PROFILE OF SELECTED INDIAN UNIVERSITIES WITH REFERENCE TO INFRASTRUCTURE, COURSES, FACULTY AND FINANCE 2007-08

UNIVERSITY GRANTS COMMISSION
NEW DELHI
2010

Contents

List of Tables

growth and development in Indian universities was sent to universities for collecting their salient features. *The envisaged functions were to regulate and make versatile applications and uses in extending services for planning, policy formulations, information of growth and development in nation building, based on the contributions, achievements, creativity, innovations, pursuits of excellence and breakthrough in teaching, research, extension and related areas during the X Five Year Plan (2002-07) and first year of XI Five Year Plan (2007-08) in tune with the financial support or otherwise to Indian universities*(Preaamble of the tables p.1) . The data vas collected for the initial year of the 11th plan. It wvas thought to use the available data in order to find out:-

1. Status of higher education in respect of physical annd academic infrastructure.
2. Status of higher education in terms of enrolmentit of students; level wise, social category wise and gender wise
3. Status of higher education in terms of programmes s and courses including the Self financing courses
4. Performance of Students in terms of their results aat different levels
5. Status of higher Education in terms of the Teachinng faculty and non-teaching staff
6. Performance of teachers in terms of their publicatiions and other relevant indicators
7. Financial Aspects of Higher Education

Data Base

As already indicated, UGC sent a detailed questitionnaire to almost 176 universitie: to obtain data for 2007-08, i.e. the initial year of 111th plan. Teams of experts along with the officials from the UGC were deputed to visiit these Universities in order to assess their academic and financial proposals for thhe 11th plan period. The filled- in questionnaire was to be collected by the officiaal of UGC accompanying the team of experts

Table: 1.1 l

The Pattern of Sample Distribution pertainiing to different Indicators of higher Educationn

Indicator	Centraral universsities	State universities	Deemed university
Availability of infrastructure	16	79	6
Students' Enrolment	15	73	10
Fellowships	13	69	9
M.Phil /Ph.D Degrees Awarded (Faculty wise)			
Arts	7/ 10	51/60	6/7
Science	4/9	49/58	4/4
Computer Science/App	2/3	15/22	Nil/2
Commerce	2/3	36/44	1/1
Management	Nil/2	24/37	3/3
Education	2/2	26/38	2/3
Engineering /Technology	Nil/2	28/29	2/2
Medicine	2/2	12/12	3/3

Agriculture	Nil/Nil	4/4	Nil/Nil
Law	1/1	10/22	Nil/Nil
Others	3/3	18/23	2/2
Level wise Faculty positions			
Professor and Equivalent	17	87	11
Reader and Equivalent	16	88	12
Sr. lecturer and Equivalent	15	67	07
Lecturers and equivalent	15	61	11
Sample universities for non-Teaching staff	18	85	11
Sample universities for SF courses			
Arts	17	80	12
Science	17	74	9
Computer Science/Application	7	31	4
Commerce	13	68	7
Mangement	9	31	3
Eduation	9	66	6
Engineering/Technology	12	46	4
Agriulture & Vet. Science	5	11	Nil
Law	9	59	1
Othes	15	68	6
Finance	16	79	11

Note: Th samples universities in case of degrees of M.Phil/ Ph.D awarded have been given in a sequece in which first figure denotes M.Phil and the second Ph.D.

Unfortuntely, all the universities did not return the filled-in questionnaires. The number of sample universities, therefore, varies in terms of faculties and courses. Moreove, the same samples were not available to cover all the aspects.
It is clearfrom the table of samples by university types that the number of samples is highly vried for different indicators. In many cases, there is only one sample representng the whole state. There are two reasons for such differences. Firstly, there are a number of states where there is only one university, for example, Arunachal Pradesh, Mizoram and Tripura etc. Secondly, many universities from the states have not responded. If there is one university and it has not responded the state goes unrepresented. The best example which can be cited is that of Sikkim. In almost all the aspect which have been discussed in the study Sikkim and sometimes Jammu and Kashmir, Orissa and Jharkhand are conspicuous by their absence.

The studyfaced serious limitations of data. The major limitations sprang from the fact that a number of universities did not respond and might have ignored the questionnire sent to them. Some of the universities did not get the questionnaires filled with the seriousness which this important task deserved. Some columns and rows are filled- in and many are left out leaving gaps in the information. The informatin is given without seriously realizing the requirement of the columns. For example, such problems were faced while discussing the infrastructure available in the univerities related to sports equipments. The question was related to the listing of equipmen costing more than Rs.5 lakh. The answers contained equipments even worth Rs. oo also. In such cases, it becomes difficult to assess the pattern.

The studyalso faced limitation of data while discussing the Self financing Courses. Besides th limited samples, questionnaire provided limited information, e.g., whether

a particular course was self financed or not? There was no clue about two vital aspects; (a) number of students enrolled in s self financed courses and (b) the fee charged from the students opting for such courses.

There occurred many discrepancies in the entitry of the data consequently the data-tables had to be shunted between the main offfice of the UGC and the Office of the Information and Statistical Bureau at 35, FFiroze Shah Road for checking and rechecking. This process consumed a lot off time unnecessarily. There are some inconsistencies in the time period also. While most of the data pertains to the year 2007-2008, the data regarding finance is for the year 2006-07.

Methods of Analysis

The present study is based on the data of one yeear, in most of the cases 2007-08 which happens to be the first year of the XI plan periood. It was aimed to get the pattern of the parameters in the base year of the XI plan (2007-08) to enable the UGC to have another study on the basis of the data obtaineed for the initial year of the XII plan period in 2012-13 to have a comparative statitus of the changes during the XI plan period. With this initial understanding the onne time period data was analyzed at different levels The basic samples are the univversities of different types i.e., Central, State and Deemed. The data, at the first instancce, were aggregated by university types in order to have a comparative situation of elements across these universities. At the second level of analysis, the data were processeed at the state level aggregating all the data of the universities belonging to a particularr state to have the idea about state wise pattern. A number of indicators were also workked out to have a comparative position of the adequacy of physical infrastructure such as auditoriums, seminar/conference rooms, and open air theatres. The adequacy off books and journals has been worked out by calculating the availability of books and j journals per student and per teacher.

The enrolment of students has been analysed l level wise at the aggregated level by university type at the first instance. The level wise, faculty wise and university type wise analysis has been added to understand the e enrolment patterns. The level wise and state wise enrolment has also been seen to wonrk out the variations within the states. The level wise and state wise analysis has also been done to see inter-state variations at the national level. The enrolment by social caategories has been analysed to examine the pattern of intra and inter- state variationss. Another crucial area is the gender composition of the enrolled population of studerents. State wise gender composition has been analysed to see inter-state variations. Almnost the same parameters of enrolment have been selected and similar analysis has beeen done in case of affiliated colleges of the central and state universities. It has been presumed that there are no affiliated colleges in Deemed universities as no universitity has reported the data pertaining to them.

The award of fellowships has been analysed by y university type and by different types of fellowships such as JRF, SRF, Research assoociate ships and other fellowships. The proportions of fellowships were calculated statete wise to see the variations within the states in different types of fellowships.
The performance of students at the UG and PG level has been assessed by the results of the students who appeared in the examinationns. The success of research scholars at the M.Phil and Ph.D levels has been judged by tlthe number of degrees awarded.

teaching faculty has been analyzed by university type, level wise, social category gender vise and qualification wise in the UTD as well as affiliated colleges. The between the sanctioned positions and the filled-in positions has been worked out ess the extent of existing vacancies. The teacher –Student ratio has been worked have an idea of the adequacy of the availability of teachers.

indicators to assess the performance of teachers has also been worked out by at their publications of books, articles in journals, attending the seminars and rences, assignments in other institutions both in India as well as in the foreign tries and developing research and obtaining patents. The ratio of teaching faculty non-teaching staff has also been calculated to see the balance between these two nents in the governance of the university system.

The data pertaining to finances are available under two heads, viz., income from different sources and expenditure on different heads for 2006-2007. The analysis has been done by university types as well as at state level. Besides working out the share of income and expenditure by states at the national level, income –expenditure ratio has been worked out at the state level. Per student income and expenditure has also been worked out in order to understand the patterns of both the parameters with reference to per student.

The Format of the Study

The study has been organised in Seven Chapters besides a chapter on summary and conclusion. The first chapter is introductory in nature which includes only the objectives, data base and method of analysis. Second chapter presents the general profile of Indian universities based on the data available for the sample universities. It includes a brief pattern of the temporal development of University education India, types of universities, Methods of admission, self financing courses and diversification of courses in Indian Universities. The third chapter deals with the availability of infrastructure, both physical and academic. Limited information on physical infrastructure was available, hence, availability of only auditoriums, conference and seminar rooms and sports equipments could be dealt with. A detailed discussion has been included covering basic features of libraries as an important academic infrastructure. The fourth chapter has been devoted to discuss all the aspects of enrolment for which data was available. The aspects discussed are university type and faculty wise enrolment at the aggregated level. It has further been extended to examine the intra and inter-state variations in enrolment. Gender wise, social category wise enrolment has also been discussed at level wise, university type wise and state wise. The enrolment in the affiliated colleges has also been included in this chapter as Part-II. The format of the analysis for the UTD has also been adopted for analysing the enrolment in the affiliated colleges and all the available parameters have been included in the analysis. The analysis of the pattern of fellowships has also been included in this chapter as Part-III. All the types of fellowships such as JRF, SRF, Research Associate ships and other fellowships have been included for analysis by university types as well as state wise.

Fifth chapter has been devoted to discuss the performance of students by analysing their examination results at different levels by university types as well as faculty wise. The analysis has been done at two levels, viz. Research degree level and at the UG

and PG levels respectively. The state wise analysis has also been done for both the levels. Different aspects of teaching faculty and non- teaching staff have been accommodated in the Sixth chapter. This chapter deals with the total sanctioned strength of the faculty, filled in positions and the gap in terms of the vacancies position wise. Social and Gender composition of the faculty, their qualifications in terms of holding a Ph.D degree have been discussed by level wise and universitytype wise. The pattern of teaching faculty in affiliatted colleges has also been discussed in the chapter as part- II. The performance of teachers has been assessed in Part- II of the chapter. Part IV of the chapter deals with the patterns of the non teaching staf.

Seventh chapter deals with the pattern of the university finances in terms of the sources of income as well as the heads of expenditure. The Summary and conclusions have been added as the last part of the study. It presents the broad features of the study and attempt has been made to highlight the implications emerging out of the study.

CHAPTER 2

General Profile of Indian Universities

University education in India, in the modern sense of the term, has been associated with the colonial period of British Raj. In the words of Prof. Moonis Raza, "colonial education system was not a modernized transformation of the traditional system of Indian education with its great chronological depth." "Education in colonial India responded to the needs of alien administration rather than to those of socio-economic development....It was, instead, expected to produce graduated cogs and wheels for the administrative machinery."(Kuldeep Kaur; Education in India 1781-1905: Policy, Planning and Implementation, pp 1and2).The first university under the colonial regime was established at Calcutta on 24th January 1857 and universities of Bombay and Madras were established on 7th July 1857 and 5th September 1857 respectively. It means that the infrastructure of higher education was concentrated in the port cities of India through which the British influence penetrated inside with the port-enclave linkages.

Punjab University was established at Lahore (now in Pakistan) in 1882 which was relocated at Chandigarh in 1956. Bangalore university was established in 1886 and in the following year, Allahabad University was established in 1887.The 1920s witnessed much larger expansion of universities in different parts of the country. Banaras Hindu University in 1916, Aligarh Muslim University in 1920, Jamia Millia Islamia in 1920 and Agra University in 1927 accelerated the pace of higher education. The Central Universities are created by the Act of the Parliament. There are Central universities which started functioning after the Parliament passed the Act to establish them but many universities existed prior to the passage of the Act as State or Deemed Universities and were given the status of Central universities after the Parliament passed the Act for the purpose. The following universities, which have got the status Central universities, now, existed before the independence.

Table: 2.1
Formation of Different (now Central) Universities before Independence

Seral Number	Name of the University	Year of Formation
1	University of Allahabad	1887
2	Banaras Hindu University	1916
3	Aligarh Muslim University	1920
4	Jamia Millia Islamia	1920
5	Vishwa Bharati	1921
6	University of Delhi	1922

Rest of the Central universities were established much later. No Central university was established after Independence between 1947 and 1966, though the thrust was there to etablish world class Engineering colleges like IITs and medical colleges such as AIIMS. The following table provides some insight of the temporal scale in which Central Universities were established after independence.

Table 2.2

Temporal pattern of the Establishment of Central Universities

Decades	Universities	Numbers
1950-60	None	0
1960-70	Jawaharlal Nehru University, New Delhi	1
1970-80	University College of Medical Sciences, Delhi, (1971),NEHU, Shillong (1973), University of Hyderabad,(1974)	3
1980-90	Pondicherry University, (1985)	1
1990-2000	Assam, Nagaland, Tezpur universities (1994), Baba Sahib B.R. Ambedkar Univ. Lucknow (1996), M. G. A. Hindi V.V., Wardha (1997), Maulana Azad N. Urdu Univ. Hyderabad, (1998)	6
2000-2008	Mizoram Univ.(2001), Sikkim Univ. (2007), **Upgraded as Central Universities**: Manipur Univ. (2005), Rajiv Gandhi Univ. Itanagar (2007),The E&FL Univ.Hyderabad (2007), Tripura Univ.(2007), Guru G.D. Univ. Bilaspur (2008),HNB Garhwal Univ. Srinagar (2008), Dr HS Gaur Univ. Sagar (2008)	10

The years 2008 and 2009 witnessed the establishment of the Central universites of Bihar, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Jammu, Karnataka, Kashmir, Kerala, Orissa, Punjab, Rajasthan, Tamil Nadu and Indira Gandhi National Tribal University, at Amarkantak (M.P). Now almost all the states of India have at least one Central University. Moreover, South Asia University has come up with its main campus in New Delhi which will be providing the bridge for interacting ideas between the youth of the SAARC countries. The provision of instituional infrastructure is to provide strong knowledge base for the future generations

The process of expansion of higher education got accelerated after the indepencence. The scenario in 1950, just after the independence, was as under:

Table: 2.3

Institutional capacity

Institutional Capacity indicators	1950
Number of university level institutions, including 11 private universities	25
Number of colleges	700
Numbers of teachers	15000
Number of students	1 lakh

Source: *Thorat, Sukhdeo; (2008) Emerging Issues in Higher Education: Approach, Strategy and Action Plan in the 11th Plan p.*

All round effort to expand the educational infrastructure of higher education was made in independent India. It was the intervention of the Central and State governments and philanthropic societies as well as individuals, that the higher education got a fillip and was made available to more and more youth who were till now deprived from getting entry into the portals of higher learning. While in 1950,

there were only 1 lakh students enrolled in higher education, the number rose to 116.12 lakh by 2008 recording a quantum jump.

The Universities by their Types

There are four types of universities in India i.e. Central, State, Deemed and Private. Table 2.4 provides the state wise list of all the four types of universities in the country. The type of universities depends upon the authority of the legislative body empowered to create them. The Central Universities, for example, are created by the Acts of Parliament of India. The State universities are established by the Acts passed by the Legislative Assemblies of the respective states. Deemed universities are generally initiated by societies, trusts or individual in the form of Colleges, Institutes or research and teaching establishments. The status of Deemed University is conferred by the Ministry of Human Resource Development on the recommendation of the University Grants Commission. Private universities are also established under the provisions of the Acts passed by the State legislatures.

Table: 2.4

The State wise universities by their types as on 01.07.2010

States	Number of Central Universities	Number of State Universities	Number of Deemed Universities	Number of Private universities
Andhra Pradesh	3	27	7	0
Arunachal Pradesh	1	0	1	0
Assam	2	4	0	1
Bihar	1	13	2	0
Chattisgarh	1	9	0	3
Goa	0	1	0	0
Gujarat	1	17	2	7
Haryana	1	8	5	2
Himachal Pradesh	1	3	0	7
Jammu&Kashmir	2	6	0	0
Jharkhand	1	6	2	1
Karnataka	1	18	15	0
Kerala	1	8	2	0
Madhya Pradesh	2	14	3	0
Maharashtra	1	19	21	0
Manipur	2	0	0	0
Meghalaya	1	0	0	4
Mizoram	1	0	0	1
Nagaland	1	0	0	2
Orissa	1	11	2	0
Punjab	1	7	2	1
Rajasthan	1	14	8	14
Sikkim	1	0	0	4
Tamil Nadu	2	22	29	0

Tripura	1	0	0	1
Uttar Pradesh	4	21	10	8
Uttrakhand	1	5	4	5
West Bengal	1	18	1	0
Chandigarh	0	1	1	0
NCT ,Delhi	4	5	12	0
Puducherry	1	0	1	0
Total	42 41	257	130	61

Source: University Grants Commission, New Delhi

Another type of classification of universities is done on the basis of their being affiliating or non-affiliating. Affiliating universities have teaching faculties, departments and also give affiliation to the colleges within their territorial jurisdiction, where teaching at UG, PG and research levels is done. The affiliating universities conduct the examinations and award the degrees. Non-affiliating universities are generally residential and do not give affiliation to colleges outside the city of their location as the municipal limits are taken as their area of jurisdiction. Some universities do have constituent colleges which are managed by the universities. While Central and State universities have affiliated colleges, the sample Deemed universities have not reported any affiliated college. It is clear that 60% of the sample Central universities and 80% of the State universities are affiliating universities.

Table: 2.5

University Type according to the affiliating status 2007-08

University Type		Affiliating	Non-Affiliating
Central	(Sample size-15)	9	6
State	(sample size-90)	72	18
Deemed	(sample Size-14)	Nil	14
Total Samples- 119		81	38

The advantage of affiliating universities is that they serve very large area and cater to the needs of a very large student population. The table 2.5 shows the pattern of affiliated colleges by university types.

Table: 2.6

Pattern of Affiliation of Colleges by University Type 2007-08

University Type	No. of Sample affili. Universities	No. of affiliated colleges	Average No. of affili. Colleges
Central	9	424	47
State	72	13216	184
Deemed	Nil	Nil	Nil
Overall Pattern	81	13640	168

[redacted] toal (119) reporting universities 81 universities are affiliating universities [redacted]ve 13,640 colleges affiliated to them. On an average, each university has [redacted] 16[redacted] colleges. The average number of colleges affiliated to the Central [redacted]es is much lower than those of the state universities. While state universities [redacted]ortel affiliation to 168 colleges per university, this figure for Central [redacted]es is only 47 colleges per university. Deemed universities have not reported [redacted] of colleges to them.

[redacted] parameters of the universities about which some data is available are [redacted] of Departments, number of PG centres and university colleges. The table 2.7 [redacted] these parameters according to the types of the universities.

Table: 2.7
Average Number of Departments, PG Centres and University Colleges by University Type 2007-08

Univ. Type	Sample Univ.	Number of Deptt.	Avr. Number of Deptt.	Number of PG Centers	Average No. of P G Centres	Number Of univ.coll.	Average No. of Univ. Coll.
Central	5	532	35	18	1	100	7
State	2	8754	107	595	7	769	9
Deemed	2	226	19	23	2	7	0.58
Total	09	9512	87	636	6	876	8

From the data of the sample universities, it can be seen that on an average there are 87 departments pr university at the aggregated level. The numbers of PG centres and university colges are 6 and 8 respectively. The differences in these parameters are obvious if w compare them by university types. While in Central universities, average numbr of departments is 35, the number of department per state university is 107 and the Deemed universities have only 19 departments per university. While the average numbr of departments per university in case on Central and state universities are higher tha the bench mark (as in 'A' grade universities), the gap in the Deemed universities is substantial (34-19=15). The average number of PG centers is also disparate. Whe in case of Central Universities, there is only one PG center per university, in ase of State universities, there are 7 PG centers per university. The PG centers, in cas of Central and Deemed universities, are much below the average for all the sampl universities. The average number of University Colleges is almost equal in case f Central and State Universities but on an average it is less than 1 in Deemed univesities.

METHOD O ADMISSION

Method of aqmission refers to the process of selecting the students in different courses for iparting education under different programmes. The methods of admission var from university to university and sometimes from programme to programme inhe same university. A number of methods of admission are followed such as merit, ntrance test, interview, mixed method of merit-cum-entrance test-cum-interview and resentation of the synopsis depending on the level of the programme. Once, the mospopular method of admission was by merit. The merit was decided on

[redacted] of the marks in the qualifying examination at the lower level. All the [redacted]ions for admission are arranged accordiing to the percentage marks in relevant [redacted] in descending order and merit list is issued according to the seats avaable in [redacted]urses. It was realised that the percenttages awarded by various boards and the [redacted]ies were not comparable. Therefore,, the admitting universities devisd their [redacted]luation method by conducting Entrancce Tests. The merit list for the urpose [redacted]ng admission is prepared on the basiis of the marks obtained in the Entrance [redacted]nducted by the University/Institute. The marks obtained by the stuents in [redacted]ier examination conducted by a boaard or university are considered nly as [redacted]y criterion for allowing the students tto appear in the admission test.

[redacted]llowing tables provide the comparative idea of method of admission in different [redacted] of universities i.e. Central, State and deemed at different levels of programmes.

Table: 2.88

Method of Admission at Graduate Level by University Type 2007-08

(Figures are in percntage)

[redacted]thod of [redacted]mission	University Type		
	Central	State	Deemed
Merit	15.65	43.83	22.00
Entrance Test	26.09	30.96	34.00
Interview	Nil	0.52	2.00
M/ET/I/O	10.43	7.30	16.00
Not Specified	2.62	1.56	2.00
Univ.not reporting Graduate Prog.	45.22	15.83	24.00
Total	100.00	100.00	100.00

The table 2.8 shows that Merit is still an iimportant method of admission in State Universities followed by Deemed univerrsiities at the graduate level. Larger proportions of Central universities (26.09%) admit students through entrance test. The State universities are also catching up and 330.96 percent of them started admission through entrance test at the graduate level whille 36.74 % of the Deemed universities also admit the students at the graduate level by entrance test. Higher proportons of Deemed and Central universities have repcortted mixed method of merit, test and interview etc.

Table: 2.99

Method of Admission at Post Graduate Level by University Type 2007-08

(Figures are in percntage)

Method of Admission	University Type		
	Central	State	Deemed
Merit	18.18	33.17	8.16
Entrance Test	39.09	42.36	36.74
Interview	2.73	0.99	2.04
M/ET/I/O	25.45	11.99	30.61
Not Specified	Nil	2.13	6.12
Univ.not reporting PG Programme	14.55	9.36	16.33
Total	100.00	100.00	100.00

[illegible] .9 shows that higher proportions of Central, State and Deemed universities [illegible]dopted entrance test as the method of admission at the post graduate level as [illegible]d graduate level. About 42.36 % of the State universities admit students by [illegible] tets followed by Central and State universities. High proportion of Deemed [illegible]) nd Central (25.45%) universities have reported mixed criterion for [illegible]lon.

[illegible]le .10 shows that very large proportions of all types of universities have not [illegible] M.Phil programme. About 67% of the central and 69 % of Deemed [illegible]sitie do not have M.Phil programme.

Table: 2.10

Mthod of Admission at M.Phil Level by University Type 2007-08

Methd of Admision	University Type (in per cent)		
	Central	State	Deemed
Met	5.45	19.20	7.85
Entranc Test	10.90	12.55	3.92
Interview	Nil	0.95	3.92
M/ET/O	13.64	1.90	11.76
Not Speified	2.73	2.66	3.92
Univ. not rporting M.Phil Programme	67.28	62.74	68.63
Toti	100.00	100.00	100.00

About 13 % of the State universities have Entrance Test as the method of admission in M.Phil pogramme followed by about 11% of the Central universities. If Entrance Test and nxed criteria of merit, ET and Interview etc are taken together, Central Universitie account for about 25 % followed by 15 % of the State universities.

The table 211 also shows that 43.10% sample State universities have not reported Ph.D. progamme, while 17% have reported the existence of Ph.D programme but have not spcified the method of admission. About 42 % Deemed and 38% Central sample unirsities have not reported Ph.D. programme but 8 and 10 per cent respectivelyhave reported the Ph.D. programme but have not specified the method of admission. The table further reveals that 11.8, 21.36 and 22 .00 percent of Central, State and Ieemed universities respectively admit students to Ph.D programme by merit.

Table: 2.11

Mthod of Admission at Ph.D Level by University Type 2007-08

(Figures in percentages)

Metodof Admission	University Type		
	Central	State	Deemed
Merit	11.82	21.36	22.00
Intrance Test	8.18	9.07	2.00
Interview	2.73	6.43	10.00
MET/I/O	29.09	2.65	16.00
Iot Specified	10.00	17.39	8.00
Univ. not reorting Ph.D Programme	38.18	43.10	42.00
Total	100.00	100.00	100.00

ET and Mixed criteria are taken together, Central universities account for about 37 llowed by Deemed universities (18%) and State universities (12%). It is clear that is a trend of introducing ET and mixed method of admission in all types of ersities but it is more so in Central universities.

hod of Admission at Graduate Level across the Faculties

table 2.12 shows that merit is the major criterion of admission at the Graduate l in more than 50% of the courses in the faculties of Arts, Science, Computer nce /App., Commerce and Management. The proportion of universities providing ission varies from the lowest of 29.55% in case of Management faculty to the hest of 63.64% of the universities in the faculty of Commerce.

Table: 2.12
Method of Admission at Graduate Level by Faculties 2007-08

Faculties	No. of sample Universities	No. of Courses	Method for Admission (MFA)			
			Merit % of Course (%Univ.)	Ent.Test % of Course (%Univ.)	Interview % of Course (%Univ.)	Direct % of Course (%Univ.)
Arts	109	115	69.57 (56.88)	12.18 (11.92)	3.48 (0.92)	4.35 (2.75)
Science	100	153	67.98 (55.00)	19.61 (19.00)	Nil	0.65 (0.00)
Comp. Sc.	42	33	60.61 (38.10)	15.15 (11.90)	9.09 (2.38)	9.09 (4.76)
Commerce	88	112	70.54 (63.64)	12.50 (13.64)	0.89 (1.14)	1.79 (2.27)
Management	44	29	58.62 (29.55)	34.48 (13.64)	Nil	3.45 (2.27)
Education	81	79	24.05 (22.23)	63.29 (58.03)	Nil	Nil
Engg/Tech.	62	74	4.05 (4.84)	71.63 (72.58)	Nil	Nil
Law	69	85	36.47 (34.78)	52.94 (47.83)	Nil	Nil
Others	89	174	41.95 (34.83)	(40.80) (42.70)	1.15 (1.12)	Nil

Table Continued...

Faculties	No. of sample Universities	No. of Courses	Method for Admission (MFA)			
			M/ET/I/O % of Course (%Univ.)	Not Avai. % of Course (%Univ.)	% of Univ. with more than one criteria of MFA	% of Univ. without Graduate Course
Arts	109	115	7.84 (4.59)	2.60 (2.75)	(-) 2.75	22.94
Science	100	153	11.76 (12.00)	Nil	(-) 14.00	28.00
Comp. Sc.	42	33	3.03 (2.38)	3.03 (2.38)	Nil	38.10
Commerce	88	112	7.14 (7.95)	7.14 (2.27)	(-) 11.36	20.45
Mangement	44	29	3.45 (2.27)	Nil	Nil	52.27
Education	81	79	11.39 (11.11)	1.27 (1.23)	Nil	7.41
Eng/Tech.	62	74	24.32 (11.29)	Nil	(-) 1.61	12.90
Law	69	85	8.24 (5.80)	2.35 (2.90)	(-) 2.90	11.59
Others	89	174	7.47 (10.11)	8.63 (3.37)	(-) 12.36	20.23

Note Figures in parenthesis show the percentage of sample universities

While in the case of traditional courses in different faculties, merit is the main criteon of admission but in professional courses such as Engineering/Technology, Eduction and Law Entrance test is conducted for admission. In 71.63% of the courses in Engineering/Technology, 72.58% of the sample universities admit students through Entrance test. Likewise 58.03% sample universities in 63.29% courses in the faculty of Education conduct Entrance test to admit students at the graduate level. The Law faculties' of 47.83% of the sample universities conduct admission test in 52.94% courses. Many sample universities adopt multiple criteria of Merit/Entrance test/ Interview etc to admit students. For example, about 11.29% universities in about 25% of the courses in the faculty of Engineering /Technology have adopted multiple criteria for admission in their admission process. In the rest of the faculties of the sample universities, 2.27% to 12% of them admit students in 3.03% to 11.76% of the courses on the basis of multiple criteria. There are universities in the sample which use one criterion for admission in one course and another criterion in other courses hence their proportion has been subtracted from the total proportion of the sample universities to avoid the double count.

A large number of universities do not have UG programmes in some faculties. While 52.27% of the sample universities have reported not to have Faculty of Management, 38% of the sample universities have not reported data about the Computer Sc/ App. faculty at the undergraduate level.

Admission at the PG Level across Faculties

2.13 presents the method of admission in different courses across faculties niversities at the PG level. It is revealing that while at the graduate level, the predominant criteria in majority of faculties, Entrance come the major criteria of admission at the PG level. Even in the faculty of % of the sample universities conduct Entrance Test for admitting students of the courses. There seems to be major shift as 58% sample universities in ty of Science, 61.90% in the faculty of Computer Sc/App.,56.83% in the Management have adopted Entrance Test in the majority of the courses.

Entrance Test criteria are added in M/ET/I/O, the proportion of Sample ity goes up. Interview only remains a minor criterion. Merit still remains nt criterion for admission in the faculties of Arts, Commerce, Law and Others G level.

Table: 2.13
Method of Admission at Post Graduate Level by Faculties 2007-08

culties	No. of sample Universities	No. of Courses	Method for Admission (MFA)			
			Merit % of Course (%Univ.)	**Ent.Test** % of Course (%Univ.)	**Interview** % of Course (%Univ.)	**Direct** % of Course (%Univ.)
Arts	109	157	47.78 (48.62)	33.76 (30.28)	3.18 (3.67)	1.91 (2.75)
Science	100	238	29.00 (37.00)	52.52 (58.00)	0.84 (2.00)	0.42 (1.00)
Comp. Sc.	42	67	10.45 (11.90)	65.67 (61.90)	1.49 (2.38)	8.96 (7.14)
Commerce	88	157	38.85 (51.13)	38.85 (42.04)	Nil	0.64 (1.14)
Management	44	72	9.72 (11.36)	63.89 (56.83)	1.39 (2.27)	Nil
Education	81	68	29.41 (23.46)	58.83 (46.91)	Nil	Nil
Engg/Tech.	62	62	11.29 (8.06)	67.75 (46.78)	1.61 (1.61)	Nil
Law	69	62	38.71 (31.88)	53.23 (43.48)	Nil	3.22 (2.90)
Others	89	240	39.58 (39.33)	41.67 (47.19)	0.83 (2.25)	0.42 (1.12)

Table Continued...

Faculties	No. of sample Universities	No. of Courses	Method for Admission (MFA)			
			M/ET/I/O % of Course (%Univ.)	Not Avai. % of Course (%Univ.)	% of Univ. with more than one criteria of MFA	% of Univ. without Post Graduate Courses
Arts	109	157	12.10 (16.51)	1.27 (1.83)	(-) 6.42	2.75
Science	100	238	15.13 (26.00)	2.10 (1.00)	(-) 28.00	3.00
Comp. Sc.	42	67	11.94 (19.06)	1.49 (2.38)	(-) 7.14	2.38
Commerce	88	157	15.29 (18.18)	6.37 (3.41)	(-) 20.45	4.55
Management	44	72	25.00 (27.27)	Nil	(-) 6.82	9.09
Education	81	68	7.35 (6.17)	4.41 (4.94)	(-) 1.23	19.75
Engg/Tech.	62	62	19.35 (12.90)	Nil	(-) 3.22	33.87
Law	69	62	Nil	4.84 (2.90)	(-) 5.80	24.64
Others	89	240	10.42 (13.48)	7.08 (3.37)	(-) 19.10	12.36

Except the faculty of Arts, in all other faculties more than 40% of the sample universities have shifted to Entrance test for admission at the PG level. This trend confirms the acceptance of the general directives and guidelines of the UGC.

Method of Admission at the M.Phil Level across the faculties

Before discussing the method of admission at the M.Phil level, it is worthwhile to examine the last row of table 2.10 which provides the proportion of sample universities not reporting the existence of M.Phil programme. It is to be noted that M.Phil programme is not uniformly available in all the faculties of all the sample universities. It may seem to be strange that 91.95% of the sample universities have not reported the existence of M.Phil programme in the faculty of Engineering/Technology followed by 89.85% sample universities in the faculty of Law and 88.68% in the faculty of Management. It means that these universities do not have M.Phil programme. Thus, the M.Phil programme seems to be largely prevalent in the faculties of Arts and Science.

Merit remains the main method of admission at the M.Phil level in the majority of the faculties except in the faculty of Engineering/ Technology where in students are admitted in 80.0% of courses of 6.45% of the sample universities through Entrance Test. It is clear from the table 2.14 that 34.86% of the sample universities admit students in 46.59% of the courses given in the faculty of Arts, on the basis of Merit while only 20.18% of the sample universities in 20.18% courses conduct Entrance

[redacted] at the M.Phil level. Like wise in 24.0% of the sample universities [redacted] criterion for admission in the faculty of Science in 39.39% of the courses, [redacted] 18.0% of the sample universities in 36.36% courses conduct Entrance [redacted] in the faculty of Science. Interviews and direct admission are [redacted] in the majority of the faculties as criteria for admission.

Table: 2.14

[redacted] of Admission at M.Phil Level by Faculties 2007-08

[redacted]	No. of sample Universities	No. of Courses	Method for Admission (MFA)			
			Merit % of Course (%Univ.)	Ent.Test % of Course (%Univ.)	Interview % of Course (%Univ.)	Direct % of Course (%Univ.)
[redacted]	109	88	46.59 (34.86)	31.82 (20.18)	3.41 (3.67)	14.78 (11.01)
[redacted]	100	66	39.39 (24.00)	36.36 (18.00)	3.03 (2.00)	12.13 (7.00)
[redacted]	42	7	42.86 (7.14)	28.57 (4.76)	Nil	28.57 (4.76)
Commerce	88	38	47.36 (19.32)	28.95 (11.36)	Nil	10.53 (4.55)
Management	44	6	66.66 (6.82)	16.67 (2.27)	Nil	16.67 (2.27)
Education	81	30	40.00 (14.82)	36.66 (13.58)	Nil	6.67 (2.47)
[redacted]/Tech.	62	5	20.00 (1.61)	80.00 (6.45)	Nil	Nil
Law	69	7	42.86 (4.35)	42.86 (4.35)	14.28 (1.45)	Nil
Others	89	36	38.89 (11.24)	36.11 (10.11)	Nil	5.56 (2.25)

Table Continued....

Faculties	No. of sample Universities	No. of Courses	Method for Admission (MFA)		
			Not Avai. % of Course (%Univ.)	% of Univ. with more than one criteria of MFA	% of Univ. without M.Phil Programme
Arts	109	88	3.41 (1.83)	Nil	28.44
Science	100	66	9.09 (5.00)	(-) 2.00	46.00
Comp. Sc.	42	7	Nil	Nil	83.34
Commerce	88	38	13.16 (4.55)	Nil	60.23
Management	44	6	Nil	Nil	88.64
Education	81	30	16.67 (6.17)	Nil	62.96
Engg/Tech.	62	5	Nil	Nil	91.95
Law	69	7	Nil	Nil	89.85
Others	89	36	19.44 (4.49)	(-) 1.12	73.03

Entrance Test and multiple criteria of M/ET/I/O taken together account for the criteria used for admission in 45.46% of the courses given by30.27% of the sample universities in the faculty of Arts and 48.49% of the courses given in 25% of the sample universities in the faculty of Science. It was expected that Entrance Test will be the main criterion for admission at the M.Phil level, but Merit still remains a very important criteria for admission. The professional courses have already introduced entrance test for admission and the process is catching up fast as most of the universities are falling in line.

Method of Admission at the Ph.D Level across the faculties

Majority of the sample universities, in the faculties of Computer Sc/App, Management, Engineering/Technology, Law and Others do not have Ph.D programme (Table 2.15) Their share ranges between 52.81% in faculty designated as 'Others" to 89.05% in the faculty of Computer Sc/App. Even in the faculty of Arts, 12.84% of the sample universities do not have Ph.D programme. Amongst the universities, which have reported the existence of Ph.D programme, many have not specified the method of admission. For example 25 % sample Universities in 30.19% of the courses in the faculty of Science and 23.85% of the sample universities in 25.69% of the courses in the faculty of Arts have not specified the method of admission. 30.99% of the sample universities in their faculty of education have not specified method of admission in 34.42% of the courses.

Non specification of the method of admission by large number of universities has created problem in understanding the scenario. Majority of the sample universities have reported Merit as the criteria for admission at the Ph.D level. The highest proportion of the sample universities (30.28%) in the faculty of Arts grants admission in 34.86% of the courses according to Merit. Like wise 27% of the universities admit students in 31.14% of the courses in the faculty of Science on the basis of Merit. In other faculties 8.06% Universities (in Engg/Techno) to 21.43% universities (Computer Sc/App.) provide admission in 26.32% courses to 69.24% courses on the basis of Merit. It seems that Entrance test, as method of admission, has been picking up in different faculties of the sample universities.

Table: 2.15
Method of Admission at Ph.D Level by Faculties 2007-08

Faculties	No. of sample Universities	No. of Courses	Method for Admission (MFA)			
			Merit % of Course (%Univ.)	Ent.Test % of Course (%Univ.)	Interview % of Course (%Univ.)	Direct % of Course (%Univ.)
Arts	109	109	34.86 (30.28)	15.60 (13.76)	11.93 (11.01)	11.93 (11.01)
Science	100	106	31.14 (27.00)	12.26 (9.00)	11.32 (9.00)	15.09 (14.00)
Comp. Sc.	42	13	69.24 (21.43)	15.38 (4.76)	Nil	7.69 (2.38)
Commerce	88	66	27.27 (18.18)	10.61 (7.95)	6.06 (4.55)	9.09 (6.82)

[redacted]gement	44	15	53.33 (15.91)	33.33 (11.36)	6.67 (2.27)	6.67 (2.27)
[redacted]tion	81	48	37.50 (20.99)	10.42 (6.17)	8.33 (4.94)	8.33 (4.94)
[redacted]/Tech.	62	19	26.32 (8.06)	10.53 (3.23)	5.26 (4.84)	21.05 (4.84)
[redacted]w	69	30	43.33 (17.39)	16.67 (7.25)	10.00 (4.35)	3.33 (1.45)
[redacted]hers	89	61	36.07 (12.36)	16.39 (8.99)	13.11 (6.74)	9.84 (7.86)

Table Continued...

[redacted]culties	No. of sample Universities	No. of Courses	Method for Admission (MFA)		
			Not Avai. % of Course (%Univ.)	% of Univ. with more than one criteria of MFA	% of Univ. without Ph.D Programme
[redacted] Arts	109	109	25.69 (23.85)	(-) 2.75	12.84
[redacted]cience	100	106	30.19 (25.00)	(-) 2.00	18.00
[redacted]mp. Sc.	42	13	7.69 (2.38)	Nil	69.05
[redacted]mmerce	88	66	46.97 (23.86)	Nil	38.64
[redacted]nagement	44	15	Nil	Nil	68.19
[redacted]ducation	81	48	35.42 (30.99)	Nil	41.97
[redacted]ngg/Tech.	62	19	36.84 (11.29)	Nil	67.74
Law	69	30	26.67 (7.25)	Nil	62.31
Others	89	61	24.59 (11.24)	Nil	52.81

Note: *Figures in parenthesis show the percentage of sample universities*

The highest proportion of the universities(13.76%) have introduced Entrance test in 15.60% of the courses in the faculties of Arts followed by 11.36% of the universities in 33.33% of the courses in the faculties of Management have introduce Entrance Test. Interview has emerged as an important criterion for admission at the Ph.D level. A substantial proportion of universities have resorted to interview as method of admission ranging between 5.26 % of courses in Engg/Tech and 13.11% courses in the faculty designated as 'other'. The only faculty where interview as method of admission has not been reported is Computer Sc/App.

The Pattern of Self Financing Courses in Sample Universities

The Indian universities have, of late, introduced self financing courses. The main purpose for introducing these courses, apparently, was to generate financial resources for the development of Departments by providing more infrastructures. These Courses, in some cases, have been introduced along with the general courses but major proportion of universities have introduced the self financing courses in specific subjects which are in greater demand in the employment market. Generally, the employability of these courses is much higher than the general courses.

The introduction of self financing courses by the universities seems to be the function of its employability. The present study is based on the data collected for the year

-08 provided by the sample universities. The number of sample universities is uniform across the faculties. The table 2.16 shows the number of sample ities of different types e.g.; Central, State and Deemed university along with roportion to the total sample universities.

Table: 2.16

wise and Faculty wise number of sample Universities included in the Study 2007-08

culties	Central Universities		State Universities		Deemed Universities		Total no. of Univ
	No. of Univ	% of Total Univ	No. of Univ	% of Total Univ	No. of Univ	% of Total Univ	
Arts	17	15.60	80	73.39	12	11.01	109
Science	17	17.00	74	74.00	9	9.00	100
Computer ience/Ap	7	16.67	31	73.81	4	9.52	42
Commerce	13	14.77	68	77.27	7	7.96	88
nagement	9	20.93	31	72.09	3	6.98	43
Education	9	11.11	66	81.48	6	7.41	81
Engg/Tech.	12	19.35	46	74.19	4	6.45	62
Agri&Vet.Sc	5	31.25	11	68.75	Nil	Nil	16
Law	9	13.05	59	85.50	1	1.45	69
Others	15	16.85	68	76.40	6	6.75	89

It is evident from the table that the proportion of sample universities by their type varies and the bulk of the universities providing information are the state universities. This variation is also evident amongst the faculties. Moreover, it is not the number of the sample universities *per se* but the numbers and the type of courses in which Self financing has been introduced is more important aspect. An attempt will be made to discuss the pattern at the aggregate level taking all the sample universities together by faculties and the programmes of the study, i.e. Graduate, Post graduate, Research, Diploma and certificate levels.

Self Financing Courses at the Graduate and Post Graduate Levels

The table 2.17 provides the aggregated patterns of self financing courses at the graduate and post graduate levels taking all the sample universities taken together. The table reveals that the highest proportion of self financing courses at the graduate level are being given in the faculty of Management .About 62.07 percent of the courses are being given by 27.90 percent of universities with the faculty of Management under self financing system.

The popular courses are BBA, BBM, BHM, and BTM. Courses in the faculty of Management are followed by the courses in the faculty of Computer Sc/Ap and Engineering/Technology which have introduced self financing system in 48.48 and 35.14 percent courses respectively. Faculties of Computer Sc. provide BCA, B.Sc (Computer Sc) and B.Sc (IT) under self financing scheme while BE and B.Tech are popular courses in Engg/Tech faculty. The other important aspect is the proportion of

sample universities providing SF courses. While about 31% of the sample universities have introduced SF courses in Computer Sc/Ap faculties, 28% universities have these courses in faculty of Management followed by about 26% universities in Engg/Tech faculty. Two more interesting areas emerge at the Graduate level.12.84% of the universities have introduced SF courses in 18.26% of the total courses in the faculty of Arts while 25% of the total universities have introduced SF courses in 26% of the total Courses being given under the rubric of others (faculties).Most of these courses pertain to library Science, Physical Education, Performing Arts, Fine Arts, Dance, Music, Journalism and social work. These are professional courses and have higher employability.

The pattern of SF courses at the post graduate level is almost the same as at the graduate level. The highest proportion of the SF courses has been reported by the faculty of Management (53%) closely followed by computer Sc/Ap (52 %) and Engg/Tech (41%).While 60% of the sample universities have introduced SF courses in the faculty of Management, 50% of them have SF courses in Computer Sc/Ap. Higher proportion of sample universities (37%) have introduced SF courses at the PG level in Science as compared to Engg/Tech (21%). The proportion of SF courses is higher at the PG level as compared to the graduate level in the Faculty of Arts and a higher proportion of sample universities have introduced SF courses at the PG level (22% as compared to 12.84 % at the graduate level).

Table: 2.17

Faculty wise Self Financing courses at graduate and Post graduate levels 2007-08

Faculty	No. of Sample Univ.	GRADUATES				
		T No. of Courses	T SF Courses	% of SF Courses	No. of Sam. Uni	% of Univer.
Arts	109	115	21	18.26	14	12.48
Science	100	151	44	29.13	20	20.00
Copm.Sci.	42	33	16	48.48	13	30.95
Commerce	88	114	22	19.30	15	17.05
Management	44	29	18	62.07	12	27.90
Education	81	101	13	12.87	13	16.05
Engg./Tech	62	74	26	35.14	16	25.80
Agri.&Vet.Sc	16	11	4	36.36	5	31.29
Law	69	85	14	16.47	10	14.49
Others	89	173	45	26.01	22	24.71

Table Continued...

Faculty	No. of Sample Univ.	POST GRADUATES				
		T No. of Courses	T SF Courses	% of SF Courses	No. of Sam. Uni	% of Univer.
Arts	109	158	34	21.52	24	22.02
Science	100	237	89	37.55	37	37.00
Copm.Sci.	42	67	35	52.23	21	50.00
Commerce	88	157	28	17.83	20	21.59
Management	44	72	38	52.78	26	60.47
Education	81	68	12	17.65	12	14.81
Engg./Tech	62	61	25	40.98	13	20.97

Agri.&Vet.Sc	16	-	-	-	-	-
Law	69	62	10	16.39	10	14.49
Others	89	240	59	24.80	29	32.58

Self financing courses at the Research Level

M.Phil and Ph.D are two important research degrees awarded by the universities in India. These are also important because they form the minimum qualification for employment in teaching faculties.

About 10 percent of the sample universities have introduced SF course at the M.Phil Level in almost 16 percent of the total courses given by them in the faculty of Arts (table 2.18). About 9 percent of the sample universities provide SF courses in 25 percent of the courses in the subjects listed under, "Others". In other faculties, SF courses account for about 13 to 14 percent of the total courses in the sample universities. The proportion of SF courses at the Ph.D level ranges from 20% in the Faculty of Management to about 12 percent in Science and 9 percent in Arts faculties respectively.

Table: 2.18

Faculty wise Self Financing courses at M.Phil and Ph.D levels 2007-08

Faculty	No. of Sample Univ.	M.Phil				
		T No. of Courses	Total SF Courses	% of SF Courses	No. of Sample. Univ	% of Univer.
Arts	109	89	14	15.73	11	10.09
Science	100	66	9	13.64	7	7.00
Commerce	88	38	5	13.16	4	4.55
Management	44	6	1	16.67	1	2.33
Education	81	30	4	13.33	4	4.94
Engg./Tech	62	-	-	-	-	-
Others	89	36	9	25.00	8	8.99

Table Continued....

Faculty	No. of Sample Univ.	Ph.D				
		T No. of Courses	Total SF Courses	% of SF Courses	No. of Sample. Univ	% of Univer.
Arts	109	102	9	18.82	7	6.42
Science	100	103	12	11.65	8	8.00
Commerce	88	64	4	6.25	3	3.40
Management	44	15	3	20.00	3	6.98
Education	81	47	2	4.26	2	2.47
Engg./Tech	62	19	2	10.53	2	3.23
Others	89	62	6	9.68	3	3.37

Note: No M.Phil and Ph.D self financing courses have been reported by any university in the faculties of Computer Sc/A, Law and Agriculture + Vet. Science.

