | <u>"Regulation 16. HONORARY FELLOWSHIP</u> 16.1. The Honorary Fellowship of the Institute may be conferred by the Council on : (a) Eminent Scholars in recognition of their distinguished contribution to knowledge in the subjects in which the Institute is interested; OR (b) Persons who have rendered eminent service to the Institute; OR (c) Persons who have made a noteworthy and lasting contribution to the cause of science and industry in India. |
| 5. Indian School of Mines, Dhanbad. | The Institute does not award such degrees. |
| 6. Jamia Millia Islamia, New Delhi. | The Jamia Millia does not award degrees 'Honoris Causa'. |
| 7. Tata Institute of Social Sciences, Bombay. | The Institute has not so far conferred any degree 'Honoris Causa' and have no immediate plans to do so. |

UNIVERSITY GRANTS COMMISSION

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Meeting:

Dated: 24th April, 1978

Item No.31 To consider the question of providing financial support to universities and colleges for field work by post-graduate and undergraduate Geology Students.

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During the IV Plan period, the University Grants Commission had been providing grants to the universities for meeting expenditure on Field Training work in Geology on 50:50 sharing basis subject to the condition that the Commission's share for the purpose would be limited to Rs. 3,000/- per annum. The permissible expenditure under the scheme included railway fare, transport charges of tents, camp furniture, rock specimens and wages of staff engaged during the camp.

In view of the importance of the field work, the Commission at its meeting held on 12th August 1974 agreed that the assistance to the universities for Field Training Work in Earth Science (Geology, Applied Geology and Geophysics) be provided on the same basis as during the IV Plan. The Commission also decided that in case a university has no university department in Geology of its own, the assistance for field work in Geology may be made available to affiliated colleges providing M.Sc facilities. The assistance, however was limited to Rs.3,000/- per annum on 50:50 sharing basis.

The Commission, at its meeting held on 14th April, 1975 further considered the recommendations of the said Panel with regard to the assistance to the universities for field work and agreed to the continuation of assistance for field work by post graduate students in Geology, Geophysics and Applied Geology during the V Plan period, provided the concerned universities agreed to treat this as committed expenditure at the end of the V Plan.

The matter has further been considered by the Geology/Geophysics Panel, at its last meetings. The Panel recommended as follows:

"The following amount may be approved for Field Training Work:

- (i) for undergraduate student -Rs.300/-per student per annum.

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(87)

ii) for post-graduate students Rs. 500/-
per student per annum.

The assistance may be made available on 50:50 sharing basis. Such outdoor tours may be performed by the teachers and the students in ratio 1:10 - where the number of students is less than 10, a teacher should accompany them for field work. In addition, one Technical Assistant may be also accompany the party. TA/DA of staff may be incurred by the university/institute concerned as per its rules"

Field work in Geology, Geophysics and Applied Geology is considered to be an important part of the programme of studies both at undergraduate and post-graduate level and therefore could be included for support under the ceiling assistance provided to affiliated colleges for their development programmes in the light of recommendations made by the Geology/Geophysics Panel.

The matter is placed before the Commission.

C O N F I D E N T I A L

UNIVERSITY GRANTS COMMISSION

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Meeting:

April 24th 1978.

Item No:32. To consider the question of constitution of a separate panel in Statistics.

A suggestion was made by Professor O.P Bagai, Head of the Department of Statistics, Panjab University, and others that the University Grants Commission may set up a separate panel in Statistics. This suggestion was considered by the Mathematics and Statistics Panel at its meeting held on 29th November 1976 and it was felt that it may not be desirable to have a separate Panel in Statistics. The Panel observed that an integrated approach in teaching both the subjects is necessary. The Panel further indicated that one or two more members in Statistics may however be added to the existing Mathematics and Statistics Panel in consultation with Prof.G.Kallianpur, Indian Statistical Institute, Calcutta. Since Prof.Kallianpur did not attend any subsequent meeting of the Panel, additional experts in Statistics have not been included in the list of Mathematics Panel. However, Prof.C.G Khatri, Head of the Department of Statistics, Gujrat University suggested the following Statisticians for inclusion in the Mathematics Panel.

1. Prof.R.K Nandi,
Professor Statistics,
Calcutta University.
2. Prof.V.M Landekar,
Gokhale Institute,
Poona.
3. Dr.A Goshal,
Council of Scientific &
Industrial Research,
New Delhi.
4. Dr. N.K Jaiswal,
Defence Science Laboratory,
Delhi.

The Commission has presently set up a specialists Panel in Mathematics and Statistics, which includes two

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*p 290-291

experts in Statistics Viz. Prof. G. Kallianpur, I.S.I, Calcutta and Prof C.G Khatri, Gujrat University. A list of the existing members of the said Panel is attached as Annexure I* The earlier Panel in Mthematics and Statistics also included two persons from Statistics viz. Prof(Miss)A. George, Kerala University, and Prof.V.S Huzurbazar, Poona University.

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A list of universities having statistics as a separate department, the years of starting, types of courses offered and the total staff strength is attached as Annexure II.@

The request for setting up a separate Panel for Statistics is placed before the Commission.

MEMBERS OF THE PANEL OF SCIENTISTS

MATHEMATICS: & STATISTICS

1. Prof.R.P Bambah, Convenor
Department of Mathematics
Panjab University,
Chandigarh.
2. Professor N.Rudraiah,
Deptt.of Mathematics,
Central College,Bangalore,
Bangalore University,
Bangalore.
3. Prof.S.D Choprea,
Deptt.of Mathematics,
Kurukshetra University,
Krukshehra.
4. Prof.M.P Singh,
Deptt.of Mathematics,
Indian Institute of Technology,
Delhi.
5. Prof.V.K Balachandran,
Deptt.of Mathematics,
Ramanujam Institute of Mathematics,
Madras University, Madras.
6. Professor Nisar A.Khan,
Deptt.of Mathematics,
Aligarh Muslim University,
Aligarh.
7. Prof.C.G Khatri,
Deptt.of Statistics,
Gujrat University,
Ahmedabad.
8. Prof.G.Kallianpur,
Director,
Indian Statistical Institute,
Calcutta.
9. Prof.U.N Singh,
Pro-Vice Chancellor,
Delhi University,
Delhi.

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10. Prof.G.A Swarup,
Deptt.of Mathematics,
N.E.H.U, Shillong, / Now at Tata Institute of
Fundamental Research,
Bombay
11. Professor M.S Narasimhan,
School of Mathematics,
Tata Institute of Fundamental
Research,
Bombay.
12. Dr.D.Shankar Narayan, Member Secretary.
Additional Secretary,
U.G.C.

Annexure II to Item No.32

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Universities having Departments of Statistics-1976-77

| <u>S.No.</u> | <u>University/ Deptt.</u> | <u>year of Est.of the Deptt.</u> | <u>Types of courses offered.</u> | <u>Total staff strength of the Deptt.</u> |
|--------------|-------------------------------|--|---|---|
| 1. | Aligarh | 1975 | M.Sc, Ph.D, Dip. | 9 |
| 2. | Andhra | 1951 | M.Sc, P.G Dip. in App, Stat. | 11 |
| 3. | Annamalai | 1954 | B.Sc, M.Sc, Ph.D | Stat.staff not available separately. |
| 4. | Bangalore | 1969 | M.Sc, UG & PG Diploma. | 8 |
| 5. | Bhagalpur | 1958 | M.A/M.Sc | 6 |
| 6. | Bombay | 1948 | MA/M.Sc, Ph.D | 5 |
| 7. | Calcutta | 1941 | MA/M.Sc | 11 |
| 8. | Delhi | 1973 | B.A(Hons) M.A/M.Sc, Ph.D | 6 |
| 9. | Dibrugarh | 1967 | M.Sc | 6 |
| 10. | Gauhati | 1948 | M.A/M.Sc, Dip. | 8 |
| 11. | Indore | 1971 | M.Sc | 2 |
| 12. | Jodhpur | 1973 | B.Sc | Stat.Staff not available sepa- rately. |
| 13. | Kalyani | 1973 | As Sub-major subject with Hons.in Physics o: Maths. | -do- |
| 14. | Karnatak | 1951 | M.A/M.Sc, Ph.D Cert. | 13 |
| 15. | Kerala | 1945 | M.Sc | 5 |
| 16. | Lucknow | 1956 | B.A/B.A(Hons) B.Sc/B.Sc " M.A/M.Sc Ph.D, D.Litt, D.Sc. | 9 |
| 17. | Madras | 1941 | Cert/Dip. | 4 |

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| | | | | |
|-----|------------------------|---------|------------------------|-----------------------------|
| 18. | M.S Univ.of Baroda. | 1952-53 | B.Sc, M.Sc Ph.D | 14 |
| 19. | Mysore | 1960 | M.Sc, Ph.d | 7 |
| 20. | Osmania | 1966 | B.A, M.A/M.Sc Ph.D | 11 |
| 21. | Panjab | 1966 | M.A | 8 |
| 22. | Patna | 1948 | M.A/M.Sc Ph.D, D.Sc | 21 |
| 23. | Rajasthan | 1961 | M.A, Ph.D | 10 |
| 24. | Sardar Patel | 1958 | M.A/M.Sc, Ph.D | 4 |
| 25. | South Gujrat | 1970 | M.A | Stat.Sept.not available; |
| 26. | Sri Venkateswara | 1962 | M.Sc, Dip. | -do- |
| 27. | Utkal | 1958 | M.A/M.Sc | 5 |
| 28. | Sambalpur | 1976 | M.A/M.Sc | 2. |

CONFIDENTIAL

University Grants Commission

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Meeting:

Dated : 24-25th April, 1978

Item No.33: To consider the report of the Committee which examined the departmental research programme received from the Department of Geography, Calcutta University for departmental support.

The Commission appointed an expert visiting committee comprising of the following members for examining the research proposal of the Department of Geography, Calcutta University for Departmental Support:

1. Professor C.D. Deshpande,
National Fellow (ICSSR)
Jawaharlal Nehru University,
New Delhi.
2. Professor S.L. Kayastha,
Head of the Department of Geography
Banaras Hindu University,
Varanasi,
3. Professor Jasbir Singh,
Department of Geography,
Kurukshetra University,
Kurukshetra.
4. Shri A.G. Deshmukh,
Education Officer,
University Grants Commission

The Committee visited the Department of Geography, Calcutta University on 17th December, 1977 and discussed the proposal for support of research with Professor K. Bagchi and other members of the staff. The committee also examined the facilities available at the Department and recommended a total non-recurring and recurring grant of Rs. 4,71,000/- for a period of three years as detailed below:

Non-Recurring:

(I) Equipment etc.

- i) Laboratory Apparatus (pH meter testing kits, calculator etc.) - Rs. 45,000

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| | |
|---|------------------------------|
| ii) Aerial Photographs Double Mirror stereoscope etc. | - Rs. 40,000 |
| iii) Cartographic Material, stationery etc. | - Rs. 20,000 |
| iv) Topo-sheets | - Rs. 5,000 |
| (II) Field Laboratory Van | Rs. 1,10,000 - Rs. 80,000 |
| (II) Field Laboratory Van | - Rs. 80,000 |
| (III) Publication of the report Thematic Maps with annotations. | - Rs. 20,000 |
| Total: | <u>Rs. 2,10,000</u> |

Recurring

i) Research Personnel:

| | | |
|---|---|---------------------|
| a) Research Associate - 1 (Rs. 1,000/- P.M. consolidated) | } | Rs. 2,01,600 |
| b) Senior Research Fellows-3 | | |
| c) Junior Research Fellows-6 | | |
| d) Assistant Cartographer -1 (Rs. 400/- P.M. fixed) | | |
| ii) TA/DA (for field staff and consultants) | | Rs. 45,000 |
| iii) Contingency & working expenses | | Rs. 15,000 |
| Total recurring: | | <u>Rs. 2,61,600</u> |

Grand Total NR & R: Rs. 4,71,600

A copy of the detailed report made by the Committee is
*p 296-301 attached as Annexure. *

The matter is placed before the Commission for
consideration.

