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UNIVERSITY GRANTS COMMISSION

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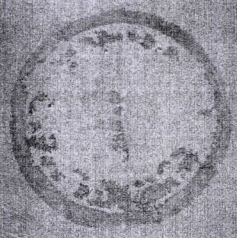
REPORT FOR THE YEAR 1978-79



PRESENTED TO THE GOVERNMENT OF INDIA
IN COMPLIANCE WITH SECTION 18 OF THE UGC ACT, 1956
NEW DELHI

UNIVERSITY GRANTS COMMISSION

REPORT FOR THE YEAR

1978-79

Presented to the Government of India in compliance with Section 18 of the UGC Act, 1956

NEW DELHI

University Grants Commission
New Delhi-110002
(INDIA)

Note

Figures given in the report have been rounded

1 Lakh = 1,00,000
1 Crore = 1,00,00,000 = 10 million

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Members of the University Grants Commission

Chairman

1. Professor Satish Chandra

Vice-Chairman

2. Professor B. Ramachandra Rao

Members (upto 13-1-79)	*From 14-1-79*
3. Shri P. Sabanayagam	3. Shri P. Sabanayagam
4. Shrt J.P. Kacker	4. Shri J.P. Kacker (*)
5. Prof. R.P. Bambah	5. Dr. Amrik Singh Cheema†
6. Prof. S.S. Saluja	6. Prof. Amales Tripathi
7. Prof. (Miss) A.J. Dastur	7. Prof. C.V. Subramaniam
8. Prof. S. Gopal	8. Prof. Usha H. Mehta
9. Dr. Amrik Singh Cheema	9. Dr. A.R. Kidwai (**)
10. Prof. S. Maqbool Ahmed	10. Prof. Mrinal Miri
11. Prof. B.M. Udgaonkar	11. Prof. Ram Lal Parikh
12. Dr. Chandran D.S. Devanesan	12. Mr. Justice H.R. Khanna (***)

* Shri S. Vasudevan appointed as member of the Commission with effect from 8th August 1979 in place of Shri J.P. Kacker.

** Resigned w.e.f. 3rd October 1979.

*** Replaced by Mr. Justice S.M. Sikri with effect from 24th April 1979.

† Dr. V.S. Arunachalam appointed as member of the Commission with effect from 21st March 1980 in place of Dr. Amrik Singh Cheema.

UNIVERSITY GRANTS COMMISSION
ANNUAL REPORT

April 1978—March 1979

In compliance with Section 18 of the UGC Act, 1956 (No. 3 of 1956)* we have the honour to present to the Central Government the Annual Report of the University Grants Commission for the year 1978-79 to be laid before the Houses of Parliament.

SECTION I

Introduction

1.01 The year 1978-79 has been an eventful year as during the year the University Grants Commission finalised its approach to the development of higher education during the next plan period in the light of the document, *Policy Frame* and also undertook a comprehensive review of its ongoing programmes and their impact on the standards of teaching, research and examinations in the universities.

1.02 Policy Frame on Development of Higher Education: *The Policy Frame for the Development of Higher Education in India over the next 10-15 years* was finalised towards the close of the year 1977-78. The policy frame outlines the main achievements and failures of the system of education in India and proposes a broad strategy for overcoming these, with special emphasis on the concept of extension, social change, equalisation of educational opportunities and removal of regional imbalance, maintenance of standards and social relevance of courses and research.

The *Policy Frame* has been circulated to the universities for discussion by students and teachers. The following working groups were also appointed to identify appropriate programmes with regard to the implementation of the *Policy Frame* so that they would have the necessary impact on the university system:

(i) Extension including optimal use of vacations.
(ii) Criteria for evaluation of colleges.
(iii) Role and Responsibility of teachers.
(iv) Regulation of admissions and facilities to be provided to enable weaker sections of society to take advantage of the facilities of higher education.
(v) Introduction of regional languages as media of instruction.

*The University Grants Commission Act 1956 (Act No. 3 of 1956) (as amended upto the 17th June, 1972).

The reports of all the working groups listed above have been finalised during 1978-79 and follow-up action is being taken on the specific measures proposed by the working groups.

1.03 Approach Paper for the Development of Universities and Colleges in the Plan Period 1978-83: The approach paper for the development of higher education in the next five year plan period outlines the basic philosophy and strategies for development of universities and colleges. The main focus is on improvement of quality, making extension an integral part of the activities of the universities and colleges and balanced development. Further expansion of the educational system by way of opening new universities or centres for postgraduate studies or new departments and colleges would receive very low priority.

For purposes of development, the Commission grouped universities in the country in three categories viz. well-developed universities, developing universities and universities which have the potential to reach the well-developed stage in the next five years. The main attempt was to ensure that in the case of well-developed departments and universities, the general plan assistance would be utilised at a minimal level. Assistance to the developing departments/universities would be made available in order to bring their facilities and activities to the optimum level. It was proposed that 15-20 universities would be assisted on the same pattern, as the central universities, to bring a minimal number of the developing universities, chosen on the basis of well identified criteria, to the level of developed universities. This approach, it was hoped, would, to a considerable extent reduce the disparity which has come into existence between some of the central and developed universities on the one hand, and the state universities on the other, on account of historical developments in the past three decades, despite the efforts of the Commission to pay special attention to the newly established universities located in backward regions.

The Approach Paper was discussed in two regional conferences of Vice-Chancellors held in May and July, 1978 and was broadly endorsed.

1.04 Review Committee: In October, 1978 the Ministry of Education directed the UGC to undertake a comprehensive review of the various programmes being implemented by it. The Commission was also asked to identify the schemes which are considered peripheral or which have not registered any impact on the maintenance and improvement of standards of university education and to discontinue them.

The Commission, while noting that it had already taken steps to review the existing schemes being implemented by it with a view to determining the schemes that may be continued in the next plan, desired that normally such quality programmes be reviewed at this stage which have been in operation for about three years or so including programmes involving larger

financial outlays.

Accordingly, the committee already constituted by the Commission to review its ongoing programmes was enlarged. The reconstituted committee met on 14th December, 1978 and agreed that a sub-committee may be appointed to consider review notes on the ongoing programmes of the Commission as also the question of the continuation of the peripheral schemes. The sub-committee was also asked to identify a few schemes for detailed examination on the basis of the importance of the scheme and the allocation made for the purpose.

The Review Committee also took note of the fact that the Commission had invested a significant portion of its funds on the development of universities and colleges during the Fourth and Fifth Plan and desired that an effort should be made to study the impact of development programmes on the determination and maintenance of standards of teaching, research and examinations by selecting a few universities and colleges on a zonal basis.

The sub-committees visited the universities and colleges between March 19 and April 12, 1979 and submitted their reports by May 20, 1979. *The Report of the Review Committee* is being finalised.

1.05 State of Higher Education during 1974-79 and Trends: One of the main developments during the period 1974-75 to 1978-79 has been that the rate of growth of university level enrolment has come down and is now in keeping with our needs and requirements as well as the capacity of our economy to absorb the products of the university system. While it is important that enrolment at the university level increases in order that we may keep pace with the developed countries of the world, it is equally important that this rate has some correspondence with the rate of economic growth. During the decade 1960-61 to 1969-70, university level enrolment increased by roughly 12 to 14 per cent per annum creating such problems as the high incidence of educated unemployment in the country and dilution of facilities in institutions of higher education. During the five year period from 1974-75 to 1978-79, the average growth rate of enrolment has been 3.2% and the compound rate 2.5%, which is considerd to be reasonable.

It is important to note that the policy of regulating the growth rate of university level enrolment does not mean any restriction or denial of access in so far as the weaker sections of the society or students in geographically remote and backward areas are concerned. Facilities are now available for correspondence courses in almost every state in the country and a majority of universities also permit students to appear privately at university examinations.

A significant development during the period 1974-79 has been that the number of arts, science and commerce colleges increased in a somewhat regulated manner. During the Fourth Plan period (1969-74) the number of newly established arts, science and commerce colleges increased by 765 or by 191

per year. During the period 1974-79, the number of such newly established colleges was 231 or 58 per year.

In 1978-79, the teacher pupil ratio was 1:11 in the university departments and the university colleges. This shows a distinct improvement in the position as compared to a teacher pupil ratio of 1:13 in the university departments/colleges in 1974-75. The improvement of teacher pupil ratio becomes more meaningful in the context of the efforts made by the Commission to simultaneously improve the proportion of senior teachers viz. professors and readers in the university departments/colleges. The proportion has gone up from 26% at the close of the Fourth Plan to 27.9% in 1978-79.

The percentage enrolment in science had declined from 19.6 in 1974-75 to 19.1 in 1975-76 and 18.2 in 1976-77. Since then, the trend has been reversed. The percentage enrolment increased to 18.4 in 1977-78 and 18.8 in 1978-79. While, in general, science enrolment depends on a number of factors including the position of demand and supply and employment prospects in different sectors, the special programmes undertaken by the Commission for promoting science education as also those for improving the quality of science education have also played a part in this process.

1.06 Maintenance and Coordination of Standards: The UGC has taken several important measures for the maintenance and coordination of standards of teaching, research and examinations. These include the development of universities and colleges, restructuring of courses, faculty improvement programmes and support for research.

(a) Restructuring of Courses

The Commission's Scheme of restructuring of courses has two important aspects viz. (i) to make the first degree courses more relevant to the rural environment and to the development needs of the community and (ii) to link education with field work, practical experience and productivity.

The scheme of restructuring of courses is meant for all colleges, not merely for colleges located in the rural and backward areas. However, particular attention has been paid to the needs of the latter. In order to enable a good number of colleges in the rural and backward areas to participate under this scheme, the stipulation regarding minimum enrolment and minimum number of teachers as laid down by the Commission in respect of rupees five lakh scheme for the development of affiliated colleges will not be insisted upon while examining proposals for restructuring of courses.

Under this scheme, 155 colleges were identified initially to try out the restructured new combinations of courses. The colleges have been selected, generally speaking, in the vicinity of agricultural universities/krishi vigyan kendras, so that these agricultural universities/krishi vigyan kendras can render useful assistance to the colleges in drawing up the syllabi for the new papers/subjects with a practical/rural/field orientation. The universities were

requested to add the names of some more colleges to this list if they find them suitable for inclusion under the scheme and accordingly 32 more colleges were included in the list, bringing the total to 187 colleges.

Guidelines have also been issued to the universities for the reorganisation of courses at the undergraduate stage following 12 years of schooling. The universities have been asked to keep certain considerations in view e.g. updating courses, diversification, flexibility, social responsibility, relevance, inter-disciplinary approaches and practical orientation. The universities have also been asked to provide in their curriculum a set of foundation courses, under which one may introduce such themes as Indian History and Culture, history of the freedom struggle in India and other parts of the world; social and economic life in India, concepts and processes of development; population education, alternative value systems and societies based thereon; cultures of Asia and Africa (selected countries), Gandhian thought, science and society, scientific methods, science in every day life etc.

The Commission also agreed to provide financial support to the universities for the introduction of short-term diploma courses in such areas as transport management, accountancy, office management, electronics, instrument repairing etc. to increase the employability of the products of the universities and to give them confidence in self-employment and entrepreneurship.

(b) Faculty Improvement Programmes

The University Grants Commission attaches great importance to Faculty Improvement Programmes by providing opportunities to teachers to keep abreast of modern developments in their fields of study and research and to exchange ideas with experts in similar or related fields.

The Commission has initiated a programme of teacher fellowships for teachers in the affiliated colleges to enable them to do M.Phil. or Ph.D. with support from the UGC. The Commission entrusted the implementation of this programme to 338 departments of universities/IITs/laboratories/ BARC/TIFR and other institutions of national importance. In addition to this, grants to about 1,000 teacher fellows under centrally administered scheme have been sanctioned. So far about 5,000 teachers have been covered under the scheme.

During 1978-79, 293 seminars, symposia etc. were organised to enable college teachers and research scholars to keep abreast of modern developments in their fields.

The Commission continued to provide assistance towards national fellowships, national lectures and national associateships. In addition, it has taken up a new scheme of Career Awards to Young Scientists. The purpose of the scheme is to identify young talented scientists who have established competence and good potential in their areas of specialization. The awardees are enabled to devote their efforts and energy early in their

career to research and study. The total number of awards each year will be 50. Seventeen awards were made during the year 1978-79. The scheme is being extended to cover social sciences and humanities.

(c) Support for Research

The Commission has suggested that research projects be formulated on well-defined topics keeping in view the facilities already available. At the end of 1978-79, 219 advanced research projects and 1,539 short-term projects were being implemented in the universities in the Humanities and Social Sciences at a total cost of about Rs. 94 lakhs. In Science subjects a total number of 1,227 research projects at a cost of Rs. 905 lakhs had been approved upto the end of March 1979. In addition to this 25 departmental research projects in science subjects involving an expenditure of Rs. 206 lakhs had also been approved. More than 11,000 teachers have also benefited under the scheme of small research projects by individual teachers. Grants ranging from Rs. 50,000 to Rs. one lakh have been provided to each university as core support for research; the total amount approved to 75 universities was Rs. 55.5 lakhs for the plan period.

(d) Examination Reforms

There has been some setback to examination reforms viz. introduction of continuous sessional evaluation in addition to the term-end examination, question banks, grading, semester system etc.

According to information available with the Commission, sessional evaluation at different levels has been introduced in 65 universities including 14 agricultural/technical universities and 7 institutions deemed to be universities. Question banks have been or are being developed in 21 universities including 2 agricultural universities. Grading system is in operation at 44 universities/institutions, including 14 agricultural/technical universities and 7 institutions deemed to be universities. Semester system is in vogue in 40 universities, 5 institutions deemed to be universities and 14 agricultural/technical universities.

Various follow-up measures are being taken in order to ensure that the progress made in regard to the implementation of examination reform is maintained.

1.07 Development of Universities

(a) Grants to central and state universities during the period 1974-75 to 1978-79 are set out in Section IX. It will be seen that the proportions laid down under development schemes for appointment of staff, books and journals, equipment, buildings and other programmes in the Fifth Plan guidelines have been generally maintained.

(b) With the help of subject panels, the Commission has taken steps to undertake the revision of syllabi in various subjects. In all, 16 panels in the

humanities and social sciences and 6 panels in science subjects have been functioning. The panels have laid down broad lines of development including priority areas of research and have advised the Commission regarding various academic matters.

1.08 Development of Colleges

(a) The Commission's policy in regard to the development of colleges is governed mainly by two factors, firstly, removal of disparities and regional imbalances and secondly, the improvement of standards and quality of education in the institutions. Keeping in view the limitations of resources and the large number of colleges with disparate standards the Commission planned to bring about qualitative improvements through college science improvement programme; and the college humanities and social science improvement programme; to give special attention to colleges in the backward areas and to raise the level of assistance for the development of undergraduate courses. Under the scheme of lead colleges, one or two colleges identified in each district would be required to prepare integrated programmes for intensive development. Programmes for student welfare include the establishment of book banks, student-aid-fund etc. Additional support is provided for postgraduate studies and research in the colleges towards such items as additional staff, equipment, books and journals and buildings.

(b) Although the idea of autonomous colleges was mooted way back in the sixties and supported by the Education Commission (1964-66) it was in 1976-77 and 1977-78 that real progress was made and autonomous status was granted to selected colleges of Madras and Madurai Universities in addition to the Birla Institute of Technology, Mesra which had been granted such status earlier. Under the scheme these colleges would enjoy necessary autonomy in formulating curricula, courses of study, evaluation methods and other related matters with a view to raising standards and local relevance. The Commission has agreed to provide assistance to these colleges on a 100% basis for a period of five years at Rs. one lakh per annum. It is expected that the movement towards autonomy would gather momentum since a beginning has been made in this direction, as a result of vigorous efforts made by the Commission.

1.09 Approach to Development in the Sixth Plan

The Commission, in the light of the financial allocations likely to be available, had to further modify its approach to the development of universities and colleges. The final guidelines to be issued to the universities and colleges had to be amended in the context of the very limited financial allocations indicated to the UGC by the Government of India. As against a suggested allocation of Rs. 210 crores in the Fifth Plan (1974-79) period, the Commission was informed that the allocation for the plan period 1978-83 was not likely to be more than Rs. 126 crores which included the sum of

Rs. 43.32 crores already provided for the year 1978-79 which has since been reckoned as the first year of the new plan period, thereby leaving a sum of about Rs. 83 crores available for the remaining four years ending 31st March 1983 for purposes of meeting both the ongoing commitments in respect of projects initiated during the fifth plan period as well as for any new programmes to be accepted during the new plan period.

The prospect of development of higher education in the next plan period, development to include both growth and change, viewed in the context of the financial resources as presently indicated by the Government of India cannot be considered realistic. Basically, three priority areas which would be seriously affected, owing to inadequate resources and funding at a sub-critical level, would be (i) Development of R & D capability and university research, as a substantial component of national research effort, (ii) intensive development of a few selected universities in educationally backward regions and preparing them as educational growth points, along desirable directions and (iii) district-wise development of at least two colleges in each district to bring their facilities to an optimal stage for good quality instruction at the undergraduate level and capable of serving local or regional needs of development. The Commission has, therefore, to continue to strive to obtain additional resources if it has to sustain the level and tempo of development, which the university system has set in motion in the last decade. Every effort will be needed to prevent the slide back in the quality and size of activities in the universities, which may be an inescapable consequence of inadequate finances in the Sixth Plan period. The matter has already been taken up with the Government. The Commission is also of the view that in order to strengthen infrastructure facilities and build up a reasonable R & D capability in the university system it should be possible for the different Ministries of the Government of India, such as, Industries, Energy, Science and Technology, Agriculture, Electronics, Defence Production etc. to sponsor and fund specific research projects of interest to them to be implemented in selected university departments. However, this should not be counterposed to the minimum support which the UGC would need under the sixth plan to strengthen the research capabilities of the universities.