The proportions of universities giving SF courses range between 2.5 % to 8% of the sample universitiies. About 8% of the sample universities provide Ph.D programme in 12 percent of the total courses in the Science faculty while about 2.5% of the sample

universities provide Ph.D programme under SF system in about 4 % courses in the faculty of education.

A pertinent question arises in case of the regulation of Ph.D programme under SF system. Is Ph.D degree feasible under SF system with out compromising with quality of the research? It will be worthwhile to examine the mechanism of regulating the Ph.D programme in greater depth under this system.

Self Financing Courses at Diploma and Certificate Levels

Diploma and certificate courses provide opportunity for skill upgradation for those who did not have an opportunity to pursue graduate and post graduate degrees. In most of the Diploma courses, the minimum qualification for admission is graduation and at the certificate level it is 12th grade examination. The table 2.19 shows that SF courses at the Diploma level are more popular as these accounts for 33% to 64% of the total course across different faculties.

Table: 2.19

Faculty wise Self Financing courses at the level of Diploma and certificate 2007-08

Faculty	No. of Sample Univ.	DIPLOMA				
		T No. of Courses	T SF Courses	% of SF Courses	No. of Sam. Uni	% of Univer.
Arts	109	122	57	46.72	16	14.68
Science	100	56	19	33.93	14	14.00
Copm.Sci.	42	28	18	64.29	10	23.80
Commerce	88	25	13	52.00	8	9.09
Management	44	22	12	54.44	7	16.28
Education	81	8	4	50.00	3	3.70
Engg./Tech	62	6	2	33.33	2	3.23
Law	69	15	13	86.67	6	8.70
Others	89	56	24	42.86	14	15.73

Table Continued...

Faculty	No. of Sample Univ.	CERTIFICATE				
		T No. of Courses	T SF Courses	% of SF Courses	No. of Sam. Uni	% of Univer.
Arts	109	58	31	53.45	6	5.50
Science	100	19	14	73.68	3	3.00
Copm.Sci.	42	13	8	61.54	3	7.14
Commerce	88	2	1	50.00	1	1.14
Management	44	-	-	-	-	-
Education	81	-	-	-	-	-
Engg./Tech	62	1	1	100.00	1	1.61
Law	69	3	3	100.00	2	2.90
Others	89	19	10	52.63	6	6.74

Note: No diploma and certificate courses have been reported in Agriculture + Vet. Sc.

Te highest proportion of Diploma courses (86.67%) have been reported by the faulty of Law followed by Computer Sc/App (64.3%), Management (54.44%), Cmmerce (52.0%) and Education (50.0%) of the sample Universities. Though only 8.0 % of the sample universities provide 86.67% of the Diploma courses under SF in Lw, the high proportion has been obtained due to the fact that 13 out of 15 courses gien at the Diploma level are under self financing system. About 23.80% of the sample universities have 64.29% of the courses under SF in the faculty of Computer ScAp which is followed by Faculty of Management and "others" wherein 16.28% an 15.73% of the Sample universities respectively provide SF courses in 54.44% and 4286% of the total courses in these faculties respectively. It is also interesting to note tht 14.68% of the sample universities have devoted 46.72% of the courses in the faulty of Arts for SF courses.

Crtificate courses are not very popular under SF system. There are no certificate lev SF courses in the faculties of Management and Education. Only two sample uversities have reported certificate courses in Commerce and only one provides SF corse in Consumer consultancy. The similar pattern has been observed in the Faculty of ngineering/ Technology, as only one university offers one SF course.
Se Financing courses at the certificate level seem to be more popular in the Faculties of cience, Computer Sc/App, Arts and "Others" where in 73.68,61.54,53,45 percent corses are under SF system respectively but the proportions of the sample uversities do not follow the same pattern. These SF courses are offered by 3.0.7.14, 5.5 and 6.74 percent of the sample universities respectively. The minimum quification for the admission to certificate course in the Faculty of Law is graduation but two of the three courses given at the certificate level are," Communication skill and Personality Development" and " Visual Basic Net" may be tened as courses in skill upgradation rather than courses in Law *per se.*

Se Financing Courses in the Central Universities

A iaximum of 17 Central universities have reported about the Self Financing courses thogh their number varies from faculty to faculty. The table 2.20 shows that the SF corses are being given in only five faculties. The following salient features are obtined from the data given in the table.
(a) No Central University has reported SF courses in the faculties of Arts, Eng/Tech.and Agriculture+ Vet. Science, Law and "Others".
(b) No Central University has reported SF courses at the research level i.e. M.Phil andPh.D.
(c) The central universities which have reported giving SF courses may be sumarised as under:
(i) Delhi University: Faculty of Science; B.Sc.(H) and M.Sc. (General as well as SF) M.A.(SF) and PGDIP (SF)
i) The E.F.L.U., Hyderabad; B.Ed. (S.F.)
ii) Rajeev Gandhi University; B.Ed.(S.F.)
v) Tripura University; Faculty of Computer Sc./App.; B.C.A., M.C.A. (S.F.)
Faculty of Commerce; PGDTTS (S.F.)
Faculty of Management; B.B.A., MRMD (S.F)

Table: 2.20

Faculty wise and Level wise Self Financing courses in Central Universities 2007-08

Faculty	No. of Sample Universities.	GRADUATES				
		Total No. of Courses	Total SF Courses	% of SF Courses	No. of Sample. University	% of University.
Science	17	13	1	7.69	1	5.88
Computer Sc.	7	3	1	33..33	1	14.29
Commerce	13	-	-	-	-	-
Management	9	1	1	100.00	1	11.11
Education	9	10	2	20.00	2	22.22

Table Continued...

Faculty	No. of Sample Universities.	POST GRADUATES				
		Total No. of Courses	Total SF Courses	% of SF Courses	No. of Sample. University	% of University.
Science	17	28	2	7.14	1	5.88
Computer Sc.	7	6	1	16.66	1	14.29
Commerce	13	23	2	8.70	1	7.69
Management	9	9	1	11.11	1	11.11
Education	9	-	-	-	-	-

1. Note: No self financing courses have been reported in Central universities in the faculties of Arts, Law, Agri + Vet Sc., Engg/Tech and others.
2. Note: Central Universities reporting self financing courses are:
   (i) Delhi University: B.Sc.(H)(G/SF), M.Sc (G/SF), MCA,MIB,MFC and PGDIP
   (ii)Tripura University: BCA, BBA, MCA, MRMD, PGDIP, PGDTTC
   (iii) The EFLU Hyderabad: B.Ed
   (iv) Rajeev Gandhi Univ Itanagar B.Ed.

There was vehement resistance against the introduction of Self Financing courses by the students in some central universities as, in their perception it was a step towards the privatisation of education.

Self Financing Courses in State Universities

Graduate and Post Graduate Levels

The main features of the pattern of Self Financing courses have been presented in three tables. The first table No. 2.21 provides the pattern of SF courses at the Graduate and Post Graduate levels.

Table: 2.21

Faculty wise Self financing courses in State Universities at Graduate and Post Graduate level 2007-08

Faculty	No. of Sam. University	GRADUATES				
		Total Courses	SF Courses	% of SF to Total Courses	Sample Universities	% of Samp. Univ to Total Univ.
Arts	80	103	15	14.56	11	13.75
Science	74	125	36	28.80	16	21.62
Comp. Sc	31	27	13	48.15	10	32.26
Commerce	68	107	18	16.82	12	17.65
Management	31	24	13	54.17	9	29.03
Education	66	85	9	10.58	9	13.64
Engg/Tech.	50	69	25	36.23	15	30.00
Agri+Vet Sc	11	11	4	36.36	4	36.36
Law	59	85	14	16.47	10	16.95
Others	68	160	37	23.13	20	29.41

Table Continued....

Faculty	No. of Sam. University	POST GRADUATES				
		Total Courses	SF Courses	% of SF to Total Courses	Sample Universities	% of Samp. Univ to Total Univ.
Arts	80	146	32	21.92	22	27.50
Science	74	195	84	43.08	34	45.95
Comp. Sc	31	56	31	55.36	18	58.06
Commerce	68	127	23	18.11	17	29.00
Management	31	60	34	56.67	23	74.19
Education	66	64	10	15.63	10	15.15
Engg/Tech.	50	61	25	40.98	13	26.00
Agri+Vet Sc	11	-	-	-	-	-
Law	59	62	10	16.13	10	16.95
Others	68	224	52	23.12	27	39.71

The pattern, generally, conforms to the general pattern at the aggregated level discussed earlier. In ease of State Universities also, their number, providing information about SF courses, varies from faculty to faculty. While 80 State Universities have reported about the SF courses in the Faculty of Arts, only 11 universities have done so in the Faculty of Agriculture and Vet. Sciencee .The Faculty of Management in 29.03% of the sample State Universities has 54.17% of the courses under Self Financing scheme followed by the faculty of Computer Sc/app. in which 32.26% of the sample State universities have 48.15% of the courses under Self Financing Scheme at the graduate level. Like wise, the Faculty of Engg/Tech in 30% of the sample State universities has 36.23 % courses as SF courses at the graduate level.

A similar pattern is discernible at the Post Graduate level. The higher proportions of SF courses have been reported in the faculties of Management, Computer Sc /app, Science and Engg/Tech. About 74.19 percent of the sample State Universities has 56.67% of the courses in the Faculty of Management under SF scheme followed by 58.06 % of the sample State Universities providing SF courses in 55.36% of their total courses in the Faculty of Computer Sc./app. Like wise, 45.95 and 26.0% of the sample State Universities have introduced Self Financing courses in 43.08 and 40.98 percent of the total courses in the faculties of Science and Engg/Tech. respectively at the Post Graduate level. Two more important faculties which have introduced SF courses at the Post Graduate level are "Others" and Arts. Some of the important Professional courses included in the faculty put under the rubric "Others" are Library science, B.P.Ed. , Hotel Management, Tourism, Performing Arts, Music and Dance etc. 39.71% of the Universities provide SF courses at the Post Graduate level in 23.21% of the total courses given under this faculty. In the Faculty of Arts also 27.50 % of the sample State universities have introduced SF courses in 21.92% of the courses at the Post Graduate level. The Faculty of Agriculture and Vet. Science has not reported any SF courses at the Post Graduate level in the sample universities.

Self Financing Courses at the Research Level

No State university has reported SF courses at the research level (M.Phil and Ph.ID) in the faculties of Computer Sc/App., Engg/Tech., Agriculture +Vet Science and Law. The highest proportion of SF courses (18.18%) at the M.Phil level, has been reported by 8.82% of the sample state universities in the courses put under the rubric "Others" followed by 3.23% of the universities reporting 16.67% of the total as SF courses in the Faculty of Management.

Table: 2. 22

Faculty wise Self financing courses in State Universities at the research level 2007-08

Faculty	No. of Sam. University	M.Phil				
		Total number of Courses	No. of SF Courses	% of SF to Total Courses	No. of Sample Universities	% of Sample Uniw to Tottal Uniiv.
Arts	80	82	12	14.63	9	11.29
Science	74	66	9	13.64	7	9.446
Commerce	68	38	5	13.15	4	5.838
Management	31	6	1	16.67	1	3.223
Education	66	30	4	13.33	4	6.096
Others	68	33	6	18.18	6	8.832

Table Continueed....

Faculty	No. of Sam. University	Ph.D				
		Total number of Courses	No. of SF Courses	% of SF to Total Courses	No. of Sample Universities	% of Sample Univ to Total Univ.
Arts	80	91	8	8.79	5	6.25
Science	74	95	10	10.53	7	9.46
Commerce	68	64	4	6.25	3	4.41
Management	31	13	1	7.69	1	3.23
Education	66	43	1	2.33	1	1.51
Others	68	55	1	1.81	1	1.47

Note:-No sample State university has reported Self Financing courses in the faculties of Computer Science/App, Engineering/Technology, Agriculture + Vet. Scien. and Law

About 11.29% of the sample State Universities has 14.63% of the total courses under SF scheme in the Faculty of Arts followed by 9.46% of the universities having 13.64% of the courses as SF courses in the Faculty of Science. Two more faculties have introduced SF courses .The Faculty of Education provides SF courses in 13.33 % of the total courses in 6.06% of the sample universities. In 5.88 % of the sample universities provide SF courses in 13.15% of the total courses in the Faculty of commerce.

The highest proportion of self financing courses at the Ph.D. level (10.53) is given by 9.46% of the Sample universities in the Faculty of Science. About 8.79% courses in Faculty of Arts, 7.69% courses in the Faculty of Management and 6.25% courses in the faculty of Commerce are given as SF courses by 6.25 %, 3.23% and 4.41 % of the sample State universities respectively. However, the logic of giving SF courses at the Ph.D level under SF Scheme is baffling.

Self Financing Courses at the Diploma and Certificate Levels

Diploma courses under SF system are extensively given by the sample State Universities. The popular courses at the Diploma level are Law, Computer Sc/App, Management, Education, Arts and Commerce.

Table: 2.23

Self financing courses in State Universities at the Diploma and Certificate level (faculty wise) 2007-08

Faculty	No. of Sam. University	DIPLOMA				
		Total number of Courses	No. of SF Courses	% of SF to Total Courses	No. of Sample Universities	% of Sample Univ to Total Univ.
Arts	80	108	53	49.07	14	17.90
Science	74	46	17	36.96	12	16.22
Comp. Sc	31	18	10	55.56	8	25.81

Commerce	68	21	10	47.62	5	7.35
Management	31	20	11	55.00	6	19.35
Education	66	8	4	50.00	3	4.55
Engg/Tech.	50	5	1	20.00	1	2.00
Law	59	15	13	86.67	6	10.16
Others	68	52	20	38.46	12	17.65

Table Continued....

Faculty	No. of Sam. University	CERTIFICATE				
		Total number of Courses	No. of SF Courses	% of SF to Total Courses	No. of Sample Universities	% of Sample Univ to Total Univ.
Arts	80	42	26	61.90	4	5.00
Science	74	19	14	73.68	3	4.05
Comp. Sc	31	7	3	42.85	2	6.45
Commerce	68	-	-	-	-	-
Management	31	-	-	-	-	-
Education	66	-	-	-	-	-
Engg/Tech.	50	-	-	-	-	-
Law	59	3	3	100.00	2	3.39
Others	68	12	5	41.67	4	5.88

***Note:** No sample university has reported self financing course at the diploma and certificate level in Ag+Vet. Sc. faculty*

About 25.81% of the sample universities have 55.56% of the total Diploma courses in the Faculty of Computer Sc/App as SF courses followed by 19.35% of the sample state universities providing SF courses in 55.0% of the courses in the Faculty of Management. 10.16% Universities have introduced SF courses in almost 86.67% of the courses in the Faculty of Law. 17.9% of the sample universities have introduced SF courses in about 50% of the total courses even in the Faculty of Arts. It is clear from the table 2.23 that the popularity of the Diploma courses depends on the employability with the only exception of Faculty of Engg/Tech. in which only 2% sample universities provide SF courses in only 20% of the total courses.

No Sample State university has reported any SF course in the faculties of commerce, Management Education, Engg. /Tech. and the Agriculture + Vet.Sc at the certificate level. About 73.68% of the courses in Faculty of Science are given under SF system by 4.05% of the sample universities. Like wise 61.90% courses in Faculty of Arts, 42.85% in Computer Science/App. And 41.675% courses in others are given under SF system by 5.0%, 6.45% and 5.88% of the sample universities respectively. All the courses give in the Faculty of Law by 3.39% universities are given under SF system.

Self Financing Courses in the Deemed Universities

The table 2.23 at the first instance reveals the variations in the number of sample Deemed universities providing information about SF courses. The number of samples varies from 1 from the Faculty of Law to 11 universities in Faculty of Arts.

Only one university has reported to have the Faculty of Law but it has not reported the existence of any SF course.

SF Courses at the Graduate and Post Graduate Levels in Sample Deemed Universities

The proportions of the SF courses are higher at the graduate and post graduate levels. All the courses in the Faculty of Management at the graduate and post graduate levels are under the SF system. The SF courses in the Faculties of Arts, Science, Commerce, Others and Computer Sc/app vary between 50 to 67% of the total courses respectively. The proportions of sample universities providing SF course also vary between 27.27% for the Faculty of Arts to 33.33%, 42.86%, 33.33% and 50% for the Faculties of Science, Commerce ,Others and Computer Sc/App respectively.

Table: 2.24

Faculty wise Self financing courses in Deemed Universities at the Graduate and Post Graduate level 2007-08

Faculty	No. of Sam. University	GRADUATE				
		Total number of Courses	No. of SF Courses	% of SF to Total Courses	No. of Sample Universities	% of Sample Univ to Total Univ.
Arts	11	12	6	50.00	3	27.27
Science	9	13	7	53.85	3	33.33
Comp. Sc	4	3	2	66.67	2	50.00
Commerce	7	7	4	57.14	3	42.86
Management	3	4	4	100.00	2	66.67
Education	6	6	2	33.33	2	33.33
Engg/Tech.	4	5	1	20.00	1	25.00
Others	6	13	8	61.54	2	33.33

Table Continued.....

Faculty	No. of Sam. University	POST GRADUATE				
		Total Number of Courses	No. of SF Courses	% of SF to Total Courses	No. of Sample Universities	% of Sample Univ to Total Univ.
Arts	11	12	2	16.67	2	18.18
Science	9	14	3	21.43	2	22.22
Comp. Sc	4	5	3	60.00	2	50.00
Commerce	7	7	3	42.86	2	28.57
Management	3	3	3	100.00	2	66.67
Education	6	4	2	50.00	2	33.33
Engg/Tech.	4	-	-	-	-	-
Others	6	16	7	43.79	2	33.33

Note: (Only one Deemed University in the sample reported the presence of Law faculty but no SF course has been reported by it.

The proportions of SF courses are lower at the post graduate level as compared to the under graduate level in almost all the faculties except Management and Education. The proportions of the SF courses at the post graduate level vary from 40 % to 60% in the faculties of Commerce, Others, Education and Computer Sc/App respectively. The proportions of Deemed universities giving SF courses at the post graduate level also vary from 28.57% for the Faculty of Commerce to 33.33% for Education and others, 50.0 percent for the faculty of Computer Sc/App. The pattern is expected as the majority of SF courses have been introduces in the subjects which have higher demand in the employment market.

Self Financing Courses at the Research Level

No SF courses have been reported by Deemed universities at the M.Phil level except in the faculties of Arts and "Others". No Deemed university has reported the existence of SF courses in the faculties of Commerce, Engg/Tech. and Law. All the courses in the Faculty of Management are SF courses given by 66.67% of the sample Universities.71.43% of the courses in the faculty of "Others" are given by 33.33% of the sample Deemed universities under the SF system.50% of the courses in the faculty of Computer Sc/App. are also under SF system.

Table: 2.25

Faculty Wise Self financing courses in Deemed Universities at the Research level 2007-08

Faculty	No. of Sample. University	M.Phil				
		Total No. Courses	No. of SF Courses	% of SF to Total Courses	No. of Sample Univ	% of Samp. Univ to Total Univ.
Arts	11	7	2	28.57	2	18.18
Science	9	-	-	-	-	-
Comp. Sc	4	-	-	-	-	-
Management	3	-	-	-	-	-
Education	6	-	-	-	-	-
Others	6	3	3	100.00	2	33.33

Table Continued....

Faculty	No. of Sample. University	Ph.D				
		Total No. Courses	No. of SF Courses	% of SF to Total Courses	No. of Sample Universities	% of Sample Univ to Total Univ.
Arts	11	11	2	18.18	2	18.18
Science	9	8	2	25.00	1	11.11
Comp. Sc	4	2	1	50.00	1	25.00
Management	3	2	2	100.00	2	66.67
Education	6	4	1	25.00	1	16.67
Others	6	7	5	71.43	2	33.33

Note: (i) only one Deemed university in the sample reported the presence of Law faculty but no SF course has been reported by it.

(ii) No Deemed university has reported M.Phil and Ph.D courses in Commerce and Engg/Tech. faculties

.5% of the total courses in the faculty of science are also given as SF courses by 1.11 % of the sample universities followed by 18.18% of the total courses under SF ystem are given by 18.18% of the universities in the faculty of Arts.

Self Financing Courses at the Diploma and Certificate Levels

No sample Deemed University has reported SF courses at Diploma level in the faculty of Education and Law.

Table: 2.26

Self financing courses in Deemed Universities at the Diploma and Certificate level (faculty wise) 2007-08

Faculty	No. of Sam. University	DIPLOMA				
		Total Number of Courses	No. of SF Courses	% of SF to Total Courses	Sample Universities	% of Sample Univ to Total Univ.
Arts	11	14	4	28.57	2	18.18
Science	9	5	1	20.00	1	11.11
Comp. Sc	4	10	8	80.00	2	50.00
Commerce	7	1	1	100.00	1	14.29
Management	3	2	1	50.00	1	66.67
Engg/Tech	4	1	1	100.00	1	25.00
Others	6	4	4	100.00	2	33.33

Table Continued.....

Faculty	No. of Sam. University	CERTIFICATE				
		Total Number of Courses	No. of SF Courses	% of SF to Total Courses	Sample Universities	% of Sample Univ to Total Univ.
Arts	11	16	5	31.25	2	18.18
Science	9	-	-	-	-	-
Comp. Sc	4	6	5	83.33	1	25.00
Commerce	7	1	1	100.00	1	14.29
Management	3	-	-	-	-	-
Engg/Tech	4	1	1	100.00	1	25.00
Others	6	7	5	71.43	2	33.33

Note: (i) Only one Deemed University in the sample reported the presence of Law faulty but no SF course has been reported by it.
(ii) No Deemed University has reported Diploma and Certificate courses in Education faculty.

All the courses being given at Diploma level in the faculties of Engg/Tech, Commerce and 'Others' in Deemed universities are self financing courses and 25%, 14.29% and 333% of the sample universities provide SF courses respectively in the above mentioned faculties. 80% of the courses in the faculty of Computer Sc/App in 50% of

the sample universities are also self financing courses. On the whole 54.05% of the total courses in all the faculties are SF courses at the Diploma level across the faculties.

No sample Deemed University has reported the existence of SF courses in the faculties of Science, Management, Education and Law at the certificate level. All the courses in the Faculties of Engg/Tech. and Commerce at the certificate level are SF courses given by 25% and 14.29% of the sample universities respectively. About 83.33% of the courses in the Computer Sc/App are given as SF courses by 25% of the sample universities followed by 71.43% of the courses in the faculty of 'Others' being given as SF courses by 33.33% of the sample universities. Over all, 54.83% of the courses given in all the faculties at the certificate level are self financing courses.

Self Financing Courses at the State Level

The state level data as shown in the three tables below reveals large variation in the percentages of the universities giving self financing courses in different faculties. This variation is the reflection of uneven number of sample universities across the states. There are states where there is only one single university providing the data and there are states where the number of sample universities is larger.

Table 2.27 shows that no university has reported self financing courses in the States of Arunachal Pradesh, Assam, Jammu& Kashmir, Manipur, Meghalaya, Mizoram, Nagaland, Punjab and Uttara Khand in the faculties of Arts, Science and Computer Sc/App. Besides these states, no university has reported giving SF courses in the faculties of Arts in Delhi, Goa, Himachal Pradesh, Jharkhand, Tripura and West Bengal. The universities in only 13 states have reported having SF course in the Faculty of Arts .The proportions of the universities giving SF courses vary between 14% in Uttar Pradesh to 66.67% in Andhra Pradesh and Orissa.19 States (table 2.27) have reported having SF courses in the Faculty of Science wherein the proportion varies between 14.29% in West Bengal to 100% of the universities in Goa, Haryana, Himachal Pradesh, Jharkhand Maharashtra, Rajasthan and Tripura. It is clear that either there is only one university in the states reporting 100% SF courses or only one university has responded by providing the information in Arts Science and Computer Science/app faculties. No university in the states of Goa, Himachal Pradesh, Jharkhand, Kerala, and West Bengal has reported the existence of SF courses in the faculty of Computer Science/app. Out of the 19 states listed in Table 2.27, only 14 states have reported SF courses in the faculty of Computer Sc/app. The proportions of universities offering SF courses in Faculty of Computer Sc/app. vary between 20% in Madhya Pradesh and 66.67 % in Delhi and Haryana.

Table: 2.27

Proportion of Sample Universities in States Providing Self Financing Courses in Different Faculties 2007-08

(Figures are in Per cent)

S.N.	State	Faculties		
		Arts	Science	Computer Science
1	Andhra Pradesh	66.67	55.56	42.86
2	Bihar	57.14	83.33	33.33
3	Chattisgarh	33.33	50.00	50.00
4	Delhi	0.00	50.00	66.67
5	Goa	0.00	100.00	0.00
6	Gujarat	50.00	50.00	60.00
7	Haryana	100.00	100.00	66.67
8	Himachal Pradesh	0.00	100.00	0.00
9	Jharkhand	0.00	100.00	0.00
10	Karnataka	42.86	33.33	50.00
11	Kerala	20.00	50.00	0.00
12	Madhya Pradesh	20.00	40.00	20.00
13	Maharashtra	50.00	100.00	60.00
14	Orissa	66.67	80.00	25.00
15	Rajasthan	100.00	100.00	100.00
16	Tamil Nadu	55.56	50.00	50.00
17	Tripura	0.00	100.00	100.00
18	U.P	14.29	30.00	33.33
19	West Bengal	0.00	14.29	0.00

Note: No university has reported self financing courses in the states of Arunachal Pradesh, Assam, J&K, Manipur, Meghalaya, Mizoram, Nagaland, Punjab and Uttra Khand in the faculties of Arts, Science and Computer Sc/A.

Table: 2.27 (a)

Proportion of Sample Universities in States Providing Self Financing Courses in Different Faculties 2007-08

(Figures are in Per cent)

SN.	State	Faculties		
		Commerce	Management	Education
1	Andhra Pradesh	42.86	60.00	60.00
2	Arunachal Pradesh	0.00	0.00	100.00
3	Assam	0.00	50.00	0.00
4	Bihar	33.33	100.00	50.00
5	Chattisgarh	50.00	0.00	0.00
6	Delhi	66.67	0.00	0.00
7	Gujarat	60.00	0.00	0.00
8	Haryana	66.67	100.00	33.33
9	Karnataka	50.00	0.00	0.00
10	Madhya Pradesh	20.00	0.00	-0.00
11	Maharashtra	60.00	80.00	75.00
12	Orissa	25.00	80.00	0.00
13	Rajasthan	100.00	100.00	100.00
14	Tamil Nadu	50.00	37.50	50.00
15	Tripura	100.00	100.00	0.00
16	U.P	33.33	0.00	12.50

Note: No university has reported self financing courses in the states of Goa, Himachal Padesh, J&K, Jharkhand, Kerala, Manipur, Meghalaya, Mizoram, Nagaland, Punjab, Utara Khand and West Bengal in the faculties of Commerce, Management and Education.

Table: 2.27(b)

Proportion of Sample Universities in States Providing Self Financing Courses in Different Faculties 2007-08

(Figures are in Per cent)

S.N.	State	Faculty			
		Engg/Tech	Agri+Vet. Sc.	Law	Others
1	Andhra Pradesh	50.00	-	60.00	27.27
2	Bihar	50.00	100.00	25.00	100.00
3	Chattisgarh	100.00	-	66.67	-
4	Gujarat	50.00	-	60.00	50.00
5	Haryana	100.00	-	100.00	100.00
6	Jammu&Kashmir	0.00	-	100.00	-
7	Karnataka	66.67	-	-	50.00
8	Kerala	33.33	-	25.00	25.00
9	Madhya Pradesh	0.00	-	25.00	40.00
10	Maharashtra	66.67	-	100.00	80.00
11	Orissa	100.00	-	25.00	60.00
12	Rajasthan	100.00	-	100.00	100.00
13	Tamil Nadu	66.67	-	-	60.00
14	U.P	0.00	20.00	-	33.00
15	West Bengal	20.00	-	-	-

Note: No university has reported self financing courses in the states of Arunachal Pradesh, Assam, Delhi, Goa, Himachal Pradesh, Jharkhand, Manipur, Meghalaya, Mizoram, Nagaland, *Punjab, Tripura and Uttara Khand in the faculties of Engg/Tech, Agri+Vet Sc., Law and "Others"*

The universities offering SF courses in the faculties of Commerce and Management have been listed in table 2.27 (a). The table shows that 13 states are not included in the list as the universities in these states have not reported offering SF courses. Thus, only 14 universities have reported offering SF courses. The proportion of universities offering SF courses in Commerce varies between 20% in Madhya Pradesh and 66.67% in Delhi and Haryana. The figure of 100 % in these faculties also is a phenomenon of either one university providing information or all those reporting have the SF courses. Out of the total states listed in the table the universities in only 9 States have provided information regarding SF courses in the Faculty of Management. Though, the number of states providing information is less, the proportion of universities offering SF courses is higher in the Faculty of Management. It varies between 37.50% in Tamil Nadu and 80% in Maharashtra and Orissa. The universities of only 8 states have reported offering SF courses in the faculty of Education. Rajeev Gandhi University of Arunachal Pradesh and Banasthali Vidhyapeeth of Rajasthan are the single universities which have reported offering SF courses in Education. The proportion of universities offering SF courses in Education faculty varies between 12.50 % in Uttar Pradesh and 75% in Maharashtra. Almost 60% of the Universities in Andhra Pradesh and 50% in Bihar and Tamil Nadu have reported offering SF courses in the faculty of Education.

Table 2.27(b) contains the list of 15 states which means that 16 states do not figure in the list of states and the universities in these states do not offer SF courses in the

offers
faculties of Engg/Tech, Agriculture ,Law and" Others". The faculty of Engg/Tech. offers professional courses which have higher employability. The table shows that the universities in 12 out of the 15 states listed offer SF courses in Engg/Tech. faculty. All the sample universities in the states of Chattisgarh, Haryana, Orissa, and Rajasthan offer SF courses in the faculty of Engg/Tech. In the rest of the states, the proportion of universities varies between 20% in West Bengal and 66.67% in Karnataka, Maharashtra and Tamil Nadu. The information about SF courses in the faculty of Agriculture and Vet. Science has been provided by the universities in two states only. Only one out of the 5 sample university from Uttar Pradesh has reported SF course in Agriculture and all the sample universities (3) from Bihar have reported offering SF courses in Vet. Science. All the sample universities in the states of Haryana, Jammu&Kashmir, Maharashtra and Rajasthan have reported SF courses in the faculty of Law. The proportions of sample universities offering SF courses vary between 25% in the states of Bihar, Kerala, Madhya Pradesh, and Orissa and 66.67% in the State of Chattisgarh.

The faculty identified as "Others" is an assortment of many professional courses such as Library Science, Performing Arts, Home Science, Fine Arts, Dance and Music, Social work and Mass Communication etc. Out of 15 states listed in the table 2.27(b) the sample universities in 12 states have reported offering SF courses in this faculty. All the sample universities in the states of Bihar, Haryana, and Rajasthan have reported offering SF courses. In other states the percentage of universities offering SF courses varies between 25% in Kerala and 80% in Maharashtra.

The above discussion shows that only the pattern of SF courses across the faculties at the aggregated level, by type of universities and state level has been dealt with unfortunately, two vital informations are missing from the data format. One is about the enrolment of the students in the SF courses and the other is the fee structure of these courses across the universities. It is expected that there will be variation in the fee structure across the universities as well as across the courses. This aspect, which has policy implications, could not be captured from the existing data sent by the universities.

Diversification of Courses in Indian Universities

The higher education imparted through the universities and institutions cannot afford to remain static. The courses and areas of research have to be innovated and new subjects are introduced in response to the social need and the demand for skilled human resources by different sector of the economy. The purpose of a university is both teaching and research because research is basic input in teaching. Research is means of generating knowledge .If there is no research, there will be very limited material for teaching and after sometime the teaching and teacher both may get fossilised and nobody will be ready to take that knowledge. Hence, teaching and research have to go hand in hand playing a complimentary role to each other.
The universities in India have always been introducing new courses of study. As the demand arises, new areas of study emerge. In the process, the courses get diversified both, at the graduate and post graduate levels. This has happened in almost all the faculties of Indian universities. They have responded to the social demand. The most crucial role of education is capacity building of the human resource and to enhance

employability of the graduates and post graduates leaving the precincts of the universities. With the expansion of the development process, the universities can not afford to continue to remain on the beaten track and resist change. The younger generation is exposed to the exploding information every day and therefore, they demand knowledge which is relevant and helps them in grasping the global reality. If we look at the course structures in which the degrees are being awarded by the universities, we can appreciate the diversification of areas of studies taking place. There may be difference in the pace being adopted by different universities but the trend of change is observed in most of the universities. The following examples are indicative of the positive changes which are being introduced by the universities.

Faculty of Arts: Besides the traditional courses of B.A and B.A (Hons.) BLitt, BOL (oriental Learning) BRS (Rural Studies), almost all the Indian languages including Pali, Prakrit, Shino, Mizo, Manipuri, Konkani, Bhoti have been introduced in the universities of the regions where these languages are spoken. Many universities have introduced foreign languages such as Arabic, Chinese, Japanese, Bhasha Indonesia, German, Russian, Spanish, Italian, Persian, Portuguese, Pashto etc. at the Undergraduate and Post graduate levels. MOL (Oriental Learning) and M.A. (Education/Soc. Sc), M.A (Social Work) M.A. (HR) and M.A. (Theology), (Islamic studies), (Jainology), M. G.S (Gandhian Studies), Folklore Studies, Tribal Studies, M.A. (Labour Welfare), MRS (Rural Studies) have been introduced.

2. **Faculty of Science**: B.Sc and B.Sc (H) have been traditional courses which were given in limited papers in the Faculty of Science of the Universities. Now new courses have been introduced such as B.Sc (Computer Science/Application),B.Sc (Information Science),B.Sc (Bio-Technology),B.Sc (Home Science) at the graduate level and M.Sc (Bio-Tech) ,M.Sc (Life Sciences), M.Sc.(Applied Sciences) M.SC (Microbiology),M.Sc (Bio-Chemistry),M.Sc (Aquaculture),M.Sc (Environmental Sc),M.Sc (I.T) M.Sc.(Applied Chemistry),MSc(Nano Sc and Nano Technology),M.C.A.,M.Sc(Medical Bio-Technology),M.Sc (Food Processing),M.Sc (Industrial Applied Chemistry), Polymer Sciences, Marine Living Resources, M.Sc(Bio-Informatics),M.Sc(Remote Sensing and GIS) M.Sc. (Geo-Informatics and Remote Sensing) M.SC.(Molecular Biology) have been introduced at the PG level.

3. **Faculties of Commerce and Management**: Commerce and Management faculties in the universities have introduced a number of courses relevant for employment such as BBA (Business Administration)BTHM(Tourism and Hotel Management), BBM (Business Management) BBE (Business Economics) BEM(Environmental Management), BTTM (Travel and Tourism Management, PMIR (Personnel Management and Industrial Relations,) Besides these areas some new courses have been added at the PG level such as MIBA(Ind.Business Admn), MIRPM (Ind.Relations and Personnel Management), MFM (Financial Management), MFC (Financial Control), MRM (Rural Management),MMS (Management Science) MIB (International Business)M.AFC (Accounting and Financial Control)MTA(Tourism Administration) MBF (Business Finance) MCM (Corporate Management etc.

4. **Faculty of Engineering**: Graduates in Engineering faculties do study traditional branches such as Civil, Mechanical and Electrical but at the same time a host of other courses have been introduced such as B.Sc (Textiles), B.E (Electronics and communication)B.E./Tech(construction)B.E(Instrumentation)B.E.(computerSc/App)B.Tech/B.Sc.(Bio-Pharma/Medicine) B.E (Printing) B.E./B.Tech (Information Sc/Technology).Further a number of courses have been introduced at the PG level e.g. (Energy Tech) M.E (Soil-Geo. Tech) M.E Environmental Engg), Nano technology, Ship Technology), Instrumentation, Printing Technology, Agricultural Engineering, Automobile Engineering have become the part of BE and ME programmes..

5. Agricultural Universities have introduced courses in new areas such as Dairying, horticulture, Pest Management. Fisheries, Aquaculture, Floriculture, Sericulture, Food and Nutrition, Water technology etc.

6. Many new courses have been introduced in other areas such as journalism, Fine Arts, Performing Arts, BTA (Theatre Arts), Mass Communication, Library Science, Urban and Regional Planning, Linguistics, Culture Studies, Behavioural Sciences, Musicology, Physical Education, Pharmacy, Home Science, Nursing etc.

The diversification has been taking place in all the areas of study in response to the social and market demands. The universities will have to innovate and introduce new subjects of teaching and new areas of research to remain relevant both academically and socially.

CHAPTER 3

Infrastructure

PART I

India has made very impressive progress in the field of higher education in last two decades. India's education sysstem is often cited as one of the main contributor to the economic progress of the countiry. However, India continues to face challenges as 35 per cent of India's population in age group of 20-25 aspires for higher education but the present enrolment is only 9 to 11 per cent as against 45 to 85 per cent in the developed countries. Per studlent expenditure on higher education in India also lags behind the developed countriees. A lot has still to be done to catch up with the ever-changing world.

In order to improve the quaality of higher education, apart from other important factors, provision of better physical infrastructure is absolutely essential. The objective of higher education is over all development of the personality of the student so that she/he becomes a good human being and a committed citizen of the country. Besides the infrastructure for the academic pursuits like the class rooms, labs and library etc. the facilities for co-curricular and extracurricular activities in terms of auditoriums, open air theatres, and conference rooms and sports equipments are very important.

Keeping in view the importance of the above mentioned infrastructural facilities, an assessment of these facilities has been done by university types as well as at state level from the data supplied by the Information and Statistical Bureau of University Grants Commission. The data pertains to 16 samples Central, 79 State and 6 Deemed universities.

Table 3.1 shows the percentage share of auditoriums, open air theatres and conference rooms and the accommodation capacity in Central, State and Deemed universities. It is clear from the table (3.1) that the share of Central universities to the total number of auditoriums is 20.33 per cent, holding 20.45 per cent of the capacity of accommodation available in all the sample universities. State universities have 74.73 per cent of the total auditoriums with 76.04 per cent accommodation capacity, while the percentage share of Deemed universities is 4.94 per cent to the total auditoium but have only 3.51 per cent off the total accommodation capacity.

Table: 3.1

Availability of Auditorium, Open Air Theatre and Conference Room by Universiy Type 2007-08

University Type	Auditorium				Open Air Theatre				Conference Rom			
	No	%	AC	%	No	%	AC	%	No	%	AC	%
Central (16)	37	20.33	16316	20.45	5	10	11500	17.85	96	18.43	7870	25.61
State (79)	136	74.73	60671	76.04	44	88	52405	81.37	415	79.65	2184	71.06
Deemed (6)	9	4.94	2800	3.51	1	2	500	0.78	10	0.92	1025	3.33
Total (101)	182	100	79787	100	50	100	64405	100	521	100	3073	100

Note: Figures in parenthesis are the number of sample universities

As far as the availability of open air theatres is concerned it is clear from the table 3.1 that Central universities have 10 per cent of the total open air theatres and 17.85 per cent of the total capacity of accommodation. State universities have 88 per cent of the total open air theatres with 81.37 per cent accommodation capacity. Deemed universities have only 2 per cent of the total open air theatres in terms of numbers but only 0.78 per cent of the total accommodation capacity. Out of the total conference rooms 1.43 per cent are found in central universities with 25.61 per cent accommodation capacity. State universities have 79.65 per cent of the total number of conference rooms and have 71.06 per cent of the total capacity of seats .Deemed universities have only 0.92 per cent conference rooms with 3.33 per cent accommodation capacity.

The calculation of above mentioned facilities (auditorium, open air theatre and conference rooms) per university will provide a more comprehensive picture as to which university type (Central, State and Deemed) is endowed with better facilities. It is clear from the table 3.2 that Central universities have 2.31 auditoriums per Sample University with accommodation capacity of 1020 person whereas State universities have 1.72 auditoriums per Sample University with accommodation capacity of 768 persons per university. Deemed universities have 1.50 auditorium per sample university with accommodation capacity of 311 persons. As far as open air theatres are concerned, Central, State and Deemed universities have 0.31, 0.56 and 0.11 open air theatre per university with a capacity of 719, 663 and 83 person per Sample University respectively.

Table: 3.2

Availability of Auditorium, Open Air Theatre and Conference Room per university by University Type 2007-08

University Type	Auditorium		Open Air Theatre		Conference Rooms	
	Audi/Univ.	Acco/Univ.	OAT/Univ.	Acco/Univ	CR/Univ.	Acco/Univ
Central (16)	2.31	1020	0.31	719	6.00	492
State (79)	1.72	768	0.56	663	5.25	276
Deemed (6)	1.50	311	0.11	83	1.67	171

Note: Figure in parenthesis are the number of sample universities

Central universities have 6 conference rooms per university while State universities have 5.2 and Deemed universities have only 1.67 per university. The accommodation capacity of Central, State and Deemed universities is 492, 276 and 171 persons per university respectively. It is clear from the above discussion that Central universities are much better endowed with facilities in comparison to State and Deemed universities except the availability of open air theatre which is 0.56 per university in State and 0.31 per university in Central universities. The gap from Central to State and State to Deemed universities in the availability of these facilities is quite large which should be minimised for the sake of equity.

The State wise distribution of auditorium, open air theatre and conference rooms have been examined to understand the condition of these facilities in different states. It is clear from the table 3.3 that the states of Karnataka, Tamil Nadu, West Bengal, Andhra Pradesh and Gujarat together account for 57.33 per cent of the total auditorium with 49.08 per cent of accommodation capacity. There are a few states where the percentage of auditorium is quite high but the accommodation capacity is low and vice versa. For instance, West Bengal and Gujarat have 11.47 and 9.55 per cent of the total auditoriums with accommodation capacity of 1.33 and 3.92 per cent

respectively. On the other hand Haryana has just 1.91 per cent of the total auditoriums but has 9.63 per cent of accommodation capacity. The size of auditorium plays an important role in creating such anomalies. Apart from these states, the share of Maharashtra (5.73 per cent), Madhya Pradesh (4.46 per cent) and Uttar Pradesh (4.46 per cent) is also significant in the availability of auditorium with 3.68, 4.88 and 5.92 per cent of accommodation capacity respectively. The share of Bihar and Delhi is 3.18 per cent each to the total auditorium with 1.93 and 2.07 per cent accommodation capacity.

Table 3.3 shows that the states of Andhra Pradesh, Gujarat, Tamil Nadu and Orissa together account for 56.59 per cent of the total open air theatres with 57.59 per cent accommodation capacity. Big states like Madhya Pradesh and Uttar Pradesh have 7.55 per cent share each to the total open air theatres with 7.14 and 2.40 per cent accommodation capacity respectively. The states of West Bengal and Karnataka have 5.66 per cent share each to the total open air theatres with 13.87 and 7.38 per cent accommodation facility.

Table: 3.3

State wise Availability of Auditorium, Open Air Theatre and Conference Room in Sample Universities 2007-08

(Figures are in percentage)

State	Auditorium	Accomo	OAT	Accomo	Conf.R	Accomo
Andhra Pradesh	10.19	17.94	20.75	28.59	41.47	8.49
Arunachal Pradesh	0.64	0.44	N.A	N.A.	0.19	0.22
Assam	2.55	0.89	1.89	0.77	1.33	1.43
Bihar	3.18	1.93	N.A	N.A	1.70	4.63
Chattisgarh	1.91	1.40	N.A.	N.A	1.14	2.76
Delhi	3.18	2.07	3.77	2.61	5.68	2.76
Goa	N.A.	N.A.	N.A.	N.A.	0.38	0.55
Gujarat	9.55	3.92	15.09	8.01	3.41	5.31
Haryana	1.91	9.63	3.77	1.54	1.52	4.76
Himachal Pradesh	1.27	1.49	N.A	N.A	0.95	1.13
Jammu&Kashmir	1.91	4.88	N.A	N.A	0.38	0.37
Karnataka	13.38	8.38	5.66	7.38	2.65	2.20
Kerala	1.91	2.37	1.89	0.39	0.76	2.85
Madhya Pradesh	4.46	4.88	7.55	7.14	4.73	3.64
Maharashtra	5.73	3.68	1.89	4.62	0.76	0.51
Manipur	0.64	1.05	1.89	0.92	0.19	0.37
Meghalaya	0.64	0.25	N.A	N.A	0.19	0.51
Nagaland	1.91	1.11	0.00	0.00	0.76	0.95
Orissa	1.91	3.85	9.43	11.56	2.08	5.64
Rajasthan	2.55	0.96	1.89	0.77	0.95	1.70
Tamil Nadu	12.74	17.51	11.32	9.43	8.90	15.52
Tripura	0.64	1.16	N.A	N.A	0.76	1.11
Uttar Pradesh	4.46	5.92	7.55	2.40	14.19	24.61
Uttra Khand	1.27	2.96	N.A	N.A	0.76	1.83
West Bengal	11.47	1.33	5.66	13.87	4.17	6.15
Total	100.00	100.00	100.00	100.00	100.00	100.00

Note: Data for Jharkhand, Mizoram, Punjab, Puducherry and Sikkim are not available

Several states such as Arunachal Pradesh, Assam, Bihar, Goa, Himachal Pradesh, Jammu & Kashmir, Meghalaya, Nagaland, Tripura and Uttrakhand have not reported the availability of Open air theatres.

As far as conference rooms are concerned, Andhra Pradesh, Uttar Pradesh and Tamil Nadu together account for 64.56 per cent of the total conference rooms with 48.62 per cent accommodation capacity. The shares of Chattisgarh (5.68%), Madhya Pradesh (4.73%) West Bengal (4.17%) and Gujarat (3.41%) with 2.76, 3.64, 6.15 and 5.31 per cent accommodation capacity respectively are not very impressive at the country level. The share of Karnataka is 2.65 per cent to the total conference rooms with 2.20 per cent of accommodation capacity while the share of Orissa is 2.08 per cent with 5.64 per cent accommodation capacity. All other states have less then 2 per cent share in the total available conference rooms.

Sports are integral part of higher education system in the world so is the case in India also. In any university sports facilities are necessary for overall personality development of the students. In table 3.4 an attempt has been made to examine the total expenditure on sports equipments and percentage share of Central, State and Deemed universities during 2007-08. Total expenditure on sports equipments per university and expenditure per 100 students have also been calculated for 2007-08.

Table: 3.4

Value of Sports Equipments by Type of Universities 2007-08

University Type	Cost of Sports Equipments (in Rs. Lakh)	Percentage	Expenditure per 100 Students (in Rs. Lakh)	Expenditure per University (in Rs. Lakh)
Central (16)	157.48	20.02	0.23	9.84
State (79)	595.34	75.67	0.11	7.54
Deemed (6)	33.88	4.31	0.06	5.65
Total (101)	786.70	100.00	0.08	7.79

Note: Figures in parenthesis are the number of sample universities

It is clear from the table 3.4 that out of the total expenditure of Rs.786.70 lakh on the purchase of sports equipments during 2007-08, the share of sample Central universities is 20.02%, while the share of state universities is 75.67% and Deemed universities have only 5.65 per cent as their share.