The Report of the Committee which visited the Calcutta University, Department of Geography to examine the proposal for Departmental Research Support.

The University Grants Commission on the advice of the Geography Panel constituted an Expert Committee to visit Calcutta University and to evaluate the major research projects submitted by the department for a departmental research support. The members of the Committee were as follows:

1. Professor C.D. Deshpande,
National Fellow (ICSSR),
Jawaharlal Nehru University,
New Delhi.
2. Professor S.L. Kayastha,
Head of the Department of Geography,
Banaras Hindu University,
Varanasi.
3. Professor Jasbir Singh,
Department of Geography,
Kurukshetra University,
Kurukshetra.
4. Shri A.G. Deshmukh,
Education Officer,
UGC, New Delhi.

The Committee visited the department on 17th December, 1977. The Committee met the Vice-Chancellor, Pro-Vice-Chancellor and had discussions with Professor K. Bagchi, Head of the Department and all the staff members. The Committee also went around the laboratories and examined the facilities available there.

The Department of Geography of the University of Calcutta is one of long-standing, and is, along with the Departments in the Aligarh Muslim University and the University of Madras, a pioneer department in instruction and research in Indian Geography. It had trained many Indian Geographers who occupy leading academic positions today. Among several projects launched by the Department under the direction of Professor S.P. Chatterji, the formation and development of the National Atlas Organisation is the most important.

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The staff strength of the Department is 2 Professors, 4 Readers and 9 Lecturers. However, at present only 2 Professors, 1 Reader and 7 Lecturers are working. The Department provides facilities for M.A., M.Sc. and Ph.D. courses. About 70 students are admitted for M.A./M.Sc. classes every year. 16 research students are also working for their doctorates. During the last 5 years the department has produced 14 Ph.Ds. The out-turn of M.A./M.Sc. is about 50 every year. About 50 research papers have been published by the staff members since 1970. During the 5th Plan period the Commission has provided posts of one Professor and one Reader as well as a grant of Rs.1.20 lakhs for equipment and Rs.1 lakh for books and journals. Recently appointment to the post of professor has been made and the post of Reader is still vacant. The grants approved for equipment and books and journals are being utilised. The Commission has already approved one research project entitled "Regional Analysis of Littoral Bay of Bengal". This involves an amount of Rs.64,000/- The Government of West Bengal has also approved one research project on Diagnostic Survey of the Deltaic West Bengal. This involves an amount of Rs.1,10,000/-.

..... The Geographical Society of India office is located in the department. A quarterly journal "Geographical Review of India" is published by this society.

The Department has proposed to undertake integrated studies in land uses in 3 typical regions in Eastern India. The regions are:-

1. Himalayan Foot-Hill zone of North Bengal
2. Damodar Valley Region
3. Basin Hinterland of Haldia Port.

The Department has given justification for selecting these areas for the survey. These areas have been involved in considerable physical and economic changes during recent years. However, the benefits of large investments have not reached the population living in the area. The department earlier undertook land use surveys of the district of Howrah, 24 Parganas, with financial support from the Government of West Bengal. A diagnostic Survey of the Damodar Valley Region for the period 1959 to 1968 was undertaken at the instance of the Planning Commission. Urban land use survey of some selected areas were undertaken for Calcutta, Metropolitan Development Authority.

From the beginning, the Department has laid stress on studies in Cartography, Soils, Land Use, and Geomorphology in its work programme. The present proposal for micro-studies

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of three regions of West Bengal is in that tradition. It is to be hoped, however, that the research work in this Department will be done in a coordinated manner with the work that is being done by the Geography Departments of other universities in West Bengal, in research institutions like the Indian Statistical Institute, I.I.T. Kharagpur, Centre for Studies in Social Sciences, Calcutta, Indian Institute of Management and the National Atlas Organisation. The Committee hopes that the Department will address itself to some basic economic and social issues in West Bengal, and that the Department will not restrict its research activities only to West Bengal, but enlarge them to cover the rest of the sub-continent. While the existing research facilities and the specialised equipment in soil science and geomorphology, should enable the Department to contribute to the theoretical aspects of tropical Geomorphology and land use, it would be necessary, in the Committee's opinion, to strengthen the Department's Social Geography component by some additions to its academic facility to enable the Department to make its contribution.

With reference to the three Projects proposed, the Committee had full discussions with Professor Bagchi and his colleagues as regards their academic aspects, the connected faculty personnel and the equipment already available and the additions that would be necessary. The Committee finds that the proposals for these projects have been framed only in general terms.

The Committee examined the facilities available in the Department for undertaking these research projects. The Department has well established soil laboratory with staff trained to undertake soil studies. A good cartographic laboratory with sufficient collection of maps and toposheets is available in the department. The supporting staff of two cartographers, one map curator, one photographer and one laboratory assistant is available.

The department has a good collection of library books. Two trained librarians manage the departmental library. The Department also envisage collaboration from the National Atlas Organisation and the Departments of Agriculture, Economics, Anthropology, of the Calcutta University. Cooperation from other agencies like Calcutta Port Trust, River Research Institute, West Bengal, Damodar Valley Corporation, Centre for Studies of Social Sciences would also be available. The computer facilities available at Calcutta University would be used for processing the data. The studies according to the proposal will be completed in 3 years. During the first year it is proposed to undertake Reconnaissance Surveys. The data will be collected from selected samples. In the second year the data will be processed

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and preliminary reports prepared. In the third year aerial mapping work would be completed and the final report would be prepared.

On the basis of the discussions and after considering the additional details given by Professor Bagchi, subsequently, the Committee would like to make following observations:

It would be desirable to have 3 Senior Fellows (one for each project region) and 6 Junior Fellows (2 for each) with suitable adjustments according to the load of work arising in each project. It is our experience that it is most difficult to get competent Junior level fellows @ Rs.400/- p.m.

The needs of Zerox, Distillation plant etc. should be met ~~within~~ from the common facilities provided to the Science Department in the complex where the Geography Department is located. The Committee would also like to suggest that work should be increasingly done by academic members themselves instead of obtaining new posts of laboratory and other assistance.

The Committee would like to make a general recommendation that those Geography Departments which have shown development and academic performance should now be provided with a van for conducting their field work. A good deal of research in Field Sciences in India lacks realism because both training at Graduate and Post-graduate level is text-book and laboratory ridden, and research therefore follows the same trend. There is thus a need to encourage field studies. The committee has, therefore, included the proposal for a field Lab van which may be sanctioned provided the University undertakes to maintain it for the Geography Department out of its own funds and ensures its replacement as a regular equipment of the Department. This was brought specifically to the notice of the Vice-Chancellor and he agreed with this approach.

In the discussion with Professor Bagchi, the Committee came across one important constraint. Good many thematic maps, the product of several years' painstaking work in the department have remained unpublished for want of financial support. Publication of these maps should prove useful for the planners as well as for students and researchers in Field Sciences. It is, therefore, our recommendation, that an amount of Rs.20,000/- be granted at the end of the project specifically for publishing the maps derived, along with their interpretation. This grant could be subject to the usual conditions of the UGC as regards the scrutiny of the material

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to be published, by experts.

In the light of discussion and the technical and the academic staff as well as equipment available at present in the Department, the Committee would like to recommend that the Department of Geography, Calcutta University may be provided following assistance to undertake the three projects mentioned above over a period of three years:

A. Non-recurring

| | | |
|-----|---|----------------------------|
| I | (i) Lab Apparatus (ph meter soil testing kits, calculator etc.) | Rs. 45,000/- |
| | (ii) Aerial Photographs Double Mirror stereoscope etc. | Rs. 40,000/- |
| | (iii) Cartographic Material, stationery etc. | Rs. 20,000/- |
| | (iv) Topo-Sheets | Rs. 5,000/- |
| | Sub-Total: | <hr/> Rs. 1,10,000/- |
| II | Field Lab Van | Rs. 80,000/- |
| III | Publication of the Thematic maps with annotations. | Rs. 20,000/- |
| | Total: | <hr/> <hr/> Rs. 2,10,000/- |

B. Recurring:

(i) Research Personnel:

- (a) Research Associate-1
@ Rs. 1,000/- p.m. consolidated
- (b) Senior Fellows - 3
- (c) Junior Fellows - 6
- (d) Assistant Cartographer
@ Rs. 400/- p.m. fixed

Total Staff: Rs. 2,01,600/-

- (ii) T.A./D.A. (for field staff and consultants) Rs. 45,000/-

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(iii) Contingency & working expenses

Rs. 15,000/-

Total (R):

Rs. 2,61,600/-

Total (N.R. + R) for a period of three years:

Rs. 4,71,600/-

The Committee is grateful to the Vice-Chancellor, the staff members of the Geography department for the cooperation given for the work of the Committee.

Confidential

UNIVERSITY GRANTS COMMISSION
.....

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Meeting

Dated : April 24, 1978.

Item No.34: To consider the recommendations of the Committee appointed to work out details of the support o that may be given by the UGC for the establishment of College Development Council in the Universities.
.....

The UGC at its meeting held on October 18, 1976 inter-alia accepted the following recommendations made by the Standing Committee on the development of under-graduate education in Arts, Science and Commerce Colleges.

"For proper and integrated development of affiliated colleges, the universities may be requested to take expeditious steps for the establishment of College Development Councils. Such a Council may include members from the Universities/Colleges and State Governme-nts".

The recommendation was brought to the notice of the Vice Chancellors of all the universities for taking necessary action. Subsequently, the Commission communicated the guidelines for the setting up of the College Development Council in the affiliating universities. A copy of the guidelines is enclosed. Annexure I.*

Subsequently, the UGC while considering the recommen-
dations made by the Standing Committee to advise the Commission on the development of colleges at its meeting held on 4th-5th August 1977 desired that it may be impressed upon the universities to set up a College Development Council as early as possible. It was also agreed that this may be discussed at the joint committee of the Standing Committee of Association of Indian Universities and the UGC. The resolution adopted at the joint meeting of the UGC and the A.I.U is reproduced below:

"The meeting welcomed the proposal of the UGC for the establishment of a College Development Council in the universities and agreed that it may again be impressed upon the Universities to set up such councils. It was also suggested that the universities may be requested to activise the Planning Group/Cell for formulating their Six Plan Proposals well in time".

The decision was conveyed to all the Vice-Chancellors for the guidance and necessary action.

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The Commission while considering the proposals from the NEHU for setting up a College Development Council at its meeting held on October 17, 1977 observed as under:

"It was desired that details of the UGC support may be worked out and similar assistance may be provided to other universities also for setting up such councils."

It was decided that the matter may be considered by a Committee to work out details of the UGC support that may be provided for the establishment of college Development Council.

Subsequently, during the discussions in the meeting of the Commission it was felt that the Scope of the Committee may be expanded so as also to indicate the work that this Committee may do particularly in relation to de-centralisation of payment of grants to colleges for small schemes. This matter was also discussed at the meeting of the Implementation Committee appointed to pursue the implementation of the proposals suggested in the note on 'Development of Higher Education in India - A Policy Frame' adopted by the Commission.

The Commission accordingly appointed a Committee with the following members:

1. Prof.R.C Paul,
Vice Chancellor,
Panjab University.
2. Shri P.G Patil,
Vice Chancellor,
Shivaji University.
3. Dr.Malcolm S.Adisheshaiah,
Vice Chancellors,
Madras University.
4. Prof.Ramranjan Mukerji,
Vice Chancellor,
Burdwan University.
5. Prof.B.M Udgaonkar,
Member, UGC.
6. Prof.R.C Mehrotra,
Vice Chancellor,
Delhi University.
7. Dr.(Smt.)Madhuri Shah,
Vice Chancellor,
SNDT Women's University.