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SECTION II

Development of Higher Education and Research in the Universities during the period 1974-79

2.01 Towards the close of the Fourth Plan period, the University Grants Commission had appointed a Planning Group to determine priorities and programmes for the Fifth Plan in relation to the requirements of higher education and national development. As part of the strategy for development, the group laid particular emphasis on the consolidation of existing facilities and efforts to strengthen programmes that have a direct bearing on the improvement of standards of teaching, research and examinations in the universities and colleges. Consolidation implied, inter alia, participation by teachers in various faculty improvement programmes and considerable restraint in expansion of enrolment in formal and full-time courses and establishment of new institutions. The implementation of the Fifth Five year Plan programmes in the universities and colleges was generally to conform to the guidelines formulated by the Planning Group and accepted by the Commission. The universities were asked to prepare comprehensive plans of development for university departments and postgraduate centres, if any, keeping in view the guidelines. Their requirements were assessed by visiting committees consisting of experts, specially appointed for the purpose. The annual report for the current year is for the last year of the quinquennium 1974-79 and this gives us an opportunity to review the main trends during the period and to examine the extent to which the priorities and programmes accepted by the Commission have been realised.

2.02 One of the main development during the period 1974-75 to 1978-79 has been that the rate of growth of university level enrolment has come down and is now in keeping with our needs and requirements as well as the capacity of our economy to absorb the products of the university system. While it is important that enrolment at the university level increases in order that we may keep pace with the developed countries of the world, it is equally important that this rate has some correspondence with the rate of economic growth. During the decade 1960-61 to 1969-70, university level enrolment increased by roughly 12 to 14 per cent per annum creating such problems as the high incidence of educated unemployment in the country and dilution of facilities in institutions of higher education. The growth rate dropped to 5.9% in 1974-75, 2.5% in 1975-76 and 0.2% in 1976-77. The rate increased to 5.5% in 1977-78 but came down to 2.1% in 1978-79. Thus during the five year period from 1974-75 to 1978-79, the average growth rate of enrolment has been 3.2% and the compound rate 2.5%. The year to year variations in the rate of growth of enrolment indicate that pressures are still being exercised on the system of higher education and that the 'open door' admis-

sion policy has not been abandoned altogether. What is particularly disturbing is the fact that the trends are far from being uniform in the different states of the country. While some states like Andhra Pradesh, Gujarat, Himachal Pradesh, Jammu & Kashmir actually registered a decline in their enrolment and had a negative rate of growth, some other states like Bihar with a growth rate of 10.9%, Rajasthan with a growth rate of 7.0% and Karnataka with a growth rate of 6.8% do not seem to have fallen in line with the national objective of regulating admissions to institutions of higher education. Nevertheless, developments during the last five years give us an opportunity whereby standards can be re-inforced by providing the necessary inputs to strengthen the existing institutions by way of strengthening basic infrastructure and physical and human resources which, in turn, can help in raising standards.

2.03 It is important to note that the policy of regulating the growth rate of university level enrolment does not mean any restriction or denial of access in so far as the weaker sections of the society or students in geographically remote and backward areas are concerned. Facilities are now available for correspondence courses in almost every state in the country and a majority of universities permit students to appear privately at university examinations. Through alternative streams, we are able to ensure that no student who has the requisite qualifications is denied access to higher education. Statistics given by 73 universities show that in the 1977 annual and 1976 supplementary examinations, the proportion of candidates appearing privately at university examinations was as high as 36.2% in B.A, 39.5% in M.A, 22.3% in B.Com., 28.8% in M.Com., 25.5% in B.Sc., 9.8% in M.Sc., 4.8% in LL.B. and 18.1% in LL.M. The corresponding proportion was much less in correspondence courses viz. 4.2% in B.A., 4.6% in M.A., 8.4% in B.Com., 8.0% in M.Com. and 31.8% in M.Ed. but this has gone up substantially in subsequent years.

2.04 A significant development during the period 1974-79 has been that the number of arts, science and commerce colleges increased in a somewhat regulated manner. During the Fourth Plan period (1969-74) the number of newly established arts, science and commerce colleges increased by 765 or by 191 per year. During the period 1974-79, the number of such newly established colleges was 231 or 58 per year. This shows a significant check and is in accordance with the advice tendered by the UGC to the state governments. This should enable scarce resources to be used for raising of standards in the existing institutions. Thus the insertion of section 12(A) in the UGC Act as amended upto 17th June, 1972 has started paying dividends.

2.05 In spite of the fact that the state governments are exercising restraint in the establishment of new colleges, the number of colleges with low enrol-

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nments are exercising restraint nber of colleges with low enrolment continues to be on the higher side. It goes without saying that colleges with inadequate enrolment find it exceedingly difficult to provide basic infrastructural facilities necessary for maintenance of standards. Accordingly, a comparative study has been made by the Commission in respect of colleges having an enrolment of 400 or more in the case of colleges having the three year degree course and an enrolment of 270 or more in the case of colleges having two-year degree course. The analysis shows that the proportion of colleges with enrolment below 400/270 has come down from 50.5% in 1973-74 to 46.8% in 1978-79. This is a welcome trend but at the same time it should be noted that the actual number of such colleges has gone up during the same period in the states of Andhra Pradesh, Haryana, Himachal Pradesh, Jammu & Kashmir, Kerala and West Bengal. The matter would need to be investigated. In the meantime, the Commission has recommended to the Government that there should be moratorium on the establishment of new colleges, the condition being relaxed only in the case of tribal areas/backward regions. This has been brought to the notice of all the universities in the country, and it is hoped that the central and state governments would give due consideration to this important recommendation.

2.06 Just as there are great disparities among colleges, there are considerable disparities among universities. Thus, on the one hand, there are universities which directly cater to 10,000 students or more, there are, on the other, universities which do not directly teach any student at all, or teach less than 400 students—the number fixed for viable, three-year-degree colleges. Thus 8 universities (Baroda, Banaras Hindu University, Lucknow, Calcutta, Allahabad, Jodhpur, Delhi and Aligarh Muslim University) have a direct enrolment ranging from 1,900 to 11,000 and together account for 35% of the students directly taught by all the universities. Some of these universities are still increasing their enrolment at a rapid rate and hence the question whether there should not be any limit to growth in the interests of standards. Thus, Banaras Hindu University with over 16,000 students and 1,685 teachers, or Lucknow University with 15,000 students and 1,192 teachers or M.S. University, Baroda with over 19,000 students to cater to directly and 917 teachers, can raise their standards if they fix the number of students to be admitted to various courses, depending on their facilities and number of teachers. Advice on these lines given by the UGC during the V Plan has, unfortunately, not been heeded under local pressure.

At the other end of the spectrum, there are 28 universities (excluding agricultural, Sanskrit, or music universities) where the number of students on rolls is less than 1,000, although many of these have been in existence for 10 years or more. Thus, in the state of Orissa, the total enrolment in the three universities is 3,600, and in Kerala 2,300. Yet, in these states, large number of colleges have been given permission to undertake postgraduate teaching and the number of these colleges is on the increase. It is obvious that without

a careful, integrated approach towards postgraduate education at the state level, it would be difficult to raise standards.

2.07 In 1978-79 the teacher-pupil ratio was 1:11 in the university departments and the university colleges. This shows a distinct improvement in the position as compared to a teacher-pupil ratio of 1:13 in the university departments/colleges in 1974-75. However, the teacher-pupil ratio in the affiliated colleges remained pegged down to 1: 15 all these years which underscores the point that both the state governments and UGC need to give greater attention to the college sector and its development in order to maintain standards. The position in the university departments has improved largely on account of the assistance provided by the Commission for additional staff positions as part of the development programmes. The position would have been still better if the state governments had taken a broad view of the objectives of creating new posts in the university departments. Some of the state governments utilised the additional positions for meeting the needs of expansion rather than for specialisation or the introduction of new emerging areas of importance or establishing the viability of the departments and their programmes. Universities also sometimes allowed some of the non-plan posts to remain vacant for varying periods of time in order to effect savings and meet expenses for which adequate provision had not been made in their block grants. In some cases, difficulties were also encountered by them in the recruitment of qualified persons in certain fields of specialisation on an all India basis. However, state universities have been permitted to fill up the posts approved by the Commission during the Fifth Plan upto 31st March, 1981 and the assistance of the Commission also made available upto that date.

2.08 The improvement of teacher-pupil ratio becomes more meaningful in the context of the efforts made by the Commission to simultaneously improve the proportion of senior teachers viz. professors and readers in the university departments/colleges. The proportion has gone up from 26% at the close of the Fourth Plan to 27.9% in 1978-79. However, no real improvement has taken place in the proportion of senior teachers in the affiliated colleges (about 12%) during the period under reference owing to paucity of funds with the Commission. If the proportion of senior teachers is to be brought anywhere near the accepted norm of 50%, resources would be required at a much higher level. In this context, the Commission's scheme of providing readership in colleges which fulfil their norms would need to be extended and pursued in the VI Plan. It would also be necessary to streamline the procedure for the selection of professors and readers in the universities. In the meantime, the fact remains that a large number of capable and dedicated teachers continue to stagnate in the university departments owing to lack of opportunities. In the context of adequate incentive for

teachers and the need for professional advancement, one cannot but underline the importance of the scheme of merit promotions in the universities for which guidelines have already been formulated by the Commission.

2.09 The percentage enrolment in science had declined from 19.6 in 1974-75 to 19.1 in 1975-76 and 18.2 in 1976-77. Since then, the trend has been reversed. The percentage enrolment increased to 18.4 in 1977-78 and 18.8 in 1978-79. While; in general, science enrolment depends on a number of factors including the position of demand and supply and employment prospects in different sectors, the special programmes undertaken by the Commission for promoting science education as also those for improving the quality of science education have also played a part in this process. In this context, particular mention may be made of the College Science Improvement Programme (COSIP) initiated by the Commission in 1970-71 in order to bring about qualitative improvements in the teaching of science at the undergraduate level. The programme was implemented at two levels; (a) in selected colleges for improvement of science teaching and (b) in selected university departments for improvement of teaching in that subject in all colleges affiliated to the university. Through various subject panels, the Commission has tried to bring about improvement and coordination of standards in science teaching and implementation of multi-disciplinary programmes and updating of syllabi. Assistance was also provided to postgraduate colleges for improving laboratories, workshops etc. in their science departments as also for purchase of books, journals and equipment and appointment of additional staff. The Commission has also provided support for research in pure as well as applied sciences.

2.10 The funds placed at the disposal of the Commission during the period 1974-79 were utilised for the development of universities and colleges and to initiate several quality improvement programmes and to provide necessary support for research. As against a suggested five-year plan outlay of Rs. 210 crores, an amount of Rs. 178.76 crores was allocated to the Commission for the fifth plan period for general development programmes of universities and colleges. In addition, a sum of Rs. 25 crores was made available for the development programmes of engineering and technology in the universities.

2.11 The programmes implemented by the Commission during the period under reference may be put under the following broad heads (a) *development of universities* (staff, equipment, books and journals, buildings, and infrastructural facilities), (b) *development of colleges* (grants to colleges for general development, college science improvement programme, college humanities and social science improvement programme and development of postgra-

duate studies in humanities, social sciences and science subjects) (c) *faculty improvement programmes* (Seminars, summer institutes and workshops, national fellowships, national associateships, visiting faculty, research associateships, visiting professorships, visiting fellows, teacher fellowships, national lectures, travel grants etc) (d) *support for research* (major and minor or short term and advanced research projects, research fellowships, scholarships, publication of theses and learned works) (e) *student welfare programmes* (student-aid-fund, non-resident student centre, study home, book banks) and (f) *other schemes* (correspondence courses, adult education, centres of advanced study, departments of special assistance, university centres for postgraduate studies, area studies, cultural exchange, examination reforms and restructuring of courses).

2.12 Development of Universities: Development grants to the universities during the period 1974-79 were paid on the basis of proposals made by the universities and accepted by the Commission on the basis of evaluation by expert committees. These included continuing schemes and projects relating to the construction of academic buildings, library buildings, staff quarters, teachers hostels, student hostels, study homes, non-resident student centres, canteens, guest houses, purchase of books, journals and equipment, appointment of additional teaching staff, and other miscellaneous schemes approved by the Commission.

The Commission invited proposals from the universities/institutions deemed to be universities and postgraduate centres concerned within an allocation of Rs. 107.25 crores. In anticipation of the recommendations of the visiting committees, the Commission allocated to the universities basic grants for the purchase of books and journals, scientific equipment and for certain other projects to enable them to meet their immediate requirements for 1974-75 and 1975-76.

A statement of development grants paid by the Commission to all the universities during the period 1969-70 to 1973-74 and 1974-75 to 1978-79 is at Appendices I and II. A comparison of the total expenditure during the two periods under reference shows that the expenditure on equipment increased by 2.2 times and the expenditure on books and journals by 2.5 times, but the expenditure on staff, buildings and infrastructural facilities declined, even in absolute terms. As a proportion of the total expenditure, the expenditure on staff declined from 20 to 13 per cent during the period under reference. The reasons for this are given in para 2.06. The expenditure on buildings and infrastructural facilities declined from 49 to 30 per cent while the expenditure on equipment increased from 20 to 34 per cent and the expenditure on books and journals from 11 to 34 per cent. *Thus, the order of priority has substantially changed in favour of equipment, books and journals during the period 1974-75 to 1978-79 as part of the development strategy proposed by the Planning Group in the beginning of the Fifth Plan period.*

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2.13 Development of Colleges: The Commission's policy in regard to the development of colleges was governed mainly by two factors, firstly, removal of disparities and regional imbalances and secondly, the improvement of standards and quality of education in the institutions. The Commission's strategy for the development of colleges, keeping in view the limitation of resources and the immensity of the problems, was to bring about qualitative improvements through such programmes as the College Science Improvement Programmes (COSIP) and the College Humanities and Social Sciences Improvement Programmes (COHSSIP), to give special attention to colleges in the backward areas and to raise the level of assistance for the development of undergraduate courses. Under the scheme of Lead Colleges, one or two colleges were to be identified in each district to prepare integrated programmes for intensive development. Programmes for student welfare included the establishment of book banks, students' aid fund etc. Additional support was provided for postgraduate studies and research in the colleges towards such items as additional staff, equipment, books and journals and buildings.

Bearing in mind the stage of development of various colleges, the Commission prescribed certain conditions which a college should satisfy in order to qualify for central assistance. However, these were modified in case of colleges located in remote or tribal regions or those catering to women or scheduled caste/tribe students.

During the period 1974-75 to 1977-78, 1,873 colleges qualified for central assistance. Of these, 1,402 applied, out of whom proposals of 998 colleges were accepted and 216 were rejected. Clarifications were sought from the remaining colleges. In addition to the above, the Commission provided assistance on 100% basis as core grant for books and equipment to 2,245 colleges which were eligible.

The Planning Group had suggested that the distribution of outlay between the universities and colleges should be in the ratio of 2:1. It would be seen from Appendix III that financial performance has been in accordance with the recommendations of the Planning Group under all major heads except the college sector. The short-fall of developmental expenditure in the case of colleges was largely due to the difficulties faced by the colleges in securing matching contributions either from the state governments or from their own resources, a deliberate de-emphasis on the construction of new buildings, and the fulfilment of eligibility conditions prescribed for various schemes.

Although the assistance of the Commission to the colleges for general development has not been to the desired extent, the Commission has tried to reduce the existing disparities between the universities and colleges through a number of quality improvement programmes. In this connection special mention may be made of teacher fellowships (under the faculty improvement programmes) which are specially meant for teachers from affiliated colleges

offering instruction in humanities, social sciences and science subjects. These fellowships are meant to provide opportunities to college teachers to work towards an M.Phil. or Ph.D. degree. The teacher selected for award is entitled to a living expense allowance of Rs. 250 per month from the UGC in case the place of research is away from his normal place of duty in addition to his salary and allowances being provided by the college authorities. So far, more than 5,000 fellowships have been awarded of whom about 3,000 teachers are in position. The various training and orientation programmes such as summer institutes, workshops, etc. also cater to college teachers. Under the scheme of support for research, especially short-term or minor research projects, special consideration is given to projects submitted by college teachers. This is intended to promote a climate of research in the colleges. The Government of India has, on the recommendation of the UGC, accepted that the scales of pay of university and college lecturers would be at par. The Commission has also made a provision for the institution of readerships in the colleges on condition that after the UGC assistance ceases, the college or state governments would take it over as committed expenditure. The procedure for recruitment to the post of reader will be the same as for corresponding posts in the universities.