As far as per university expenditure on sports equipments during 2007-08 is concerned, each Central university spent Rs. 9.84 lakh. The expenditure on sports equipments has been Rs. 7.54 lakh per state university and Rs.5.65 lakh per Deemed University during the 2007-08. The expenditure on sports equipments by Central, State and Deemed universities per 100 students was Rs. 0.23, 0.11 and 0.06 lakh respectively.

The table 3.5 presents the percentage share of different states in the total expenditure on sport equipments. It is clear from the table 3.5 that the states of Gujarat, Tamil Nadu, Assam, Uttar Pradesh and Andhra Pradesh together account for 73.26% of the total amount spent on sports equipments in the country during 2007-08.

Table: 3.5

State wise Proportion of Cost of Sport Equipments 2007-08

State	Total Amount in Rs Lakh	Percentage
Andhra Pradesh	73.35	9.32
Assam	130.82	16.63
Bihar	11.37	1.45
Chattisgarh	8.88	1.13
Delhi	1.70	0.22
Gujarat	160.45	20.39
Haryana	7.72	0.98
Himachal Pradesh	1.51	0.19
Jammu & Kashmir	2.27	0.29
Karnataka	11.41	1.45
Kerala	16.10	2.05
Madhya Pradesh	51.86	6.59
Maharashtra	15.67	1.99
Manipur	8.85	1.12
Orissa	26.91	3.42
Punjab	4.23	0.54
Puducherry	4.80	0.61
Rajasthan	6.83	0.87
Tamil Nadu	134.22	17.06
Uttar Pradesh	77.55	9.86
West Bengal	30.20	3.84
Total	786.70	100.00

Note: Data for Arunachal Pradesh, Goa, Jharkhand, Meghalaya, Mizoram, Nagaland, Sikkim, and Uttrakhand are not available.

Apart from these states, the shares of Madhya Pradesh (6.59 %), West Bengal (3.84%), Orissa (3.42 %), Kerala (2.05%), Maharashtra (1.99%), Bihar (1.45%), Karnataka (1.45 per cent), Chattisgarh (1.13%) and Manipur (1.12 %) are significant. The share of rest of the states which have reported data is less than 1 per cent each during the 2007-08.

PART II

Libraries as Academic Infrastructure

Library is a basic academic infrastructure of any university as it is the store house of knowledge in the form of books, journals, reports and official documents. The fitness, accessibility and availability of literature attract the scholars, students and intellectuals locally as well as from outside. Library is the greatest resource for the students who come from varied socio-economic backgrounds and many of them can not afford to buy the standard texts and reference material because of the high cost involved. Libraries provide equal opportunity to all the students, teachers, research scholars and others who want to read/consult books, journals, reports and rare material, otherwise not accessible. Libraries are integral parts of university education system and the funds are earmarked and allotted separately. The study in this chapter is based on a sample study of 16 central universities, 80 state universities and 3 Deemed universities. The data have been collected and preliminary tables have been processed by the information and Statistical Bureau of University Grants Commission, 35, Ferozeshah Road, New Delhi. The responding universities have reported data in varied forms creating a lot of difficulty in its precise tangible analysis. However, different parameters have been analysed according to the type of universities.

The report of the *Inter Agency Working Group on Development of an Information and Library Network under the aegis of University Grants Commission in 1988* categorised the libraries of universities and colleges as under:

Table: 3.6

A. University Libraries

	Size of Document Collection	Category
1	Libraries having collection of less than 1,00,000 volumes	Small Libraries
2	Libraries having collection of 1,00,000 to 3,00,000 volumes	Medium Libraries
3	Libraries having a collection of over 3,00,000 volumes	Large Libraries

Table: 3.7

B. College Libraries

	Size of Document Collection	Category
1	Libraries having collection of less than 50,000 volumes	Small Libraries
2	Libraries having collection of 50,000 volumes and above	Large Libraries

On the basis of the above criteria all sample university libraries considered in the study categorised into small, medium and large libraries in the table below (3.8).

Table: 3.8

Categories of Universities

	Category of University Libraries	Percentage of Sample University Libraries
1	Large Libraries (> 3 lakhs volume)	7.69 Per cent
2	Medium Libraries (between I lakhs to 3 lakhs volume)	18.27 per cent
3	Small Libraries (< 1 lakhs volume)	74.04 per cent

The table 3.8 clearly shows that the largest proportion of sample universities has small libraries having less than 1 lakh volumes. As per the Bench mark (as in the A grade Universities) about 92.31% of the sample universities having less than 352,886 books do not fall in A grade universities.(Higher Education in India U.G.C. , 2009, page 11, table 6(a).

The other categorisation of university libraries may be done on the basis of their area covered. The table 3.9 below represents percentage class of area and under the percentages of sample universities. The data for the area of libraries has been collected for the year 2007-08. The initial tabulation of the raw data has been done by the Information & Statistical Bureau of UGC as mentioned earlier.

(1) The scenario in Central Universities is as under

Table: 3.9

Proportion of Area of Libraries and Percentage of Sample Central Universities 2007-08

S.N.	No. of Samples	Percentage Category of Area	Percentage of Sample Universities (Central universities)
1	1	> 20	6.25
2	1	15-20	6.25
3	3	10-15	18.75
4	1	5-10	6.25
5	4	1-5	25.00
6	6	< 1	37.00

The table 3.9 shows the distribution of sample universities in different area classes of the total area of libraries of Central Universities. The largest area has been reported by Delhi University library (17,351.21 sq metres) followed by JNU and BHU (9,290 and 6,838.27 sq metres) respectively. Most of the libraries in the central universities located in North Eastern states are smaller in area except the library of NEHU, Shillong, which has an area of about 5,625 sq.m. The smallest area of the library amongst the Central universities has been reported by Mahatma Gandhi Antar-Rashtriya Hindi Vishwavidyalaya, Wardha (128 sq.m).

2. State Universities: The total sample size of state universities which have reported data pertaining to the area of libraries is 80. The pattern of area of libraries of state universities has been presented in table 3.10.

Table: 3.10

Proportion of Area of Libraries and Percentage of Sample State Universities 2007-08

S.No.	Percentage class of Area of Libraries	Percentage of State Universities included in Sample
1	> 6.00	2.50
2	4.00-6.00	1.25
3	2.00-4.00	13.75
4	1.00-2.00	25.00
5	< 1.00	57.00

Pattern of area of libraries in state universities is very clear. The proportion of state universities having larger area of library is low but larger proportion of sample universities has smaller area of libraries. 57.00 per cent of sample universities have less than 1 per cent of the total area of the libraries of the state universities. The largest area of the library has been reported by the Karnataka State Women University (14399.99 sq. metres) followed by Sant Gadge Baba Amravati University (8,094 Sq. metres). The smallest area of the library has been reported by Periyar University (265.31 sq. metres).

Statewise Scenario of Space in Libraries

The exercise has been extended to study the variations in availability of library space at the state level. The data of all the universities i.e. central, state and deemed has been aggregated at the state level. The sample pertains to 16 central, 80 state and 3 deemed universities. Thus, the data has been analysed on the basis of state as unit of reference. The table 3.11 shows the proportion share of sample universities in a state and also the proportion share of the area of the libraries in the respective states. It is obvious that the samples in terms of number of universities are not uniform as in 11 states only single universities have furnished the required information. The fact is that these states generally have only one university but in some cases number is more than one university but only one university has reported.

Table 3.11
State wise Percentage of sample State Universities and their Percentage of Area under Libraries 2007-08

S.No.	State	Percentage of reporting universities in states to the total number of reporting sample universities	Percentage of area covered by the libraries of the state universities to the total area covered by the sample universities
1	Andhra Pradesh	13.13	11.69
2	Arunachal Pradesh	NA	NA
3	Assam	3.03	1.31
4	Bihar	5.05	2.48
5	Chattisgarh	3.03	1.51
6	Delhi	5.05	12.38
7	Goa	1.01	2.23
8	Gujarat	6.06	5.64
9	Haryana	3.03	5.08
10	Himachal Pradesh	1.01	1.90
11	Jammu&Kashmir	1.01	0.70
12	Jharkhand	2.02	1.44
13	Karnataka	6.06	13.52
14	Kerala	3.03	1.80
15	Madhya Pradesh	5.05	3.92
16	Maharashtra	7.07	7.32
17	Meghalaya	1.01	1.94

18	Manipur	1.01	0.67
19	Mizoram	1.01	.58
20	Nagaland	1.01	0.22
21	Orissa	3.03	1.16
22	Punjab	1.01	0.22
23	Puducherry	1.01	1.01
24	Rajasthan	3.03	1.83
25	Tamil Nadu	9.09	6.47
26	Tripura	1.01	0.14
27	Uttra Khand	1.02	0.64
28	Uttar Pradesh	9.09	7.91
29	West Bengal	3.03	1.98
30	Total	100.00	100.00

Table 3.11 (a)
Percentage of Area covered by the libraries of the state universities to the total area covered by the sample universities 2007-08

Percentage of area category	No. of states where Univ. Libraries located	Names of the States
10-15	3	Karnataka, Delhi, Andhra Pradesh
5-10	5	Gujarat, Haryana, Maharashtra, U.P, T.N
1-5	13	Assam, Bihar, Chattisgarh, Goa, H.P., Jharkhand, Kerala, M.P, Meghalaya, Orissa, Puducherry Rajasthan, West Bengal
< 1	7	J&K, Manipur, Mizoram, Nagaland, Punjab, Tripura, Uttra Khand

Note: Data not available for Arunachal Pradesh

The grouping of states reveals that that only in three states, the area of university library is more than 10 per cent of the total area of all the universities at the country level (table 3.11a). Majority of the states lie in 1 to 5 per cent category and the spread of the states are from north to northeast and south. Larger states like U.P, Maharashtra, Madhya Pradesh, Tamil Nadu and Gujarat fall in the 5 to 10 per cent category. Since the sample of universities in terms of their number in states is skewed the skewness is reflected in their distribution over space.

Punjab is an exception amongst the states as it is represented by a private university. The fact remains that the non-response of the university has disturbed the statewise picture due to randomness of the sample.

Distribution of Books in Central, State and Deemed Universities

Libraries are extremely important institutions in accelerating the pace off learning and teaching in the university and college systems and play a pivotal role iin the storage and dissemination of knowledge. India is a vast country having different languages. Therefore, libraries of Indian universities also have books and journals in different

languages depending upon the needs of students, faculty and other users. The present study of libraries is based on the data supplied to UGC by the sample universities. The data pertaining to the availability of books and journals in different languages (English, Hindi, regional and others) is useful to know the existing situation in the libraries in the Central, State and Deemed universities.

It is clear from the table 3.12 that the books in English have the largest share in Central, State and Deemed universities. The number of English books in Central University libraries is larger than the State university libraries. Almost 80 per cent Central university libraries have more than 60 per cent of their housed volumes in English. It also shows that out of the total samples of 88 State universities 62.50 per cent have more than 60 per cent of books in English language. Hidayatullah National Law, Kalyani and West Bengal University of Technology have 100 per cent books in English language. Likewise, 33 per cent Deemed universities have more than 80 per cent of books in English Language. Only one Central university, namely, MGA Hindi University, Wardha has 100 per cent books in Hindi. Almost 77 per cent Central University libraries don't have more than 20 per cent books in Hindi.

Table: 3.12

Distribution of Books in different Languages by the Type of University

(Central Universities 2007-08)

Category of proportions of books	Percentage of universities with English books	Percentage of universities with Hindi books	Percentage of universities with Regional books	Percentage of universities with Other Languages books
> 80	30.77	7.69	Nil	Nil
60-80	46.16	Nil	Nil	Nil
40-60	7.69	7.69	Nil	7.69
20-40	Nil	7.69	23.08	7.69
< 20	15.38	76.93	76.92	84.62
Total	100	100	100	100

(State Universities)

Category of proportions of books	Percentage of universities with English books	Percentage of universities with Hindi books	Percentage of universities with Regional books	Percentage of universities with Other Languages books
> 80	32.95	Nil	4.55	1.14
60-80	29.55	Nil	4.55	Nil
40-60	12.50	4.55	5.68	4.55
20-40	10.23	14.77	14.77	2.27
< 20	14.77	80.68	70.45	92.04
Total	100	100	100	100

(Deemed Universities)

Category of proportions of books	Percentage of universities with English books	Percentage of universities with Hindi books	Percentage of universities with Regional books	Percentage of universities with Other Languages books
> 80	33.33	Nil	Nil	Nil
60-80	Nil	Nil	Nil	Nil
40-60	33.33	Nil	33.33	Nil
20-40	33.33	33.33	33.33	Nil
< 20	Nil	66.67	33.33	100.00
Total	99.99	100	99.99	100

There are only 4.55 per cent State university libraries which have 40 to 60 per cent of their collection of books in Hindi. More than 80 per cent State university libraries have less than 20 per cent Hindi books. No state university library has more than 60 per cent of books in Hindi language. About 25 per cent State university libraries, notably, Algappa, B.N. Mandal, Bharathiar, Bharthidasan, Calcutta, Fakir Mohan, Kakatiya, Karnataka State Women, Pondicherry and Potti S.Telugu have not reported even a single book in Hindi. Overall more than 80.68 per cent State university libraries have less than 20 per cent of total books in Hindi. The Deemed university libraries providing data have reported less than 40 per cent books in Hindi language.
The libraries of Kannada University (Karnataka), Manonmanian S. (Tamil Nadu), Sri Padmawati Mahila and Potti S.T. (Andhra Pradesh) have more than 80 per cent books in regional languages. This is quite natural, as these universities are located in southern states and the demand for the books in the regional languages in these states is higher.

There is large variation in the size of libraries and their collections of books. The Central and Deemed university libraries have lesser number of books in the regional languages. About 77 per cent of central university libraries have less than 20 per cent books in regional languages.
Jain Vishwa Bharati university library reported more than 80 per cent books in other languages. More than 80 per cent Central, State and Deemed university libraries have less than 20 per cent books in other languages and almost 45 per cent university libraries of all above mentioned categories have not reported even a single book in other language category.

Distribution of Journals in Central, State and Deemed Universities

An analysis of the distribution of journals shows that 77 per cent Central university libraries, 46 per cent State university libraries, about 66 per cent Deemed university libraries have more than 80 per cent journals in English language.

Table: 3.13

Distribution of Journals in different Languages by the Type of University 2007-08

(Central Universities)

Category of proportions of Journals	Percentage of universities with English Journals	Percentage of universities with Hindi Journals	Percentage of universities with Journals in Regional Languages	Percentage of universities with Other Languages Journals
> 80	76.92	7.69	Nil	Nil
60-80	7.69	Nil	Nil	Nil
40-60	Nil	Nil	Nil	7.69
20-40	Nil	Nil	7.69	7.69
< 20	15.39	92.31	92.31	84.62
Total	100	100	100	100

(State Universities)

Category of proportions of Journals	Percentage of universities with Journals in English language	Percentage of universities with Journals in Hindi	Percentage of universities with Journals in Regional languages	Percentage of universities with Journals in Other Languages
> 80	46.59	Nil	Nil	3.41
60-80	9.09	2.27	1.14	1.14
40-60	9.09	6.82	7.95	3.41
20-40	3.41	3.41	3.41	Nil
< 20	31.82	87.50	87.50	92.05

(Deemed Universities)

Category of proportions of Journals	Percentage of universities with Journals in English language	Percentage of universities with Journals in Hindi language	Percentage of universities with Journals in Regional languages	Percentage of universities with Journals in Other Languages
> 80	66.66	Nil	Nil	Nil
60-80	Nil	Nil	Nil	Nil
40-60	33.33	Nil	Nil	Nil
20-40	Nil	Nil	33.33	Nil
< 20	Nil	100.00	66.66	100.00

The availability of journals in Hindi is very low in Central, State and Deemed university levels. About 92 per cent Central, 87 per cent State and the entire sample Deemed University libraries have reported less than 20 per cent journals in Hindi.

The share of regional and other languages is almost negligible at all levels i.e. Central, Sate and Deemed universities. About 92 per cent Central and 87 per cent State university libraries have less than 20 per cent journals in regional languages. More

than 85 per cent Central university libraries have less than 20 per cent journals in other languages. Only 3.41 per cent State university libraries have more than 80 per cent journals in other languages while, 92 per cent State universities have less than 20 per cent journals in other languages. All sample Deemed universities have less than 20 per cent journals in other languages.

Statewise Distribution of Books in Different Languages

The table 3.14 shows the percentage of sample university libraries, their share of books as a whole and share of books in different languages in the total books in all the states of India. It is clear from the table 3.14 that the state of Andhra Pradesh has 11.43 per cent of the total university libraries but only 10.16 of the total books in which 77.91 per cent are English books, 1.86 per cent Hindi books, 9.43 per cent are books in regional languages and 10.80 are other languages books. The state of Maharashtra has 9.53 per cent of the total university libraries and a relatively higher share of 14.69 per cent of books to the total books in which the share of books in English, Hindi, regional and other languages is 84.72, 2.92, 6.74 and 5.62 per cent respectively.

The state of Tamil Nadu occupies the third position with 8.57 per cent of the total university libraries. But its share to the total books is as low as 2.09 per cent in which 80.96, 3.17, 11.65 and 4.22 per cent are books in English, Hindi, regional and other languages respectively. The share of Uttar Pradesh and West Bengal to the total sample university libraries is 6.67 per cent each. Uttar Pradesh has relatively higher percentage (15.34%) to the total books in which 68.68 per cent are in English and 20.02 per cent in Hindi. On the other hand the share of English books in West Bengal is more than 90 per cent and the share of Hindi books in is less than 1 per cent.

The states of Bihar, Gujarat, Karnataka and Orissa have 5.71 per cent libraries each to the total university libraries (table 3.14). The percentage share of these four states to the total books is 6.32, 6.16, 4.27 and 0.89 per cent respectively. The situation in Orissa is alarming as it has negligible numbers of books but the share to the total libraries is quite high. The percentage share of regional books in Orissa is as high as 54.49 per cent but the share of books in Hindi language is comparatively low. In Bihar both English and Hindi books have fair share in the total books. But in Gujarat there is strong dominance of books in regional language with a share of 42.49 per cent of the total books. In Karnataka books in English and Regional language are in large numbers but the share of Hindi books is as low as 0.47 per cent.

Table: 3.14

Statewise distribution of books in different languages in the libraries of sample universities 2007-08

State	% share of the State to the sample universities	% of English books	% of Hindi books	% of books in Regional languages	% of books in Other Language	% share of the State to the total books in the sample libraries
Andhra Pradesh	11.43	77.91	1.86	9.43	10.80	10.16
Arunachal Pradesh	0.95	48.22	51.78	NA	NA	0.10
Assam	2.86	85.41	2.68	10.02	1.88	3.21
Bihar	5.71	46.15	33.57	18.51	1.77	6.32
Chattisgarh	2.86	60.83	38.59	NA	0.58	1.72
Delhi	3.81	19.80	24.71	55.31	0.18	1.17
Goa	0.95	58.71	33.08	4.76	3.45	1.74
Gujarat	5.71	39.69	15.28	42.49	2.54	6.16
Haryana	2.86	71.40	24.06	3.16	1.38	8.77
Himachal Pradesh	0.95	63.89	22.82	N.A	13.29	2.70
Jammu&Kashmir	0.95	76.00	2.01	10.00	11.99	0.19
Jharkhand	0.95	70.00	24.00	6.00	N.A	1.51
Karnataka	5.71	51.97	0.47	46.47	1.09	4.27
Kerala	2.86	67.97	8.67	18.77	4.59	1.00
Madhya Pradesh	4.76	49.83	27.79	17.82	4.57	3.19
Maharashtra	9.52	84.72	2.92	6.74	5.62	14.69
Manipur	0.95	76.90	8.68	14.37	0.08	1.76
Nagaland	0.95	95.38	N.A.	N.A.	4.62	0.33
Orissa	5.71	31.90	8.32	54.49	5.29	0.89
Puducherry	0.95	22.39	N.A	72.71	4.91	0.02
Punjab	1.90	82.12	1.88	1.41	14.59	0.75
Rajasthan	2.86	53.80	35.84	0.27	10.08	2.21
Tamil Nadu	8.57	80.96	3.17	11.65	4.22	2.09
Tripura	0.95	65.56	2.83	23.20	8.40	0.08
Uttar Pradesh	6.67	68.68	20.02	7.34	3.96	15.34
Uttra Khand	NA	NA	NA	NA	NA	NA
West Bengal	6.67	90.72	0.13	8.05	1.09	9.63

The readership of Hindi books is naturally low as medium of instruction in many universities is regional language particularly at the graduate level. It is clear from the table 3.14 that the state of Madhya Pradesh accounts for 4.76 per cent share of the total university libraries and 3.19 per cent share to the total books with fair distribution of books in all the languages. National capital Delhi has 4.76 per cent of the total university libraries with 1.72 per cent book share to the total books in which English, Hindi and books in regional language are dominant. Assam has 2.86 per cent libraries and 3.21 per cent books to the total books. In this state more than 85 per cent of the total books are in English and the share of books in Hindi language is less than 3 per cent.

state of Chattisgarh has 2.86 per cent of the total university libraries with 1.17 per books of the total books (table 3.14). The books in English and Hindi together larger share while the share of books in regional and other languages is almost gible. Haryana has 2.86 per cent of the libraries with a large book base of 8.77 ent to the total books. In this state too, the share of books in regional and other ages is nominal. Kerala's share is 2.86 per cent to the total libraries with 1 per hare of books. Books in English and regional languages together account for than 86 per cent to the total books available in the libraries of the state. han accounts for 2.86 per cent of the total libraries and 2.21 per cent of the total . More than 89 per cent books are in English and Hindi and the remaining books other languages. The share of regional language is negligible.

state of Punjab has 1.90 per cent of the total university libraries with 0.75 per cent e total books. 82.12 per cent books are in English and the share of books in other ages is 14.59 per cent. It is interesting to note that the share of books in Hindi uage in this state is less than 2 per cent..

ble 3.14 shows that the remaining states of Arunachal Pradesh, Goa, Himachal desh, Jammu & Kashmir, Jharkhand, Manipur, Nagaland, Puducherry and Tripura ve less than 1 per cent share of the total university libraries with less than 1 per cent 2.70 per cent share in the books. There is strong dominance of books in English guage in all these states with the exception of Arunachal Pradesh where the share books in Hindi language is 51.78 per cemt and Puducherry where the share of books regional languages is 72.71 per cent. No book in Hindi language is reported in galand and Puducherry. Arunachal Pradlesh, Himachal Pradesh and Nagaland have ot reported any books in regional languages. The states of Arunachal Pradesh and arkhand do not posses books in other languages.

Statewise Distribution of Journals in Diffferent Languages

The analysis of data pertaining to the availability of journals in various states of India hows that Madhya Pradesh has 20.89 per cent of the total Journals in which the share of journals in English, Hindi, regional and other languages is 39.27, 32.39, 5.55 and 22.79 per cent respectively (Table 3.15). Bihar stands second with 16.57% to the total journals. The share of journals in English language is 51.75 per cent while journals in Hindi and regional languages account for 41.25 and 7.00 per cent respectively. The journals in other languages are almost megligible. The state of Andhra Pradesh has 16.08 per cent to the total journals in which 91.99 per cent journals are in English. The share of remaining languages is almosst negligible.

The share of Punjab and West Bengal is 4.79 and 4.76 respectively. More than 98% journals are in English language in Punjab and more than 94 per cent in West Bengal. Nagaland accounts for 3.93 per cent of the total journals available in the country and all the journals are in English language. The share of Chattisgarh is 3.42 per cent in the total journals where English and Himdi journals contributes 98.53 and 1.47 per cent respectively.

It is clear from the table 3.15 that the statte of Maharashtra has reported 2.61 per cent of the total journals with more than 80 peer cent are in English language. The state of Orissa has 2.61 per cent of the total journaals in which the share of journals in regional

nguage is remarkable (29.80 per cent) which is the second highest in the country er Puducherry. The state of Jharkhand has about 1.95 per cent the total journals d all are in English language. Even in the state of Karnataka the journals in English nguage predominate. The state of Tamil Nadu has 1.56 per cent of the total journals t 21.90 per cent of the total journals are in regional language.

e share of Gujarat is 1.54 per cent to the total journals but journals in English nguage are more than all other languages. Haryana has 1.30 per cent to the total rnals with more than 91 per cent journals in English language. The share of maining states namely Delhi, Rajasthan, Assam, Goa, Kerala, Himachal Pradesh, mmu&Kashmir, Manipur, Pondicherry, Tripura and Arunachal Pradesh is less than per cent each to the total journals (table 3.15).

Table: 3.15

Statewise distribution of journals in different languages in the libraries of the sample universities 2007-08

State	% share of the samples in States to the total universities	% of journals in English	% of journals in Hindi	% of journals in Regional languages	% of journals Other Languag e	% share of the State to the total journals
ndhra Pradesh	11.43	91.99	0.11	6.67	1.23	16.08
machal Pradesh	0.95	83.87	16.13	NA	NA	0.07
Assam	2.86	94.43	2.61	1.92	1.05	0.62
Bihar	5.71	51.75	41.25	7.00	NA	16.57
Chattisgarh	2.86	98.53	1.47	NA	NA	3.42
Delhi	3.81	90.19	3.34	3.02	3.45	0.99
Goa	0.95	4.30	8.59	8.11	79.00	0.45
Gujarat	5.71	57.87	10.79	16.16	15.18	1.54
Haryana	2.86	91.65	5.45	NA	2.89	1.30
imachal Pradesh	0.95	84.78	11.49	3.42	0.31	0.35
mmu&Kashmir	0.95	85.52	2.02	NA	12.46	0.32
Jharkhand	0.95	100.00	NA	NA	NA	1.95
Karnataka	5.71	75.30	1.72	13.21	9.76	1.68
Kerala	2.86	81.43	6.63	7.16	4.77	0.40
Madhya Pradesh	4.76	39.27	32.39	5.55	22.79	20.89
Maharashtra	9.52	80.65	4.63	11.93	2.79	2.61
Manipur	0.95	92.95	4.98	2.07	NA	0.26
Nagaland	0.95	100.00	NA	NA	NA	3.93
Orissa	5.71	58.05	5.04	29.80	7.11	2.28
Puducherry	0.95	28.83	11.71	48.65	10.81	0.12
Punjab	1.90	98.75	0.87	0.29	0.90	4.79
Rajasthan	2.86	71.21	20.22	NA	8.57	0.76
Tamil Nadu	8.57	59.50	5.17	21.90	13.43	1.56
Tripura	0.95	96.94	NA	NA	3.06	0.11
Jttar Pradesh	6.67	97.31	1.80	0.31	058	10.04
Uttra Khand	NA	NA	NA	NA	NA	NA
West Bengal	6.67	94.08	0.61	3.15	2.16	4.76

The share of journals in English language is above 80 per cent in all these states except Goa where 79 per cent of the total journals of the state are in the other languages. The state of Tripura has not reported any journal in Hindi and regional languages while Assam does not have journals of regional and other languages.

One of the striking features in the distribution of journals is that most of the journals are available in English language through out the country. The journals in Hindi language are available only in a few states like Madhya Pradesh and Bihar. Even Uttar Pradesh, which is the heartland of Hindi, has more than 97 per cent of journals in English language. Its share to the total journals is 10.04 per cent.

When we compare the availability of books and journals in different languages it is clear that that the percentage share of books in English language is higher than the books in other languages. But the books in Hindi and regional languages are also in substantial numbers in respective states. In case of journals in different languages in most of the states, English language has complete dominance. In majority of states the availability of journals in Hindi, regional and other languages is negligible.

Distribution of Universities having Electronic Library and Computer Applications By University Types and States

In modern era technology brought revolution in learning processes. Computer and internet play prominent role in determining the level of knowledge among the students. Without providing the adequate technology our students cannot compete in this era of globalization. Keeping in view the importance of technology, an attempt has been made to know the existing level of technology in different types of universities (central, state and deemed) and states with the help of certain parameters i.e. whether library has electronic facility, availability of computers and membership with different internet networks.

An assessment of data of 17 sample Central universities shows that 88.24 per cent central university libraries have electronic and have computer facilities. Jawaharlal Nehru and Delhi University together accounts 53.77 per cent of the total computers available in all the libraries of Central universities. Aligarh Muslim and Banaras Hindu universities have 8.01 per cent each to the total computers. The share of other universities, particularly north eastern universities is quite low. Maulana Azad National Urdu and M.G. Antrrashtriya Hindi University do not have electronic and computer facilities. It is a matter of concern that regional imlbalances are very prominent in the distribution of computers in the libraries of central universities as 4 major universities namely Jawaharlal Nehru, Delhi University, Alligarh Muslim and Banaras Hindu University together account for more than 70 per cent of the total computers available in the libraries of central universities. Rest of the central universities are lagging behind.

Out of total central university libraries 64.71 per cent have membership with internet network in which the share of Inflibnet network is 54.55 per cent, UGC Info net 36.36 per cent and Del net 9.09 per cent. It is worth to mention that the majority of the university libraries are in the process of procuring net facilities.

The data of 93 sample state universities shows that 79.57 per cent libraries have electronic facilities and 89.25 per cent are computerised. The universities of Kurukshetra (9.75%), Calcutta (8.22%), Gulbarga (6.15%) and Guru Ghasidas (5.98%), taken together account for 30.10 per cent of the total computers available in all the state sample university libraries. Regional disparities are there at the state level as well.

About 66.67 per cent state universities have membership of internet network like Inflib net (48.40 per cent), Del net (19.35 per cent), UGC Info net (6.45 per cent), Indest (6.45 per cent) and Ernet (6.45 per cent).

All Deemed Sample University libraries have electronic and computer facilities. About 50 per cent Deemed university libraries have membership of UGC Info net, while remaining libraries are without any internet network connection. The sample size of Deemed universities is unfortunately very small (only 2 deemed universities have reported) .This size of sample does not reflect the true picture.

The data pertaining to the ratio of students and computers and internet facilities could have presented a better picture. It will be fruitful to know the number of students per computer. This information could have been useful in the formulation of policy regarding the up gradation of infrastructure facilities in different universities. Non availability of desirable data is a major hindrance in this direction.

Table: 3.16

Statewise Distribution of Universities having Electronic Libraries and Computer Applications 2007-08

S.N.	State	% share of the state Univ. to the total sample universities	% of the electronic libraries within the state	% share of the state to the total computers in the sample libraries	% of lib. having membership with internet within the state
1	Andhra Pradesh	12.50	85.71	7.79	71.43
2	Arunachal Pradesh	0.89	100.00	0.59	0.00
3	Assam	2.68	100.00	2.18	100.00
4	Bihar	5.36	33.33	0.56	16.67
5	Chattisgarh	2.68	66.67	4.86	33.33
6	Delhi	4.46	100.00	16.24	80.00
7	Goa	0.89	100.00	0.62	100.00
8	Gujarat	5.36	100.00	6.45	66.67
9	Haryana	2.68	100.00	9.57	100.00
10	Himachal Pradesh	0.89	100.00	0.16	0.00
11	Jammu&Kashmir	0.89	100.00	1.81	100.00
12	Jharkhand	1.79	100.00	1.71	100.00
13	Karnataka	5.36	100.00	5.86	83.33

14	Kerala	3.57	75.00	1.78	50.00
15	Madhya Pradesh	4.46	60.00	1.43	60.00
16	Maharashtra	7.14	62.50	3.15	62.50
17	Meghalaya	0.89	100.00	0.37	0.00
18	Manipur	0.89	100.00	1.59	100.00
19	Mizoram	0.89	100.00	0.84	100.00
20	Nagaland	0.89	100.00	0.41	0.00
21	Orissa	3.57	25.00	0.62	25.00
22	Puducherry	0.89	100.00	1.18	100.00
23	Punjab	1.79	100.00	1.56	100.00
24	Rajasthan	2.68	66.67	1.87	66.67
25	Tamil Nadu	8.93	100.00	7.32	90.00
26	Tripura	0.89	100.00	0.75	100.00
27	Uttra Khand	0.89	100.00	0.93	100.00
28	Uttar Pradesh	8.93	70.00	7.70	60.00
29	West Bengal	6.25	85.71	10.13	85.71
30	Total	100	79.57	100	89.25

It is worth examining the state wise distribution of university libraries having electronic and computer facilities. (Table: 1.16). There are several states having high share of the total university libraries but low share in computerisation. The share of Andhra Pradesh, Tamil Nadu, and Uttar Pradesh is lower than thcre percentage share of university libraries but the gap is not wide. The situation in Gujarat and Karnataka is satisfactory as their share is more or less equal to the share of their university libraries. Bihar and Orissa lag behind. The states of Bihar and Orissa have only 0.56 and 0.62 per cent of the total available computers but their share to the total libraries is 5.36 and 3.57 per cent respectively. Only 33.33 libraries of Bihar are electronic and 16 per cent connected with internet. More or less same situation persist in Orissa also. It is clear from the table 3.16 that on the other hand national capital Delhi has only 4.46 per cent of the total university libraries but a huge share of 16.24 per cent of the total computers available in all the sample universities. The sample universities from Haryana also have a high proportion of 9.57 per cent to the total computers.

All the sample university libraries of north eastern states, Goa, Himachal Pradesh, Jammu&Kashmir, Puducherry, and Uttrakhand have less than I per cent share each to the total university libraries. The share of these university libraries is also less than 2 per cent in the availability of electronic facility. A detailed analysis of data pertaining to the use of computers and internet in university libraries of different states reveals that sharp regional disparities exist through out the country. Bihar and Orissa together have mare than 9 per cent to the total university libraries but the share in computer and internet facilities is less than 1 per cent while Delhi has mare than 16 per cent of the total computers. The share of universities of north eastern states is also very low.

Statewise Adequacy of Libraries

Libraries play vital role in giving new dimensions to the academic life of students and teachers. It is worthwhile to examine the adequacy of availability of libraries but it is even more important to analyse the adequacy of literature available in the libraries in the form of books and journals. It is fruitful to know the ratio between total number of

students and teachers and availability of books and journals in different states of India. In present analysis, statewise assessment of availability of books and journals per 100 students and per teacher has been done to find out the adequacy of books and journals in different states of India.

Statewise Adequacy of Libraries in terms of Books per 100 Students

It is clear from the table 3.17 that availability of books per 100 students ranges from 1300 books per 100 students (Delhi) to 4 books per 100 students (Puducherry). Delhi being the national capital has plenty of resources in comparison to other states leading to the highest proportion of books available per 100 students.

Table: 3.17

State wise Adequacy of Libraries in terms of Books per 100 Students 2007-08

S.N.	State	Total Students	Total Books	Number of Books /100 Students
1	Andhra Pradesh	591877	751872	127
2	Arunachal Pradesh	9882	7725	78
3	Assam	59448	237904	400
4	Bihar	155397	467963	301
5	Chattisgarh	219275	126968	58
6	Delhi	N.A	1284372	N.A
7	Goa	21089	130300	618
8	Gujarat	338863	459953	136
9	Haryana	322987	649138	201
10	Himachal Pradesh	95133	200054	210
11	Jammu&Kashmir	71203	14133	20
12	Jharkhand	3703	112015	3025
13	Karnataka	292541	316081	108
14	Kerala	155603	74031	48
15	Madhya Pradesh	343632	235966	69
16	Maharashtra	437177	1195157	273
17	Manipur	33866	N.A	N.A.
18	Meghalaya	21882	129997	594
19	Mizoram	N.A	N.A	N.A
20	Nagaland	5768	24394	423
21	Orissa	77881	75801	97
22	Puducherry	29895	1264	4
23	Punjab	3579	55345	1546
24	Rajasthan	107739	163687	152
25	Tamil Nadu	535239	154331	29
26	Tripura	24020	6072	25
27	Uttar Pradesh	56628	60260	106
28	Uttra Khand	1319472	1135236	86
29	West Bengal	418385	735073	176
30	National Average	5752164	8805092	153

state of Jharkhand stands second from the view/point of the proportion of books ilable to the students. B.I.T Mesra is the only institution from Jharkhand which has d the data. This institution is well known in the field of science and nology. The reasons for lower number of books in the library of Puducherry ersity are not known. Punjab is the third state of the country where 1,546 books ilable per 100 students. In the states of Goa, Meghalaya, Nagaland and Assam ailability of books per 100 students ranges from 625 to 400. In Bihar, ashtra, Himachal Pradesh and Haryana the ratio between books and students from 200 to 300 per 100 students. Apart from Puducherry, states where the bility of books per 100 students is low are Jammu& Kashmir (20), Tripura (25), Nadu (29), Kerala (48), Chattisgarh (58) Madhya Pradesh (69), Arunachal desh (78), Uttrakhand (84), Orissa (97), Uttar Pradesh (106) and Karnataka). In the states of Andhra Pradesh, Gujarat, Rajasthan and West Bengal the ber of books per 100 student ranges from 127 to 176 books per 100 students.

atewise Adequacy of Libraries in terms of Books per Teacher

dequacy of books among the teachers also varies from one state to another state. ahrashtra, Goa and Haryana have more than one thousand books per teacher.

Table: 3.18

State wise Adequacy of Libraries in terms of Books per Teacher 2007-08

.N.	State	Total Teachers	Total Books	No of Books / eacher
1	Andhra Pradesh	2625	751872	286
2	Arunachal Pradesh	68	7725	114
3	Assam	473	237904	503
4	Bihar	2716	467963	172
5	Chattisgarh	207	126968	613
6	Delhi	1533	1284372	838
7	Goa	110	130300	1184
8	Gujarat	1220	459953	377
9	Haryana	560	649138	1159
10	Himachal Pradesh	278	200054	719
11	Jammu&Kashmir	313	14133	45
12	Jharkhand	147	112015	762
13	Karnataka	622	316081	508
14	Kerala	754	74031	98
15	Madhya Pradesh	434	235966	544
16	Maharashtra	893	1195157	1338
17	Manipur	295	N.A	NA
18	Meghalaya	145	129997	896
19	Mizoram	129	N.A	N.A
20	Nagaland	165	24394	148
21	Orissa	359	75801	211
22	Puducherry	198	1264	6
23	Punjab	823	55345	67
24	Rajasthan	514	163687	318
25	Tamil Nadu	4556	154331	34
26	Tripura	91	6072	67

27	Uttar Pradesh	233	60260	259
28	Uttra Khand	3287	1135236	345
29	West Bengal	2402	735073	306
30	National Average	26150	8805092	337

In the states of Meghalaya, Delhi, Jharkhand, Himachal Pradesh, Chattisgarh, Madhya Pradesh, Karnataka and Assam, the availability of books per teacher ranges between 500 to 900. The state of Puducherry has only 6 books per teacher while Tripura and Punjab both have 67 books per teacher.

State wise Adequacy of Libraries in terms of Journals per 100 Students

It is obvious that the number of journals per 100 students will be much lower in comparison to books as journals are mostly consulted by research students and in few cases by Post Graduate students particularly in the field of science and technology.

Table: 3.19

State wise Adequacy of Libraries in terms of Journals per 100 Students

S.N.	State	Total Students	Total Journals	Number of Journals /100 Students
1	Andhra Pradesh	591877	15000	3
2	Arunachal Pradesh	9882	62	1
3	Assam	59448	574	1
4	Bihar	155397	15460	10
5	Chattisgarh	219275	3194	1
6	Delhi	39431	212168	538
7	Goa	21089	419	2
8	Gujarat	338863	1436	1
9	Haryana	322987	1210	1
10	Himachal Pradesh	95133	322	1
11	Jammu&Kashmir	71203	297	1
12	Jharkhand	3703	1817	49
13	Karnataka	292541	1567	1
14	Kerala	155603	378	1
15	Madhya Pradesh	343632	19490	6
16	Maharashtra	437177	34933	8
17	Meghalaya	21882	241	1
18	Nagaland	5768	3669	64
19	Orissa	77881	2197	3
20	Pondicherry	29895	111	1
21	Punjab	3579	4468	125
22	Rajasthan	107739	712	1
23	Tamil Nadu	535239	1452	1
24	Tripura	24020	98	1
25	Uttar Pradesh	56628	9363	17
26	Uttra Khand	1319472	124	1
27	West Bengal	418385	4444	1
28	National Average	5757729	335206	6.00

Note: Data for Manipur and Mizoram was not available

It is clear from the table 3.19 that the Delhi has 538 journals per 100 students followed by Punjab with 125 journals per 100 students. The states of Nagaland and Jharkhand have 64 and 49 journals per 100 students respectively. Uttar Pradesh has 17 journals per 100 students while it is 10 in Bihar. All other states have less than 10 journals per 100 students and in most of the cases the number is one or even less than one per 100 students.

Table: 3.20

State wise Adequacy of Libraries in terms of Journals per Teacher 2007-08

S.N.	State	Total Teachers	Total Journals	Number of Journals / Teacher
1	Andhra Pradesh	2625	15000	6
2	Arunachal Pradesh	68	62	1
3	Assam	473	574	1
4	Bihar	2716	15460	6
5	Chattisgarh	207	3194	15
6	Delhi	1533	212168	138
7	Goa	110	419	4
8	Gujarat	1220	1436	1
9	Haryana	560	1210	2
10	Himachal Pradesh	278	322	1
11	Jammu&Kashmir	313	297	1
12	Jharkhand	147	1817	12
13	Karnataka	622	1567	3
14	Kerala	754	378	1
15	Madhya Pradesh	434	19490	1
16	Maharashtra	893	34933	39
17	Manipur	295	N.A	NA
18	Meghalaya	145	241	2
19	Mizoram	129	N.A	NA
20	Nagaland	165	3669	22
21	Orissa	359	2197	6
22	Puducherry	198	111	1
23	Punjab	823	4468	5
24	Rajasthan	514	712	1
25	Tamil Nadu	4556	1452	1
26	Tripura	91	98	1
27	Uttar Pradesh	233	9363	40
28	Uttra Khand	3287	124	1
29	West Bengal	2402	4444	2
30	National Average	26150	335206	13.00

Statewise Adequacy of Libraries in terms of Journals per Teacher

In all the states of the country except Punjab the availability of journals per teacher follows the same trend as among the students. It is clear that Delhi has 138 journals per teacher followed by Uttar Pradesh (40 journals per teacher), Maharashtra (39

journals per teacher), Nagaland (22 journals per teacher), Chattisgarh (15 journals per teacher), and Jharkhand (12 journals per teacher). All other states have less than 10 journals and most of them have one or less than one journal per teacher.

The foregoing discussion provides an assessment on the availability and adequacy of study materials of libraries in different states of the country. Large regional disparities exist across the country which requires correction.

CHAPTER 4

PART-I

Students' Enrolment

Students are the vital component of higher education. India has a large segment of younger population who are likely to enter into the portals of colleges and universities. This chapter attempts to present the pattern of enrolment of students by university type, faculties, social categories and states for the year 2007-08. A similar exercise has been done for the enrolment in affiliated colleges. The data used for discussing the patterns have been collected by the Information and Statistics Bureau of University Grants Commission through canvassing a schedule in almost 176 Universities. If we examine the faculty wise distribution of the samples, the number of universities which have responded is very limited. Taking all the faculties together at the aggregated level, the sample consists of 15 Central, 73 State and 10 Deemed universities which have provided the information relevant in their respective faculties. The total sample thus, is of 98 universities but number is variable and as a matter of fact, it cannot be uniform due to the variations in their sizes as well as the number of universities in all the states of the country. There are states with only a single university. The state wise number of sample universities has been given in table 4.5.

Table: 4.1

Level wise Enrolment by University Types (Aggregated) 2007-08

(Figures are in percentage)

University Type	Graduate	PG	M.Phil	Ph.D	D/C	Total
Central	4.25	9.60	29.76	16.83	13.99	6.58
State	91.94	84.90	65.90	79.31	64.08	88.40
Deemed	3.81	5.50	4.34	3.86	21.93	5.02
Total	100	100	100	100	100	100

The table 4.1 shows the pattern of student enrolment by academic levels and by the university types during 2007-08. It is evident that the largest share of enrolment of students is being handled by the state universities at all levels. The State universities have 88.40 percent of the total students enrolled at all levels while the share of the Central and Deemed universities is 6.58 and 5.02 percent of the total enrolment respectively. The share of state univetsities is much larger at the graduate and post graduate levels. Almost 92 percent of the enrolment in the graduate and about 85% of the enrolment at the post graduate level is being handled by the State universities as compared to 4.25 % at the graduate level and 9.60% at the post graduate level by the Central and 5.50% and 4.34% at the graduate and post graduate levels respectively by the Deemed universities. The Central Universities enroll higher proportion of students at the M.Phil and Ph.D levels.

The share of Central universities in enrolment at M.Phil level is 29.76% and at the Ph.D level it is 16.83% of the total enrolment. The proportion of enrolment in M.Phil and PhD levels by the Deemed universities remains low i.e. 3.34 and 3.86 percent respectively. The share of enrolment at the Diploma /Certificate level is higher in the Deemed universities as compared to Central universities but much lower as compared to the State universities.

Faculty wise, level wise Student Enrolment in Central Universities:-

The student enrolment in the faculty of Arts of Central Universities is higher than in all the other faculties. The table 4.2 shows that the Faculty of Arts accounts for 33.65 % of the total students enrolled in all the graduate classes. It is followed by faculty designated as "others" (16.97%) and faculty of Science (14.30%).The faculty of Engg/Tech. is another faculty which accounts for 12.58% of the enrolment at the graduate level. Thus, faculties of Arts, Others, Science and Engg/Tech. together account for 77.50% of the total enrolment at the graduate level in the Central universities. The faculty of Arts and the other subjects who are closely related to Humanities and Social Sciences together enroll almost 51% of the students at the graduate level. This fact reflects that the Humanities and Social Sciences are still important subjects in the Central universities at the graduate level.

Table: 4. 2

Faculty wise and Level wise Students Enrolment in Central Universities 2007-08

Faculty	UG	%	PG	%	M.Phil	%	Ph.D	%	D/C	%
Arts	10427	33.65	10166	47.78	3850	78.16	2208	46.68	1367	20.09
Science	4431	14.30	5251	24.68	896	18.18	1393	29.45	111	1.63
Computer.Sc	601	1.94	758	3.56	Nil	Nil	35	0.74	Nil	Nil
Commerce	1434	4.63	922	4.33	59	1.20	125	2.64	80	1.18
Management.	116	0.37	1112	5.23	Nil	Nil	110	2.33	53	0.78
Education	921	2.97	417	1.96	54	1.10	89	1.88	75	1.10
Engg/Tech.	3899	12.58	955	4.49	27	0.55	195	4.12	1470	21.61
Law	1793	5.79	168	0.79	Nil	Nil	72	1.53	Nil	Nil
Medicine	1696	5.47	416	1.95	2	0.04	39	0.82	99	1.46
Agriculture	411	1.33	334	1.57	6	0.12	157	3.32	Nil	Nil
Others	5254	16.97	777	3.65	32	0.65	307	6.49	3548	52.15
otal	**30983**	**100**	**21276**	**100**	**4926**	**100**	**4730**	**100**	**6803**	**100**

Note: Data for the Faculty of Vet. Science have not been reported in Central Universities

The enrolment in the faculties of Arts and Science at the PG level is the highest in the Central universities accounting for 47.78% and 24.68% respectively of the total P.G. enrolment in the Central universities (table 4.2). Thus, the enrolment in these two faculties together accounts for almost three fourth of the total enrolment in all the faculties of Central universities. Likewise, 96% of the enrolment at M.Phil level pertains to the Arts and Science faculties. No enrolment has been reported in the faculties of Computer Science, Management and Law by the Central universities at the M.Phil level. Except for Commerce and Education faculties, all other faculties have less than 1 percent of the total enrolment of the Central Universities at the M.Phil level. The highest proportion of the enrolment at the PhD level has been recorded in the Arts faculty (46.68%) followed by Science faculty (29.45%) which means that these two faculties together account for 76.13% of the total enrolment of the Central Universities at the Ph.D level. The subjects under the rubric, "Others"

have recorded higher enrolment (6.49%) than all other faculties except Arts and Science. The faculty designated as "Others" includes many professional courses such as Social Work, Library Science, Music and Performing Arts etc has more than 50 % of the total enrolment in the Central Universities at the Diploma and Certificate level followed by the faculty of Engineering & Technology (21.61%) and Arts (20.09%). Thus, the three faculties account for about 94% of the total enrolment in the Central Universities at the Diploma and Certificate level. The faculties of Computer Sc/App., Law and Agriculture/Vet Sc. have not reported any enrolment at the Diploma/Certificate levels in the Central Universities.

