UNIVERSITY GRANTS COMMISSION

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REPORT FOR THE YEAR

1966-67

Presented to the Government of India in compliance with Section 18 of the UGC Act, 1980

NEW DELHI

University Grants Commission New Delhi (INDIA)

NOTE

Figures given in the report have been rounded.

1 lakh = 1,00,000

1 crore = 1,00,00,000 = 10 million

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1966-67

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Nawab Ali Yavar Jung, Vice-Chancellor, Aligarh Muslim University

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UNIVERSITY GRANTS COMMISSION ANNUAL REPORT

April 1966 to March 1967

In compliance with Section 18 of the University Grants Commission Act, 1956, we present to the Government of India a report on the work of the Commission during the year 1966-67 to be laid before both Houses of Parliament.

BASIC FACTS

Universities

The process of expansion in the field of higher education continued during 1966-67. The number of universities at the end of the Third Plan was 64. During 1966-67, new universities came into existence at Kanpur and Mecrut in Uttar Pradesh, Berhampur and Sambalpur in Orissa, and Surat and Rajkot in Gujarat. The number of universities has thus risen to 70. There are 9 institutions deemed to be universities under Section 3 of the U.G.C. Act, and no new institution was added to the list in 1966-67. A chronological list of the universities and institutions is given in appendix I.

Colleges

During the year under report, the number of colleges (excluding university departments) rose from 2,572 to 2,749. Their distribution according to courses of study was: arts, science and commerce 1,915; engineering and technology 105; medicine, pharmacy, nursing, dentistry etc. 137; law 69; agriculture 54; veterinary science 20; education 200; oriental learning 177; and others (including physical education, music and fine arts) 72. The growth of colleges course-wise and according to type of management over the period 1961-62 to 1966-67 is shown in appendices II and III.

Student Enrolment

The total enrolment in the universities and colleges* during 1966-67 was 19,49,012. This represented an increase of 2,20,239 or 12.7% over the enrolment in corresponding classes in the preceding year. The statements given in appendices IV to VI indicate the year-wise increase in the student enrolment since 1956-57 and the trends in faculty-wise and stage-wise enrolment, 1964-65 to 1966-67.

^{*} Including the enrolment in intermediate classes affiliated to the U.P. Board of High School and Intermediate Education.

During the period 1964-65 to 1966-67, the increase in the total student enrolment was 4.20,785. Of this, the maximum increase of 41.9% was in science courses. In arts the increase was 34.4%, in commerce 8.7%, in engineering and technology 4.1%, in medicine 3.7%, in law 3.1%, in agriculture and education 2.1% each, and in veterinary science 0.2%. In other courses the enrolment declined by 0.3%.

At the graduate level the percentage enrolment decreased from 54.7% to 54.1% during this period, and that at the postgraduate level came down to 5.2 from 5.5 in 1964-65. The percentage enrolment at the research level remained constant at 0.5. However, the actual enrolment at the graduate, postgraduate and research levels increased by 2,17,946; 17,597 and 2,564 respectively.

Teaching Staff

During the period 1964-65 to 1966-67, the strength of the teaching staff in university departments and university colleges rose from 13,637 to 14,900. The number of professors increased from 1,085 to 1,401, of readers from 2,069 to 2,320 and of lecturers (including assistant professors and assistant lecturers) from 9,416 to 10,264. The strength of tutors and demonstrators declined from 1,067 to 915. The proportion of lecturers and readers in the total academic staff was almost static at about 69% and 15% respectively, and that of professors increased from 8% to 9.4%. The overall strength of the teaching staff increased by 9.3% over the last three years.

In affiliated colleges, the strength of the total academic staff rose from 63,483 in 1964-65, to 78,351 in 1966-67, which shows an increase of 23.4%. The number of senior teachers (including principals and heads of departments) increased from 9,095 to 11,095, of lecturers (including assistant lecturers) from 45,389 to 56,164 and of tutors and demonstrators from 8,999 to 11,092. The proportion of senior teachers, lecturers and tutors/demonstrators in the total academic staff remained almost static at 14%, 72%, and 14% respectively.

The ratio of junior to senior posts was about 3:1 in 1966-67 in the university departments and university colleges. The corresponding ratio for affiliated colleges was about 6:1. The overall staff student ratio changed from 1:17.1 to 1:18.0 during the period under review.

The strength and distribution of the teaching staff according to designation in the universities and colleges are shown in appendices VII and VIII.

Output

During the three years, 1962-63 to 1964-65 the percentage increase in the output of graduates was most significant in the field of agriculture (35.4%), followed by veterinary science (28.4%), education (21.3%), medicine (17.8%) and science (15.8%). The increase was the smallest in the field of commerce (4.2%), and engineering and technology (5.6%). The percentage increase in postgraduate degrees was the maximum for agriculture (79.8). Next in descending order were: medicine (51.4%) veterinary science (43.8%) and science subjects (24.7%). At the other

end of the ladder, the output in postgraduate degrees increased by 5.3% in law and 14.7% in arts. The overall picture shows a perceptible shift in favour of agriculture (including veterinary science), medicine, education and science courses.

The turn-over figures for doctoral degrees awarded by the universities were 990 in 1962-63 and 1,123 in 1964-65. This represents an over-all increase of 13.5%.

The output figures in the different faculties at various stages are given in appendix IX.

NEW UNIVERSITIES

The Commission's views and policy regarding the establishment of new universities were stated in the report for 1965-66. The matter was again considered and the Commission reiterated that no new universities be established without very careful examination of all relevant facts and reasonable assurance about the availability of funds, competent staff, and other basic pre-requisites. The over-riding consideration should be that the establishment of a new university would effectively help in improving the standards of education and research.

Earlier the Commission had expressed the view that if in the process of planned development of higher education standards are not to be adversely effected, no university should be established without prior consultation with and concurrence of the Commission. The Estimates Committee of Parliament (1965-66) and the Education Commission (1964-66) have expressed identical views. The conference of education ministers held in June 1966 agreed that no new university should be started in the Fourth Plan without the Commission's prior approval. The conference also accepted the principle of consultation among the concerned State Government, the UGC and the Central Ministry of Education in respect of all important legislative proposals in this connection, including amendments to University Acts, at the initial stage. It may, however, be stated that in a few cases action regarding the establishment of new universities or modification or enactments was initiated without prior consultation with the Commission.

While considering the amending bill relating to the State universities in Andhra Pradesh, the Commission, inter-alia, expressed the view that since university education was passing through a critical phase of development in the country, a convention should be established that no major legislation about universities is undertaken without earlier consultation (may be informal) between the State Government concerned, the Central Ministry of Education and the University Grants Commission. In dealing with the principles of university structure, organisation and policy, it is important to maintain some co-ordination on an all-India level, and there could be a machinery to ensure that full consideration is given to the views of agencies such as the UGC, which are specially concerned with the development of higher education on a national basis.

A standing committee was appointed by the Commission to consider proposals received for the establishment of new universities and for setting up university centres during the Fourth Plan. The committee was also requested to lay down general principles for deeming institutions as universities, under Section 3 of the U.G.C. Act. The committee is to examine all aspects related to the establishment of new universities/university centres and prepare a plan in broad outlines for this purpose during the next 10 years or so.

The proposal of the State Government of Uttar Pradesh for the establishment of a university at Nainital to be known as Kumaon University, was examined by a committee. The Commission agreed with the recommendation of the committee that a new university for the hill areas in Uttar Pradesh may be set up at Nainital.

The Commission could not accept the proposal of the Gujarat Government for the establishment of a new agricultural university in the State, and expressed the opinion that it would be better to develop the existing Sardar Patel University instead of setting up a new agricultural university. The Commission also could not accept the proposal referred to it by the Government of India for the conversion of the Jawahar Lal Sanskrit Vishvavidyalaya, Delhi, into a statutory university.

CENTRES OF POSTGRADUATE STUDIES

The suggestion regarding the development of centres of post-graduate studies was examined by the Education Commission (1964-66) and UGC committees.

The Education Commission (1964-66) stated in this connection:

"In many cases, it may not really be necessary to start a new university. The object in view can be met by developing, under the auspices of the university, one or more postgraduate centres, wherever a number of local colleges can make a cooperative effort to provide facilities for postgraduate teaching. This scheme is being tried in some States and the results are encouraging. The University can help to strengthen such centres in many ways."

The UGC Committee on the Establishment of New Universities also suggested that it would be desirable to establish postgraduate centres as a preparatory step leading to the establishment of new universities. Such centres, as envisaged by the committee, could be organised by the local colleges and the university to which they were affiliated, on a cooperative basis.

This idea was further examined by a committee which favoured the development of centres of postgraduate education, under the auspices and leadership of the universities concerned, in collaboration with the colleges located around such centres. The committee was of the opinion that the centres of postgraduate studies need not necessarily be converted into universities, but before a new university is established it would be desirable to have a well-developed centre for postgraduate studies. The minimum requirements of staff, library and laboratory facilities etc.,

which would be needed by a centre of postgraduate studies were also examined. The Gommission generally accepted the report of the committee which was thereafter circulated to the universities and State Governments.

It has now been decided that assistance to the universities for the establishment of centres of postgraduate studies should be on the same basis as for the university departments. The provision for land, maintenance of buildings, and the administrative staff necessary for the centre should be made by the State Governments. One third of the expenditure on library buildings should also be provided by the State Governments.

The Commission received proposals for the establishment of centres of postgraduate studies from Andhra, Mysore, Osmania, Panjab and Sri Venkateswara Universities. These are under consideration of the Commission.

INSTITUTIONS DEEMED TO BE UNIVERSITIES

Under Section 3 of the U.G.C. Act, 'the Central Government may on the advice of the University Grants Commission declare by notification in the official gazette that any institution of higher education other than a university shall be deemed to be a university for the purpose of this Act'. The following institutions have so far been declared to be institutions deemed as universities under the provisions of the U.G.C. Act:

- (1) Indian Institute of Science, Bangalore.
- (2) Indian Agricultural Research Institute, New Delhi.
- (3) Indian School of International Studies, New Delhi.
- (4) Gurukul Kangri Vishvavidyalaya, Hardwar.
- (5) Jamia Milla Islamia, New Delhi.
- (6) Gujarat Vidyapeeth, Ahmedabad.
- (7) Kashi Vidyapith, Varanasi.
- (8) Tata Institute of Social Sciences, Bombay.
- (9) Birla Institute of Technology and Science, Pilani.

The Commission advised the Central Government that the rural institutes at Gandhigram (Madurai), Coimbatore and Bichpuri (Agra) may be deemed as universities under Section 3 of the U.G.C. Act for a period of three years.

The Commission also indicated the steps to be taken by these institutions to improve their standards. The Commission also recommended to the Ministry of Education that the Indian School of Mines, Dhanbad be declared* to be an institution 'deemed to be a university' under Section 3 of the U.G.C. Act.

^{*} The requisite notification to this effect has since been issued.

DEVELOPMENT GRANTS TO UNIVERSITIES

Fourth Plan Policy

The development programmes of the universities for each Plan period are examined and discussed with the universities by visiting committees appointed by the Commission. Proposals received from time to time from the universities are also considered in the light of academic needs and the financial allocations made available to them for the Plan period. Under the policy and pattern of assistance approved by the Commission for the Fourth Plan period, recurring and non-recurring grants for the development of university departments engaged in postgraduate work and research, are generally provided on a cent per cent basis. In the case of postgraduate departments doing undergraduate work also, $66\frac{2}{3}\%$ of the non-recurring and 50% of the recurring expenditure is shared for the development projects accepted by the The approved expenditure on books and journals, Commission. seminars, summer schools and institutes, fellowships and scholarships, and the development projects of the centres of advanced study is fully met by the Commission. For library buildings and general amenities like hostels, staff quarters etc., the universities/State Governments have to contribute the prescribed matching share of the expenditure. In some cases the Commission's assistance for general schemes is subject to a fixed ceiling.

Pending the allocations of funds for various development programmes of the universities in the light of the recommendations of the visiting committees, the Commission decided that basic grants be provided to the universities for meeting their urgent needs for the purchase of science equipment, books and journals.

During the Third Plan, the Commission provided assistance to the universities for a number of miscellaneous programmes such as travel grants to teachers for attending international conferences, and for visiting centres of research in India, exchange of teachers, extension lectures etc. It has now been decided that unassigned grants for such schemes may be provided to the universities subject to a prescribed ceiling, which could be utilised by them according to their needs in this regard, without reference to the Commission.

For the publication of research works and doctoral theses, a separate earmarked grant on a cent per cent basis is available to the universities for a period of five years, which can be spent by them according to their requirements.

Visiting Committees

During 1966-67, the Commission appointed visiting committees for assessing the Fourth Plan development proposals of 45 universities and 2 institutions deemed to be universities. The recommendations of the visiting committees (excluding engineering and technology) involve the commitment of the UGC to the extent of Rs. 33.58 crores, including the expenditure on schemes already sanctioned. The visiting committees have proposed an outlay of Rs. 21.75 crores for new schemes during the Fourth Plan period, of which 12.4% is for additional

staff in science subjects and 13.0% for that in the humanities and social sciences, 4.0% for library buildings, 12.1% for books and journals, 14.0% for science equipment, 1.3% for equipment for the humanities and social sciences, 15.7% and 6.9% respectively for departmental buildings for science subjects and the humanities including social sciences, 9.7% for student amenities, 7.9% for residential accommodation for staff and 3.0% for miscellaneous items.

In view of the limited funds available, the universities have been requested to select out of the programmes recommended by the visiting committees as accepted by the UGC such schemes and projects in the first instance, as would require a total outlay not exceeding 70% of the total allocation, including the cost of the continuing schemes. The universities have been advised to observe the following order of priorities as far as possible:

- (i) Continuing schemes from the Third Plan
- (ii) Library books and journals
- (iii) Appointment of additional staff
- (iv) Equipment
- (v) Buildings

The development grants paid to the universities and institutions deemed to be universities in 1966-67 are shown in the following table:

Table I

Development Grants to Universities: 1966-67

(Rupees in Lakhs)

Purpose	Grants Paid
Science Subjects	239·20
Humanities and Social Sciences	131.13
Engineering and Technology	155.08
Miscellaneous Schemes*	456.55
Total	981.96

The details of the grants paid under various heads are given in appendices X to XII. Payments are made in instalments in accordance with the progress in the implementation of the development schemes.

^{*} Revision of salary scales, construction of hostels, library buildings and staff quarters, provision of student amenities, introducation of three-year degree course scheme etc.

Science Subjects, Humanities and Social Sciences

The break-up of the payments made to the universities and institutions deemed to be universities for the development of higher education in science subjects, the humanities and social sciences is indicated below:

Table II

Grants for Departments in Science Subjects,
Humanities and Social Sciences: 1966-67

(Rupees in Lakhs)

		Grants Paid			
Items of Expenditure		Science Subjects	Humanities and Social Sciences		
1		2	3		
Equipment		76.79	6.13		
Laboratories and Other Buildings		55.49	35.05		
Books and Journals		12.16	14.75		
Staff		45.52	56.47		
Centres of Advanced Study		49.23	18.73		
	Total	239.19	131.13		

The basic grants sanctioned to the universities at the begining of the Fourth Plan period for science equipment amounted to Rs. 237.20 lakhs, and for the purchase of books and journals to Rs. 127.50 lakhs.

Engineering and Technology

Grants were provided for the development and expansion of higher education in engineering and technology to university departments and institutions maintained by the universities.

For postgraduate education and research in engineering and technology, grants are provided by the Commission to university departments and institutions on a cent per cent basis. For undergraduate courses the Commission shares 50% of the approved expenditure.

During 1966-67, the Commission approved the establishment of a girls' polytechnic at the Aligarh Muslim University which is to conduct three-year diploma courses in electronics, engineering, costume designing and dress making, and architecture. The Commission approved the introduction of postgraduate courses in engineering at the M.S. University of Baroda. Three-year degree courses in different branches of

engineering were introduced for science graduates at the Universities of Allahabad, Andhra, Baroda and Calcutta.

The grants paid to university departments and institutions for education in engineering and technology during 1966-67 amounted to Rs. 155:08 lakhs. The break-up of the payments is shown in appendix XIII.

At the commencement of the Fourth Plan period, basic grants for books and journals in engineering and technology amounting to Rs. 21.75 lakhs were sanctioned to university departments/institutions to enable them to meet their urgent requirements.

Medical Sciences

Funds for medical education do not form part of the finances made available to the Commission. Development programmes in this sector are being promoted by the Central Ministry of Health, Indian Council of Medical Research and the State Departments concerned.

Some assistance was, however, given by the Commission to selected universities for postgraduate studies in the basic medical sciences, to the Aligarh Muslim University and Banaras Hindu University for their medical colleges, and to the Delhi University for the approved postgraduate diploma courses in medicine.

The grants released in 1966-67 to the Aligarh Muslim University and the Banaras Hindu University for their medical colleges amounted to Rs. 105.01 lakhs, as detailed in appendix XIV.

MAINTENANCE GRANTS TO CENTRAL UNIVERSITIES AND DELHI COLLEGES

Under Section 12 of the U.G.C. Act, grants for maintenance, in addition to those for development, are provided on a cent per cent basis, to a university established or incorporated by a Central Act. The Commission accepted in principle the recommendation of the committee of vice-chancellors of central universities that the block grants payable to the central universities, be determined for a period of three years i.e., 1967-1970 in the first instance. This question was further examined by a committee under the chairmanship of Dr. C.D. Deshmukh which recommended that in view of the uncertainty about financial resources during the years 1966-67 and 1967-68, the maintenance grants to the central universities might, for the present, be determined on the basis of the annual budgets of these universities. The Commission accepted this recommendation and the block grants of the universities for 1966-67 were accordingly determined as under:

University	Rupees in Lakhs
Aligarh Muslim University	94.82
Banaras Hindu University	127.00
Delhi University	70.80
Visva-Bharati	37.20
Total	329.82

The Commission agreed to meet the recurring expenditure in respect of the development proposals of the central universities during the Third Plan, for which expenditure had been met for the normal period of five years under development, as part of the committed expenditure with effect from 1967-68.