2.14 The special programmes have helped universities and colleges to make efforts towards the restructuring of courses, examination reforms, preparation of new and inter-disciplinary courses of study, taking up well defined, time bound programmes of research, both of fundamental and applied nature and to promote individual and group research efforts. A comparison of the grants paid under quality programmes in the fourth plan and during the period 1974-75 to 1978-79 (Appendices I and II) shows that outlay on faculty improvement programmes increased from Rs. 233.17 lakhs to Rs. 779.14 lakhs; on support for research from Rs. 568.32 lakhs to Rs. 1,918.40 lakhs, on student welfare from Rs. 429.38 lakhs to Rs. 481.33 and on other schemes from Rs. 647.48 lakhs to Rs. 1,044.35 lakhs. It is thus evident that while the expenditure on student welfare programmes increased marginally, there was a substantial increase of approximately 3.5 times in the expenditure on support for research and faculty improvement programmes. The total outlay on these schemes was Rs. 1,868.35 lakhs in the fourth plan. It increased to Rs. 4,223.22 lakhs during the period 1974-75 to 1978-79, an overall increase of 2.3 times.

2.15 Faculty Improvement Programmes: The Commission has been attaching great importance to faculty improvement programmes by (a) providing opportunities to teachers to keep abreast of modern developments in their fields of study and research and to exchange ideas with experts in similar or related fields through seminars, summer institutes, workshops, conferences etc.; (b) enabling teachers, especially in the affiliated colleges, to improve

their professional competence through the award of teacher fellowships by providing opportunity to them to work for M.Phil. or Ph.D.; (c) increasing the mobility of teachers and enabling colleges and departments in backward and other areas to avail of the services of outstanding teachers in different disciplines through such programmes as national lectures, utilisation of services of retired teachers, travel grants, visiting professorships, fellowships etc.; and (d) enabling teachers to take time off their normal teaching and engage themselves in writing up the results of their studies/research through such programmes as national fellowships, national associateships etc.

During the period 1974-79, the Commission formulated guidelines for the implementation of these programmes. Selections were made on the advice of expert committees especially constituted for the purpose.

The implementation of the faculty improvement programmes is, to some extent, being inhibited by lack of adequate provision for faculty housing in the universities and colleges. It is indeed very difficult to promote academic mobility in the country unless provision is made for staff quarters and teachers hostels for as large a number of the teaching staff as possible. During the period 1974-79, the Commission was able to provide assistance for residential quarters for 1,281 teachers in addition to quarters for 4,595 teachers, which were already in existence in 1974. The ratio between the number of staff quarters and teachers is 1: 2.5 for professors, 1: 4 for readers and 1: 4 for lecturers. This is far below the target of 50 percent of teachers in the universities indicated by the Education Commission (1964-66).

2.16 In its efforts towards promotion of excellence and experimentation, the UGC has initiated specific schemes such as college science improvement programme, college humanities and social sciences improvement programme, examination reforms, autonomous colleges and restructuring of courses. Under the scheme of restructuring of courses, an effort is being made to link education with field work, practical experience, productivity and the needs of the local community, specially in relation to rural development. The idea is to make courses relevant to the needs of the community and thus improve the employability of the products of the university system. The scheme of restructuring of courses is meant for all colleges, not merely for colleges located in the rural and backward areas. However, particular attention has been paid to the needs of the latter. Simultaneously, with the help of subject panels, efforts have been made to modernise and upgrade syllabi and thus bring them in line with recent developments in the different disciplines. Guidelines have also been issued to the universities for reorganising courses at the + 3 stage following the adoption of 10 + 2 pattern of education in a number of states. Norms have been laid down to regulate development of postgraduate courses in colleges and selected colleges are assisted to come up to these norms and thus improve their standards. A few science

education centres have been initiated as an experimental measure in an effort to bring about interaction between the universities and the community and to identify scientific potential that may exist in the society in general and to provide opportunities to such persons to experiment with their creative ideas.

2.17 The Commission encouraged and actively supported universities to implement a number of schemes to bring universities closer to the community through a variety of programmes. The scheme of continuing education is being implemented on the basis of guidelines formulated for the purpose in 18 universities and two institutions deemed to be universities. These universities were requested to bring within the purview of the programme, schemes related to the education of people in rural, tribal and backward areas and other weaker sections of the community. Simultaneously, the programme of adult education and extension was initiated during this period. This is being looked upon not merely as a welfare activity but as a process of interaction with the society, a learning experience for students and teachers and as a means for making higher education relevant to the needs of the society. Adult education programme is being implemented by 412 colleges through 5,190 centres approved by the Commission. The programmes of adult education, extension and continuing education are important not from the point of view of the physical or financial targets achieved under these schemes but as a series of measures that have enabled universities to interact with the community on a continuing basis.

2.18 The present level of support for research, individual, group or departmental, has helped universities and colleges to take up 1,227 major projects in science, 219 major projects in humanities and social sciences and a large number of minor and short-term research projects. The policy of support for research announced in the fifth plan has helped in strengthening the climate for research in the universities and colleges and their capacity for engaging in major R & D projects. University research, combining as it does, research training function of students as well as mission oriented research has been found to be cost effective as well as economical. This needs to be strengthened and sustained, as otherwise, the chance of relapsing into *status quo ante* looms large.

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SECTION III

Institutions and Enrolment in Higher Education Growth in Numbers

3.01 Student Enrolment

Against 17,92,780 students in 79 untversities, 10 institutions deemed to be universities and 3,297 colleges in 1969-70 there were 26,18,228 students in 108 universities, 10 institutions deemed to be universities and 4,460 colleges in 1978-79. The following table indicates the growth of numbers for the ten year period 1969-70 to 1978-79. Figures relating to student enrolment exclude enrolments in intermediate classes, pre-university and pre-professional courses, unless otherwise specified:

Year	*Number of Universities*	*Number of Colleges*	*Number of Students*
1969-70	79+10 institutions deemed to be universities	3,297	17,92,780
1970-71	84+ 9 institutions deemed to be universities	3,604	19,53,700
1971-72	86+ 9 institutions deemed to be universities	3,896	20,65,041
1972-73	90+ 9 institutions deemed to be universities	4,158	21,68,107
1973-74	95+ 9 institutions deemed to be universities	4,308	22,34,385
1974-75	102+ 9 institutions deemed to be universities	4,170	23,66,541
1975-76	102+ 9 institutions deemed to be universities	4,272	24,26,109
1976-77	105+10 institutions deemed to be universities	4,317	24,31,563
1977-78	105+10 institutions deemed to be universities	4,375	25,64,972
1978-79	108+10 institutions deemed to be universities	4,460	26,18,228

Note : The number of colleges from 1974-75 onwards excludes Junior Colleges and Colleges offering diploma/certificate courses. Hence the change in trend.

A chronological list of universities with their student enrolment is given in Appendix IV. It will be noted that three new universities viz. Bhav-

nagar, Perarignar Anna University of Technology and Himachal Pradesh Agricultural University were established during the year 1978, the last as a result of restructuring of the Himachal Pradesh university established earlier in 1970 and separation of its agricultural wing.

3.02 Growth Rate of Enrolment

The growth of student enrolment during the year 1960-61 to 1969-70 and 1969-70 to 1978-79 is given in Appendix V. The average growth rate of enrolment during the decade 1969-70 to 1978-79 was 5.3 per cent per annum. This was considerably lower than the average growth rate of 14.0% during the decade 1960-61 to 1969-70. The enrolment growth rate declined successively from 14.5% in 1969-70 to 0.2% in 1976-77 except during the period 1974-75 when it rose to 5.9% from 3.1% in 1973-74. The rate of growth which increased to 5.5% in 1977-78 again came down to 2.1% in 1978-79.

During the five-year period from 1974-75 to 1978-79, the average annual compound growth rate of enrolment was 2.5%. However, there were wide deviations from this average growth rate of 2.5% among different states as indicated in Appendix VI. Bihar, for instance, had a growth rate of 10.9% which is more than four times the average growth rate. The States which had growth rates more than double the average are Karnataka (6.8), Kerala (6.2), Madhya Pradesh (6.3), Meghalaya/Nagaland (6.9) and Rajasthan (7.0). The growth rate was higher than the average in Assam/Manipur (4.1), Maharashtra (4.0), Orissa (4.0) and Uttar Pradesh (4.4). The States of Andhra Pradesh, Gujarat, Himachal Pradesh, Jammu & Kashmir and West Bengal/Tripura did not register any growth in enrolment during the period under reference. In all these cases, it needs to be emphasised that while growth rates of enrolment have come down, there has been an increase in absolute numbers enrolled in higher education.

3.03 Stage-wise Enrolment

According to the stage-wise enrolment from 1975-76 to 1978-79 given in Appendix VII, undergraduate enrolment as a percentage of total enrolment decreased marginally from 88.5 in 1975-76 to 88.1 in 1976-77, 87.9 in 1977-78 and 87.7 in 1978-79. The percentage enrolment at the postgraduate and research levels has, however, continuously gone up from 9.8 in 1975-76 to 9.9 in 1976-77, to 10.2 in 1977-78 and 10.6 in 1978-79.

Appendix VIII gives the stage-wise enrolment in university departments, university colleges and affiliated (private or government) colleges. The affiliated colleges account for 83.2 per cent of the total enrolment. The percentage of students in affiliated colleges is as high as 88.0 at the undergraduate stage. The affiliated colleges also account for 53.5 per cent of the enrolment at the postgraduate level and 13.2 per cent of research enrolment.

3.04 Faculty-wise Enrolment

The faculty-wise distribution of student enrolment from 1975-76 to 1978-79 given in Appendix IX shows that the percentage of enrolment in the faculty of arts (including oriental learning) to the total enrolment went down from 44.5 in 1975-76 to 44.4 in 1976-77 to 43.7 in 1977-78 and 42.3 in 1978-79. However, the percentage of students enrolled in commerce courses has gone up from 17.1 in 1975-76 to 17.7 in 1976-77 to 18.1 in 1977-78 and 18.8 in 1978-79.

The percentage enrolment in science which had been going down until 1976-77 increased from 18.2 in 1976-77 to 18.4 in 1977-78 and 18.8 in 1978-79. The changes in percentages of enrolment in the professional courses have been of a marginal nature.

3.05 Establishment of New Colleges

There was an increase of 85* in the number of colleges during the year (Appendix X). Of these new colleges, 80 were arts, science and commerce colleges. The distribution of newly established professional colleges is as under:

Engineering & Technology	4
Medicine, Pharmacy, Ayurveda, Homeopathy, Nursing and Dentistry	4
Law	2
Music & Fine Arts	1

The number of colleges in the faculties of education/physical education and oriental learning came down in 1978-79 as compared to 1977-78.

3.06 State-wise Growth of Colleges

The state-wise distribution of the growth of colleges during the period 1974-75 to 1978-79 is given in Appendix XI . There was a total increase of 290 in the number of colleges during the 5-year period. The following states account for a substantial increase in the number of colleges:—

Bihar	56
Maharashtra	39
Andhra Pradesh	37
Karnataka	29
Kerala	26
Rajasthan	25

*The difference is due to change in the status of some of the existing colleges.

These six states taken together account for 73 per cent of the total increase in the number of colleges. The number of colleges has gone down in the states of Himachal Pradesh and Madhya Pradesh during the period 1974-75 to 1978-79. The increase in the total enrolment over the preceding year, percentage increase in the number of students and the state-wise growth rates for the period 1974-75 to 1978-79 are given in Appendix VI. A comparison of Appendices VI and XI will show that there are four states viz., Andhra Pradesh, Gujarat, Jammu & Kashmir and West Bengal/Tripura where there has been a decline in enrolment and yet the number of colleges has gone up during the period, thus adding to the number of sub-viable colleges.

In 1978-79 the number of colleges increased by 18 in Maharashtra, 13 in Kerala, 11 in Bihar, 9 in Assam/Manipur, 7 in Orissa, 4 each in the States of Andhra Pradesh, Karnataka, Tamil Nadu and Uttar Pradesh, 3 in Rajasthan, 2 each in Punjab and West Bengal/Tripura and one each in the states of Gujarat, Jammu & Kashmir, Madhya Pradesh and Meghalaya/Nagaland.

Appendix XII gives the state-wise increase in arts, science and commerce colleges during the period 1974-75 to 1978-79. It will be seen that the increase in arts, science and commerce colleges accounted for nearly 78% of the total increase in the number of colleges during the period. Appendix XIII gives the state-wise position of colleges conducting postgraduate classes during the period 1974-75 to 1978-79.

3.07 Staff Strength

Appendix XIV shows the strength and distribution of teaching staff in university departments and university colleges during the period 1974-75 to 1978-79. In 1978-79, there were 38,835 teachers in the university departments and university colleges. Out of them, 3,678 were professors, 7,146 readers, 25,268 lecturers and 2,743 tutors and demonstrators. The proportion of senior teachers viz. professors and readers to the total teaching staff was 27.9% which shows that there has been a decline in the proportion as compared to 28.6% senior teachers in 1974-75. The teaching staff in the university departments and university colleges increased by about 1,700 in the year 1978-79 as compared to an increase of 5,000 in 1977-78 over the preceding year. Nevertheless annual increases are not of real concern as the overall increase in a five-year period. The staff in the affiliated colleges (Appendix XV) totalled 1,42,824 teachers in 1978-79, including 16,662 senior teachers, 1,15,596 lecturers and 10,566 tutors and demonstrators. There was an increase of nearly 1,600 teachers in affiliated colleges in 1978-79 over the year 1977-78, as compared to an increase of 3,729 in 1977-78 over the year 1976-77.

3.08 Doctorate Degrees Awarded

The faculty-wise position of doctorate degrees awarded during 1973-74

to 1977-78 given in Appendix XVI shows that the maximum number of doctorates were awarded in science followed by arts. In professional faculties, the maximum number of degrees awarded was in agriculture followed by engineering/technology. The number of degrees awarded during the period for all the faculties taken together increased by nearly 50%. The increase was particularly marked in 1977-78 as compared to the earlier periods under reference.

3.09 Viable and Non-Viable Colleges

The Commission has made a comparative study of viable and non-viable colleges during the period 1973-74 and 1978-79. A viable college is defined* as a college having an enrolment of 400 or more in degree classes and above but excluding pre-university/pre-professional and intermediate enrolments. In states having two-year degree course in arts, science and commerce, the enrolment is taken as 270 for purposes of determining the viability of a college. Appendix XVII (a and b) shows that the proportion of viable colleges has gone up from 49.5% in 1973-74 to 53.3% in 1978-79. In other words, the reduction in the number of non-viable colleges has begun and should be made further. However, the proportion of non-viable colleges has gone up during the period in the states of Andhra Pradesh, Haryana, Himachal Pradesh, Jammu and Kashmir, Kerala and West Bengal. The proportion of non-viable colleges is more than 50% in the states of (a) Andhra Pradesh, Haryana, Himachal Pradesh, Jammu & Kashmir, Maharashtra, Punjab and (b) Assam, Bihar, Manipur, Meghalaya/ Nagaland and Orissa.

3.10 Record of Higher Education and Trends

Appendix XVIII shows the State-wise record of Higher Education in terms of the average growth of students per annum and in terms of the number of colleges added (arts, science and commerce) during the period 1974-75 to 1978-79. Appendix XIX shows trends in higher education during the year 1978-79 in terms of enrolment and the number of undergraduate and postgraduate colleges (arts, science and commerce only.)

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* The criteria of a viable college has since been revised.

SECTION IV

Implementation of the Policy Frame on Development of Higher Education

4.01 Towards the close of the year 1977-78 the University Grants Commission finalised an important document *Policy Frame* for the Development of Higher Education in India over the next 10-15 years. The Policy Frame outlines the main achievements and failures of the system of education in India. The Policy Frame analyzes the current developments and values of the educational system in India, its strengths and weaknesses and proposes a broad strategy for over-coming the inadequacies, with special emphasis on the concept of extension integrated with teaching and research, social change, equalization of educational opportunities and removal of regional imbalance, maintenance of better standards and relevance of courses and research work to national development needs.

4.02 The Policy Frame has been circulated to the universities for discussion by students and teachers and a meaningful feed-back for enabling design of suitable programmes for action. Working groups were also appointed to identify appropriate programmes with regard to the implementation of the Policy Frame in the following key areas so as to bring about the necessary impact on the university system:

(i) Extension including optimal use of vacations
(ii) Criteria for evaluation of colleges
(iii) Role and responsibility of teachers
(iv) Regulation of admissions and facilities to be provided to enable weaker sections of society to take advantage of the facilities of higher education.
(v) Introduction of regional languages as media of instruction.

The reports of the above working groups were finalised during 1978-79 and follow up action is being taken on the specific measures proposed by the Working Groups.

4.03 Adult Education and Extension Programmes

The Working Group appointed by the Commission to formulate the guidelines for the implementation of the Adult Education and Extension Programmes by the universities and colleges has submitted its report to the Commission. As recommended by the Working Group, the programme will have three components viz., Adult Education with literacy as an essential component, Community Service and Educational Extension. The guidelines have since been circulated to the universities and colleges. The Commission has also agreed to provide assistance on hundred per cent basis for

a period upto five years for the implementation of the approved projects by the universities and colleges. The details in this regard are given in Section VII of the report.

4.04 Criteria for Evaluation of Colleges

The Working Group on the evaluation of colleges did not consider it desirable to have a formal categorization of colleges, but suggested that there should be an intensive and continuous evaluation of colleges including self-evaluation. A proforma finalised by the Working Group has been circulated to the colleges and the information obtained from the colleges will be analysed to enable further action.