Faculty wise, Level wise Student Enrolment in the State Universities:

The table 4.3 shows that the general pattern of enrolment in the sample State universities almost conforms to the pattern of the Central universities with little variations. The faculties of Arts, Commerce and Sciences respectively have reported higher enrolment at the graduate level. These three faculties of the sample State universities account for 78.63% of the total enrolment at the graduate level. The faculty of Engineering/Technology stands fourth in terms of enrolment with 9.08% of the total enrolment of the state universities at the graduate level. The enrolment in the State universities at the Post Graduate level is different from the Central universities. Though, the Arts and Science faculties have attracted higher enrolment as the enrolment therein is 38.76 and 22.40 percent respectively, the faculties of Commerce, Engineering/Technology, "Others" and Management have almost the same proportion in total enrolment which varies between 6% and 6.60% of the total enrolment at the Post graduate level. Together, these faculties account for about 88% of the total enrolment at the post-graduate level in the State universities.

No enrolment of students has been reported in the faculties of Agriculture and law at the M.Phil level in the State universities. About 51% of the enrolment at the M.Phil level has been reported in the Faculty of Arts followed by Faculty of Science (25.94%). The enrolment in Education, Commerce and others faculties at the M.Phil level, has been reported to be 6.28, 6.18 and 5.5% respectively. Thus, the five faculties i.e. Arts, Science, Education, Commerce, and "others" together account for about 95% of the total enrolment of the State universities at the M.Phil level. There is a shift in the pattern of enrolment at the Ph.D level.. The highest proportion of the enrolment has been reported in the Faculty of Science (33.88%) followed by Faculty of Arts (27.80% and Faculty of Engineering and Technology (24.16%).

Table: 4.3

Faculty wise and Level wise Students Enrolment in sample State Universities 2007-08

Faculty	UG	%	PG	%	M.Phil	%	Ph.D	%	D/C	%
Arts	321969	47.98	72897	38.76	5533	50..72	6199	27.80	14667	47.07
Science	97524	14.53	42133	22.40	2830	25..94	7552	33.88	2606	8.36
Com.Sci	19099	2.85	84.72	4.50	386	3.554	194	0.87	1346	4.32
Commerce	108191	16.12	12411	6.60	674	6.118	821	3.68	648	2.08
Manage.	20767	3.09	11603	6.17	98	0.990	511	2.29	592	1.90
Education	10070	1.50	8290	4.41	685	6.228	742	3.33	469	1.51

Engg/Tech.	60899	9.08	12167	6.47	89	0.82	5386	24.16	6464	20.74
Law	20497	3.05	5665	3.01	13	0.12	399	1.79	1561	50.1
Medicine	6227	0.93	2473	1.31	Nil	Nil	103	0.46	57	0.18
Agri+Vet	1545	0.23	186	0.10	Nil	Nil	109	0.48	Nil	Nil
Others	4252	0.63	11775	6.26	600	5.50	280	1.26	2751	8.83
Total	**671040**	**100**	**188072**	**100**	**10908**	**100**	**22296**	**100**	**31161**	**100**

Note: No enrolment in the faculty of Vet. Science has been reported in the state universities

These three faculties have enrolled 85.84% of the total students of State universities at the Ph.D.level. The enrolment at this level is less than 1% of the total enrolment in the faculties of Computer Sc/App., Medicine, and agriculture.

The pattern of enrolment at the Diploma and certificate level is similar to the pattern of the enrolment at the graduate level in the Faculty of Arts. The Faculty of Arts has recorded the highest enrolment of 47.07 percent at the Diploma and Certificate levels followed by the faculty of Engineering/Technology (20.74%).The two faculties which occupy third and the fourth position in enrolment at the Diploma and Certificate level are "Others" (8.83%) and the faculty of Science (8.36%) but as is evident from the figures there exists a large difference in the proportions of enrolment in the Faculty of Arts and the faculties which follow. The two other faculties which can be mentioned are the faculty of Law and the faculty of Computer Science/ Application.

Faculty wise, Level wise Student Enrolment in Deemed Universities:

The Deemed Universities, as expected, present a different pattern of student enrolment from the Central and State universities. The general expectation is that Deemed universities lay greater emphasis on introducing professional courses and attract students on that count rather than imparting instructions in the traditional subjects as in the case of Central and State universities. The data presented in the table 4.4 reflects this trend to certain extent. The highest proportion of enrolment at the graduate level has been recorded by the Faculty of Computer Science/App. (38.34%) followed by the faculty of Arts (25.88%).The faculty of Engineering /Technology has also recorded enrolment of 12.59% of the total enrolment at the graduate level which is more than the enrolment at this level in the State universities but almost equal to the enrolment in Central universities. The pattern got reversed at the Post Graduate level. The highest enrolment (31.58%) has been reported in the faculty of Arts followed not by Computer Science/App. but by the Faculty of Management (26.61%).The other two faculties which have recorded moderate level of enrolment are Computer Science/App. (12.29%) and Science (11.81%). Thus, the four faculties mentioned above account for almost 82.29% of the total enrolment at the Post graduate level in the Deemed universities.

No enrolment at the M.Phil level in the Deemed universities has been reported in the faculties of Engineering/Technology, Law, Medicine, Agriculture and Veterinary Science. The faculties in which significant enrolment has been reported are the faculties of Arts and Science with enrolment of 61.34 and 28.65 percent respectively at the M.Phil level. Thus, together these two faculties account for almost 90% of the

total enrolment at M.Phil level. In fact, the proportion of M.Phil enrolment in the total enrolment in all the faculties of the Deemed universities is very insignificant (1.36%).

Table: 4.4

Faculty wise and Level wise Students Enrolment in sample Deemed Universities 2007-08

Faculty	UG	%	PG	%	M.Phil	%	Ph.D	%	D/C	%
Arts	7195	25.88	3845	31.58	441	61.34	616	56.73	3064	28.73
Science	1726	6.21	1438	11.81	206	28.65	202	18.60	278	2.61
Com.Sci	10661	38.34	1497	12.29	10	1.39	45	4.14	380	3.56
Commerce	1411	5.07	903	7.42	18	2.50	40	3.68	Nil	Nil
Manage.	514	1.85	3240	26.61	1	0.14	58	5.34	15	0.14
Education	1643	5.91	724	5.95	11	1.53	58	5.34	Nil	Nil
Engg/Tech.	3502	12.59	83	0.68	Nil	Nil	54	4.97	6190	58.03
Medicine	263	0.95	275	2.26	Nil	Nil	Nil	Nil	Nil	Nil
Others	891	3.20	171	1.40	32	4.45	13	1.20	739	6.93
Total	**27806**	**100**	**12176**	**100**	**719**	**100**	**1086**	**100**	**10666**	**100**

Note:-Data for the Faculties of Agriculture, Vet. Science and Law in Deemed universities are not available.

Though, the faculties of Law, Medicine, Agriculture and Veterinary Science have not reported any enrolment at the Ph.D level in the Deemed Universities, the distribution in reporting faculties is a little better than the M.Phil level. The highest enrolment at the Ph.D level has been reported by the faculty of Arts which accounted for 56.73% of the total students enrolled at the Ph.D level in Deemed universities. The Faculty of Science reported the enrolment of 18.60% of the total Ph.D enrolment. The enrolment in rest of the faculties has ranged between 3.68% to 5.34% of the total enrolment at the Ph.D level.

The enrolment in the faculties of Commerce, Education, Law, Medicine, Agriculture and Veterinary Science of the Deemed Universities at the Diploma and Certificate level has not been reported. More than 55% (58.03% to be precise) of the total enrolment at the Diploma and Certificate level has been reported in the Faculty of Engineering/Technology followed by the Faculty of Arts (28.73%).The two faculties accounted for 86.76% of the total enrolment at Diploma and Certificate level.

State wise, Level wise Student Enrolment in Sample Universities:

The sample size of the universities is not uniform as their number varies from state to state. The table 4.5 provides an idea of the state wise sample universities. The largest numbers of sample universities which have responded to the questionnaires are from Andhra Pradesh. There are 11 states from where the single universities have reported data. Eight samples are there from Maharashtra and Tamil Nadu. The absolute figures vary because of the variations in the number of samples.

Table: 4.5

State wise sample universities 2007-08

States	No of Sample Univ	States	No. of Sample Univ	States	No of Sample Univ.	States	No of Sample Univ.
Andhra Pradesh	11	Gujarat	06	Madhya Pradesh	06	Puducherry	01
Arunachal Pradesh	01	Haryana	03	Maharashtra	08	Rajasthan	03
Assam	03	Himachal Pradesh	01	Manipur	01	Tamil Nadu	08
Bihar	03	J & K	01	Meghalaya	01	Tripura	01
Chattisgarh	02	Jharkhand	01	Mizoram	01	Uttar Pradesh	07
Delhi	02	Karnataka	06	Orissa	06	Uttrakhand	01
Goa	01	Kerala	05	Punjab	03	West Bengal	05

Note: The data for Nagaland and Sikkim are not available

The table 4.6 presents the state wise and level wise enrolment in 2007-08 from which all the tables for different levels have been derived. The table 4.6 shows the percentage share of student enrolled at different levels within the states of the country.

State wise enrolment at the Undergraduate Level

Even a cursory look at the table 4.6 reveals the fact that, almost in all the States of the country, there is preponderance of Undergraduate teaching except Delhi where higher enrolment has been reported at the M.Phil level. One of the plausible reasons may be the fact that University of Delhi does not figure in the samples because the university had not responded to the questionnaire.

Table: 4. 6

Level wise Students Enrolment in Different States 2007-08

S.N.	State	U/G	P/G	M.Phil	Ph.D	D/C	Total
1	Andhra Pradesh	35.89	48.56	5.78	4.61	5.16	100
2	Arunachal Pradesh	5.99	88.01	1.29	4.71	0	100
3	Assam	18.48	59.36	5.34	12.32	4.5	100
4	Bihar	87.2	12.24	0	0.56	0	100
5	Chattisgarh	70.65	24.6	1.84	0.84	2.07	100
6	Delhi	16.58	28.44	51.23	0.36	3.39	100
7	Goa	NA	93.66	0	5.05	1.29	100
8	Gujarat	57.27	32.03	1.7	1.51	7.49	100
9	Haryana	45.18	43.75	3.25	4.98	2.84	100
10	Himachal Pradesh	29.92	32.67	3.58	29.86	3.97	100
11	Jammu & Kashmir	4.95	78.49	6.38	7.94	2.24	100
12	Jharkhand	95.47	3.58	0.06	0.89	0	100

13	Karnataka	80.00	17.27	0.6	0.92	1.21	100
14	Kerala	64.83	23.15	0.5	1.13	10.39	100
15	Madhya Pradesh	75.98	21.18	0.82	1.09	0.93	100
16	Maharashtra	77.05	15.28	0.74	0.71	6.22	100
17	Manipur	DNA	57.65	3.85	37.28	1.22	100
18	Meghalaya	13.05	63.86	1.23	19.06	2.8	100
19	Mizoram	77.54	14.78	6.62	1.06	0	100
20	Orissa	2.31	41.69	6.46	3.06	46.48	100
21	Puducherry	DNA	78.35	10.46	10.65	0.54	100
22	Punjab	52.94	37.95	3.01	1.43	4.67	100
23	Rajasthan	46.13	35.52	1.55	1.37	15.43	100
24	Tamil Nadu	33.89	36.03	4.15	18.82	7.11	100
25	Tripura	10.75	83.41	0	1.15	4.69	100
26	Uttar Pradesh	54.72	25.02	1.04	5.4	13.82	100
27	Uttra Khand	76.99	20.01	0	2.36	0.64	100
28	West Bengal	85.25	13.26	0.33	0.91	0.25	100
29	National Average	69.59	21.57	1.56	2.61	4.67	100

Note: Data for Nagaland and Sikkim have not been reported. Goa, Manipur and Puducherry have not reported data pertaining to UG enrolment

Almost 50% percent of the states have more than 50% of their total enrolment confined to undergraduate programmes. There is no clear regional pattern on the basis of UG level enrolment emerging in the distribution of the states.

Table: 4.6 (a)

Distribution of States under Different Enrolment Categories at the UG Level 2007-08

Percentage range	States	Nos.
More than 80	Jharkhand, Bihar, West Bengal, Karnataka	4
60—80	Mizoram , Maharashtra, Uttrakhand, Madhya Pradesh, Chattisgarh, Kerala	6
40-60	Gujarat, Uttar Pradesh, Punjab, Rajasthan, Haryana	5
20-40	Andhra Pradesh, Tamil Nadu, Himachal Pradesh	3
Less than 20	Assam, Delhi, Meghalaya, Tripura, Arunachal, Jammu & Kashmir, Orissa	7
Data N .A.	Goa, Manipur, Puducherry	3

The table 4.6 (a) shows that 4 states have more than 80 percent of their total enrolment confined to the UG level while 6 states fall in the category of 60 to 80 %. 5 States lie in the enrolment category of 40 to 60 % at the UG level. Delhi has recorded exceptionally low percentage (16.58%) of enrolment at the UG level which has happened due to the fact that the two large universities imparting education at UG

level i.e. Delhi University and Jamia Millia Islamia have not responded by sending their data and consequently have been left out of the state sample. Except for Mizoram, the other states of Northeast such as Assam, Meghalaya, Tripura and Arunachal Pradesh have reported low enrolment at the UG level ranging between 6 to 18 percent. Thus, there is preponderance of Undergraduate teaching in more than 50% of the states of the country.

State wise Enrolment at the PG Level

The pattern of State wise enrolment at the PG level is very different from the pattern of UG level enrolment. The highest proportion of enrolment at the PG level has been recorded in the State of Goa (93.66%) and the lowest in Jharkhand (3.58%). The distribution of the states in different percentage categories of enrolment has been presenting in Table 4.6(b). It is clear that majority of the states fall in the category of 20 to 40% of their total enrolment. The states of Goa, Arunachal Pradesh and Tripura have higher percentage at the PG level (more than 80%) enrolment to the total enrolment in the respective states. There is no clear cut regional pattern in the PG level enrolment also as in the case of UG level.

Table: 4.6 (b)
Distribution of States under Different Enrolment Categories at the PG Level 2007-08

Percentage range	States	Nos.
More than 80	Goa, Arunachal Pradesh, Tripura	3
60–80	J&K, Puducherry, Meghalaya	3
40–60	Assam, Manipur, Andhra Pradesh, Haryana, Orissa,	5
20–40	Punjab, Tamil Nadu, Rajasthan, Delhi, U.P.,Chattisgarh, Madhya Pradesh, Uttrakhand, Gujarat, Himachal Pradesh	11
Less than 20	Karnataka, Maharashtra, Mizoram, Bihar, West Bengal, Jharkhand	6

Note: The data for Nagaland and Sikkim are not available.

State wise enrolment at the M.Phil and Ph.D Levels

The sample universities in four states i.e. Bihar, Goa, Tripura and Uttrakhand have not reported the enrolment at M.Phil level (Table 4.6 (c)). The data for Nagaland and Sikkim are not available. The highest enrolment at M.Phil level has been reported in Delhi which is 51.23% of the total enrolment in Delhi at all the levels. This is exceptionally high as compared to other states.

Table: 4.6 (c)

Distribution of States according to their percentage range of enrolment to total enrolment at the M.Phil level 2007-08

Percentage range	States	No. of States
8—12	Puducherry	1
4—8	Mizoram, Orissa, J&K, Andhra Pradesh, Assam, Tamil Nadu	6
1—4	Arunachal Pradesh, Chattisgarh, Gujarat, Meghalaya, Haryana, Himachal Pradesh, Manipur, Punjab, Rajasthan, Uttar Pradesh	10
Less than 1	Jharkhand, Karnataka, Kerala, M.P. ,Maharashtra, West Bengal	6
V. high (> 50%)	Delhi	1
No data reported	Bihar, Goa, Tripura, Uttrakhand	4

Note: Data for Nagaland and Sikkim are not available.

In all the other state the enrolment at the M.Phil level varies between 0.06% in Jharkhand to 10.46% in Puducherry of the total enrolment in the respective states. The states of Mizoram, Orissa, J&K and Andhra Pradesh stand out with M.Phil enrolment of 6.62,6.46 6.38 and 5.78 percent respectively. In majority of states, the M.Phil enrolment is pretty low. A large number of states are clustered in the enrolment category of 1 to 4 percent.12 states have reported enrolment at the M.Phil level lower than the national average which itself is very low. The table 4.6 (d) shows the distribution of states according to the percentage category of the enrolment at the Ph. D. level to the total enrolment in each state.

Table: 4.6 (d)

Distribution of States according to their percentage range of enrolment to total enrolment at the Ph.D level 2007-08

Percentage range	States	No. of states
20 and above	Manipur, Himachal Pradesh	2
16-20	Meghalaya, Tamil Nadu	2
12-16	Assam	1
8-12	Puducherry	1
4-8	Goa, Haryana, J&K, Uttar Pradesh, Andhra Pradesh, Arunachal Pradesh	6
1-4	Gujarat, Kerala, Madhya Pradesh, Mizoram Orissa, Punjab, Rajasthan, Tripura, Uttrakhand	9
Less than 1	Bihar, Chattisgarh, Delhi, Jharkhand, Karnataka, Maharashtra, West Bengal	7

Note: Data are not available for Nagaland and Sikkim

It is clear from the table 4.6(d) that two states, viz: Manipur (37.28%) and Himachal Pradesh (29.86%) stand out in the enrolment at the Ph.D. level. Meghalaya (19.06%) and Assam (12.32%) have also recorded comparatively higher proportion of

enrolment at the Ph.D level. 14 state have lower enrolment than the national average which is 2.61 percent for Ph.D enrolment.

Enrolment at the Diploma and Certificate Level:

The highest proportion of enrolment at the D/C level has been reported in Orissa (46.48% of the total in the State) which is the highest, followed by Rajasthan (15.43%), Uttar Pradesh (13.82%) and Kerala (10.39%). (Table 6 (e))The other states where the enrolment at the D/C level is more than 5% of their enrolment are Gujarat (7.49%), Tamil Nadu (7.11%), Maharashtra (6.22%) and Andhra Pradesh (5.16%). The data are not available for Arunachal Pradesh, Bihar, Jharkhand and Mizoram. Four states have less than one percent of their total enrolment at the D/C level and these are Madhya Pradesh, Puducherry, Uttrakhand and West Bengal. Mostly the D/C level courses have been introduced as professional courses where the employability of the courses is higher than the general courses.

Table: 4.6 (e)

Distribution of states according to the percentage range to total enrolment at D/C level 2007-08

Percentage range	States	No. of states
12 to 16	Rajasthan, Uttar Pradesh	2
8 to 12	Kerala	1
4 to 8	Gujarat, T.N, Maharashtra, Andhra P,Tripura, PB, Assam	7
1 to 4	H.P.,Delhi,Haryana,Meghaya,J&K,Chattisgarh, Goa, Manipur,Karnataka	9
Less than 1	Madhya Pradesh, Puducherry, Uttrakhand, West Bengal	4

Table: 4.7

State wise and Level wise share in the total Enrolment in Sample Universities of the country 2007-08

S.L	State	UG	PG	M.Phil	Ph.D	D/C	Total
1	Andhra Pradesh	1.75	7.62	12.53	5.99	3.74	3.38
2	Arunachal Pradesh	0.01	0.33	0.07	0.15	0	0.08
3	Assam	0.14	1.41	1.76	2.42	0.51	0.51
4	Bihar	10.11	4.58	0.00	1.74	0	8.07
5	Chattisgarh	0.65	0.73	0.76	0.21	0.28	0.64
6	Delhi	0.15	0.80	19.98	0.09	0.44	0.61
7	Goa	0.00	0.45	0.00	0.20	0.03	0.10
8	Gujarat	4.06	7.32	5.37	2.86	7.91	4.93
9	Haryana	1.13	3.54	3.62	3.33	1.06	1.74
10	Himachal Pradesh	0.30	1.04	1.57	7.86	0.58	0.69
11	Jammu & Kashmir	0.03	1.39	1.56	1.16	0.18	0.38
12	Jharkhand	6.10	0.74	0.17	1.51	0	4.45
13	Karnataka	8.96	6.24	2.99	2.73	2.02	7.79
14	Kerala	5.34	6.15	1.82	2.48	12.77	5.73
15	Madhya Pradesh	11.44	10.30	5.54	4.37	2.09	10.49
16	Maharashtra	23.71	15.18	10.21	5.77	28.59	21.42
17	Manipur	0.00	0.65	0.60	3.49	0.06	0.24
18	Meghalaya	0.05	0.78	0.21	1.93	0.16	0.26

19	Mizoram	1.04	0.64	3.97	0.38	0	0.94
20	Orissa	0.03	2.03	4.35	1.24	10.48	1.05
21	Puducherry	0.00	0.72	1.32	0.80	0.02	0.20
22	Punjab	0.71	1.64	1.80	0.51	0.94	0.93
23	Rajasthan	1.26	3.14	1.89	1.00	6.30	1.91
24	Tamil Nadu	2.20	7.55	12.02	32.59	6.89	4.52
25	Tripura	0.03	0.68	0.00	0.08	0.18	0.18
26	Uttar Pradesh	3.70	5.45	3.13	9.73	13.93	4.70
27	Uttra Khand	0.94	0.79	0.00	0.77	0.12	0.85
28	West Bengal	16.16	8.11	2.76	4.61	0.72	13.21
29	Total	100	100	100	100	100	100

Note: Data for Nagaland and Sikkim have not been reported

State wise and Level wise Enrolment in the country

The table 4.11 shows the enrolment in states as proportion to the total enrolment in all the sample universities at the country level. Hence, this exercise highlights the position of the respective states with reference to the country as a whole. The pattern of enrolment at the state level as proportion to the total enrolment in the country is affected by the number of sample universities from each state. The number of sample universities from each state is not uniform, therefore, the enrolment at each level follows a different pattern.

Enrolment at the Under Graduate Level

The percentage of total enrolment in a state to the total enrolment at UG level varies from 0.01% in Arunachal Pradesh to 23.71% in Maharashtra. The table 4.7 (a) shows the distribution of states in different percentage categories of enrolment at the country level.

Table: 4.7 (a)

Distribution of states according to the percentage range to the total enrolment at the UG level in the country 2007-08

Percentage range	States	Number of states
More than 20	Maharashtra	1
15 to 20	West Bengal,	1
10 to 15	Madhya Pradesh, Bihar	2
5 to 10	Karnataka , Jharkhand, Kerala	3
1 to 5	Gujarat, Uttar Pradesh, Tamil Nadu, Andhra Pradesh, Rajasthan, Haryana, Mizoram	7
Less than 1	Arunachal Pradesh, Assam, Chattisgarh, Delhi, Himachal Pradesh, J&K, Meghalaya, Orissa, Punjab, Tripura , Uttrakhand	11
Not reported	Goa, Manipur, Puducherry	3

Note: Data for Nagaland and Sikkim are not available.

Maximum numbers of states have clustered in the percentage range of less than 1 %. Maharashtra and west Bengal, taken together, account for 61.42 % of the enrolment at the UG level while these two states along with Madhya Pradesh and Bihar account for 72.97% of the total UG level enrolment in the country as a whole.

Enrolment at the PG level

The sample universities in all the 28 states have reported enrolment at the PG level and no data is available for two states i.e. Nagaland and Sikkim. The enrolment at PG level varies from 0.33% in Arunachal Pradesh to15.18% in Maharashtra. The fact to be noted is that Maharashtra leads all other states at both, he UG as well as PG level enrolment. The table 4.7(b) shows the distribution of states according to their share in total enrolment at the country level.

Table: 4.7(b)

Distribution of states according to the percentage range to the total enrolment at the PG level in the country 2007-08

Percentage range	States	No. of States
More than 12	Maharashtra	1
8 to 12	Madhya Pradesh, West Bengal	2
4 to 8	Andhra Pradesh , Tamil Nadu, Gujarat, Karnataka, Kerala, Uttar Pradesh, Bihar	7
1 to 4	Haryana, Rajasthan, Orissa, Assam, J&K, Himachal Pradesh, Punjab	7
Less than 1	Arunachal Pradesh, Chattisgarh, Delhi, Goa, Jharkhand, Manipur, Meghalaya, Mizoram, Puducherry, Tripura, Uttrakhand	11

It is clear from the table that the maximum number of states (11) have clustered in the percentage range of less than 1%.Out of these 11 states, 5 belong to Northeast where all the states, except Assam, have only one university as sample hence, their share in the total enrolment at the country level is very low. The states of Maharashtra, West Bengal and Madhya Pradesh have claimed higher share of enrolment at the PG level.

Enrolment at the Research level:

The degrees of M. Phil and Ph.D. are research degrees for which enrolment is done after post graduation. Out of the 28 states for which data pertaining to enrolment at various levels is available, four states viz. Bihar, Goa, Tripura and Uttrakhand have not reported enrolment at the M.Phil level. The table (4.7(c) showing the distribution of states in percentage ranges reveals that Delhi has the largest share (19.98%) of the total enrolment at the M.Phil level in the country.

Table: 4.7 (c)

Distribution of States according to the percentage to the total enrolment at M.Phil level in the country 2007-08

Percentage range	States	No. of states
More than 16	Delhi	1
12 to 16	Andhra Pradesh, Tamil Nadu	2
8 to 12	Maharashtra	1
4 to 8	Madhya Pradesh , Gujarat, Orissa ,	3
1 to 4	Mizoram, Haryana, Uttar Pradesh, Karnataka, Kerala, West Bengal, Rajasthan, Punjab, Assam, Himachal Pradesh , J&K, Puducherry	12
Less than 1	Arunachal Pradesh, Chattisgarh, Jharkhand, Manipur, Meghalaya	5
Not reported	Bihar, Goa, Tripura, Uttrakhand	4

The states of Delhi, Andhra Pradesh, Tamil Nadu and Maharashtra account for almost 55% of the total enrolment at the M.Phil level in the country. A large number of states (12) have clustered in the percentage range of 1 to 4 percent.

All the sample universities in 28 states which have responded to the questionnaire have reported enrolment at the Ph.D level and their share varies from 0.15% in Arunachal Pradesh to 32.59% in Tamil Nadu. The distribution of states in different categories is clear from table 4.7(d).

Table: 4.7 (d)

Distribution of states according to the percentage to the total enrolment at the Ph.D level in the country 2007-08

Percentage range	States	No. of states
More than 8	Uttar Pradesh	1
4 to 8	Himachal Pradesh, Andhra Pradesh, Maharashtra, West Bengal, Manipur, Madhya Pradesh	6
1 to 4	Haryana, Gujarat, Karnataka, Kerala, Assam, Meghalaya, Bihar, Jharkhand, Orissa, J&K, Rajasthan	11
Less than 1	Arunachal Pradesh, Chattisgarh, Delhi, Goa, Mizoram, Puducherry, Punjab, Tripura, Uttrakhand	9
Exceptionally High	Tamil Nadu	1

Note: Data for Nagaland and Sikkim is not available.

The enrolment at Ph.D level is exceptionally high in Tamil Nadu (32.59%) in the country followed by Uttar Pradesh but the gap in the share of the two states is pretty large. Maximum number of states (11) has clustered in the percentage range of 1 to 4%. Himachal Pradesh (7.86%), Andhra Pradesh (5.99%) and Maharashtra (5.77%) have recorded more than 5% of the total enrolment at the Ph.D level in the country. 9 states have less than 1 percent of the enrolment at Ph.D level to the total enrolment in the country.

Enrolment at Diploma /Certificate levels

Diploma and Certificate courses have generally been introduced in the courses which have larger employability to those who have obtained the degrees up to graduation level. These courses empower these students by skill improvement in specialized areas. The table 4.7 (e) shows the distribution of states according to the percentage categories of enrolment in Diploma/Certificate level courses to the total enrolment in the country.

Table: 4. 7 (e)

Distribution of states according to the percentage to the total enrolment at Diploma/Certificate level in the country 2007-08

Percentage range	States	No. of states
Very high (28.59%)	Maharashtra	1
12 to 16	Uttar Pradesh, Kerala	2
8 to 12	Orissa	1
4 to 8	Gujarat, Tamil Nadu, Rajasthan	3
1 to 4	Andhra Pradesh, Madhya Pradesh, Karnataka, Haryana	4
Less than 1	Assam, Chattisgarh, Delhi, Goa, Himachal Pradesh, J&K, Manipur, Meghalaya, Puducherry, Punjab, Tripura, Uttrakhand, West Bengal	13
Data not reported	Arunachal Pradesh, Bihar, Jharkhand , Mizoram	4

Note: Data for Nagaland and Sikkim are not available.

It is clear from the table 4.7(e) that Maharashtra has exceptionally high enrolment in Diploma/Certificate courses. The enrolment at the diploma/Certificate level is higher than that at the UG level. The states of Maharashtra, Uttar Pradesh, Kerala and Orissa, together, account for about 66% of the total enrolment at the Diploma/Certificate level in the country. Almost 50% of the states which have responded to the questionnaire have less than 1 percent of their enrolment at the Diploma/Certificate level of the total enrolment in the country.

State wise and Social Category wise Enrolment

The state wise and social category wise pattern of enrolment has been discussed in two ways. Firstly, the status of the student enrolment belonging to different social categories has been understood by their representation in the enrolment within the state (Table: 4.8).This table shows the category wise enrolment within the state and the share of SC and ST categories in the population of the state as well as enrolment has been arranged in the rows with total in each state being 100%. Secondly, the pattern of the enrolment has been looked at from the status of the social categories in each state with reference to the country as a whole. (Table 4.9).In this table the state wise share of each social category has been calculated as proportion of that category in the country and the total of the column is 100%.

State Wise Pattern of Enrolment of SC Students

The table 4.8 reveals that West Bengal has the highest enrolment of SC students i.e. 27.52 % of the total enrolment in the state while the share of SC population to total population in the state is 23.02% followed by Tamil Nadu (21.83%), though the share of SC population is 19 % and Uttrakhand (20.29 %) with the share of SC population of 17.87 percent. No enrolment of SC students has been reported in Arunachal Pradesh. Mizoram has the lowest proportion of SC enrolment. The demographic profile of northeastern states is such that the share of SC population in the total population is very low. The share of SC population in Arunachal Pradesh and

Meghalaya is 0.56 and 0.48 % respectively. Hence, the proportion of SC enrolment is invariably low in North east. It is expected that the enrolment of SC students in the Northeastern states will be low as the proportion of SC population is low but Tripura is an exception where the enrolment of Sc students is 18.12% of the total enrolment in the state where the share of SC population is also higher (17.37%). The other states, where the enrolment of SC students is very low are Goa (1.93%) and Jammu and Kashmir (2.32%) of the total enrolment with the share of SC population of 1.77% and 2.77% respectively. The States of Assam (8.82%) and Manipur with (6.20%) are comparable with Bihar (7.09%), Rajasthan (6.75%), Kerala (6.44%) and Gujarat (6.21%) as far as enrolment of SC students are concerned in the respective States as percentage to their total enrolment. As is evident from the table, majority of the states have not been able to fulfill the mandatory proportion of the enrolment in tune with the policy of affirmative action in case of deprived sections of the society.

Pattern of ST enrolment

The table 4.8 presents the state wise pattern of enrolment of ST student expressed as the proportion of the total enrolment in the state. The pattern of the ST students at the state level is much skewed. The highest proportion of enrolment of ST students to the total enrolment in States has been recorded in Mizoram (96.72%) followed by Arunachal Pradesh (81.0%) and Meghalaya (76.51%).The proportion of ST population to total population in these states is 94.46,64.22 and 85.94 percent respectively. The range of variation amongst the states is very large (Mizoram being the highest (96.72%) and Punjab being the lowest (0.34%).The other states where the enrolment of ST students as percentage to the total enrolment in the states are Manipur (24.1%), Tripura (19.81%) and Jharkhand (19.48%). The other states which have enrolment of ST students a little higher than the stipulated proportion are in Assam (9.72%), Madhya Pradesh (9.64%) and Chattisgarh (8.94). It is obvious that the proportion of ST students in the total enrolment in the states is higher in those states where the proportion of ST population is also higher.

Table: 4.8

State wise, Social Category wise Enrolment of Students 2007-08

States	% of SC population	SC enrol.	% of ST population	ST enrol.	OBC enrol.	Minority enrol.	PC enrol.	Gen. Category
Andhra Pradesh	16.19	15.75	6.59	4.94	28.85	2.30	1.53	46.63
Arunachal Pradesh	0.56	0.00	64.22	81.00	0.00	0.00	0.00	19.00
Assam	6.85	8.82	12.41	9.72	24.58	1.10	0.11	55.67
Bihar	15.72	7.09	0.91	0.42	17.41	5.38	0.15	69.55
Chattisgarh	11.61	17.48	31.76	8.94	36.78	0.00	0.00	36.80
Delhi	16.92	12.32	0	6.42	11.83	0.02	1.80	67.61
Goa	1.77	1.93	0.04	3.03	9.27	0.00	0.28	85.49
Gujarat	7.09	6.21	14.76	5.42	10.78	3.48	0.25	73.86
Haryana	19.35	16.85	0	1.20	19.99	0.29	0.68	60.99
Himachal Pradesh	24.72	13.79	4.02	6.57	0.00	0.06	0.32	79.26
J&K	7.59	2.32	10.9	0.00	0.62	0.00	0.88	96.18
Jharkhand	11.84	6.05	26.3	19.48	15.58	5.95	0.25	52.69
Karnataka	16.2	16.18	6.55	7.61	35.35	1.00	0.20	39.66

Kerala	9.81	6.44	1.14	0.83	11.99	1.89	0.26	78.59
Madhya Pra	15.17	10.90	20.27	9.64	20.33	2.01	0.20	56.92
Maharashtra	10.2	11.08	8.85	1.14	11.22	1.62	0.06	74.88
Manipur	2.77	6.20	34.2	24.1	17.86	0.00	0.12	51.72
Meghalaya	0.48	2.03	85.94	76.51	2.21	0.00	0.11	19.14
Mizoram	0	0.51	94.46	96.72	0.00	0.00	0.00	2.77
Nagaland	0	N.A	89.15	N.A	N.A	N.A	N.A	N.A
Orissa	16.53	9.10	22.13	5.23	2.17	0.13	0.22	83.15
Puducherry	16.19	19.07	0	2.97	0.00	0.00	0.00	77.96
Punjab	28.85	10.21	0	0.34	3.98	0.00	0.52	84.95
Rajasthan	17.16	6.75	12.56	5.19	3.82	0.14	0.04	84.06
Sikkim	5.02	N.A	20.6	N.A	N.A	N.A	N.A	N.A
Tamil Nadu	19.0	21.83	1.04	0.63	49.49	8.60	0.08	19.37
Tripura	17.37	18.12	31.05	19.81	15.56	1.91	0.11	44.49
Uttar Pradesh	21.15	9.05	0.06	1.86	5.82	0.08	0.62	82.57
Uttra Khand	17.87	20.29	3.02	2.84	7.58	0.00	0.00	69.29
West Bengal	23.02	27.52	5.5	1.31	1.55	0.07	0.02	69.53

Note: (i) N.A= Data not available

State Wise Pattern of Enrolment of OBC students:

The pattern of enrolment of OBC students within each state has been presented in the Table 4.8. The states of Arunachal Pradesh, Himachal Pradesh, Mizoram and Puducherry have not reported the enrolment of any OBC students. If we compare the enrolment of OBC students with the enrolment pattern of each state, Tamil Nadu has reported the highest enrolment (49.49%) followed by Chattisgarh (36.78%) and Karnataka (35.35%).The other states reporting substantial proportion of OBC enrolment are Andhra Pradesh (28.85%), Assam (24.58%), Madhya Pradesh (20.33%) and Haryana (19.99%).The lowest enrolment of OBC category has been reported by J&K (0.62%) of the total enrolment in the State. Except for Punjab (3.98%), Rajasthan (3.82%) Meghalaya (2.21%) and Orissa (2.17%), other states have moderate level of OBC enrolment as percentage to the total enrolment in the respective states. It is clear from the table that the highest share of the OBC enrolment has been recorded in Karnataka (17.09%) closely followed by Maharashtra (15.65%), Tamil Nadu (14.65%) and Madhya Pradesh (13.88%). These four states, together, account for 61.27% of the total OBC enrolment of the country. However, the largest cluster of states fall in less than 1 percent category of OBC enrolment at the country level.

State Wise Pattern of Enrolment of Students belonging to Minorities:

The enrolment of students belonging to minorities, as is evident from the table 4.8, is concentrated in a few states. Ten states have not reported enrolment of any minority student including J& K and Punjab. The reason for such a reporting is not very clear and nothing can be said based on conjecture. The absence of minority enrolment in Arunachal Pradesh, Manipur, Meghalaya and Mizoram is also difficult to be explained. However the highest share of minorities has been reported by Tamil Nadu (8.60%), Jharkhand (5.95%) and Bihar (5.38%) of the total enrolment of the respective states.

Pattern of Enrolment of Physically Challenged Students:

It is clear from the Table 4.8 that only two states i.e. Delhi and Andhra Pradesh have recorded more than 1 percent of enrolment of physically challenged students to their total enrolment. Five states viz., Arunachal Pradesh, Chattisgarh, Mizoram, Puducherry and Uttrakhand have not reported enrolment of any physically challenged student. 21 States have less than 1 percent of enrolment of physically challenged students to the total enrolment of the respective states.

State Wise Pattern of Enrolment of Students belonging to General Category:

The pattern of enrolment obtained as percentage of students belonging to General category to the total enrolment in the respective states varies from 2.77% in Mizoram and 96.18 percent in Jammu and Kashmir as shown in the table 4.19, some of the Northeastern states, such as Meghalaya (19.14%) and Arunachal Pradesh (19%) have reported lower enrolment of students belonging to General category. Whereas, Assam (55.67%) Manipur (51.72%) and Tripura (44.49%) have reported higher proportion of enrolment of this category. Except for Andhra Pradesh (44.63%), Karnataka (39.66%) and Chattisgarh (36.80%), rest of the states have more than 50% of their total enrolment given to the students of General category

Enrolment of Students Belonging to Different Social Categories at the State level with Reference to the Country:

The table 4.9 shows the pattern of enrolment of SC students in states as proportion of the total SC students enrolled at the country level. It is clear from the table that West Bengal and Maharashtra stand out with 27.68 and 18.08 percent of enrolment of SC students of the country. These two states make for 45.76% of the total SC enrolment in the country. If the proportions of Karnatak, Madhya Pradesh and Tamil Nadu are also added, it will make 70.61% of the total SC enrolment of the country.

Table: 4.9

Social Category wise Share of Each State in the Total Enrolment 2007-08

S. N	States	Total Enrolment	SC	ST	OBC	Minority	PC	General
1	Andhra Pradesh	3.44	4.13	3.28	6.47	3.76	23.2	2.51
2	Arunachal Pradesh	0.08	0.00	1.20	0.00	0.00	0.00	0.02
3	Assam	0.51	0.34	0.96	0.82	0.27	0.25	0.45
4	Bihar	8.06	4.35	0.66	9.14	20.61	5.26	8.77
5	Chattisgarh	0.64	0.85	1.10	1.53	0.00	0.00	0.37
6	Delhi	0.59	0.55	0.73	0.45	0.02	4.63	0.62
7	Goa	0.10	0.02	0.06	0.06	0.00	0.13	0.14
8	Gujarat	4.91	2.32	5.13	3.44	8.12	5.43	5.66
9	Haryana	1.89	2.42	0.44	2.46	0.26	5.64	1.80
10	Himachal Pradesh	0.69	0.72	-0.87	0.00	0.02	0.97	0.85
11	Jammu& Kashmir	0.37	0.06	0.00	0.02	0.00	1.43	0.55
12	Jharkhand	4.45	2.05	16.72	4.51	12.57	4.93	3.66

3	Karnataka	7.78	9.58	11.42	17.9	3.71	6.82	4.82
4	Kerala	5.12	2.51	0.83	4.00	4.60	5.85	6.29
5	Madhya Pradesh	10.49	8.71	19.52	13.88	10.00	9.22	9.33
6	Maharashtra	21.42	18.08	4.70	15.65	16.52	5.52	25.06
7	Manipur	0.24	0.12	1.14	0.28	0.00	0.13	0.20
8	Meghalaya	0.26	0.04	3.91	0.04	0.00	0.13	0.08
9	Mizoram	0.93	0.04	17.46	0.00	0.00	0.00	0.04
0	Nagaland	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	Orissa	1.05	0.73	1.06	0.15	0.06	1.01	1.36
2	Puducherry	0.20	0.29	0.11	0.00	0.00	0.00	0.24
3	Punjab	1.39	1.08	0.09	0.36	0.00	3.20	1.85
4	Rajasthan	1.90	0.98	1.91	0.47	0.12	0.34	2.50
5	Sikkim	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	Tamil Nadu	4.55	7.56	0.55	14.65	18.58	1.64	1.38
7	Tripura	0.18	0.24	0.67	0.18	0.16	0.08	0.12
8	Uttar Pradesh	4.70	3.24	1.68	1.78	0.17	12.84	6.06
9	Uttra Khand	0.85	1.31	0.46	0.42	0.00	0.00	0.92
0	West Bengal	13.21	27.68	3.34	1.34	0.45	1.35	14.35
1	Total	100.00	100.0	100.0	100.0	100.00	100.0	100.00

The table 4.9 (a) shows the distribution of states according to the percentage ranges of SC enrolment in the country. Majority of the states are located in two clusters i.e. 9 states in 1 to 5 percent category and 13 States in less than I percent category. Only West Bengal falls in the category of percentage range of more than 20 per cent followed by Maharashtra which is located in the percentage range category of 15-20 per cent.

Table: 4.9 (a)

Distribution of States according to the percentage range of SC enrolment in the Country 2007-08

Percentage Range	State	No. of States
More than 20	West Bengal	1
15—20	Maharashtra	1
10—15	None	0
5—10	Karnataka, Madhya Pradesh, Tamil Nadu	3
1—5	Bihar, Andhra Pradesh, Uttar Pradesh, Kerala, Haryana, Gujarat, Jharkhand, Uttrakhand, Punjab	9
Less than 1	Assam, Chattisgarh, Delhi, Gujarat, Himachal Pradesh, J&K, Manipur, Meghalaya, Mizoram, Orissa, Puducherry, Rajasthan, Tripura	13
Nil	Arunachal Pradesh	1

Note: Data is not available for Nagaland and Sikkim

The table 4.9 shows a somewhat different pattern of ST enrolment across the states at the country level. While from the enrolment data at the state level we find that the highest proportion of enrolment of ST students has been reported in Mizoram, the highest proportion (19.52%) of the ST enrolment at the country level has been

recorded in Madhya Pradesh followed by Mizoram (17.46%) and Jharkhand (16.72%).

Table: 4.9 (b)

Distribution of states according to the percentage category of ST enrolment in the country 2007-08

Percentage range	States	No of State
More than 16	Madhya Pradesh, Mizoram, Jharkhand	3
12—16	None	Nil
8—12	Karnataka	1
4—8	Gujarat, Maharashtra	2
1—4	Meghalaya, West Bengal, Andhra Pradesh, Rajasthan, U.P., Arunachal Pradesh, Manipur, Chattisgarh, Orissa	9
Less than 1	Assam, Bihar, Delhi, Goa, Haryana, Himachal Pradesh, Kerala, Puducherry, Punjab has been, Tamil Nadu, Tripura, Uttrakhand	12

Note: No data is available for Nagaland and Sikkim and J&K has shown nil ST enrolment

The table 4.9 (b) presents the distribution of States according to their share in the total enrolment of ST students at the country level. While the share of ST enrolment in each state is very high in Northeastern states individually, their share at the country level has gone down due to the total volume of students admitted in different states. This is the reason that the states which have higher shares of ST enrolment are from other parts of the country and not from Northeast except Mizoram. Majority of the Northeastern states fall in the category of 1 to 4% and Less than 1% of the share of the ST enrolment at the country level. Madhya Pradesh, Mizoram, Jharkhand and Karnataka, together, account for 65.30% of the total enrolment of ST students at the national level. It is also clear from the table that 21 out of 28 States, for which data are available, fall in the enrolment category of ST students in less than 1 to 4 percent.

The table 4.9 shows the share of each state in the total OBC enrolment in the country as a whole. The Table 4.9(c) shows the distribution of states arranged according to their percentage ranges in the total enrolment of OBC students in the country.

Table: 4.9 (c)

Distribution of States according to the percentage range of OBC enrolment ih the country 2007-08

Percentage range	States	No. of States
More than 16	Karnataka	1
12—16	Maharashtra, Tamil Nadu, Madhya Pradesh	3
8—12	Bihar	1
4—8	Andhra Pradesh , Jharkhand , Kerala	3
1—4	Gujarat, Haryana, Uttar Pradesh, Chattisgarh, West Bengal	5
Less than 1	Assam Delhi, Goa, J&K, Manipur ,Meghalaya, Orissa, Punjab , Rajasthan, Tripura, Uttrakhand	11
Not reported	Arunachal Pradesh, Himachal Pradesh, Mizoram, Puducherry	4

Note: Data for Nagaland and Sikkim are not available

The table 4.9 (d) is showing the share enrolment of minorities in each state as proportion to that of the country has to tell another story. The table 4.9(d) based on the table 4.9 shows the distribution of states according to their share of minority enrolment in the country

Table: 4.9 (d)

Distribution of states According to the percentage Range of Minorities enrolment 2007-08

Percentage range	State	No. of States
More than 16	Bihar , Tamil Nadu, Maharashtra	3
12--16	Jharkhand	1
8--12	Madhya Pradesh, Gujarat	2
4--8	Kerala	1
1--4	Andhra Pradesh, Karnataka,	2
Less than 1	Assam, Delhi, Haryana, Himachal Pradesh, Orissa , Rajasthan, Tripura, Uttar Pradesh, West Bengal	9
No Minority enrolment reported	Arunachal Pradesh, Chattisgarh, Goa, J&K, Manipur, Meghalaya, Mizoram, Puducherry, Punjab and Uttrakhand	10

Note: Data for Nagaland and Sikkim are not available

The table 4.9 reveals that the highest share of the minorities' enrolment in the country has been recorded in Bihar which accounts for 20.61 % of the total enrolment of minorities. Bihar is closely followed by Tamil Nadu (18.58%), Maharashtra (16.52%) and Jharkhand (12.57%). Together these states account for 68.28%of the total enrolment of minorities in the country. Out of 28 states whose data are available 10 states have not reported any enrolment of minorities and 9 states are clustered in percentage range of less than 1 percent. This scenario requires further investigation.
If we examine the enrolment pattern of physically challenged Students at the country level (table 4.9) we find that 23.20% students belonging to this category have been enrolled in Andhra Pradesh followed by Uttar Pradesh (12.84 %) and Madhya Pradesh (9.22%). These three states together, account for about 45% of the total enrolment of P.C. students in the country. The States of Assam, Goa, Himachal Pradesh, Manipur, Meghalaya, Rajasthan, Tripura, West Bengal have less than 1 percent of the total enrolment of P.C category in the country. In the rest of the states of the country their share varies from 1.53% to 6.8 percent.