The meeting of the Committee was held in the UGC Office on February 6, 1978, copy of the minutes is enclosed Annexure II.*

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The main observations/recommendations made by the Committee are detailed below:

Para 3(i)(ii)(v)(vi)(vii)(viii)(ix)(x)(xi)(xii)
(xiii)(xiv)(xv)

The matter is placed before the Commission for consideration.

Guidelines for College Development Council in
an Affiliating University.

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The University Grants Commission accords a very high priority to the development of affiliated colleges as about 85% of the total student population at the university stage receive instructions in these colleges. Also about five out of every six teachers at this stage work in the affiliated colleges.

2. With a view to improving the standard of collegiate education in the real sense in the country, it is necessary that there is an all round development of affiliated colleges and that is possible if the conditions of teaching and learning therein are improved substantially. For the proper and integrated development of colleges, the Commission has considered it desirable that a College Development Council may be established in an affiliating university.

3. The functions of the College Development Council may inter-alia be to advise the university on all matters relating to the development of affiliated colleges, such as : provision of adequate facilities-academic and physical - for raising the standard of learning, teaching and research and its periodic evaluation; implementation of the university's policy on affiliation of colleges, keeping a close contact with colleges with a view to helping in their proper development; selection of teachers, student amenities, proper utilisation of grants and efficient implementation of University Grants Commission approved projects and reforms, such as examination reform, restructuring of courses, COSIP, COHSIP etc. It would enable the university to take long-term decisions on the development of affiliated colleges and to decide on matters related to different disciplines taught in colleges at different stages of university education. It might also enable the university to maintain a reasonable continuity of policy in regard to development of colleges. It would be desirable to lay down the functions of the College Development Council in the statutes/ordinances of the universities.,.

The Council may also help in planning for location of new colleges to be established and also selective development of some colleges to remove regional imbalances and also help in identification of colleges for autonomous status.

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4. The College Development Council might consist of vice-Chancellor; a few teachers of the university, some principals of colleges and a representative of State Government and a few teachers of the colleges. The total memberships of the Council should not exceed 30.

5. The College Development Council may meet at regular intervals to review the implementation of various programmes. The expenses on the T.A. and D.A. of the members for attending the meeting could be met out of the unassigned grants placed by the University Grants Commission at the disposal of the University.

UNIVERSITY GRANTS COMMISSION
Bahadur Shah Zafar Marg,
New Delhi.

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Draft Minutes of the Committee appointed to work out the details of the support that may be given by the UGC for the establishment of College Development Council in the Universities held on February 6, 1978.

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A meeting of the Committee appointed by the UGC to work out the details of the support that may be given by it for the establishment of College Development Council in the universities was held at 11.00 a.m on 6th February, 1978 in the UGC Office, New Delhi. The following were present:

1. Prof.B.Ramachandra Rao,
Vice Chairman, UGC.
2. Prof.R.C Paul,
Vice Chancellor,
Panjab University,
Chandigarh.
3. Prof.Ramranjan Mukherji,
Vice Chancellor,
Burdwan University,
Burdwan.
4. Dr.(Mrs)Madhuri Shah,
Vice Chancellor,
SNDT Womens University,
Bombay.
5. Shri R.K Chhabra,
Secretary, UGC.
6. Dr.D.Shankar Narayan,
Additional Secretary, UGC.
7. Shri Y.D Sharma,
Deputy Secretary, UGC.

Professor B.M Udgaonkar, Member, UGC Dr.Malcolm Adiseshiah, Vice Chancellor, Madras University, Shri P.G Patil, Vice Chancellor, Shivaji University, and Prof. R.C Mehrotra, Vice Chancellor, Delhi University could not attend the meeting.

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2. Prof. B. Ramachandra Rao welcomed the members and apprised the Committee that the UGC accords a high priority to the development of colleges as about 85% of the total student population at the university stage receive instruction in the colleges. For the proper and integrated development of colleges the UGC requested the universities . . . early in January 1977 to take expeditious steps for the establishment of College Development Councils at the universities. Subsequently, guidelines for the setting up of the council were communicated to the universities. This proposal was welcomed also at the joint meeting of the University Grants Commission and the Association of Indian Universities, as a step towards activating the planning process for the formulation of sixth plan proposals well in time. The Commission has further desired that the scope of College Development Council in the university may be expanded and assistance be provided to the universities for setting up such Councils. The Committee may make suggestions in this regard.

3. . . The Committee made the following observations . . . and recommendations.

- (i) It was noted that the Commission has recently released basic grants to the universities for disbursement to the arts, science and commerce colleges for the purchase of books and journals and scientific equipment. It was felt that this was a welcome step towards the decentralisation of disbursement of grants and more involvement of universities in the developmental process for the improvement of standards in the colleges. It was recommended that the Commission may also de-centralise the process of release of such grants like establishment of students aid fund and book bank in colleges, student amenities, etc. through the universities. It would, however, be necessary to ensure that grants released to the universities for disbursement to colleges for various schemes are not held/locked up in the universities nor are these used-up by the universities for their own needs, but are properly and expeditiously disbursed to the colleges according to the guidelines laid down by the UGC.
- (ii) It was noted that due to the paucity of matching share a large number of colleges are not taking advantage of the UGC assistance made available

for the development proposals requiring matching contribution from the college managements. The colleges are not in a position to raise their contribution through private donations, nor can they raise the tuition fee from the students and expenses towards the salaries of the teaching staff having been increased with the introduction of revised pay scales of teachers. A suggestion was made that the colleges may charge development fee from the students, the income from which may be utilised as a matching contribution for claiming UGC assistance for various development projects.

- (iii) Some of the state governments have decided to undertake the responsibility of direct payment of salary of teaching and non-teaching staff of the colleges receiving grant-in-aid from the government. The UGC, it was noted, is collecting the necessary information in this regard from the state governments.
- (iv) UGC provides assistance to the colleges for the development, expansion and improvement of existing facilities in the colleges and not for fulfilling the affiliation conditions laid down by various universities.
- (v) It was noted that as per the recent amendment in the UGC Act, colleges set up after 17.6.72 and granted temporary affiliation by the universities have not been declared fit to receive central assistance. Such colleges should be permanently affiliated to the universities for being eligible for UGC assistance. Arising out of this, it was observed that as per the procedures obtaining in universities, various categories of affiliations are granted viz. temporary, provisional, affiliated upto a specified period etc.etc. and a long span of a number of years elapses before a college is granted permanent affiliation. The committee recommended that the UGC may request the universities to rationalise and liberalise the procedure of granting permanent affiliation, so that the colleges are not debarred from claiming UGC assistance on this account. It was, however, felt that with a view to maintaining

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high standard of collegiate education, affiliation condition should be strictly enforced at the time of granting affiliation as well as thereafter.

- (vi) It was noted that for special/quality improvement schemes like COSIP, COHSIP etc., and for the development of facilities in the postgraduate departments in the colleges, the UGC provides assistance for approved projects on cent per cent basis, as in the case of university teaching departments. The Committee however, recommended that the UGC may liberalise its pattern of assistance and provide assistance for a large number of developmental scheme on 100% basis even for undergraduate programmes.
- (vii) It was felt that there was very little interaction and collaboration between the academic faculty working in the university teaching departments and at the colleges. With a view to improving and raising the standard of higher education in the country, it is imperative that there is continuous channels of communications between the academic facilities in the universities and colleges and that the existing facilities in the universities are shared and made available to the college teachers also. The university faculty may spend some time in the college departments at regular intervals and similarly the teachers from the colleges may also work in the university departments and make use of the research and other facilities. A system of regular feedback should be developed.
- (viii) There obtains presently some machinery for affiliation and inspection of colleges, laying down of courses of study, conduct of examinations etc. in the universities. In addition to the existing machinery, there was an urgent need for creating an appropriate body at the university headquarter for ensuring the proper planning and integrated development of affiliated colleges and provide the colleges necessary help and guidance. The establishment of the College Development Council with the active and willing participation of various academic and administrative constituents, as envisaged

by the UGC is a welcome step in the direction of improvement of standards of higher education. The efforts of such a body will bear fruit only if fullest cooperation and help is ensured between the existing machinery in the universities and the proposed College Development Council. In fact, the College Development Council should serve as a vital link between the UGC, University, Colleges and State Education Department.

(ix) The College Development Council may consist of the Vice-Chancellor, Coordinator/Director/Dean of the Council, a few senior teachers of the University teaching departments particularly those who have taken up COSIP/CCHSIP etc. some principals of affiliated colleges, a few teachers from affiliated colleges, and a representative of the state government. The total membership of the council should not exceed 30.

(x) The Coordinator/Director/Dean of the College Development Council may be appointed by the syndicate on the recommendations of the Vice-Chancellor. He may be appointed on contract for a tenure of three years, extendable by one more term only, but not beyond the age of 65 years when he would retire.

may be given fixed salary between Rs. 2,000 to Rs. 2,500 per month.

(xi) The College Development Council may meet at regular intervals at least twice in an academic year, to review the implementation of various programmes and activities.

(xii) The College Development Council would serve as an academic guide to the college system on the one hand and on the other hand ensure inter-action between the academic facilities in the university departments to the teachers in the colleges. To fulfil this objective the College Development Council may take in consultation with the University or other bodies concerned, all such steps as it may think fit for the promotion, coordination and raising the standard of education in college, and for the purpose of performing its function it may -

- a. function as a policy making body in regard to proper planning and integrated development of colleges;
- b. conduct surveys of all the affiliated colleges , districtwise, with a view to preparing and maintaining an up-to-date profile on each college under the university, reviewing the existing facilities and identifying the needs and gaps that need to be filled for the development of colleges and make such information available to the UGC and other concerned bodies;
- c. advise the university on all matters relating to development of affiliated colleges, such as provision of adequate facilities- academic and physical - for raising the standard of learning teaching and research and its periodic evaluation for enabling the university to maintain reasonable continuity of policy in regard to development of colleges;
- d. prepare a perspective plan for the development and opening of new colleges, to enable the university and state education authorities to take long term decisions on the planning and development of colleges and may advise the university on matters relating to different disciplines taught in colleges at different levels of university education;
- e. advise the university in regard to rationalisation and implementation of university's policy on affiliation of colleges;
- f. keep close contact with the colleges with a view to helping them in their proper development, selection of teachers, student amenities, proper utilisation of grants and efficient implementation of UGC approved projects and reforms viz. examination reform, courses, COSIP, COHSIP, restructuring of courses to make them more relevant and significant not only to students, but also to the region as a whole by assessing social transformation and regional development.

- g. review the facilities for postgraduate departments of colleges in terms of the norms prescribed by the UGC, and assist those having the potential of coming up to the norms within a few years.
 - h. help in the selective development of some colleges to remove regional imbalances; and also assist the colleges to realise their potential and in identification of colleges for autonomous status;
 - i. evaluate and assess the impact of UGC grants utilised by the colleges for the implementation of various development projects.
 - j. ensure that the UGC grants released to university for disbursement to colleges are not held/locked up or utilised by the university for its own purposes, and also ensure that these grants are properly and expeditiously disbursed to colleges for specified purposes according to the guidelines laid down by the Commission;
 - k. obtain from the colleges and furnish to the University Commission utilisation certificates and completion documents in respect of UGC grants released/dispursed to colleges through the university, and help in monitoring the UGC programmes implemented by the affiliated colleges;
 - l. ensure close and continued contact and interaction between the academic faculties at the university ^{at} teaching departments and ~~the~~ colleges;
 - m. review the inspection reports of the colleges and suggest remedies for the defects and irregularities reported.
 - n. perform such other functions as may be prescribed or as may be deemed necessary by the university for advancing the cause of collegiate education as may be incidental or conducive to the discharge of the above functions.
- (xiii) The College Development Council may be responsible to the Vice Chancellor and send periodic reports to the UGC about the impact of UGC programmes. It may be desirable to lay down the functions of the College Development Council in the Statutes/ Ordinances of the Universities.