The following Fourth Plan scales of pay for the academic staff, recommended by the University Grants Commission and accepted by the Central Government, were adopted in the central universities with effect from 1st April 1966:

Lecturer ... Rs. 400-40-800-50-950 Reader ... Rs. 700-50-1,250

Professor ... Rs. 1,100-50-1,300-60-1,600

It was also agreed that 1/3rd of the number of professors in the universities might be given the senior scale of Rs. 1,600-100-1,800. The additional expenditure involved would be met out of the maintenance grants payable to these universities.

On the advice of the Commission, the Government of India accepted the introduction of the scheme relating to general provident fund-cum-pension-cum-gratuity, and contributory provident fund-cumgratuity in the central universities and in the Indian Institute of Science, Bangalore.

The University Grants Commission continued to provide maintenance grants to the non-government constituent/affiliated colleges of the Delhi University to the extent of 90% of the approved deficit. The Delhi University proposed that the basis for the payment of maintenance grants to the colleges might be liberalised in view of their limited resources and steady increase in expenditure. On the recommendation of a committee appointed to consider the proposal, the Commission has recently agreed to raise its assistance in respect of maintenance grants to the non-government colleges of the Delhi University to 95% of the approved deficit.

The four government colleges set up by the Delhi Administration became registered societies, entitled to receive maintenance and non-recurring grants from the Commission, like other non-government colleges of the Delhi University, with effect from 1st April, 1966.

The question of increasing the intake of the colleges, subject to the conditions of eligibility for admission prescribed by the Delhi University, was examined in consultation with the University and the Ministry of Education. Under the rules framed by the Delhi University, a constituent/affiliated college of the University cannot have a strength of more than 1,000 students. It was felt that it would be difficult and expensive to start new colleges. Therefore, a system of 'extended colleges' was introduced in some of the colleges of the Delhi University. Under this scheme these colleges were allowed to admit more students than the prescribed maximum by staggering or extending the working hours and suitably adjusting the time table. The Commission agreed to meet the

increased expenditure on this account for the additional students admitted in the colleges on a cent per cent basis.

For 1966-67, the maintenance grants paid to the non-government colleges of the Delhi University amounted to Rs. 139.65 lakhs, as against Rs. 100 lakhs in 1965-66.

CENTRES OF ADVANCED STUDY

Policy and Existing Facilities

Perhaps the most pressing need in the field of higher education is to improve quality and raise standards at the postgraduate and research levels. The concentration of our relatively meagre resources in terms of competent personnel and specialised equipment at a few selected centres is obviously necessary if worthwhile results are to be achieved. In view of this, the Commission has been providing special assistance to twenty-six university departments carefully selected on the basis of their work, existing facilities and potentialities for further development to function as centres of advanced study in specific fields. These centres are intended to encourage the 'pursuit of excellence', and to provide suitable conditions and facilities for advanced studies and research.

In addition to the twenty-six university departments selected as centres of advanced study during the Third Plan, the Commission agreed in 1966-67 to the recognition of a centre of advanced study in mathematics at the Madras University. This centre will bring together the university department and the Ramanujan Institute of Mathematics, which were functioning so far as two separate departments with very little staff in each, and enable the pooling of resources and facilities for improving the quality of research and training in mathematics. A list of the centres of advanced study and their major areas of specialisation is given in appendix XV.

The centres of advanced study have generally strengthened their teaching and research programmes, and organised a number of seminars and symposia in specialised fields. The Centre of Advanced Study in Physics at the University of Madras organised an international symposium on conformation of biopolymers in January 1967. A number of distinguished scientists from various countries participated in the symposium and presented research papers. A number of publications also were brought out by the centres giving information about their research programmes, and the seminars and symposia organised by them. The fifth International Symposium on Comparative Endocrinology is to be held at the Centre of Advanced Study in Zoology, University of Delhi, in November 1967. A few centres, as in previous years, continued programmes for training teachers of the affiliated colleges and acquainting them with the new developments and techniques in their field of work. It is expected that these programmes would help in raising the standards of instruction in the subjects concerned.

The continuance of the Commission's recognition of a department as a centre of advanced study depends on the quality of work done by it, and the extent to which the department fulfils the objectives of the programme. Assessment committees consisting of experts were appointed to visit the centres and report on the progress of their academic

programmes. These committees have made valuable suggestions regarding the functioning and further development of these centres. The recommendations made by the assessment committees were brought to the notice of the universities concerned for implementation.

In the light of the recommendations of the assessment committees which visited the centres in 1965-66, the Commission considered the Fourth Plan requirements of most of the centres, and sanctioned recurring and non-recurring grants amounting to Rs. 4.39 crores for the Fourth Plan period, for strengthening the activities and programmes of these centres. It may be stated that payments are phased according to the progress of their work and expenditure. In 1966-67, grants amounting to Rs. 18.73 lakks for the centres in the humanities and social sciences, and Rs. 49.23 lakhs for those in science subjects were released. These also included payments for the normal development programmes of the departments concerned. Assistance is being provided for the improvement of library and laboratory facilities required for programmes of teaching and research, recruitment of academic staff, provision of fellowships and scholarships, etc. Approval was given for the recruitment of additional staff of 5 professors, 16 readers and 14 research associates for the Fourth Plan period. Apart from this, 16 senior and 36 junior research fellowships and 12 research scholarships were also created for further strengthening the programme of the centres during the current Plan. The provision of a hundred national scholarships for postgraduate studies at the centres was continued. Of these, at least 50% are to be used for students coming to the centres from other universities. Visiting fellowships have also been provided to help the centres to invite scientists and scholarships for specific programmes.

The Central Advisory Board of Education had earlier recommended that the number of centres should be increased to promote the 'pursuit of excellence'. The Education Commission (1964-66) also stated that "it is necessary to strengthen and expand the UGC programme of the establishment of centres of advanced study.....We would recommend the establishment of about 50 such centres including some in modern Indian languages over the next five to ten years." The recognition and development of new centres of advanced study in various disciplines will depend on the academic achievements and potentialities of the departments concerned, as well as on the availability of resources, personnel and the essential equipment. The question of establishing new centres, in the light of the above, is already under the Commission's consideration.

UNESCO Assistance

The UNESCO continued to assist the centres of advanced study and some university departments in developing their programmes of teaching and research. This assistance, as hitherto, has come mainly from the USSR for equipment, services of experts, and training fellowships for Indian scholars and technicians in the USSR. In 1966-67, UNESCO assistance was utilised by 10 university departments, 7 of which are centres of advanced study in science subjects. The Soviet scientists, who visited the different centres of advanced study, included Professors N.S. Wulfson, V.I. Goldanskii, A.S. Gritizaenko, V.S. Lensky, L.P. Gorkov and A.G. Tarkhov. They participated in programmes of the centres, gave lectures and made valuable sug-

gestions in their reports, which were brought to the notice of the universities concerned. The services of Professor Yu. V. Novozhilov, Vice-Rector, University of Leningrad were made available to the Commission for co-ordinating the programme of UNESCO assistance. Some Indian teachers from the centres visited the USSR for advanced training in specialised areas.

Several items of specialised equipment were received by the centres of advanced study from the USSR. Orders have been placed by the UNESCO for the supply of an IBM-1130 Computer for the Centre of Advanced Study in Physics, Madras University. The UNESCO also placed orders for the supply of equipment from the USSR costing about \$ 339,960 for different centres of advanced study. The equipment ordered includes items like spectrophotometer, magnetometer, gravitational gradientiometer, universal chromatograph infra-red spectro-meter, recording spectrophotometer, electron microscope, gravimeter etc. In March, 1967, lists of equipment estimated to cost 280,000 roubles in the first priority and 200,000 roubles in the second priority were forwarded to the UNESCO for accommodation within the UNESCO savings for the biennium 1965-66. Lists of equipment amounting to \$ 30,000 in convertible currency also were sent to the UNESCO for consideration. The services of an engineer and some technicians were made available by the UNESCO for the installation of mass spectrometers; liquid helium plant, X-ray equipment etc., at the Universities of Delhi and Madras.

During March, 1967, an evaluation mission appointed by the UNESCO, visited the centres of advanced study and the university departments receiving assistance from the UNESCO. The mission had discussions with the Chairman, University Grants Commission, and the heads of the centres/university departments regarding the implementation of the UNESCO programme.

UNESGO assistance is a continuing programme and steps have already been taken for formulating proposals for such assistance during the biennium 1967-68.

Assistance from the United Kingdom

It was stated in the report for 1965-66 that the UK Government has been providing assistance to some centres of advanced study. The programme of assistance is based on a report made by Sir Charles Morris, Chairman of the UK Committee for University Secondment, who visited India in February, 1964. Under this programme, the services of British scholars and scientists, training facilities for Indian teachers n the UK, and specialised equipment are provided to selected centres. The British scientists and scholars, who visited India and worked at the centres concerned, were Dr. David T. Gauld, University of Aberdeen, Prof. D. Rees, University of Exeter, Professor W.J. Phillips, University College of Wales, Aberytswyth, Dr. T.W. Rackham, of the University of Manchester, Prof. H.J. Habakkuk of All Souls' College, Oxford University, Mr. Peter Mathias, Queen's College, Cambridge University, Mr. M.A. Brimer, and Mr. M. Skilbeck of the University of Bristol and Mrs. E.M. Whitley of the School of Oriental and African Studies, University of London. At the conclusion of their visits they submitted

brief reports to the Commission about the work of the centres, and suitable action was taken on the suggestions wherever necessary. A few teachers from the centres also visited the United Kingdom under this programme.

The Ministry for Overseas Development in the United Kingdom has approved proposals under the Colombo Plan for the supply of specialised equipment to some centres. So far equipment worth $\underline{\ell}$ 35,000 has been received under this programme.

SUMMER INSTITUTES, SCHOOLS, SEMINARS AND CONFERENCES

The success of the educational process depends largely on the competence of the teachers, and in view of the rapid advances in various fields of knowledge, a competent teacher has to be a continuing student. There is a constant need for increasing opportunities for teachers to acquaint themselves with current developments in their respective fields of work, and modern curricula and techniques of instruction. Teachers have to be exposed to new concepts and developments to enable them to improve their professional competence and effectiveness. The programme of summer institutes and schools, seminars and conferences is intended to acquaint teachers with new concepts, perspectives and methods. This programme has grown in dimension over the years and has been widely welcomed. The Education Commission (1964-66) has described the programme of summer institutes as "a major instrument in the country's effort towards the improvement of science education in schools and colleges."

Summer institutes and schools are being run in collaboration with the United States Agency for International Development and the National Science Foundation, USA. The National Council of Educational Research and Training, Ministry of Education, has also been cooperating with the Commission in organising summer institutes for school teachers.

Assistance from USAID

The National Science Foundation, USA in cooperation with the United States Agency for International Development expressed its willingness to assist the improvement of the teaching of science, engineering and technology in India. A delegation of the Foundation visited Delhi in May, 1966 for discussions with the Government of India. It was agreed in these discussions that the various agencies of the Government of India and the National Science Foundation/Agency for International Development will cooperate during the next few years in a programme of follow-up activities designed to improve the effectiveness of the summer institutes programme. A conference of Indian and American scientists and administrators was held in Srinagar in June 1966 to work out a detailed plan for a follow-up programme of summer science institutes. The conference inter-alia, made the following recommendations:

(a) The number of summer institutes for school teachers—should be increased. There is a distinct need for organising other

types of teacher training programme such as academic year institutes, in-service institutes, part-time institutes etc.

- (b) Selected universities may undertake to improve the quality of instruction in specific scientific disciplines in their constituent colleges and undertake pilot project for this purpose. There should be a national pilot programme in which selected unversities working cooperatively with the school authorities may assist the participating schools in improving their instructional programmes.
- (c) There should be a national programme for the preparation, production and distribution of modern scientific textbooks, instructional films and other teaching aids including laboratory apparatus.
- (d) The course content and curricula should be continuously reviewed and modernised.
- (e) There is need for the republication of textbooks and science journals in low-priced editions.
- (f) A programme for exchange of scientists including participants of summer institutes should be introduced.

A programme agreement was signed between the Government of India in the Ministry of Finance and the United States Agency for International Development relating to the operation of summer science institutes in 1967.

Summer Institutes for School Teachers

During 1966-67, 44 summer institutes in science subjects for school teachers were organised at different centres in the country, in collaboration with the National Council of Educational Research and Training, Teachers' Training College, Columbia University, and the United States Agency for International Development. The operational cost of these institutes amounting to Rs. 13.99 lakhs is to be met by the National Council for Education Research and Training. The USAID made available the services of 85 American consultants who worked as coordinators and as members of the academic staff of the institutes. Of the 44 institutes mentioned above, 4 were organised at the regional colleges of education in collaboration with Ohio State University team. Each participant was given a set of books and text materials. The USAID supplied books and equipment worth \$ 21,356 which were imported from the United States, and commodities worth Rs. 4.17 lakhs which were purchased in India. In addition, books of the value of Rs. 51,894 were supplied by the Commission. The number of teachers who participated in these institutes was 1,676.

Since the inception of the programme, 4,299 school teachers have received the benefit of summer institutes' training in science subjects including mathematics. The number of institutes held year-wise and the

number of teachers who received training at these institutes is indicated in the following table:

Table III

Statistics of Summer Institutes for School Teachers
1963 to 1966

Nu	Total No. of			
Mathematics	Physics	Chemistry	Biology	Institutes
2	3	4	5	6
34	43	38	39	4
169	170	148	153	16
616	488	464	261	49
490	463	410	308	44
1,309	1,169	1,060	761	113
	2 34 169 616 490	Mathematics Physics 2 3 34 43 169 170 616 488 490 463	2 3 4 34 43 38 169 170 148 616 408 464 490 463 410	Mathematics Physics Chemistry Biology 2 3 4 5 34 43 38 39 169 170 148 153 616 488 464 261 490 463 410 308

An important feature of the programme of the summer institutes for school teachers is that it brings together in active academic collaboration school and college teachers, and university professors.

Summer Institutes for College Teachers

Thirty-three summer institutes for college teachers in science subjects were organised from June 8 to July 15, 1966 in collaboration with the Ohio State University Contract Team of the USAID. The Commission paid grants amounting to Rs. 16.35 lakhs to the universities for conducting these institutes. The USAID provided the services of 79 consultants, who worked as the supporting staff of these institutes, and also supplied commodities worth \$15,000 on a grant basis. In addition, books and equipment of the value of Rs. 2.79 lakhs were locally purchased and given on a grant basis by the USAID. The Commission also supplied books worth Rs. 2.66 lakhs for these summer institutes.

The Commission also organised one summer institute in agriculture for college teachers under the auspices of Sardar Patel University, Vallabh Vidyanagar.

The number of college teachers, who participated in the summer institutes has been increasing from year to year. Table IV indicates the number of institutes held for college teachers in various subjects since the inception of the programme and the number of teachers who participated in these institutes.

Table IV

Statistics of Summer Institutes for College Teachers
1964 to 1966

Year	Number of Participants				Total No. of	
	Mathematics	Physics	Chemistry	Biology	Institutes	
1964	163	166	162	168	16	
1965	269	258	248	277	29	
1966	326	308	344	257	34	
Total	7 58	732	754	702	79	

The Commission accepted the proposal of the Madurai University for starting an intensive course in the university department of mathematics for college teachers.

Summer Institutes in English Language

Four summer institutes in English language teaching were organised in collaboration with the British Council in the summer of 1965. In 1966, six such institutes were organised in cooperation with the British Council and the US Agency for International Development at the Universities of Bombay, Delhi, Mysore, Osmania, Panjab and Ranchi. The object of these institutes was to acquaint selected college teachers with modern methods of teaching English as a language. In all 317 teachers from various parts of the country attended the institutes. The British Council and the USAID made available the services of some consultants and supplied text material and reference books on a grant basis. The Commission paid grants amounting to Rs. 2.32 lakhs to the universities concerned for the organisation of these institutes. The programme of summer institutes in English was reviewed and evaluated at a conference of the directors of these institutes and the consultants associated with them.

It is proposed to hold eight summer institutes in English language during 1967. The British Council has agreed to provide the services of two experts for each of these institutes, and also the necessary assistance for the purchase of books and reading materials from the UK. The United States Agency for International Development invited a team of experts in applied linguistics from the USA to visit India to survey and assess the opportunities and resources for the teaching of English, and to suggest programmes of assistance for consideration of the USAID.

Summer Institutes in Chemistry, Mathematics and Biology for Talented Students

The Commisson organised three summer institutes, one each in chemistry, biology and mathematics, in the Universities of Madras, Panjab and Madurai respectively, for talented undergraduate students in science and mathematics. These institutes were intended to give them advanced instruction through specially designed courses at a level higher

than those normally provided in the universities and colleges, and also to enable them to meet reputed teachers. Grants amounting to Rs. 58,000 were paid to the universities for organising these summer institutes. The number of students who participated in the three summer institutes was 36.

Assessment

The programme of summer institutes is assessed every year in evaluation conferences attended by the directors of the institutes. The reports of the directors are discussed and measures suggested to improve the effectiveness of the programme. An appreciable number of teachers are already utilising their summer institute experience and training, and some universities have introduced new courses in some science subjects or modified the existing courses. As recommended by the directors of the summer institutes in chemistry, assistance is being provided to selected colleges for the purchase of semi-micro analysis equipment. A special programme relating to participation by college teachers in research is being taken up. A similar programme for initiating selected undergraduate and post-graduate students into research is being formulated. It is also intended to provide financial support to a few universities, to begin with, to cuable them to modernise their curricula, and introduce them in the colleges.