The scenario of the enrolment of the General category at the country level is different from the individual states. The Distribution of states arranged in different percent ranges of enrolment of students belonging to the General Category in the country shows more clustered pattern. The distribution can be seen in the table 4.9 (e)

Table: 4.9 (e)

Distribution of the states according to the percentage range of Enrolment of General category in the country 2007-08

Percentage range	State	No of States
More than 20	Maharashtra	1
15—20	None	Nil
10—15	West Bengal	1
5—10	Madhya Pradesh, Bihar, Kerala, Uttar Pradesh, Gujarat	5
1—5	Karnataka, Jharkhand, Andhra Pradesh, Rajasthan, Punjab, Haryana, Tamil Nadu, Orissa	8
Less than 1	Arunachal Pradesh, Assam, Chattisgarh, Delhi, Goa, Himachal Pradesh, J&K, Manipur, Meghalaya, Mizoram, Puducherry, Tripura, Uttrakhand	13

Note: Data for Nagaland and Sikkim are not available.

It is evident from the table that the highest proportion of the enrolment of the students belonging to general category as percentage of the total students of this category in the country has been reported in Maharashtra ((25.06%) followed by West Bengal (14.35%), Madhya Pradesh (9.33%) and Bihar (8.77%). These four states account for about 58% of the total enrolment of the students belonging to general category in the country.13 states listed in the table have less than 1 percent of the total enrolment of students belonging to general category in the country. Out of these 13 states 6 states belong to Northeast. The other 13 states are clustered in the 1 to 10 percent category. The low enrolment of General categories in Northeastern states is due to the low percentage of this category in the total population.

State Wise and Gender Wise Enrolment:

The gender composition in the total enrolment by each state has been presented in Table 4.10 as percentage of females and males to the total students enrolled.

Table: 4. 10

Statewise Gender Composition in the Total Enrolment 2007-08

S.N	States	Female	Male
1	Andhra Pradesh	33.47	66.53
2	Arunachal Pradesh	48.75	51.25
3	Assam	50.56	49.44
4	Bihar	30.13	69.87
5	Chattisgarh	28.53	71.47
6	Delhi	33.07	66.93
7	Goa	68.87	31.13
8	Gujarat	45.45	54.55
9	Haryana	40.47	59.53
10	Himachal Pradesh	41.19	58.81
11	Jammu&Kashmir	38.62	61.38

12	Jharkhand	47.83	52.17
13	Karnataka	49.28	50.72
14	Kerala	47.79	52.21
15	Madhya Pradesh	46.95	53.05
16	Maharashtra	24.84	75.16
17	Manipur	49.29	50.71
18	Meghalaya	55.89	44.11
19	Mizoram	46.30	53.70
20	Nagaland	D.N.A	D.N.A
21	Orissa	49.47	50.53
22	Puducherry	33.51	66.49
23	Punjab	43.20	56.80
24	Rajasthan	53.89	46.11
25	Sikkim	D.N.A	D.N.A
26	Tamil Nadu	43.23	56.77
27	Tripura	29.37	70.63
28	Uttar Pradesh	34.53	65.47
29	Uttrakhand	49.38	50.62
30	West Bengal	40.84	59.16

D.N.A = Data not available

Table: 4.10 (a)

Distribution of the states on the basis of gender composition (Females as Percentage) in the total Enrolment by States 2007-08

Percentage range	States	No. of States
60 --70	Goa	1
50—60	Assam, Rajasthan, Meghalaya	3
40—50	Arunachal Pradesh, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Manipur, Mizoram, Orissa, Punjab, Tamil Nadu, Uttrakhand, West Bengal	15
30—40	J&K, Bihar, Puducherry, Uttar Pradesh, Delhi, Andhra Pradesh	6
20--30	Tripura, Chattisgarh, Maharashtra	3

Note: Data for Nagaland and Sikkim are not available

Enrolment of females and males in terms of percentage to the total enrolment in each state has been presented in Table 4.10.The summary table 4.10 (a) showing the distribution of states in the percentage ranges of female enrolment shows that the proportion of women in the total enrolment is higher in four states i.e., Goa, Assam, Rajasthan and Meghalaya.. Maximum clustering of female enrolment can be observed in the percentage range of 40 to 50 which includes 15 states. The scenario of male enrolment is exactly opposite to that of the female enrolment. Unfortunately the data pertaining to explanatory variables have not been collected and conjecture can not be depended upon.

The table 4.11 presents two elements; (a) percentage share of each state in the total enrolment in the country and (b) Percentage share of female students to the total female students enrolled in the country. The distribution of States on the basis of both these elements has been presented in two tables (Table 4.11(a) and 4.11 (b) for the sake of comparison.

Table: 4.11

State wise, Gender wise Enrolment in All the Faculties at All the Levels (Aggregated) 2007-08

S.N	States	Share of Each State in Total Enrolment	Statewise Share of Females in Total Female Enrolment
1	Andhra Pradesh	3.38	2.97
2	Arunachal Pradesh	0.08	0.1
3	Assam	0.51	0.67
4	Bihar	8.07	6.26
5	Chattisgarh	0.64	0.47
6	Delhi	0.61	0.5
7	Goa	0.1	0.18
8	Gujarat	4.93	5.87
9	Haryana	1.74	1.97
10	Himachal Pradesh	0.69	0.72
11	Jammu&Kashmir	0.38	0.37
12	Jharkhand	4.45	5.48
13	Karnataka	7.74	9.87
14	Kerala	5.73	6.31
15	Madhya Pradesh	10.49	12.69
16	Maharashtra	21.42	13.71
17	Manipur	0.24	0.31
18	Meghalaya	0.26	0.38
19	Mizoram	0.94	1.11
20	Orissa	1.05	1.34
21	Puducherry	0.2	0.17
22	Punjab	0.93	1.55
23	Rajasthan	1.91	2.64
24	Tamil Nadu	4.52	5.07
25	Tripura	0.18	0.13
26	Uttar Pradesh	4.7	4.18
27	Uttra Khand	0.85	1.08
28	West Bengal	13.21	13.9
29	Total	100	100

Note: Data for Nagaland and Sikkim are not available

Table: 4.11 (a)

Distribution of States according to the Percentage range of each state in the total Enrolment in the country 2007-08

Percentage range	States	No. of States
More than 16	Maharashtra	1
12—16	West Bengal	1
8—12	Madhya Pradesh, Bihar	2
4—8	Karnataka, Kerala, Gujarat, U.P., Tamil Nadu, Jharkhand	6
1—4	Andhra Pradesh, Rajasthan, Haryana, Orissa	4
Less than 1	Mizoram, Punjab, Uttrakhand, Himachal Pradesh, Chattisgarh, Delhi, Assam, J&K, Meghalaya, Manipur, Puducherry, Tripura, Goa, Arunachal Pradesh	14

Note: Data for Nagaland and Sikkim are not available

The table clearly shows that the share of four states i.e. Maharashtra, West Bengal, Madhya Pradesh and Bihar is high in the total enrolment in the country and these together accounts for about 53% of the total enrolment in the country. Almost 50% of the States have less then one percent of the total enrolment in the country.

Table: 4.11(b)

Distribution of states according to the share of female enrolment in the total Female enrolment in the Country 2007-08

Percentage range	States	No. of States
More than 12	West Bengal, Maharashtra, Madhya Pradesh	3
8--12	Karnataka	1
4--8	Kerala, Gujarat, Bihar, Jharkhand, Tamil Nadu, U.P.	6
1—4	Andhra Pradesh, Rajasthan, Haryana, Punjab, Orissa, Mizoram, Uttrakhand	7
Less than 1	Himachal Pradesh, Assam, Delhi, Chattisgarh, J&K, Goa, Meghalaya, Manipur, Arunachal Pradesh, Puducherry, Tripura	11

Note: Data for Nagaland and Sikkim are not available

The Table 4.11 showing the pattern of female enrolment in the country has correspondence with the total enrolment in the country. The share of states in the total enrolment of the country also shows higher share in the total female enrolment. It is also clear that some states may have high female enrolment as percentage to the total enrolment within the state but those may not have higher share in the country. For illustration, one may take the case of Goa. The share of females in the total enrolment within the state is very high (68.70%) but its position with reference to the country is pretty low.

The differences also may be there due to the variable number of sample universities in different states. The pattern is clear to the extent that those states which have high share in total enrolment in the country have also higher share of female enrolment in the country. For example, the states of Maharashtra, West Bengal, M.P. and Bihar account for about 53% of the total enrolment of the country, with addition of Karnataka these states account for about 56 percent of the female enrolment in the country. It seems that incremental enrolment will ensure incremental share of females in total enrolment in the country.

PART-II

STUDENT ENROLMENT IN AFFILIATED COLLEGES

The data for the student enrolment in affiliated colleges has been presented by the universities affiliating these colleges. Thus, the data should be seen with reference to the affiliating universities.

Faculty wise and Level Wise Student Enrolment in the Affiliated Colleges of Central Universities

The data for the affiliated colleges of Central universities shows the preponderance of enrolment of students at the undergraduate level.

Table: 4.12
Level wise enrolment in the Affiliated Colleges of Central Universities (Aggregated) 2007-08

Level of the Programme	Percentage to total enrolment
Under Graduate	92.64
Post Graduate	2.06
M.Phil	0.06
Ph.D	0.07
Diploma/Certificate	5.17
Total	100

The table 4.12 reveals that 92.64% of the enrolment in affiliated colleges is confined to the undergraduate level. The enrolment at the PG and research level is not very significant. The certificate level courses in Engg/Tech. faculty have attracted larger enrolment while the enrolment in Diploma courses has very few takers in the affiliated colleges of Central universities.

An appraisal of the enrolment at the faculty level reveals that Arts faculty accounts for 64.17% of the total enrolment at the UG level followed by the faculties of Commerce (12.78%) and Science (11.37%). Thus, these three faculties account for 88.15% of the total enrolment at the UG level in affiliated colleges.

The highest enrolment at the PG level in the affiliated colleges of the Central universities has been recorded in the faculty of Engg/Tech (28.16%) followed by the Faculties of Education (14.90%) and Law (11.26%). The faculty of Science stands fourth (10%) and the faculty of Arts occupies the fifth place (9.8%) in the enrolment at the PG level.

Table: 4.13

Faculty wise and Level wise Student Enrolment in Affiliated Colleges of the Central Universities 2007-08

Faculty	UG	%	PG	%	M.Phil	%	Ph.D	%	D/C	%
Arts	84209	64.17	286	9.80	45	51.72	30	30.61	Nil	Nil
Science	14919	11.37	292	10.00	42	48.28	19	19.39	Nil	Nil
Com.Sci	1684	1.28	67	2.30	Nil	Nil	Nil	Nil	13	0.18
Commerce	16773	12.78	155	5.31	Nil	Nil	Nil	Nil	Nil	Nil
Manage.	1023	0.78	276	9.46	Nil	Nil	Nil	Nil	Nil	Nil
Education	3515	2.68	435	14.90	Nil	Nil	Nil	Nil	Nil	Nil
Engg/Tech.	329	0.25	835	28.61	Nil	Nil	40	40.82	7282	99.47
Medicine	4172	3.18	244	8.36	Nil	Nil	9	9.18	12	0.16
Law	1799	1.37	329	11.26	Nil	Nil	Nil	Nil	Nil	Nil
Others	2812	2.14	Nil	Nil	Nil	Nil	Nil	Nil	14	0.19
Total	**131235**	**100**	**2919**	**100**	**87**	**100**	**98**	**100**	**7321**	**100**

Note: No student has been reported in the faculty of Agriculture and Vet. Science

The enrolment at the research (M.Phil and Ph.D.) level in affiliated colleges of the Central Universities is very insignificant at the aggregate level. Only the Faculties of Arts and Science have reported enrolment at the research level. The table also reveals that the Diploma level courses in these colleges are confined to the Faculties of Computer Seience, Medicine and the courses designated as "Others" but the numbers are very low. The Certificate course is confined only to the Faculty of Engineering/Technology and the number of students enrolled is substantial. The Diploma /Certificate courses, taken together, account for 5.17% of the total enrolment in all the faculties of the affiliated colleges of the Central Universities.

Faculty wise and Level wise Student Enrolment in Affiliated Colleges of the State Universities

The enrolment in the affiliated colleges of the State universities also shows a dominant position of the Undergraduate programme in the overall enrolment. The pattern of the student enrolment at the aggregated level has been shown in table 4.13 (a)

Table: 4.13(a)

The Share of Enrolment at Different levels in the Affiliated Colleges of the State Universities, 2007-08

Level of the programme	Percentage to total enrolment
Under Graduate	87.02
Post Graduate	10.61
M.Phil	0.06
Ph.D	0.08
Diploma/ Certificates	2.23
Total	100.00

It is clear from the table that the enrolment at the UG and PG levels in the affiliating colleges of the state universities accounts for almost 98% of the total enrolment. It is also clear that enrolment at the research (M.Phil and PhD) level presents a dismal picture. The enrolment at the research level (M.Phil and Ph.D) accounts for only 0.14% of the total enrolment at all level in all the faculties. This scenario at the research level may be due to (a) emphasis on UG and PG teaching and (b) constraints in supervisory arrangement for research students. The enrolment at the Diploma /certificate level is higher than the combined enrolment at the M.Phil and PhD level. It will be worthwhile to examine the patterns of enrolment in the affiliated colleges of the State universities.

An appraisal of the table 4.14 shows that the faculties of Arts, Science and Commerce have significant proportion of enrolment at the UG level, though, the Arts faculty has the highest proportion of the enrolment at the UG level in the affiliated colleges of the State universities. These three faculties, together, account for 82.54% of the total enrolment at the UG level. If the proportions of enrolment in the faculties of Engineering/technology, Education, Computer Science and Management are also added to the three faculties already mentioned, these together add up to 96.5% of the total enrolment at the UG level.

Table 4.14

Faculty wise and Level wise Student Enrolment in Affiliated Colleges of State Universities 2007-08

Faculty	UG	%	PG	%	M.Phil	%	Ph.D	%	D/C	%
Arts	1948789	45.36	243725	46.55	1122	35.75	1376	34.17	13805	12.51
Science	843239	19.62	105577	20.17	1146	36.52	1302	32.33	23425	21.23
Com.Sci	140945	3.28	47273	9.03	88	2.80	65	1.61	33505	30.37
Commerce	754513	17.56	58598	11.19	397	12.65	454	11.27	26291	23.83
Manage.	92027	2.14	36442	6.96	110	3.51	121	3.00	10490	9.51
Education	174545	4.06	9675	1.85	159	5.07	235	5.83	453	0.41
Engg/Tech.	192726	4.48	7984	1.53	20	0.64	73	1.81	26	0.02
Medicine	44771	1.04	2145	0.41	12	0.38	28	0.70	352	0.32
Agriculture	7895	0.18	213	0.04	Nil	Nil	8	0.20	14	0.01
Vet. Sci.	2162	0.05	35	0.007	Nil	Nil	Nil	Nil	Nil	Nil
Law	68134	1.59	5733	1.10	6	0.19	36	0.89	632	0.57
Others	27442	0.64	6135	1.17	78	2.49	330	8.19	1341	1.22
Total	4297188	100	523535	100	3138	100	4028	100	110334	100

The enrolment at the PG level in the affiliated colleges of the State universities is 10.61% of the total enrolment across all the faculties (table4.32).The faculty wise enrolment at the PG level (Table 4.14) shows that the faculties of Arts, Science and Commerce accounting for 46.55, 20.17, 11.19 percent respectively have reported substantial enrolment and together these have contributed to more than three fourth of the of the total enrolment at the PG level.

The enrolment at the M.Phil and Ph.D level in the affiliated colleges of the State universities is also very low just as in the case of Central universities. It accounts for only 0.14 % of the total enrolment at all the levels across the faculties. The enrolment at the research level is concentrated in the faculties of Arts, Science and Commerce. These three faculties account for 84.92% of the M.Phil enrolment and 77.77% of the Ph.D enrolment. The table 4.32 also reveals that the faculties such as Computer Science, Management and Engineering/Technology wherein the employability is higher after graduation and post- graduation, the enrolment at the research level is low.

The pattern of enrolment at the Diploma/Certificate level is very different from the UG , PG and research levels. The highest enrolment at D/C level has been observed in the faculty of Computer Science (30.37%) followed by Commerce (23.83%) and Science (21.23%) and taken together these three faculties account for 75.43% of the total enrolment at the D/C level.

Social Category wise enrolment in the Affiliated Colleges of Central Universities:

The affirmative action in favor of the deprived sections of the society has been affected in response to the policy intervention through the instrument of reservation in educational institutions. It is worthwhile to see the pattern of enrolment of various social categories in Central and State universities. The table 4.15 shows the pattern of enrolment of social categories in the affiliated colleges of Central as well as the State universities.

Table: 4.15

Social Category wise enrolment by University Type 2007-08

University Type	SC	ST	OBC	Minorities	Physically Challenged	Others	Total
Central	15546	65521	2005	4046	308	54234	141660
percentage	10.97	46.25	1.42	2.86	0.22	38.28	100
State	64298	170324	1281763	143153	33170	2698515	493823
percentage	12.38	3.45	25.96	2.90	0.67	54.64	100

The pattern of social categories in the affiliated colleges of Central and State universities presents quite different scenario. At the aggregated level, the proportional representation of social categories in Central universities is higher than that of the general categories. The ratio of enrolment of reserved and general categories in Central universities is 61.72 and 38.28 in terms of percentage. The table shows that the enrolment of ST category is much higher in the Central universities than the reserves quota. One of the plausible explanations may be that out of 15 sample Central Universities, Seven are from Northeastern states where the enrolment of ST students is much higher due to the composition of population. On the other hand the enrolment of SC students (10.97%) in the affiliated colleges of Central

universities is far behind the targeted enrolment. Likewise the enrolment of OBC students is also much lower that what it should have normatively been. There is no reservation for minorities in educational institutions except for those which have been included in the OBC category, their proportion in the enrolment is also very low (2.86%). The other category which lags behind is that of physically challenged as them the enrolment proportion is only 0.22 percent. The Central universities should take lead in improving the enrolment of social categories through their constituent and affiliated colleges and the University Teaching Departments.

As stated earlier the patterns of enrolment of the social categories in the affiliated colleges of Central and State universities is very different, the enrolment of general category students is higher than the social categories. The proportion of general categories in the total enrolment is 54.64% and that of the social categories is 45.36% at the aggregated level. While the enrolment of the SC category in the affiliated colleges of the State universities is slightly higher than the Central universities, it still falls short of the provided provisions in the reservation policy. The shortfall in the enrolment of ST category is very obvious in the affiliated colleges of the State universities as it is only 3.45% of the total enrolment. The enrolment of the OBC category (25.96%) of the total enrolment) is closer to the targeted enrolment. The enrolment of Minorities and physically challenged is also very low. Some of the distortions in the enrolment seem to be due to the locational characteristics of the colleges in the regions with the numerical dominance of specific social categories.

Social Category wise and Gender wise enrolment in the Affiliated Colleges of Central and State universities:

The general perception prevails that the enrolment of female students is lower across the social categories. An attempt has been made to examine and verify the extent of this prevailing perception.

The table 4.16 presents the social category wise and gender wise enrolment in the affiliated colleges of the Central and State universities. The total amongst the social categories shows the share in the total enrolment while the females represent their share in the total in their respective social categories.

Table: 4.16

Percentage Share of students by social categories enrolled in the Affiliated Colleges of Central and State Universities 2007-08

University Type	Total Enrolment		SC		ST		OBC	
	T	F	T	F	T	F	T	F
Central	141660 (100)	66499 (46.94)	15546 (10.97)	6493 (41.77)	65521 (46.24)	31621 (48.26)	2005 (1.42)	794 (39.60)
State	4938223 (100)	2123750 (43.01)	611298 (12.38)	237848 (38.91)	170324 (3.45)	63755 (37.43)	128763 (25.96)	581533 (45.37)

Table Continued.....

University Type	Minorities		Physically Challenged		General	
	T	F	T	F	T	F
Central	4046 (2.86)	1456 (35.99)	308 (0.22)	82 (26.62)	54234 (38.29)	26053 (48.04)
State	143153 (2.90)	71927 (50.24)	33170 (0.67)	8871 (26.74)	2698515 (54.64)	1159816 (42.98)

Note: Figures in parenthesis are in percentage

Note: The share of females in social categories has been calculated with reference to their total in each category. It means 100 – female percentage will show the share of males in each social category

The share of female and male students is 46.94 and 53.06 percent respectively in the affiliated colleges of the Central universities. The share of female students of ST category in the total enrolment is higher (48.26%) than the share of the total female enrolment in the affiliated colleges of the Central universities (46.94%). The SC female students account for 41.77% of the total enrolment in the SC category. Though, the overall enrolment of students belonging to OBC category is very low (1.42%) in the affiliated colleges of Central universities, the proportion of Females in this category is 39.60%. The same pattern is discernible amongst the minorities. While the share of minorities in the total enrolment is only 2.86%, the share of females within their own category is 35.99 percent. The overall share of physically Challenged in the total enrolment is very low (0.22%) but within that category also the share of female students is about 27 percent. The students in general category account for 38.29% of the total enrolment and the share of female students within the general category is 48.04% which comparable to the enrolment of the female students within the ST category. The representation of female students in the enrolment within their respective categories has shown a better level but has not touched the 50% mark in any social category though it is closer to it amongst the ST and General categories in the affiliated colleges of noted in the Central Universities.

The enrolment scenario in the affiliated colleges of State universities is different from those of the Central universities. The enrolment of the female students in the affiliated colleges of the state universities is lower (43.01%) than that of the Central universities (46.94%). The glaring difference between the affiliated colleges of Central and State universities is in the total enrolment of OBC category where it is 1.42 and 25.96% respectively. But the representation of female students within the category of OBC in case of State universities is quite high (45.37%) which is higher than the female enrolment (42.98%) in the General as well as SC and ST social categories. The share or female students belonging to SC and ST categories in the enrolment in their respective categories are almost similar (38.91 and 37.43 percent respectively) in the affiliated colleges of State universities. The table 4.16 shows that, though the share of minorities in the total enrolment is quite low but the share of female students is surprisingly high within their category i.e. 50.24 percent in the State universities while it is 35.99 % in the case of Central universities. The share of female students in Physically Challenged category in State universities (26.74%) is similar to that of the Central universities (26.62%).Amongst the social categories, the lowest share of female students has been of Physically Challenged category.

Social Category wise Share of Female Students in the Total Enrolment of Females in the Affiliated Colleges of Central and State Universities:

Here an attempt has been made to understand the position of females in different social categories in respect to the enrolment of total females in the affiliated colleges of Central and State universities. The table4.35 shows that there are large variations in the enrolment of female students across the social categories in the colleges of Central and State universities. There is glaring variation in the female enrolment of ST and OBC categories in the Central and state universities.

The enrolment of female students belonging to ST category to total female enrolment in Central universities is 47.55% as against 3.00% in the State universities. A similar difference is noted in the OBC category. The female students belonging to OBC

category in Central universities account for only 1.19 percent of the total female enrolment while in the State universities, their share is 27.38%. The other category where large variation has been noted is the General category designated as others in the table.

Table: 4.17

Social category wise Share of Females in the total Female enrolment in the Affiliated Colleges of Central and State universities 2007-08

University type	Total Females	SC	ST	OBC	Minorities	Physically Challenged	Others
Central	66499 (100)	-6493 (9.76)	31621 (47.55)	794 (1.19)	1456 (2.19)	82 (0.12)	26053 (39.19)
State	2123750 (100)	237848 (11.20)	63755 (3.00)	581533 (27.38)	7192 (3.39)	8871 (0.42)	1159816 (54.61)

Note: Figures in parenthesis are in percentage

The share of female students belonging to general categories in the total female enrolment in the affiliated colleges of Central universities is 39.19 % where as it is 54.61 % in the affiliated colleges of the State universities. While the share of female students belonging to minorities is found to be higher in the total enrolment of minorities within their category, the share of females in the total female enrolment is very meager (2.19% in Central universities and 3.39% in the State universities). There is not much of a variation in the female enrolment of the SC category between the Central and State universities but more has to be done. The share of physically challenged female enrolment to total female enrolment is also very low which calls for remedial measures.

As far as Research Associates are concern the state of Rajasthan has got maximum percentage with 20.43 per cent of the total RA in the country. The state of Uttar Pradesh is at the second place with 19.71% of the total RA followed by Andhra Pradesh (5.84%) and Jammu & Kashmir (4.38%). The share of Maharashtra, West Bengal and Karnataka is 3.65 per cent each to the total RA. The states of Arunachal Pradesh, Bihar, Chattisgarh, Himachal Pradesh, Meghalaya and Punjab have not reported.

The state of Uttar Pradesh alone has got 67.64% of the total 'Other Fellows'. Other than Uttar Pradesh no state has got double digit figure. West Bengal occupies the second place with 7.04% of the total 'Other Fellows' followed by Andhra Pradesh (4.59%) Maharashtra (3.60%), Kerala (2.75%) and Tamil Nadu (2.35%).
s
The shares of Haryana, Madhya Pradesh, Karnataka and Assam vary between 1 to 2 per cent. The states of Chattisgarh, Delhi, Arunachal Pradesh and Uttrakhand have not reported.

Taking all the fellowship (JRF, SRF, RA and Other Fellows) together into consideration the share of Uttar Pradesh alone is 36.07% to the total fellowships. Apart from Uttar Pradesh, Delhi is the only state has 10.49 per cent share of the total fellowships followed by Maharashtra (8.54%), Andhra Pradesh (7.89%), West Bengal (5.90%) and Tamil Nadu (4.66%). The above six states account for almost 73.55% of the total fellowships.

The share of Kerala and Madhya Pradesh is 3.32 and 3.26% respectively. The share of Maharashtra, Gujarat and Haryana is in between 2.00 to 2.50% to the total fellowship. The share of Karnataka, Jharkhand, Himachal Pradesh, Assam, Jammu & Kashmir, Rajasthan and Puducherry is in between 1 to 2 per cent to the total Fellowship. Remaining states have less than 1% of the total fellowship.

The state wise variation in the share of fellowships is, to some extent, due to the variable numbers of sample universities in the states. Moreover, the JRF is awarded through a National Eligibility Test conducted by UGC. While due care is taken for the provisions of the reservation, it is difficult for the students of the remote areas to be able to compete due to the lack of facilities and proper guidance. As far as SRF is concerned, its numbers depend on the numbers of Junior Research Fellows who are evaluated for the award of SRF after availing of the JRF for two years. Logically, there should be a link between the numbers of JRF and SRF but the data, in case of some states shows large variation due to the fact that the information about the number of JRF has not been reported while it has been reported for SR Fellowships.

CHAPTER 5

PART-I

Performance of Students

The best indicator of the performance of students is their examination results at various levels. The main function of the universities and colleges is to impart education in different disciplines at different levels and evaluate them to award degrees certifying their ability. It does not mean that there are no learning avenues barring universities and colleges. These are the formal channels of learning with well defined structure of courses. The teachers not only teach but also evaluate. Actually teaching and evaluation are integral part of the process of learning. The present chapter is based on two types of data. Firstly, the data pertains to faculty wise and state wise research degrees of M.Phil and PhD awarded and secondly, the faculty wise and state wise students appeared and passed in the examinations at the UG and PG levels. The sample universities which have responded to the UGC questionnaire are quite variable in this case also. The Faculty wise and level wise number of sample universities by their types has been given in table 5.1.

Table: 5.1

Faculty wise University Samples by their Type 2007-08

Faculty	Central Universities		State Universities		Deemed Universities		Total Sample universities	
	M.Phil	Ph.D	M.Phil	Ph.D	M.Phil	Ph.D	M.Phil	Ph.D
Arts	7	10	51	60	6	7	64	77
Science	4	9	49	58	4	4	57	71
Computer Sc.	2	3	15	22	Nil	2	17	27
Commerce	2	3	36	44	1	1	39	48
Management	Nil	2	24	37	3	3	27	41
Education	2	2	26	38	2	3	29	43
Engg/Tech.	Nil	2	28	29	2	2	30	33
Medicine	2	2	12	12	3	3	17	17
Agriculture	Nil	Nil	4	4	Nil	Nil	4	4
Law	1	1	10	22	Nil	Nil	11	23
Others	3	3	18	23	2	2	23	28

The table 5.1 makes it amply clear that the samples are highly variable and the number of universities is limited in different faculties, across the university types as well as at the level of M.Phil and Ph.D. The number of sample universities vary from 4 (Faculty of Agriculture) to a maximum of 77 representing the faculty of Arts at the PhD level. The largest number of sample universities is found in Arts and Science faculties. The number of universities awarding M.Phil degree in almost all the faculties is lower than the sample universities awarding PhD degree except in the faculties of Agriculture and Medicine. This variation has, perhaps, been caused due to the fact that many universities which award PhD degree have not introduced M.Phil programme. The number of samples from Central and Deemed universities are very few.

Besides the analysis at the level of faculties by university types, attempt has been made to organize the data at the state level to understand the pattern of the award of M.Phil and PhD degrees by states. When the data were organized at the state level, it was found that only 24 states are represented. Thus, the information about the award of M.Phil and PhD degrees is not available for the states of Jammu & Kashmir, Mizoram, Nagaland, Sikkim, Uttrakhand and West Bengal. The other limitation of the data is that all the sample universities representing the states have not reported information about all the faculties. Only the sample universities from Delhi, Kerala, Madhya Pradesh, Puducherry, Maharashtra and Tamil Nadu have provided information about all the faculties. The sample universities from rest of the states have provided only partial information about selected faculties. It is also possible that all the universities may not have all the faculties, for example a number of universities do not have the faculties of Medicine, Agriculture and Engg. /Tech.

Research Degrees awarded by university Type at the Aggregated Level

The variable nature of the sample size is reflected in the proportion of the research degrees awarded at M.Phil and Ph.D levels. The table 5.2 shows that the share of sample State universities in awarding the M.Phil and PhD degrees is very high as compared to the Central and Deemed universities.

Table: 5.2

Share in Research Degrees awarded By University Type 2007-08

University Type	M.Phil Degrees awarded	Percentage to Total	PhD Degrees awarded	Percentage to Total
Central	1104	12.49	736	8.74
State	7466	84.45	7498	88.95
Deemed	271	3.06	195	2.31
Total	8841	100.00	8429	100.00

State universities have awarded more Ph.D degrees as compared to M.Phil degrees while the share of M.Phil degrees awarded by the Central Universities is higher than the share of Ph.D degrees awarded by them. The share of M.Phil degrees awarded by the Deemed universities is also higher than their share of Ph.D degrees. There is large variation when the faculty wise award of research degrees is examined.

Faculty Wise Research Degrees Awarded by University Types

Central Universities

It is clear from the table 5.3 that no M.Phil degree has been awarded in the faculties of Management, Engg. /Tech., Agriculture, Law and Medicine of the Central universities. The reasons for such a pattern could not be culled out from the data as the questionnaire is silent on this aspect. The fact that the highest proportion of M.Phil degrees (72.92%) in the faculty of Arts of Central universities reflects the preponderance of research concerns in the subjects of Arts and Social Sciences. The faculty of Science of Central universities stands second with 17.03 % of the total M.Phil degrees awarded by all the faculties. Thus, these two faculties of Central universities awarded almost 90% of the M. Phil degrees. Only 3.89 and 3.62% M.Phil

degrees were awarded in the faculty of Computer Sc /App. and "Others" respectively. The proportion of M.Phil degrees awarded in other faculties is very small.

The share of faculty of Arts in the award of PhD degree is the highest amongst the faculties (51.50%) while Science faculty accounted for 37.77% and together, these two faculties accounted for 89.27% of the total PhD degrees awarded by all the faculties. The faculties of Computer Sc/App and "others" awarded 3.13% and 2.58% of the PhD respectively. It means that 95% of the PhD degrees in the Central universities have been awarded by only 4 faculties. The variation in the number of sample universities at different levels and in different faculties has influenced the proportions at different levels.

Table: 5.3
Faculty wise Research Degrees awarded 2007-08

Faculty	Central Universities		State Universities		Deemed Universities	
	M.Phil	Ph.D	M.Phil	Ph.D	M.Phil	Ph.D
Arts	805 (72.92)	379 (51.50)	3979 (53.29)	2875 (38.34)	112 (41.33)	49 (25.13)
Science	188 (17.03)	278 (37.77)	1861 (24.94)	2707 (36.10)	8 (2.95)	55 (28.20)
Computer Science	44 (3.98)	23(3.13)	292(3.91)	88(1.17)	Nil(0.00)	1(0.51)
Commerce	16(1.45)	11(1.49)	564(7.55)	484(6.46)	Nil(0.00)	3(1.54)
Managemen t	Nil(0.00)	6(0.82)	135(1.81)	319(4.25)	1(0.37)	21(10.77)
Education	11(1.00)	7(0.95)	283(3.79)	329(4.39)	6 (2.21)	10(5.13)
Engg/Tech.	Nil(0.00)	4(0.54)	21(0.28)	290(3.87)	Nil(0.00)	11(5.64)
Agriculture	Nil(0.00)	Nil(0.00)	Nil(0.00)	18(0.24)	Nil(0.00)	Nil(0.00)
Law	Nil(0.00)	7(0.95)	57(0.76)	89(1.19)	Nil(0.00)	Nil(0.00)
Medicine	Nil(0.00)	2(0.27)	115(1.54)	67(0.89)	115(42.44)	3 (17.44)
Others	40(3.62)	19(2.58)	159(2.13)	232(3.10)	29(10.70)	11(5.64
Total	1104(100)	736(100)	7466(100)	7498(100)	271(100)	195 (100)

Note: Figures in parenthesis show the proportion of the research degrees awarded

State Universities

The scenario of the award of M.Phil and PhD degrees in State universities is not very different from the Central universities. The faculties of Arts and Science remain leading faculties in awarding the degrees of M.Phil and PhD. 53.29 % of the M.Phil degrees have been awarded in the faculty of Arts followed by the faculty of Science with 24.94 per cent degrees. Commerce has emerged as another important faculty in the State universities and 7.55% degrees in M.Phil have been awarded in this faculty. Thus, the faculties of Arts, Science and Commerce account for about 86 % of the total M.Phil degrees awarded in the State universities. The faculties of Computer Sc/app and Education have awarded M.Phil degrees almost 4 % each of the total degrees awarded by State universities.

The number of sample state universities at the PhD level in the faculties of Arts and Science are almost similar. The PhD degrees awarded in the Arts faculty account for 38.34% of the total PhD degrees awarded by all the faculties of the State universities while 36.10 % of the total PhD degrees were awarded in the Science faculty. Thus, three fourth of the total PhD degrees in the State universities have been awarded by these two faculties of the sample universities. The faculties of Commerce, Computer Sc and Education are other important faculties which have awarded 7.55, 3.91 and 3.79 % of PhD degrees respectively.

Deemed Universities

There are limited numbers of sample universities at M.Phil as well as PhD level in case of Deemed universities. The faculties of Computer Sc., Commerce, Engg./Tech. Agriculture and Law of the Deemed universities have not reported to have awarded M.Phil degrees. The three faculties, in which the substantial proportions of M.Phil degrees have been awarded, are Medicine, Arts and Others. These three faculties have awarded 42.44, 41.33 and 10.70 % of the total degrees awarded by all the faculties of the sample Deemed universities. Thus, these faculties together account for almost 95 % of the total M.Phil Degrees awarded in the Deemed universities.

The sample Deemed universities have not awarded any PhD degree in the faculties of Agriculture and Law. The highest proportion of PhD degrees has been awarded in the faculty of Science (28.20%) followed by the faculties of Arts (25.13%) and Medicine (17.44%). Thus, almost 71% of the total PhD degrees, in sample Deemed universities, have been in these three faculties. If the proportion of degrees awarded in the faculty of Management (10.77%) are also added, the total proportion of PhD degrees awarded in Deemed universities comes to about 82 per cent. The faculties of Education (5.13%), Engg./Tech.(5.64%) and Others (5.64%) together add about 16% of the awarded PhD degrees. Thus, the above mentioned six faculties account for almost 98% of the total PhD degrees awarded by the Deemed universities.

State wise Research Degrees Awarded (Aggregated Level)

The general practice in the universities is that the degrees are awarded in different subjects by the faculties in which these subjects are taught. But it is worthwhile to examine the pattern of research degrees at the aggregated level by states. Therefore, as a first step, attempt has been made to discuss the state wise pattern at the aggregated level, both, in case of M.Phil and PhD separately.

The table 5.4 clearly shows the pattern of M.Phil and PhD degrees awarded at the state level. The data shows the proportion of M.Phil and PhD degrees awarded by each state to the total M.Phil and PhD degrees awarded in the country. The data, of course, presents the pattern emerging out of the data provided by the sample universities representing the respective states.

The data pertaining to the share of each state in M.Phil degrees shows that Tamil Nadu accounts for 33.50% of the total M.Phil degrees awarded by the entire sample universities. The second state which follows Tamil Nadu is Madhya Pradesh which awarded 10.47%of M.Phil degrees but stands far behind Tamil Nadu. Delhi stands

third with 9.42% of the total M.Phil degrees awarded by the entire sample universities. Thus, three states account for 53% of the total M.Phil degrees awarded. If the degrees awarded by the sample universities of Andhra Pradesh are also added, the share of the four states goes up to almost 62 % of the total M.Phil degrees awarded. Out of the 30 states, 12 have not reported the award of M.Phil degrees. There are two possibilities of such a gap. It is possible that many universities have not started the M.Phil programme at all. The other possibility is that the universities, which have M.Phil programme in the state, have not responded to the questionnaire. The rest of the states have contributed from less than 1 % to 6% of the total M.Phil degrees awarded at the country level.

Table: 5.4

State wise M.Phil and Ph.D degrees awarded at the aggregated level 2007-08

States	Total M.Phil Awarded	% age of the Total in the Country	Total Ph.D Awarded	% age of the Total in the Country
Andhra Pradesh	787	8.90	1237	14.67
Arunachal Pradesh	12	0.14	19	0.23
Assam	152	1.72	79	0.94
Bihar	N.A	N.A	493	5.85
Chattisgarh	111	1.26	171	2.03
Delhi	833	9.42	596	7.07
Goa	N.A	N.A	25	0.3
Gujarat	393	4.45	649	7.7
Haryana	877	9.92	203	2.41
Himachal Pradesh	224	2.53	81	0.96
Jharkhand	27	0.31	222	2.63
Karnataka	337	3.81	575	6.82
Kerala	524	5.93	321	3.81
Madhya Pradesh	926	10.47	556	6.6
Maharashtra	279	3.16	756	8.97
Manipur	N.A	N.A	55	0.65
Meghalaya	1	0.01	49	0.58
Orissa	141	1.59	62	0.74
Punjab	N.A	N.A	87	1.03
Rajasthan	225	2.54	166	1.97
Tamil Nadu	2962	33.50	1586	18.81
Tripura	N.A	N.A	6	0.07
Uttar Pradesh	30	0.34	435	5.16
Total	**8841**	100.00	8429	100.00

Note: Data for the states of J&K, Mizoram, Nagaland, Puducherry, Sikkim, Uttrakhand and West Bengal are not available at both the M.Phil and PhD levels

The sample universities of almost 23 states have reported the award of PhD degrees. There is no concentration in any particular state as in the case of M.Phil degree. The table shows the distribution of states according to their share in the award of Ph.D degree in the country.

Table: 5.5

Distribution of States according to their share in the award of Ph.D degrees 2007-08

Percentage range	States	No. of states
More than 16	Tamil Nadu	1
12 to 16	Andhra Pradesh	1
8 to 12	Maharashtra	1
4 to 8	Bihar, Delhi, Gujarat, Karnataka, Madhya Pradesh, Uttar Pradesh	6
1 to 4	Chattisgarh, Haryana, Jharkhand, Kerala, Punjab, Rajasthan	6
Less than 1	Arunachal Pradesh, Assam, Goa, Himachal Pradesh, Manipur, Meghalaya, Orissa, Tripura	8

As is evident from the table 5.5 that the highest proportion of Ph.D degrees have been awarded in Tamil Nadu (18.81%) followed by Andhra Pradesh (14.67%) and Maharashtra (8.97%). Six states have been included in the categories of 4 to 8 and 1 to 4 percent. Rest of the 8 states has awarded less than 1 percent of the PhD degrees. It is obvious that many universities which do not have M.Phil programme do have PhD programme at least in some of the selected faculties.

State wise and Faculty wise Research Degrees Awarded

The pattern of state wise and faculty wise degrees awarded at M.Phil and Ph.D levels is different in terms of the number of states as well as the faculties. The number of states reporting the award of PhD degrees is more than the states reporting the award of M.Phil degrees. Hence, attempt has been made to examine the pattern by the levels separately.

Table: 5.6

State wise and Faculty wise Proportion of Research Degrees Awarded 2007-08

State	Faculty of Arts				Faculty of Science			
	M.Phil	%	Ph.D	%	M.Phil	%	Ph.D	%
Andhra Pradesh	430	8.78	395	11.96	245	11.91	545	17.93
Arunachal Pradesh	12	0.25	11	0.33	N.A	N.A	3	0.10
Assam	107	2.19	39	1.18	33	1.60	38	1.25
Bihar	N.A	N.A	373	11.29	N.A	N.A	101	3.32
Chattisgarh	67	1.37	84	2.54	23	1.12	31	1.02
Delhi	562	11.48	270	8.17	162	7.88	215	7.07
Goa	0	N.A	2	0.06	N.A	N.A	20	0.66
Gujarat	283	5.78	206	6.24	23	1.12	264	8.69
Haryana	640	13.07	88	2.66	10	0.59	34	1.12
HP	133	2.72	35	1.06	71	3.45	29	0.95
Jharkhand	27	0.55	112	3.39	N.A	N.A	27	0.89
Karnataka	145	2.96	199	6.03	153	7.44	323	10.63
Kerala	229	4.68	99	3.00	200	9.72	102	3.36
MP.	642	13.12	231	6.99	221	10.74	198	6.52
Maharashtra	97	1.98	212	6.42	10	0.49	243	8.00
Manipur	N.A	N.A	25	0.67	N.A	N.A	25	0.82
Meghalaya	1	0.02	31	0.94	N.A	N.A	16	0.53

Orissa	112	2.29	45	1.36	29	1.41	8	0.26
Punjab	N.A	N.A	35	1.06	N.A	N.A	17	0.56
Rajasthan	135	2.76	55	1.67	N.A	N.A	21	0.69
Tamil Nadu	1243	25.39	476	14.41	877	42.63	698	22.97
Tripura	N.A	N.A	4	0.12	N.A	N.A	2	0.06
UP.	30	0.61	279	8.45	N.A	N.A	79	2.60
Total	4895	100.00	3303	100.00	2057	100.00	3039	100.00

Note: Data for the faculties if Arts and Science are not available in the states of J&K, Mizoram, Nagaland, Sikkim, Uttrakhand and West Bengal

Pattern of M.Phil Degrees awarded by States

The tables 5.6 showing the faculty wise award of M.Phil degrees reveal that 10 states have not awarded M.Phil degrees in the Faculty of Arts and 15 states have not reported the award of M.Phil degrees in the Faculty of Science. This is the greatest constraint in getting an overall pattern of M.Phil degrees awarded by faculties in the country. The states which have reported significant proportion of M.Phil degrees awarded are Tamil Nadu (25.39%), Madhya Pradesh (13.12%), Haryana (13.07%) , Delhi (11.48%) and Andhra Pradesh (8.78%). Thus, almost 63% of M.Phil degrees in Arts faculty are awarded by the above mentioned four states. Tamil Nadu has the highest share (42.62%) in awarding the M.Phil degree in Science faculty also. The other important states are Andhra Pradesh (11.96%), Madhya Pradesh (10.74%), Kerala (9.72%) and Delhi (7.88%). The five states mentioned have awarded 83% of the total M.Phil degrees.

Table: 5.6 (a)

State wise and Faculty wise Proportion of Research Degrees Awarded 2007-08

State	Faculty of Comp Sc/Application				Faculty of Commerce			
	M.Phil	%	Ph.D	%	M.Phil	%	Ph.D	%
Andhra Pradesh	1	0.30	9	8.04	45	7.76	61	12.25
Assam	N.A	-	N.A	-	12	2.07	1	0.20
Bihar	N.A	-	N.A	-	N.A	-	0	2.00
Chattisgarh	N.A	-	1	0.89	21	3.62	13	2.61
Delhi	44	13.10	17	15.18	11	1.90	9	1.81
Gujarat	N.A	-	2	1.79	17	2.93	28	5.62
Haryana	N.A	-	N.A	-	91	15.69	25	5.02
Jharkhand	N.A	-	N.A	-	N.A	-	73	14.66
Karnataka	11	3.27	8	7.14	N.A	-	9	1.81
Kerala	N.A	-	2	1.79	29	5.00	25	5.02
MP.	16	4.76	12	10.71	24	4.14	49	9.84
Maharashtra	N.A	-	7	6.25	90	15.51	47	9.44
Orissa	N.A	-	1	0.89	N.A	-	1	0.20
Rajasthan	N.A	-	29	25.89	N.A		29	5.82
Tamil Nadu	264	78.57	24	21.43	240	41.38	76	15.26
UP	N.A	-	N.A	-	N.A	-	42	8.42
Total	336	100.00	112	100.00	580	100.00	498	100.00

Notes: 1 Data for the faculties of Computer Science/Application and Commerce are not available for the states of Arunachal Pradesh, Goa, Himachal Pradesh, J&K, Manipur, Meghalaya, Sikkim, Mizoram, Nagaland, Punjab, Tripura, Uttrakhand and West Bengal.
2. Data for Computer Science/Application are not available in the states of Assam, Bihar, Haryana, Jharkhand and Uttra Pradesh.

The data pertaining to the award of M.Phil degree in Computer Science is available only for 5 states (Table 5.6(a). Almost 79% of M.Phil degree in this faculty has been awarded by Tamil Nadu and 13.10% by Delhi. Other three states, namely Andhra Pradesh (0.30%), Madhya Pradesh (4.76%) and Karnataka (3.27%) together account for about 8% of the award of M.Phil degrees the faculty of Computer Science. Ten states, out of the total 30 states have reported the award of M.Phil degree in the Faculty of Commerce. Three states namely Tamil Nadu (41.38%), Haryana (15.69%) and Maharashtra (15.51%) together account for about 73 % of the M.Phil degrees awarded in the faculty of Commerce.