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- (xiv) The University Grants Commission may provide adequate grants to the expenditure on-
- a. the salary and allowances paid to the coordinator/Director/Dean
 - b. the salary and allowances for one post of stenographer appointed by the University in the prevalent senior scale to assist the Coordinator in the discharge of his duties and the work of the council;
 - c. actual TA and DA according to the university rules to the members for the meetings of the Council, its Committees and sub-committees and approved field work of the Coordinator alongwith his stenographer.

(xv) The University will provide for adequate accomodation, furniture and fittings, stationary, typing machines, ~~reneo~~. facilities, secretariate and class IV staff and other facilities from its own resources for the efficient and smooth functioning of the College Development Council.

The meeting ended with a vote of thanks to the Chair.

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UNIVERSITY GRANTS COMMISSION

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Meeting:

Date: 24th April, 1978.

Item No: 35 : To consider a proposal from Vice-Chancellor, Panjab University, for assistance for attending the meeting of International Union of Pure and Applied Chemistry to be held in France in May, 1978.

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Dr. R.C. Paul, Vice-Chancellor, Panjab University, Chandigarh, has requested for assistance towards his travel and maintenance for attending the meeting of the committee of Teaching of Chemistry of the International Union of Pure and Applied Chemistry to be held in France in May, 1978. The Indian National Science Academy has nominated him to attend this meeting but the Academy is finding it difficult to provide any support to him for attending this meeting. A copy of the letter received from Dr. Paul is enclosed (Annexure).*

The Commission has schemes for providing support to Post Doctoral Fellows and college teachers for presenting their papers in the International Conferences. Such proposals from University teachers are considered by the University under the scheme of unassigned grant which is allocated to the Universities every year by the Commission. It is difficult and embarrassing for the Vice-Chancellors who are invited to attend the meetings of the International Conferences to sponsor their own cases for support under the scheme of unassigned grant. The Commission, at present, has no scheme under which such proposals could be considered.

The matter is placed before the Commission for consideration.

AS(D-2b)/DS(D-2b)

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Annexure to Item No: 34

Copy of letter No. 969-VC/DS dated 9th March, 1978 received from Professor R.C. Paul, Vice-Chancellor, Panjab University, Chandigarh addressed to Shri R.K. Chhabra, Secretary, University Grants Commission.

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Dear Shri Chhabra,

I am National Representative on Committee of Teaching of Chemistry of the International Union of Pure and Applied Chemistry. This Committee is meeting at Cassis, France, in the second week of May. The Indian National Science Academy has nominated me to attend this meeting. They, however, because of financial position, find it difficult to support me for this meeting. I shall feel much obliged if you kindly find out a way for supporting my travel and subsistence for four days as a meeting is likely to last for 4/5 days.

With kind regards,

UNIVERSITY GRANTS COMMISSION

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Meeting:

Dated : 24-4-1978

Item No.38: To consider the recommendations of the Committee constituted for the award of Junior Research Fellowships and scholarships for Postgraduate studies in Science and Humanities including Social Sciences to the students belonging to the scheduled tribes of Border Hill Areas.

The Committee constituted by the University Grants Commission for the award of Junior Research Fellowships and scholarships for Postgraduate studies in Science subjects, Humanities and social sciences to the students belonging to scheduled tribes of the Border Hill Areas at its meeting held on 5th October, 1977 noted that there was poor response in spite of wide publicity in all the leading newspapers and the circular issued to universities. The main reason for this appears to be that there are not sufficient number of students belonging to the scheduled tribes of border hill areas with requisite qualifications. In view of this, the Committee recommended that the scheme may be merged with the existing scheme for the institution of research fellowships in Science, Humanities and social sciences specially meant for scheduled caste/scheduled tribes. If necessary, the number of these fellowships may be suitably increased. At the time the scheme for border Hill areas was initiated, there was no earmarked provision for Scheduled caste and Scheduled tribe students. Now that such a provision has been made for the weaker sections of the society, the scheme of border hill areas should be utilised for promoting the objective with which this scheme was initiated viz. the promotion of national integration by building up channels of academic contact between the border hill areas and other parts of the country. In this connection the committee suggested the following alternatives:-

- (1) The institution of Research Fellowships and scholarships may not be restricted to students belonging to scheduled tribes but may be extended to include scheduled caste students also from the Border Hill areas.
- (2) The scheme may be extended to students belonging to all communities of Border Hill Areas within the territorial jurisdiction of North-Eastern Hill University, Jammu, Kashmir, Garhwal, Kumaon, North-Bengal and Himachal Pradesh Universities.

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Students may be considered under (2) above for fellowships and scholarships provided they join a University other than the one under whose jurisdiction they are residing at the moment, except that fellowships may also be granted to students within the same University provided the students propose to take up research on a topic relevant to the problems of the region concerned.

In this connection it may be pointed out that prior to 1975, these schemes were available to the candidates belonging to hill areas of North-East region only. In 1975 the Ladakh was also brought under the scheme. Till then these awards were made to candidates of all communities

of these two regions, and not to scheduled tribes only. During 1976 when this scheme was extended to cover candidates belonging to all border hill areas falling under the jurisdiction of the universities of NEHU, Kashmir, Garhwal, Kumaon, Himachal Pradesh, Jammu and North Bengal, it was decided in consultation with the Director General B.C.W., Ministry of Home Affairs, that these awards may be made only to candidates belonging to scheduled tribes under the jurisdiction of NEHU, Kashmir, Jammu, Garhwal, Kumaon, Himachal Pradesh, and North Bengal Universities.

In this connection a representation has also been received from Ladakhi students requesting the Commission to waive the restriction regarding the award of Junior Research Fellowship/scholarship to the students belonging to scheduled tribes of Border Hill Areas. (A copy of the memorandum is placed below - (Annexure).*

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The matter is placed before the Commission for consideration.

AS(RF)/DS(ER)

Copy of letter dated 5th February, 1978,
addressed to the Chairman, UGC, New Delhi,
from Ladakhi students regarding consideration
for award of Post Graduate and Research
Scholarships to the scholars belonging to the
Hill Area of Ladakh

In view of the sudden switching off of the UGC scholarship awards to the scholars of Ladakh this year on the ground that they do not come under the categories of scheduled castes and tribes, we wish to make this representation with the hope that the commission would reconsider its proposed principle in applying to the scholars of the Hill Areas of Ladakh (Kashmir).

We wish to draw to your kind notice and sympathetic consideration the underlying facts:-

1. It is a fact that Ladakh Constitutes a part of Jammu and Kashmir, but it is apparent that not so much progress has ever taken place in the very backward and hard pressed area like Ladakh. It is also a matter of thought that in area Ladakh is larger than Jammu & Kashmir together; still Ladakh does not have a University, any institute or advanced Centre of learning, and not even colleges in its widely diffused hill-range districts which results in an exodus, on a large scale, of students, who have taken recourse to receive their higher education in Delhi and Varanasi. Ladakh horribly lacks publication projects and press managements and many other facilities which are necessary for the development of practical education or for the matter of that an education of higher import.
2. The language of Ladakh, called the Ladakhi is a derivative of the Tibetan group of languages for which there is absolutely no provision in the State under which Ladakh comes. This shortfall has made us to leave our home States to get education in Varanasi.
3. It may be recalled that a student of Acharya Third year class of the Central Institute of Higher Tibetan studies, Sri Lobsang Zotpa who has been a recipient of the UGC grant, has suddenly been debarred from this privilege. It is very strange and also, too, disturbing.
4. The political and strategic situation of Ladakh calls for better treatment of the Ladakhi nationals and not only a

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specific care should be bestowed to its border security army organisations. It is our conviction to which most of the thoughtful persons in the country would be willing to subscribe.

5. The Commission should have appreciated that although the education in Ladakh through Hindi medium is very much negligible, Lobzang Phunchok has evinced great courage in passing his M.A. in Hindi and has joined the Ph.D. course. It is imaginable in what way it be possible that may Lobzang Phunchok, a monk of poor resources, can in the absence of Scholarship, get his Ph.D., such cases are sufficient examples of frustrating the young men from Ladakh who are keen to show their talents in academic fields.

6. Another example is that of Tsultin Gyatso, who is a Scholar of Acharya Third Year and has attained good knowledge of Sanskrit Buddhist philosophy has been debarred of the UGC Scholarship in the post Graduate final year course of studies.

7. There are yet two students Tsewang Rigzing, a student of Political Science reading in the Kashi Vidhyapith in M.A. and Lobzang Tsewang a student of M.A. in Philosophy in the Punjabi University, Patiala. They are promising students of Ladakh who deserve attention of the Commission and their education must not be allowed to suffer for want of proper financial aid.

The aforementioned facts and our very humble submissions deserve serious and sympathetic attention of the Commission, and the Government of India's Education Ministry; otherwise there would be a perilous breach in our educational progress in Ladakh and the people of Ladakh would remain always wallowed in ignorance and backward of provery.

We solicit an early and prompt notice of the representation.

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UNIVERSITY GRANTS COMMISSION

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Meeting:

Dated : April 24, 1978

Item No. 39 : To consider the recommendations made by the Publication Committee about providing assistance to the universities for publication of quality journals.

... The Committee constituted by the Commission to consider the question of providing assistance to a few universities for setting up regional centres and other related matters met on 10th October, 1977 and made the following recommendations with regard to the proposals from universities for publication of quality journals:-

- i) The Committee recommended that the Commission may provide assistance to the universities for publication of quality journals. Such assistance may be for an initial period of three years. The amount of assistance may not exceed Rs. 5,000/- in a year for a journal and may be determined on the merit of each case keeping in view the circulation of journals and the number of printed pages each year.
- ii) The Committee in this connection noted that the UGC is not in a position to provide assistance to any institution/society other than universities. In view of this, it would not be possible to provide any assistance for Journals brought out by Association/Societies etc.

20-326 A copy of the minutes of the meeting is enclosed (Annexure)* It is proposed that the universities may meet expenditure on publication of a journal as approved by the Commission on the merit of each case out of the grants allocated to them for publication of research work including doctoral thesis. This allocation could be increased wherever necessary.

The recommendations of the Committee for providing assistance to the universities for publication of quality journals is placed before the Commission for consideration.

AS(D.3(b))/DS(D-2)

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Minutes of the Publication Committee meeting
held on 10.10.1977 in the U.G.C. office

The meeting of the Committee constituted by the UGC to consider the question of providing assistance to a few universities for setting up regional centre for taking up publications of research/learned work in inter-university basis and allocation of grants to the universities for the block year 1977-78 and 1978-79 and other related matters, was held in the Commission's office on 10th October, 1977, at 11.00 AM. The following were present:-

1. Prof. Satish Chandra
Chairman
University Grants Commission
New Delhi
2. Prof. R. Ramachandra Rao
Vice-Chairman
University Grants Commission
New Delhi
3. Prof. C.P. Bhambhri
Jawaharlal Nehru University
New Delhi
4. Prof. J.N. Bhattacharya
Calcutta University
Calcutta
5. Prof. A.R. Murti
Indian Institute of Science
Bangalore
6. Prof. V.L. Bhimasankaran
Osmania University
Hyderabad
7. Prof. Ramesh Mohan
Director
C.I.E.F.L.
Hyderabad
8. Dr. D.D. Narula
I.C.S.S.R.
New Delhi.

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9. Shri R.K. Chhabra
Secretary
University Grants Commission
New Delhi
10. Shri A.B. Gupta
Deputy Secretary
University Grants Commission
New Delhi.
11. Shri P.L. Chopra
Assistant Secretary
University Grants Commission
New Delhi.

Prof. S. Maqbool Ahmed, Aligarh Muslim University and Prof. R.L. Shukla, Delhi University could not attend the meeting.

Item No. 1: To consider the question of providing assistance to a few universities for setting up regional centre for taking up publication of research/learned work on inter-university basis.