4.05 Role and Responsibility of Teachers

The Working Group on the Role and Responsibility of Teachers suggested that a series of regional workshops of university teachers may be conducted in the various places of the country to consider the following issues in detail:

(i) Structure of decision-making in the university system,
(ii) Selection of teachers, especially in the colleges,
(iii) Role and responsibility of teachers with special reference to work-load,
(iv) A system of assessment and accountability.

4.06 Regulation of admissions and facilities for the weaker sections of society

The Working Group on the regulation of student admissions and facilities to be provided to enable the weaker sections of the society to take advantage of the facilities of higher education made the following observations and recommendations :

(a) During the last three years there has been a steady decline in the overall rate of expansion of higher education. The underlying causes need to be analyzed in detail and a study made of its impact on students belonging to the weaker sections and the educationally backward regions.
(b) Bearing in mind the infrastructure facilities already created and the existence of a large number of nonviable colleges and the decline in the rate of growth in enrolment, there should be a moratorium on the establishment of new colleges during the next five years. If, in a particular backward region, it is found that there are no facilities for higher education in certain fields of specialisation it would be desirable to provide bursaries for students tenable at the existing colleges rather than to bring into being more sub-viable colleges with low standards. Simultane-

ously, an effort should be made towards rationalisation, co-ordination and optimum utilisation of facilities in the existing institutions, especially in urban areas. Cooperative teaching already being tried out in some universities, should become the norm in universities having affiliated/constituent colleges as one of the ways of avoiding setting up of non-viable departments in colleges and of reinforcing standards and inter-disciplinary approaches. It should be impressed upon the state governments and universities that the present opportunity should be fully utilised for greater consolidation and strengthening of facilities, rather than for spreading our resources too thinly.

(c) In the case of colleges established after 17th June, 1972 the Commission provides assistance only to those colleges which are permanently affiliated to a university and are declared fit to receive assistance under section 12-A of the UGC Act.

(d) The UGC should make a detailed study of the terms and conditions laid down by different universities for affiliation of colleges and formulate appropriate guidelines for adoption by universities and state governments on a uniform basis.

(e) The universities may be asked to give particular attention to the following aspects for regulating admissions and to ensure access for students from the weaker sections:—

(i) The intake capacity of each course/department/college should be determined keeping in view the availability of academic and physical resources. This is important not only in science and professional courses, but in other courses as well.

(ii) If there is a constant pressure for admission to certain courses and requisite facilities are not available, the demand should be met through alternative means e.g. institution of correspondence courses, allowing students to appear privately.

(iii) In the existing institutions where there are more applicants than seats, there should be reservation for students belonging to backward/weaker sections of society.

(iv) In all institutions particularly in quality institutions, the students belonging to the weaker sections of the society should also be given admission apart from reservation of seats for them. The bursary scheme needs to be started for the purpose by the Central and State governments.

4.07 The above recommendations/observations of the Working Group have been circulated to the universities. In view of the suggestions of the working group that no new colleges be set up during the next five years except in tribal/backward areas or for meeting the needs of the weaker

sections of the society, the universities have also been asked to carry out detailed surveys, with regard to existing facilities in different districts under their jurisdiction. Keeping in view the impact of regulated admissions on the weaker sections of the society as stressed by the Government of India, the Commission has also taken steps for laying down the criteria for determining the viability of colleges.

4.08 Introduction of Regional Languages as Media of Instruction

The Working Group on the introduction of regional languages as media of instruction has made the following observations and recommendations:

(a) The working group noted that at present 83 universities and institutions deemed to be universities are using the regional languages as media of instruction at different levels including the undergraduate pass and honours, postgraduate and professional courses (with the exception of M.B.B.S.) The analysis regarding percentage of students who answered question papers in regional languages during 1977 examinations relating to 32 universities shows that an increasing number of students are now opting for the regional languages. Generally speaking, the percentage varies from 60 to 100. However, the percentage is on the lower side in universities in some states and in respect of courses in commerce, law and education.

(b) The Working Group discussed some of the constraints in the speedy switch over from English to the regional languages as media of instruction, especially in relation to the use of regional languages as media of examinations. Firstly, the publication of books and reference materials in the regional languages can hardly keep pace with the reading materials available in English. Secondly, for a variety of reasons, the employment prospects of students who have done their courses through the English medium are better or are felt to be better as compared to those who come through the stream of regional languages. Thirdly, in universities where regional languages are used as media of instruction at the undergraduate level but English is the medium at the postgraduate level or in professional courses, the switch-over creates several problems, especially in the absence of orientation courses in English language use.

(c) It was emphasised that in order to bridge the growing gulf between students educated in English medium schools and those educated in schools which have Hindi or other regional languages as their medium of instruction, efforts should be made to turn out a student who is effectively bilingual i.e. proficient in the regional language and also the link languages English/Hindi.

4.09 On the recommendations of the Working Group, the Commission has agreed to assist the universities in the next plan period for (a) summer institutes for teachers in regional languages; (b) preparation of reading materials in the regional languages, and (c) organisation of remedial courses.

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SECTION V

Maintenance and Co-ordination of Standards

5.01 The University Grants Commission has statutory responsibility under the UGC Act, 1956 (Act No. 3 of 1956) and the UGC Amendment Act, 1972 (Act No. 33 of 1972) to take all such steps as it may think fit for the promotion and coordination of university education and for the determination and maintenance of standards of teaching, examinations and research in universities (Section 12).

5.02 A reference was made in the last report to the opinions expressed that the University Grants Commission's financial support should become available to almost every institution of higher education and possibly in equal measure as well. Such a notion is obviously academically untenable and in practice, makes it extremely difficult to maintain and improve standards of higher education particularly as universities and colleges are in different stages of growth, development and levels of management in different parts of the country. The Commission has, therefore, followed a policy of providing for the intensive development of selected university departments and identified colleges to help them grow into centres of excellence with high academic standards. Simultaneously, the Commission has taken into consideration the demands of social justice, equality of opportunity and the needs of institutions in backward and rural areas and the potential of each institution to bring about improvement of standards, with the financial and other support from the Commission.

5.03 The very dimensions and complexity of the system of higher education in India indicate that improvement can be brought about only with the active and full collaboration of the universities and the state governments concerned. Such a collaborative effort is essential, not only with regard to effective implementation of various developmental activities and maintenance of standards in existing institutions, but also in the matter of putting a severe restraint on the opening of new universities and colleges. The various agencies concerned viz., the Government of India, the State Governments and the UGC have to take concerted steps to arrest indiscriminate and unplanned proliferation of universities and colleges in order that the existing educational institutions are enabled to consolidate their facilities and maintain a certain level of standards.

5.04 Questions have been raised about the relevance and usefulness of the higher educational system as it obtains today with special reference to manpower needs and emergent employment opportunities, and occupational patterns. Questions have also been raised about the high rate of wastage in

higher education, especially at the undergraduate level. It is also felt that our educational system has not been able to play its role as effectively as it possibly could, in helping to solve some of the problems of national development, particularly those of rural development and to promote much needed awareness and interaction with the local problems. The Commission has examined these points of criticism in the document, *Policy Frame*, and tried to set out a strategy of development of education. The strategy involves changes in the structures and processes of the educational system, restructuring of courses to make them responsive and relevant to social needs, decentralisation as well as diversification of educational programmes, and considerable autonomy and academic freedom to the constituent departments and colleges of a university and bringing about confidence in the proper and efficient discharge of their academic responsibilities.

5.05 The Commission, since, its inception, has taken several measures for the maintenance and coordination of standards of teaching, research and examinations. The Commission has received in considerable measure willing cooperation and, advice from the academics in implementing these activities. This section deals with specific measures relating to the improvement and updating of courses of study, support for research and publications, examination reforms and quality improvement programmes, all of which have a direct and significant bearing on standards, in the university system.

5.06 New Pattern of Education

With the help of a Standing Committee set up by the Commission to advise it on the general policy regarding courses at the undergraduate level following the adoption of the 10+2+3 new pattern of education, the Commission finalised the guidelines for the re-organisation of courses at the plus three stage. These guidelines are given in Appendix XX. The purpose is to give a good foundation to every undergraduate student in the following four important areas:—

(i) Foundation Courses

The new curriculum should provide a set of broad-based foundation courses in the three major areas of knowledge, viz., humanities, social sciences and sciences and these together with applied studies/projects and extension should be provided within 20 to 25 per cent of the time available for all studies in the three-year course. The purpose is to create a greater awareness of the social, cultural and natural environment and to break the existing dichotomy of two cultures. These courses are not expected to be like the earlier general education courses.

There should be a large number of alternative courses or a group of courses from which a student could choose the stipulated number of courses in a faculty other than his own. The alternatives should be so provided that

there is some degree of equivalence as well as flexibility and the colleges are enabled to select relevant courses, depending upon their teaching resources and local needs.

Under the foundation courses, one may introduce themes such as Indian history and culture, history of the freedom struggle in India and other parts of the world; social and economic life in India, concepts and processes of development; alternative value systems and societies based thereon; culture of Asia and Africa (selected countries), Gandhian thought, history of science, science and society, scientific methods, science in everyday life and so on.

Given the fact that the foundation courses are conceived as awareness courses, the responsibility for teaching them can be taken by existing teachers in related disciplines, after providing suitable, short-term orientation programme wherever necessary.

(ii) Core Programme

The remaining 75 to 80% of the time available should be devoted to a core programme within each faculty which would provide the student with a broad exposure to several disciplines and an opportunity to study some chosen discipline or disciplines in depth. Universities may decide whether the core programme will consist of the study of several subjects with equal weight or the study of one or two subjects in depth alongwith some ancillaries. Any attempt at too narrow a specialisation at the undergraduate stage should be avoided.

(iii) Applied Studies/Projects

It would be desirable to incorporate applied studies, project work and field studies as an integral part of the core programme, as indicated in the guidelines on the restructuring of courses already circulated to the universities. Here again, the aim of providing such new subject groups including one applied area is not to make the student an expert in the applied area chosen but to enable him to understand the application potential and practical/field aspects of his discipline and promote better employment opportunities.

In introducing subjects of an applied nature, universities may enlist the collaboration of user agencies like industries, business houses, national laboratories etc. and relate them to emerging trained manpower needs.

Teaching of social sciences, biological sciences etc. should be marked by an integrated and interdisciplinary approach. Further, where quantitative analysis is required elements of mathematics and statistics would need to be incorporated into the courses concerned.

(iv) Extension Programmes

Extension programmes should also be introduced as a means for making courses and studies relevant to the needs of the society and oriented

towards a solution of existing local/regional problems. Extension work should be integrated with the curriculum in order that it may have a beneficial impact on course contents on the one hand, and the value system expected to be promoted by the academic programmes on the other.

5.07 In addition, the guidelines have set out the basic objectives of the first degree courses, principles for restructuring and reorganising the courses and supportive measures with particular reference to practical orientation, relevance, flexibility, inter-disciplinary approaches and measures of examination reforms all of which should result in better teaching-learning processes.

These guidelines were circulated to the universities in September, 1978. The Commission has also decided to continuously monitor these programmes.

5.08 Simultaneously, the Joint Consultative Committees set up by the Commission on agricultural, medical, teacher and legal education have also completed their work and made their recommendations with regard to the objectives and duration of courses consequent upon the introduction of the new pattern of education. These recommendations were brought to the notice of the concerned organisations for their action.

5.09 Modernisation of University Level Courses

40 regional workshops in various disciplines were arranged in some selected university centres throughout the country for upgrading and modernising the syllabi in various courses and for bringing them nearer to the needs of the society and students. The final report on the workshops in philosophy, political science, economics and history have since been printed and circulated to the universities for placing the recommendations of these workshops before their academic bodies for further necessary action. The final reports on the workshops in law and psychology have also been received and these are also being circulated to the universities for necessary action. The reports of workshops in other disciplines are either under print or are being finalised.

The Commission expects a new thrust in teaching and research in university courses after the recommendations of these workshops are considered by the universities.

5.10 Preparation of Text Books

The Panels in different subjects set up by the UGC observed that updating of syllabi and faculty improvement would only be possible with the availability of adequate number of suitable University Level Books both at undergraduate and postgraduate levels. The Panels, therefore, suggested that the authors who are authorities in some identified areas in which no good books

are available in India, may be invited to take up this book writing work. Accordingly, the Panels identified the authors for writing books for university/college students.

The Panels considered the information placed before them from time to time regarding the various low priced book production schemes and UGC scheme of preparation of University Level Books by Indian authors.

The Panels reviewed the list of books published under the scheme of ELBS/Indo-US and Indo-USSR programmes and suggested modifications therein.

With a view to supplementing the efforts of the state governments for the production of books in Indian languages, the University Grants Commission, in collaboration with the Government of India, Ministry of Education and Social Welfare, initiated in 1970-71 a programme of providing financial assistance for writing of quality books for universities and colleges. The key factor in the entire process is to involve outstanding teachers, researchers and scholars in the universities, colleges and other institutions of higher learning and research to take a lead in the preparation of high quality books for use at the university stage.

The objective of the scheme is to support the preparation of high quality books, monographs and reference material for use in universities and colleges, not necessarily conforming to a particular set of syllabi, but indicating the level of training desired to be attained at different stages.

The theme, subject matter and contents of the books, monographs etc. prepared under the scheme should reflect present situation as obtaining in India and should be relevant to the social goals and the educational future as visualised by the society.

An important provision made in the scheme is that the Commission may on its own, invite outstanding teachers and scholars to write university level books. Such authors may be given a lump sum of Rs. 10,000 for undertaking the writing of a book as approved by the Commission within a period of three years.

Under the revised rules, normally, no provision will be allowed for the appointment of a fellow, except in cases where the proposed book writing project is of an inter-disciplinary nature, and the collaboration of a fellow belonging to a discipline other than that of the author becomes essential or where a lot of field work or collection of data is necessary.

In the case of teachers who wish to undertake the book writing programme in addition to their normal teaching and research responsibilities in the universities and colleges, assistance may be available in the form of contingent grant of Rs. 2,000 per annum (plus additional contingent grant of Rs. 1,000 per annum in exceptional cases).

It would also be possible for a group of three or upto five university teachers to jointly take up a book-writing material which could be put together in the form of a book. In such cases each author would be given a con-

tingent grant of Rs. 1,000 per annum.

In some cases, outstanding teachers may be selected to devote full time for a period normally not exceeding one year for writing books. Such teachers may be paid by the University Grants Commission a sum equivalent to the salary and allowances drawn by them with provision for increments due during the period of their leave.

Under the scheme, there is also a provision for the participation of outstanding scholars and scientists who are not in the service of a university or an affiliated college but are serving in another organisation of higher learning and research.

Up to March 1979, out of 390 active projects for preparation of books in various fields of sciences and humanities under this scheme, 114 manuscripts have been completed and the remaining 276 are in different stages of implementation.

During the year 1978-79, an expenditure of Rs. 3.69 lakhs was incurred under this scheme.

5.11 Panels of Experts in Individual Subjects

As mentioned in the earlier reports, the Commission constitutes panels of experts* in various subjects of study and research in the universities to advise the Commission on all matters relating to the present status and standards of teaching and research in the subject concerned, facilities available within the country and in different regions for training in the subjects and also to suggest measures to be taken for proper development of facilities for pursuing studies at an advanced level. These subject panels, therefore, review syllabi and courses of study followed by different universities at undergraduate and postgraduate levels with reference to such courses of study being made upto-date and wherever necessary relevant to the regional and national needs and also to bring about necessary inter-disciplinary aspects. The advice given by the panels, with greater participation of the academics from universities and colleges has helped in initiating appropriate measures so that the teaching and research in the subjects concerned could be brought to the required level. The panels consisting of experts from different disciplines and different regions of the country are generally reconstituted once in every two years.

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* Presently 22 subject panels, 16 in the humanities and social sciences and 6 in science subjects are functioning. These are: *Humanities and Social Sciences*—(1) English & Foreign Languages, (2) Linguistics, (3) Modern Indian Languages, (4) Economics, (5) Political Science & Public Administration, (6) Sociology & Social Anthropology, (7) Anthropology, (8) Commerce & Business Administration, (9) Law, (10) History, (11) Mass Communication, (12) Psychology, (13) Philosophy, (14) Library & Information Science, (15) Social Work, (16) Teacher Education, and *Science subjects*—(1) Physics, (2) Chemistry, (3) Mathematics, (4) Biological Sciences, (5) Geography, (6) Geology/Geophysics.

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2) Chemistry, (3) Mathematics,
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5.12 Panels in the Humanities and Social Sciences

Panels of experts in various disciplines in humanities and social sciences were set up in February, 1974. These panels advise the Commission regarding measures for improvement of standards and facilities of teaching and research in the subject concerned for development of inter-disciplinary and multidisciplinary programmes and on such matters as may be referred to them by the Commission. The panels may also recommend for consideration of the Commission proposals for promotion and support for studies/research which may demand special attention and resources in relation to education and developmental needs of the country.

The panels have concentrated their work on the objectives of teaching at different levels, the structure of various courses and the articulation of compulsory and optional papers, modalities of introducing interdisciplinary approach, major developments in the teaching of courses and the need for remedial measures, encouraging production of text-books, monographs and supplementary reading materials by Indian authors, introduction of new and better methods of teaching, faculty improvement and methods of evaluation.