The table 5.6 (b) shows that award of M.Phil degrees in the Faculty of Management has been reported by only 6 states. Tamil Nadu has reported the award of 71.32% of the total M.Phil degrees and the contribution of other 4 states varies from 5 to 9 % only. The award of M.Phil degrees in the faculty of Education has been reported in ten states. The highest proportion has been reported from Haryana (45.33%) followed by Tamil Nadu (33.0%). Himachal Pradesh accounted for 8.33% and others have small contributions to make.

Table: 5.6 (b)

State wise and Faculty wise Proportion of Research Degrees Awarded 2007-08

State	Faculty of Management				Faculty of Education			
	M.Phil	%	Ph.D	%	M.Phil	%	Ph.D	%
Andhra Pradesh	1	0.73	96	27.74	17	5.67	13	3.76
Assam	N.A	-	N.A	-	N.A	-	1	0.29
Bihar	N.A	-	1	0.29	N.A	-	N.A	-
Chattisgarh	N.A	-	5	1.44	N.A	-	N.A	-
Delhi	N.A	-	12	3.47	11	3.67	2	0.58
Goa	N.A	-	2	0.28	N.A	-	1	0.29
Gujarat	9	6.62	38	10.98	11	3.67	45	13.01
Haryana	N.A	-	4	1.16	136	45.33	26	7.51
HP	N.A	-	4	1.16	25	8.33	4	1.16
Jharkhand	N.A	-	1	0.29	N.A	-	N.A	-
Karnataka	N.A	-	13	3.76	14	4.67	13	3.76
Kerala	13	9.56	24	6.94	6	2.00	23	6.65
MP	9	6.62	27	7.80	4	1.33	8	2.31
Maharashtra	7	5.15	26	7.51	7	2.33	78	22.54
Manipur	N.A	-	N.A	-	N.A	-	5	1.11
Orissa	N.A	-	4	1.16	N.A	-	1	0.29
Punjab	N.A	-	22	6.36	N.A	-	8	2.31
Rajasthan	N.A	-	N.A	-	N.A	-	19	5.49
Tamil Nadu	97	71.32	66	19.07	69	23.00	73	21.10
UP	N.A	-	1	0.29	N.A	-	26	7.51
Total	136	100.00	346	100.00	300	100.00	346	100.00

Note: Data for faculties of Management and Education are not available for the States of Arunachal Pradesh, J&K, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, Uttrakhand and West Bengal

It is evident from the table 5.6(c) that M.Phil does not seem to be important programme in the faculty of Engineering/Technology and Medicine. While Madhya Pradesh (62.50%), Andhra Pradesh (31.25%) and Maharashtra (6.25%) have reported award of M.Phil degree in the faculty of Engg/Tech. only Rajasthan has reported M.Phil in the faculty of Medicine.

M.Phil does not seem to be a popular programme in the faculty of Law also (table 5.6 (d). Only three states have reported the award of M.Phil degree in this faculty. Gujarat (75%), Karnataka (14.06%) and Kerala (10.94%) are the only states which have reported the award of M.Phil degree in the faculty of Law. Seven States have M.Phil degree awarded in the faculty designated as "Others" which includes many professional courses. The highest proportion of M.Phil degree in the faculty of 'Others' has been reported in Maharashtra (29.39%) followed by Andhra Pradesh (18.86%), Kerala (17.54%), Delhi (14.47%) and Tamil Nadu (10.53%).

Pattern of Ph.D Degrees Awarded by States

The table 5.6 shows that the information for the award of Ph.D degree in the faculties of Arts and Science are available from 23 states out of the 30 states. The highest proportion of Ph.D degrees has been awarded in the Faculty of Arts from Tamil Nadu (14.41%) followed by Andhra Pradesh (11.96%) and Bihar (11.29%).Other states have contributed less than 9 percent. Arunachal Pradesh, Goa, Manipur, Meghalaya and Tripura have reported less than 1 % award of Ph.D degree at the country level. The pattern in Science faculty is not very different. The highest proportion of Ph.D degrees has been awarded in Tamil Nadu (22.97%) followed by Andhra Pradesh (17.93%) and Karnataka (10.63%).Ten states namely, Arunachal Pradesh, Goa, Himachal Pradesh, Jharkhand, Manipur, Meghalaya, Orissa, Punjab, Rajasthan and Tripura have reported less than 1% of the total Ph.D degrees awarded at the country level.

Table: 5.6 (c)

State wise and Faculty wise Proportion of Research Degrees Awarded 2007-08

State	Faculty of Engg/Tech				Faculty of Medicine			
	M.Phil	%	Ph.D	%	M.Phil	%	Ph.D	%
Andhra Pradesh	5	31.25	55	17.63	N.A	-	14	13.59
Arunachal Pradesh	N.A	-	5	1.60	N.A	-	N.A	-
Bihar	N.A	-	N.A	-	N.A	-	8	7.77
Chattisgarh	N.A	-	7	2.24	N.A	-	N.A	-
Delhi	N.A	-	11	3.53	N.A	-	34	33.02
Gujarat	N.A	-	23	7.37	N.A	-	N.A	-
Haryana	N.A	-	13	4.17	N.A	-	N.A	-
Jharkhand	N.A	-	7	2.24	N.A	-	2	1.94
Kerala	N.A	-	15	4.81	N.A	-	N.A	-
MP	10	62.50	18	5.77	N.A	-	5	4.85
Maharashtra	1	6.25	29	9.30	N.A	-	20	19.42
Punjab	N.A	-	1	0.32	N.A	-	4	3.88
Rajasthan	N.A	-	5	1.60	115	100	N.A	-
Tamil Nadu	N.A	-	123	39.42	N.A	-	16	15.53
Total	16	100	312	100	115	100	103	100

Notes: 1 Data for the faculties of Engg/Tech. and Medicine are not available for the states of Assam, Goa, Himachal Pradesh, J&K, Karnataka, Manipur, Meghalaya, Mizoram, Nagaland, Orissa, Sikkim, Tripura, Uttar Pradesh, Uttrakhand and West Bengal.
2. Data for the faculty of Medicine is not available in the states of Arunachal Pradesh, Gujarat, Haryana and Kerala

The table 5.6(a) shows the pattern of the award of Ph.D degree in various states in the faculties of Computer Science and Commerce. While only 11 states have reported award of Ph.D degree in Computer Science, 16 states have reported to have awarded Ph.D degree in the Faculty of Commerce. The state of Rajasthan has reported awarding 25.89% Ph.D degrees in Computer Science at the country level followed by Tamil Nadu (21.43%), Delhi (15.18%) and Madhya Pradesh (10.71%). These four states account for about 73% of the total Ph.D degrees awarded in Computer Science. As is evident from the table, Tamil Nadu has the highest share in the award of Ph.D degree in the faculty of Commerce with 15.26% closely followed by Jharkhand (14.66%) and Andhra Pradesh (12.25%).Madhya Pradesh and Maharashtra have contributed 9.84 and 9.44% respectively. Assam and Orissa have their share less than 1 percent.

Table: 5.6 (d)
State wise and Faculty wise Proportion of Research Degrees Awarded 2007-08

State	Faculty of Law				Faculty of Others			
	M.Phil	%	Ph.D	%	M.Phil	%	Ph.D	%
Andhra Pradesh	N.A	-	23	23.71	43	18.86	25	9.65
Chattisgarh	N.A	-	2	2.06	N.A	-	28	10.81
Delhi	N.A	-	7	7.22	33	14.47	15	5.79
Gujarat	48	75.00	25	25.78	9	3.95	18	6.95
Haryana	N.A	N.A	13	13.40	N.A	-	N.A	-
HP	N.A	N.A	2	2.06	N.A	-	7	2.70
Karnataka	9	14.06	4	4.12	12	5.26	2	0.77
Kerala	7	10.94	1	1.03	40	17.54	30	11.58
MP	N.A	-	2	2.06	N.A	-	4	1.55
Maharashtra	N.A	-	6	6.19	67	29.39	88	33.98
Meghalaya	N.A	-	N.A	-	N.A	-	2	0.77
Orissa	N.A	-	2	2.06	N.A	-	N.A	-
Rajasthan	N.A	-	8	8.25	N.A	-	N.A	-
Tamil Nadu	N.A	-	2	2.06	24	10.53	32	12.36
UP	N.A	-	N.A	-	N.A	-	8	3.09
Total	64	100.00	97	100.00	228	100.00	259	100.00

Notes: 1 Data for the faculties of Law and Others are not available for the states of Arunachal Pradesh, Assam, Bihar, Goa, Jharkhand, J&K, Manipur, Mizoram, Nagaland, Punjab, Sikkim, Tripura, Uttrakhand and West Bengal
2. Data for the faculty of Law are not available in Meghalaya and Uttar Pradesh
3. Data for the faculty designated as others are not available in Orissa and Rajasthan

Out of the 30 states, 17 States have reported award of Ph.D degree in the faculties of Management and Education. Data for the faculty of Management are not available for Arunachal Pradesh, Assam, J&K, Meghalaya, Manipur, Mizoram, Nagaland, Sikkim Tripura, Uttrakhand and West Bengal. The State of Andhra Pradesh with 27.74% of

the total Ph.D degrees awarded in the faculty of Management has the largest share at the country level followed by Tamil Nadu (19.07%) and Gujarat (10.98%).The states of Madhya Pradesh, Maharashtra, Kerala and Punjab account for 7.80, 7.51, 6.94 and 6.36 percent respectively of the Ph.D degrees awarded in the faculty of Management at the country level. The share of Bihar, Goa, Jharkhand and Uttar Pradesh is less than 1 percent. The share of the rest of the states ranges between 1 to 4 percent.

The data for the states of Arunachal Pradesh, Bihar, Chattisgarh, J&K, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, Uttrakhand and West Bengal in the faculty of Education are not available. Maharashtra has reported the largest share of the award of Ph.D degrees in the faculty of Education with 22.54% of the total Ph.D degrees awarded at the country level. Maharashtra is closely followed by Tamil Nadu (21.10%) and Gujarat (13.01%).Haryana and Uttar Pradesh have awarded 7.51% of the Ph.D degrees each in Education. The share of the states of Assam, Delhi, Goa and Orissa is less than 1 percent.

Out of the 30 states, only 13 states have reported the award of Ph.D degree in the Faculty of Engineering/Technology (Table 5.6 (c)).Tamil Nadu has awarded the largest share (39.42%) of Ph.D degrees in the faculty of Engineering/ Technology followed by Andhra Pradesh (17.63%) and Maharashtra (9.30%). Punjab is the only state whose share is less than 1 per cent. Only 8 states have reported the award of Ph.D in the faculty of Medicine. Delhi claims the highest share with 33.02% of the total Ph.D degrees awarded in the faculty of Medicine at the country level followed by Maharashtra (19.42%) , Tami Nadu (15.53%) and Andhra Pradesh (13.59%).Thus, these four states account for almost 82% of the total Ph.D degree awarded in this faculty at the country level.

The table 5.6(d) presents the state wise pattern of the award of Ph.D degrees in the faculties of Law and Others. The sample universities of only 13 states have reported the award of Ph.D degrees in the faculty of Law but the number of degrees is very low. It is strange that only 97 Ph.D degrees have been awarded in the 13 states taken together. Gujarat (25.78%) and Andhra Pradesh (23.71%) account for almost 50% of the degrees awarded in the faculty of Law. Haryana (13.40%) ,Rajasthan (8.25%) and Delhi (7.22%) are other states which can be mentioned as contributors at the country level.

The faculty designated as "Others" presents an assortment of professional courses such as library Science, Social Work, Performing Arts, Fine Arts, Music, Physical Education etc. Table 5.6(d) contains the information pertaining to the award of Ph.D degree in these subjects. The information is available from the sample universities of only 12 states. Maharashtra is the leading state in the award of Ph.D degree in these subjects with 33.98 % of these degrees awarded at the country level. Other important states are Tamil Nadu, Kerala and Chattisgarh with their share of 12.36, 11.58 and 10.81 percent respectively.

Research is a very crucial input in the generation of knowledge. The pattern as discussed above shows pitfalls in many faculties. The general pattern of the faculty wise research shows that it is not a major concern in the faculties of professional degrees such as Engineering/Technology, Management, Medicine and Law though research adds to the professional excellence in all the faculties.

PART- II

Performance of Students at the Graduate and Post Graduate Levels

Pattern of Performance of Students at the UG level (Aggregated)

The pass percentage has been one of the important traditional indicators of the performance of students at different levels of examinations. The pass percentage is calculated on the basis of number of students appearing in the examination of a particular course. The present exercise has been done on the basis of the data of students appeared and passed. In the first exercise the patterns of the results of the total as well as of female students of undergraduate courses have been analyzed and in the subsequent exercise, the patterns of post graduate results at the level of total as well as female students have been analyzed. The table 5.7 shows the results of UG and PG courses along with the gender representation.

Table: 5.7

Aggregated Results of UG and PG in All the Faculties by States and Gender- 2007-08

(Pass Percentages to the Total Appeared)

States	Under Graduates		Post Graduates	
	Male & Female	Female	Male & Female	Female
Andhra Pradesh	53.94	63.16	78.19	80.29
Arunachal Pradesh	85.45	92.03	71.48	80.45
Assam	52.33	43.47	76.71	68.34
Bihar	75.86	79.14	85.98	86.44
Chattisgarh	76.32	82.98	89.57	91.97
Delhi	53.27	67.50	92.25	93.67
Goa	76.58	85.16	93.28	93.14
Gujarat	85.20	88.79	71.09	84.27
Haryana	60.57	59.24	70.71	75.42
Himachal Pradesh	69.85	60.28	32.56	32.53
Jharkhand	96.80	97.19	97.97	98.13
Karnataka	68.39	72.26	81.82	81.55
Kerala	53.84	64.29	62.77	71.23
Madhya Pradesh	70.19	68.21	59.95	73.83
Maharashtra	54.32	59.57	44.69	47.57
Manipur	73.47	72.67	88.69	41.23
Meghalaya	82.26	83.92	83.52	85.98
Nagaland	54.71	0.00	0.00	Nil
Orissa	79.75	79.34	87.07	86.01
Puducherry	45.86	55.81	Nil	Nil
Punjab	78.36	81.71	70.89	92.88
Rajasthan	97.68	96.45	98.01	87.59
Tamil Nadu	77.86	84.08	77.26	84.22
Tripura	87.98	91.89	92.00	85.82
Uttar Pradesh	89.36	91.32	87.20	89.59
Uftrakhand	86.10	86.31	82.65	72.94
West Bengal	88.73	94.94	92.51	69.51
National Average	70.86	75.56	71.53	74.18

Note: Data are not available for Jammu & Kashmir, Mizoram and Sikkim

The table clearly indicates that Rajasthan has reported the highest pass percentage (97.68%) at the UG level and the lowest has been reported by Puducherry (45.86%). The distribution of states according to the pass percentage at the UG level is given in table 5.7 (a). The table shows that the pass percentage in Rajasthan and Jharkhand is more than 95 per cent. The states of Arunachal Pradesh, Gujarat, Tripura, Uttar Pradesh, Uttrakhand and West Bengal have also shown very good results at the UG level by recording pass percentage of 85 to 95 per cent. The clustering of seven states can be observed in

Table: 5.7 (a)

Distribution of states according to pass percentage range at the UG Level (Total Students) 2007-08

Pass percentage range	States	No. of states
More than 95	Rajasthan, Jharkhand	2
85 to 95	Arunachal Pradesh, Gujarat, Tripura, Uttar Pradesh, Uttrakhand, West Bengal	6
75 to 85	Bihar, Chattisgarh, Goa, Meghalaya, Punjab, Tamil Nadu, Orissa	7
65 to 75	Himachal Pradesh, Karnataka, Madhya Pradesh, Manipur	4
55 to 65	Haryana	1
45 to 55	Andhra Pradesh, Assam, Delhi, Kerala, Maharashtra, Nagaland, Puducherry	7

Note: Data is not available for Jammu& Kashmir, Mizoram and Sikkim

Percentage ranges of 75 to 85 as well as the percentage range of 45 to 55. Haryana happens to be the only state in the pass percentage range of 55 to 65.

It is worth while to examine the pattern of pass percentage of female students in order to understand their performance in the respective states. The table 5.7 (b) shows the pattern of the distribution of states according to the pass percentage of female students.

Table: 5.7 (b)

Distribution of states according to the pass percentage range of Female students (Aggregated level) 2007-08

Pass percentage range	States	Number of States
More than 95	Jharkhand, Rajasthan	2
85 to 95	Arunachal Pradesh, Goa, Gujarat, Tripura, Uttar Pradesh. Uttrakhand, West Bengal	7
75 to 85	Bihar, Chattisgarh, Meghalaya, Punjab, Tamil Nadu, Orissa	6
65 to 75	Delhi, Karnataka, Madhya Pradesh, Manipur	4
55 to 65	Andhra Pradesh, Haryana, Himachal Pradesh, Kerala, Maharashtra, Puducherry,	6
Less than 55	Assam	1

Note: Data for Jammu & Kashmir, Mizoram, Nagaland and Sikkim are not available

The pattern of pass percentages of female students largely conforms to the pattern of the total students. The states of Jharkhand and Rajasthan have recorded the highest pass percentage in case of female students also. The discernible changes are there in case of Goa which has moved up to the second category from the third one. The important changes have been observed in Assam and Puducherry. In Assam the pass percentage of total students was 52.33% but the pass percentage of female students dropped to 43.47%. In case of Puducherry, the pass percentage for total students was 45.86% but for female students it has gone up to 55.83%. The pass percentage of female students has also improved in Andhra Pradesh, Delhi Kerala, Maharashtra and Puducherry. Data for the results of female students was not available for Nagaland. Except for a few exceptions, the results of the female students have shown improvement over the results of the total Students.

State wise and Faculty wise Performance of UG Students

The tables 5.8, 5.9 and 5.10 contain the State wise and Faculty wise pass percentages of the students.

Table 5.8 contains the pattern of results of the students appearing in the undergraduate examinations of the faculties of Arts, Science, Computer Sc/App and Commerce. The table shows that the highest pass percentage at the UG level in the faculty of Arts of the total students, who appeared in the examination, has been recorded in Jharkhand (97.06%) and the lowest in Puducherry (20.13%). 12 states have recorded total pass percentage of more than 80% against a national average of 76.68%. 9 states have the pass percentage less than the national average. Assam and Maharashtra are the two other states besides Puducherry where failure rate is more than 50%.

Table: 5.8

State wise and Faculty wise Examination Results (Pass Percentages to the Total Appeared) 2007-08

State	UG Arts		UG Science		UG Comp. Sc.		UG Commerce	
	% of Total Passed	% of Females Passed	% of Total Passed	% of Females Passed	% of Total Passed	% of Females Passed	% of Total Passed	% of Females Passed
Andhra Pradesh	54.58	62.57	41.65	57.62	28.26	68.75	62.51	62.65
Arunachal Pradesh	86.05	93.32	61.76	100	N.A	N.A	81.71	85.71
Assam	49.49	34.96	54.88	63.31	N.A	N.A	46.09	50.66
Bihar	82.9	83.5	69.79	83.71	95.22	94.81	84.14	89.94
Chattisgarh	81.63	87.44	75.8	86.19	92.99	93.88	58.64	65.84
Delhi	90.41	97.18	N.A	N.A	65.13	84.14	N.A	N.A
Goa	58.57	76.73	81.18	83.62	48.99	48.99	90.56	93.34
Gujarat	87.72	94.17	77.15	75.23	86.24	91.15	81.83	89.85
Haryana	N.A	N.A	64.65	96.77	N.A	N.A	N.A	N.A
HP	71.65	62.88	51.46	34.47	84.61	100	65.96	48.99

Jharkhand	97.06	97.5	97.73	98.62	N.A	N.A	95.69	95.35
Karnataka	69.84	74.37	56.73	61.46	82.73	90.32	62.72	68.09
Kerala	76.9	76.35	75.3	78.15	59.69	72.84	21.14	29.96
MP	69.45	62.28	67.83	57.16	67.74	100	67.24	80.01
Maharashtra	43.95	52.1	53.02	59.93	69.85	71.02	71.52	69.84
Manipur	79.73	79.12	77.86	77.61	N.A	N.A	60.38	66.67
Meghalaya	81.65	84.95	85.63	81.76	80.95	66.67	85.67	80.44
Nagaland	51.11	N.A	41.49	N.A	100	N.A	72.97	N.A
Orissa	79.65	78.27	74.31	81.51	88.71	86.36	80.37	80.33
Puducherry	20.13	35.19	23.76	26.73	24.54	22.22	24.27	41.44
Punjab	73.39	78.22	80.49	86.29	78.88	80.46	78.29	81.38
Rajasthan	89.26	87.53	100	100	100	100	100	100
Tamil Nadu	56.02	67.34	77.08	85.31	76.01	87.36	80.95	84.18
Tripura	87.65	90.69	89.04	96.49	54.17	100	85.52	85
UP	91.07	91.25	82.7	92.37	97.67	100	83.57	89.35
Uttrakhand	86.92	87.02	80.55	78.25	N.A	N.A	87.32	89.99
WB	87.67	94.07	88.14	97.38	100	N.A	93.2	96.99
National Average	76.68	78.42	60.31	70.28	74.63	80.8	61.75	66.3

Note (i) Data are not available for Haryana, Jammu & Kashmir, Mizoram and Sikkim for the faculty of Arts

(ii) Data for Delhi, J&K, Mizoram and Sikkim are not available in the faculty of Science.

(iii) Data for Arunachal Pradesh, Assam, Haryana, J&K, Jharkhand, Manipur, Mizoram, Uttrakhand and Sikkim are not available for the Faculty of Computer Sc/App

(iv) Data for Delhi, Haryana, J&K, Mizoram and Sikkim are not available for the Faculty of Commerce.

The female students have performed better. The highest pass percentage of female students has been recorded in the State of Delhi and the lowest in Assam. The national average pass percentage for female students is higher than the national average for the total students by 1.76 per cent. Except for the states of Assam, Himachal Pradesh, Madhya Pradesh, Orissa and Rajasthan, the pass percentage for female students is higher than the pass percentage for the total students.

In the faculty of Science, the highest pass percentage of the total student has been recorded in Rajasthan (100%) and the lowest in Puducherry (23.76%). The national average for the pass percentage of the total students is much lower (60.31%) as compared to the faculty of Arts (76.68%).8 states have recorded a pass percentage of more than 80% of their total appearing students. The states of Andhra Pradesh, Assam, Himachal Pradesh, Karnataka, Maharashtra and Nagaland have their total pass percentage below the national average.

The highest pass percentage of female students in UG Science has been recorded in Arunachal Pradesh and Rajasthan (both have recorded 100%) but the lowest is in Puducherry (26.73%) which is lower than the performance of female students in the

faculty of Arts (35.19%).Except for 6 states, in all other states, the performance of the female students is better over the total. The national average for the female students is much higher (70.28%) as compared to the national average for the total pass percentage.

The data for the Faculty of Computer Science/Application is not available for the states of Arunachal Pradesh, Assam, Haryana, Jharkhand, Manipur and Uttrakhand. The national average for the pass percentage of the total students is 74.63% and for female students it is 80.80 percent. The highest pass percentage for the total students has been recorded in Rajasthan and West Bengal (100% in both the states) followed by Uttar Pradesh (97.67%) and Bihar (95.22%).The lowest pass percentage has been recorded in Puducherry (24.54%). Andhra Pradesh, Delhi, Goa, Puducherry and Tripura have the pass percentage of total students below the national average. Female students have done much better in computer Sc/App at the UG level in every state as compared to the results of the total students except in Meghalaya, Orissa and Puducherry where their pass percentage is marginally lower than the total.

The highest pass percentage in the Faculty of Commerce has been reported in Rajasthan (100%) at the UG level followed by Jharkhand (95.69%) and West Bengal (93.20%). The lowest pass percentage is reported in Kerala (21.14%).The results for the total in the states of Assam, Chattisgarh, Kerala, Manipur and Puducherry are below the national average of 61.75 per cent. The highest pass percentage for female students has been recorded in Rajasthan (100%) followed by West Bengal (96.99%) and Jharkhand (95.35%). The lowest has been recorded in Kerala (29.96%) Except for Himachal Pradesh, Maharashtra, Meghalaya, and Tripura the results of female students are higher than the pass percentage of the total students.

Table: 5.9

State wise and Faculty wise Examination Results (Pass Percentages to the Total Appeared) 2007-08

State	UG Management		UG Education		UG Engg/Tech		UG Medicine	
	% of Total Passed	% of Females Passed	% of Total Passed	% of Females Passed	% of Total Passed	% of Females Passed	% of Total Passed	% of Females Passed
Andhra Pradesh	79.33	88.65	88.48	81.23	79.52	85.96	84.16	87.73
Arunachal Pradesh	N.A.	N.A	93.28	80	N.A	N.A	36.84	50
Assam	N.A	N.A	80.22	72.41	N.A	N.A	75.38	70
Bihar	99.22	99.36	95.69	92.4	99.71	98.83	57.16	70.23
Chattisgarh	90	76.47	93.33	93.55	52.14	68.69	93.62	100
Delhi	19.27	26.77	95.79	97.27	83.61	89,14	93.69	94.12
Goa	97.87	95.12	89.06	89.47	85.53	85.45	74.09	92.73
Gujarat	66.47	69.62	99.15	98.98	96.54	97.62	82.01	85.63

Haryana	N.A	N.A	N.A	N.A	83.22	96	90.72	97.62
HP	81.21	80.89	95.77	95.67	76.2	72.73	51.72	79.1
Karnataka	67.85	72.44	91.71	85.04	27.54	27.59	N.A	N.A
Kerala	82.12	74.79	95.81	97.34	42.1	54.23	81.45	83.57
MP	53.08	62.74	88.51	90.16	100	100	82.56	87.56
Maharashtra	49.72	61.72	95.11	95.21	80.91	87.91	78.49	89.54
Manipur	N.A	N.A	53.63	49.54	21.36	30.77	N.A	N.A
Meghalaya	98.57	96.3	80	81.42	41.38	66.67	N.A	N.A
Nagaland	44.44	N.A	95.88	N.A	N.A	N.A	N.A	N.A
Orissa	87.95	81.48	89.78	93.52	N.A	N.A	97.46	98.44
Puducherry	30.68	27.71	85.78	88.41	76.85	85.41	89.36	97.54
Punjab	61.29	70	92.37	90.3	N.A	N.A	100	100
Rajasthan	97.56	97.56	100	100	100	100	N.A	N.A
Tamil Nadu	83.94	87.3	89.92	88.3	79.14	93.8	90.7	96.8
Tripura	96	100	91.84	99.18	89.09	91.89	92	100
UP	93.57	96.07	92.54	92.52	89.06	94.67	83.53	91.93
Uttrakhand	N.A	N.A	96.24	100	N.A	N.A	100	100
W Bengal	92.8	N.A	83.99	N.A	82.38	80.15	74.72	N.A
National Average	64.26	70.64	91.5	89.61	72.09	75.63	81.65	88.82

The table 5.9 contains the results of the faculties of Management, Education, Engineering/Technology and Medicine at the UG level. The data for the faculty of Management is not available for the states of Arunachal Pradesh, Jharkhand, Meghalaya, Nagaland and Puducherry. The national average for the pass percentage of the total students in the faculty of Management is 64.26 per cent and for the female students it is 70.64 per cent. The highest pass percentage of the total students has been recorded in Bihar (99.22%) followed by Meghalaya (98.57%), Goa (97.87%) and Rajasthan (97.56 %).The highest percentage for female students has been recorded in Tripura (100%) followed by Bihar (99.36%) and Rajasthan (97.56%). The lowest pass percentage has been recorded in Delhi (26.77%). Except for six states, where the performance of the girl students is marginally lower than the total, they have done better than the total students in all other states for which data is available.

The data for the faculty of Education is not available in the states of Haryana and Jharkhand and for female students it is not available in Nagaland and West Bengal. In case of faculty of Education the national average is marginally higher (91.50%) for the total pass percentage than the pass percentage for female students (89.61). The highest pass percentage for the total students has been recorded in Rajasthan (100%) followed by Gujarat (99.15%). Fifteen states have recorded pass percentage of more than 90% for the total students. Two states, Rajasthan and Uttrakhand have recorded 100% results for female students followed by Tripura (99.18%). In fourteen states, the results for female students have been more than 90 per cent.

The data for the faculty of Engineering/Technology is not available for the states of Arunachal Pradesh, Assam, Jharkhand, Nagaland, Orissa and Uttrakhand. The results in the Engineering/Technology at the UG level show 100 percent success rate in the states of Madhya Pradesh and Rajasthan followed by Bihar (99.71%) and Gujarat (96.54%). Seven states have recorded pass percentage of more than 80 per cent. The national pass percentage for the total results is 72.09% while, for female students, it is 75.63%. The states of Madhya Pradesh and Rajasthan have recorded 100 per cent results for female students also. The lowest pass percentage for the female students has been recorded in the state of Karnataka (27.59%). Except for a few exceptions the pass percentage of female students is higher than the pass percentage of the total students.

The results of UG level in Medicine are not available in the states of Jharkhand, Karnataka, Manipur, Meghalaya, Nagaland and Rajasthan are not available. The national average for the total pass percentage is 81.65 while for female students it is 88.82 percent. Punjab and Uttrakhand have recorded pass percentage of 100 in case of total students who appeared in the examination followed by Orissa (97.46%). The lowest pass percentage has been recorded in Arunachal Pradesh (36.84%) for the total students. In case of female students at the UG level in Medicine, the states of Chattisgarh, Punjab, Tripura and Uttrakhand have recorded pass percentage of 100. Besides these states, seven other states have obtained pass percentage of more then 90 for female students. The lowest pass percentage for female students has been recorded in Arunachal Pradesh (50%).

The data pertaining to the faculty of Law at the UG level are not available for the states of Arunachal Pradesh, Jammu and Kashmir, Jharkhand, Mizoram, Nagaland and Rajasthan. The state of West Bengal has recorded the highest pass percentage (99.66%) in the Faculty of Law at the UG level for the total students followed by Tripura (97.50%) and Manipur (93. 62%). The lowest pass percentage (39.75%) for total students has been reported in the state of Karnataka. The performance of female students seems to be better than the total students though they themselves are the part of the total. Tripura and Uttrakhand have reported pass percentage of 100 for Female students. Besides these, there are 5 other States in which the female students have obtained pass percentage of more than 90. The lower pass percentage for female students is 49.70 in the state of Karnataka.

Table 5.10
State wise and Faculty wise UG Level Examination Results (Pass Percentages to the Total Appeared) 2007-08

State	UG Law		UG Others	
	% of Total Passed	% of Females Passed	% of Total Passed	% of Females Passed
Andhra Pradesh	79.75	83.14	77.18	64.28
Arunachal Pradesh	N.A	N.A	N.A	N.A
Assam	47.95	63.72	60.71	60.61
Bihar	83.92	89.25	N.A	N.A
Chattisgarh	58.77	67.13	96.53	77.73

Delhi	75.77	81.82	83.25	87.94
Goa	73.48	77.35	100	100
Gujarat	81.5	81.89	97.4	97.33
Haryana	75	85.71	95.1	100
Himachal Pradesh	61.18	82.1	82.47	83.95
Karnataka	39.75	49.7	88.09	87.2
Kerala	62.13	60.49	75.86	76.05
Madhya Pradesh	68.15	89.73	81.4	94
Maharashtra	61.89	71.13	80.34	83.33
Manipur	93.62	93.33	N.A	N.A
Meghalaya	72.55	66.67	N.A	N.A
Nagaland	N.A	N.A	N.A	N.A
Orissa	91.63	92.51	98.11	100
Puducherry	64	90.91	26.37	23.43
Punjab	78.8	89.47	90.5	94.25
Rajasthan	N.A	N.A	82.98	88.89
Tamil Nadu	49.23	N.A	97.42	94.91
Tripura	97.5	100	100	100
Uttar Pradesh	71.58	91.78	91.48	95.73
Uttrakhand	86.49	100	N.A	N.A
West Bengal	99.66	96.87	97.43	N.A
National Ave.	71.18	76.48	83.55	77.54

The results for 'others' at the UG level are not reported in the states of Arunachal Pradesh, Bihar, J&K, Jharkhand, Manipur Meghalaya, Mizoram, Nagaland and Uttrakhand. The states of Goa and Tripura have reported pass percentage of 100 in 'others' followed by Orissa (98.11%), West Bengal (97.43%) and Tamil Nadu (97.42%) for the total students who appeared in the examination. The lowest pass percentage of (26.37%) for the total students has been recorded in Puducherry. Four states; Goa, Haryana, Orissa and Tripura have recorded pass percentage of 100 for female students. The lowest pass percentage for female students has again been recorded by Puducherry. The national average for female students is lower than the national average for the total students.

Performance of Students at the PG Level

The aggregated data for the PG level of all faculties and all states has been presented in the table 5.7. The data for the states of J&K, Mizoram, Nagaland, Puducherry and Sikkim are not available.

Table: 5.11

Distribution of states according to the Pass percentage of total students at the PG level 2007-08

Percentage range	States	No. of states
More than 90	Delhi, Goa, Jharkhand, Rajasthan, Tripura, West Bengal	6
75 to 90	Andhra Pradesh, Assam, Bihar, Chattisgarh, Karnataka, Manipur, Meghalaya, Orissa, Tamil Nadu, Uttar Pradesh, Uttrakhand	11
60 to 75	Arunachal Pradesh, Gujarat, Haryana, Kerala, Punjab	5
45 to 60	Madhya Pradesh	1
30 to 45	Maharashtra, Himachal Pradesh	2
Data not Available	J&K, Mizoram, Nagaland, Puducherry, Sikkim	5

The table 5.11 shows the distribution of states according to the pass percentage for the total students who appeared in the examination. The highest pass percentage of students at the PG level has been recorded in the state of Rajasthan (98.01%) followed by Jharkhand (97.97%) and Goa 93.28%).The lowest pass percentage has been recorded in Himachal Pradesh (32.56%).The national average for pass percentage of the total students is 71.53%. Seventeen states have recorded pass percentage above the national average while rest of the eight states has pass percentage of less than the national average.

The national average for the pass percentage of female students is 74.18%, higher than the national average of the total students. The pass percentage female students are higher than the national average in seventeen states. The highest pass percentage for female students has been recorded in Jharkhand (98.13%) and the lowest in Himachal Pradesh (32.53%).

The table 5.12 shows the distribution of states according to the pass percentages of female students. The pass percentages of female students are higher than the total pass percentages in fifteen states. Maximum concentration of states is found in the category of 75% to 90% wherein 12 states have clustered. There is no data for 5 states. Faculty wise pattern of performance of students is quite varied. The pass percentages at the PG level vary between 97.72% in Jharkhand and 33.92% in Himachal Pradesh.

Table: 5.12

Distribution of states according to pass percentage of female students at the PG Level 2007-08

Percentage range	States	No. Of States
More than 90	Chattisgarh, Delhi, Goa, Jharkhand, Punjab	5
75 to 90	Andhra Pradesh, Arunachal Pradesh, Bihar, Gujarat, Haryana, Karnataka, Meghalaya, Orissa, Rajasthan Tamil Nadu, Tripura, U.P.	12
60 to 75	Assam, Kerala, Madhya Pradesh, Uttrakhand, West Bengal	5
45 to 60	Maharashtra	1
30 to 45	Himachal Pradesh, Manipur	2

Note: Data not available for J&K, Mizoram, Nagaland, Puducherry, Sikkim

The national average for the pass percentage of total students is 67.34% and seventeen states have their pass percentage above the national average. The states of Assam, Haryana, Himachal Pradesh, Kerala, Madhya Pradesh, Maharashtra and Punjab have recorded the pass percentage of total students below the national average.

The pass percentage of the female students at PG level in Arts faculty is higher than the pass percentage of the total students in 21 states. It means that female students have performed much better in majority of the states. The highest pass percentage has been recorded in Jharkhand and the lowest in Himachal Pradesh.

The pass percentage in the Science faculty is also varied. It varies between 99.38% in Rajasthan and 49.35% in Madhya Pradesh. The data for Himachal Pradesh, J&K, Mizoram, Nagaland, Puducherry, Tripura and Sikkim are not available for the faculty of Science. Eight states have recorded pass percentage of more than 90 percent. Six states have 80to 90%.Thus, almost two third of the states for which data is available have pass percentage of more than 80 per cent.

The pass percentage of female students in the Science faculty varies between 99.69% in Rajasthan and 61.94 % in Maharashtra. The pass percentage of female students is generally higher than the pass percentage for total students. Seventeen states out of 23 for which data is available have recorded pass percentage of more than 80 percent.

The number of states reporting pass percentage in Computer Science / Application is very few. Only 12 states have reported pass percentage for Total students and only 5 states have reported for female students. The data is so scanty that it is difficult to discern any clear pattern. The states of Haryana, Himachal Pradesh, Rajasthan and West Bengal have reported pass percentage of 100% for the total students. Rest of the states have more than 90 % except Andhra Pradesh which has reported pass percentage of 77.23 %.The states of Andhra Pradesh and Gujarat have recorded pass percentage of more than 90% for female students. In the other three states of Haryana, Kerala and Uttar Pradesh the pass percentage is lower than that for the total.

Table: 5.13

State wise and Faculty wise Examination Results (Pass Percentages to the Total Appeared) 2007-08

State	PG Arts		PG Science	
	% of Total Passed	% of Females Passed	% of Total Passed	% of Females Passed
Andhra Pradesh	70.9	76.62	78.45	77.44
Arunachal Pradesh	71.36	78.72	80.52	88.57
Assam	68.93	57.1	75.79	81.58
Bihar	83.96	87.27	90.36	84.5
Chattisgarh	89.15	91.5	91.86	94.37
Delhi	92.17	92.39	96.6	94.29
Goa	95.65	N.A	94.42	91.53

Gujarat	83.07	84.65	91.84	88.19
Haryana	35.64	96.66	83.49	46.99
Himachal Pradesh	33.92	34.66	N.A	N.A
Jharkhand	97.72	97.94	98.64	98.19
Karnataka	82.08	77.99	69.52	73.69
Kerala	56.33	60.35	78.43	89.49
Madhya Pradesh	59..75	65.58	49.35	83.22
Maharashtra	37.85	41.85	59.74	61.94
Manipur	91.11	94.45	83.18	87.32
Meghalaya	86.59	86.59	76.47	83.75
Orissa	82.26	80.98	89.77	91.08
Punjab	66.88	67.43	89.2	89.04
Rajasthan	91.49	93.39	99.38	99.69
Tamil Nadu	79.34	81.36	66.93	71.3
Tripura	N.A	86.91	N.A	N.A
Uttar Pradesh	88.2	85.77	85.39	91.85
Uttrakhand	83.92	88.56	76.84	74.14
West Bengal	91.26	72.93	93.23	87.59
National Ave.	67.34	72.93	47.87	77.41

Note: Data are not available for Arunachal Pradesh, Jammu & Kashmir, Jharkhand, Manipur, Meghalaya, Mizoram, Nagaland and Uttrakhand.

The data for the faculty of Commerce at the PG level are not available for the states of Delhi, J&K, Mizoram, Nagaland, Puducherry, Punjab, Rajasthan, Sikkim, Uttrakhand and West Bengal. Goa has recorded 100% results for the total students as well as for the female students. Besides, Jharkhand, Manipur and Tripura have also recorded 100% pass percentage for female students. The lowest percentage for the total students has been recorded in Himachal Pradesh (22.68%) as well as for the female students (17.34%) which are much lower than the pass percentage of the total students. In the majority of the states, the results for the female students are much better than the total students.

The states of Arunachal Pradesh, Himachal Pradesh, J&K, Jharkhand, Meghalaya, Mizoram, Uttrakhand and Sikkim have not reported pass percentage in the faculty of Management at the PG level. Manipur, Tripura and Uttrakhand have recorded pass percentage of 100% for the total students. The lowest pass percentage for the total students appearing at PG level in Management has been recorded in Gujarat (40.95%). The states of Manipur, Tripura, Uttrakhand and West Bengal have recorded 100% pass percentage for the female students. While eight states have recorded pass percentage of more than 90% for the total students, eleven states have recorded pass percentage of more than 90% for girl students. The pass percentage for the female students is generally better than the total students in terms of pass percentage.

The States of Arunachal Pradesh, Assam, Bihar, Goa, J & K, Jharkhand, Manipur, Meghalaya, Mizoram, Nagaland, Puducherry, Sikkim and Tripura have not reported

the pass percentages at the PG level in the Faculty of Education (table 5.14). The highest pass percentage has been reported in Chattisgarh (100%) for the total students followed by Andhra Pradesh (98.86%) and Gujarat (98.31%). The pass percentages for the female students at the PG level in Education is much better. The states of Chattisgarh, Delhi, Kerala, Orissa and West Bengal have reported 100 per cent results for female students. Nine states have reported pass percentage of more than 90% for female student.

Table: 5.14

State wise and Faculty wise PG Examination Results (Pass Percentages to the Total Appeared) 2007-08

State	PG Management		PG Education	
	% of Total Passed	% of Females Passed	% of Total Passed	% of Females Passed
Andhra Pradesh	88.59	92.51	98.86	98.88
Assam	94.55	92.86	N.A	N.A
Bihar	86.7	79.41	N.A	N.A
Chattisgarh	98.11	100	100	100
Delhi	90.16	94.76	91.67	100
Goa	78.33	90.48	N.A	N.A
Gujarat	40.95	99.6	98.31	98.78
Haryana	64.45	73.41	93.87	90.57
Himachal Pradesh	N.A	N.A	63.89	54.46
Karnataka *	95.54	94.91	96.68	95.65
Kerala	66.94	65.47	96.69	100
Madhya Pradesh	75.57	73.74	79.41	92.59
Maharashtra	89.71	86.26	78.72	78.95
Manipur	100	100	Nil	Nil
Orissa	98.6	97.73	83.87	100
Punjab	97.16	96.92	94.55	94.35
Rajasthan	97.75	97.46	97.14	97.14
Tamil Nadu	88.88	95.2	95.49	95.86
Tripura	100	100	N.A	N.A
Uttar Pradesh	85.64	95.48	94.85	96.84
Uttrakhand	100	100	88	87.5
West Bengal	97.86	100	95.83	100
National Ave.	80.99	89.68	91.22	91.59

Out of 30 states of the country, the data for the pass percentages of the total students in the Faculty of Engineering /Technology are available only for only 14 states at the PG level. However, the data for the female students is not available for the state of Bihar. The states of Bihar and Rajasthan have reported 100% pass percentage for the

total students at the PG level followed by Kerala (99.49%) while the lowest has been reported in Maharashtra (41.43%). The states of Assam, Kerala, Rajasthan and Uttar Pradesh have reported pass percentage of 100% for female students in the Faculty of Engineering/ Technology. The lowest pass percentage has been recorded in Maharashtra (34.66%) for the female students also. In the majority of states pass percentage for female students is lower than the total consequently the national average for female students is also lower than the total students.

The faculties of Medicine at PG level have reported results in seventeen states. The states of northeast particularly, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland and Tripura are conspicuous by their absence. The states of Bihar, Chattisgarh, Haryana and Punjab have recorded pass percentage of 100 for the total students while the lowest pass percentage is as high as 76.28% in Gujarat. The national average for the total is 91.31%. The states of Bihar, Chattisgarh, Haryana, Madhya Pradesh, Orissa, Punjab, Tamil Nadu, Uttar Pradesh and West Bengal have reported pass percentage of 100 for female students in the faculty of medicine. The national average, thus, for female students is 91.82%. The lowest pass percentage for female students has been reported in Gujarat (76.06%).

Table: 5.15

State wise and Faculty wise PG Examination Results (Pass Percentages to the Total Appeared) 2007-08

State	PG Law		PG Others	
	% of Total Passed	% of Females Passed	% of Total Passed	% of Females Passed
Andhra Pradesh	80.43	95.45	90.82	87.06
Assam	N.A	N.A	90	85
Chattisgarh	N.A	N.A	91.85	93.18
Delhi	N.A	N.A	97.73	100
Gujarat	95	92.31	92.52	89.63
Haryana	68.48	63.59	100	100
Himachal Pradesh	N.A	N.A	79.73	80
Karnataka	N.A	N.A	95.63	97.74
Kerala	64.71	70.83	79.37	69.73
Madhya Pradesh	N.A	N.A	97.7	94.12
Maharashtra	N.A	N.A	61.61	68.26
Orissa	97.14	N.A	97.73	100
Punjab	N.A	N.A	90	100
Tamil Nadu	N.A	N.A	94.41	97.75
Uttar Pradesh	69.51	72.73	81.36	97.26
West Bengal	N.A	N.A	96.32	93.02
National Ave.	71.33	68.68	87.48	87.99

Note: Data are not available for Arunachal Pradesh, Bihar, Goa, Jammu & Kashmir, Jharkhand, Manipur, Meghalaya, Mizoram, Nagaland, Puducherry, Rajasthan, Tripura and Uttrakhand

The situation of the faculty of Law is peculiar in the sense that 23 states out of 30 have reported results at the UG level while at the PG level only six states have reported for the total and only 5 states have reported for the Female students. The states of the Northeast have not reported the results for PG level. The scanty data, which is available in the table 5.15, is self explanatory and no specific pattern can be discerned.

The faculty designated as 'Others' includes a number of professional courses including library Sc., Social Work, Fine Arts, Performing Arts etc. Sixteen states have reported pass percentages for this faculty. Except four states of Himachal Pradesh, Kerala, Maharashtra and Uttar Pradesh, other states have reported pass percentage of more than 90 at the PG level, the highest being recorded in Haryana 100%Delhi, Haryana, Orissa and Punjab have reported pass percentage of 100 for female students. While 12 states have reported pass percentage of more than 90 for the total, nine have recorded pass percentage of more than 90 for female students.

CHAPTER 6

Teaching Faculty and Non Teaching Staff

This section has been devoted to examine the various aspects of teaching faculty such as the sanctioned strength, filled-in positions and the gap created by the vacant positions. An attempt has also been made to understand the strategy adopted by the universities to fill-in the gap between the sanctioned strength and the filled-in positions. Generally universities recruit part time teachers, appoint tutors or resort to the appointment of teachers on ad hoc or temporary basis. The quality of teaching faculty is judged by their academic attainment such as obtaining Ph.D degree and publications. Hence, the evaluation of quality of teaching staff will also be done to the extent possible. The structure of the teaching faculty in terms of their gender composition and social structure will also be discussed. The teaching faculty in the University Teaching Departments (UTD) will be discussed first and the teaching faculty in the affiliated colleges will be discussed in a subsequent section.

Sample Size

The data obtained from different universities by university types is variable as the numbers of responding samples is variable. The number of the sample universities at different levels of teaching positions is given in table 6.1.