The Committee felt that in question of providing special assistance to a few selected universities for setting up regional centres for taking up publication on the inter-university basis may be considered at a later stage. In the meantime, the Commission may with a view to setting up the pace for production of high quality research work encourage such programmes through its centres of Advanced Study and Departments of Special Assistance which may be provided financial assistance for bringing out publication of research/learned work including doctoral thesis of high quality in their areas of specialisation from teachers and scholars of other universities and colleges.

The Committee in this connection also considered the question of providing assistance to the universities for bringing out abstracts in science subject. It was felt that INSA, INSDOC and CSIR are bringing out such abstracts in some disciplines in science- The UGC could supplement these efforts. The abstracts of these in Education brought out by CAS in Education, Baroda University was referred to in this connection. The Committee felt that similar efforts could be made by CAS/DSA in sciences and the Commission may provide necessary assistance to such CAS/DSA which wish to bring out such abstracts in their areas of specialisation.

Item No. 2: To consider the question of providing assistance to the Universities for publication of quality journals.

The Committee recommended that the Commission may provide assistance to the universities for publication of quality journals. Such assistance may be for an initial period of three years. The amount of assistance may not exceed Rs. 5,000 in a year for a journal and may be determined on the merit of each case keeping in view the circulation of journals and the number of printed pages each year.

The Committee in this connection considered the suggestions made by various panels in Humanities and social sciences and sciences and desired that further details viz. (1) year of starting the publication, (2) Names of members of Editorial Board, (3) No. of copies printed and sold during the past three years, (4) subsidy received if any and the sources, (5) Rate of subscription and (6) Details of income and expenditure and (7) whether the journals is brought out by the department itself or on behalf of some association society etc. in respect of the following journals be obtained in the first instance:

1. Bulletin of Earth Sciences, Poona
2. Indian Linguistics-brought out by the Department of Linguistics, Poona University.
3. International Journals for Dravidian Linguistics-brought out by the Linguistics Department, Kerala University.
4. Aligarh Law Journal, Aligarh Muslim University.
5. Banaras Law Journal, Banaras Hindu University.
6. Cochin Law Journal, Cochin University
7. Delhi Law Journal, Delhi University
8. Jaipur Law Journal, Rajasthan University
9. Panjab Law Journal, Panjab University

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10. Indian Year Book of International Studies, Madras University.
 11. Journal of Social Research-Department of Sociology and Anthropology, Ranchi University Ranchi.
 12. Sameiksha (in Hindi)-being published by the Department of Sociology, Banaras Hindu University.
 13. Journals of North Eastern Studies-Department of Sociology, Dibrugarh University.
 14. Indian Journal of Social Work, T.I.S.S. Bombay
 15. Political Science Review, Jaipur.
 16. International Studies, J.N.U.
 17. Journal of Politics, Aligarh
 18. Journal of the School of Languages, Jawaharlal Nehru University, New Delhi.
 19. Journal of Comparative Literature, Jadavpur University, Jadavpur
 20. Osmania Journal of English Studies, Osmania University, Hyderabad.
 21. The Journal of Indian History, Kerala University.
 22. Indian Economics and Social History Review, Delhi University.
 23. Bulletin of C.I.E.F.L., Hyderabad.

The Committee in this connection noted that the UGC is not in a position to provide assistance to any institution/society other than universities. In view of this, it would not be possible to provide any assistance for Journals brought out by Association/Societies etc. the Committee desired that the other panels may also be requested to identify quality journals which could be considered for support by the UGC.

Item No. 3: To consider incorporation of certain conditions in the guidelines for the publication of learned Research work including Doctoral Thesis.

The Committee suggested that the guidelines

for publication of thesis/learned research work may include the following:-

1. The authors should not be asked to make any financial contribution towards publication of their approved work.
2. The Universities may follow the Indian copy Right Act for deciding the question of copy right of the works approved for publication grant.

The Committee in this connection considered the suggestions made by the Delhi University for amendments in the guidelines and agreed with the suggestion that even in such cases where the amount of subsidy is less than Rs. 3,000/- reference to experts be made.

The Committee suggested that the guidelines for publication of thesis of learned work may be revised accordingly, and the new guidelines may be as at Appendix-I.

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Guidelines for the Implementation of Scheme of Assistance to Universities for the Publication of Learned/Research Work including Doctoral Theses during Fifth Plan period.

1. The University Grants Commission scheme of assistance to Universities/Colleges teachers for the publication of learned/research work including doctoral theses, is by way of supplementing the work of private publishers and not by way of replacing the private publisher in bringing out high quality publication.
2. A learned research work to be assisted under the scheme should be one that breaks new ground and is useful as reference material for honours and postgraduate studies.
3. Theses accepted for doctoral degree may be considered for assistance for publication under the scheme only within a period of ten years after its submission.
4. A specific ratio of assistance be fixed for assistance for learned research works and doctoral theses. The allocation made to a university under the scheme be utilised by the universities normally on the basis of 2/3rd for doctoral theses and 1/3rd for other learned research works.
5. Repetitive publication should not be considered under the scheme for assistance. Assistance would be available once only for the initial publication. The publication should be printed in India only.
6. The University may either publish the works under its supervision and control or get these published through reputed publishers. Payments towards the cost of a publication should not be made to the author, but directly to the publisher by the university. The author could be consulted regarding the publisher, if it is not done through university press.
7. The authors should not be asked to make any financial contribution towards publication of their approved work.
8. The universities may follow the Indian Copy Right Act for deciding the question of Copy Right of the works approved for publication grant.
9. With a view to ensuring a high academic standard the universities should take utmost care in making proper selection of learned research works and theses for publication. The manuscripts should be got assessed by experts, usually by two (other than the examiners) in that particular field. The university may also avail of the services of professional people for editing, referencing spacing etc. of the manuscripts from the point of view of quality and presentation and may meet expenditure in this regard out of the grant allocated for publication.

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10. Besides seeking the advice of commercial interests while selecting a manuscripts for publication, the universities may consider the desirability for appointing sole and/or regional selling agents/distributors.

11. The amount of subsidiary for publication of a thesis should not exceed Rs. 5,000/- unless the university is itself publishing the thesis on its own, in which case it may meet actual expenses on its publication.

12. Where assistance to a publication is substantial, the university should undertake it as its publication and a major part of the money realised through sale (after making provision of royalty to author, Commission to retailers etc.) should be credited to this fund for publications so that it can support more books to be published. The money obtained through sales of books published with UGC support should not be used by the universities as a general sources of revenue.

13. There should be proper coordination among the agencies providing financial assistance for similar purposes, i.e. ICHR, ICSSR, NBT, Indian Institute of Advanced Study, Simla. To avoid duplication of assistance, the universities should . . . provide a column in the proforma inviting proposals indicating whether a particular scholar has approached any other organisation for financial assistance for the same publication and if so, with what results ?

14. The publication of catalogues, critical additions of rare manuscripts and research/reference manuals costing more than Rs. 20,000/- would be considered on merits outside the general scheme of the UGC on all India basis after the work has been examined by the Commission with the help of experts.

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U G C
UNIVERSITY GRANTS COMMISSION

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Meeting:
Date : 24th April, 1978

Item No. 40: To consider the question of fixing the duration for which assistance be provided to the universities for junior research fellowships allocated to them on the recommendation of the V Plan Visiting Committees.

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The University Grants Commission has allocated about 1,350 to the universities on the basis of the recommendations made by the V Plan Visiting Committee. These include junior research fellowships which have been allocated to some universities in whose cases the V Plan Visiting Committee did not consider any allocation. A copy of the rules relating to the allocation of these fellowships is at Annexure-B. These fellowships are in addition to about 2500 junior fellowships allocated to the universities on the basis of at any given time under the U.G.C. Scheme of allocation of Junior Research Fellowships to the universities.

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The Panjab University has now enquired the duration upto which assistance would be available from the Commission for award of these fellowships. A copy of the letter received from the university is enclosed (Annexure-II).

The junior research fellowships allocated by the Commission on the recommendation of the V Plan Visiting Committee are on the basis of "at any given time". Assistance during the V Plan period for appointment of staff is available upto 31-3-1981. If the universities continue to award these fellowships upto this date, payment towards these fellowships will go beyond 31-3-1981 as the duration of these fellowships is four years with an assessment after two years. The duration of assistance for these fellowships is, therefore, to be determined. The following alternatives are for consideration:

- (a) The Commission's assistance to the universities for these fellowships may be only upto 31-3-1981. The universities may keep this in view while selecting candidates for award of the fellowships

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allocated on the basis of the V Plan Visiting Committee's recommendations and should not make fresh selection if any fellowships is vacated before this period. In case the tenure of any fellow extends beyond 31-3-1981, the university may meet the expenditure from their own funds.

- (b) The universities may select candidates for award of junior research fellowships allocated on the recommendations of the V Plan visiting committee by 31-3-1979, and no selection be made for award of these fellowships after this date. The Commission may provide assistance to the universities for all fellows selected by 31-3-1979 upto the end of their tenure as per fellowship rules.

The matter is placed before the Commission for consideration.

AS(D-2b)/DS(D-2)

Guidelines for Award of Junior Research
Fellowships in Science and Humanities

On the recommendations of the Visiting Committees which examined the development schemes of the Universities, the University Grants Commission has provided to each University, a certain number of Junior Research Fellowships with an annual contingency grant of Rs.1,500/- per annum as part of the V Plan development programmes. These are in addition to the University Grants Commission fellowships already allocated to each university from the general pool of fellowships. The total number of fellowships thus available each year to a university is to be utilised in accordance with the GUIDELINES given below:

- (1) The fellowships may be awarded to deserving scholars working for the Ph.D. degree. The total number of fellowships in any given time/year during V Plan period shall not exceed the number of fellowships annually allocated to the University. The number of fellowships made each year in different subjects may be decided by the University with the help of a Committee. The fellowship once awarded would be tenable for the duration of the award i.e. 4 years subject to prescribed conditions and any vacancies arising could therefore be filled only for the remaining period of that award.
- (2) The University Grants Commission is not in favour of distribution of such fellowships among the departments of the University on a permanent basis.
- (3) These fellowships are given to the universities as part of their development plans with the specific purpose of encouraging their research effort and creating research interest in every department of the University and in inter-disciplinary areas. Distribution of fellows among qualified guides should be as even as possible and within the limits laid down by the University in this behalf. Selected fellows may be encouraged to work under the guidance of such qualified teachers who have less than three Ph.D. scholars working under their guidance.
- (4) The scholars selected for award of these fellowships should fulfil the qualifications prescribed by the

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University Grants Commission for the award of Junior Research Fellowships. Selection should be on an ALL INDIA BASIS and on competitive merit.

- (5) The University should not discontinue the existing maintenance budget provision for scholarships/fellowships.
- (6) The awards against these fellowships may be made with the help of a Committee appointed by the University and in consultation with the Research Fellowships Committee of the Department concerned and before the end of September each year. The question of raising the years of tenure may be taken up in accordance with the guidelines already supplied to the University. A statement of selections made during a particular year as well as in respect of fellow selected in earlier years may be sent to the University Grants Commission before the end of October each year.
- (7) Any vacancies arising in these fellowships for whatever reasons may be considered as part of the general pool of fellowships. The University, if it so desires, may undertake a second selection during the year but such selection should be completed before the end of March each year and the ~~statement~~ statement forwarded to the Commission before end of April of that year.

Copy of letter No.4179/A dated 16th February, 1978 from Shri S.P. Arora, Finance and Development Officer, Panjab University, Chandigarh addressed to Shri P.L. Chopra, Assistant Secretary, UGC regarding Higher Education and Research - Development of the Universities for the Fifth Plan Period (1974-75) - Acceptance of the Scheme by the Commission.

Kindly refer to your letter No.F.16-1/75 (D-2a/b) dated 29-11-1977 conveying the approval of the Commission for the allocation of 40 Junior Fellowships of the value of Rs.400/- p.m. outside the Fifth Plan allocation.