Seminar on Historical Studies

A seminar to discuss modern techniques and methodological advances in the field of historical studies was held in the Delhi University in April, 1967 in cooperation with the British Council. The participants included a number of scholars from the United Kingdom. The UGC provided a grant of Rs. 6,081 for this purpose to the Delhi University.

Conferences, Symposia and Refresher Courses

Apart from the summer institutes, the Commission has been providing assistance to the universities for academic conferences, symposia, refresher courses, seminars, summer schools etc. During 1966-67, 310 proposals were received from 50 universities for holding such conferences, seminars etc. Of these, 71 proposals from 41 universities—30 relating to science subjects and 41 to the humanities and social sciences—were accepted by the Commission for 1966-67. Sixty-two proposals were also approved for 1967-68. During 1966-67, the Commission paid grants amounting to Rs. 8.93 lakhs to the universities concerned on this account.

REVIEW COMMITTEES

In view of the rapid advance in various fields of knowledge, it is imperative that the existing courses of study be critically reviewed from time to time. The Education Commission (1964-66) was of the opinion that 'some of the teaching until comparatively recently, has been dominated by a syllabus which is many years out-of-date'.

The University Grants Commission has appointed review committees in a number of important subjects in physical and biological sciences, the humanities and social sciences, to survey and assess the existing facilities, syllabi and standards of teaching and research, and to make suggestions for their further improvement. Reports of the review committees on English, social work, sociology, library science, education, political science and philosophy have been printed and circulated to the universities for their comments and observations. The reports of the review committees concerned with biochemistry, botany, chemistry and mathematics have also been printed and circulated to the universities for their consideration. The Commission stressed the need for special efforts to improve the standards of teaching and research in mathematics. The report of the mathematics reforms committee appointed to review the situation and recommend necessary steps in this regard has been brought to the notice of the universities.

The review committees concerned with Arabic and Persian studies, military science, psychology and economics have also completed their work and finalised their reports. The report of the committee appointed to suggest measures for the development of teaching and research in the field of transport economics and transport management is being finalised. The review committee on history has concluded its work and its report is awaited. The committees concerned with geography and anthropology have also completed their work and their reports are soon expected to be ready for circulation to the universities.

The review committees have recommended improved syllabi and made other valuable suggestions for raising the level of academic achievement in the disciplines concerned. The reports of these committees are receiving the careful consideration of the universities and their academic bodies.

With a view to providing channels of communications and consultation with the academic personnel from the universities and other institutions, the University Grants Commission has decided to set up a number of panels of specialists in different subjects. These panels will have advisory functions. So far such panels have been formed in the fields of physical, biological and earth sciences. Similar panels are to be constituted for the humanities and social sciences as well as engineering and technology.

AREA STUDIES

There is a growing awareness of the value and importance of developing a gradually expanding programme of area studies at suitable centres in the country. India has close social, political and economic relations with several countries, and there is need for scholars with specialised knowledge of the life, institutions, culture, and languages of specific regions of the world, particularly those in which India is directly and intimately concerned. The programme of area studies envisages the teaching of the languages of the areas concerned, specialised studies relating to the areas under social sciences, and field work. Glose interdisciplinary collaboration would also be essential. It would be necessary to provide more funds than those presently available for promoting the programme in the universities.

A standing advisory committee has been appointed to advise the Commission regarding the measures to be taken to implement the scheme. During 1966-67, the proposals for the development of studies

concerning West Asia, China, Pakistan and South East Asia were received from the Aligarh, Delhi and Jadavpur Universities.

The Aligarh Muslim University has been running a diploma course in modern Arabic, Persian and Turkish and has an institute of Arabic and Islamic studies. On the recommendations of a visiting committee, the Commission agreed to provide a grant to the University for the development of studies relating to the West Asia. The grant is earmarked for library facilities, specialised training in West Asia for selected teachers, research scholarships etc.

The proposal of the Jadavpur University for promoting studies relating to South East Asia (including Indonesia, Malaysia, the Philippines and Pakistan) was also examined by a visiting committee. The Jadavpur University has a department of international relations which has been concentrating on studies relating to South East Asia for some time. The Commission accepted the proposal of the University for developing studies on the region in active collaboration with the department of international relations and other social science departments, and sanctioned grants to the university for staff, research fellowships, library facilities, accommodation etc.

The Delhi University already has departments of African and Chinese studies, and has made provision for the study of several foreign languages. The University desired to make a beginning with studies on Pakistan in the field of economics and sociology, and to start a course in the Hausa language. On the recommendations of the area studies committee, the Commission accepted the proposal of the University for studies concerning Pakistan in the departments of economics and sociology. The proposal for obtaining the services of a visiting lecturer in Hausa language from Nigeria and for training an Indian scholar in that language was also accepted.

Some other universities, for example, the Universities of Bombay, Delhi and Madras, have included proposals for the development of area studies in their Fourth Plan development programmes. These were examined by the visiting committees appointed by the Commission to assess the Fourth Plan requirements of the universities. The recommendations of these committees have been accepted by the Commission, and financial assistance made available to the universities.

The Commission accepted the proposal of the Indian School of International Studies, New Delhi, for organising two seminars, one on Asian studies and the development of international law, and the other on aspects of contemporary America. The seminars are to be organised in 1967-68.

Three teachers nominated by the Universities of Delhi and Jadavpur, and the Indian School of International Studies visited centres of Oriental and Asian studies in some Australian Universities. Travel fellowships for the purpose were provided by the Australian High Commission under the Colombo Plan. The reports of the teachers were circulated to the universities which are developing area studies.

DEVELOPMENT GRANTS TO COLLEGES

The University Grants Commission is of the view that the quality of university education in India will largely depend on the standards maintained by the colleges, and unless it is made possible for them to improve their staff, equipment, libraries, laboratories and other facilities, no real improvement of university education will be possible. Colleges have a significant place in the pattern of higher education in India and there has been a rapid increase in their number and student enrolment.

The number of colleges has risen from 1,783 in 1961-62 to 2,749 in 1966-67. The number of new colleges established every year during the past six years has ranged from 155 in 1962-63 to 177 in 1966-67.

The student enrolment in university colleges and departments during 1966-67 was 2,21,642 as against 14,60,370 in the affiliated colleges excluding the enrolment in the intermediate colleges affiliated to the Board of High School and Intermediate Education, U.P. Thus, 86.8% of the students were in the affiliated colleges during 1966-67. About 91% of the students in science, medicine and commerce, 87% in arts and education, 74% in engineering and technology, and about 63% in agriculture were enrolled in affiliated colleges. Faculty-wise enrolment in the universities and affiliated colleges is shown in appendix XVI. About 48% of the postgraduate and 13.2% of the research scholars in various faculties were enrolled in the affiliated colleges in 1966-67. Over 84% of the university level teachers were teaching in the affiliated colleges.

Within the available resources, the Commission has been providing assistance to selected colleges for the following schemes and projects:

- (i) Development of postgraduate studies in science subjects, and the humanities and social sciences.
- (ii) Extension to library and laboratory facilities, construction of hostels, non-resident student centres and staff quarters.
- (iii) Introduction of the three-year degree course.
- (iv) Revision of the salary scales of teachers.
- (v) Centenary grants to colleges which have served the cause of education for a hundred years.
- (vi) Establishment of textbook libraries and student aid fund.

A statement of the development grants paid to the colleges during 1966-67 is given in appendix XVII.

Postgraduate Studies

In 1966-67, 447 affiliated colleges were conducting postgraduate courses in various sectors of higher education. A significant proportion of postgraduate students was in the affiliated colleges. The Commission has been providing financial assistance to selected colleges for the development of postgraduate studies in science subjects and the humanities and social sciences. The Commission's assistance is given on a sharing basis within prescribed ceilings.

For the development of postgraduate studies in the humanities and social sciences, assistance from the Commission to a college during the Fourth Plan period (inclusive of payments in respect of continuing projects from the earlier Plan periods) is limited to Rs. 1,00,000. For postgraduate departments in science subjects, the Commission's grant to a college is limited to Rs. 1,00,000 each for physics and chemistry, Rs. 75,000 each for botany, zoology, geology, home science and biochemistry, and Rs. 50,000 each for anthropology, geography and mathematics (including statistics). The Commission's assistance is limited to 50% of the approved cost of buildings and expenditure on additional teaching staff, and 75% for equipment and books. The prescribed matching share has to be contributed by the college and the Commission does not share expenditure on contingencies, and non-teaching staff. An assurance is required that the additional posts created under the scheme will be continued and maintained by the college concerned when assistance from the Commission for this purpose ceases.

During the Third Plan, the Commission approved the development of facilities for postgraduate education in science subjects in 85 affiliated colleges and sanctioned grants amounting to Rs. 1.05 crores. Grants amounting to Rs. 47.37 lakhs were also approved for 71 colleges for the development of postgraduate departments in the humanities and social sciences. Payments for the development of postgraduate studies in science subjects and the humanities including social sciences during 1966-67 amounted to Rs. 7.46 lakhs and Rs. 8.17 lakhs, respectively.

Three-Year Degree Course

The Commission assisted 42 universities and 733 colleges affiliated to them for the provision of additional staff, class-room accommodation and library and laboratory facilities, in order to facilitate the introduction of the three-year degree course. The grants made available by the Commission were intended to help the institutions concerned to provide essential academic and physical facilities for the three-year degree course, and thereby to bring about an improvement in the quality and standards of undergraduate education. Recurring grants were provided for four years starting from the year in which the three-year degree course was introduced, and non-recurring grants admissible under the scheme had to be utilised by 31st March, 1966. During 1966-67, grants amounting to Rs. 20.94 lakhs for the admissible recurring and non-recurring expenditure were released to the universities and colleges.

Other Projects

The Commission provides development grants to selected arts, science and commerce colleges on a prescribed sharing basis for the construction of libraries, laboratories, hostels, non-resident student centres and staff quarters and for the purchase of science equipment and library books. Grants provided by the Commission are intended for development, and are not available for the establishment of new colleges, for starting new courses, and for enabling colleges to fulfil the conditions of affiliation. The Commission's assistance to an affiliated college during the Fourth Plan period, inclusive of grants paid after 31st March, 1966 in respect of continuing schemes from the earlier Plan periods, is normally limited to

a ceiling of Rs. 1.5 lakhs. Of the approved cost, the Commission shares $66\frac{2}{3}\%$ for the extension of library and laboratory facilities, 75% for the purchase of books and laboratory equipment, 50% for men's hostels, 75% for women's hostels, and 50% for residential quarters for academic staff. The Commission's grant for the non-resident student centres is limited to Rs. 35,000. In view of the turgent need for residential accommodation for teachers, the Commission decided that eligible colleges may be assisted during the current Plan period, for the construction of teachers' hostels $@66\frac{2}{3}\%$ of the approved cost within the Fourth Plan ceiling of Rs. 1.5 lakhs per college. In special cases where the assistance for the construction of teachers' hostel is sought outside the ceiling, the Commission's share of expenditure is limited to 50% of the approved cost. Teachers' hostels are intended for teachers who do not have large families and can manage with a suite of two rooms and a kitchenette.

During 1966-67, the Commission was unable to consider a number of building projects of colleges, involving a big outlay, on account of the paucity of resources. Some modest proposals were, however, accepted.

The following grants and projects were approved by the Commission during 1966-67:

- (i) Grants amounting to Rs. 10.27 lakks were sanctioned to 40 colleges for the extension of library facilities, of which an amount of Rs. 3.47 lakks was earmarked for the purchase of books.
- (ii) A sum of Rs. 21.44 lakhs was sanctioned to 43 colleges for the development of laboratory facilities for undergraduate courses, of which an amount of Rs. 13.03 lakhs was allocated for the purchase of science equipment.
- (iii) The proposals of four colleges for the construction of men's hostels, and of two colleges for the construction of women's hostels were accepted, the Commission's grant for these being limited to Rs. 5.23 lakhs and Rs. 3.00 lakhs respectively.
- (iv) The proposals of 9 colleges for the construction of non-resident student centres were approved, the Commission's grant for this purpose being limited to Rs. 3.15 lakhs.

Grants for Semi-Micro Equipment

The Commission has decided to provide grants to selected colleges for the purchase of semi-micro equipment. The semi-micro method is of real analytical value and can yield results comparable or even superior to the older method of classical qualitative analysis. The delicacy of tests based on semi-micro analysis depends primarily on the concentration of ions present and not on the volume of solution used. Proportionately scaled apparatus makes it feasible to handle small amounts of material, and the concentration of precipitated material by centrifuging permits casy observation of residues. In view of the obvious advantages of semi-micro analysis, the Commission provided grants to 76 colleges during 1966-67 for the purchase of micro analysis equipment @ Rs. 5,000 per college. It is proposed to extend this assistance to 120 other colleges during 1967-68.

Centonary Grants

The Commission has sanctioned so far centenary grants to 51 colleges which have served the cause of education in India for 100 years. This assistance is limited to Rs. 1,00,000 per college and can be utilised for development projects of a permanent nature. Payments amounting to Rs. 4.43 lakhs were made to the colleges concerned in 1966-67 under this programme.

Information about grants released to colleges under other schemes such as revision of salary scales of teachers, establishment of textbook libraries and student aid fund is given in the sections concerned of this report*.

PROGRAMMES FOR TEACHERS

It is generally admitted that the quality of education largely depends on the ability and devotion of teachers. The Education Commission (1964-66) has stated:

"Of all the different factors which influence the quality of education and its contribution to national development, the quality, competence and character of teachers are undoubtedly the most significant. Nothing is more important than securing a sufficient supply of high quality recruits to the teaching profession, providing them with best possible professional preparation and creating satisfactory conditions of work in which they can be fully effective."

Revision of Salary Scales

It has been repeatedly emphasised that the provision of reasonable salaries and essential amenities and incentives for the teaching profession are indispensable to the maintenance and improvement of standards of education. It is important to feed back a significant proportion of talented men and women from the colleges and universities into the educational system. The improvement of salary scales helps to maintain this 'feed back' process and enables universities and colleges to attract and retain well-qualified staff. The Education Commission (1964-66) noted that as a result of the work done by the UGC during the last 10 years considerable improvements have been made in regard to the pay scales of teachers at the university stage. Assistance was provided by the Commission for improving the salary scales of teachers during the Second Plan period. These scales were further revised during the Third Plan, and grants amounting to Rs. 3.14 crores were paid to the universities and colleges for implementing them. The Commission shared 80% of the additional expenditure involved in the case of the universities and 50% in the case of the colleges. For women's colleges, the Commission shared 75% of this expenditure.

Forty-three universities and 705 colleges were assisted under this scheme. No grant was provided to universities which already had scales

^{*}Programmes for Teachers and Student Services and Welfare.

identical with or better than those recommended by the Commission. The Commission's suggestion that the salary of the teaching staff in the agricultural universities should be the same as recommended for other universities was earlier accepted by the Central Ministry of Food and Agriculture. The Ministry agreed to meet the expenditure on this account.

The Commission gave grants to the engineering and technological departments/institutions maintained by the universities for introducing the revised scales of teachers with effect from 1st April, 1960 as recommended by the All India Council of Technical Education. This was done on a cent per cent basis for a period of five years to 14 universities. On the advice of the Ministry of Education this assistance was extended for a further period of two years.

In 1966-67, grants amounting to Rs. 39.24 lakhs were paid to the universities and colleges under the scheme for the revision of salary scales of teachers.

As stated in the report for 1965-66, the Commission recommended a further revision of the scales of pay of university and college teachers as indicated below:

(a) University Departments

 Professor
 Rs. 1,100-50-1,300-60-1,600

 Reader
 Rs. 700-50-1,250

 Lecturer
 Rs. 400-40-800-50-950

A senior grade—for professors viz., Rs. 1,600-1,800 was also proposed for one-third of the total strength of professors in a university.

(b) (i) Undergraduate Colleges

Principal Rs. 700-40-1,100 Lecturer (Senior Scale) Rs. 400-30-640-40-800 (Junior Scale) Rs. 300-25-600

Tutor/Demonstrator Rs. 250-15-400

(ii) Postgraduate Colleges

Principal Rs. 800-50-1,250 or

Rs. 1,000-50-1,500

Reader/Senior Lecturer Rs. 700-40-1,100

Lecturer (Senior Scale) Rs. 400-30-640-40-800

(Junior Scale) Rs. 300-25-600

Tutor/Demonstrator Rs. 250-15-400

The Government of India accepted these recommendations and decided to give special assistance to the State Governments for implementing the revised scales with effect from 1st April, 1966. The assistance

from the Centre would be limited to 80% of the additional expenditure involved and will be available for a period of five years. The State Governments are required to meet 20% of the additional expenditure involved and not to pass on the liability for any portion of it to the managements of private colleges. The State Governments are required to give an assurance that at the end of the five-year period of central aid for this purpose, they would take over the responsibility for maintaining the revised scales. The State Governments of Andhra Pradesh, Assam, Uttar Pradesh and West Bengal have already decided to implement the scheme.

The Commission has further recommended to the Government of India that the directors/instructors of physical education and professionally qualified library staff in the universities and colleges may also be brought within the purview of the Fourth Plan scheme of the revision of salary scales.

Assistance for Research and Learned Work

In 1963-64, the Commission initiated a scheme for giving financial support to teachers in the universities and colleges for undertaking research and learned work. A grant up to a maximum of Rs. 5,000 may be given to a teacher in a year for field work, books, chemicals, equipment etc., needed by him for his research project, but which are not normally available at the institution where he works.

The scheme was continued during 1966-67, and grants amounting to Rs. 1.33 lakhs for 166 projects in the humanities and social sciences and Rs. 2.87 lakhs for 318 projects in science subjects including engineering and technology were approved. Up to the end of 1966-67, 595 teachers in the humanities and social sciences, and 1,005 in science subjects were helped under the programme.

An amount of Rs. 3.83 lakhs was paid to the universities and colleges concerned during the year under this scheme.