Table 6.1
Sample Universities by level of Faculty Position and University Type 2007-08

Levels of Faculty	University Type	No. of Sample Univ.
Prof.& equivalent	Central	17
	State	87
	Deemed	11
Reader & equivalent	Central	16
	State	88
	Deemed	12
Sr. Lect.& equivalent	Central	15
	State	67
	Deemed	07
Lect.& equivalent	Central	15
	State	61
	Deemed	11

PART-1

Faculty Positions in University Teaching Departments by Type of University at the Aggregated Level

An attempt has been made to analyze various aspects of teaching faculty at the aggregated level taking the Central, State and Deemed universities together. It is clear from the table 6.2 that the existing positions at the professor level exceed the sanctioned strength, perhaps, because of the implementation of the Career Advancement Scheme wherein the promotion to this level was personal to the incumbent. While 78.22 percent of the sanctioned strength at the Reader level has

been filled in, the positions filled in at the Senior Lectures and lecturer levels are 62.15 and 55.84 % respectively. There seems to be a pattern that larger proportions at the higher levels of faculty positions have been filled in and more vacancies exist at the lower levels. The fact becomes clear when we examine the vacancies at different levels. The vacancies at the lecturer level are 44 .16% but at the senior lecture level these are 37.85%. These vacancies further shrink to 23.03% at the Reader's level and finally no position lies vacant at the Professor level as per the data provided by the sample universities. It seems that the universities have attempted to fill the gap between the sanctioned strength and filled-in positions by recruiting Part-time teachers at all the levels including Professors. There is no clue available from the data about the part time Professors. Whether these are retired persons re-employed on contractual basis or they are there under some other scheme? The highest proportion of part time teachers is found at the lecturer level (10.11%) followed by senior lectures (9.72 %).While the emphasis in the 11th plan is on quality, it is imperative that all the vacancies are filled-in by selecting competent teachers. Appointing part-time teachers on *ad hoc* basis without proper selection procedure has its own limitations.

Table: 6.2

Faculty Positions at Aggregated Level 2007-08

	SS	FP	Out of Filled-in Positions				Teachers with. Ph.D	Part-Time	Vacant Positions
			Women	SC	ST	OBC			
Professor	4850	6193 –	1006 16.24	205 3.31	68 1.10	914 14.76	5527 89.25	49 0.79	1343 (more than ss)
Reader	8034	6284 78.22	1525 24.27	420 6.68	141 2.24	1007 16.02	5128 81.60	25 0.40	1850 23.03
Senior Lecturer	5846	3633 62.15	977 26.89	432 11.89	138 3.80	786 21.64	1946 53.56	353 9.72	2213 37.85
Lecture	13911	7768 55.84	1855 23.88	892 11.48	316 4.07	2123 27.33	2934 37.77	785 10.11	6143 44.16

SS - Sanctioned strength *FP – Filled in positions*

The competence of teachers can be judged by their teaching abilities as well their capacities to add to the existing knowledge by their research and publications. Table 6.2 shows that only 38 per cent lecturers hold Ph.D degree and the proportions of teachers holding Ph.D degree gradually increases with the higher level positions. It is clear from the table that about 54% of Senior Lectures, 82% of Readers and 89 % of the professors have acquired Ph.D degree. Ph.D degree should be an essential qualification for a teacher, if she/he wants to remain in the teaching profession. Generation of new knowledge is a necessary condition for imparting knowledge.

Teachers by Gender and Social Categories (Aggregated level)

The representation of women, as revealed by the table 6.2, seems to decline with the increase in the level of the position. While the share of women is 23.88 % at the lecture level, it is 26.89% at the Senior Lecturer level followed by 24.27% at the

Reader level and only 16.24% at the Professor level. The Senior Lecture level seems to be an exception.

As a consequence of the policy of affirmative action by providing reservation to the deprived and marginalised sections of the society, the representation of these social categories should normatively be at least according to the provisions in the policy. The share of teachers belonging to the SC category at the Lecturers and Senior Lectures level is 11.48% and 11.89% respectively but it is very low at the Readers and Professors levels, i.e. 6.68% and 3.31% respectively. The positions of ST category, at all the levels, are much below the desired level. Their proportions at the Lecture, Senior Lecturer, Reader and Professor level are 4.07, 3.80, 2.24 and 1.10 percent respectively. These proportions are lower than what these should have been. The higher percentage of OBC category at lecturer level shows the effect of reservation of this category. Though, there is short fall at Senior Lecture, Reader and Professor Levels, the movement is in the right direction.

Faculty Positions in University Teaching Departments by the Type of University at the Professor Level

It is clear from the table 6.3(a) that no vacant positions exist at professor level in Central and State universities. In Central universities the number of filled-in positions is 48% higher than the sanctioned strength whereas filled positions are 19% higher in State universities than the sanctioned posts. This may be the effect of scheme of Career Advancement; however, in Deemed universities almost 30 per cent posts are lying vacant even at the professor level.

The proportion of part- time Professors is almost negligible in all types of universities except in Deemed universities where 2 per cent teachers at the professor level are part-time. The share of female teachers at professor level is very low. It is only 17, 15 and 37 per cent in Central, State and Deemed universities respectively.

Table: 6.3

University Type wise and Gender wise Filled in positions in UTD 2007-08 (Professors and Equivalent)

Category	Sanctioned Strength	Filled in Position	Out of filled- in Position		Part Time Teacher	Vacant Position
			Male	Female		
Central University S.17	973	1619	1345 (83.08)	274 (16.92)	3 (0.19)	+464
State University S.87	3636	4347	3676 (84.56)	671 (15.44)	29 (0.67)	+711
Deemed University S.11	183	146 (79.78)	92 (63.01)	54 (36.99)	3 (2.05)	37 (29.53)

Note: Figures in parenthesis show the:-

(i) Percentage of filled in position to the sanctioned strength in Deemed universities

(ii) Percentage male and female teachers to the filled- in positions

(iii)Part time teachers as percentage to filled-in positions

Table: 6.3 (a)

Faculty position in UTD by University Type and Social categories 2007-08

(Professors and Equivalent)

Category	Sanctioned Strength	Filled Position	Out of filled- in Position			Teachers with Ph.D
			SC	ST	OBC	
Central Universities S. 17	973	1619	18 (1.11)	47 (2.90)	6 (0.37)	1526 (94.26)
State Universities S. 87	3636	4347	185 (4.26)	21 (0.48)	873 (20.08)	3798 (87.37)
Deemed Universities S. 11	183	146 (79.78)	1 (0.68)	nil	35 (23.97)	131 (89.73)

Note: Figures in parenthesis show the proportion of the filled- in positions in sample universities

The share of different social categories (SC, ST, and OBC) at professor's level is lower than the Reader level. At professor's level the share of SC, ST and OBC in Central universities is 1.11, 2.90 and 0.37 per cent respectively. In State universities the shares of SC, ST and OBC categories at the Professor level are 4.26, 0.48 and 20.08 percent respectively. The representation of SC and ST categories at the Professor level is much below the desired level of 15 per cent for SC and 7 per cent for ST in almost all types of universities. In Deemed universities there are no ST teachers while the share of SC teachers is only 0.68 per cent. The share of OBC teachers is 23.97 per cent marginally lower than the desired level of 27 per cent.

Faculty Position in University Teaching Departments by the Type of Universities at Reader Level

The table 6.4(a) shows that 77.66% of sanctioned positions at the Reader's level in Central universities and 76.18% in the State universities have been filled leaving 22.34 and 23.82% positions respectively as vacant. In Deemed universities the percentage of filled-in positions are almost 29% higher than the sanctioned strength. Only 0.54% to the total filled positions in Deemed universities have been reported as part time teachers in the State universities. Central and Deemed universities have not reported any part time teacher at the Reader's level.

The table 6.4(a) shows that the share of female teachers is 25.64% of the total filled-in position in Central universities and slightly lower (21.76%) in the State universities. But in Deemed universities, the share of female teachers is much higher (51.46%) as compared to the Central and State universities.

Table: 6.4

University Type wise and Gender wise Filled- in positions in UTD 2007-08

(Reader and Equivalent)

Category	Sanctioned Strength	Filled in Position	Out of filled- in Position		Part Time Teacher	Vacant Position
			Male	Female		
Central University S.16	1768	1373 (77.66)	1021 (74.36)	352 (25.64)	Nil	395 (22.34)
State University S.88	5857	4462 (76.18)	3491 (78.24)	971 (21.76)	24 (0.54)	1395 (23.82)
Deemed University S.12	292	377	183 (48.54)	194 (51.46)	Nil	(+29.11)

Note: Figures in parenthesis show the proportion of the filled- in positions in sample universities

Table: 6.4 (a)

Faculty position in UTD by University Type and Social categories 2007-08

(Reader and Equivalent)

Category	Sanctioned Strength	Filled Position	Out of filled- in Position			Teachers with Ph.D
			SC	ST	OBC	
Central Univer S. 16	1768	1373 (77.66)	48 (3.50)	64 (4.66)	4 (0.29)	1252 (91.19)
State Univer S. 88	5857	4462 (76.18)	363 (8.14)	96 (2.15)	935 (20.95)	3529 (79.09)
Deemed Univer S. 12	292	377	6 (1.59)	1 (0.27)	68 (18.03)	297 (78.78)

Note: Figures in parenthesis show the proportion of the filled in positions in sample universities

The share of SC, ST and OBC at the Reader's level in Central universities is 3.50, 4.66 and 0.29% respectively. State universities have 8.14% SC, 2.15% ST and 20.95% OBC. The share of social categories (ST, SC and OBC) at the Reader's level in central universities is lower as compared to lecturer and senior lecturer levels. It is clear that the implementation of reservation policies has brought higher representation at the entry level but large gaps still persists.

The percentage of teachers with Ph.D degree has significantly improved at Reader's level. In Central universities more than 91% teachers hold Ph.D degree while the share of Ph.D holders is almost 79 % each in State and Deemed universities.

Faculty Position in University Teaching Departments by Type of University at Senior Lecturer Level

Table 6.5 (a) shows that the proportions of filled- in positions to the sanctioned strength at the Senior Lecturer and Equivalent level in Central, State and Deemed universities are 63.18, 62.53 and 56.49% respectively. This situation has created a gap of 36.82, 37.47 and 43.50% in the form of vacancies in Central, State and Deemed universities respectively. No part-time teachers have been reported in Central universities at the Senior Lecturer level whereas 12 and 8 per cent part- time teachers respectively have been reported at this level in State and Deemed universities.

The table 6.5 (a) further reveals that the proportion of female teachers is very high in the Central (41.91%) and Deemed universities (55.56%) but lower in State universities (21.58 %).

Table: 6.5

University Type wise and Gender wise Filled- in positions in UTD 2007-08

(Senior Lecturer and Equivalent)

Category	Sanctioned Strength	Filled in Position	Out of filled- in Position		Part Time Teacher	Vacant Position
			Male	Female		
Central University S.15	812	513 (63.18)	298 (58.09)	215 (41.91)	Nil	299 (36.82)
State University S.67	4572	2859 (62.53)	2242 (78.42)	617 (21.58)	332 (11.61)	1713 (37.47)
Deemed University S.7	462	261 (56.50)	116 (44.44)	145 (55.56)	21 (8.05)	201 (43.50)

Note: Figures in parenthesis show the proportion of the filled in positions in sample universities

Table: 6.5 (a)

Faculty position in UTD by University Type and Social categories 2007-08

(Senior Lecturer and Equivalent)

Category	Sanctioned Strength	Filled Position	Out of filled -in Position			Teachers with Ph.D
			SC	ST	OBC	
Central Univer S. 15	812	513 (63.18)	70 (13.65)	41 (7.99)	4 (0.78)	326 (63.55)
State Univer S. 67	4572	2859 (62.53)	334 (11.68)	93 (3.25)	754 (26.37)	1487 (52.01)
Deemed Univer S. 7	462	261 (56.49)	28 (10.73)	4 (1.53)	28 (10.73)	133 (50.96)

Note: Figures in parenthesis show the proportion of the filled in positions in sample universities

The share of SC category is slightly lower (13.65%) in Central universities than what it should have been but the share of ST faculty at the Senior lecturer level is marginally higher. The share of OBC in Central universities has been reported to be very low (0.78 %) in Central universities. The share of SC, ST and OBC in the State universities is 11.68, 3.25 and 26.37% respectively. The share of ST in Deemed universities is only 1.53% while it is 10.73% each for SC and OBC categories.
The percentage of teachers with Ph.D degree ranges between 50.96% in Deemed and 63.55% in Central universities. About 52.01% of the Senior Lecturers in State universities hold Ph.D degree.

Faculty Position in University Teaching Departments (UTD) by the Type of University at Lecturer Level

It is clear from the table 6.6 (a) that only 52.64% of the total sanctioned strength of the faculty positions have been filled in the Central universities leaving about 47.36% positions as vacant. The situation in the State universities seems to be marginally better as the proportion of filled-in position has been recorded to be 55.80%. There are thus, about 44.20% of the sanctioned positions lying vacant. The position of Deemed universities is much better as the positions filled-in account for 70.47% of the total sanctioned strength. The strategy to make arrangements for teaching has been through recruiting part-time teachers by all the types of universities. The highest recruitment of part-time teachers has been done by the State universities (10.56%) followed by the Central universities (7.29%) and Deemed universities (5.65%). Almost 50% vacant positions at the level of Lectures in Central and State universities is a matter of serious concern.

The table 6.6 (a) shows gender composition of teaching faculty also. It is clear that the proportion of female teachers is much lower in Central and State universities than the Deemed universities. While there are 26.36% female teachers in Central universities, their share in State universities is 21.10%. The proportion of female teachers in Deemed universities is 51% which is almost two times higher than the other two types of universities.

Table: 6.6
University Type wise and Gender wise Filled- in positions in UTD 2007-08
(Lecturer & Equivalent)

Category	Sanctioned Strength	Filled in Positions	Out of filled- in Position		Part Time Teacher	Vacant Positions
			Male	Female		
Central University S.15	2371	1248 (52.64)	919 (73.64)	329 (26.36)	91 (7.29)	1123 (47.36)
State University S.61	10636	5935 (55.80)	4683 (78.90)	1252 (21.10)	627 (10.56)	4701 (44.20)
Deemed University S.11	728	513 (70.47)	251 (48.93)	262 (51.07)	29 (5.65)	215 (29.53)

Note: Figures in parenthesis show the proportion of the filled in positions in sample universities

Table: 6.6 (a)

Faculty position in UTD by University Type and Social categories 2007-08

(Lecturer & Equivalent)

Category	Sanctioned Strength	Filled Position	Out of filled- in Position			Teachers with Ph.D
			SC	ST	OBC	
Central Univer S.15	2371	1248 (52.64)	167 (13.38)	205 (16.43)	23 (1.84)	509 (40.79)
State Univer S.61	10636	5935 (55.80)	696 (11.73)	107 (1.80)	2041 (34.39)	2220 (37.41)
Deemed Univer S.11	728	513 (70.47)	22 (4.29)	4 (0.80)	53 (10.33)	180 (35.09)

Note: Figures in parenthesis show the proportion of the filled in positions in sample universities

The social composition of teachers has been presented in table 6.6 (b).It is clear from the table that in Central universities 13.38% of the lecturers belong to SC category, 16.43 per cent to ST category and only 1.84 per cent to OBC category. It is clear that OBC representation in Central universities requires improvement. In State universities the share of SC and OBC is satisfactory but the representation of ST is as low as 1.80 per cent. The share of these sections of the society is much below the expectations in Deemed universities.

The qualification of teachers is the most important parameter to asses the quality of education. It is a matter of serious concern in all university types. The academic criteria at the entry point i.e. at the time of recruitment of Lecturers should be very rigorously followed It is a matter of concern that in all the university types, the proportion of the teachers having a Ph.D degree is less than 50% of the total recruited strength. The percentage of Lecturers holding a Ph.D degree is only 41, 37 and 35% in Central, State and Deemed universities respectively.

PART-II

Teaching Faculty in Affiliated Colleges

The expansion of higher education has been phenomenal after the independence by the establishment of colleges affiliated to different universities." Indian higher education system is the third largest in the world with over 14 million students and over half a million teachers." (Report of the Committee to Review the Pay Scales and Service Conditions of University and College Teachers, 2008 p.21) Teachers are, undoubtedly, the most important pillars of higher education who generate and disseminate knowledge simultaneously. In this era of globalisation we need quality education system so that we can compete with other developed countries. For that matter, we need to attract young, talented and dynamic men and women for college and university teaching jobs.

Education system in India currently represents a great paradox. On the one hand we have IIMs and IITs that rank among the best institutes in the world and on the other hand there are number of colleges in the country that do not even have the basic infrastructure.

In the present study an attempt has been made to analyse the availability of teaching faculty as against the sanctioned strength in the affiliated colleges of the sample universities by type as well state wise. Attempt has also been made to look into the position of the faculty by social categories. The data pertaining to social categories s available only for scheduled (SC) caste and scheduled tribes (ST) at aggregated level as well as at the level of positions of Professors, Readers and Lecturers.

Table: 6.7
Sample Affiliating Universities by Types 2007-08

Levels of Faculty	University Type	No. of Sample Univ.
Prof. & equivalent	Central	02
	State	25
Readers & equivalent	Central	04
	State	23
Lecturers & equivalent	Central	06
	State	31

Sample Size

The number of sample universities in Table 6.7 refers to those Central and State universities which have colleges affiliated to them. The table shows that the number of sample universities at all the levels of teaching positions is variable. Moreover, no sample Deemed University has reported to have affiliated colleges.

Teaching Faculty in Affiliated Colleges at Aggregated Level

It is clear from the table 6.8 that the total sanctioned positions in sample universities were 76,097. Out of which 89.54% are filled in positions and the remaining10.46% positions were vacant.

Table: 6.8

Teaching Faculty in Affiliated Colleges at the Aggregated Level 2007-08

Sanctioned Strength	Filled-in positions	Vacant positions	Total UG students	Total PG students
76,097	68,140	7,957	4,297,188	523,535
	89.54%	10.46%	89.14%	10.86%
T/S Ratio (UG+PG)				71.00

The ratio between teachers and students is 1:71 at the aggregated graduate and post graduate levels. This ratio seems to be imbalanced. Ideally there should be only 40 students per teacher in order to ensure closer interactive relationship.

Teaching Faculty in Affiliated Colleges at the Aggregated Level by the University Type

It is clear from the table 6.9 that at aggregated level almost 8% posts are lying vacant in Central universities. Out of the total filled-in positions, 6.29 % were SC and 52.64 % ST. It may be mentioned here that out of the total 6 sample Central Universities, 5 are from North eastern states which, perhaps, is the reason of higher representation of ST category.

Table: 6.9

Aggregated Social Category wise Teaching Faculty (Affiliated Colleges) 2007-08

Sample Size	University Type	Sanctioned strength	Filled-in Positions	Out of filled- in Position			Vacant
				SC	ST	SC+ST	
6	Central	5,373	4,947 (92.07)	311 (6.29)	2,604 (52.64)	2,915 (58.93)	426 (7.93)
31	State	70,724	63,193 (89.35)	4,264 (6.75)	1,940 (3.07)	6,204 (9.82)	7,531 (10.65)

Note: Figures in Parenthesis are in percentage.

The table 6.9 further shows that almost11% positions in the State universities are lying vacant at the aggregated level (lecturer, reader and professor). It is clear from the table that out of the total filled-in positions, only 6.75% belong to SC and 3.07 to ST category in the affiliated colleges of the State universities.

Teaching Faculty in Affiliated Colleges at Professor Level by University Type

All the positions at the Professor level in affiliated colleges of Central Universities are filled in and there is no vacancy. It is clear from the table 6.10 that there are no Professors belonging to SC category in the affiliated colleges of Central universities while 55.71% belong to ST category. This situation seems to have been caused due to the fact that 1 out of the 2 sample universities (NEHU) come from North east and the small sample has created this situation.

Table: 6.10

Professors by Social Category and by University Type (Affiliated Colleges) 2007-08

Sample Size	University Type	Sanctioned strength	Filled-in Position	Out of filled- in Positions			Vacant positions
				SC	ST	SC+ST	
2	Central	70	70 (100)	0 -	39 (55.71)	39 (55.71)	Nil
25	State	3614	2889 (79.94)	138 (4.78)	99 (3.42)	237 (8.20)	725 (20.06)

Note: Figures in parenthesis are in percentage

About 80% of the sanctioned positions at the professor's level have been filled in the affiliated colleges of State universities. Thus, about 20% of the sanctioned positions lie vacant. The share of Professors belonging to SC category is 4.78% while 3.42% belong to ST category. While in the University Teaching Departments there is no vacancy at the professor's level, the vacancies in the affiliated colleges of State universities are substantial.

Teaching Faculty in Affiliated Colleges at Reader's Level by University Type

In sample Central universities all sanctioned positions at the Reader level are filled – in and there are no vacancies. Out of the total filled in positions 13.10% belong to SC category and 42.94% belong to ST category. While the proportion of Readers belonging to SC category in the affiliated colleges of Central universities is nearer to the desired level, the share of ST category is substantially large. This is again a function of the samples at this level as all the 4 sample Central universities belong to North eastern states where the proportion of ST population is high.

Almost 92% of the sanctioned positions in the affiliated colleges of the State universities at the Reader's level have been filled-in leaving vacancy of about 8% per cent. The representation of Readers belonging to SC and ST category in the affiliated colleges of State universities is dismally low as only 4.64% belong to SC and 1.92% belongs to ST category.

Table: 6.11

Readers by Social Category and University Type (Affiliated Colleges) 2007-08

Readers

Sample Size	University Type	Sanctioned strength	In Position	Out of in Position			Vacant
				SC	ST	SC+ST	
4	Central	496	496 (100)	65 (13.10)	213 (42.94)	278 (56.04)	-
23	State	6041	5533 (91.59)	257 (4.64)	106 (1.92)	363 (6.56)	508 (8.41)

Note: Figures in parenthesis are in per cent

It is important to find out the causes for this mismatch as these for this low proportion of representation of the social categories, in spite of all safeguards, can not be surmised by this data.

Teaching Faculty in Affiliated Colleges at Lecturer Level by University Type

Table 6.12 shows that 91.14% of the sanctioned positions at the level of Lectures including Senior Lectures and equivalent in the affiliated colleges of the Central universities stand filled-in and about 9% of the position lie vacant. Out of the filled in positions, 5.61 per cent belong to SC category which is well below the desired level of representation of this category.

Table: 6.12
Social Category wise Teaching Faculty by University Type (Affiliated Colleges) Lecturer (including senior + selection grade) 2007-08

Sample Size	University Type	Sanctioned strength	In Position	Out of in Position			Vacant
				SC	ST	SC+ST	
6	Central	4807	4381 (91.14)	246 (5.61)	2352 (53.69)	2598 (59.30)	426 (8.86)
31	State	61069	54771 (89.69)	3869 (7.06)	1735 (3.17)	5604 (10.23)	6298 (10.31)

Note: Figures in parenthesis are in percentage

The share of ST category to total filled-in position in the affiliated colleges of sample Central universities is 53.69 per cent. The high representation of ST faculty is due to the fact that out of the total six sample Central universities, five belong to North-east. In the affiliated colleges of sample State universities, about 90% sanctioned post stand filled up leaving a vacancy of 10% positions. Out of total filled-in positions, 7.06 % belong to SC category and only 3.17% belong to ST category. The representation of both social categories; SC and ST, is much below the desired level as prescribed in the reservation policy.

Pattern of Statewise Teaching Faculty in Affiliated Colleges

An attempt has been made to understand the pattern of teaching faculty in the affiliated colleges in different states of the country. Only 31 sample universities with affiliated colleges have responded from 17 states. Thirteen states did not respond at all. The states are represented by only a few universities. The number of sample universities varies between 1 and a maximum of three. For instance, 2 universities responded from Maharashtra and 1 university each from Bihar, Rajasthan, Punjab, Himachal Pradesh and Haryana etc.

The table 6.13 shows the state wise sanctioned as well as filled- in positions in the affiliated colleges. It is clear from the table that 100% of the sanctioned positions in the affiliated colleges of the sample universities have been filled- in the states of Assam, Bihar, Goa and Orissa and there is no vacancy. The proportion of filled- in positions in the rest of the states, varies between 61.43% in Himachal Pradesh to 97.58% in Kerala. The distribution of the states according to the percentage of filled in positions has been presented in table 6.14.

Table: 6:13

Pattern of State wise Teaching Faculty in Affiliated Collages 2007-08

No. of Sample Uni.	Name of the State	Sanctioned Strength	Filled-in positions	Vacant positions
2	Andhra Pradesh	9444	9014	430
			95.45%	4.55%
1	Assam	1981	1981	Nil
			100%	Nil
1	Bihar	529	529	Nil
			100%	Nil
1	Jharkhand	532	459	73
			86.28%	13.72%
1	Goa	1600	1600	Nil
			100%	Nil
3	Gujarat	5596	5205	391
			93.01%	6.90%
1	Haryana	2792	2179	613
			78.04%	21.96%
1	Himachal Pradesh	4019	2469	1550
			61.43%	38.57
2	Karnataka	4422	3630	792
			82.09%	17.91%
3	Kerala	10767	10504	263
			97.58%	2.44%
3	M.P.	3910	3316	594
			84.81%	15.19%
2	Maharashtra	6405	5902	512
			92.01%	7.99%
2	Orissa	3668	3668	Nil
			100%	Nil
1	Punjab	1635	1356	279
			82.94%	17.06%
1	Rajasthan	1636	1178	458
			72.00%	28.00%
3	Tamil Nadu	8990	8263	727
			91.91%	8.09
3	West Bengal	2789	1940	849
			69.56%	30.44%

Note: The data for Arunachal Pradesh, Chattisgarh, Delhi, Jammu&Kashmir, Manipur, Meghalaya, Mizoram, Nagaland, Puducherry, Sikkim, Tripura, Uttar Pradesh and Uttra Khand was not available.

Table: 6.14

Distribution of States according to the proportion of Filled-in Teaching Positions in Affiliated Colleges 2007-08

Percentage range	States	No. of States
90 to 100	Andhra Pradesh, Assam, Bihar, Gujarat, Goa, Kerala, Maharashtra, Orissa, Tamil Nadu	9
80 to 90	Jharkhand, Karnataka, Madhya Pradesh, Punjab	4
70 to 80	Haryana, Rajasthan	2
60 to 70	Himachal Pradesh, West Bengal	2

The table 6.14 shows that the situation of filled-in positions is not worrisome at least in 4 states where there is no position lying vacant. In the rest of the 5 states i.e. Andhra Pradesh, Gujarat, Kerala Maharashtra and Tamil Nadu, the proportion of filled in position varies between 90 to 97.58% .The pattern of vacant positions is higher in Himachal Pradesh (38.57%) and West Bengal (30.44%). In Rajasthan and Haryana the vacant positions are (28.0%) and 21.96% respectively. Ten to twenty percent positions remain vacant in Jharkhand, Karnataka, Madhya Pradesh and Punjab. It is needless to emphasise that the affiliated colleges which largely cater to the needs of students at the graduate and post graduate level, should not fall short of the teaching faculty. In the face of large vacancies, the process of learning is bound to be adversely affected.

Table: 6.15

State wise Representation of Social Categories in the Teaching Faculty in Affiliated Collages 2007-08

No. of Sample Uni.	Name of the State	Existing Strength	SC	ST	SC+ST
2	Andhra Pradesh	9014	923	52	975
			(10.24)	(0.58)	(10.82)
1	Assam	1981	85	187	272
			(4.29)	(9.44)	(13.73)
1	Bihar	529	5	Nil	5
			(0.95)	Nil	(0.95)
1	Jharkhand	459	16	29	45
			(3.49)	(6.32)	(9.81)
1	Goa	1600	3	1	4
			(0.19)	(0.06)	(0.25)
3	Gujarat	5205	289	396	685
			(5.55)	(7.61)	(13.16)
1	Haryana	2179	4	5	9
			(0.18)	(0.23)	(0.41)
1	Himachal Pradesh	2469	153	57	210
			(6.20)	(2.31)	(8.51)
2	Karnataka	3630	174	225	399
			(4.79)	(6.20)	(10.99)

3	Kerala	10504	253	109	362
			(2.41)	(1.04)	(3.45)
3	M.P.	3316	325	417	742
			(9.80)	(12.58)	(22.38)
2	Maharashtra	5902	872	142	1014
			(14.77)	(2.41)	(17.18)
2	Orissa	3668	222	250	472
			(6.05)	(6.82)	(12.87)
1	Punjab	1356	70	1	71
			(5.16)	(0.07)	(5.23)
1	Rajasthan	1178	30	28	58
			(2.55)	(2.38)	(4.93)
3	Tamil Nadu	8263	538	Nil	538
			(6.51)	Nil	(6.51)
3	West Bengal	1940	302	41	343
			(15.79)	(2.11)	(17.68)
	National Ave.	63193	4264	1940	6204
			(6.75)	(3.07)	(9.82)

***Note:** The data for Arunachal Pradesh, Chattisgarh, Delhi, Jammu&Kashmir, Manipur, Meghalaya, Mizoram, Nagaland, Puducherry, Sikkim, Tripura, Uttar Pradesh and Uttra Khand were not available.*

***Note:** Figures in parenthesis are in per cent*

It is clear from the table 6.15 that there are only two states namely, West Bengal and Maharashtra in which the share of SC category is 15 per cent or above to the total existing positions of the faculty. Apart from these two above mentioned states, none of the states has filled- in the 15 per cent desired representation of SC in the total teaching faculty. Andhra Pradesh with 10.24 per cent of SC share occupies the third place. The share of Madhya Pradesh, Tamil Nadu, Himachal Pradesh and Orissa is 9.80, 6.51, 6.20 and 6.05 per cent respectively. The representation of SC teachers in the affiliated colleges of Punjab is 5.16 per cent and in Haryana, it is only 0.18 per cent which is very low. The share of SC population to the total population in these two states is one of the highest in the country but the representation of SC in teaching faculty is even below the national average of slightly less than 7 per cent.

There are two other states namely Bihar and Goa where representation of SC is less than one per cent to the total existing strength of the faculty.

As far as ST share to the total faculty is concerned, it is 13% in Madhya Pradesh followed by Assam with 9.44%. Madhya Pradesh is the only state where the representation of SC and ST together is above 22 per cent. The share of ST to the total faculty in the state of Gujarat is almost 8% followed by Orissa (6.82%), Jharkhand (6.32%), and Karnataka (6.20%). These states are quite close to the 7 per cent prescribed reservation for ST category.

In the states of Andhra Pradesh, Bihar, Goa, Haryana, Punjab, and Tamil Nadu the representation of ST population is less than 1 per cent. The national average of ST share to the total faculty is 3.07 per cent which is much below the desired level.

PART –III

Performance of Teachers

Teachers have two basic responsibilities i.e. teaching and research. They generate knowledge and disseminate it. They published books and research papers which are reviewed by their peers and the impact of their work assessed. One method of dissemination is to attained seminars and conferences with in the country and abroad and exchange ideas through discussions and debates. They are also given teaching and research assignments with in the country and in the foreign universities. This brooders the horizon of their understanding and get a chance of interacting with foreign scholars and students and thus, their knowledge also gets enriched. The questionnaire contained questions to solicit information about the following

(i)- Publications
a: - Text and reference books
b: - Research papers published in national and international journals
(ii) Seminars/ Conferences attended (a) National and (b) International
(iii) Teaching/Research assignments (a) National and (b) international
(iv) Patents produced

The data obtained, processed and provided by the Information and Statistical Bureau of UGC pertains to 2006-07.

Performance of Teachers by University Type:

The table 6.16 presents the pattern of the performance of teachers by university type at the aggregated level.

Table: 6.16
Performance of Teachers by University Type 2007-08
Note: Figures in parenthesis are the number of sample universities by Type

University	No. of Books Produced		Conferences/Seminars Attended	
Types	Texts	References	National	International
Central (S 9)	2.5	21.34	12.64	21.11
State (S 56)	90.28	73.7	76.33	69.46
Deemed (S 8)	7.22	4.96	11.03	9.43
Total (S 73)	100	100	100	100

A comparative view of all the parameters of different types of the universities shows that the state universities are far ahead in every parameter measured as percentage to the total parameters at the country level. The number of sample universities in every type has been given in parenthesis. The variations in the sample size have camouflaged the size of the parameter. As far as the publications of text books are concerned 90% have been contributed by the state universities but the proportion of

reference books is less than the text books. Since the effect of number of sample universities has blurred the share of each university type an attempt has been made to make the parameters scale free and see these parameters in terms of each university type.

Table 6.17 presents the clear picture of the parameters. While the share of per state university in the production of text books is higher, the share of per Central University in producing reference books is quite high in comparison to other types (22 reference books per university).

Table: 6.17
Performance of Teachers per University by its Type 2007-08

University Types	No. of Books Produced		Conference/Seminars Attended		No. of Research Papers Published		Teaching/ Research Assignments		Patent Produced
	Text	Ref.	National	Inter national	National	Inter national	National	Inter national	
Central (9)	3	22	131	56	255	33	12	4	0.33
State (56)	17	12	127	30	127	69	19	3	0.68
Deemed (8)	10	6	128	28	92	53	22	2	1.63

The teachers of Central Universities lead in attending seminars and conferences at national and international levels. These teachers of per Central University have attended 131 national and 56 international seminars and conferences and the teachers of per state university attended 127 national and 30 international seminars. The Deemed universities have also contributed in seminars and conferences significantly as teachers per Deemed University attended 128 national and 28 international seminars and conferences. The number of research papers by the teachers of per Central University, at the national level, is higher (255) as compared to state (127) and Deemed (92) University. The contribution of per state university is higher in the research papers published in international Journals (69) as compared to the Central (33) and Deemed (53) Universities.

The share of per Deemed university is higher in teaching/ Research assignments at the national level (22) followed by state (19) and Central (12) universities. The per university share in producing patents is higher in Deemed universities (1.63) while per state university the share is (0.68) and the share of per central university is 0.33.

Table 6.18 shows statewise pattern of performance of teachers at aggregated level. The percentage share of different states in terms of producing text and reference books, national and international seminar attended, research paper published in national and international journals, teaching and research assignments at national and international level and patent produced have been calculated. Large variations in the performance of the teachers have been recorded across the states because of variable number of sample universities, difference in the quality of teachers and availability of infrastructure facilities.

It is clear from the table 6.18 that in producing the text books, the share of four states namely, Andhra Pradesh, Karnataka, Tamil Nadu and West Bengal is 17.19 per cent to the total text books produced at the national level. Other notable states are Delhi (3.84%), Gujarat (3.37%), Madhya Pradesh (3.37%), Maharashtra (2.99%), Jammu & Kashmir (2.81%) and Uttar Pradesh (2.62%). The share of Arunachal Pradesh, Manipur and Puducherry has been reported as nil. Reference books are more evenly distributed in different states in comparison to text books as far as their production is concern. The states of Maharashtra, West Bengal, Karnataka, Uttar Pradesh and Meghalaya together account for 63.68 per cent of the total reference books produced in the country. The share of states of Andhra Pradesh (6.25%), Delhi (5.71%), Madhya Pradesh (4.42%), Haryana (3.66%), Tamil Nadu (3.56%) and Puducherry (3.13%) is also notable. The states of Bihar, Chattisgarh, Goa, Jammu & Kashmir, Jharkhand and Manipur have not reported the publication of reference books.

In attending the conference and seminars, few states have larger share, both, at national and international levels and vice versa. For instance, the state of Tamil Nadu has reported the highest participation with 14.35 per cent share at national level and 18.86 pre cent share at the international level. Maharashtra has also reported good performance at both the levels with 11.04 per cent share at national level and 10.92 per cent at international level. Karnataka has also performed well with 10.29 per cent share at national level and 8.41 per cent share at international level. The share of West Bengal is second highest with 11.19 per cent in attending the national conferences/seminars while its share at international level is just 2.80 per cent. The state of Puducherry has also performed well at the international level with 14.14 per cent share but at national level seminars and conferences, its share is 5.26 per cent to the total conferences/seminars attended by the teachers.The share of Haryana is 7.26 per cent at the national and 5.77 per cent at the international level. The state of Andhra Pradesh has recorded 4.66 and 7.07 per cent at national and international levels respectively. The states of Arunachal Pradesh, Bihar, Chattisgarh, Jharkhand and Tripura have less than 1 per cent share each at the national as well as international level conferences and seminars.

Table: 6.18

State wise Performance of Teachers 2007-08

States	No. of Books Produced		Conference/ Seminars Attended		No. of Research Papers Published		Teaching/Research Assignments		Patent Produced
	Text	Ref	National	International	National	International	National	International	
Andhra Pradesh	46.3	6.25	4.66	7.07	17.04	10.44	21.4	4.4	12.96
Assam	1.87	2.05	2.49	1.84	3.07	0.11	3.03	0	0
Arunachal Pradesh	0	0.65	0.29	0.13	0.31	0.04	0	0	0
Bihar	0.09	0	0.72	0	0.57	0.04	0.99	0	0

Chattisgarh	0.19	0	0.4	0.29	0.33	0.4	0	1.65	1.85
Delhi	3.84	5.71	5.72	3.55	2.59	6.06	7.13	7.69	22.22
Goa	1.4	0	1.42	0	1.02	0	0	0	0
Gujarat	3.37	1.72	5.27	4.85	2.96	4.6	12.59	4.4	1.85
Haryana	1.31	3.66	7.26	5.77	7.34	5.33	3.34	2.2	5.56
Himachal Pradesh	0.94	1.29	1.38	0.79	1.58	3.25	3.26	4.4	0
J&K	2.81	0	1.05	1.92	1.74	2.19	1.97	2.75	7.41
Jharkhand	0.75	0	0	0	0	0	0	0	1.85
Karnataka	11.13	14.33	10.29	8.41	7.09	8.41	11.46	5.49	0
Kerala	1.68	2.05	3.53	5.81	3.8	10.11	3.87	3.3	14.81
Madhya Pradesh	3.37	4.42	3.69	3.35	4.49	6.06	7.59	7.14	0
Maharashtra	2.99	17.24	11.04	10.92	9.19	10.9	10.62	27.47	18.52
Manipur	0	0	0	1.63	1.89	0	0	0	0
Meghalaya	0.09	6.57	3.25	1.34	1.95	1.59	3.41	2.2	1.85
Orissa	1.03	1.29	2.62	1.84	2.66	2.52	2.96	4.4	3.7
Puducherry	0	3.13	5.26	14.14	0	0	0	0	0
Rajasthan	0.09	0.11	1.6	1.59	1.6	4.82	3.49	0.55	0
Tamil Nadu	7.02	3.56	14.35	18.86	10.98	13.69	0	2.2	0
Tripura	0.37	0.43	0.21	0	0.45	0.04	0.46	0	0
Uttar Pradesh	2.62	8.62	2.31	3.09	17.34	7.21	2.43	19.78	3.7
West Bengal	6.74	16.92	11.19	2.8	0	2.17	0	0	3.7
Total	100	100	100	100	100	100	100	100	100

Note: Data for Mizoram, Nagaland, Punjab, Sikkim and Uttrakhand are not available
Note: Number of sample universities are 73

As far as publication of research papers at national level is concern four states namely, Uttar Pradesh, Andhra Pradesh, Tamil Nadu and Maharashtra together accounts 54.55 per cent of the total publication in the country. Apart from these states, Haryana (7.34%), Karnataka (7.09%), Madhya Pradesh (4.49%), Kerala (3.80%), and Assam (3.07%) are remarkable. The share of Jharkhand Puducherry and West Bengal is nil in the publication of research papers at national level.

The states which are performing well at national level also doing the same at international level. The states of Tamil Nadu, Maharashtra, Andhra Pradesh and Kerala together have 45.14 per cent share in publication of research papers at international level. The states of Karnataka (8.41%), Uttar Pradesh (7.21%), Delhi (6.04%), Madhya Pradesh (6.06%), Haryana (5.33%), Rajasthan (4.82%), Gujarat (4.60%) and Himachal Pradesh (3.25%) also registered there presence. The share of Goa, Jharkhand, Manipur and Puducherry is nil in the publication of research papers at international level.

The states of Andhra Pradesh, Gujarat, Karnataka and Maharashtra together gets 56.09 per cent share of the total teaching/research assignments assigned to the teachers of the sample universities. Madhya Pradesh and Delhi with 7.59 and 7.13 per cent share have registered there presence. The share of Arunachal Pradesh, Chattisgarh, Goa, Jharkhand, Manipur, Puducherry, Tamil Nadu and West Bengal is nil in getting research and teaching assignments at national level. As far as the research assignments at international level is concern, two states namely, Maharashtra and Uttar Pradesh together holds almost 50 per cent share in the total assignments of the country. The states of Delhi, Madhya Pradesh, Karnataka, Andhra Pradesh, Gujarat, Himachal Pradesh and Orissa have 7.69, 7.14, 5.49, 4.40, 4.40, 4.40 and 4.40 per cent share respectively. Nine states namely, Assam, Arunachal Pradesh, Bihar, Goa, Jharkhand, Manipur, Puducherry, Tripura, and West Bengal do not contributed in teaching and research assignments at the international level.

In case of patent produced the states of Delhi, Maharashtra, Kerala and Andhra Pradesh together account 68.51 per cent of the country. Jammu & Kashmir, Haryana, Orissa, Uttar Pradesh and West Bengal with 7.41, 5.56, 3.70, 3.70 and 3.70 per cent share also contributed in patent products respectively. Apart from these above mentioned states the share of other states is not acknowledgeable. About 11 states do not have any contribution in patent products. These large regional variations across the states are not conducive to the educational development of the nation as a whole. The disparities at the regional level have to be abridged.

PART -IV

Non -Teaching Staff in University Teaching Departments by University Type

Non teaching staff is also an integral part of higher education system. Its main role is to facilitate the process of teaching and learning by providing administrative support for proper the functioning of the institution. Table 6.19 shows that 81.66% of the sanctioned strength of the non-teaching staff is filled in the Central universalities leaving 18.34% of these positions as vacant. The proportion of the existing strength of non teaching to the total sanctioned positions in State universities is slightly higher as compared to the Central universities consequently the vacant positions are lower.

As far as social composition of non teaching staff is concerned, it is clear from the table 6.19 that in the Central universities almost 15.07% non- teaching staff belongs to SC category and only 4.99% belongs to ST category. The share of SC is as per the policy of reservation but the share of ST category is low. The Central universities from north eastern states have higher share of ST to the total non teaching staff but at country level their representation is slightly less than 5 per cent.

Table: 6.19

Representation of SC and ST in the total non Teaching Staff 2007-08

University Type	Sample Size	Sanctioned Strength	Total Filled in Position	Out of theTotal Filled in Positions			
				SC	ST	SC+ST	Vacant
Central	18	24799	20251 (81.66)	3052 (15.07)	1010 (4.99)	4062 (20.06)	4548 (18.34)
State	85	55021	45421 (82.55)	8774 (19.32)	586 (1.29)	9360 (20.61)	9600 (17.45)
Deemed	11	2534	2755 (108.72)	272 (9.87)	171 (6.21)	443 (16.08)	+221 (+8.72)
Total	114	82354	68206 (82.82)	12098 (17.68)	1767 (2.58)	13865 (20.26)	14148 (17.18)

In state universities the share of SC is high (19.32%) but the proportion of ST category is very low (1.29%). The representation of SC in Deemed universities is less than 10 per cent but it is 6.21 per cent for ST category which is higher than, both, the Central and State universities.

It is clear from the table 6.19 that in Central universities, there are almost 4 non teaching staff per teaching faculty. In State and Deemed universities, this ratio is almost 2 per teaching faculty. The ratio between teaching faculty and the non teaching staff at the aggregated level is almost 1 to 3.

Table: 6.20

Ratio of Teaching Faculty and Non-Teaching Staff by Type of University2007 -08

University Type	Sample Size	Non Teaching Staff	Teaching Staff	Ratio per Teacher
Central	18	20251	5703	3.55
State	85	45421	19718	2.30
Deemed	11	2755	1297	2.12
Total	114	68427	26718	2.56

It is clear from the table 6.20 that the gap in the ratio of teaching and non teaching staff between Central and State universities are 1.25. This gap is larger when we compare Central universities with Deemed universities.

Table 6.21 shows the ratio of non teaching staff per100 students. In the Central Universities, there are about 8 non-teaching staff per 100 students, but their ratio is quite low in State universities (about 3 non teaching staff per 100 students) the gap between the Central and State and between State and Deemed university is substantial. At the aggregated level, the ratio between non teaching staff and student's ratio is about 4 per 100 students.

Table: 6.21
Ratio of Non Teaching Staff per 100 Students by Type of University 2007-08

University Type	Sample Size	Non Teaching Staff	Students	Ratio per 100 Students
Central	18	20251	247377	8.19
State	85	45421	1327700	3.42
Deemed	11	2755	144244	1.91
Total	114	68427	1719321	3.98

Non Teaching Staff in Affiliated Colleges by the University Type

The affiliated colleges of Central and State universities also employ non teaching staff to facilitate the process of learning and teaching. It is clear from the table 6.22 that the ratio between teaching and non teaching staff is slightly less than 1:3 in affiliated colleges of Central universities. In the affiliated colleges of State universities, the ratio is 1:2 i.e. almost 2 non teaching staff per teaching faculty.

Table: 6.22
Ratio of Teaching Faculty and Non Teaching Staff in Affiliated Colleges by University Type 2007-08

University Type	Sample Size	Non Teaching Staff	Teaching Staff	Ratio per Teacher
Central	5	2398	6716	2.80
State	30	46590	81604	1.75
Total	35	48988	88320	1.80

It is clear from the table 6.22 that the ratio between Teaching faculty and non teaching staff in affiliated colleges of Central universities is higher than those of the State universities.

The ratio between non teaching staff per 100 students in the affiliated colleges of Central universities is almost 2. In the colleges of State universities this ratio is less than 1 per 100 students. (table.6.23)

Table: 6.23

Non Teaching Staff in Affiliated Colleges per 100 Students by University Type 2007-08

University Type	Sample Size	Non Teaching Staff	Students	Ratio per 100 Students
Central	5	2398	141660	1.69
State	30	46590	4938223	0.94
Total	35	48988	5079883	0.96

It is difficult to maintain the smooth functioning of higher educational institutions with such a small strength of non teaching staff. The ratio between teaching and non teaching staff as well as between students and non teaching staff should be improved in order to improve the functioning in the affiliated colleges of central and state universities.

Non Teaching Staff in the Affiliated Colleges by Social Categories

Out of total non teaching staff in the affiliated colleges of Central universities about 8.48% belong to SC category and 52.26 per cent belong to ST category due to the small size of samples of central universities mainly from the north east India. In the affiliated colleges of Central universities only 2.17% positions are vacant.

Table: 6.24

Non Teaching Staff in the Affiliated Colleges by Social categories 2007-08

University Type	Sample Size	Sanctioned Strength	Total Filled Position	OTPSC	OTPST	SC+ST	Vacant
Central	5	2398	2346 (97.83)	199 (8.48)	1226 (52.26)	1425 (60.74)	52 (2.17)
State	30	46590	41639 (89.37)	5234 (12.57)	2532 (6.08)	7766 (18.65)	4951 (10.63)
Total	35	48988	43985 (89.79)	5433 (12.35)	3758 (8.54)	9191 (20.90)	48.03 (10.92)

The share of non teaching staff belonging to SC category in the affiliated colleges of State universities is 12.57 per cent while it is 6.08 per cent belonging to the ST category. The representation of ST category is less than the desired level in State universities.

CHAPTER 7

Finance

The resource base in terms of income ensures better educational infrastructure in the institutions of higher learning. The financial allocation to the educational sector is not comparable to other sectors of the economy. An attempt has been made in this chapter to analyze the income and expenditure of universities by their type and also at the state level. The data of income and expenditure has been obtained from the Information and Statistical Bureau, University Grants Commission, New Delhi. The numbers of sample universities for which data was available are 16 Central, 78 State and 14 Deemed universities for the year 2006-07.The attempt has been made to examine the pattern of income from different sources and expenditure on various heads.