In the above said letter the said approval was conveyed in continuation of your office letter of even number dated 3-4-1976 on the subject mentioned above. In this respect, I am to invite your kind attention to para III of your letter No.F.16-1/75 (D-2a) dated 3-4-1976, in continuation of which you conveyed the approval. This reads as under:

"In the case of recurring items of expenditure particularly with regard to additional posts and fellowships etc., the University Grants Commission will pay grants to the University, on the agreed sharing basis as indicated and on the basis of actual expenditure incurred in respect of posts filled during the Fifth Plan period. It will be the responsibility of the University, in consultation with State Government, to take over this entire expenditure, as a committed expenditure, to effectually maintain these posts, when the University Grants Commission assistance ceases after 31-3-1981.

I had the opportunity to discuss with you about the recurring liability of the University on these fellowships after 31-3-1981. You were of the view that since these fellowships had been provided outside the Fifth Plan allocations for four years and there was no question of any recurring liability of the University on these fellowships after 31-3-1981.

In fact need for clarification has arisen on account of reference made to letter No.F.16-1/75 (D-2a) quoted above.

I am to request you to kindly clarify whether assistance of the Commission towards these Junior Fellowships will continue to be available to the University after 31-3-1981.

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UNIVERSITY GRANTS COMMISSION

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Meeting:

Dated : 24th April, 1978

Item No. 41 : To consider a note regarding payment of grants towards research projects approved by the Science Panels in respect of universities which are yet to be brought under Section 12A of the UGC Act.

Some of the universities, for example, Kakatiya and Rohtak are yet to be brought under Section 12A of the UGC Act. However, research proposals submitted by individual teachers working in these universities as and when received by the Commission are placed before the Science Panels for consideration and which are sometimes recommended to the Commission for grant-in-aid for the implementation of the research schemes.

However, as the above universities have not yet been brought under Section 12A of the UGC Act, the Commission despite the recommendations of the Panels is not able to pay them the grant for the individual research schemes.

A peculiar situation has arisen when two teachers, namely, Dr. K.S. Sharma and Dr. R.K. Nigam of the Department of Chemistry, Rohtak University while working in the Kurukshetra University had submitted research schemes for the consideration of the Commission which were duly approved on the recommendations of the Chemistry Panel. A total grant of Rs. 5,000/- was also paid in respect of each of the above schemes to the Kurukshetra University. However, when Dr. Sharma and Dr. Nigam were brought under the newly established Rohtak University, further grant could not be paid to the Rohtak University towards their research projects.

The matter is placed before the Commission for consideration, to consider how such on going projects could be continued to be supported.

E.C. SR-II/Addl. Secy.

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UNIVERSITY GRANTS COMMISSION

(333)

Meeting:

Dated : 24th April, 1978.

Item No. 42 : To consider a proposal from the Indian School of Mines, Dhanbad, for the construction a building for the Executive Development Centre.

The Indian School of Mines, Dhanbad, has sent a proposal for the construction of a building for the Executive Development Centre at an estimated cost of Rs. 49.89 lakhs. The building will comprise the following two wings:-

1. Academic wing having a small auditorium, separate library facilities, a couple of lecture-rooms as also rooms for seminars and syndicate discussions.
2. Residential block comprising 24 single and 48 double seated rooms with attached bath room facilities, lounge and dining room, indoor games facilities, accommodation for teachers including some members of guest faculty.

The School has informed that with the nationalisation of the Coal Mining Industry, the demand for refresher and intensive training courses has become very high. The School organised 25 courses in 1976 and over 40 courses in 1977. They however, have a major constraint in running the in-campus programmes in the absence of adequate academic and living accommodation for the participants who belong to the middle and higher management cadres. This deficiency has been pointed out to the School, not only by the participants but various government and non-government officials who have been visiting the School.

The School proposes to adjust the requirements of the building for the Executive Development Centre from within the additional space sanctioned by the University Grants Commission in the Fourth and Fifth Plan as under:-

- | | |
|---|----------------------|
| 1. Additional space sanctioned for the Science Block in the fourth plan | 14,500 sq.ft. |
| 2. Additional space sanctioned by the Commission during the Fifth Plan for various departments. | 41,500 sq.ft. |
| Total | <u>56,000 sq.ft.</u> |

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|----|--|----------------------------|
| 3. | Utilisation of the space now proposed: | 21,750 sq. ft. |
| | I. Science Block | 21,750 sq. ft. |
| | II. Humanities Block | 6,334 sq. ft. |
| | III. Executive Development (Academic wing) | 6,200 sq. ft. |
| | IV. Engineering Block | 22,000 sq. ft. |
| | Total - | <hr/> 56,284 sq. ft. <hr/> |

The space requirements on some departments agreed to in the fifth plan (mining, petroleum, technology, applied geology and applied geo-physics) would be met by allotting them the space at present occupied by the Science and Humanities Departments and some departments in engineering subjects when new buildings for these faculties are ready. Similarly, for the residential wing of the proposed building of the Executive Development Centre, the school has proposed to utilise the provision agreed to for a hundred-seated students hostel in the fifth plan.

The Indian School of Mines, Dhanbad, had proposed the establishment of an Executive Development Centre comprising the following two faculties in the Fifth Plan period:-

1. Faculty of Management and Industrial Engineering
2. Faculty of Continuing Education.

The proposal was considered by the Visiting Committee of the Commission. The committee was of the view that although the school may not have a fullfledged Faculty of Management, there is need for the School offering certain courses in Management as applied to Mining Industry. The School may organise short-term courses in industrial engineering, industrial finance,

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personnel management etc. as applied to mining industry with the help of specialised organisations in management. The committee recommended a post each of Professor and Assistant Professor for this purpose. No additional assistance was recommended by the committee for this activity.

The Department of Coal, Government of India, which provided an amount of Rs. 3.17 crores for the development of Indian School of Mines, Dhanbad, during the fifth plan period informed the Commission in one of its communications that the Department as one of the major users of its products is keenly interested in seeing that the School develops high degree of expertise in the management training so that the School trains not only good mining engineers and planners, but also good managers. The general management schools, the department further pointed out, lack the special orientation that is required to cater to the special needs of mining and mineral industries and this can best be provided at an institute where mining and mineral sciences are taught. The Department is also interested in the School developing a strong programme of short courses- both professional and managerial. If the School is to strengthen its activity in the field of continuing education for senior and middle level mining executives, it must provide much better facilities for board and lodging for the participants.

It may be mentioned that the School had made a forceful plea before the fifth plan visiting committee for allocation of additional space for various departments and also for additional accommodation for the residence of students. The School now proposes to utilise some of the sanctioned space for academic residential building of the Executive Development Centre. The School has also informed that they would need a 200-seated hostel for undergraduate and a 50-seated ladies hostel during the sixth plan period.

The matter is placed before the Commission for consideration.

AS (SA)/DS (CF)

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UNIVERSITY GRANTS COMMISSION

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Meeting:

Dated : 24-25th April, 1978

Item No. 43 : To reconsider the proposal of the Indian School of Mines, Dhanbad, for starting a regular B.Tech (Mining Machinery) Degree Course.

The Commission at its meeting held on 20th February, 1978 considered alongwith other proposals received from the Indian School of Mines, Dhanbad, a proposal for starting a regular B.Tech. (Mining Machinery) Degree Course (Item No.34) and resolved that the School may be advised to take up B.Tech.(Mining Machinery) degree programme alongwith its next plan proposals. Relevant extracts of the note are enclosed (Annexure I)*

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The School has requested for the reconsideration of the proposal on the ground that there is a great demand in Industry for Mining Machinery Engineers and over 600 vacancies in this cadre already exist in the coal mining industry alone. A real need would therefore be met if a regular B.Tech. course in this subject can be started early and any delay would mean that the shortage in this cadre would keep on growing with detrimental results. The School has further informed that even if the course is started this year and admissions are made directly at the 3rd year level, even then the first batch will come out only in 1980. A copy of the letter received from the Director, Indian School of Mines, Dhanbad is enclosed as (Annexure-II).@

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The matter is placed before the Commission.

AS(SA/DS(CE)

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B.Tech. (Mining Machinery) Degree Programme.

The starting of B.Tech(Mining Machinery) Degree Programme is not entirely new one. A condensed version of the proposed regular B.Tech (Mining Machinery) programme is already being offered at the School for diploma holders in Elec./Mech.Engg. with an annual intake of around 10. It should be possible to take an additional batch of 15-20 per year to the 5 year integrated course who around the 3rd year level, would join the Condensed Course stream-with the physical facilities already sanctioned. This would in fact, help optimise the facilities already created. Hence no additional academic preparation is needed and even funds, if needed at a later stage, would only be marginal.

As regards the likely manpower requirements the School has intimated that as on 1.4.1977, Coal India alone needed 685 colliery Engineers (as distinct from Mining Engineers, Excavation Engineers or Civil Engineers). Needs of M/s Singhereni Collieries Co.Ltd and of non-coal mines are additional, and may amount to about a third of the above figure, taking the current shortage upto about 900. Moreover as the mining industry is a 'growth' core-sector industry with an increasing pace of mechanisation its annual needs of mine Elec./Mech. engineers would remain considerably above 100 a year.

The school has informed that the annual admission would be kept low (about 15-20) to start with, to see how the products fit in with the requirements of the industry.

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Copy of letter No. DT/442(EE) dt. March 16, 1978 from Prof. G.S. Marwaha, Director Indian School of Mines, addressed to Shri B.R. Kwatra, Asstt. Secretary, UGC.

--ooOoo--

This has reference to your letter No. F.15-14/77(T) dated March 10, 1978, on the above subject. We note with satisfaction that the Commission, noting that it would not involve any additional financial liability, has approved the start of a part-time M.Tech (Mining) Programme.

2. I write in connection with our proposal to start the regular B.Tech Mining Machinery course; this course too would not require any additional financial liability. On the other hand, as may be seen from my letter of 28th Nov. there is great demand in the Industry for Mining Machinery Engineers and over 600 vacancies in this cadre already exist in the coal mining industry alone. A real need would therefore be met if a regular B.Tech course in this subject can be started early. Any delay would mean not only that this considerable demand will not be met but also that the shortage in this cadre would keep on growing with detrimental results.

If the course is started this year and admissions are made directly at the 3rd year level, even then the first batch will come out only in 1980; by that time the shortage in the engineering cadres in mines is likely to grow further. Postponing it for consideration as a VI Plan scheme, would mean a further delay of about three years - which in the circumstances, is not desirable.

3. I write therefore to request the Commission to kindly reconsider the matter and grant its approval to the starting of a regular B.Tech (Mining Machinery) course at ISM early. It may be repeated that no additional financial liability would be involved, except for a few undergraduate scholarships.

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Meeting:

Dated : April 24, 1978

Item No.44 : To consider the proposal from the Madras University for financial assistance towards the appointment of additional teaching staff for development of post-graduate studies outside 5th Five Year Plan allocation.