Retired Teachers

The Commission assisted universities and colleges to utilise the services of selected teachers who have crossed the normal age of retirement, but are otherwise fit to continue their teaching and research work. An honorarium of Rs. 6,000 per annum and an annual grant of Rs. 1,000 for meeting expenditure on contingencies relating to the work undertaken by him is available to a retired teacher under this scheme. Awards are offered to the selected teachers for three years in the first instance, and may be renewed further till they attain the age of 68 provided they remain active in their academic work. In exceptional cases, the assistance may be continued beyond the age of 68. The retired teachers under this scheme are expected to devote all their working time to academic work and to give a minimum of six hours a week to lectures and seminars.

During 1966-67, awards were offered to 23 teachers. An amount of Rs. 12.18 lakhs was paid to the universities and colleges during the year for disbursement to the teachers working under the scheme. At the

end of the year, the services of 174 retired teachers were being utilised under the scheme.

Exchange of Teachers

It is desirable to utilise the services of distinguished teachers and experts in the universities and other centres of learning as widely as possible. Under the scheme for the exchange of teachers, financial assistance is given to the universities to enable them to invite distinguished teachers or experts who have done outstanding research work in their field of specialisation from other universities or centres of learning in the country, for a limited period, to deliver lectures, conduct seminars, or guide research workers. The persons to be invited are selected by the universities, the duration of their visit depending on the nature of the assignment and the time for which the visiting teachers or experts can be spared by their parent institutions.

With effect from 1966-67, it was decided that the expenditure for this purpose may be met by the universities on a cent per cent basis out of the unassigned grants placed at their disposal.

Travel Grants

The Commission continued to provide assistance to the universities for travel grants to teachers and research workers, to visit centres of research or advanced study in the country. The scheme is intended to help teachers and research workers to pursue their special studies and to obtain specialised training in their respective fields of work at appropriate centres. The benefit of this scheme is also available to teachers of affiliated colleges and research scholars registered at various universities. Expenditure on this scheme has to be met by the universities out of the massigned grants placed at their disposal.

Expenditure for attending conferences, seminars etc., arranged by other institutions and universities in the country may also be met on a cent per cent basis according to the university rules out of the unassigned grants.

The Commission has also been giving financial assistance to the universities for foreign travel by teachers selected to attend international conferences abroad. Such assistance is provided for a teacher who is invited to preside at a conference or its section, or is invited to contribute a paper, provided the sponsoring university or the teacher concerned is willing to share fifty per cent of the expenditure on travel. The Commission agreed to assist 44 teachers from affiliated colleges for attending international conference abroad to the extent of 50% of the travel expenditure. In respect of university teachers, the universities concerned may meet the expenditure on this account to the extent of 50% out of the unassigned grants placed at their disposal with effect from 1966-67.

Staff Quarters and Teachers' Hostels

There is an urgent and pressing need for suitable residential accommodation for teachers in universities and colleges. The Education

Commission (1961-66) states :::

"General experience has been that universities which provide residential accommodation to teachers have been able to obtain the services of eminent teachers and to retain them. The target to be reached over the next 20 years should be to provide residential accommodation to about 50% of the teachers in the universities and to 20% in affiliated colleges."

A committee on residential accommodation for students and teachers appointed by the University Grants Commission estimated that it would be necessary to construct 900 teachers' hostels accommodating about 20,000 teachers, and 44,000 staff quarters at a total cost of Rs. 137 crores to accommodate 50% of the teachers in the universities and colleges by the end of the Fourth Plan period. The committees which drew up specific proposals in the light of the recommendations made by the panel of vice-chancellors and educationists in October 1966 gave priority to this crucial programme and the Commission approached the Government of India for necessary funds. The resources required for the purpose have not been made available to the UGC.

The Commission has, however, been giving limited aid to the universities and colleges for the construction of staff quarters for teachers and sharing 50% of the approved expenditure on this account. The Commission meets in full the cost of staff houses in the central universities. The proposal of 42 universities were accepted during the Third Plan period for the construction of staff quarters, estimated to cost Rs. 3.42 crores.

In order to meet the serious shortage of accommodation of teachers, the Commission decided in 1963-64, to assist the universities for the construction of teachers' hostels. These are intended to provide two-room tenements for teachers, who are bachelors or have very small families. Under this scheme, a university could be assisted for the construction of two such hostels each accommodating 24 teachers at an estimated cost of Rs. 3 lakhs, the Commission's grant being limited to 75% of the total approved cost of the two hostels or alternatively cent per cent for the first hostel and fifty per cent for the second hostel. The building advisory committee of the UGC has worked out the norms and these have been intimated to the universities for their guidance.

During the Third Plan period, the Commission accepted the proposals of 45 universities for the construction of teachers' hostels at an estimated cost of Rs 1.75 crores. During 1966-67, payments to the universities in respect of the construction of teachers' hostels amounted to Rs. 45.56 lakhs, and of staff quarters to Rs. 24.04 lakhs. An amount of Rs. 5.10 lakhs was paid to the universities concerned during the year for staff quarters for teachers of the departments/colleges of engineering and technology maintained by the universities.

Assistance is also given to colleges for the construction of staff quarters @ 50% of the approved cost. Colleges have generally given low priority to such projects. So far, proposals of 25 colleges for the cons-

truction of staff quarters at an estimated cost of Rs. 36.30 lakhs have been accepted. During 1966-67, payments to colleges on this account amounted to Rs. 4.15 lakhs. The Commission has now decided to assist selected colleges during the Fourth Plan period for the construction of teachers' hostels @ $66\frac{2}{3}\%$ of the approved cost within the Fourth Plan ceiling of Rs. 1.5 lakhs per college.

Sabbatical Leave

The Gommission considered a proposal for the introduction of sabbatical leave in universities and colleges, so that teachers may have free time for research, writing books, field work, etc. It was estimated that on the basis of the number of teachers in 1961-62, funds amounting to Rs. 3.30 crores would be required for introducing the system of sabbatical leave in the universities and colleges. The proposal could not be implemented for want of funds.

STUDENT SERVICES AND WELFARE

The Education Commission (1964-66) has stated that "the major weakness of the existing system of education is the failure to provide adequately for student welfare. This is an aspect of higher education which needs to be improved on a priority basis,"

Programmes of student services and welfare are an integral part of educational development. An improvement of the conditions in which students live and work is expected to have a salutary influence on the attitudes and academic performance of students. Assistance is being given to the universities and colleges for the provision of essential amenities for the student community under various schemes approved by the Commission. It has been decided that high priority should be given to projects relating to student welfare in the Fourth Plan.

Committee on Student Welfare and Allied Matters

Problems relating to student welfare and allied matters were examined by a committee under the chairmanship of Dr. T. Sen, then Vice-Ghancellor, Banaras Hindu University.

Some of the important observations of the committee are as under:

- (i) Every institution should ensure sound arrangement for work and be prompt in redressing legitimate grievances. Every effort should be made to remove the causes of discontent among the students.
- (ii) As the living conditions exert a powerful influence on the character and personality of the students, provision for hostel facilities for as large a number of students as possible should receive high priority in any scheme of educational planning.
- (iii) The scheme for assisting universities to set up student homes, already being implemented by the University Grants Commission, may be extended to cover as large an area as possible.

- (iv) An effective health service system is an essential programme of student welfare and should be introduced.
- (v) The State should provide financial assistance to poor but meritorious students to enable them to continue their studies.
- (vi) A properly organised counselling system should be introduced in the universities and colleges. If this cannot be undertaken on a large scale, due to paucity of resources, the tutorial system should be improved and encouraged.
- (vii) Before affiliation is given to institutions certain physical standards about numbers, library and laboratory facilities, class-room accommodation etc., should be insisted upon.
- (viii) There should be increasing participation of students in the business of decision making and programmes in which they are involved, so as to avoid the feeling among them that they are not full members of the university community.
 - (ix) It should be impressed upon the students that there are certain areas pertaining to the duties and responsibilities of the institutions which cannot be interfered with, for example, courses of study, examinations, academic standards, appointment of teachers etc.

The report of the committee has been printed and sent to the universities for their consideration.

Committee on Physical Education

A committee was appointed under the chairmanship of Dr. C. D. Deshmukh, to examine the existing facilities for physical education and the standards of games and sports in Indian universities and colleges, and to make recommendations for improving them. The committee has submitted its report and this has been circulated to the universities for comments. The committee is of the opinion that the development of physical education in the universities and colleges should be given the highest possible priority and regarded as an essential and integral part of education. Necessary steps for improving the programme of physical education have been suggested by the committee.

Discipline

A number of universities and colleges were affected by student unrest and violence. Acts of indiscipline are the result of varied factors and circumstances, many of them non-academic. The Education Commission (1964-66) has made the following observations on the subject:

"There is a variety of causes which has brought about these ugly expressions of uncivilized behaviour in the universities and colleges; e.g., the uncertain future facing the educated youngmen leading to a sense of frustration which breeds irresponsibility, the mechanical and unsatisfactory nature of many curricular programmes; the

totally inadequate facilities for teaching and learning in the large bulk of institutions; the poor student-teacher contact..... the inefficiency and lack of scholarship on the part of many teachers and their failure to interest themselves in the students' problems; the absence of imagination and tact combined with firmness on the part of the heads of institutions; the prevalence of what has come to be known as teacher politics in some colleges and universities, the attempt by political parties to interfere in their work, and by no means the least, the impact of the conditions of public life in the country, the falling standards of discipline among the adults and a weakening of their civic consciousness and integrity...... This is also necessary to remember that the responsibility for the situation is not unilateral-it is not merely that of students or parents or teachers or State Governments or political parties—but multilateral. All of them share it, together with many factors in the objective situation and no effective solution is possible unless each agency responsible for the malaise does its own duty. Some of the remedies for students unrest, therefore, go beyond the education system."

The University Grants Commission noted with serious concern the existing unrest and student agitation in the country, and decided to set up a panel of vice-chancellors and educationists to consider the situation and the relevant recommendations of the Education Commission. The panel constituted for this purpose met in New Delhi on October 16-18, 1966 and made the following important recommendations:

- (i) The genuine needs and difficulties of students should be looked into carefully and sympathetically, and a consultative machinery devised, so that the authorities in the universities and colleges could discuss periodically and regularly with students their needs and problems in order that remedial action, wherever possible, could be taken expeditiously. It is important to associate student representatives in discussions relating to student welfare, discipline and related subjects.
- (ii) The University Grants Commission may request the Government to place adequate funds at its disposal, in order that schemes in the universities and colleges which promote the welfare of students, and assist in adoption of measures necessary to fulfil their genuine needs are undertaken. High priority should be given to measures which would impart a greater sense of national purpose. In this context serious attention should be given to the introduction of more 'field work' into the curriculum, social service and work experience, so that education is more intimately linked with life, and the real conditions and problems of the country.
- (iii) Universities have to maintain the highest integrity in matters of appointment, election, examinations, affiliations etc., so as to create confidence in teachers and students and the public. Admissions should be based solely on merits and considerations of caste, region, etc., should not be allowed to come in. Academic matters such as admissions and appointments should

be left entirely to the universities and there should be no outside interference.

- (iv) The scheme for improving the salaries of university and college teachers which have already been sanctioned by the Government should be implemented without delay.
- (v) If at any time intervention by the police became necessary in dealing with the voilent situation on an educational campus, the entry of the police into the campus, and their exit should ordinarily be at the request of the educational authority, who are the best judge of the temper and gravity of the situation.
- (vi) All political parties should desist from using students for their own political ends and objectives.
- (vii) The following steps may be taken urgently:
 - (a) Deans of student welfare may be appointed in universities and colleges where they do not exist, and the Dean's organisation in other educational centres should be strengthened. Counselling and guidance facilities may be provided, information and employment bureaus strengthened, and effective orientation programmes instituted.
 - (b) Library facilities may be expanded and reading scats provided. Day study centres should be established. Hostel accommodation should be increased and medical and recreational facilities made available for students. Financial aid should be given to needy students. The necessary steps may be taken to ensure better living and working conditions for students and better employment of their leisure hours.
 - (c) Personal contacts between teachers and students should be promoted.
 - (d) Proctorial arrangements with the participation of students should be strengthened.

These recommendations were generally accepted by the Commission. The universities have welcomed the suggestions, and some of the recommendations relating to advisory councils of teachers and student representatives, machinery for student welfare, improvement of library facilities etc., are already being implemented. Some vice-chancellors have emphasised inter-alia the need for more hostels with better facilities, additional residential accommodation for teachers near the university campus, restricted admissions at the university level, institution of tutorials and seminars, better facilities for sports, games and co-curricular activities (including programmes of social service), reforms in the examination system, diversification of courses, counselling and guidance facilities etc. Many universities have stated that the implementation of the recommendations of the Education Commission and the panel of vice-chancellors regarding student welfare and services

would require additional financial resources, which should be provided by the University Grants Commission.

A small committee was appointed to work out specific proposals in this regard in the light of the recommendations made by the panel of vice-chancellors and educationists. The following schemes were suggested for introduction in the universities and colleges:

- (i) Appointment of deans of student welfare.
- (ii) Provision of reading seats.
- (iii) Provision of teachers' rooms.
- (iv) Improvement of the existing hostel facilities.
- (v) Construction of staff quarters and student homes.
- (vi) Promotion of sports and games.
- (vii) Introduction of health service scheme.

The financial implication of these schemes as worked out by the committee amounted to nearly Rs. 67 crores in the Fourth Plan. The Commission approached the Government of India to provide necessary funds for the purpose.

Several schemes relating to student welfare have been approved by the Gommissson, and assistance is being given to the universities and colleges, within the framework of the resources available, for the provision of essential amenities for the student community. Information about these programmes is given below.

Halls of Residence

The physical environment and living conditions exert a powerful influence on the personality and character of the students. A vast majority of our students living in their own homes or in the rented accommodation do not have the facilities and conditions congenial for advanced studies. The provision of suitable and adequate hostel accommodation is essential for a rich and healthy corporate life and the improvement of academic standards.

Though the number of students residing in hostels has risen steadily, this has generally not kept pace—with the rapid increase in enrolment. The overall position in this respect during the last three years is analysed in the following table:

Table V

Students Residing in Hostels: 1964-65 to 1966-67

Year	Total Enrolment	No. of Students Residing in Hostels	Percentage of Resident Students to Total Enrolment
1	2	3	4
1964-65 13,18,227 1965-66 14,88,773 1966-67 16,82,012		2,50,113 2,68,330 2,95,318	19.0 18.0 17.6

The question of providing adequate hostel accommodation was earlier examined by a committee appointed by the University Grants Commission. The committee prepared a perspective plan in this regard and estimated that additional hostels for 3 lakh students at an estimated cost of Rs. 120 crores (@ Rs. 4,000 per student) will be needed by the end of the Fourth Plan to accommodate 25% of the total student population in the universities and colleges.

The Commission continued its assistance to universities and colleges for the construction of hostels. The total approved cost of construction is shared to the extent of 50% in the case of men's hostels, and 75% in the case of women's hostels. For central universities, grants are provided on a cent per cent basis.

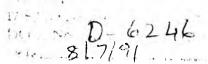
During the Third Plan period, the Commission sanctioned the construction of 119 hostels in various universities at an estimated cost of Rs. 5.59 crores, the Commission's share of expenditure being limited to Rs. 3.71 crores. During the Second and Third Plan periods, 297 proposals for the construction of hostels in colleges were accepted by the Commission at a total estimated cost of Rs. 6.26 crores, the Commission's share of expenditure being limited to Rs. 2.93 crores. During 1966-67, payments to the universities for the construction of hostels amounted to Rs. 44.32 lakhs. A sum of Rs. 5.20 lakhs was paid to the universities concerned in respect of hostels for engineering students. An amount of Rs. 22.90 lakhs was paid to the colleges for this purpose. A number of proposals had to be deferred for consideration in view of the limited resources available with the Commission.

Student Homes and Non-Resident Student Centres

The Education Commission (1964-66) has recommended that day study centres and library seats should be provided on a liberal scale for the use of non-resident students who do not have adequate facilities at home. The Commission has been assisting universities and colleges for the construction of student homes and non-resident student centres, which are intended to provide facilities for studies to day-scholars during their leisure hours.

A student home normally has reading room facilities for 100 students at a time with stack room for about 5,000 books, a cafetaria and a dining hall. The Commission's assistance for student home is limited to Rs. 1 lakh against an estimated cost of Rs. 1.25 lakhs and a further grant of books may also be provided. The maximum grant payable to a college for a non-resident student centre, having a built up area of 2,000 sq. ft., is Rs. 35,000.

Up to the end of the Third Plan, proposals of 30 universities and 233 colleges were accepted for the establishment of such homes or centres. During 1966-67, grants amounting to Rs. 2.83 lakhs were paid to the universities on this account. An amount of Rs. 6.03 lakhs was paid to the colleges for the construction of non-resident student centres. Nine new proposals received from the colleges were accepted during the year.



The UGC Committee on Students Welfare and Allied Matters and the Education Commission (1964-66) have stressed the need for organising an adequate and effective health service in the universities and colleges. The Education Commission has also suggested that the UGC might explore the possibility of organising a health centre for university teachers and students on the lines of the contributory health service organised for the employees of the Government of India.

The University Grants Commission has been providing grants to the universities for establishing health centres which are intended for the medical examination of students and the treatment of simple ailments. Assistance for a health centre for a student population of 5,000 is limited to Rs. 50,000. For a larger student community, the Commission may provide an amount of Rs. one lakh to the university. The proposals of 36 universities for the establishment of health centres have already been accepted by the Commission.