The panels are at present engaged in spelling out the general problems and perspective of teaching and research in different subjects and formulating draft guidelines for revision and modernization of courses.

In all, 16 panels in the humanities and social sciences were functioning in 1978-79. Some important recommendations made by the panels in humanities and social sciences during 1978-79 are mentioned below, discipline-wise:

5.13 Status Reports in Various Disciplines

In accordance with the recommendations made by the various panels, the Commission from amongst the members of the panels set up committees to prepare the status reports in the various disciplines. The work of the preparation of status reports is in progress.

IMPORTANT RECOMMENDATIONS OF THE PANELS IN HUMANITIES AND SOCIAL SCIENCES

5.14 Panel on History

The Panel on history has recommended that some research associateships and senior research fellowships may be earmarked for the study of Portugese and Dutch.

5.15 Panel on Law

The Panel identified departments for participation under the programmes relating to 'University Leadership Projects and Special Assistance to

selected Departments'. The Panel also laid down the exact scope and nature of work that the law departments will be required to undertake under these programmes.

The Panel recommended that a Summit workshop by senior teachers of jurisprudence may be organised.

The Panel also laid down qualifications for the persons to be appointed as part-time teachers for teaching law, and for admission of students to the LL.B. courses and formulated norms regarding the size of a class, teacher-pupil ratio and composition of faculty in university departments of law, schools and colleges.

5.16 Panel on Philosophy

The Panel recommended that two regional workshops be held at Sri Venkateswara and Rajasthan universities to identify middle and younger level teachers in the universities and colleges for undertaking research projects. The Panel also recommended that two summer or winter schools may be organised for the exposure of traditional scholars and oriental college teachers to modern methods and approaches in philosophy at the universities of Sri Venkateswara and Rajasthan.

5.17 Panel on Anthropology

The Panel examined in detail the need for the development of anthropological museum in the department of anthropology, especially in view of the fact that a museum is required for teaching, research and extension purposes and decided that a scheme may be worked out by a sub-committee.

5.18 Panel on Mass Communication

The Panel on Mass Communication set up this year, decided to concentrate, in the first instance, on the following matters :

(1) To identify and establish necessary linkage between teaching and research in mass communication in the universities and institutions outside the universities, not only allied institutions, but also with agencies which are concerned with communication through other media like performing arts etc.

(2) To identify the level and type of mass communication courses and the places where such courses should be started.

(3) To revise and modernise and up-date the syllabus in the subject, especially with regard to developmental needs of the country and also to revise courses in journalism in the regional languages and to take adequate measures to encourage the writing of text-books in the regional languages.

(4) To examine the question of introduction of mass communication courses as (a) an optional subject in the undergraduate course,

(b) a diploma course after the first degree, and (c) Master's degree course and prepare syllabi in each area for the consideration of the universities.

Accordingly, two Advisory Committees have been constituted, one to review the research already in progress in the field of mass communication (including journalism) and to identify priority areas of research and to consider how best research should be permitted and the second to consider the question of modernisation of curriculum/training in mass communication.

The Panel made recommendations regarding the qualifications of the teachers of various categories in a university department of mass communication.

5.19 Panel on Social Work Education

The Panel formulated the norms regarding the teacher-pupil ratio for social work courses and recommended the minimum enrolment limit for making the schools of social work eligible for Commission's assistance under the various development programmes.

The Panel recommended the organisation of a workshop of two weeks duration on 'Faculty Development Programme' for strengthening field work at Delhi School of Social Work. The Panel considered a note on experiments in field training for social development and identified places where this experimental project can be initiated.

5.20 Development of Museums and Museology courses

The Commission has been providing assistance to the departments of history and archaeology in universities upto a ceiling of Rs. 15,000 on a selective basis for the acquisition of audio visual aids. In addition, the Commission also provides an amount of Rs. 20,000 for development of museums to universities which have working museums. The amount of Rs. 20,000 can be utilised for the purchase of racks, and furniture required for the display of materials and art objects as also for the purchase of antiquities, coins and other art objects.

The Commission has also been attaching high importance to the growth of museums in the universities, since it considers that the museums are the main instrument in preserving, disseminating and developing the national heritage of the country, in the inculcation of a better understanding of man and the universe, in fostering a rational outlook and scientific temper. The Commission's assistance to universities for the introduction of training courses in museology started as early as in 1958 and it provided assistance to the universities of Baroda and Calcutta for instituting a diploma course which was an advanced course meant for graduates with Masters' degree who wanted to specialise in the subject. In 1963, the Commission

appointed a Committee to examine the progress made in this direction. In accordance with its recommendations, the Commission started assisting these universities on an enhanced scale. Since then, the number of institutions imparting training in museology has grown.

In view of the growing need of trained personnel for the museums and teaching courses, the Commission organised a three-day workshop on teaching and research in Museology at the National Museum, New Delhi, from April 16 to 18, 1979.

5.21 Development of Expertise in Archaeology

The Commission constituted a Committee for processing ways and means of developing expertise in the field of archaeology and museums in the universities. The report of the committee was considered by the Commission in March, 1976. The Commission generally accepted the recommendations of the committee. The Committee had inter alia recommended that the universities having atleast four courses in archaeology at the post-graduate level and with adequate arrangements for practical training should be considered for some assistance outside the plan allocation for development of archaeological studies. The universities were requested to send certain information in this regard. The information received from the universities was considered by the committee at its meeting held on January 23, 1979. It was agreed that while selecting the universities for assistance under this programme, the following may be kept in view, viz., (i) the infrastructural facilities available at present and (ii) the regional importance of the development of archaeology and museums. Keeping this in view, it was agreed that assistance to various universities may be provided at three levels, namely, (a) those universities which have a strong infrastructure for teaching and research in archaeology may be provided assistance for (i) technical staff for undertaking field work; (ii) purchase of equipment essentially required for digging/excavation work (b) those universities where teaching and research in archaeology is still in its infancy the department has to be necessarily strengthened in so far as the research/teaching staff is concerned and (c) those universities where teaching in archaeology has just been started and where some good and technically qualified and devoted persons in the field of archaeology are on the staff, assistance may be provided for research oriented plans either on an individual or departmental level.

Certain universities were selected by the committee for assistance at the three levels indicated above and proposals have since been invited from these universities in this regard.

5.22 Election Studies

On the recommendations of an Expert Committee, the Commission accepted the proposals of the following universities to conduct state/consti-

tuency level studies and enquiries on Sixth Lok Sabha elections, 1977. The Commission's assistance in this connection was made available for appointment of temporary research staff, field work/travel, printing of questionnaire, tabulation, coding and other contingent expenditure :

1. Banaras Hindu University, 2. Calcutta University, 3. Delhi University, 4. Gujarat University, 5. Himachal Pradesh University, 6. Jabalpur University, 7. Jawaharlal Nehru University, 8. Kurukshetra University, 9. Madurai University, 10. Magadh University, 11. Nagpur University, 12. Osmania University, 13. Panjab University, 14. Poona University, 15. Rajasthan University, 16. Sambalpur University, and 17. Udaipur University.

5.23 Panels in Science Subjects

The Science Panels constituted by the UGC in (i) Physics; (ii) Chemistry; (iii) Biological Sciences; (iv) Mathematics and Statistics; (v) Geology and Geophysics; and (vi) Geography continued to advise the UGC regarding steps to be taken for improvement of science teaching and research in the universities and colleges, implementation of multidisciplinary programmes, support of science research projects and such matters as were referred to them by the Commission.

5.24 The Panels considered and reviewed, wherever necessary, the need for curricula development and upgrading of syllabus in various disciplines at the undergraduate/postgraduate level. The areas of research thrusts with identification of institutions are being reviewed by the Panels keeping in view the regional and national needs. The Panels continued to suggest appropriate measures to be taken up for faculty improvement in the universities and colleges. The Panels identified professional/academic associations in India which could be supported by the Commission for organising conferences, etc. The Panels are reviewing the matter relating to minimum requirements of staff and other infrastructure which a department should have in various disciplines. The questionnaires devised by the Panels for eliciting detailed information from each science department in the universities were issued to the universities. On the basis of information received from the universities, departmental profiles have been prepared. The profiles will be useful to the VI Plan Visiting Committees to have a proper assessment of the concerned university in respect of science subjects and link their recommendations with the overall regional and national needs for development of subjects and their disciplines.

5.25 The Panels during the year 1978-79 selected 26 national associates in different science subjects sponsored by the universities. 33 research associates were also selected after interviewing the candidates and discussing their research areas and plan of work etc.

5.26 The Panels have also prepared status reports in the subjects concerned giving present position of teaching and research in the universities and suggesting future lines of development. The status report on chemistry which has been published not only provides an objective assessment of the areas of current research and contributions made by universities but also draws attention to the existing gaps and the need for promoting newly emerging areas in chemistry, which have a distinct relevance to the research and development effort of the country. The report will be of real value in the advancement of teaching and research in chemistry in universities and colleges.

5.27 Similarly the status report on geology and geophysics brings out the present status of teaching and research on these subjects and suggests measures for upgrading of postgraduate teaching and research in earth sciences, and to provide research effort in areas of national importance so as to make a distinct contribution to the natural resources development effort in the country. The status report in biological sciences is in the stage of finalisation for publication.

IMPORTANT RECOMMENDATIONS OF SCIENCE PANELS

5.28 Organization of University Based Curriculum Development Institutes

On the recommendations of the Science Panels, the UGC agreed to the organisation of short-term courses, special summer and winter schools on an all India basis under the directions of well known scientists for updating the professional competence of the inservice teachers from postgraduate colleges/universities. A number of workshops/summer institutes, etc., recommended by the Panels have already been organised.

5.29 Collaboration with University Departments and other agencies such as CSIR Laboratories, Surveys etc.

The Panel considered the question of creating opportunities for exchange of personnel among universities and CSIR laboratories and noted that there existed UGC schemes viz., National Associateships and Teacher Fellowships etc., which enable university teachers to spend short period of three months or a period of a year or more respectively at any research centre including CSIR laboratories, which would enable them to undertake and pursue their research efforts by utilising the special facilities available and interacting with research groups.

5.30 On the recommendations of the Panels, the Commission also instituted awards to be given exclusively to scientists/scholars working in national laboratories and other research institutions as well as in R&D laboratories to enable them to interact with university departments on

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OF SCIENCE PANELS

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mutually identified research areas for short periods. The university departments and CSIR laboratories and other institutions have also been identified by the Panels with a view to promoting useful applied research.

On the recommendations of the geology and geophysics Panel, the Geological Survey of India has agreed to institute 20 fellowships in 10 universities for undertaking research and exchange of materials between Geology/Geophysics departments of the universities and Geological Survey of India.

The biology Panel considered the proposal sent by the Botanical Survey of India regarding "Development of Herberia" in selected institutions/colleges. The Panel welcomed the proposal and recommended that specific proposals from identified institutions could be supported by UGC. It was also suggested that the Regional Coordination Committee may supervise such collaborative work with regional botanists of the Botanical Survey of India.

5.31 Identification of emerging areas in Science Subjects

With a view to encouraging the research work in the emerging areas in science, the Panels have identified new areas of research which could be supported by the Commission. Suitable research projects in the emerging areas are considered by the Commission for support.

5.32 Design and Fabrication of Science Equipment and indigenous sources for use by Universities and Colleges

The Panels observed that sophisticated instruments and small items or equipment, necessary for research in the universities and colleges are not available indigenously. Accordingly, the Panels recommended that with a view to saving foreign exchange, it is desirable to promote the fabrication of indigenous equipment and to identify the specific items of equipment which could be designed or fabricated by indigenous sources. Several research projects regarding fabrication of equipment have also been approved to be taken up in the university departments. The Panels have been persuing this matter and detailed suggestions in this regard would be finalised by them.

5.33 Review of work done under research projects in operation

As recommended by the Panels a procedure has been evolved to undertake continuous monitoring of each research project to be followed by proper feedback to the investigators. This would also ensure continuous flow of information on the research projects for use by the Panels. The Panels have reviewed the progress of work done under the ongoing research projects approved during 1974-75.

5.34 Preparation of Departmental Profiles in Science Subjects

The need for such profiles, based on adequate and useful information

furnished by the individual departments, arises out of three major considerations, viz. (i) determination of the stage of development of the department and to recognise it either belonging to the developed, developing or subviable category: (ii) the development of the subject and its subdisciplines or specialisations within the department in relation to the teaching and research activities undertaken by it—with reference to the infrastructure facilities and the faculty composition and development of thrust areas for research and (iii) the development of the individual subject departments in relation to the overall development of the subject and its disciplines in the country as a whole, keeping in view the need for developing inter-disciplinary and newly emerging areas of importance in the subject.

The science panels (physics, chemistry, biological sciences, geology & geophysics, geography and Mathematics) have accordingly prepared the profiles. The departmental profiles indicate the present stage of development of the departments concerned and give suggestions with regard to the directions for future growth of teaching and research activities, staffing pattern and the nature of support that may be made available by the Commission, both as general plan support as well as for special programmes of UGC. The profiles would be useful for the VI Plan Visiting Committees.

5.35 Physics Panel

The Physics Panel inter alia recommended that it would be desirable to organise a crash programme of workshop type Advance Level Summer Institutes of a sequential type covering 1. Mathematics, 2. Electronics, 3. Optics and Electro-magnetic Theory, 4. Quantum Mechanics, 5. Application of quantum mechanics to Atomic, Molecular and Solid State and Nuclear Physics.

The Panels also decided that the UGC may enter into a federation agreement with the International Centre for Theoretical Physics, Trieste. While signing this agreement the question of participation of Indian teachers as faculty members for this course should be stressed. In this connection, the Panel also felt that India at present has considerable expertise to establish such a centre in India for participants from South Asian Countries. It was decided that some centre in India may be identified for this purpose where selected short-term courses on the lines of Trieste Institution should be opened and for this purpose assistance from COSTED/UNESCO could also be obtained.

The Panel also felt the necessity to develop facilities for crystal growing technique in the universities. A Sub-committee was constituted by the Commission to discuss the basic facilities required for crystal growing in the universities.

The Physics Panel was deeply concerned that Physics courses could be re-oriented with introduction of subject papers in the new emerging

areas so as to increase the employability of students.

5.36 Chemistry Panel

The Chemistry Panel identified Photochemistry and the Polymer Chemistry as the areas of research to be promoted in India and therefore recommended that special efforts should be made to encourage both basic and applied work in the subject. The Chemistry Panel, therefore constituted special sub-committees for both of these areas for the specific task of preparing a status report. The panel appreciated the work done by the sub-committee on Photochemistry and Polymer Chemistry and agreed in general with all the recommendations contained in the report. The Panel advised the members to keep in view the emerging areas of research and suggested specialisation to be developed in a particular department.

The Panel members were also concerned with the preparation of departmental profile work and to ascertain the strongly developed departments and their field of specialisation which could be considered for special assistance programme, department of special assistance or departmental support.

5.37 Biological Sciences Panel

As recommended by the Panel the new universities are being encouraged to start the development of Biological Sciences instead of traditional Botany and Zoology Departments and thus create a philosophy of Biological Sciences in the Indian university system. A workshop to suggest specific courses which would be included in the interdisciplinary curriculum in the new Biological Sciences departments for ensuring uniform standard was held in the School of Life Sciences, Jawaharlal Nehru University.

On the recommendations of the Panel, Professor T.J. Pandian, Department of Biological Sciences, Madurai University was finally selected by the IARI for Hooker award for Agricultural Research for biennial years 1976-77 on "Teaching Materials and Aids in Botany" to be held under the auspices of National Botanical Garden.

5.38 Geography Panel

The Panel recommended that advanced level institutes be organised at different universities under the guidance of well established geographers. It was also decided that the proceedings of the Institutes so far held may be got printed and circulated in university departments of geography.

The Panel felt that few studies on ecology and ecosystems have so far been made in the country by scientists belonging to certain disciplines like botany, geology, agriculture, public health engineering, meteorology etc. A time has come when intensive efforts have to be made to initiate studies in depth on eco service in parts of the country forming natural units and reflecting certain environment. Accordingly, on the recommenda-

tions of the Panel "A Seminar on Eco systems" was organised at Andhra University to highlight the major problems and areas in the field of ecology. As a follow up to the deliberations of the seminar the Panel indicated the desirablility of identifying a few groups for different areas and felt that mapping work may be done within a year.

The Panel identified the areas of studies in which it would be desirable to send geographers for training abroad.

5.39 Geology/Geophysics

A Sub-committee of the Panel updated the courses for postgraduate teaching and research in Indian universities in geology and geophysics. The report made by the Committee would be useful to the UGC for considering future directions of development of geology/geophysics in the universities.

The Panel also considered a proposal for setting up of the corporation to undertake resources surveys and inventories (exploration, development of utilisation) and cognates R&D and Personnel Training Programmes in the Third World countries. The Panel decided that the Commission could recommend the proposal for setting up the said corporation to the Government of India. It however, agreed in principle that a few selected university departments of geology/geophysics may be started for bringing about qualitative improvement in teaching and research so that in course of time the students coming out of these universities could take up Indian contracts in Third World countries for undertaking resource surveys, research etc.