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The Vice-Chancellor, Madras University has sent proposal requesting marginal support from U.G.C. (copy of letter attached as Annexure - for appointment of additional teaching staff required for carrying post-graduate teaching in Science, Humanities and Social Science Departments from the academic year 1978-79 as detailed below:-

| S. No. | Department | Professor | Reader | Lecturer |
|--------|---------------------|-----------|--------|----------|
| 1 | Sociology | - | - | 1 |
| 2 | Commerce | - | 1 Or | 1 |
| 3 | English | - | 1 Or | 1 |
| 4 | Journalism | 1 | - | - |
| 5 | Telugu | - | - | 1 |
| 6 | Kannada | - | - | 1 |
| 7 | Malayalam | - | - | 1 |
| 8 | Hindi | - | 1 | - |
| 9 | Criminology | 1 | 1 | 2 |
| 10 | Anthropology | - | 1 | 1 |
| 11 | Geography | - | 1 | 1 |
| 12 | Statistics | - | 1 | - |
| 13 | Organic Chemistry | - | 1 | 3 |
| 14 | Physical Chemistry | - | 1 | - |
| 15 | Inorganic Chemistry | - | 1 | 2 |

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|----|--------------------------------|---|----|----|
| 16 | Analytical Chemistry | - | 1 | 1 |
| 17 | Biochemistry | - | 1 | - |
| 18 | Nuclear Physics | 1 | - | 1 |
| 19 | Theoretical Physics | - | - | 1 |
| 20 | Biochemistry (P.G.I.B.M.S.) | - | 1 | - |
| | | 3 | 12 | 18 |

The above proposal was discussed with the Vice-Chancellor, Madras University with a view to have the minimum requirements of staff for teaching for Post-graduate classes. After discussion it was suggested that the following additional teaching posts during the V Plan period for which assistance of the Commission would be available upto 31st March, 1981 on the usual sharing basis outside V Plan allocation may be provided.

| S. No. | Department | Professor | Reader | Lecturer |
|--------|--|-----------|--------|----------|
| 1 | Sociology | - | - | 1 |
| 2 | Commerce | - | - | 1 |
| 3 | English | - | - | 1 |
| 4 | Telugu | - | - | 1 |
| 5 | Kannada | - | - | 1 |
| 6 | Malayalam | - | - | 1 |
| 7 | Hindi | - | 1 | - |
| 8 | Anthropology | - | 1 | 1 |
| 9 | Geography | - | 1 | 1 |
| 10 | Statistics | - | 1 | - |
| 11 | School of Chemistry (Comprising Organic Physical Inorganic and Analytical Chemistry) | - | 1 | 1 |
| 12 | Biochemistry | - | 1 | - |
| 13 | Nuclear Physics | 1 | - | 1 |
| 14 | Theoretical Physics | - | - | 1 |

The appointment of the additional staff has been necessitated by the introduction of Post-graduate teaching programme in all its departments from 1976-77 which were till then purely research departments.

An allocation of Rs. 2.00. crores was made to Madras University at the beginning of the V Plan period and the scheme covering Rs. 2 crores have already been approved to the University.

Regarding additional staff for the department of journalism it was agreed that this may be considered on receipt of the report of the Verghese Committee which has been set up by the University for formulating the new syllabus for M.A. in Communication.

Regarding additional staff for Criminology it was agreed that the staff may be appointed as recommended by the University Grants Commission (Item No. 20 dated 17.10.77) which considered the proposal for setting up of a department in Criminology in accordance with its structure in consultation with the user agencies and also after the transfer of the diploma course in Criminology being run by the Madras Medical College by the Government.

The proposal for assistance towards additional teaching posts outside the Vth Plan allocation is placed before the Commission for consideration.

AS/DS(D.1)

ANNEXURE : TO ITEM NO 44 .

Copy of D.O. letter No. Ag/C.1351 dated 16th March, 1978 from the Vice-Chancellor, Madras University to the Chairman, U.G.C.

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I refer to your letter D.O. No.F. 78-4/75(DI(c) dated 9th March, 1978, which comes, of course, as a great disappointment to me. However, in order not to discontinue admissions to postgraduate courses for the academic year 1978-79 (which I explained to Mr. Chhabra who, in turn, requested me not to do so), I would suggest that the Commission provide the University with the teaching staff in the case of Social Sciences to make it up to a minimum of 4 and in the case of Sciences to make it up to a minimum of 6. In my letter to you No. V.2235 dated 16th December, 1977 followed by Registrar's letter No. Ag/C.1176 dated 8th March, 1978 the details of our requirement are to be found as follows:-

| | <u>Department</u> | <u>Staff required</u> | | |
|----|------------------------------------|-----------------------|---------------|-----------------|
| | | <u>Prof.</u> | <u>Reader</u> | <u>Lecturer</u> |
| A. | <u>Humanity and Social Science</u> | | | |
| 1 | Sociology | - | - | 1 |
| 2 | Commerce | - | 1 Or | 1 |
| 3 | Journalism | 1 | - | - |
| 4 | English | - | 1 Or | 1 |
| 5 | Telugu | - | - | 1 |
| 6 | Kannada | - | - | 1 |
| 7 | Malayalam | - | - | 1 |
| 8 | Hindi | - | 1 | - |
| 9 | Criminology | 1 | 1 | 2 |
| B. | <u>Science</u> | | | |
| 10 | Anthropology | - | 1 | 1 |
| 11 | Geography | - | 1 | 1 |
| 12 | Statistics | - | 1 | - |
| 13 | Organic Chemistry | - | - | 3 |

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|----|----------------------|---|---|---|
| 14 | Physical Chemistry | - | 1 | - |
| 15 | Inorganic Chemistry | - | 1 | 2 |
| 16 | Analytical Chemistry | - | 1 | 1 |
| 17 | Biochemistry | - | 1 | - |
| 18 | Nuclear Physics | 1 | - | 1 |
| 19 | Theoretical Physics | - | - | 1 |
| 20 | Biochemistry | - | 1 | - |
| 8 | (PGIBMS) | - | 1 | - |

This is the marginal support that is needed by the University to keep the postgraduate programme going next academic year.

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University Grants Commission

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Meeting:

Dated : 24th April, 1978.

Item No. 45: To consider the proposal of the KSD Sanskrit University for setting up two Departments of -
(i) Teacher Education Department (Shiksha Vibhag)
and (ii) Department of Ancient Indian History and Sociology (Prachina Itihas Sanskriti Purana Evam Samajshastra Vibhag)

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At the time of the visit of the UGC V Plan Visiting Committee to KSD Sanskrit University, the University had proposed establishment of two new departments - one in Ancient History and the other in Rajshastra. The University did not include any proposal for establishing a Department of Education, but after discussion with the Vice-Chancellor and other University authorities, the Committee felt that top priority should be given to the establishment of a Shiksha Vibhag and that the University may have only one department for Prachin Itihas, Samskriti, Purana evam Samajshastra. The Visiting Committee recommended that the Commission may provide the assistance for the establishment of these two departments (i.e. one Professor, one Reader and one Lecturer in each of these departments and a contingency expenditure of Rs.90,000/-) as detailed below :-

1. Shiksha Vibhag

I Priority

- i) One Professor with specialisation in educational methods and teaching technique.
- ii) One Reader with specialisation in language teaching.
- iii) One Lecturer with specialisation in teaching of English to non-English speaking students as a library language.
- iv) Books and Journals - Rs.25,000/-
- v) Equipment and Audio-Visual Aids. - Rs.10,000/-

II Priority

- i) One Lecturer - Open
- ii) Books and Journals - Rs.15,000/-
- iii) Equipment and Audio Visual Aids. Rs. 10,000/-

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II. Prachina Itihas Sanskriti Furana Evam
Samajshastra Vibhag :

I Priority

- i) One Professor with specialisation in Prachin Itihas Evam Sanskrit.
- ii) Books & Journals - Rs.20,000/-

II Priority

- i) One Reader with specialisation in Furana.
- ii) One Lecturer in Arthashastra or Samaj Shastra or Rajniti Shastra.
- iii) Books & Journals - Rs.10,000/-

The Commission could not accept the recommendation of the Visiting Committee with regard to starting of a Department of Ancient Indian History and Sociology and Teacher Education Department.

The Vice-Chancellor, KSD Sanskrit University, however, feels that these two Departments are sine-gua-non for a Sanskrit University and all that the University is doing or propose to do for development of Sanskrit education will remain incomplete without these two departments. A copy of the letter received from the Vice-Chancellor is attached as Annexure.*

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In view of the Vice-Chancellor's recommendations, the matter is placed before the Commission for consideration.

AS/DS (D-3)

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Copy of letter No.G/960/78 dated 18th February, 1978 received from Dr. R.K. Sharma, Vice-Chancellor, K.S.D. Sanskrit University addressed to Prof. Satish Chandra, Chairman, UGC, New Delhi.

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We are grateful to the University Grants Commission for their kind help for strengthening our University departments as conveyed through their letter No.F.11-1/74(D-8a) dated 5th July, 1976. I would however, like to invite your kind attention to Para 1(f) saying that the commission could not accept the recommendations of the visiting team with regard to starting of a department of Ancient Indian History and Sociology (Prachina Itihas Sanskrit Purana Evam Samajshastra Vibhag) and teacher education department (Siksha). It goes without saying that these two departments are sine-qua-non for a Sanskrit University whose primary objective is to create interest in Ancient Indian History and Culture and propagation and development of Sanskrit language. In our opinion all that we are doing or propose to do for the development of Sanskrit education in this University will remain incomplete without these two departments. Our proposals in this behalf and the recommendations of the visiting team are too modest. According to the recommendations of the visiting team, one Professor, one Reader and one lecturer are to be appointed in each of these two departments and a contingent expenditure of Rs.90,000/- only is involved in setting up both the departments.

I shall therefore be grateful if you could kindly agree to convey the acceptance of the commission to the recommendations of the visiting team with regard to the setting up of a department of Ancient Indian History and Sociology (Prachin Itihas sanskrit Purana Evam Samajshastra Vibhag) and Teacher Education Department (Siksha) so that these departments could start functioning in the next session beginning July 1978. All other posts already sanctioned by the commission have been advertised by the Bihar Public Service Commission on an All India basis and appointments are likely to be finalised by the end of March, 1978. If we could get the acceptance of the commission to the creation of the posts of one Professor, one Reader and one lecturer in each of the two departments in time, we will persuade the Bihar Public Service Commission to finalise their recommendation as quickly as possible so that the incumbents are in position by July next.

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Meeting:
Dated : 24-4-1978

Item No.46: To receive the minutes of the meeting of the Standing Advisory Committee on Area Studies held on 29th March, 1978

The Standing Advisory Committee on Area Studies met on 29th March, 1978, to consider various matters referred to it by the Commission. A copy of the minutes of the meeting of the committee is attached (Annexure).

The main observations/recommendations of the committee are given below:-

1. The Committee at its earlier meeting held in February 1977 had accepted the proposal of North Bengal University for the establishment of a Centre for Himalayan Studies and desired that the studies may be confined to Tibbet and Bhutan. The position was reviewed and it was decided that the North Bengal University may not confine studies of Tibbetan and Bhutan, but may have the flexibility to undertake studies on regions in Himalayas.
2. A sub-committee may examine the proposals received from universities for administrative, ministerial and library staff for the Area Studies Centres.
3. In the utilisation of the Ford Foundation assistance for area studies, lower priority may be given to acquisition of books, as facilities through open general licence are already available for the import of books from abroad.
4. The following universities may undertake depth studies on Pakistan in the area indicated against each:

| <u>University</u> | <u>Area of Study</u> |
|---------------------|---------------------------|
| Panjabi and Lucknow | Economic Development |
| Rajasthan | Modern History & Politics |
| Panjab | Language and Literature |
| Bombay | Sindhi |

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4. Calcutta University may be assisted for setting up a Centre for South East Asian Studies for undertaking studies on Bangladesh, Burma and Thailand. The proposal of Osmania University for setting up a Centre for West Asian Studies is not acceptable.

5. Osmania University may be provided assistance for developing expertise on the developing countries around the Indian Ocean on Urban and Regional Planning.

6. A committee may visit the Centre of West Asian Studies to examine its requirements for staff and other items. However, to meet its pressing requirements, the university may be provided a professorship in Political Development and an amount of Rs.25,000/- for publications.

7. The Jawaharlal Nehru University may utilise its existing resources for undertaking studies on Central and Southern Africa.

The matter is placed before the Commission for consideration.

DS(CE)

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The meeting of the Standing Advisory Committee on Area Studies was held on 29th March, 1978 in the UGC. The following were present:-

1. Professor S. Gopal Chairman
2. Chairman, UGC
3. Professor Maabool Ahmed,
4. Professor V P Dutt,
5. Professor M S Agwani,
6. Professor Iqbal Narain,
7. Professor M Jha,
8. Professor Barun De,
9. Shri A Damodaran
(in place of Shri JS Mehta)
10. Shri L R Mal.