A committee was appointed under the chairmanship of Dr. A. L. Mudaliar to formulate a scheme of health service for the staff and students in the universities and colleges on the lines of the Central Government Health Service Scheme. The committee has made the following recommendations:

- (i) The university health service programme should have a comprehensive scope including preliminary medical examination, preventive and curative measures, supervisory and advisory services on environmental hygiene, sanitation etc. The scheme should also include immunisation and regular health check-up.
- (ii) The scheme of health service should cover both universities and colleges and its benefits should be available to students, teachers and other staff with their families.
- (iii) The health centre service system or part-time doctor system may be introduced to suit different situations. The health centre should provide facilities for laboratory and diagnostic tests and consultation for general minor ailments.
- (iv) Arrangements may also be made for special laboratory tests and hospitalisation in recognised hospitals. Under the part-time doctor system a medical doctor may be allotted to a population, of 3,000. For special laboratory tests and hospitalisation, the part-time doctor may refer the cases to recognised hospitals. The contribution of the students may not be more than Rs. 6 per annum, but that of the teachers and other staff may be on a graded scale, as in the case of the Central Government Health Service Scheme.
- (v) No charges should be debited to the beneficiaries for the drugs supplied to them. The possibility of organising drug cooperative stores for supplying medicines to the dispensaries or for direct purchase may be explored.

The Committee is of the opinion that the health care of students and teachers is basic to the concept of a welfare State, and the Central and State Governments should provide assistance, both in terms of finances and physical facilities, to the universities and colleges for introducing the health service scheme. The Commission has accepted the report of the committee and desired that a modest beginning may be made as early as possible. The Commission has requested the Government of India to provide an additional grant for the implementation of the scheme. It has also been suggested that to start with the scheme may be implemented in those universities which are associated with medical colleges. The central universities have been requested to send to the Commission specific proposals regarding a health service scheme for their staff and students.

The Mental Health Advisory Committee of the Ministry of Health recommended, inter-alia, at its meeting held in November 1965 that mental health orientation courses should be given to educationists and teachers, and should be included in their training programmes as well as courses for B. Ed. and M.A. in Psychology. The Commission agreed with the views of the Inter-University Board that the recommendations made by the Mental Health Advisory Committee be commended to the universities.

Student Aid Fund

Needy students are given financial assistance from the student aid fund in universities and colleges for paying their tuition or examination fees, purchasing books or meeting other expenses related to their studies. The Commission contributes to the student aid fund, on the basis of the enrolment and the amount subscribed by the students and collected from other sources. The maximum contribution of the Commission to the student aid fund in a university is limited to Rs. 10,000 and in a college to Rs. 3,000 per year. During 1966-67, grants amounting to Rs. 11.17 lakhs were paid to the universities and colleges under this scheme.

Textbook Libraries

The Commission decided in 1963-64 to sanction grants on a cent per cent basis to arts, science and commerce colleges having the prescribed minimum envolment for establishing textbooks libraries, wherefrom deserving students could obtain textbooks for study on long-term loans. A grant of Rs. 10,000 is given under this scheme to a college providing undergraduate courses leading to the first degree and Rs. 15,000 to a college conducting postgraduate courses, for purchasing multiple copies of standard textbooks. The university libraries can also utilise a part of the library grants from the UGC for purchasing textbooks. Up to the end of March, 1967, the Commission paid grants amounting to Rs. 72.78 lakhs to 726 colleges for this purpose. Payments during 1966-67 under the scheme amounted to Rs. 10.01 lakhs.

The Commission agreed in principle that the textbook library scheme should be extended to all colleges other than professional colleges covered under Section 2(f) of the U.G.C., Act. It is estimated that additional funds amounting to Rs. 70 lakks would be required to imple-

ment this decision during the remaining period of the Fourth Five Year Plan. This expenditure has not been possible within the funds available to the Commission.

In collaboration with the Ministry of Education, the Commission has been promoting the publication of low-priced editions of standard works in science, the humanities and social sciences originally printed in the USA, UK and USSR. The titles to be published are evaluated by experts in the subjects concerned and suitable recommendations are made to the Ministry of Education for this purpose.

Consumer Cooperative Stores

The University Grants Commission in consultation with the Department of Co-operation in the Ministry of Food and Agriculture decided to promote the establishment of consumer cooperative stores in universities and colleges.

In the wake of devaluation and rising prices, it has become imperative to provide essential consumer commodities at reasonable rates to the staff and students in academic institutions. The Government of India agreed to the provision of Rs. 75.00 lakbs as clean credit and Rs. 25.00 lakbs as subsidy during 1966-67 for the working capital and managerial expenses of the consumer cooperative stores in the universities and colleges.

The cooperative stores are intended to provide essential consumer goods, textbooks, imported books and scientific instruments. They may run canteens, book-banks, etc. Financial assistance for the working capital and managerial subsidy to the cooperative stores will be released by the Ministry of Food and Agriculture, Community Development and Cooperation, through the State Governments concerned. The working capital will vary from Rs. one lake to Rs. two lakes and the managerial subsidy will be Rs. 10,000 to each wholesale store at the university level depending upon the size of the university and the population it has to cover. For primary stores or branches an amount of Rs. 2,000 may be provided as managerial subsidy. The universities and colleges have to provide accommodation at a nominal rent, free electricity and water supply for the stores and canteens. In order to ensure the smooth flow of essential commodities to these stores, they would be linked with the nearest wholesale cooperative stores organised by the State Governments. The details of the scheme were communicated to the universities.

SCHOLARSHIPS AND FELLOWSHIPS

Enrolment at the research level in various faculties has increased significantly during the recent years. In 1964-65, research enrolment was 7,104, and this rose to 8,633 in 1965-66, and 9,668 in 1966-67. Thus during the span of three years, the enrolment for research has increased by almost 36%.

There is a growing need for research scholarships and fellowships in view of the increase in the volume and diversity of research now being undertaken in the universities and colleges. The University Grants Com-

mission and other central agencies like the Council of Scientific and Industrial Research, the Department of Atomic Energy, the Indian Council of Medical Research, the Indian Council of Agricultural Research etc., are providing scholarships and fellowships for research in various fields. Some scholarships and fellowships are provided by the universities themselves. Merit and loan scholarships for studies at the undergraduate and postgraduate levels are also provided by the Central Ministry of Education.

In addition to the assistance being given to the universities and colleges for improving library and laboratory facilities for advanced studies, provision has been made for a specific number of scholarships and fellowships which are awarded every year. This is apart from the special scholarships and fellowships created for the various centres of advanced study. Fellowships and research assistantships are also made available to the universities for specific research projects approved by the Commission from time to time.

In view of the anomalies in the conditions for the award of scholar-, ships and fellowships offered by various central agencies, such as disparities in the amounts offered and the qualifications required, it would be an advantage if better coordination could be ensured between the various agencies at the national level. This was emphasised in the Commission's report for 1965-66, and has also been specifically recommended by the Education Commission (1964-66).

Fellowships

Senior and junior fellowships in the humanities (including social sciences) and science subject are being provided by the Commission every year to promote advanced study and research in various fields. Senior fellowships are of the value of Rs. 500 per month and are meant for those who have obtained a doctoral degree or have equivalent research work to their credit and have shown some aptitude for original work. Junior fellowships are of the value of Rs. 300 per month and are generally intended for persons who have one year's research experience after obtaining the Master's degree. These fellowships have a normal tenure of two years which may be extended by a maximum period of one year in special cases. Each fellowship, junior or senior, carries a grant of Rs. 1,000 per annum for expenditure on contingencies relating to the research undertaken. A further sum of Rs. 1,000 may also be provided during the tenure of the fellowship for field work and publication of the research work completed.

During 1966-67, the Commission awarded 30 senior fellowships and 87 junior fellowships in science subjects and 20 senior fellowships and 48 junior fellowships in the humanities and social sciences. The number of research fellows working at the end of 1966-67 was 186 in science subjects and 156 in the humanities and social sciences. In 1966-67 the Commission paid a grant of Rs. 10.01 lakhs to the universities and colleges for fellowships in science subjects and Rs. 9.71 lakhs for those in the humanities and social sciences.

In addition to the fellowships mentioned above, the Commission has also been awarding research fellowships in engineering and technology

of the value of Rs. 400 per month. These fellowships also carry a grant of Rs. 1,000 per annum for expenditure on contingencies relating to the research undertaken. A sum of Rs. 1,000 may be made available for field work and publication of the research work completed. During 1966-67, 32 fellowships were awarded for research in various fields of engineering and technology. A grant of Rs 3.22 lakhs was paid to the universities and colleges for the continuing and new fellowships. At the end of 1966-67, 65 fellows were carrying on research in engineering and technology.

Research Scholarships

The Commission has been giving research scholarships of the value of Rs. 200 p.m. every year for research in the humanities (including social sciences) and science subjects. These scholarships have a tenure of two years, which may be extended, in special circumstances by one year. The scholarships are allocated to the universities, who are requested to distribute them among different subjects or disciplines according to their requirements, and to award them on the basis of academic merit to the best available candidates. In 1966-67, 265 scholarships were made available by the Commission to 47 universities and a grant of about Rs. 14.45 lakhs was paid to them on this account. The value of these scholarships was raised from Rs. 200 to Rs. 250 per month with effect from Ist July, 1966. The number of research scholars under the scheme working in the universities in various fields was 548 at the end of 1966-67.

The Commission decided that the number of scholarships should be increased to 400, if and when the necessary funds were available.

Studentships

The Commission continued to provide assistance to the universities concerned for awarding junior fellowships of the value of Rs. 250 per month each to students admitted to the postgraduate courses in engineering and technology. Grants amounting to Rs. 17.11 lakhs were released on this account during 1966-67.

On the recommendations of the Review Committee on Arabic and Persian Studies, the Commission agreed to institute a few scholarships of the value of Rs. 100 per month each for promoting honours and post-graduate studies in Arabic and Persian. During 1966-67, scholarships were awarded to 14 candidates for these studies and a grant of Rs. 0.24 lakhs was paid to the universities and colleges concerned for the purpose. The number of students receiving scholarships for honours and postgraduate studies in Arabic and Persian at the end of 1966-67 was 21.

In pursuance of the recommendations of the geophysics expert committee, and the geology and applied geology committee, the Commission has been providing studentships, each of the value of Rs. 150 per month, to students in geophysics and applied geology for postgraduate studies. During 1966-67, 20 studentships were awarded for studies in geophysics and 145 studentships were made available for studies in applied geology. Payments during the year under this scheme amounted to Rs. 2.23 lakhs.

OTHER PROGRAMMES

Information about a number of miscellaneous programmes and activities conducted by the Commission is given below.

Community Development and 'Panchayati Raj'

A grant of Rs. 5 lakhs was provided by the Ministry of Community Development against an equal amount to be contributed by the Commission for promoting programmes of teaching and research in community development, cooperation and panchayati raj in the universities.

Under the scheme, grants are made to universities and colleges for research projects, fellowships, seminars and conferences, purchase of books and journals etc. The proposals received from the universities were examined by a committee set up for this purpose, and a number of such proposals were approved by the Commission.

Correspondence Courses

The Central Advisory Board of Education at its 32nd session held at Chandigarh in October, 1965 recommended that the feasibility of starting correspondence courses in arts at the undergraduate level at selected universities and of extending such courses to cover science subjects also should be examined, and the experience of the Delhi University in this field could be utilised with advantage. The Commission generally accepted the recommendations made by the Central Advisory Board of Education.

The Delhi University started correspondence courses for B.A. (Pass) in September, 1962 as a pilot project. On the recommendation of the Delhi University, the Commission agreed that the directorate of correspondence courses in the University be placed on a permanent footing.

The Ministry of Education has agreed to transfer to the Commission the scheme of correspondence courses and its extension to other universities and institutions to cover different courses of study. A committee was appointed by the Commission to recommend steps to be taken to implement the scheme. The Commission had earlier received proposals from a number of universities for starting courses in various disciplines. The committee has suggested that the correspondence course should be started only in some well established universities with strong faculties, and the duplication of courses for the same degree may be avoided as far as possible. It is expected that the committee will soon finalise its report.

Examination Reform

With the Commission's assistance examination reform units were set up by the Universitities of Aligarh, Baroda, Delhi and Gauhati. A number of studies relating to various aspects of the examination system were produced. The Commission's assistance to the examination reform

unit of the Gauhati University has been extended up to 30th September, 1967.

Information was collected regarding the steps taken by the universities to achieve uniformity and objectivity in the standards of evaluation. Comments of the universities on admission procedures, teaching methods, internal evaluation, spacing of examinations, classification of successful candidates and the efficacy of objective tests and viva-voce also were obtained. It has been observed that there is variation in the minimum percentage for awarding classes at the university examinations and consequent lack of uniformity in grading the students. This was brought to the notice of the universities. The attention of the universities was also invited to the following observations of the Education Commission:

"The grading or classification of examination results is almost invariably done on an absolute rather than on a relative basis. In our present system of examination, an 80% mark in mathematics does not convey the same meaning as say 80% mark in history or English. Again an 80% in one year does not mean the same thing as 80% mark in another year because examiners may be different and there may be many other variations from year to year. A system of grading must be such as to bring out whether a student belongs say, to the top 20% of his class or to the bottom 20%. It is strongly recommended that even if the present system of examinations and classifying the results is continued it should be supplemented by giving, in the same certificate, the relative grading of the student, say on a five point scale. Grade ' Δ ' would mean that the student is in the top 20% of those who have been successful at the examinations."

Printing Presses

The Commission has been giving assistance to the universities for establishing and improving their printing presses. Non-recurring expenditure on buildings, machinery and equipment is shared by the Commission to the extent of 2,3rd of the approved cost subject to a normal ceiling of Rs. 1.21 lakls. The balance has to be met by the university concerned. The Commission does not provide any assistance for recurring expenditure on staff, contingencies etc.

During the Second and Third Plan periods, grants were sanctioned to 41 universities for the establishment or improvement of their printing presses. Payment on this account during 1966-67 amounted to Rs. 5.54 lakhs.

Extension Lectures

Assistance was given to the universities for organising extension lectures by university and college teachers. Under the scheme no permanent staff is to be exclusively employed for this purpose. During the Third Plan, the Commission's assistance to the universities for this scheme was limited to Rs. 5,000 per annum. With effect from 1966-67, it was decided that the universities could meet expenditure on this account from the unassigned grants placed at their disposal each year.

Publication Grants

The Commission continued to give assistance to the universities for the publication of research work and doctoral theses. A sum of Rs. 11.65 lakhs was allocated for the Fourth Plan period to 63 universities and institutions deemed to be universities for this purpose. During 1966-67 payment to the universities on this account amounted to Rs. 1.12 lakhs.

General Education

The Commission's views on the significance and purpose of general education were stated in the report for 1964-65. Grants amounting to Rs. 8.83 lakhs were paid to the universities and colleges during the year under review for programmes relating to general education. These included payments to some colleges for establishing small general education libraries on the recommendations of the advisory committee on general education.

Guest Houses

The Commission has been providing assistance to the universities for the construction of guest houses. The Commission's grant to a university for this purpose is limited to 2/3rd of the total approved cost subject to a maximum of Rs. 1,00,000.

Grants have so far been sanctioned to 33 universities for the construction of guest houses on the approved sharing basis. Payments to the universities concerned on this account during 1966-67 amounted to Rs. 5.08 lakhs.

Gandhi Bhavans

Assistance was provided to 14 universities, in collaboration with the Gandhi Smarak Nidhi, for the construction of Gandhi Bhavans. The Commission's grant to a university for this purpose is limited to Rs. 50,000 against an equal amount provided by the Gandhi Smarak Nidhi. The Gandhi Bhavans have started working in the Universities of Delhi, Jadavpur, Karnatak, Nagpur, Panjab and Rajasthan. In order to activise the functioning of the Gandhi Bhavans, the Commission agreed to contribute Rs. 5,000 per annum for a period of three years towards recurring expenditure for a Gandhi Bhavan. Gandhi Smarak Nidhi would also provide Rs. 5,000 per annum for this purpose, and an amount of Rs. 2,000 is to be contributed by the university concerned.

Academic Calendar

On the recommendations of a committee appointed to suggest a uniform calendar for the universities, the Commission has, inter-alia, recommended to the universities that

- (i) the academic session in each university should start on a date within a specified period, i.e., between the last Monday of June and the first Monday of July;
- (ii) every university should have a minimum of 180 working days; and

(iii) the number of holidays should be cut down as far as possible.

The Commission is in favour of extending the working time in the institutions and adjusting the work-load accordingly. This, the Commission thinks, does not mean working in shifts but implies the staggering of the time table.

Committee on Manpower Development

The Commission appointed a committee to consider problems relating to the employment of university students and manpower development. On the recommendations of the panel on employment information set up by the committee, the Commission has requested the universities to undertake a survey of the employment patterns of its outgoing graduates on a regular basis. Several universities are now engaged in this study.

FOREIGN AID PROGRAMMES

Foreign Aid Programmes for the benefit of the universities are operated by the University Grants Commission in collaboration with the Union Ministries concerned. During 1966-67, several universities received assistance from the UNESCO and some foreign countries such as the UK, USA and USSR. This assistance is given under specific agreements entered into by the Government of India with the agencies concerned.

As stated earlier in this report, assistance was provided to some centres of advanced study by the UNESCO for the purchase of specialised equipment, the training of some Indian scholars in the USSR, and for inviting Soviet scientists for a short period. A similar programme of assistance to centres of advanced study from the United Kingdom for inviting expert personnel, short term visits to the United Kingdom by Indian scientists and scholars, and the supply of essential equipment was also implemented during 1966-67.

Reference has also been made earlier in this report to the assistance provided by the United States Agency for International Development and the National Science Foundation, USA for the programme of summer institutes for secondary school and college teachers.

In addition to the programmes mentioned above, foreign aid was also utilised from other sources and agencies. Information about some of the important programmes relating to such assistance is given below.

United States PL 480 Programme

As in previous years, assistance from the rupee fund from the United States PL 480 Programme was provided to several university departments and other institutions for specific research projects in agricultural, physical and biological sciences. Such programmes have been undertaken in collaboration with the US Department of Agricultural Research, the National Bureau of Standards, and the Bureau of Commercial Fisheries of the US Department of Commerce.