5.40 UGC—ISRO Coordination Committee

The University Grants Commission and the Indian Space Research Organisation jointly set up a Coordination Committee towards the end of 1976 for joint cooperative programmes at universities and academic institutions on teaching, training and research related to broad areas of Space Sciences, Space Applications and Space Technology. The Committee performed the following tasks:

Review and analysis from time to time of projects sponsored and funded by the two agencies in universities and academic institutions related to space research and devising of mechanisms for speedy and effective selection and implementation of projects geared to various elements of the Indian Space Research Programme.

Selection and recommendation of areas of research for joint research programmes between ISRO and Universities/Institutions:

(i) Review and recommendation of appropriate teaching and training programmes on space related subjects in universities/institutions keeping in view the need for the development of such trained manpower for the Indian Space Programme and for other national endeavours that are

or may be related to the space programme.

(ii) Organisation of scientific workshops at ISRO establishments for students and staff members of universities to impart an awareness of different aspects of space research especially to students at graduate and postgraduate levels.

(iii) Review and initiation of programmes related to space sciences, space applications and space technology which would benefit multi-lateral cooperation between ISRO-universities, national research laboratories and other government agencies and the recommendation of measures for the effective management and implementation of such programmes.

The establishment of a UGC-ISRO cooperative link has helped at the national level to achieve a measure of coordination which, it is hoped, will lead to substantial benefits to university research as well as to the Indian Space Programme. Already, in two years or so, a degree of interactive support can be seen and university departments can receive research grants and fellowships from the UGC as well as ISRO supplementing each other. Cooperative training programmes are also being planned.

For the period ending 1978-79 a total of 59 research projects costing Rs. 50 lakhs in areas of sciences, having relevance to space sciences, space technology and space applications were under implementation in universities.

5.41 Engineering & Technology Panel

The Engineering and Technology Panel constituted by the University Grants Commission continued to advise the Commission regarding measures for improvement of standards and facilities for teaching and research for development of interdisciplinary and multidisciplinary programmes in engineering and technology and pharmaceutical sciences.

The Panel *inter alia* considered the projects received by the Commission for support of research in engineering and technology and pharmaceutical sciences.

The Panel is working out a suitable scheme for faculty improvement programme for the teachers of engineering colleges/institutions under the purview of UGC. An Expert Committee has also been set up on the recommendations of Panel for providing increased facilities for postgraduate pharmaceutical studies in the country.

The Panel approved the award of national associateship to three candidates. One candidate was selected for award of research associateship. The Panel reviewed the progress of work done under the UGC scheme of Preparation of University Level Books and approved a proposal for writing a book on "Power System Engineering".

The selection of senior research fellows in engineering and technology was recommended by the Panel. The recommendations made by the national conference convened by the National Productivity Council on

introducing productivity education were also considered by the Panel.

The Panel also recommended that the engineering colleges may undertake the extension work as outlined in Development of Higher Education in India—A Policy Frame.

5.42 Restructuring of Courses

The Commission's scheme of restructuring of courses has two important aspects viz. (a) to make the first degree course more relevant to the rural environment and to the developmental needs of the community and (b) to link education with work/field/practical experience and productivity.

The Commission is of the view that special attention needs to be given to the orientation of the existing courses towards rural problems without creating a completely different channel for such studies. The courses are to be reoriented in such a manner that a student can apply his theoretical knowledge to the problems of the region through field work, project work, extension etc. In other words, the existing conventional courses may be integrated with concrete problems and the courses related to the development of the region. The key concept underlying restructuring of courses is to remodel the existing conventional three subject courses at the first degree level by courses comprising two of the existing subjects together with a third subject being oriented towards field/practical work or having a bearing and direct relevance to the local/regional needs and requirements.

5.43 The scheme of restructuring of courses is primarily meant for the colleges in the rural and backward areas, and in order to enable a good number of colleges in these areas to participate in this scheme, the stipulation regarding minimum enrolment and minimum number of teachers as laid down by the Commission in respect of developmental schemes of affiliated colleges is not insisted upon while examining proposals for restructuring of courses.

5.44 While the Commission would like all universities to participate in this scheme, 155 colleges were identified initially to try out the restructured new combination of courses. The colleges have been selected, generally speaking, in the vicinity of agricultural universities/krishi vigyan kendras, so that these agricultural universities/krishi vigyan kindras can render useful assistance to the colleges in drawing up the syllabi for the new papers/subjects with a practical/rural/field orientation. The universities were requested to add the names of some more colleges to this list if they find them suitable for inclusion under the scheme, and accordingly 32 more colleges were included in the list.

5.45 The UGC supports the programme by providing assistance in the form of grants for the purchase of books and journals and appoint-

ment of core staff on the merit of each proposal. Assistance to the colleges towards restructuring of courses is limited to Rs. one lakh per annum for recurring as well as non-recurring expenditure. Colleges have been advised not to diversify this programme by introducing too many courses. Instead, to begin with, a college may consider to start one course in the social sciences and one in sciences.

5.46 A number of courses have been suggested in the illustrative list sent to the universities. The new subjects like Horticulture, Fisheries, Applied Nutrition and Public Health, Soil Science, Fertilizers, Dairy Science, Plant Protection, Agricultural Marketing, Farm Management, Community Development, Rural Banking, Rural Industrialization etc. could be offered alongwith other traditional subjects at the first degree level.

The Vice-Chancellors of the Universities and the Principals of the Colleges concerned have been requested to expedite the formulation of their proposals based on the guidelines circulated to the universities. The scheme has been implemented in 22 colleges and one university. The proposals of 24 colleges are being processed. However the lack of freedom for colleges to introduce new subject combinations and inadequate response from universities have proved to be major limiting factors in the implementation of this scheme.

5.47 Promotion of Gandhian Studies

The Commission has taken a number of steps for introduction of courses on Gandhi, Gandhian thought and values in universities and colleges at different levels viz. undergraduate, postgraduate and diploma levels.

A working paper on the subject was considered by a Committee during September 1978. The Committee observed that these courses should pay special attention to relevance of Gandhian thought and values to the age of science and technology, and to the problems of socio-economic development of the country. The contribution towards national and social integration should be emphasised. The courses, as far as possible should contain field or practical work relevant to the course.

5.48 The Commission circulated the Working Paper and observations of the Committee among all the universities and invited proposals for promotion of Gandhian Studies and specifically proposals in relation to one or all of the following measures:—

(a) Preparatory work during the year 1978-79 so that courses on Gandhi, Gandhian thought and values could be started in the next academic year. Preparatory work would include organisation of seminars/workshops to promote studies and research on Gandhian thought and values, framing of courses, provision

of basic collection of books etc. and preparation of details of staff, library, and other facilities required for the introduction of the proposed courses. The assistance by the UGC for the preparatory work would not ordinarily exceed Rs. 10,000 during 1978-79.

(b) Strengthening of library and other facilities for courses on Gandhian Studies currently provided by the university.

(c) *Research projects on Gandhian Studies*: Some relevant themes could be: national integration, education and rural development, economic growth, science and values, ahimsa and satyagraha, violence in society and disarmament.

(d) Organisation of seminars/workshops on Gandhian thought and values in relation to the important problems facing the country.

5.49 Proposals have so far been received from 29 universities and these are being processed in order to enable the universities to introduce courses in Gandhian Studies during the academic session 1979-80. Grants upto a ceiling of Rs. 10,000 have been sanctioned to 12 universities for preparatory work in this connection. In addition, *ad hoc* book grants of Rs. 20,000 each have been sanctioned to five universities.

5.50 Centres of Advanced Study and Special Assistance to Selected Departments

An urgent need in the field of higher education in India is the strengthening of postgraduate teaching and research and channelling the existing rather limited resources effectively for the purpose. The University Grants Commission has therefore undertaken since 1963-64 in consultation with the universities a scheme for developing a limited number of university departments for advanced training and research in certain selected fields, The scheme is intended to encourage the pursuits of 'excellence' and team work in studies and research and to accelerate the realisation of 'international standards' in specific fields. With this object in view it is proposed to give active support and substantial assistance to promising departments in the universities carefully selected on the basis of quality and extent of work already done by them, their reputation and contribution to research, and their potentiality for further development.

A beginning has been made by providing assistance to certain university departments for getting competent and promising teachers and research workers and procuring essential equipment. To be viable, such 'Centres of Advanced Study' have to exceed a certain 'critical' size as regards their staff. The departments concerned would therefore have a fairly large staff of professors, readers and research associates or fellows of outstanding ability and qualifications who are actively engaged in research and advanced training. A substantial proportion of the team would be a kind of 'floating

staff' coming to these centres for long or short periods on deputation from their universities or institutions and possibly from abroad. Adequately staffed and properly organised, these departments are expected to make an appreciable impact, direct and indirect, in raising the standards of teaching and research in our universities.

As they would be functioning on an all-India basis, they would attract teachers and scholars from all over the country and help in maintaining and strengthening the corporate intellectual life in the country. Another additional advantage accruing from the scheme would be that the personnel trained in the centres would in course of time be available for strengthening the staff of other university departments—thus helping to meet to some extent the present difficult position experienced by the universities in securing qualified and competent teachers in adequate numbers.

The implementation of such a programme is no doubt not easy; it would need much serious thought and boldness in approach and planning. It would demand cooperation and team-spirit from the participants. In actual working many difficulties are likely to be faced, but these would have to be overcome through determined efforts.

The University Grants Commission, on the advice of a committee consisting of eminent educationalists and scientists, has invited selected university departments in certain specific subjects depending on their strength of academic work to operate either as centres of advanced study or to receive special assistance to build up their infrastructure facilities and areas of research effort and ultimately to function as centres of advanced study.

5.51 Centres of Advanced Study and Departments of Special Assistance in the Humanities and Social Sciences

During 1963-64 the UGC initiated a programme of Centres of Advanced Study with a view to strengthening postgraduate teaching and research by developing a limited number of university departments in selected fields so as to encourage the 'pursuit of excellence' and enable these departments to attain international standards in the subjects concerned. On the basis of advice of the Standing Committees specifically constituted for this purpose, 11 Centres of Advanced Study were recognised during 1963-64. In 1968-69 two more centres in humanities and social sciences were recognised.

The work of centres of advanced study in the humanities and social sciences which had completed the initial period of ten years was assessed during 1974 and the reports of the Assessment Committees were considered by the Standing Advisory Committee for the CAS. The Standing Committee recommended that the centres whose work was found to be average may be excluded from this programme and no further assistance under the Centres of Advanced Study scheme for 1974-75 be provided for such departments.

5.52 The Commission decided that assistance under this programme in future should be made available only for a period of 5 years and the State Government/University should take over the recurring liability at the end of this period as committed expenditure.

The Commission further decided that the centres whose work has been rated as excellent or good may be provided continued assistance under the CAS during the V Plan period to enable them to strengthen their teaching and research programmes. The Commission also accepted the recommendations of the Assessment Committees and agreed to provide grants recommended by them for further development of the Centres of Advanced Study in the subjects concerned.

A list of Centres of Advanced Study in the humanities and social sciences currently receiving assistance from the UGC is at Appendix XXI. Assessment Committees have been constituted to review the work of centres of advanced study which have been in existence for ten years.

5.53 Departments of Special Assistance

In 1972, the Commission initiated a programme of special assistance to selected departments to help them in strengthening and consolidating their teaching and research programme and to identify an area of specialisation in which they would ultimately strive to achieve excellence.

The following departments for special assistance were selected in the humanities and social sciences:—

1. Department of Economics	(i) Osmania University & (ii) Presidency College, Calcutta.
2. Department of History	Patna University
3. Department of Sociology	Bombay University
4. Department of Anthropology	Saugar University
5. Department of Archaeology	Deccan College of Postgraduate and Research Institute, Pune-(Poona University)

The UGC's assistance to the above departments was made available upto 1978-79.

The working of the Department of Economics, Presidency College, Calcutta and Department of Archaeology of Deccan College Postgraduate & Research Institute, Pune has since been reviewed. The recommendations of the Visiting Committees have been accepted and the Commission has

agreed to provide further assistance to these departments upto the period ending 1983-84.

5.54 Further in 1976 on the basis of the reports of the Visiting Committees, the Commission agreed to provide assistance to the following departments till the end of 1983-84.

Subject	*Name of the University*
Economics	(i) Andhra
	(ii) Punjabi
	(iii) Calcutta
History	(i) Allahabad
	(ii) Mysore
	(iii) Calcutta
	(iv) Baroda
Sociology	(i) Panjab
Anthropology	(i) Ranchi
Psychology	(i) Utkal
	(ii) Allahabad
Linguistics	(i) Osmania
Philosophy	(i) Jadavpur
	(ii) Rajasthan

Thus, upto 1978-79, 20 departments were functioning under the scheme. A list of these departments is given in Appendix XXII. No new department was brought under the scheme during 1978-79.

5.55 Centres of Advanced Study and Departments of Special Assistance—Science Subjects

The programme of providing assistance to centres of advanced study and selected departments under Special Assistance Scheme was continued this year also. In 1978-79 the Department of Zoology, Marathwada University was inducted in this programme. Thus upto the end of 1978-79, assistance was provided to 14 Centres of Advanced Study and 33 Departments of Special Assistance. A list of the centres and departments currently functioning under the programme is given in Appendices XXIII and XXIV respectively.

5.56 The Assessment Committee visited 20 Departments of Special Assis tance which have been assisted since 1972 and two Centres of Advance Study which have completed 10 years, to examine their achievements an recommended continuation of further support. Their recommendation would be considered initially by the Standing Advisory Committee o CAS/DSA and later on by the Commission.

5.57 The Commission has agreed to provide 5 additional teacher fellow ships of one-year duration to these departments. The teachers from un versities could also be considered for these additional positions of teache fellowships. It has also been decided that the assistance to the existin Centres of Advanced Study may be made available upto 31.3.1981 afte which the recurring assistance is to be taken over by the concerned Stat Governments/Universities. In case of CAS in the Central Universities the recurring assistance is available upto 31.3.1979 after which it is to b merged into maintenance grant. In the case of Departments of Special Assis tance approved in the V Plan, it was decided that the recurring & non recurring assistance may be provided upto the end of VI Plan period after which the concerned state government should take over the recurrin liability.

5.58 The Commission considered the question of further assistance to th Centres of Advanced Study and the Departments selected under Specia Assistance Programme in the VI Plan period.

The Commission generally reviewed the policy and pattern of assistanc given so far to the departments participating in the programme of Centre of Advanced Study and Special Assistance to Selected Departments. It wa agreed that in the case of Centres of Advanced Study which would hav been assisted for a period of 15 years, ending March, 1979, the type o assistance to be given for future activities may be related to specific well defined projects which can be implemented within the five year period an these proposals could be considered on merit and keeping in view the sugges tions made by the Evaluation Committees for such Centres of Advance Study. The question of providing non-plan assistance to these department after the Commission's plan assistance ceases could also be explored.

In the case of other Centres of Advanced Study which would complet their initial 10-year period in March, 1979 and whose work would be eva luated by the Assessment Committees, the nature and extent of assistanc that may be given could be suggested by the Evaluation Committees an such assistance may be given as in other cases in the past, for a further fiv year period.

In the case of departments participating in the programme of specia assistance to selected departments since April, 1972, the nature and exten of assistance that may be given to these departments where their work ha

been found satisfactory, could be decided on the basis of the evaluation reports, either under the programme of Centres of Advanced Study or under the special assistance programme for a further five-year period for the purpose.

In the case of engineering and technology subjects, the concerned Panel which had taken up the work of identifying a few departments which could be considered suitable for participation under the programme of special assistance to selected departments would prepare an integrated proposal which then can be considered on the basis of funds in the VI Plan.

5.59 Support for Research

The place of independent research, objective and scientific investigations and critical enquiry in the university system is as important as that of teaching. In fact, both teaching and research must go together. In the realm of research itself, both fundamental and applied research should receive adequate attention but in a country with inadequate resources and stupendous problems, priority should be given to research projects that have a direct relevance to the problem of the community.

The Commission has suggested that research projects be formulated on well-defined topics keeping in view the facilities already available. The plan of the project should be drawn up in such a way that the research work can be brought to successful completion within the specified period. While drawing up research programmes having R & D effort it is required that the areas identified as of R & D importance by the National Committee on Science and Technology and Council of Scientific and Industrial Research etc. are kept in view so that the university/college can make a distinct contribution by way of research in such areas.

While formulating research projects, universities have been requested to keep in view (a) the importance of defining major thrust areas and detailing the plan for coordinating and making the best use of visiting faculties and staff (b) interdepartmental and/or interdisciplinary proposals as well as collaboration with universities, national laboratories and industries (c) scarcity of resources of foreign exchange, and therefore, the need to emphasise indigenous instruments and design, fabrication and building up of equipment (d) allowing use of sophisticated equipment by scientists from other departments or other universities or colleges etc.

5.60 Core Support for Research

The Commission placed at the disposal of all universities grants to provide core support for research in the universities, to enable them to consider request from an individual teacher for taking up research work. This assistance is meant to create a climate of research work and to encourage those teachers who may not otherwise be able to get financial support for their research projects. Grants ranging from Rs. 50,000 to Rs. 1,00,000

have been provided to each university. The total amount approved to 75 universities is Rs. 55.5 lakhs for plan. Several universities have substantially utilised this amount and the question of providing further grant would be considered on the basis of evaluation.