Pattern of income

The major sources of the income of universities are Central and State Governments, University Grants Commission and different types of fees charged by the universities such as admission fee, tuition fee and examination fee as well as some other charges taken from time to time from other sources. The table 7.1 shows the income of universities by their type from different sources.

Central Universities

The Central universities derive the major portion of their income in the form of grants from the UGC so much so that the grants from the UGC account for as much as 84.66 percent of their total income. The share of the grants directly from the Central and state governments is very small (3.66 percent of their total income). The fee charged by the Central universities from the students under the heads admission, tuition and examination etc. contribute only 1.82 percent which, in any case, is a very meager proportion of their total income. The tuition fee charged by the Central universities is a pittance (only 0.71 percent of the total income of these universities).The source designated as "others" account for 10.46 percent of the total income of these universities.

Table: 7.1

Proportions of Income from different sources by University Type 2006-07

University Type	Central and State Govt.	UGC	Others	Admission Fee	Exam Fee	Tuition Fee	Total
Central	3.06	84.66	10.46	0.19	0.92	0.71	100
State	48.74	5.05	22.53	4.01	14.84	4.83	100
Deemed	20.19	17.50	44.15	1.10	2.19	14.87	100

State Universities

The major share of the income of the state universities is contributed by the respective state governments. The State and the Central governments, excluding the UGC, contribute about 48.74 percent of the total income of the State universities. The UGC grant to the sample State universities in 2006-07 has been 5.05 percent of their total income as UGC provides funds for specific academic programmes but such support is available for a specified period, may be for a plan period or period for which the programme is sanctioned. After the expiry of the specified period, the state government has to take over the programme as well as the financial liability. The share of fees charged in State universities is much higher in comparison to Central universities i.e. 23.68 percent against only 1.82 percent. The major contribution has come from the examination fee as compared to admission and tuition fees. The share of examination fee in the total income of state universities is14.8 percent .About 22.53 percent of the total income of the sample state universities has come from other sources which have not been specified in the data source.

Deemed Universities

The major proportion of the income of the Deemed universities comes from the sources designated as other as the sample universities received 44.15 percent of their income from this source. About 20.19 percent of the total income of Deemed universities has been contributed by the Central and State governments. The grant from the UGC accounted for 17.50 percent of their total income during 2006-07.While the share of admission and examination fees are lower than the State sample universities, the share of tuition fee of Deemed universities (14.87%) is about 3 times higher than the State sample universities (4.83%) and about 21 times higher than the Central universities.

If we take the income of the universities from all sources by their types and work out the UGC's share, the pattern, in 2006-07 was as presented in table 7.2 below

Table: 7.2
Share of UGC in the Income of Universities by Type 2006-07

University type	No. of sample Universities	% share of UGC in income of sample Univ.	Amount released by UGC (Rs. In lakh)
Central	17	75.24	77434.46
State	78	18.38	18919.39
Deemed	14	06.38	6563.57

Out of the total amount given to different types of universities, the Central universities received 75% of the total amount while State and Deemed universities received 18.38 and 6.38 percent of the total grant released by UGC respectively. It is clear that the bulk of the resources of Central universities came from UGC but the other type of universities also receives grants from UGC though the bulk of the income comes from other sources.

Expenditure

The table 7.3 provides the pattern of expenditure on various heads by university type. As is evident that salary component of teaching faculty and non teaching staff is quite large in Central, State and Deemed universities.

Central Universities

Almost 51% of the expenditure in Central universities goes to the salaries of the teaching faculty and non teaching staff. The books/journals and the equipment account for about 10.24 percent out of which 7.43 percent was spent on equipments in 2006-07.

Table: 7.3

Expenditure on Different Heads by University Type 2006-07

University Type	Salary to Teaching Faculty	Salary to Non Teaching staff	Fellow -ships	Students Welfare Schemes	Books /Journals	Equip-ments	Others	Total
Central	22.75	27.87	4.69	0.30	2.81	7.43	34.15	100
State	31.00	24.91	4.16	1.00	1.30	2.64	34.99	100
Deemed	25.68	14.29	1.77	1.45	3.96	27.35	25.50	100

Figures are in percentage

The students' welfare scheme got only 0.30 percent but the fellowships have claimed higher proportion of the total expenditure (4.69 percent). 34.15 percent has been shown as expenditure on other heads which have not been specified. The salary component and the expenditure on other heads together account for about 84.77 percent of the total expenditure in Central Universities.

State Universities

The salary component of the State universities is also very large as the salaries of the teaching faculty and non teaching staff account for 55.91 percent of the total expenditure. The expenditure on other heads is also substantial (34.99%) as in the case of Central universities (34.23%). Taken together, these two components account for about 90.90 percent of the total expenditure of the State universities. Books/Journals account for only 3.94 % as compared to about 10 percent in case of Central universities. About 5%^ has been spent on fellowships and student's welfare schemes.

Deemed Universities

The salary component in the Deemed universities is much lower than the State and Central universities. The expenditure on the salary of teachers has been 25.68 % and on that of the non teaching staff it has been 14.29 percent. Both the components, together, account for about 40% which is much lower as compared to State and Central universities. The expenditure on the fellowships and students welfare schemes (3.22%) is much lower than the Central and even State universities. The expenditure on Books/Journals and equipment by the Deemed universities account for about 31 percent of their total expenditure and this proportion is larger than that of the Central and State universities. The expenditure on the head designated as' *others'* accounted for 25.50% of the total expenditure in 2006-07.

Pattern of State wise aggregated Income and Expenditure

The table 7.4 shows the state wise share of income from various sources and share of expenditure on different heads at the aggregated level. The data pertains to the sample universities in each state which have responded and provided the data. The main problem of the data at State level is that the number of sample universities from each state is not uniform. The relevant examples of single university states are Meghalaya, Arunachal Pradesh, Tripura and Nagaland etc. Some states, though, have many universities but only single university has responded and provided the data. Moreover, the university/ universities of Himachal Pradesh, J&K, Manipur, Sikkim and Uttrakhand have not responded at all and the data of the universities of these states could not be included. The highest share of income at the aggregated level has been reported by Karnataka state (14.69%) followed by Andhra Pradesh. In expenditure at the aggregated level highest share has been reported by Andhra Pradesh (12.34%) followed by Karnataka (10.21%). The state of Karnataka is closely followed by Bihar in expenditure (10.10%).The state of Tripura has reported the lowest share of income (0.19%) as well as the expenditure (0.07%).

Table: 7.4

Share of States in the total Income and Expenditure 2006-07

(Figures are in percentage)

State	Income	Expenditure
Andhra Pradesh	12.37	12.34
Arunachal Pradesh	0.23	0.36
Assam	0.89	0.82
Bihar	8.20	10.10
Chattisgarh	0.54	0.34
Delhi	4.46	4.46
Goa	0.47	0.43
Gujarat	3.23	3.35
Haryana	4.46	4.73
Jharkhand	3.51	2.41
Karnataka	14.69	10.21
Kerala	3.34	4.66
Madhya Pradesh	7.30	5.37
Maharashtra	2.55	5.36
Meghalaya	1.53	1.56
Mizoram	0.79	0.91
Nagaland	1.77	0.97
Orissa	2.12	2.07
Punjab	3.21	3.83
Pondicherry	0.84	0.96
Rajasthan	0.72	0.48
Tamil Nadu	6.55	8.49
Tripura	0.19	0.07
Uttar Pradesh	9.57	9.58
West Bengal	6.47	6.14
Total	100.00	100.00

Note: Data for Himachal Pradesh, J&K, Manipur, Uttrakhand and Sikkim are not available

The two tables 7.5 and 7.6 present the various states in the categories of percent shares of income expenditure respectively. The table 7.5 shows that Arunachal Pradesh and Tripura from Northeast and Goa fall in the lowest category of share of income. Almost 50 percent of the states fall in the percentage range category of 0.50 to2.50 and 2.50 to 5.0 percent. Four states of Bihar, Uttar Pradesh, Andhra Pradesh and Karnataka are in the income category of more than 7.5 per cent.

Table: 7.5
States in Different Income Categories 2006-07

Categories (%)	Name of the State	No of States
< 0.50	Arunachal Pradesh, Goa, Tripura	3
0.50-2.5	Assam, Chattisgarh, Meghalaya, Mizoram, Nagaland, Orissa, Pondicherry, Rajasthan	8
2.5-5	Gujarat, Haryana, Jharkhand, Kerala, Maharashtra, Punjab, Delhi	7
5-7.5	Madhya Pradesh, Tamil Nadu , West Bengal	3
7.5-10	Bihar, Uttar Pradesh	2
> 10	Andhra Pradesh, Karnataka	2
Data not Available	Himachal Pradesh, J&K, Manipur, Sikkim, Uttrakhand	5
Total		30

Table: 7.6
States in Different Expenditure Categories 2006-07

Categories (%)	Name of the State	No of States
< 0.50	Arunachal Pradesh, Chattisgarh, Goa, Tripura, Rajasthan	5
0.50-2.5	Assam, Jharkhand, Meghalaya, Mizoram, Nagaland, Orissa, Pondicherry	7
2.5-5	Delhi, Gujarat, Haryana, Kerala, Punjab	5
5-7.5	Madhya Pradesh, Maharashtra West Bengal	3
7.5-10	Uttar Pradesh, Tamil Nadu	2
>10	Andhra Pradesh, Bihar, Karnataka	3
Data not Available	Himachal Pradesh, J&K, Manipur Sikkim, Uttrakhand	5
Total		30

Table 7.6 shows the distribution of states according to the expenditure categories of percentage range. The States of Arunachal Pradesh, Chattisgarh, Goa, Tripura, and Rajasthan fall in the lowest category of expenditure while Andhra Pradesh, Bihar and Karnataka fall in the highest category. About 40% of the states fall in expenditure categories of 0.50 to 2.50 and 2.5 to 5.0 percent. The states of Madhya Pradesh, Maharashtra, West Bengal Uttar Pradesh and Tamil Nadu are in the expenditure categories of 5.0 to 7.0 and 7.0 to10 percent. These states together accounted for almost 34.94 percent of the total expenditure in the country.

Table 7.7 shows the income expenditure ratio of the sample universities in different states of the country. The ratio has been obtained by dividing the expenditure by income in order to see the balance between these two components.

Table: 7.7

State wise Income –Expenditure Ratio 2006-07

State	Income (Lakh Rs.)	Expenditure (Lakh Rs.)	Income – expenditure ratios
Andhra Pradesh	62828.01	57780.82	0.92
Arunachal Pradesh	1153.76	1661.13	1.44
Assam	4531.16	3832.26	0.85
Bihar	41656.5	47282.61	1.13
Chattisgarh	2729.39	1598.15	0.59
Delhi	22641.02	20898.56	0.92
Goa	2383.74	1995.74	0.84
Gujarat	16415.66	15698.77	0.96
Haryana	22661.91	22147.24	0.98
Jharkhand	17839.21	11273.14	0.63
Karnataka	74578.19	47785.40	0.64
Kerala	16952.2	21825.86	1.29
Madhya Pradesh	37049.12	25145.17	0.68
Maharashtra	12940.27	25109.2	1.94
Meghalaya	7770.41	7296.1	0.94
Mizoram	4016.92	4252.85	1.06
Nagaland	9007.85	4549.1	0.51
Orissa	10787.04	9670.27	0.90
Punjab	16321.73	17922.59	1.10
Puducherry	4264.39	4487.48	1.05
Rajasthan	3646.40	2233.19	0.61
Tamil Nadu	33268.51	39718.06	1.19
Tripura	938.97	338.6	0.36
Uttar Pradesh	48598.11	44832.17	0.92
West Bengal	33828.03	28755.7	0.88
National Average	507808.30	468090.16	0.92

Note: Data for Himachal Pradesh, J&K, Manipur, Uttrakhand and Sikkim are not available

It is clear from the table 7.7 that there are eight states in which expenditure on education by these states is higher than their income. The state of Maharashtra has incurred higher expenditure in comparison the income of the universities from all sources. The state's income from all sources is 12,940.27 lakh but the expenditure is almost the double of the income (Rs 25,109.20 lakh) and has the income-expenditure ratio of 1:1.94. It means the state of Maharashtra spends Rs.1.94 against the income of Re. 1 from all sources. The state of Arunachal Pradesh has the second highest income- expenditure ratio (1:1.44). The income of university from all sources in Arunachal Pradesh during 2006-07 was 1,153.76 lakh while the expenditure on all the heads was 1,661.13 lakh. The state of Kerala occupied third place where income-expenditure ratio was 1:1.29 followed by Tamil Nadu (1:1.19), Bihar (1:1.13), Punjab (1:1.10), Mizoram (1: 1.06) and Puducherry (1:1.05).

Table: 7. 7(a)

Distribution of states according to the range of Ratio between Income and Expenditure 2006-07

Range of the Ratio	States	Number of states
More than 1.44	Maharashtra	1
1.17 to 1.44	Arunachal Pradesh, Kerala, Tamil Nadu	3
0.90 to 1.17	Andhra Pradesh, Bihar, Delhi, Gujarat, Haryana, Meghalaya, Mizoram, Punjab, Puducherry, U. P.	10
0.63 to 0.90	Assam, Goa, Karnataka, Madhya Pradesh, Orissa, West Bengal	6
Less than 0.63	Tripura, Chattisgarh, Jharkhand, Nagaland, Rajasthan	5
Data not Available	Himachal Pradesh, J&K, Manipur, Uttrakhand, Sikkim	5

Except the above mentioned eight states, all other states which have reported data have their income more than the expenditure. The income and expenditure ratio in Haryana was 1:0.98. In the state of Gujarat the ratio between income and expenditure has been 1:0.96 and in Meghalaya this ratio was 1:0.94. The income & expenditure ratio during 2006-07 in the states of Andhra Pradesh, Delhi and Uttar Pradesh was 1:0.92 followed by Orissa (1:0.90), West Bengal (1:0.88), Assam (1:0.85) and Goa (1:0.84). In a few states the ratio between income and expenditure is very low. For instance, in Tripura, it is as low as 1: 0.36 Nagaland (1: 0.51), Chattisgarh (1:0.59) and Jharkhand (1: 0.63). It means that the income of universities in these states is higher than the expenditure.

The table 7.8 presents the income and expenditure per student by university types. It is revealing to find out the gap in the income and expenditure per student to understand the disparities among different university types. It is clear from the table that in the Central universities income per student is 1.60 lakh while expenditure is 1.38 lakh. In State universities income per student is only 0.42 lakh and expenditure is 0.34 lakh but in Deemed universities, income per student is 0.72 lakh and expenditure of 0.52 lakh.

Table: 7. 8

Income and Expenditure per Student by University Type-2006-07

(Rs. In Lakh)

Type	Income (all sources)	Expenditure (All heads)	No. of Students	Income per Student	Expenditure per Student
Central	109270.31	94243.46	68475	1.60	1.38
State	378855.60	316478.94	926196	0.41	0.34
Deemed	37505.41	27298.27	52453	0.72	0.52

This table 7.8 highlights that in all university types income per student is higher than the expenditure. Central universities spent 86% of their income while State universities spent 83 % and Deemed universities spent only 72% of their total income. This table also reveals that the gap in income amongst different university types is pretty high. The share of the Central universities in terms of income per student is almost 4 times higher than the State universities and 2.5 times higher than the Deemed universities. This large gap in income per student in different university types needs bridging.

Table 7.9 reveals the income and expenditure per student in different states of the country. It is clear from the table that income and expenditure per student in sample universities in Delhi is the highest in the country followed by university in Meghalaya with income of Rs 2.82 lakh and expenditure of Rs.2.64 lakh per student. Meghalaya stands second in this respect.

Table: 7.9

State wise Distribution of Income and Expenditure per Student (In lakh Rs) 2006-07

S.No.	States	Income per Student	Expenditure per student
1	Andhra Pradesh	1.78	1.64
2	Arunachal Pradesh	1.35	1.95
3	Assam	0.85	0.72
4	Bihar	0.49	0.56
5	Chattisgarh	0.41	0.24
6	Delhi	3.56	3.29
7	Goa	2.19	1.83
8	Gujarat	0.32	0.30
9	Haryana	1.25	1.21
10	Jharkhand	0.38	0.24
11	Karnataka	0.92	0.59
12	Kerala	0.28	0.36
13	Madhya Pradesh	0.34	0.23
14	Maharashtra	0.06	0.11
15	Meghalaya	2.82	2.64
16	Mizoram	0.41	0.44
17	Orissa	0.98	0.88
18	Punjab	2.07	2.72
19	Pondicherry	1.68	0.46
20	Rajasthan	0.18	0.11
21	Tamil Nadu	0.70	0.84
22	Tripura	0.51	0.18
23	Uttar Pradesh	0.99	0.91
24	West Bengal	0.24	0.21
25	**Average for the Country**	0.50	0.46

Note: Data for Himachal Pradesh, Jammu&Kashmir, Manipur, Nagaland, Sikkim and Uttrakhand are not available.

Meghalaya has one Central university (NEHU) as sample and receives funds from UGC. Goa occupies the third place with an income of Rs. 2.19 lakh and expenditure of Rs. 1.83 lakh per student. The state of Punjab occupies the fourth place with income and expenditure of Rs 2.07 lakh and Rs 2.72 lakh per student respectively. The other states which have income and expenditure more than 1 lakh per student are Andhra Pradesh, Arunachal Pradesh and Haryana.

All the eight states mentioned above have, both, income and expenditure of more than Rs.1 lakh per student except Puducherry where income is more than Rs. one lakh but expenditure is Rs. 0.46 lakh per student. Out of these states, six are comparatively developed states and remaining two (Meghalaya and Arunachal Pradesh) have majority of tribal population.

Out of the rest of the sixteen states for which the sample data was available, Uttar Pradesh, Orissa, Karnataka, Assam, Tamil Nadu and Tripura are the states where income and expenditure per student is more than the national average of Rs 0.50 lakh for income and Rs 0.46 lakh for expenditure. Bihar is one example where the income per student (Rs.0.49 lakh) is below the national average (Rs. 0.50 lakh) but expenditure per student (Rs. 0.56 lakh) is above the national average (Rs. 0.46 lakh). There are ten states whose income and expenditure per student is below the national average.

Though the income and expenditure per student is a good indicator which generally reflects the status of infrastructure, both academic and physical, but sometimes it may create problem in understanding of the phenomena. There may be a situation in which the income and expenditure levels may be the same but the enrolment in one state is very high in comparison to other state. In such cases even with the same income and expenditure levels, per student figure will be the function of the denominator (Students enrolment) and will vary.

CHAPTER 8

Summary and Conclusions

The study was started with a set of objectives (listed in the chapter I) mainly to assess the status of higher education in terms of some selected parameters in the initial year of the XI Five Year Plan. The seed of this study was, of course, sown by Prof. Thorat, Chairman, University Grants Commission. His main concerns were expansion of infrastructure in the universities, expansion of enrolment, inclusiveness and equal access, equity, quality and excellence in higher education. The UGC had sent a comprehensive questionnaire to the universities before the visit of the Committee to recommend the grant for XI plan period. All the questionnaires were not returned and many Universities gave only partial information. Therefore, there was no uniformity in the responses. The samples were, thus, culled out for each aspect to be discussed. The structure of samples has been spelt out at the beginning of the respective chapters. The purpose for this study was to assess the status of higher education in India based on the data received from the universities.

The expansion of higher education can be gauged from the fact that there were 25 university level institutions after the independence in 1950 but by 2010, India has 42 Central, 257 State, 130 Deemed and 61 Private universities besides the Institutes of National importance. Moreover, there are a large number of affiliated colleges (13,640 colleges affiliated to 81 sample universities, hence, per university average number of affiliated colleges are 168). The methods of admission vary not only from university to university but also across the levels as well as faculties in all types of universities. Merit is the dominant criteria for admission in 43.83% of sample State universities at the UG level but Entrance Test is the main criteria in 26.09% of Central and 34% of sample Deemed universities. 10.43% Central, 7.30% State and 16% Deemed universities follow multiple criteria for admission such as, merit, entrance test, and interview etc. Unfortunately only 45.22% Central, 15.83% State and 24% Deemed sample universities have reported information about UG classes. Entrance Test has become the dominant method of admission at the PG level in all types of the universities. Multiple criteria have emerged as important method of admission at the M.Phil level in Central and Deemed universities but merit remains an important method of admission in the State universities. The method of admission varies at different levels across the faculties. Merit remains the main criteria for admission in the faculties of Arts, Science, Computer Science, Commerce and Management at the UG level. Entrance Test is the main criteria for admission in the faculties of Education, Engineering/Technology and Law. Many universities in these faculties use multiple methods such as merit/test/interview etc.

Entrance Test is the main method of admission in almost all the faculties at the PG level except the faculties of Arts and Commerce, in which admission is largely done on the basis of merit. Large proportions of universities have shifted to Entrance Test for admitting students at the PG level. About one fourth universities use multiple method for admission in which Entrance Test is also an important component. The trend in the method of admission in the universities is obvious and shifts are taking place in favour of the entrance test in various faculties.

Merit still remains the main method of admission at the M.Phil level in the faculties of Arts, Science, Computer Science, Commerce, Management and Education but in the majority of courses in the Faculty of Engineering/Technology, Entrance Test is the main method of admission at the M.Phil level. Merit still is the main consideration in the admission at the Ph.D level but a number of universities have introduced Entrance Test as well as Interviews in various faculties. The UGC notification of July 2009 may show its effect after 2010.

Introduction of self financing courses in the universities and colleges is a recent phenomenon when universities decided to generate financial resources by charging fees from those who can pay. The Student Unions in many universities opposed the introduction of such courses. These courses became popular in job oriented professional areas in the faculties of Engineering/Technology, Management, Computer Science and Faculty designated as Others at all the levels from UG to Diploma and certificate courses. It is surprising that Self financing courses have also been introduced at the research levels i.e. M.Phil and Ph.D. It seems that those who can pay may be awarded a research degree but this may not be compatible with the whole idea of quality and excellence in research.

The universities have responded to the market demand for professionals and specially trained human resource with the strategy of diversifying the courses by restructuring the existing courses and also introducing new courses. This has happened in all the faculties and at all the levels. Almost all the languages in India are being taught in one university or the other in the Faculty of Arts and Humanities. Universities have also introduced courses on foreign languages, both, at UG and PG levels. Many universities have introduced foreign languages at the degree and Diploma level. Tribal Studies, Rural Studies, Human Resource, Labour Welfare, Regional Economics, Policy Research, Science Policy, International Relations, International Trade, Regional Development, Business Economics, social work, Women Studies, Studies in Exclusion and Inclusion are some of the areas introduced in the Faculty of Social Sciences.

A number of new courses have been introduced in the faculty of Science in Indian universities such as; Bio-technology, Genetic Engineering, Computer Science, Information Sciences, Nano Science, Food Processing, Bio-informatics, Geo-informatics, Remote Sensing and GIS, Molecular Biology, Polymer Sciences, Marine Living Resources, Medical Biotechnology, Environmental Sciences etc. These courses were not known about 3 decades ago. Extensive diversification has taken place in the faculties of Commerce and Management. The courses generally introduced are: Business Administration, Business Management, Industrial Relations and Personnel Management, Financial Management, Tourism and Hotel Management, Tourism Management, Business Economics, Personnel Management and Industrial Relations, Financial Control, Corporate Management, Accounting and Financial control etc.

Engineering / Technology faculties have also diversified courses at the graduate and Post graduate levels. Courses on Textiles Bio-Pharma, Nano technology, Environmental Engineering, Instrumentation, Printing Technology, Ship Technology, Automobile Technology, Petro-Chemical Engineering, Agricultural Engineering,

Soil-Geo Technology, Electronics and Communication have been introduced besides the core areas of Civil, Mechanical and Chemical Engineering.

Agricultural universities have introduced courses on Horticulture, Dairying, Floriculture, Aquaculture, Fisheries, Pest Management, Seed Technology, Biotechnology and Genetic Engineering, Sericulture, Food and Nutrition and Water Technology to meet the growing demand in these new areas.

The faculty designated as "Others" is diverse by its nature with assortment of many subjects such as Performing Arts (Music, Theatre, Dance/Drama), Fine Arts (Sculpture, Painting, Graphics, Photography), Journalism, Mass Communication, Library Science, Urban and Regional Planning, Architecture and Heritage Conservation, Culture Studies, Physical Education, Home Science, Nursing, and Behavioural Sciences.

The data on Physical infrastructure was not adequately reported. It was limited to availability of auditoriums, Conference rooms and Open Air Theatres in terms of numbers and available accommodation. The data calculated on per university basis reveals that the Central Universities are better placed not only in terms of numbers but also in terms of accommodation except in case of Open Air Theatres as State universities are better placed in terms of numbers of Open Air Theatres but Central Universities have more accommodation. The libraries have been treated as the most important academic infrastructure. Categorization of libraries on the basis of number of volumes shows that 7.69 per cent libraries of the sample universities may be termed as large libraries where the number of books is more than three lakh, 18.27 per cent libraries are medium libraries as they have less than 3 lakh but more than 1 lakh books and 74 percent libraries are small ones as they have books less than 1 lakh. There is preponderance of books in English language. State universities have higher proportion of books in regional languages as compared to Central and Deemed universities. The libraries in Gujarat, Karnataka, Madhya Pradesh, Manipur, Orissa, Puducherry and Tripura have larger share of books in regional languages. There are more journals in English language across the states. The university libraries in the states of Bihar, Madhya Pradesh, and Rajasthan have larger proportion of journals in Hindi language while journals in regional languages are subscribed in Gujarat, Maharashtra, Karnataka, Orissa, Puducherry and Tamil Nadu. Libraries of the Central universities have got electronic facilities with computer connectivity. Libraries in majority of the state and Deemed universities have also adopted electronic mode of access through Inflibnet and Delnet etc. The adequacy of books in the libraries has been ascertained by calculating the number of books per teacher and per 100 students. The highest share of books per 100 students has been recorded in Jharkhand followed by Punjab and Goa. Maharashtra has reported the largest number of books per teacher followed by Goa and Haryana. Delhi has the largest number of Journals per 100 students followed by Punjab, Nagaland and Jharkhand. Delhi again leads in numbers of journal per teacher followed by Uttar Pradesh, Maharashtra and Nagaland.

The enrolment of student is very important component in the higher education. This aspect has been discussed, at the first instance, university type wise and level wise. The sample of State universities is much larger as compared to the Central and Deemed universities. Hence, they have the largest enrolment so much so that they enrol almost 88 percent of the total students enrolled by all types of sample

universities. The bulk of the enrolment has been reported in the faculties of Arts and Science at all the levels in the Central universities. The same trend is discernible in the State universities too. Deemed universities are exceptions in the enrolment at the UG level as the Commerce faculty has reported the highest enrolment. The faculty of Arts of Deemed universities has reported the highest enrolment at the PG level but the second place is occupied by the Faculty of Management and not Science. Deemed universities have also reported the highest enrolment at the Diploma/Certificate level in the faculty of Engineering/Technology. There are large variations in enrolment at all the levels within the state in their various faculties as well as across the states. Maharashtra has reported the highest enrolment at UG, PG and Diploma/ Certificate levels while Delhi has recorded the highest enrolment at the M.Phil level. Tamil Nadu has the highest enrolment at the Ph.D. level.

The state wise and social category wise pattern of enrolment is revealing. The state wise SC and ST enrolment compared with the share of state wise SC and ST population shows that West Bengal, Puducherry, Tamil Nadu and Uttrakhand have higher share of SC enrolment in relation to their share in the state's population. In case of ST enrolment, Arunachal and Mizoram have higher share in the enrolment than their share in the total population. The highest enrolment of OBC students has been recorded in Tamil Nadu followed by Chattisgarh and Karnataka. Enrolment of minorities is very low in almost all the States but Tamil Nadu has recorded the highest enrolment of minorities followed by Jharkhand and Bihar. It seems strange that J&K has reported low enrolment of minorities or no minority enrolment. The share of Physically Challenged in the total enrolment in the respective states is also very low. The enrolment of students belonging to General category is low in Northeastern states for obvious reasons that the share of OBC population in the total population is very low in these states. Jammu And Kashmir State also presents an exception as the enrolment of General category students has been reported to be very high (96.18%) while the share of enrolment of minorities has been shown as nil. The reasons cannot be guessed.

Besides the intra state variations in the enrolment of the social categories, interstate variations have also been assessed. West Bengal, amongst the states, has the highest enrolment of students belonging to SC category followed by Maharashtra. The three states i.e. Madhya Pradesh, Mizoram and Jharkhand have the highest enrolment of ST students. Karnataka has reported the highest enrolment of OBC category followed by Maharashtra, Tamil Nadu and Madhya Pradesh. The highest enrolment of minorities in the country has been reported in Bihar followed by Tamil Nadu and Maharashtra. The highest share of students belonging to General category in the total enrolment in the country has been recorded in Maharashtra which accounts for almost 25% of the total enrolment of General category in the country. The highest proportion of enrolment of students belonging to Physically Challenged category has been recorded in Andhra Pradesh followed by Uttar Pradesh.

The state wise and gender wise enrolment within the states shows that Goa has the highest female enrolment (68.87%). In Assam, Rajasthan, and Meghalaya, more than 50% of the enrolled students are females. When the interstate enrolments are observed, one of the important patterns is discernible that in all the states where total enrolment is higher, the proportion of female enrolment is also high.

The enrolment in affiliated colleges of the Central and State universities provides opportunity of getting education to a much larger number of Students particularly at the UG and Diploma/Certificate level. While the share of ST students enrolled in the affiliated colleges of Central universities is much larger than those enrolled in the affiliated colleges of State universities, the share of SC students in the affiliated colleges of State universities is higher than in the affiliated colleges of the Central universities.

The share of female students in the Affiliated Colleges of Central universities is almost equal to male students but the share of female students belonging to ST category is higher than the male students in the Affiliated Colleges of Central universities. SC female students account for almost 42% of the total enrolment in the SC category in the Affiliated Colleges of the Central universities. Though the share of minorities in total enrolment is low but the share of female students within minorities is a little more than 1/3 of the total students of minority category enrolled in the Affiliated Colleges of the Central universities.

The enrolment of the female students in the Affiliated Colleges of State universities is lower than the Affiliated Colleges of the Central universities. There is growing difference between the Affiliated Colleges of the Central universities and State universities in the share of OBC category which is 1.25% and 25.96% of the total enrolment respectively. But the representation of female students within OBC category in the Affiliated Colleges of State universities is quite high (almost approaching 50%). The share of females belonging to SC and ST category in the total enrolment of the Affiliated Colleges of State universities is almost similar around 38% but the share of females belonging to minorities in these colleges is almost 50 per cent within their category though the share in total enrolment is very low.

The pattern of research fellowships by university types shows that 51% of the total fellowships are there in the Central universities and 46% in the State universities. SRF and 'other fellows' are concentrated in the Central universities while the share of JRF in State universities is higher. The share of JRF in almost all the States is higher with exception of Delhi and Uttar Pradesh. In Delhi, the share of SRFs is very high while in Uttar Pradesh there is preponderance of other fellows.

At the country level, the share of Maharashtra is the highest in JRF followed by Andhra Pradesh while SRFs are concentrated in Delhi followed by Uttar Pradesh and 'other fellows' have very high concentration in Uttar Pradesh. As far as total fellowships are concerned, Uttar Pradesh has the largest share and Delhi occupies the second place. Logically Junior Research Fellows are awarded SR fellowship after the completion of two years and after due evaluation of the progress, hence, there should be some link between the two. In the present exercise the link seems to be missing because many sample universities did not report data properly.

One of the prevalent methods of evaluating the performance of the students is the results in their respective examinations and the degree awarded to them. As is logical working at the faculty wise sample size, the largest numbers of M.Phil and Ph.D degrees are awarded by State universities. Largest numbers of M.Phil and Ph.D degrees are awarded in the Faculty of Arts of Central universities. This trend is true in case of State and Deemed universities but in State universities Ph.D degrees in Arts

aid Science Faculties are almost equal. No Central university has awarded M.Phil degree in the faculties of Engg/Tech., Agriculture, Law and Medicine. In case of Deemeed University the proportion of Ph.D degrees in Science faculty is marginally hgher than the Ph.D degrees awarded in Arts faculty. The state wise data show that tle statde of Tamil Nadu has awarded the highest number of M.Phil and Ph.D degrees. There aare wide variations in M.Phil and Ph.D degrees awarded in various faculties aross the states. Very few M.Phil degrees have been awarded in the faculty of Manageement, Education, Engg/Tech, Medicine and Law by the states.

The passs percentage of the total students at UG level in all the states varies between 52 and 98 per cent while the pass percentage of female students is much higher than piss peercentage of the total students. Jharkhand and Rajasthan have recorded high piss peercentage of total as well as female students at the UG level.

The ressults of the students at the PG level vary between 32% and 98% amongst the states. (Generally, female students have performed better at the PG level too across the states with a few exceptions such as Assam, Manipur, Rajasthan, Uttrakhand, Tripura aid Weest Bengal.

Teachimg faculty in the universities and colleges is a very crucial parameter in higher educatiion. A team of committed and dedicated teachers is necessary to ensure the quality of education imparted to the students. The data at the aggregated level shows that thee vacant positions increase in lower posts of teaching faculty. For example 44.16, 37.85 and 23.03 per cent of the faculty positions were lying vacant at Lectureer's, Senior Lecturer's and Reader's level respectively. Of course, professors are moore than the sanctioned posts due to the arithmetic of Career Advancement. Large mumbers of vacant posts do not augur well for quality of university education. The geender composition of teaching faculty shows that the proportion of female teacherrs declines as the level of post increases. While 24% teachers at the lecturer level aare females, their proportion is only 16% at the professor's level. There is substamtial gap in the teaching faculty as far as other social categories are concerned. For exaample the proportion of SC faculty is 3.31, 6.68, 11.89 and 11.48 per cent at the Professsor's, Reader's, Senior-Lecturer's and Lecturer's level respectively. It may be due to tthe fact that the policy of affirmative action was applied only at the entry point. Now, tthe decision has been taken to have reservations at all levels, hopefully the situatiion will change. The representation of STs is much below the required level. It is only 1..10, 2.24, 3.80 and 4.07 per cent respectively at the Professor, Reader, Senior Lecturer and Lecturer level. The representation of OBC, at the aggregated level is better at all the levels.

The proportion of teachers with Ph.D degree declines with the decline in the hierarchy. While 89% of Professors and 82% of Readers have Ph.D degree, only 54% Senior Lecturer and 38% Lecturers have obtained Ph.D degrees. Recruitment of part-time teachers and guest faculty is purportedly to fill the gap between the sanctioned and fillled in posts. The share of part-time teachers is higher at the Lecturer and Senior Lecturer levels. There are very few part-time Readers and Professors.

If we llook at the faculty positions in UTD, level wise and by university types, the Centrail and State universities have excess Professors but Deemed universities have almost 30% positions of Professors lying vacant. Deemed universities have the

distinction of having female Professors two times more than the Central and State universities. The proportion of SC and ST Professors is pathetically low in all type of universities but the proportion of OBC at the professor level in the State and Deemed universities is around 20% but it is very low (0.67%) in the Central universities.

The representation of female teachers at Reader's level is very high in Deemed universities in comparison to Central and State universities and there are no vacancies in Deemed universities at this level. Actually, Deemed universities have reported excess Readers. But about 25% positions are lying vacant in Central and State universities. The proportion of female teachers in Central and State universities at Reader's level is 26 and 24 per cent respectively as against 51 per cent in Deemed universities. The social composition of faculties at the Reader level lags behind the desired level. The representation of SC faculty in Central universities is lower than the State universities but it is the lowest in the Deemed universities. The proportion of readers belonging to ST category in Central universities is much lower than the state universities and the share of ST category at this level in Deemed universities is dismal. The proportion of readers belonging to OBC category is much larger in State and Deemed universities than in the Central universities where their representation is not even one percent. As far as qualifications are concerned at the Reader's level in Central, States and Deemed universities the proportion of faculty with Ph.D degree is 91, 79 and 79 per cent respectively.

A large proportion of sanctioned positions at the Senior lecturers level have been lying vacant in all university types. The Central universities have 36.82% vacancies while State universities have marginally higher vacancies of 37.47% .The highest level of vacancies at Senior lecturers level have been reported in Deemed universities (43.50%).

The social category wise faculty positions show that the SC category faculty is better represented in all types of universities but the proportion of ST faculty lags far behind the norms except the Central Universities where the strength of ST faculty is 7.99%. The representation in State universities is hardly 3.25% and in Deemed universities it is only 1.53%. Inversely representation of OBC category is 6.37% in State universities and 0.76% in Central universities, though it is 10.73% in Deemed universities.

The Central universities have the highest percentage of vacancies at the lectures level (47.36%) followed by the state universities (44.20%) and Deemed universities (29.53%). The universities have attempted to fill the gap between the sanctioned positions and the filled-in positions, partly, by recruiting part-time faculty. The state universities have 10.56% of part time faculty followed by the Central universities (7.29%) and Deemed universities (5.65%). The gender composition of the faculty is in favour of female faculty in the Deemed universities where the female faculty constitutes almost 51% of the total strength at the lecturer's level. About 26% of the faculty in the Central universities and 21 percent in the State universities are female faculty at this level. The status of social categories in universities is again revealing. The representation of SC faculty is higher in the Central universities (13.38%) followed by the State universities (11.73%). The lowest representation is found in Deemed universities (4.29%). The representation of ST faculty is more skewed. The Central universities have 16.43 % ST faculty but their representation in the State and

Deemed universities is dismally low. The State universities have 1.8% and Deemed universities have only 0.80% ST faculty which is much below the norm. The representation of OBC faculty in Central universities is very low (almost 2%) but State universities have much higher representation (34.39%) and Deemed universities have about 10 % faculty belonging to OBC category. The teachers with Ph.D degree account for 41% in Central universities, 37.41% in State universities and 35% in the Deemed universities.

The teaching faculty in affiliated colleges presents a better scenario at the aggregated level as only 10.46% faculty positions have been reported as vacant. While 8% of the faculty positions are vacant in Central universities, the State universities have almost 11% positions as vacant. Vast differences are found in the social categories in the faculty positions at the aggregated level by university type. The SC faculty accounts for about 6 and 8 percent in Central and State universities respectively. The share of ST faculty in the affiliated colleges of Central universities is very large (52.64%) while in State universities it is only 3.07 percent. The only plausible explanation is that majority of the colleges are affiliated to the Central universities of northeastern states and the share of teachers belonging to ST categories should be higher.

There are 70 Professors in the affiliated colleges of Central universities and there is no vacancy at this level but at the same time there is no professor belonging to SC category while 56% of these professors belong to ST category. The affiliated colleges of State universities have 20 percent of the professor's posts lying vacant which are substantial if compared with the UTDs. About 5 percent of the professors belong to SC category and 3% to ST category. There is no vacancy in the affiliated colleges of the Central universities at the Reader's level but 8.41% of Readers posts have been reported as vacant in the affiliated colleges of the State universities. The representation of SC and ST category at this level in the affiliated colleges of Central universities is much higher as compared to the State universities. The percentage share of SC category is 13.10% and that of ST category is almost 43% but the share of both the categories is very low in the affiliated colleges of the state universities. The share of SC is 5% and that of ST is less than 2% at the Reader's level. The vacant positions at the lecturer's level (including Senior and selection grade) are 8.86% and 10.31% in Central and State universities respectively. The share of SC and ST categories in Central universities at this level is 5.61% and 53.69% respectively but again it is very low in State universities. The share of lecturers belonging to SC and ST categories in State universities is 7.06% and 3.17% respectively.

The state wise pattern shows that the lowest filled in positions are there in Himachal Pradesh (61.43%) and the highest in Kerala (97.58%) hence the vacant positions are the highest in Himachal Pradesh and the lowest in Kerala. The highest share of SC category in the teaching faculty in affiliated colleges at the State level is found in West Bengal and the lowest in Haryana while the highest share of ST faculty is found in Madhya Pradesh and the lowest share has been reported from Goa and Punjab.

The performance of teachers has been assessed in terms of publications of books and articles in journals, attendance in seminars and conferences at the national and international levels, teaching and research assignments in the country and abroad and patents produced. It is seen that in the publication of reference books, number of research papers at the national level, conferences and seminars attended at the

national and international levels the teachers of Central universities have made much higher contribution as compared to the State and Deemed universities. Larger numbers of text books have been written in the State and Deemed universities. Likewise the State and Deemed universities have published more papers in the international journals as compared to the Central universities. The highest numbers of patents have been produced by Deemed universities. These parameters have shown large state wise variations. While the highest proportion of text books has been contributed by Andhra Pradesh, the highest percentage of reference books has been contributed by West Bengal. The highest percentage of teachers from Tamil Nadu attended the seminars and conferences at the national level as well as international level. The highest percentage of research papers in national journals has been published in Uttar Pradesh and the teachers of Tamil Nadu have published the highest proportion of papers in international journals. Andhra Pradesh leads in teaching and research assignments at the national level and the share of teachers from Maharashtra is the highest in teaching and research assignments at the international level. Delhi has the honour of producing the highest numbers of patents.

Non-teaching staff is an integral part of the higher education system as its role in facilitating the process of teaching and learning is very important. It is seen that there are less vacancies in the non teaching cadres as the vacant positions in Central and State universities are about 18 percent of the sanctioned strength. Deemed universities have reported excess number of non-teaching staff. The social category wise composition of non teaching staff reveals that the representation of SC category employees is higher in State Universities (19.32%). Though, the proportion of SC category is lower in Central Universities (15.07%), it fulfills the norm. The representation of employees belonging to SC category is the lowest in the Deemed universities. The percentage of employees belonging to ST category is lower than the norm in every type of university, i.e. 4.99%, 1.29% and 6.21% in Central, State and Deemed universities respectively. Teacher-employee ratio is the highest in the Central universities (1:3.55) and the lowest in the Deemed universities (1:2.12). There are 8.19 employees per 100 students in Central universities, 3.42 employees in State and 1.91 employees per 100 students in Deemed universities.

The pattern of income from various sources by university types shows that the Central universities derive the major portion of their income in the form of grants from the UGC. The fee charged by the Central universities under the heads admission, tuition, examination etc. contribute very meager proportion of their total income.

The major share of the income of the State universities is contributed by the respective state governments. The UGC grant to the sample State universities in 2006-07 has been 5.05% of their total income as UGC provides funds for specific academic programmes but such support is available for a specified period, may be for a plan period or period for which the programme has been sanctioned. After the expiry of the specified period, the State government has to take over the programme as well as the financial liability. The share of fees charged in State universities is much higher in comparison to Central universities i.e. 23.68% against only 1.82 percent.

The major proportion of the income of the Deemed universities comes from the sources designated as 'others' as the sample universities received 44.15% of their income from this source. The data provided by the Deemed universities does not

specify the category designated as others. The share of tuition fee of Deemed universities (14.87%) is about 3 times higher than the State sample universities (4.83%) and about 21 times higher to Central universities.

As far as expenditure on various heads is concerned salary component of teaching faculty and non-teaching staff is quite large in Central and State universities, but comparatively low in Deemed universities. It is about 51% in Central universities, 56% in State universities and only about 40% in Deemed universities. In Deemed universities, expenditure on the fellowships and students welfare schemes is much lower than the Central and State universities.

The state wise data pertaining to income from various sources and expenditure on different heads shows that the highest share of income at the aggregate level has been reported by Karnataka followed by Andhra Pradesh. In expenditure at the aggregated level highest share has been reported by Andhra Pradesh followed by Karnataka. The state of Tripura has reported the lowest share of income as well as the expenditure.

The income expenditure ratio of the sample universities in different states of the country shows that there are eight states in which expenditure on education is higher than their income. Except these eight states (Maharashtra, Arunachal Pradesh, Kerala, Tamil Nadu, Bihar, Punjab, Mizoram and Puducherry), all other states which have reported data have their income more than the expenditure.

The pattern of income and expenditure per student reveals large disparities among different university type. The share of the Central Universities in terms of income per student is almost 4 times higher than the State universities and 2.5 times higher than the Deemed universities. This large gap in income per student in different university types needs bridging in order to reduce it. Central universities spent 86% of their income while State universities spent 83% of their income and Deemed universities spent only 72% of their income during the year 2006-07.

The pattern of income and expenditure per student in different states shows that Delhi has highest income and expenditure per student followed by Meghalaya, Goa and Punjab. The other states which have per student income and expenditure more than Rs.1 lakh are Andhra Pradesh, Arunachal Pradesh and Haryana.

Though the income and expenditure per student is a good indicator which generally reflects the status of infrastructure, both academic and physical, but sometimes it may create problem in understanding the phenomena. There may be a situation in which the income and expenditure levels may be same but the enrolment in one state is very high in comparison to the other one. In such cases even with the same income and expenditure levels, the ratio per student will be the function of the denominator (Students enrolment) and should vary.

Summing Up:

1. The infrastructure for higher education has expanded in an impressive manner with 42 Central, 257 State, 130 Deemed and 61 Private universities.

2. There is a definite shift in the method of admission in some faculties but merit still remains the main criteria of admission in the faculties of Arts and Science.
3. There is a trend of diversification of courses at different levels in response to the market demand of skilled human resource particularly in subjects where employability is higher.
4. The universities have provided only partial information about Self Financing Courses. It is important to have the number of students enrolled under SF courses and the fee structure in order to have any policy intervention.
5. Physical infrastructure pertaining to co-curricular and Extra-curricular activities in order to channelize the energies of students towards creativity are necessary conditions for their physical and intellectual growth. The facilities should not only be created but also managed with active participation of students.
6. Library is the academic core of universities. Constant replenishment of books and journals is an absolute necessity. Now library networking has expanded the reach and e-networking may be encouraged to stimulate and enrich the intellectual exchange.
7. The growth of infrastructure of higher education in terms of more universities should result in higher enrolment not only in absolute number but should have inclusive approach where students belonging to different social categories should get adequate representation. The gap, as the study shows, still remains substantial.
8. There is substantial gap between the sanctioned strength of the faculty and their filled in positions at all levels except Professors. Larger proportion of vacancies of teaching faculty and the practice of engaging the classes by Guest and Part time teachers generally affects the quality adversely.
9. The teacher/student (T/S ratio) is one of the measures of finding the adequacy of teaching faculty. The T/S ratio is towards the higher side. The situation should improve with the filling in of the vacant positions.
10. The performance of teachers measured in terms of publication of books and articles in journals, participation in conferences and seminars, teaching and research assignments in the country and abroad and patents produced shows that the Central universities are much ahead in the publication of reference books, participation in conferences and seminars, publication of research papers at the national level and teaching and research assignments abroad. The State universities have contributed more text books, and have published more research papers in foreign journals. The Deemed universities have higher teaching and research assignments in the country as compared to Central and State universities. The relationship between such data based evaluation and promotion as a policy will encourage faculty to perform better.
11. The ratio between teaching faculty and non teaching staff is the highest in Central universities. The ratio between non teaching staff per 100 students is also the highest in the Central universities. The

non teaching staff be placed in such a manner that they facilitate the process of teaching and learning.

12. Finance for higher education is the most crucial factor for ensuring quality, equity and access. The gap between income and expenditure per student in different types of universities is quite large. The gap needs to be reduced to improve the quality of infrastructure and ensure quality of learning.