In 1966-67, 90 proposals for research in agricultural sciences were forwarded by the Commission to the Indian Council of Agricultural Research, Ministry of Food and Agriculture. At present, 108 projects of university departments and other institutions are under implementation and the requisite agreements for these projects have already been signed. Grants amounting to Rs. 3-14 crores have so far been made available to the universities and other institutions from the PL 480 Fund for research relating to agricultural sciences.

In collaboration with the United States Agency for International Development, the National Bureau of Standards, USA, and the Bureau of Commercial Fisheries of the US-Department of Commerce, assistance was also provided from the PL-430 Fund for research projects in physical and biological sciences. Thirty-three such projects have so far been approved by the screening committee, and six others are under consideration. Of these, 17 projects costing Rs. 36.88 lakhs were received from the university departments.

The funds available under the PL 480 Programme have given a fillip to research in the agricultural, physical and biological sciences in the universities.

Assistance for Training Abroad and Vivits of Foreign Experts

In collaboration with different ministries of the Government of India, the Commission gave assistance to some universities for sending selected Indian personnel for training abroad and for inviting foreign specialists.

During 1966-67, the Government of India approved the proposals of five persons for training abroad in special fields for which training facilities are not available in India. The proposals of the Universities of Banaras, Roorkee and Jadavpur for obtaining the services of experts in the field of petroleum refining, petro-chemicals control system and instrumentation, dam and civil engineering are under consideration of the Government of India.

On the invitation of the Australian High Commission, three university teachers were deputed to visit Australia for four weeks to study the organisation and administration of the School of Oriental and Asian Studies in the Australian Universities.

During 1966-67, some Indian universities were visited by Prof. J. Chatt of the University of Sussex, Professor D. Lewis of the University College of London, Professor J.H. Quastal of McGill University, Doctor M. Oosternbrink of the Netherlands, and Professor E. Wenk of the University of Basel (Switzerland).

Exchange of Visits by Scientists between the United Kingdom and India

The programme for the exchange of visits by young scientists between India and the UK was sponsored in collaboration with the Indian High Commission in the United Kingdom and the British Council. This programme has helped in establishing contacts between young

Indian and British scientists. During 1966-67, four British scientists visited Indian universities. Six Indian scientists visited the UK under this programme.

Cultural Exchange Programmes

Programmes of cultural exchange are covered by specific agreements between the Government of India and the governments of the countries concerned. The Commission is concerned with agreements relating to the exchange of educationists, teachers and scholars.

During 1966-67, 38 teachers, educationists and scientists came to India, 21 from the USSR, one from Czechoslovakia, six from Hungary, three from Bulgaria, four from Federal Republic of Germany, two from Yugoslavia and one from the West Indies. Nineteen Indian educationists/scholars went to different countries—10 to the USSR, one to Czechoslovakia, two to Hungary, four to Yugoslavia, one each to Bulgaria and Rumania.

Many of the persons who visited India and went abroad under the cultural exchange programme gave lectures and submitted brief reports to the Commission. The proposal of the Jadavpur University for a bilateral exchange programme for teachers with the Brno University (Czechoslovakia) was accepted by the Commission subject to the normal clearance from the Government of India.

A seven-member delegation of Soviet scientists visited India at the invitation of the Government of India for about three weeks. The delegation consisted of Academician P. N. Fedoscey, Vice-President of the Academy of Sciences of the USSR, Academician V. M. Glushkov, Vice-President of the Academy of Sciences of the Ukrainian Soviet Socialist Republic, Academician A. S. Sadikov, Member of the USSR Academy of Sciences and President of the Academy of Sciences of the Uzbek Soviet Socialist Republic, Academician M. M. Shemyakin of the Department of Biophysics, Academy of Sciences of USSR, Academician A. M. Prohorov, Nobel Prize Laurente and Head of the Laboratory of the Institute of Physics of the USSR, Dr. S. G. Korneev, Head of the Foreign Department of the USSR Academy of Sciences, and Mr. U.I. Tkachenko, secretary-interpreter of the delegation. The delegation visited some of the universities, scientific institutes, national laboratories etc., and also attended the 54th Session of the Indian Science Congress at Hyderabad.

Other Programmes of Foreign Aid

The UK Government has agreed to supply equipment worth about £12,000 for the central instrumentation laboratory of the Indian Institute of Science, Bangalore under the Colombo Plan.

The proposal for setting up an institute in earth sciences at the Osmania University with Soviet assistance has been agreed to. The details are now being worked out and the matter is under the consideration of the Government of India.

The Commission is of the opinion that in order to make the best use of the assistance available from foreign foundations/agencies, it is desirable to channelise such assistance to carefully selected institutions and important academic fields. Selection for this purpose should normally be made by the University Grants Commission/Government of India.

The Commission considered the proposal from the Danforth Foundation, USA for providing assistance over a period of three to four years to the extent of \$1,00,000 to \$1,50,000 per year for the development of higher education in selected colleges and other institutions. The Commission was of the opinion that, by and large, the assistance offered should be utilised for the purchase of library books and science equipment not generally available in the country. The Commission agreed with the proposal of the Bangalore University for assistance from the Danforth Foundation for strengthening the honours course in economics in the university.

The Commission considered a proposal received from the Delhi University for financial assistance from the Ford Foundation amounting to Rs. 5.05 crores. This is intended to be utilised for the improvement of library and laboratory facilities, construction of faculty buildings, staff quarters etc., expenditure on academic and non-academic staff, visiting professors and training of teachers and scholars. The Commission's general policy has been that apart from an all round improvement in standards some carefully selected departments should be strengthened to attain the highest academic standards. In view of this, the Commission welcomed the proposal of the Ford Foundation to assist the University of Delhi. This would enable the University to develop necessary facilities and help in raising standards. The proposal was recommended to the Government of India for acceptance. Further, it was decided that in case of schemes involving recurring expenditure to be met wholly or in part by the UGC after the assistance from the Ford Foundation would cease, the university would get the approval of the Commission before taking up their implementation.

FOREIGN EXCHANGE

It was stated in the report for 1965-66 that in view of the rapid advance in the field of science and technology, the development of specialised courses and the centres of advanced study and the increasing volume and diversity of research programmes, there is a pressing need for adequate foreign exchange particularly for sophisticated scientific equipment which cannot at present be fabricated within the country.

The Commission has been giving some foreign exchange, made available to it by the Government of India, to the universities and colleges for importing scientific equipment, books and journals and other articles required for teaching and research. It may, however, be emphasised that the foreign exchange provided to the universities has so far been inadequate in relation to their essential requirements.

During 1966-67, the Government of India allocated foreign exchange worth Rs. 33.54 lakhs from the rupce payment area and Rs. 100.48 lakhs from the free resources area for the import of scientific equipment by

the universities and colleges. Since the power to release the foreign exchange was not delegated to the Commission, all proposals for imports were referred to the Ministry of Finance, Government of India. Against the allocation made, the foreign exchange that was actually released amounted to Rs. 6.86 lakhs from the rupee payment area and Rs. 1.75 lakhs from the free resources area.

Import licences were issued by the Government of India to the State Trading Corporation for the requirements of the universities and colleges. The details of the foreign exchange made available countrywise are given below:

Country	Foreign Exchange
	(Rupees in Lakhs)
German Democratic Republic	10.01
Hungary	5.36
Czechoslovakia	6.96
Poland	0.02
U.S.S.R.	5.59
Yugoslavia	0.10

Towards the end of 1965-66, the Government of India made a special allocation of foreign exchange worth Rs. 15 lakhs, for the import of library books and journals needed by the universities, institutes of technology, etc. This was allocated to various universities on the recommendations of an advisory committee.

The Ministry of Commerce, Government of India, amended the imports control order and permitted the import of the articles as indicated below without import licences:

- (a) Scientific instruments and appliances needed by technical and research institutes etc., for their own use provided the c.i.f. value of such goods imported at any one time does not exceed Rs. 500.
- (b) Artists' materials required by any individual for his personal use provided the c.i.f. value of such goods imported at any one time was not in excess of Rs. 150.
- (c) Scientific items through parcel posts required by any institution for its own use provided the c.i.f. value of goods imported at any one time from Asian and non-Asian countries did not exceed Rs. 80 and Rs. 180 respectively.

Detailed information regarding this amendment of the imports control order was sent to the universities.

The distribution of UNESCO coupons to the universities and colleges for the purchase of scientific equipment, chemicals etc., which was earlier being done by the Ministry of Education, was entrusted to the Commission. During 1966-67, UNESCO coupons worth \$23,600 were allotted to different universities and colleges. The block allocation

of such coupons to the Commission was, however, not sufficient to meet the total requirements of the institutions concerned.

FUNDS

During 1966-67, the Government of India agreed to the provision of Rs. 11.30 crores for plan projects including those relating to engineering and technology against the estimated requirements of about Rs. 20 crores. The provision for non-plan expenditure for this year amounted to Rs. 4.91 crores. The financial allocation for development programmes in 1966-67, expressed in rupces per student per year, is less than the allocation made in 1961-62 and in terms of 'purchasing power' it is perhaps not more than what it was five years ago.

In view of the fact, that the funds provided were hardly sufficient to meet the requirements, it became necessary to request the universities and colleges to restrict expenditure on development and to defer new construction projects. Many of the recommendations of the panel of vice-chancellors and educationists which discussed the question of student services and welfare in October 1966, could not be implemented, and a number of programmes approved by the Commission, such as the provision of health services and adequate residential accommodation for staff and students could not be undertaken on account of the lack of requisite funds.

The expenditure for plan and non-plan projects under major heads, incurred during 1966-67, is shown in Appendix XVIII.

* * * *

The policies formulated and the programmes implemented by the Commission within the available financial allocations have already been described. It is apparent that there has been a significant increase in the volume and diversity of educational effort at various levels. Attempts have been made to meet the challenge of the rising student enrolment on the one hand, and the urgent need to improve the quality of higher education on the other. The Commission has provided development grants to the universities and colleges for improving the physical and academic facilities essential for advanced studies and research. Approved programmes have been continued and wherever possible expanded, and new suggestions made for further development. Many of the academic problems facing the universities have been carefully examined by a number of committees appointed by the Commission and their views on these matters were made available to the universities and colleges.

It has been repeatedly emphasised that prior consultation with the Commission is desirable when new universities are proposed to be established, and when legislation about universities is undertaken. In dealing with principles of university structure, organisation and policy, it is necessary to maintain co-ordination on an all-India level, and full consideration should be given to the views of the Commission which is specially concerned with the co-ordination of higher education on a national basis.

The resources made available to the universities and colleges are totally inadequate in relation to their tasks and responsibilities. The

increase in the outlay of higher education has to take into account not only the enrolment, which has been rapidly rising at a growth rate (compound) as high as 11% per year, but also the increased cost of buildings, books, equipment and other essential facilities. In view of the pressing requirements of the universities and colleges for essential facilities, the determination of priorities between competing programmes becomes extremely difficult. Moreover, unless the investment on a particular programme exceeds a certain critical size, it may not be possible to achieve worthwhile results. In this connection, the Education Commission (1961-66) observed that "the proportion of national income devoted to education in India is small in comparison with that in educationally advanced countries of the world. The absolute amount per capita spent by us on education is about one hundredth of that spent by a highly industrialised country like the USA..... Japan and the USA and the USSR are spending considerably more than 6 per cent of the GNP on education, about twice as much as India." Universities need much bigger resources than those currently available to them for the maintenance and improvement of educational standards and adequate freedom in the deployment of these resources.

In conclusion, the Commission would like to invite a reference to the following recommendations made by the Estimates Committee (1965-66) in their 102nd report to the Lok Sabha:

- (i) The low investment in education may make all our developmental expenditure infructuous. For the Fourth Plan sufficient funds should be placed at the disposal of the Commission, if it is to discharge its function effectively.
- (ii) Grants to institutions of higher education should be regulated through the University Grants Commission. In the interest of higher education, it should be the responsibility of the University Grants Commission to effect promotion and co-ordination of all higher education and not university education only.

The Commission is of the view that the general policy in various fields of higher education, with special reference to coordination and maintenance of standards, should be vested in one body or agency to ensure a planned and coherent development of the whole educational system. This general concept is also embodied in the constitution of the UGC. There is so much interaction and overlap between the different sectors of higher education (liberal arts, natural sciences, social sciences, agriculture, medicine etc.), particularly in the context of the progress of science and technology, that any fragmentation of division of responsibility as regards general policy and coordination of standards is liable to be confusing and harmful to the best interest of education and efficient utilisation of our limited resources. It may be stated in this connection that higher education in agriculture, medicine, engineering and technology (in institutions not maintained directly by the universities) is at present not covered by the financial allocations provided to the Commission.

The Commission is grateful to the universities and colleges for their continued cooperation, and to the teachers and educationists who have

worked as members of the various UGC committees. The Commission also places on record its appreciation of assistance and cooperation received from the State Governments, various Ministries of the Government of India, Planning Commission and other agencies associated with the Commission's work and activities.

P.J. Philip Secretary December 6, 1967. D.S. Kothari
Chairman
S. Dhawan
P.B. Gajendragadkar
Ali Yavar Jung
P.N. Kirpal
D.S. Reddi
B. Shiva Rao
T.P. Singh
A.R. Wadia

APPENDICES AND CHARTS

APPENDIX I

INDIAN UNIVERSITIES AND INSTITUTIONS DEEMED TO BE UNIVERSITIES (ARRANGED CHRONOLOGICALLY)

(a) Universities

1857 (1) Calcutta University (2) Bombay University (3) Madras University 1887 (4) Allahabad University (5) Banaras Hindu University (Varanasi) 1916 (6) Mysore University 1917 (7) Patna University 1918 (8) Osmania University (Hyderabad) 1921 (9) Aligarh Muslim University (10) Lucknow University 1922 (11) Delhi University 1923 (12) Nagpur University 1926 (13) Andhra University (Waltair) 1927 (14) Agra University 1929 (15) Annamalai University (Annamalainagar) 1937 (16) Kerala University (Trivandrum) 1943 (17) Utkal University (Bhubaneswar) (18) Saugar University 1946 1947 (19) Rajasthan University (Jaipur) (20) Panjab University (Chandigarh) 1948 (21) Gauhati University (22) Jammu & Kashmir University (Srinagar) 1949 (23) Roorkee University (24) Poona University (25) M.S. University of Baroda (26) Karnatak University (Dharwar) 1950 (27) Gujarat University (Ahmedabad) 1951 (28) S.N.D.T. Women's University (Bombay) (29) Visva-Bharati (Santiniketan) 1952 (30) Bihar University (Muzaffarpur) 1954 (31) Sri Venkateswara University (Tirupati) 1955(32) Sardar Patel University (Vallabh Vidyanagar) (33) Jadavpur University (Calcutta) 1956 (34) Kuruksetra University (Kurukshetra) (35) Indira Kala Sangit Vishvavidyalaya (Khairagarh) (36) Vikram University (Ujjain) 1957 (37) Gorakhpur University (38) Jabalpur University (39)1958 Varanaseya Sanskrit Vishvavidyalaya (Varanasi) (40) Marathwada University (Aurangabad) 1960 (41) U.P. Agricultural University (Nainital) (42) Burdwan University (43) Kalyani University (44) Bhagalpur University

(46) K.S. Darbhanga Sanskrit Vishvavidyalaya

(47) Punjab Agricultural University (Ludhiana)

(45) Ranchi University

1961

1962

APPENDIX I (Gontd.)

	7 193	Danieli University (Datisla)
		Punjabi University (Patiala) Orissa University of Agriculture and Technology (Bhubanes-
	(13)	war)
	(50)	North Bengal University (Siliguri)
	(51)	Rabindra Bharati (Calcutta)
	(52)	Magadh University (Gaya)
	(53)	Iodhpur University
	(54)	Udaipur University
	(55)	Shivaji University (Kolhapur)
1964	(56)	Jodhpur University Udaipur University Shivaji University (Kolhapur) Indore University
	(37)	Jiwaji University (Gwalior)
	(58)	Ravi Shankar University (Raipur)
		University of Agricultural Sciences (Bangalore)
		Andhra Pradesh Agricultural University (Hyderabad)
		Bangalore University
1005		Jawaharlal Nehru Krishi Vishvavidyalaya (Jabalpur)
1965		Dibrugarh University
1966	(64)	Kanpur University
		Meerut University
	(67)	Madurai University Sourcehtre University (Paiket)
	(68)	Saurashtra University (Rajkot) South Gujarat University (Surat)
1967		Berhampur University
1507		Sambalpur University
	(, ,	Samsapar Omversity
(b) In	stituti	ons decreed to be Universities
1958	(1)	Indian Institute of Science / Pancalova)
1330	$\binom{1}{2}$	Indian Institute of Science (Bangalore) Indian Agricultural Research Institute (New Delhi)
1961	$\frac{127}{31}$	Indian School of International Studies (New Delhi)
1962		Gurukul Kangri Vishvavidyalaya (Hardwar)
		Jamia Millia Islamia (New Delhi)
1963		Gujarat Vidyapith (Ahmedabad)
		Kashi Vidyapith (Varanasi)
1964	(8)	Tata Institute of Social Sciences (Bombay)
		Birla Institute of Technology and Science (Pilani)
1967	(10)	Indian School of Mines (Dhanbad)

APPENDIX II

DISTRIBUTION OF COLLEGES ACCORDING TO COURSES
OF STUDY: 1961-62 TO 1966-67

Course of Study	Number of Colleges						
	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	
1	2	3	4	5	6	7	
Arts, Science and Commerce	1,201	1,283	1,418	1,615	1,769	1,915	
Engineering and Technology	83	90	93	93	103	105	
Medicine, Pharmacy, Nursing, Dentistry etc	. 83	95	109	115	123	137	
Law	46	54	61	63	70	69	
Agriculture	43	47	48	48	54	54	
Veterinary Science	18	18	19	20	20	20	
Education	133	146	157	168	193	200	
Oriental Learning	156	168	163	167	169	177	
Others (Physical Education, Music and Fine Arts)	20	37	43	66	71	72	
Total	1,783	1,933	2,111	2,360	2,572	2,749	

NUMBER OF COLLEGES ACCORDING TO TYPES OF MANAGEMENT: 1961-62 TO 1966-67

Year	University Colleges	Privale Colleges	Government Colleges	Total Number of Colleges	Increase in Number of Colleges Over the Pre- ceding Year
1	2	3	-}	5	6
1961-62	107	1,223	453	1,783	241
1962-63	133	1,333	472	1,938	155
1963-64	128	1,485	498	2,111	173
1964-65	147	1,686	527	2,360	249
1965-66	163	1,841	568	2,572	212
1966-67	166	1,968	615	2,749	177

APPENDIX IV

GROWTH OF STUDENT ENROLMENT*: 1956-57 TO 1966-67

Year	Tota l Enrolment	Increase Ove r the Preceding Year	Percentage Increase
1	2	3	4
1956-57	7,69,468	66,771	8.0
1957-58	8,27,341	57,873	7.5
1958-59	9,28,622	1,01,281	12.2
1959-60	9,97,137	68,515	7· 5
1960-61	10,34,934	37,797	3.8
1961-62	11,55,380	1,20,446	11.6
1962-63	12,72,666	1,17,286	10.2
1963-64	13,84,697	1,12,031	8.8
1964-65	15,28,227	1,43,530	10.4
1965-66	17,28,773	2,00,546	13.1
1966-67	19,49,012	2,20,239	12.7

^{*}Including enrolment of intermediate classes under the U.P. Board of High School and Intermediate Education.