5.61 Research in the Humanities and Social Sciences

The panels in the humanities and social sciences have devoted considerable time in preparing lists of research priorities in various disciplines. In case of some disciplines the list is based on the findings of expert groups set up for the purpose by the ICSSR, in some disciplines the University Grants Commission panels identified their own research priorities; and in the case of education, the list was adopted from the report of a University Grants Commission seminar on educational research. The list is merely illustrative and will be under constant revision.

The University Grants Commission is providing financial assistance to universities and colleges for advanced research projects and for short-term research projects in humanities and social sciences. Research projects are approved on the recommendations of the concerned panels.

5.62 Advanced Research Projects

The UGC provides support to teachers in the universities and colleges with facilities for postgraduate studies and research to enable them to take up work on intensive and depth studies in specific areas in the humanities and social sciences.

Research projects may be undertaken by an individual teacher or by a group of teachers or by a department as a whole. The Commission also provides assistance for research, technical and other staff, travel, field work, apparatus, equipment, postage, stationery, computation work, printing of questionnaires, books, journals, contingencies and similar other items needed for the project.

Assistance is normally available to a teacher or a department for one project at a time. The duration of the project may be upto a period of three years. In special cases, however, projects covering a period of three to five years may be considered but in no case will assistance for a project be available for a period of more than five years.

After the completion of the project, any apparatus, equipment, books and data etc., procured with UGC assistance becomes the property of the institution where the project was undertaken for use by other scholars.

During the seven selections, two each in 1974-75 and 1975-76 and one each in 1976-77, 1977-78 and 1978-79, the Commission has approved 219 advanced research projects in a number of universities and in a number of disciplines and a grant of over Rs. 54 lakhs has been committed in support of these projects as detailed below:

S.No.	Subject	No. of Projects approved/number of principal investigators involved	Amount approved (in lakhs of Rupees)
1.	Anthropology	4	0.81
2.	Commerce	5	1.16
3.	Economics	19	6.72
4.	Education	8	3.432
5.	English & Foreign Languages	4	1.176
6.	History	35	11.572
7.	Law	6	1.714
8.	Linguistics	24	4.58
9.	Library Science	4	1.14
10.	Mass Communication	11	1.493
11.	Modern Indian Languages	27	5.427
12.	Psychology	12	3.164
13.	Political Science	32	6.09
14.	Philosophy	12	1.12
15.	Sociology & Social Anthropology	16	4.45
	Total	219	54.048

5.63 Short-term Research Projects

Under this scheme, financial assistance ranging from Rs. 500 to Rs. 5,000 may be provided to a university or a college teacher who wishes to undertake, along with teaching work, a short-term research project or an investigation for a doctoral degree under approved supervision. Assistance will be available only for field work, preparation of questionnaires, computation work, equipment, books and journals which are specifically required for the proposed project but which are not normally available to the teacher in the institution where he is employed. In special cases assistance may also be provided for publication of monographs and research papers.

Grants under this scheme are available to individual teachers and are neither transferable nor available for appointment of any staff or items of a recurring nature. After the project has been completed, any apparatus

or equipment purchased, with the Commission's support, becomes the property of the institution where the teacher is employed. Books and journals may, however, be retained by the teacher, if he so desires.

During the seven selections, two each in 1974-75, 1975-76 and one each in 1976-77, 1977-78 and 1978-79, the Commission has approved 1,539 short-term projects* at a cost of over Rs. 39.85 lakhs as detailed below:—

S.No.	*Subject*	*No. of projects approved/teachers provided assistance*	*Amount approved (in lakhs of Rupees)*
1.	Anthropology	5	0.16
2.	Commerce	155	4.93
3.	Economics	200	4.85
4.	Education	164	5.27
5.	English & Foreign Languages	112	1.65
6.	History	179	5.20
7.	Law	19	0.65
8.	Linguistics	91	1.95
9.	Mass Communication	1	0.05
10.	Modern Indian Languages	261	4.80
11.	Philosophy	48	1.11
12.	Political Science	117	3.88
13.	Psychology	96	2.66
14.	Social Work	3	0.08
15.	Sociology & Social Anthropology	88	2.61
	Total	1,539	39.85

5.64 Support for Science Research

The Commission decided to provide as much support for university research during the plan period as its funds permitted. The assistance for research is provided to faculty members in the universities, university centres for postgraduate studies and affiliated colleges for taking up well-defined research projects in pure and applied sciences. The research projects relate

* The total number of short-term projects approved by the Commission during 1963-64 to 1978-79 is given in Appendix XXV.

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1974-75, 1975-76 and one ission has approved 1,539 akhs as detailed below:—

projects /*teachers assistance*	*Amount approved (in lakhs of Rupees)*
5	0.16
155	4.93
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164	5.27
112	1.65
179	5.20
19	0.65
91	1.95
1	0.05
261	4.80
48	1.11
117	3.88
96	2.66
3	0.08
88	2.61
,539	39.85

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to major programme of research to be undertaken by the university departments as a whole in a selected field or relate to projects by small research groups as well as by individual teachers.

With the help of panels, departments have been identified for assistance under departmental research support, so that with these additional inputs, the departments concerned could develop studies and researches in specialised fields and later on be considered for other programmes. The departments concerned have been requested to formulate suitable projects in their respective fields of specialisation. Expert committees will be constituted to visit these departments for examining the proposals and recommending the extent of assistance that may be provided to each one of them for undertaking departmental research programmes.

Upto the end of March, 1979 a total number of 1,227 research projects recommended by the Science Panels have been approved to be implemented. The break up of the proposals is given below:

Sl. No.	*Subject*	*No. of projects*	*Amount approved (in lakhs of Rs.)*
1.	Physics	222	230
2.	Chemistry	383	220
3.	Biological Sciences	505	360
4.	Mathematics and Statistics	39	29
5.	Geology and Geophysics	56	35
6.	Geography	22	31
	Total	1,227	905

These include 265 projects with distinct R & D value and development of instruments. Others are of fundamental importance.

Apart from these a total number of 25 departmental research projects in science subjects involving an expenditure of Rs. 206 lakhs have been approved by the Commission.

5.65 Short-term Research Projects

The Commission has been providing assistance to individual teachers working in the universities and colleges for undertaking research in their specific fields. Support under this programme is specially provided to college teachers and junior teachers in the universities who do not have adequate resources to meet the expenses connected with their individual research either for a degree or as part of their individual project. Assistance under

this programme is limited to Rs. 10,000 for every selected teacher and is available for field work, computation, purchase of equipment, apparatus, chemicals and books which are required for the project and not normally available in the university/college where the teachers may be working at the time. More than 9,000 teachers have benefited under this scheme so far. (Appendix XXVI). During the year 1978-79 more than 2,000 proposals were received under the scheme. These were examined with the help of an Expert Committee. The Committee recommended grants for more than 800 teachers involving an amount of nearly Rs. 42 lakhs as detailed in table.

Sl. No.	*Subject*	*Number of teachers selected*	*Grants approved (Rs. in lakhs)*
1.	Physics	69	5.82
2.	Chemistry	240	16.43
3.	Mathematics	82	2.43
4.	Botany	200	7.12
5.	Zoology	128	5.96
6.	Geography	36	1.63
7.	Geology	39	1.47
8.	Medicine	15	0.67
9.	Home Science	5	0.26
	Total	814	41.79

5.66 Computer Development

The Commission in consultation with the department of Electronics has approved installations of major computer facilities at Poona, Roorkee and Banaras Hindu Universities. These would work as regional computer centres. The computers are expected to be installed during this year. In case of Panjab University, it has been decided to provide computer terminals in the university campus of the major computer centre being set up at Mohali by the Department of Electronics, Government of India. The proposals from Aligarh Muslim University and Indian Institute of Science, Bangalore for expansion of existing computer facilities have already been approved. The existing computer at Indian Institute of Science would be transferred to M.S. University of Baroda. With the provision of these facilities, 28 universities would be having computer facilities. A map giving the latest position about computer facilities is given in Appendix XXVII.

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15	0.67
5	0.26
814	41.79

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5.67 Carreer Awards to Young Scientists

Recently the Commission has taken up a new scheme of Career Awards to Young Scientists. The purpose of the scheme is to identify young talented scientists who have established competence and good potential in their areas of specialisation and to promote their professional growth by enabling them to devote all their efforts and energies early in their career for research and study with minimum encumbrances and teaching responsibilities.

Ordinarily Career Awards will be offered for a period of three years to lecturers or readers in universities who are not more than 35 years old on the first of July of the year in which the award is made and who have completed doctoral or post-doctoral or other equivalent professional training. A candidate may, however, apply for the award before he/she has actually joined the faculty but the award will be operative only after he/she has joined.

The Commission will pay the awardees their full salary and allowances. They will continue to earn normal increments and maintain their seniority in their universities. In addition, the Commission will provide each awardee a research grant of upto Rs. one lakh (including travel costs, contingency, etc.) and two or three research fellows. Normally the universities should appoint a temporary lecturer as substitute during the tenure of the Career Award to its staff member. The awardees under the scheme should also be encouraged to take part in teaching work of the department.

The awardee may spend the term of the award in his/her own institution or in any approved institutions in the country. During the period of the award the awardee will not be allowed to leave the country except for a maximum period of six months. Prior concurrence of the Commission will have to be obtained before accepting any foreign assignment. No assistance will be available from the Commission for meeting travel expenses or any other expenditure connected with the foreign assignment.

The first selections for these awards were made during the year, in consultation with the respective subject panels. The total number of 17 selections made during 1978-79 included 5 in Zoology, 4 in Geology, 3 in Physics, 2 in Chemistry and one each in Mathematics, Botany and Geography.

The scheme is being extended to cover social scientists and teachers from the humanities.

5.68 Hari Om Ashram Trust Awards in Science Subjects

The University Grants Commission has instituted the following five awards of the value of Rs. 10,000 each to be awarded every year to outstanding scientists from out of the endowment placed at the disposal of the Commission by the Hari Om Ashram Trust, Nadiad.

1. Sir C.V. Raman Award for Experimental Research in Physical Sciences.
2. Dr. Homi J. Bhabha Award for Research in Applied Sciences.

3. Dr. Meghnad Saha Award for Research in Theoretical Sciences.
4. Sir Jagdish Chandra Bose Award for Research in Life Sciences.
5. Award for contribution in the field of 'Interaction between Science and Society'.

The awards are based on the following considerations :

(i) Only contributions by Indian scientists, whether individually or by a team, would be eligible. Institutions or organisations are not governed.
(ii) The award is for outstanding scientific work which has made conspicuously important contribution to human knowledge in the areas covered by each award and thrown light on the problems in a new manner. The prize could be equally shared by two or more persons whose work was of equal merit.
(iii) In deciding the award, attention would be focussed on contributions made during past 5 to 7 years.
(iv) The scientific work to be assessed would cover books, monographs, papers or any other account of unpublished research work, inventions, discoveries etc.
(v) The research work should have been carried out in India.

The following awards were given during 1978-79 for the year 1975.

I. *The Sir C.V. Raman Award for Research in Physical Sciences*

Professor C.N.R. Rao,
Chairman, Solid State and Structural
Chemistry Unit and Materials Research
Laboratory, Indian Institute of Science,
Bangalore.

II. *The Homi J. Bhabha Award for Research in Applied Sciences*

Shri C. Ambasankaran,
Director,
Electronics and Instrumentation Group,
Bhabha Atomic Research Centre,
Bombay.

III. *The Meghnad Saha Award for Research in Theoretical Sciences*

(i) **Professor A.N. Mitra,**
Department of Physics,
Delhi University.

(ii) **Professor P.M. Mathews,**
Department of Physics
Madras University.

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over books, monographs,
research work, inventions,

out in India.

8-79 for the year 1975.

Physical Sciences

Applied Sciences

eoretical Sciences

IV. *The Jagdish Chandra Bose Award for Research in Life Sciences*

(i) Professor M.R.N. Prasad,
Department of Zoology,
Delhi University.

(ii) Professor R.N.R. Moudgal,
Department of Biochemistry,
Indian Institute of Science,
Bangalore.

(iii) Professor G.P. Talwar,
Department of Biochemistry,
All India Institute of Medical Sciences,
New Delhi.

5.69 M.Phil. course

The main objective of introducing the M.Phil. course as the first research degree is to enable the student to take advanced course work in his area of specialisation and to train him adequately in research methodology. It would also provide an opportunity to candidates to proceed to the second research degree viz. Ph.D., it being understood that the research work done for M.Phil. degree could be incorporated in Ph.D. work.

The guidelines for the introduction of M.Phil. courses are given in the University Grants Commission Annual Report for 1976-77. During the year 1978-79, the Commission accepted the proposal of the Hyderabad University for introducing M.Phil. course in rural development on an experimental basis in collaboration with the National Institute of Rural Development, Hyderabad.

5.70 University and College Teachers: Minimum Qualifications

An important measure in the maintenance of standards is to culture that university and college teachers possess the requisite qualifications for performing their professional duties.

The Government of India, in the Ministry of Education and Culture on the recommendations of the University Grants Commission approved the revised scale of pay in respect of university and college teachers. A statement indicating the existing and revised scales of pay and the conditions for payment of central assistance were given in the University Grants Commission Annual Report for the year 1975-76.

The minimum qualifications prescribed for recruitment to the post of lecturers in the universities and colleges are given in Appendix XVIII of the University Grants Commission Annual Report for the year 1976-77. The qualifications for recruitment to the post of Readers and Professors are given below (*).

*These are only guidelines and are not linked with revision of scales of pay.

5.71 Professor

An eminent scholar with published work of high quality and actively engaged in research. Ten years' experience of teaching and/or research.

Experience of guiding research at doctoral level.

An outstanding scholar with established reputation who has made significant contribution to knowledge.

5.72 Reader

Good academic record with a doctoral degree or equivalent published work. Evidence of being actively engaged in (i) research or (ii) innovation in teaching methods or (iii) production of teaching materials.

About five years' experience of teaching and/or research provided that at least three of these years were as lecturer or in an equivalent position. This condition may be relaxed in the case of candidates with outstanding research work.

5.73 Guidelines for the Implementation of Scheme of Assistance to Universities for the Publication of Learned or Research Works including Doctoral theses

There has been no change in the guidelines indicated in the Annual Report of the UGC for the year 1977-78 regarding publication of theses. However, the Commission has since agreed that assistance may be provided to the universities for publication of quality journals upto a maximum of Rs. 5,000 per annum, initially for three years for a journal. The amount of assistance may be met by the universities out of the funds placed at their disposal for publication of research works including doctoral theses. Assistance to a journal is determined on the merits of each case keeping in view the suggestions made by the Advisory Committee in this regard. The journals are identified by the Subject Panels.

5.74 Examination Reforms

The Commission has been concerned about delays in examination schedules and the use of unfair means and cheating in examinations. Universities have been asked to take remedial measures in this regard but from the long-term point of view, it is important that universities make basic and structural changes in their examination systems.

The Commission has laid special emphasis on the implementation of various measures of examination reforms with a view to improving the reliability, validity and objectivity of evaluation and with a view to bringing about a closer integration of teaching, learning and evaluation and to make examinations an educational experience rather than a nightmare for students.

The main emphasis is on the following aspects of examination reforms:

(a) Continuous sessional evaluation as a supplement to the present final examination.
(b) The development of question banks in order to eliminate some of the shortcomings of setting up examination papers and as a means for revision and modernisation of courses of study.
(c) Introduction of grade system instead of present marking system in order to increase reliability and bringing about better comparability among different subjects.
(d) Introduction of the semester system in order to have greater flexibility.

According to the information available with the Commission, sessional evaluation at different levels has been introduced in 65 universities including 14 agricultural/technical universities and seven institutions deemed to be universities. Question banks have been or are being developed in 21 universities including 2 agricultural universities. Grading system is in operation at 44 universities/institutions including 14 agricultural/technical universities and 7 institutions deemed to be universities. Semester system is in vouge in 40 universities, 5 institutions deemed to be universities and 14 agricultural and technical universities.

The Commission is also providing financial assistance to the universities for workshops for orientation of teachers and for some core staff for the establishment of examination reform units in the selected universities. Various follow-up measures are also being taken in order to ensure that the progress made in regard to the implementation of examination reforms is maintained. Steps are also being taken to examine why the programme has received a setback in some universities.

5.75 Re-publication of Foreign books in Cheaper Editions

The Ministry of Education and Culture in consultation with the University Grants Commission had initiated in 1960 programmes of republication of books in low priced editions, originally published in U.S.A., U.K. and U.S.S.R. and used by university and college students in areas in which there is a dearth of quality books by Indian authors.

Presently there are three such programmes viz.

(i) Joint Indo-American Standard Works Programme.
(ii) English Language Book Society Series (ELBS), and
(iii) Joint Indo-Soviet Text Book Board Scheme.

Suggestions regarding books that may be published under any of these programmes are made by specialists in the subject concerned from India as well as the respective countries. The Ministry of Education and Culture receives such suggestions as also copies of the books and in turn

refers them to the University Grants Commission for getting them evaluated from the standpoint of their suitability to Indian university and college students. The Commission's role in all these programmes has been that of getting the books evaluated with the help of experts in the subjects concerned in the universities and other educational institutions. The recommendations received from evaluators are passed on to the Ministry of Education and Culture.