Shri PN Haksar, Professor Manmohan Singh, Professor AJ Dastur, Professor VM Dandekar, Dr. MS Gore and Professor VM Reddy could not attend the meeting.

Item No.1: To receive a note on the action taken on the minutes of the last meeting of the Committee

The committee noted the action taken on the minutes of the last meeting of the committee held in February 1977. With regard to Item 2 of the minutes, the committee was informed that the note on the work done by Delhi and Jawaharlal Nehru University on Chinese Studies has since been received. The committee desired that the matter may be examined in the light of the recommendations made by the Committee and placed before it again at its next meeting.

The committee also reviewed its earlier decision with regard to the proposal of the North Bengal University

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for the establishment of a Centre of Himalayan Studies and felt that the North Bengal University may not confine the studies to Tibet and Bhutan. The words "but desired that the studies may be confined to Tibet and Bhutan" may be deleted from the minutes of the last meeting.

The committee had also some discussion with regard to the Directorship of the Area Studies programme and felt that in the interest of the continuity of the programme, the earlier decision of the committee that every Centre of Area Studies should have a Director for 3-5 years and if a change is to be effected in the Directorship before this period, the University Grants Commission should be consulted, may be reiterated. It was also noted that the Rajasthan University had not consulted the UGC for the change in the Directorship of their Area Studies Programme. The Committee desired that the position may be got clarified from the University.

Item No.2: To consider the requirements of Universities for administrative and ministerial posts in the Area Studies Centres

The committee noted that the Centres of Area Studies have apart from administrative and ministerial staff also asked for some professional staff for their library work. It was decided that a sub-committee with the following composition may examine the proposals made by universities for administrative, ministerial and library staff for their Centres of Area Studies and make recommendations:-

1. Professor (Miss) AJ Dastur,
2. Professor Barun De,
3. Shri NN Gidwani,
Librarian,
Rajasthan University,
4. Shri L R Mal.

Item No.3: To consider the requirements of the Universities to be met out of the grant of \$3,00,000 offered by the Ford Foundation

There was some general discussion with regard to the utilisation of the Ford Foundation assistance offered for Area Studies Programme and it was decided

that the Chairman of the Standing Committee and the Chairman, UGC, may appoint a sub-committee to consider the requirements of the universities to be met out of the Ford Foundation grant. The committee felt that in the utilisation of the Ford Foundation assistance, lower priority should be given to acquisition of books, as facilities through open general licence were already available for the import of books from abroad.

Item No.4: To consider the proposals of universities for undertaking depth studies on Pakistan

The Committee agreed that the following universities may undertake depth studies on Pakistan in the area indicated against each:-

| <u>UNIVERSITY</u> | <u>AREA OF STUDY</u> |
|---------------------|---------------------------|
| Panjabi and Lucknow | Economic Development |
| Rajasthan | Modern History & Politics |
| Panjab | Language and Literature |
| Bombay | Sindhi |

The Chairman of the Standing Committee and Chairman, UGC, may decide the staff and other facilities to be provided to these universities for this purpose.

Item No.5: To consider the proposal of Panjab University for undertaking comparative study of the development of Agriculture and Small Industry in West Panjab (Pakistan) and Haryana and Panjab (India) in the Deptt. of Economics

The Committee decided to defer consideration of this item for some time.

Item No.6: To consider the proposal of Calcutta University for setting up a centre of South East Asian Studies

The committee felt that the establishment of a Centre to undertake studies on Bangladesh at Calcutta is very desirable. This Centre could utilise the material already collected by the Centre for Social



Sciences, Calcutta, on Bangladesh. The committee recommended that Calcutta University may be assisted for setting up a Centre for South East Asian Studies for undertaking studies on Bangladesh, Burma and Thailand. The Calcutta University may be provided additional staff and facilities for undertaking this programme in the light of similar facilities provided to other universities for taking up Area Studies Programme.

Item No.7: To consider the proposal of Osmania University for setting up a Centre for West Asian Studies

The committee did not accept the proposal of Osmania University for setting up a Centre of West Asian Studies.

Item No.8: To consider the proposal of Osmania University Department of Geography for developing expertise on the developing countries around the Indian Ocean on Urban and Regional Planning

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It was pointed out that the Department of Geography, Osmania University has done very good work in the field of Regional Planning and have recently brought out a Planning Atlas on Andhra Pradesh, which is very informative and useful. The committee agreed that Osmania University may be provided assistance for developing expertise on the developing countries around the Indian Ocean on Urban and Regional Planning. The University may, however, involve other Social Sciences Departments in this programme. The University may be requested to send a detailed proposal which may be examined by the Commission and requisite assistance provided.

Item No.9: To consider the proposal of Utkal University for undertaking studies on South East Asia and Pacific Islands in the Department of Anthropology (Details awaited)

The committee decided that the consideration of the Item may be deferred.

Item No.10: To consider the proposal received from Ministry of Education & SW to identify a Centre to undertake studies on the Culture and Civilisation of countries like Sri Lanka and Burma

The committee noted that they have already recommended assistance to Calcutta University for setting up a Centre for Area Studies on Bangladesh, Burma and Thailand. Madras University is also undertaking programmes of depth studies on Sri Lanka. These Centres are required to undertake studies on the civilisation, culture, history, geography and economy of the areas concerned.

Item No.11: To consider a proposal from the Centre of West Asian Studies, Aligarh Muslim University. for additional teaching posts and funds for books and publication work.

The committee decided that a small committee may be appointed to visit the Centre of West Asian Studies, Aligarh Muslim University and examine its requirements for staff and other items. In the meantime an amount of Rs.25,000 may be sanctioned to the Centre for its publications. Subsequently, the Chairman of the Committee has recommended that the Centre be also strengthened by providing a post of Professor in Political Development.

Item No.12: To receive the recommendations of the All India Seminar on African Studies organised by Jawaharlal Nehru University on 3rd and 4th March, 1978

The committee noted the recommendations made at the Seminar.

Item No.13: To consider the proposal of Jawaharlal Nehru University for the Development of Central and Southern African Studies

The committee desired that the Jawaharlal Nehru University may utilise its existing resources for undertaking studies on Central and Southern Africa.

(SM)

Item No.14: To consider a reference from Jawaharlal Nehru University for seeking assistance from the Japan Foundation under their programme of Institutional Project Support

The committee noted that the Jawaharlal Nehru University has already approached the Japan Foundation for assistance and the Commission may itself consider this matter in the light of general guidelines for assistance from foreign Foundations. The committee, however, desired that any assistance to Jawaharlal Nehru University from Japan Foundation should not be at the cost of the programme of Japanese Studies of Delhi University for which the Government of Japan are already committed to provide assistance.

Confidential

UNIVERSITY GRANTS COMMISSION

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Meeting:

Dated : 24-4-1978

Item No.47: To consider a proposal from the MS University of Baroda, Baroda for Colombo Plan assistance for the postgraduate diploma course in Low Cost Housing.

The Visiting Committee which assessed the fifth plan proposals of the faculty of Technology & Engineering, MS University of Baroda, recommended the proposal of the University for starting a postgraduate diploma course of one year duration in Low Cost Housing. The Committee felt that this diploma course would be useful not only to the fresh graduates but also to the in-service officers of the State Government. For this purpose, the Committee recommended additional posts of one Professor and One Reader besides certain other grants for the Department of Architecture.

The MS University of Baroda has informed that it intends to start the postgraduate diploma course in Housing from June, 1978. A PG Course of this type, exclusively devoted to Housing for the masses, involving housing for roofless dwellers, rehousing of slums, site and services programmes, EWS and LIG Housing is stated to be the first of its kind in India. Some expertise is available in the University department of Architecture in this field, but it would like to take advantage of wide and long experience of the Development Planning Unit of the University College, London. The areas under which assistance is desired are as follows:-

- (1) Making available the services of a senior staff member of the DPU London University as advisor of studies for an initial period of 3 months (before the course starts) and for 3 years after the course begins, to see that it is set up well.
- (2) A training programme for 3 years, in which 2 staff members of the Architecture Department are trained each year in the DPU London: 9 months training in DPU and 3 months travel in Developing countries.

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- (3) A 3 month visit of the Head of the Department of Architecture (who will also be heading the PG Course in Housing) to DPU to acquaint himself with the various training programmes and methods, followed by the DPU.
- (4) One visit (of 3 months duration) each year by a staff member of the DPU to conduct special courses for students of Housing.
- (5) Books and equipment (not available in India) for setting up a proper reference section for the new course, and make available all teaching aids.

No financial commitments are involved on the part of UGC or the Ministry of Education & SW. The University has sought approval of UGC for seeking assistance for this programme from UK under Colombo Plan. A copy of the proposal received from the MS University, Baroda, is *p 357-358 enclosed as Annexure.*

The matter is placed before the Commission. It is for consideration whether the proposal of the University may be recommended to the Ministry of Education and SW, New Delhi.

AS(SA)/DS(CE)

Copy of letter No. GCU/V/1678 dated 24th December, 1977 from the Registrar, The Maharaja Sayajirao University of Baroda, Baroda to the Secretary Secretary, UGC, New Delhi.

We have to refer to your letter No. F.30-16/76(T) dated 26th September, 1977 and to thank you for approving the one year Postgraduate Diploma Course in Housing which the Department of Architecture of this University had proposed. The University intends to start this course, from June, 1978.

2. A P.G. course of this type, exclusively devoted to Housing, for the masses involving housing for roofless dwellers, rehousing of slums, site and services programme, E.W.S. and L.I.G. Housing is the first of its kind in India. We have a certain amount of expertise in our Department of Architecture, in this field; but we were also exploring ways in which this course can be assisted and helped by institutions which have a very wide and long experience of working in this field, in other developing countries. The Development Planning Unit of the University College, London, is such an Institution, under the guidance of experts like Dr. Koeningsberger, the University of London, has set up this Development Planning Unit which is doing considerable work in the field, and also helping other Developing countries to set up suitable courses in their respective areas. The Development Planning Unit of the University of London, is under the Overseas Development Ministry of United Kingdom, which is represented in India by the British Council. We have had extensive discussions about our course with Dr. Richards, of the Bombay Office and Mr. Buccanon of the Delhi Office, of the British Council. From our discussions with them about our new course, we carried the impression that the British Council, and overseas Development Ministry of U.K. will be prepared to help and assist the M.S. University of Baroda, if the Ministry of Education gives its sanction for such assistance.

3. The areas of assistance are likely to be as follows:

- (1) Making available the services of a senior staff member of the D.P.U. London University as advisor of studies for an initial period of 3 months (before the course starts) and for 3 years after the course begins, to see that it is set up well. The D.P.U.'s experience in this regard would be invaluable to the Department of Architecture of this University.

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- (2) A training programme for 3 years, in which 2 staff members of the Architecture Department are trained each year in the D.P.U. London: 9 months in D.P.U. and 3 months travel in Developing Countries. (This will enable this University to have a core of trained staff members to run the Department in future).
- (3) A 3 month visit of the Head of the Department of Architecture (who will also be heading the P.G. Course in Housing) to D.P.U. to acquaint himself with the various training programmes and methods, followed by the D.P.U.
- (4) One visit (of 3 months duration) each year by a staff member of the D.P.U. to conduct special courses for students of Housing.
- (5) Books and Equipment (not available in India) for setting up a proper reference section for the new course, and make available all teaching aids.

4. The British Council will, we believe, entertain a request to make available this help to the M.S. University of Baroda, to enable us to run a good course in Housing, which the country very much needs. It may also be pointed out that the Ministry of Education and the U.G.C. are not expected to share any financial or other burden in this arrangement.

5. We feel, that if we are permitted to seek this assistance and help from the D.P.U. of the University of London, through the ODM the course in Housing will benefit very greatly. We have therefore to request you to kindly process this matter further, and approach the British Council Delhi and the O.D.M. London on our behalf.

One set of Forms (A-1, A-2, and A-4) giving details of the areas of collaboration mentioned in this letter is enclosed* herewith.

*Not enclosed