 ${\bf APPENDIX-V}$ STUDENT ENROLMENT*: FACULTY-WISE: 1964-65 TO 1966-67

F aculty	1964	-6 ₀	1965	1965-66		1966-67	
	Enrol- ment	Percentage of Total	Enrol- ment	Percentage of Total	Enrol- ment	Percentage of Tetal	
Ĭ	2	3	4	5	6	7	
Arts including Orien	tal						
Learning	6,41,186	42.0	7,06,641	40.9	7,86,124	40.3	
Science	4,78,702	31.3	5,65,254	32.7	6,54.899	- 33.6	
Commerce	1,47,789	9.7	1,65,283	9.6	1,84,452	9.5	
Education	29,528	1.9	33,546	1.9	38,241	2.0	
Engineering and Technology	78,114	5.1	85,555	4.9	95,422	4.9	
Medicine	61,742	4.0	70,088	4.0	77,286	4.0	
Agriculture	44,228	2.9	51,190	3.0	52,935	2.7	
Veterinary Science	5,711	0.4	6,257	0.4	6,553	0.3	
Law	32,000	2.1	37,318	2.2	44,970	2.3	
Others	9,227	0.6	7,641	0.4	8,130	0.4	
Total	15,28,227	160.0	17,28,773	100.0	19,49,012	100,0	

^{*}Including enrolment of intermediate classes under the U.P. Board of High School and Intermediate Education.

APPENDIX VI STUDENT ENROLMENT*: STAGE-WISE: 1964-65 TO 1966-67

Stage	1964	-65	1965-66		1966-67	
	Enrol- ment	Percentage of Total	Enrol- ment	Percentage of Total	Enrol- ment	Percentage of Total
I	2	3	4	5	6	7
Pre-university	3,20,566	21.0	3,69,373	21.4	430,954	22.1
Intermediate	2,14,395	16,0	2,77,2115	16.0	3,68,485	15:8
Pre-professional	12,989	0.8	15,231	0.9	18,860	1.0
Graduate	8,35,804	54.7	9.44.015	54.6	10,53,750	54.1
Postgraduate	84,201	5.5	91.830	5.3	1,01,798	5.2
Research	7,104	$0.\bar{5}$	8,633	0.5	9,668	0.5
Diploma/Certificate	53,168	1.5	22.466	1.3	25,497	1.3
Total	15,20,227	Tearre	17,26,773	inco	19,49,012	100,0

^{*}Including enrolment of intermediate classes under the U.P. Board of High School and Intermediate Education.

APPENDIX VII

STRENGTH AND DISTRIBUTION OF TEACHING STAFF IN UNIVERSITY DEPARTMENTS/COLLEGES 1964-65 TO 1966-67

Year	Professors	Readers	Lecturers*	Tutors Demonstrators	Total
1	2	3	4	5	6
1964-65	1,085 (80)	2,069 (15·2)	9,416 (69·0)	1,067 (7·8)	13,637
1965-66	1,273 (8·9)	2,115 (14-8)	9,710 (68·0)	1,193 (8·3)	14,291
1966-67	1,401 (9·4)	2,320 (15·6)	10,264 (68·9)	915 (6·1)	14,900

Note: Figures within brackets indicate the percentage of cadre to the total staff in that year.

^{*}Including assistant professors and assistant lecturers.

APPENDIX VIII

DISTRIBUTION OF TEACHING STAFF IN AFFILIATED COLLEGES ACCORDING TO DESIGNATION 1964-65 TO 1966-67

Year	Senior* Teachers	Lecturers**	Tutors Demonstrators	Total
1	2	3	4	5
1964-65	9,095 (14·3)	45,389 (71·5)	8,999 (14·2)	63,483
1965-66	10,211 (14·5)	50,837 (72·2)	9,337 (13·3)	70,385
1966-67	11,095 (14·2)	56,164 (71·6)	11,092 (14·2)	78,351

Note: Figures within brackets indicate the percentage of the cadre to the total staff in that year.

^{*}Including principals.

**Including assistant lecturers.

APPENDIX IX **DEGREES AWARDED**: 1962-63 TO 1964-65

Faculty/Degree	1962-63	1963-64	1964-65	Percentage Increase 1962-65
1	2	3	4	5
Faculty of Arts				
B.A.* M.A. Doctorates	80,202 22,816 389	81,394 24,281 412	94,257 26,180 476	17·5 14·7 22·4
Faculty of Science				
B.Sc.* M.Sc. Doctorates	33,015 5,848 489	34,046 6,571 511	38,230 7,290 520	15·8 24·7 6·3
Faculty of Commerce				
B.Com.* M.Com. Doctorates	17,656 2,357 22	17,624 2,652 15	18,395 2,864 23	4·2 21·5 4·5
Faculty of Education				
B.Ed./B.T. M.Ed. Doctorates	19,251 656 8	21,994 784 14	23,346 803 2 2	21·3 22·4 175·0
Faculty of Law				
LL.B./B.L. LL.M. Doctorates	7,425 95 1	7,408 103 1	8,691 100 2	17.1 5·3 100.0
Faculty of Agriculture				
B.Sc. (Agriculture) M.Sc. (Agriculture) Doctorates	4,112 634 38	4,718 698 18	5,569 1,140 24	35·4 79·8 —
Faculty of Veterinary Science				
B.V. Sc. M.V.Sc. Doctorates	802 105 —	999 109 —	1,030 151 3	28·4 43·8

^{*}Including honours.

APPENDIX IX (Contd.)

1	2	3	4	5
Faculty of Medicine				
M.B.B.S. M.D./M.S. Doctorates	3,936 621 20	3,789 771 17	4,635 940 21	17·8 51·4 5·0
Faculty of Engineering/ Technology				
B.E./B.Sc. (Engg.)/ B.Sc. (Tech.) etc. M.E./M.Sc. (Engg.)/	9,226	9,466	9,739	5.6
M.Sc. (Tech.) etc. Doctorates	488 23	515 2 6	576 32	18·0 39·1

APPENDIX X

GRANTS PAID IN 1966-67 TO THE UNIVERSITIES AND INSTITUTIONS DEEMED TO BE UNIVERSITIES FOR SCIENCE DEPARTMENTS

(Rupees) Laboratory Library Staff and S.No. Equipment Centres of Total University Buildings Books Maintenance Advanced Study 6 8 7 2 3 4 5 2.40,769 72,638 8,15,658 Aligarh 2.60.857 2,32,394 83,123 3,22,763 Allahabad 2,19,640 20,000 1.02,667 5,78,257 Andhra 4,48,000 27,590 Annamalai 23,004 54,665 38,900 2,83,766 4,00,135 2,49,838 7,76,455 Banaras 10,27,043 750 Bangalore 2,000 1,02,060 1,00,000 22,833 19,894 75,989 Baroda 2,39,277 3,57,093 Bhagalpur 1,25,000 2,46,000 71,000 50,000 Bihar 21,000 0. 21,000 13,650 2,02,784 Bombay 2,16,454 ro. 50,000 Burdwan 2,91,000 1,10,000 4.51.000 II. 4,850 Calcutta 5,41,000 2,09,541 20,000 7,75,391 12. Delhi 54,473 ---21,27,566 21,81,679 13. 4.95.484 Gauhati 40,600 72,700 8,(1,710 14. 1,93,526 Gorakhpur 11,346 11,930 1,29,000 37,500 1,86,776 15. τĥ. Guiarat 2,52,750 1,30,000 6,209 30,000 4,18,959 Iabalour 8,058 20,000 50,000 3,935 81,693 17. Tadavour 60,000 18. 1,52,547 14,400 2,26,047 Jammu and Kashmir 48,480 1,93,328 23,239 2,80,047 1,15,000 19. Iiwaii 29,858 1,602 22,587 64,157 20. Iodhpur 3.945 21. 5,100 1,50,000 1,59,045 Kalyani 22. 89,371 37,500 1,26,871 Karnatak 080,10,1 4,44,116 30,000 23. 1,74,255 7,49,451 Kerala 48,275 1,51,260 24. 1,50,000 32,025 3,81,560 Kuruksetra 1,04,996 45,000 1.40,006 Lucknow 3,652 12,852 26. 9,200 Madras 19,761 6,62.7-6 27. 1,56,839 1.16.000 2,13,000 11,68,356 28. Madurai 10,000 60,000 70,000 Marathwada 1,65,000 20. 1.67.828 5.85,000 47,000 9,64,828

1	2	3	4	5	G	7	8
a	Mysore	1,64,731	3,27,210	44.629	1.52.500		6.86.270
30.	Nagpur	2,11,338	2,85,000	25,000	1.29.827		6,51.165
31. 32.	North Bengal	1,02,000	1,10.000	50,000	52.700		3,14,500
32. 33.	Osmania	4,85,260	45.500	20.000	2,35,887	3,53,154	11,50,801
	Panjab	4,39,519	$\frac{13}{58.467}$	27.492	2,66,000	8,43,430	16,34,848
34.	Patna	4.77,503	26,666	-/	2,00,00	0.40.400	5,04,166
35. 36.	Poona	2,79,417	20,000		87,000		3,66,417
	Punjabi	2,79,417		35,000	54,000		3,00, 1 17
37. 38.	Rajasthan	2,29,456	1,18,300	37.468	54,000		3,64,646
	Ranchi	1,14,000	1,.0,5	37.400	3,13,585		4,27,585
39. 40.	Ravi Shankar	1,14,000	_	5,000	3,13,503	-	5,600
	Roorkee		2.1	5	1,00,204		1,60,204
41.	Sardar Patel	2,91,000	19.388	10,000	£9,£83		4,20,171
42.	Saugar	2,91,000	1 3/2 3 4 4	10,000	5,605	2,40,675	2.46.286
43.	Shivaji	1,51,037	2,65,000	80,000	38,760	2,40,073	5-34-731
4-1-	S.N.D.T. Women's	84.663	27,869		50,000		1,61,632
45.	Sri Venkateswara	5,25,799	27,009	82.716	65,660		6,74,175
46. 47.	Udaipur	1,47,000	-	66.250	1,710		2,14,060
.48.	Utkal	19-547	7,000	13,700	1,710		2,14,00
	Vikram	1,26,000	3,10,410	10.00	71.148		ь, 8°, 6 ₃₃
49.	Visya-Bharati	1,25,000	1, 50,000	40,000	2,03,00		6,68,66
			., ,	11. 1	24,000		0,00,00
Inst	itutions deemed to be Univer	sities					
.13	Birla Institute of Technology and Science	1,48,687		20,600		_	1,68,087
52.	Gurukul Kangri Vishva- vidyalaya	20,000					20,000
53.	Indian Institute of Science	2,53,700	-	1,20,000	_		3,73,700
54.	Jamia Millia Islamia	20,000	5,000		-		25,000
	Total	76,78,790	55,49.335	12,16.174	45-21-997	49,23,412	2,39,19,76

APPENDIX XI

GRANTS PAID IN 1966-67 TO UNIVERSITIES AND INSTITUTIONS DEEMED TO BE UNIVERSITIES FOR DEPARTMENTS IN HUMANITIES AND SOCIAL SCIENCES

(Rupees)

S.No.	University	Equipment	Buildings	Library Books	Staff and Maintenance	Centres of Advanced Study	Total
I	2	3	4	5	6	7	8
1.	Agra		2,974	20,000	1,09,140		1,32,114
2.	Allahabad	10,000	1,50,000	18,000	38,000		2,56,000
3.	Aligarh		_	57,000	4,84.000		5.41,000
	Andhra	40,636	15,660	70,000		-	1,26,302
4· 5· 6.	Annamalai	1,392	_	24,505	1,05,734	1,10,196	2.41.827
6.	Banaras	43,956	7,70,000	30,000	9.33.000	2,84,883	20.61.839
7· 8.	Bangalore	_	_	25,000	_		25,000
8.	Baroda	13,398		12,000	75.927	1.99.334	3,cc,65 9
9.	Bhagalpur	7,500	80,000		2,00,000		2.37,500
io.	Bihar		_	•	50,000		50,000
II.	Bombay	117	_	-	93,100	39,244	1,32,461
12.	Burdwan		30,000	30,000	70.770		1,30,770
13.	Calcutta			5,000	1,10,000	53.004	1.68,004
14.	Delhi	63,230	9,000		7,93,500	1,48,671	10,14,401
cŝ.	Gauhati	37,000	25,000	39,000	37,000		1,58,000
ı6.	Gorakhpur	5,588	3,05,500	_	-	-	3,77,088
7.	Gujarat	8,765	20,000		1,10.600	-	1,38,765
۶Ŕ.	Jabalpur	46,000	50,000	8,000	30,060		1,94,000
19.	Jadavpur	5,000	25,000	_	71,250		1,01,250
20.	Jammu and Kashmir	10,000	30,000	60,000	40,000		1,40,000
21.	Jiwaji	´ —		25,000	-	-	25,000
22.	Karnatak	3,000	10,000	20,000	1,60.000		1,93,000
23.	Kerala	4,448	3,00,000	30,000	1,20,700		4,55,148
24.	Lucknow		45,000	_	1,40,000		1,85,000
	Madras	10,000		57,428	70,000	$6_{4.335}$	2,01,763
25. 26.	Madruai			15,000			15,000
27.	Magadh		1,50,000	_	50,000	_	2,00,000

1	2	3	-1-	3	6	7	8
	100 ((- 144						
28.	Marathawada	10,000	25,000	20,000	20,000		75,000
29.	Mysore	47,375	1,85,000	40,000	1.09.466	***	9,81,841
30.	Nagpur	12,477		49,440	1,09,000		1,70,917
31.	North Bengal		At many	200	65,000		65.000
32.	Osmania	-	39,952	4-4	1,14.000		1,53,952
33.	Panjab	33,793	17,787	1,65,696	1,62,668		3,80,244
34.	Patna	90,417	1,70,682	1,04,000	9,000		3,74,699
35.	Peona	29,273	4,267	15,650	1.17,000	8,20,006	0,86,196
36.	Punjabi	_	1,22,000	1-4	45,000	· · ·	1,67,000
37.	Rabindra Bharati	-	Street	20,000			20,000
38.	Rajasthan	8,000	70,000	45,159	29,408		1,52,567
39.	Ranchi	_	-		50,000		40,000
40.	Ravi Shankar	(i -)	-	28,074		*******	28,074
41.	Roorkee		-		15,000		15,660
12.	Sardar Patel	30,000	6,000	30,000	94,000		1,60,000
43.	Saugar	29.397	26,000	3,900			59,297
44.	Shivaji	_		10,000	10,000		20,000
45	S.N.D.T. Women's	12,558	27,943	17,876	20,652		70,020
46.	Sri Venkateswara		1,20,000	50,000	30,512		2,00,512
17.	Udaipur	224			4.500		4,500
18.	U (kal		(-)	53.000	= ===		53,000
13.	Varanaseya Sanskrit Vishvavidya	lava —	T Go,ooo		60,000		2,30,000
500	Vikram	_	7-1-234	20,666	-	·	,
51.	Visya-Bharati		$1\Omega_{r}$ with	1, 3,,,,,,,,,	1,52	1,52,973	75,234 $4,59,921$
Inst	itutions deemed to be Universi	ties					
- 25	Birla Institute of Technology						
52.	and Science		-	Triging			
2.0	Gajarat Vidyapith		-	201,000	23,500	-	10,000
53.	Garakat Vatyanan Garakat Kangri Visyayidyalaya		_	20,100	90,876		43,000
$54 \cdot$	Tedian School of International	1.50			31.241.72		30,876
55.	Studies - Studies		3, 70,000	40,000	in we state		
C	Jamia Millia Islamia		30,000	-612411142	3,25,000		7.15,000
56.	Kashi Vidvanith	_	20,000	1 Γ. (μ)()	1,50,000		1,80,000
57.	Tata Institute of Social Sciences		210.00	26,000			35,000
58.	Tata Institute of Social Sciences			до, отка		_	g6 ,600
	Total	6,19,920	35,05,005	1.1.74.720	50-17-151	18.72.646	

APPENDIX XII

GRANTS PAID IN 1966-67 TO UNIVERSITIES AND INSTITUTIONS DEEMED TO BE UNIVERSITIES FOR THE CONSTRUCTION OF HOSTELS, LIBRARY BUILDINGS AND STAFF QUARTERS

S. No.	University	Hostels	Library Buildings	Stoff Quarters	Teachers Hostels	Tetal
active little	2	3	4	5	6	7
Ι.	Agra	30,000		403	. =	30,000
2.	Aligarh	4,78,000		16,25,000	2,500	21,27,500
3.	Allahabad	56,000	2,60,000	_		3.16,000
4.	Andhra	50,000	40,000	4 444	20,000	1,10.000
	Annamalai	10,000	9,000		· —	10,600
5· 6.	Banaras	1,95,000	1,00,000	1,70,000	2,00,000	6,6-,00
7.	Baroda	35,000	4,644	1,38,313	1.45.867	3.25,76
ģ.	Bhagalpur	3,20,000	2,25,000	20.00	1,00,00	6,65,66
9.	Bihar	60,000	50,000			1,10,60
<i>3</i> - 2 0.	Bombay	2,00,000	J.,		_	2,00,00
II.	Burdwan	3,51,626	2,50,000	70,000	95,000	7,66,62
12.	Calcutta	2,05,000	2.00,000			4,05,00
13.	Delhi	15,000		75.000		00,00
14.	Gauhati	-3,	35,000	55,000	1.35,000	2,25,00
15.	Gorakhpur	70,000	75.000	10,000		1,55,00
16.	Gajarat	77,988	2,00,000	13.764	1,00,000	4,81,75
17.	Jabalpur	1,30,000	85,000	30,000	1,00,000	3,65,60
18.	Jadavpur	6,500	30,000	1,40,000	50,000	2,35,50
19.	Jammu and Kashmir		.,,,,,		1,18,000	1.18,00
20.	Jodhpur	45,000		50,000		95,00
21.	Karnatak	1,78,300		32,000	40,000	2,50,50
22.	Kerala	1,70,5	40,000	·' —	1.50,000	1,90,00
23.	Kuruksetra	1,00,000	T.,	43,645	.40,600	1,83,64
24.	Lucknow	95,000		25,050		1,18,65
25.	Madras	50,000		-:,,, 9	4	,0,00
26.	Magadh				1,70,000	1,70,00
27.	Marathwada		82,928		2,15,000	2,57,92
28.	Mysore		2,18,000	70,000	1,23,000	4,11,00

1	2	3	4	5	6	7
29.	Nagpur	175000	6,000		1.75 oco	1,08.00
30.	North Bengal	5,18,040	1,20,000	4,00,000	1,00,000	11,38,040
31.	Orissa University of Agriculture and Technology		C,oco			6,000
32.	Osmania	2.02.450		1,15,000	4,00,000	8,07,450
33.	Panjab	1.90.000		5.80,000	1,00,000	8.70,000
34.	Patna	5.1 5.000	1,00,000	1,50,000	80,000	8.4.,000
35.	Poona	1.48.973	·		2.55.000	4,93,973
36.	Punjabi	43,000	3.75.000	30,000	1,00,000	5,48,600
37.	Rajasthan		30,000	12.011	GO,GGO	1,32,911
38.	Roorkee	2 1.000		4.10,600	2,30,000	6,65,600
39.	Sardar Patel	65.056		28,265	46.66.7	1,40,526
40.	Saugar	10.000	6,000		70,000	26,6en
41.	Shivaji	1.35.000	1,30,000	45,000	2,15,000	5,27,000
42.	S.N.D.T. Women's	*	201,0891		70.000	70,000
43	Udaipur				1.50.000	1,50,000
4-1	Utkal	1.02,000	45,000	1,00,000	2,50,000	4,67,000
45.	Varanaseya Sanskrit Vishvavidyalaya	14.1 00	05,000	(1000.5)	50,000	1,53,000
46.	Vikram	1.77.007	73.000	40,000	1.168.036.47	4.00,007
47.	Visya-Bharati	94.718		1., 7,000	-	2.51,718
Insti	itutions deemed to be Universities					
48.	Gujarat Vidyapith	6 4,100	(6,6)		_	1,55,666
49.	Indian Institute of Science	ii, tico	GO, C(-0)			€8,600
50.	Indian School of International Studies	2, (4.0)		 -		2,000
51.	Kashi Vidyapith	Contra		<u>5</u> ,000	1,00,000	2,55,600
	Total	52.51,848	31,04,572	46.58.948	45-55-912	1,75,71,280

APPENDIX XIII

GRANTS FOR ENGINEERING AND TECHNOLOGICAL EDUCATION: 1966-67

(Rupces in Lakhs)

Purpose	Grants Paid
1	2
Improvement Expansion of Existing Facilities	37.58
Five-Year Integrated Courses	12:13
Degree Course in Chemical Engineering	8.83
Pharmaceutical Education	3.07
Courses in Business and Industrial Management/ Business Administration etc.	4.67
Postgraduate Specialised Courses including Research Schemes	50.39
Fellowships in Engineering and Technology (Junior and Scnior)	20.33
Hostels	5.20 🗸
Staff Quarters	5.10 -
Revision of Salary Scales	4.78
Other New Schemes and Miscellaneous Items	3.00
Total	155.08

APPENDIX XIV

GRANTS PAID TO MEDICAL COLLEGES: ALIGARH AND BANARAS: 1966-67

. Ruper in Lakhs) Grants Paid Purpose Aligarh Muslim Banaras Hindu University University 3 2 Non-Recurring Grants Buildings (including Staffquarters and Hostels) 4.4637.50 Equipment, Furniture and Books 10.76 3.50 Recurring Grants Maintenance Expenditure including Expenditure on Staff Salaries 28.30 15.00 Total 63.26 41.75

Subject	Major Area of Specialisation	$Department_i University$
1		3
	SCIENCE SUBJ	EC18
Astronomy	Astronomy	Department of Astronomy and Nizamiah Observatory, Osmania University, Hyderabad.
Botany	Plant Morphology and Embryology	(2) Department of Botany, Delhi University, Delhi.
	Plant Pathology and Mycology	(3) Department of Botany, Mardas University, Madras.
Chemistry	Chemistry of Textile Fibres and Dyes	(4) Department of Chemical Tech- nology, Bombay University, Bombay.
	Chemistry of Natural Products	(5) Department of Chemistry, Delhi University, Delhi.
Geology	Himalayan Geology and Palacontology	(6) Department of Geology, Parjab University, Chandigarh.
	Structural Geology Geomerphology, Petrology and Minerology	(7) Department of Geology and Applied Geology, University of Saugar, Sagar.
M athematics	Pure Mathematics	(8) Department of Mathematics, Bombay University, Bombay.
	Applied Mathematics	(9) Department of Applied Mathematics, Calcutta University, Calcutta.
	Pure Mathematics	(10) Ramanujan Centre of Advanced Study in Mathematics, Madras University, Madras.
	Pure Mathematics	(11) Department of Mathematics, Panjab University, Chandigarh.
Physics	Theoretical Physics and Astrophysics	(12) Department of Physics and Astrophysics, Delhi University Delhi.
	Radiophysics and Electronics	(13) Institute of Radiophysics and Electronics, Calcutta University, Calcutta.
	Physics, Biophysics and Crystallography	(14) Department of Physics, Madras University, Madras.
Zowlogy	Cell Biology and Endocrinology	(15) Department of Zoology, Delhi University, Delhi.
	Marine Biology	(16) Department of Marine Biology at Porto-Novo, Annamalai University, Annamalainagar.

APPENDIX XV (Contd.)

1	2	3
	HUMANITIES AND SO	CIAL SCIENCES
Economics	Public Finance and Industrial Economics	(1) Department of Economics, Bombay University, Bombay.
	Economics of Development and Economic History	(2) Department of Economics, Delhi University, Delhi.
	Agricultural Economics	(3) Gokhale Institute of Economies and Politics, Poona University, Poona.
Education	Educational Research (Psychometrics and Research Methods, Guidance and Counselling)	(4) Department of Education, M. S. University of Barøda, Baroda.
History	Ancient Indian History and Gulture	(5) Department of Ancient Indian History and Gulture, Calcutta University, Calcutta.
Linguistics	Applied Linguistics	(6) Deccan College Postgraduate and Research Institute, Poona University, Poona
	Dravidian Linguistics	(7) Department of Linguistics, Annamalai University, Annamalainagar.
Philosophy	Buddhist and Allied Systems of Philosophy	(8) Department of Philosophy, Banaras Hindu University, Varanasi.
	Advaita and Allied Systems of Philosophy	(9) Department of Philosophy, Madras University, Madras.
	Metaphysics	(10) Department of Philosophy, Visva-Bharati, Santiniketan.
Sanskrit	Sanskrit Literature	(11) Department of Sanskrit, Poona University, Poona.

APPENDIX XVI

FACULTY-WISE ENROLMENT : UNIVERSITIES AND AFFILIATED COLLEGES* : 1966-67

F aculty	ly Envolment in University Departments University		Total	Percentage in Affiliated Colleg es	
	Colleges			1966-67	1965-66
- m-1.					
Arts	87,594	5,88,793	6,76,387	87.0	36.2
Science	49,214	4,95,681	5,44,895	91.0	90.3
Commerce	14,351	1,51,945	1,66,296	91.4	90.6
Education	4,666	33,575	38,241	87.8	87:1
Engineering and Technology	25,063	70,359	95,422	73.7	73·1
Medicine	7,075	70,211	77, 286	90.8	90-1
Agriculure	10,717	18,188	28,905	62.9	64.6
Veterinary Science	3,172	3,381	6,553	51.6	52-6
Law	18,182	26,788	44,970	59.6	58•9
Others	1,603	1,419	3 ,0 57	47.4	52.7
Total	2,21,642	14,60,370	16,82,012	86.8	86·1

^{*}Excluding enrolment in intermediate classes affiliated to U.P. Board of High School and Intermediate Education.

APPENDIX XVII

DEVELOPMENT GRANTS PAID TO COLLEGES: 1966-67

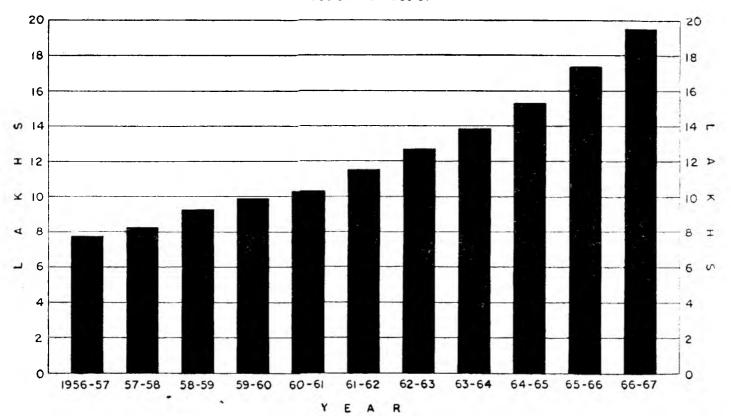
S. A	Scheme	Amount
		Rupces
1.	Construction of Hostels	29,90,038
2.	Improvement of Library and Laboratory Facilities	46,10,659
3.	Construction of Staff Quarters	4,15,224
4.	Development of Postgraduate Courses in Science Subjects	7, 46,35 9
5.	Development of Postgraduate Courses in Humanities and Social Sciences	8,16,722
6.	Grants to Colleges of Delhi University for Specific Purposes	10,58,114
7.	Centenary Grants to Colleges	4,43,418
8.	Student Aid Fund	10,86,621
9.	Hobby Workshop	1,04,709
10.	Non-Resident Student Centres	6,02,557
11.	Textbook Libraries	10,01,499
12.	Water Coolers	22,821
13.	Research Fellowships for Humanities & Science Subjects	2,94,632
14.	Scholarships in Arabic and Persian	15,954
15.	Financial Assistance to Research Workers	2,14,108
16.	Utilisation of Services of Retired Teachers	4,06,667
17.	Miscellaneous Schemes	89,920
	Total	1,49,20,022

APPENDIX XVIII

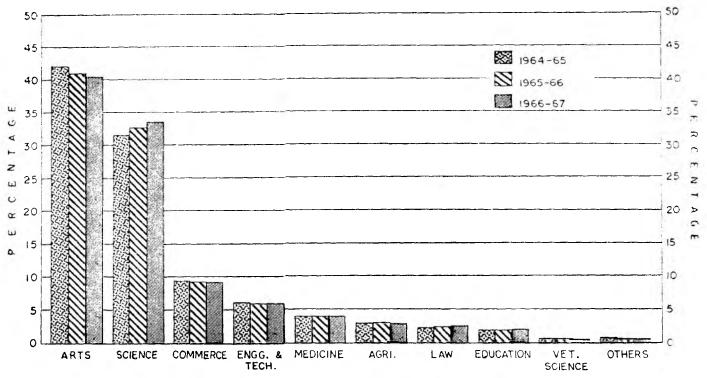
EXPENDITURE UNDER PLAN AND NON PLAN PROJECTS DURING THE YEAR 1966-67

Purpose	Amount
	Rupees
Non-Plan Projects	
1. Administration Charges	24,23,283
2. Block Grants to Central Universities	3,29,82,000
3. Maintenance Grants to Constituent/Affiliated Colleges of Delhi University	1,39,65,485
4. Grants to Central Universities for Schemes not Covered under Block Grants	12,000
Total (Non-Plan)	4,93,82,768
Plan Projects	
1. Grants to Central and State Universities for Humanities	s 1,31,13,150
2. Grants to Central and State Universities for Higher Scientific Education and Research	2,39,19,708
3. Grants to Central and State Universities for Engineering and Technology	1,55,07,735
4. Grants to Constituent and Affiliated Colleges	1,49,20,022
5. Grants to Central and State Universities for Miscellaneous Schemes	4,56,55,003
6. Miscellancous Expenditure incurred by UGC on Seminars, Conferences etc.	6,69,710
7. Expenditure from Grants received from the Govt. of India and Other Sources for Specific Purposes	17,65,316
Total (Plan)	11,55,50,644
Grand Total (Plan and Non-Plan)	16,49;33,412

UNIVERSITY ENROLMENT 1956-57 TO 1966-67

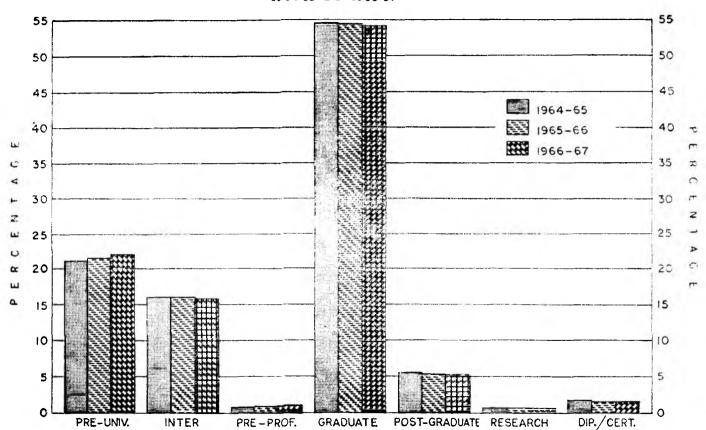


FACULTY-WISE ENROLMENT 1964-65 TO 1966-67

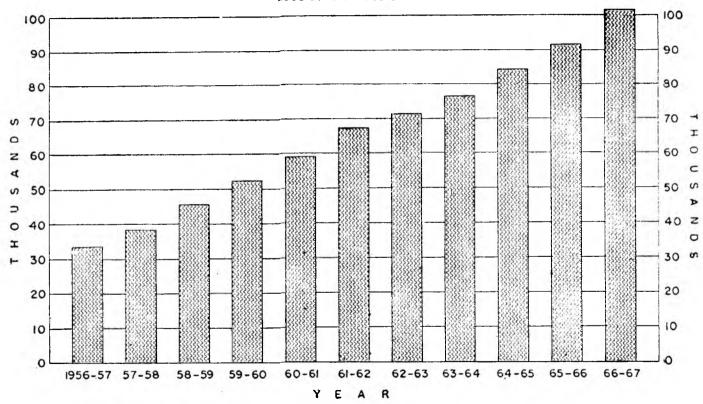


FACULTIES

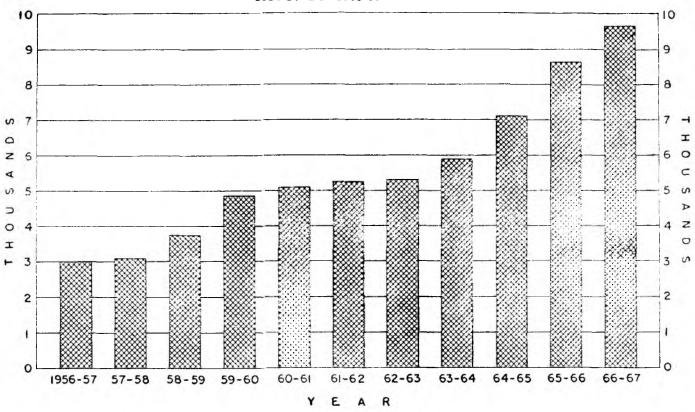
ENROLMENT AT DIFFERENT STAGES 1964-65 TO 1966-67



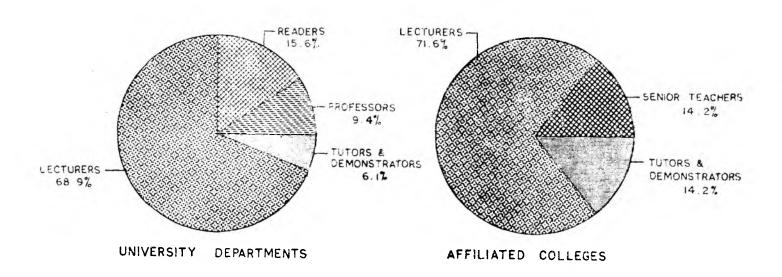
POSTGRADUATE ENROLMENT 1956-57 TO 1966-67



RESEARCH ENROLMENT 1956-57 TO 1966-67



DISTRIBUTION OF STAFF ACCORDING TO DESIGNATION 1966-67



FACULTY-WISE DISTRIBUTION OF STAFF 1966-67