5.76 Journal/Bulletin of Higher Education

Since Monsoon, 1975, the Commission has been bringing out a Journal of Higher Education to promote scholarly study as well as discussion of contemporary problems and policies in higher education. The hundred and fifty page journal is issued three times a year: Moonsoon, Autumn and Spring.

Upto 1979, 11 issues of the journal have been published. Some important topics discussed in articles and communications relate to equality of educational opportunity with particular reference to Scheduled Castes and Tribes, examination reforms and restructuring of courses.

A Bulletin of Higher Education is also published by the University Grants Commission for dissemination of information regarding the ongoing schemes and programmes of the Commission. Up to 1979, four volumes of the bulletin have been published.

SECTION VI

Faculty Improvement Programme

6.01 The University Grants Commission attaches great importance to faculty improvement programme by providing opportunities to teachers to keep in touch with the modern developments in their fields of study and research and to exchange ideas with experts in their subject areas and related fields. The focal point in the improvement of standards centres around improving lhe professional competence of the teachers to make them better equipped to initiate and carry out high quality instructional programmes and thus maintain good standards. With these objectives in view, the Commission has provided necessary financial support during the year under review to colleges and universities to participate in the programmes designed for academic development and academic conferences etc. and beneficial interaction.

The guidelines formulated by the Commission for the implementation of the faculty improvement programme were given in the University Grants Commission Annual Report for the year 1975-76. The response from the colleges and universities to these programmes has been very encouraging. Regulatory measures to ensure adequate standards of attainment have been formulated to ensure proper utilisation.

6.02 Seminars, Symposia, Refresher Courses, Workshops, Conferences etc.

The University Grants Commission has been supporting the efforts of universities and colleges in providing opportunities for college teachers and research workers to keep abreast of recent developments in their fields of study, with grants towards organisation of seminars, symposia, refresher courses, workshops, conferences etc. The programmes have been extensively utilised by the academic community as is evident from the increasing number of proposals being considered by the Commission in the past few years. While during 1977-78, 311 seminars, symposia etc. were organised with University Grants Commission support, in 1978-79, 293 seminars, symposia etc. were organised as detailed below :

	Humanities and Social Sciences	*Sciences*	*Total*
(i) Seminars	82	25	107
(ii) Symposia	11	27	38
(iii) Workshops	14	9	23
(iv) Refresher Courses	9	3	12
(v) Summer Institutes	56	57	113
Total	172	121	293

6.03 The programme was reviewed by a Committee appointed for the purpose. The revised norms suggested by the Committee have already been adopted. The following important points also emerged from the review :

(a) The organisation of seminars/symposia/refresher courses/summer institutes would be meaningful only if they are organised after adequate preparation. Apart from adequate preparation, well documented papers would be presented and there would be meaningful exchange of views by experts on various schemes having a direct bearing on the teaching and research programmes of the universities and other institutions of higher learning.

(b) It was noted that there was some lack of clarity as to the objectives and distinctiveness of these programmes and a document would be prepared with the help of a Committee which will outline the objectives and methods of approach and techniques as also content of programmes. The subject panels would be requested to suggest interdisciplinary areas where these programmes could be organised. Important reports in respect of these programmes would be circulated to all universities and institutions of higher learning.

(c) The planning of these programmes will be done in such a way that these are not concentrated in a few enterprising departments.

(d) There is some communication gap regarding the guidelines and details relating to this programme and a suitable publication would be brought out by the Commission to bridge this gap.

(e) All-India Institute and other similar programmes would be organised on specific areas which are relevant and for this the assistance of the subject panels would be enlisted.

(f) It would be necessary to prepare these activities in such a way that the Commission approves the organisation of All-India Institute one year in advance to facilitate adequate and proper preparation.

Follow up action has already been taken on the above recommendations.

6.04 English Literature Seminars

Two English literature seminars covering various aspects of poetry, drama and fiction were organised in January, 1979, one at the University of Rajasthan and the other at the Kerala University. The seminars were organised on All-India basis under the joint auspices of the University Grants Commission, the Central Institute of English and Foreign Languages, Hyderabad and the British Council. The faculty of the seminar was drawn from universities in U.K. and India.

6.05 Summer Institutes in English Language Teaching

The programme of Summer Institutes in English Language teaching was initiated by the Commission in 1965 with the main objective of assisting the universities in the use of English, as a structured and dynamic language of communication and to develop it as an effective second language, rather than as a literature course which had been the tradition till then. The Central Institute of English and Foreign Languages, Hyderabad, the British Council, New Delhi and financial assistance from the Commission have helped in directing English language teaching institutes. During 1978-79 no English language summer institute was organised. However, the Advisory Committee on English Language Teaching recommended that the universities may be advised to send only such proposals for summer institutes for their teachers which are preceded by adequate preparation, such as, correspondence courses or for special institutes for faculty improvement with a clear and well defined programme.

6.06 National Associateships

The University Grants Commission initiated during 1970 a scheme of National Associateships in Sciences, Humanities and Social Sciences, Engineering and Technology and Agriculture with a view to assisting talented university/college teachers, generally below the age of 35 years and engaged in worthwhile research, to visit and work for short periods (not exceeding three months at a time) at other university centres/research institutions/ national laboratories which have special facilities (e.g. research groups, laboratory/library facilities etc.) relevant to their respective field of work and active research interest. This programme has had a useful impact in promoting research efforts and also in essential interaction between university faculties and research personnel in R & D laboratories etc.

6.07 The scheme of national associateships was started initially with the awards tenable for a five-year period. Beginning from the year 1975-76, the following two categories of national associateship awards are available.

(a) National Associateships extending over a five year period

Teachers selected under this programme will be kept on the national associateship roll for a period of five years from the date of selection and within this period, the teacher concerned can plan and visit the institutions of his choice in India (including universities, national laboratories and other institutions engaged in research) for a maximum of three times, once in a year for periods of not more than three months. If a fellow fails to undertake at least one such visit within the initial period of three years from the date of award, his name will be taken out of the national associateship scheme roll.

(b) National Associateships extending over one year duration only

This short-term award has been instituted to enable such teachers who are selected under the programme, to undertake within a period of 12 months of their selection only one visit not exceeding three months, to work at any of the universities, research institutions having specialised facilities connected with their research work.

The total positions available under the five years' scheme are 300 against which 218 have been filled upto 31-3-1979. The total positions available under the one-year scheme are 100 out of which 82 have been filled upto 31-3-1979.

6.08 National Fellowships

Twenty National Fellowships are available for teachers, generally professors and readers, with recognised academic achievements, to avail themselves of a year or two off from normal duties and to devote their efforts exclusively to research and writing of results of their study. Teachers selected under the programme receive their normal salary and allowances and a fellowship allowance of Rs. 250 per month in addition to a grant of Rs. 3,000 a year for secretarial assistance, travel and contingent expenditure. During the year 1978-79, two awards were made under the scheme. The total number of awardees including those selected earlier was twenty at the end of 1978-79.

6.09 National Lectures

The scheme of National Lectureship was initiated in 1970-71 to enable outstanding teachers and research scholars to visit university departments for delivering a series of lectures in their special fields and to participate in the academic programmes of host universities. The Commission provides to the selected teachers an honorarium of Rs. 1,500 and a grant of Rs. 250 for preparation of lecture aids etc. in addition to travel expenses. During 1978-79, 29 teachers participated in the programme drawn from several major subjects and disciplines. The list of teachers is given in Appendix-XXVIII.

6.10 Teacher Fellowships under Faculty Improvement Programme

The teacher fellowships are mainly available for teachers from affiliated colleges in humanities including social sciences and science subjects to work towards either an M.Phil. or a Ph.D. degree, from one to three year period, in an institution having necessary facilities for such advanced study and research within the country.

A teacher selected under the award receives a living expense allowance of Rs. 250 per month from the University Grants Commission in case the place of research is more than 32 kilometres from his normal place of

duty (in addition to his salary and all allowances including annual increments which have to be provided by college authorities) from the date of his joining research alongwith a grant of Rs. 1,500 per annum for contingent expenditure for research work. The Commission pays to the college salary of a substitute who may be appointed by the college in accordance with the rules framed by the state government or the university concerned on the basis of UGC guidelines. This has enabled new entrants to obtain essential teaching experience and to provide employment to academically qualified persons.

Since 1978, the Commission has decentralised the implementation of this programme and for this purpose 338 departments of universities/institutions/IITs/laboratories/BARC/TIFR and national laboratories and other institutions of national importance have been identified. Each of these departments can accept upto ten teacher fellowships at any given time.

Recently the Commission decided that the departments identified under Centres of Advanced Study and Special Assistance programme may be allowed additional intake of five teacher-fellows annually and these persons can be from the university departments and may not be required to register for a degree. Similar teacher fellowships could be available also in the institutions of national importance and national laboratories, identified for the purpose of participating in the faculty improvement programme. The duration of such teacher fellowships would be limited to one year and the Commission would not pay the salary of the substitutes in the case of such teacher fellows coming from university departments. The total grant paid during 1978-79 under this programme is Rs. 234.96 lakhs. In addition, individual colleges can also send teachers under this programme by utilising the funds placed at their disposal by the Commission under faculty improvement programmes. Thus a college can utilise for faculty improvement programmes, the entire sum of Rs. 5 lakhs available to it. The programme has become very popular and many colleges have used this provision under development schemes.

6.11 Travel Grants for attending Conferences etc.

Travel grants are available to teachers in the universities/colleges and full time post-doctoral fellows for participation in international conferences and seminars to present their research results and to benefit from participation in the discussions. The provision for this purpose (except for post-doctoral fellows) is included in the unassigned grants placed annually at the disposal of the universities. The Commission's assistance in respect of teachers in the university is limited to the extent of 50 per cent of the travel costs, registration and living allowance, provided the other 50 per cent is met by the university/state government. The colleges can also enable the participation of teachers working with them in international conferences, provided they are willing to meet 50 per cent of the cost of international

travel from their own or university or government funds. In such cases, the remaining 50 per cent of the expenditure is provided by the Commission, after evaluation by referees regarding the value of the paper/research work to be presented by the teacher. A few selected post-doctoral fellows can, on the same basis, be assisted by the Commission on a 100% basis for participating in a conference. On the recommendations of a committee, the Commission has decided to extend this scheme to technical personnel assisting in research in the universities on the same terms and conditions as to teachers in the universities. Only scientific/technical officers enjoying a scale of not less than Rs. 700-1300 will be considered for such assistance.

The universities/institutions can spend upto 75 per cent of the unassigned grant towards travel and other expenditure on attending international conferences, seminars etc. in accordance with the guidelines.

In 1978-79, travel grants amounting to Rs. 2.94 lakhs were paid to the colleges to enable teachers for attending conferences within the country and abroad. In addition, unassigned grant of Rs. 23.68 lakhs was placed at the disposal of the universities.

6.12 Travelling Fellowships or Special Visiting Professorships and Associateships for Creative Writers and Creative Artists

The Commission accepted the following recommendations of the Committee appointed by it to work out details of the scheme for travelling fellowships or special visiting professorships and associateships for creative writers and creative artists.

The Visiting Fellowships or Professorships scheme may be extended to cover creative artists and writers so that they can be in residence and work at a university centre for a period of three months to one year. About 20 such fellowships/professorships—one or two positions in a university may be created in university centres.

The selection of the visiting fellows may be made by the identified university centres by a selection committee presided over by the vice-chancellor/pro-vice-chancellor of the university concerned, and consisting of three academics of the university of which one may be the dean/professor/head of the faculty of music/performing/fine arts and two outside experts of which one should be a UGC nominee.

The visiting fellow may be paid an honorarium upto Rs. 3,000 per month. In addition, he may be allowed a contingent expenditure upto Rs. 2,000 per annum.

A suitable provision may be made to provide for the travelling expenses of the visiting fellow from his residence to join the selected university centre and back to the residence at the end of the term.

Suitable furnished residential accommodation may be provided to the visiting fellow at the university centre. This could be kept in view while fixing his honorarium. Visiting fellowships for creative artists were provid-

ed in the following universities:

(i) Madras University (1)
(ii) Mysore University (1)
(iii) M.S. University of Baroda (2)
(iv) Banaras Hindu University (2)
(v) Allahabad University (1)
(vi) Punjab University (1)

Fellowships for Creative Writers

The duration of the fellowship for creative writers should not be less than six months and upto one year. The following universities were selected for the creation of the fellowships (one each) for creative writers:

(i)	Annamalai	(Tamil)
(ii)	Andhra	(Telugu)
(iii)	Calcutta	(Bengali)
(iv)	Gauhati	(Assamese)
(v)	Gujarat	(Gujarati)
(vi)	Karnataka	(Kannada)
(vii)	Kerala	(Malayalam)
(viii)	Lucknow	(Urdu)
(ix)	Patna	(Hindi)
(x)	Poona	(Marathi)
(xi)	Punjabi (Patiala)	(Punjabi)
(xii)	Utkal	(Oriya)
(xiii)	Vikram	(Hindi)

6.13 Staff Quarters and Teachers Hostels

The Commission continued to provided grants on a limited basis towards the construction of staff quarters and teachers hostels. These included construction approved during the Fourth Plan period and the recommendations made by the Fifth Plan visiting committees.

The Commission agreed to assist the universities to construct faculty residences (both Type I and Type II) on the usual sharing basis for about 50% of the number of additional teaching posts approved by the Commission in the Fifth Plan period. Instead of three categories of residence provided earlier there are now only two types. Grants for the purpose are provided outside the general development plans approved by the Commission on the basis of the Fifth Plan visiting committees.

In order that the universities could utilise the rental income from staff residences constructed with the grant available from the Commission, the Commission has desired that the universities may be advised to create a separate fund so that the rental income should be used for meeting the

expenditure on maintenance of these buildings and if possible for construction of additional houses for faculty members. Thus the rental income should not be treated as a source of general revenue of the university. Assistance to the college for staff housing is included under Rs. five lakh scheme for the development of affiliated colleges.

The position of grants paid to the universities and colleges under the scheme is given in the following table:

Grants paid for Staff Quarters/Teachers Hostels

	1975-76	1976-77	1977-78	1978-79
Universities				
Staff Quarters	19.77	21.16	35.36	188.46
	(22)	(25)	(18)	(42)
Teachers Hostels	7.85	1.8	5.96	9.54
	(9)	(7)	(6)	(7)
Colleges				
Staff Quarters	12.36	12.09	12.38	10.69
	(41)	(33)	(28)	(28)

Note : Figures in brackets indicate the number of universities/colleges.

6.14 Visiting Professors and Visiting Appointments

The Commission further reviewed the guidelines earlier prescribed for appointment of Visiting Professors. The revised guidelines as accepted by the Commission in respect of Visiting Professors/Visiting Appointments are indicated below:

A. Visiting Professors

(i) A Visiting Professor should be an eminent scholar in his field. Generally a person who has held or is holding the post of a professor should be considered for appointment as visiting professor. In case a university desires to appoint any other person under the Scheme of appointment of Visiting Professors, the university should send the necessary bio-data etc. and obtain the prior concurrence of the Commission.

(ii) The maximum tenure of appointment of a visiting professor should be one year and the minimum not less than three months provided that a person who has been appointed and acted once as a visiting professor for a period not less than three months or upto one year should not be reappointed by the same university.

(iii) A Professor should not be appointed as a visiting professor in

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1977-78	1978-79
35.36	188.46
(18)	(42)
5.96	9.54
(6)	(7)
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(28)	(28)

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the same university in which he held a post immediately before or after superannuation.

(iv) Subject to guidelines a person appointed as a visiting professor from outside the country may be paid an honorarium upto Rs. 3,000 p.m. In case a person already serving in an Indian university or an institution is appointed as a visiting professor, the honorarium payable should be determined on the basis of the salary drawn plus 20% of the basic pay provided the two together do not exceed Rs. 3,000 p.m.

(v) If a superannuated person is appointed as a visiting professor, the honorarium payable to him should not exceed Rs. 2,000 p.m. excluding any superannuation benefits.

(vi) If a university proposes to appoint a person who has attained the age of 62 years or more as visiting professor, it should send the necessary bio-data and obtain the prior concurrence of the Commission.

(vii) If a person working abroad on a permanent basis is invited as a visiting professor, the university may meet the cost of international air travel by economy class by the direct route. This will not be applicable to a person who is returning to India at the end of his foreign appointment to take up the visiting professorship. visiting professors appointed from within the country may be paid travel expenses in accordance with the rules of the university.

(viii) It is expected that when a serving person is appointed as visiting professor, the parent university would give him academic leave without pay.

(ix) A university while sending the accounts of the grants paid would also send a brief report of the benefits accrued to the university by the appointment of visiting professor(s).

B. Visiting Fellows

(i) A visiting fellow should be an eminent scholar in his subject. The minimum tenure of a visiting fellow should not be less than two weeks and the maximum upto 8 weeks. The following expenditure be met out of the grant placed at the disposal of a university for appointment of visiting fellows.
  (a) Payment of daily allowance not exceeding Rs. 100.
  (b) Travel expenses in accordance with the rules of the university.

(ii) It is expected that the parent institution will grant to the visiting fellow academic leave with pay and allowances as usual for the duration of the appointment as visiting fellow.

(iii) It is expected that the host university would provide accommodation to the visiting fellow in the university guest house free of charge.

(iv) The same person may not be invited as visiting fellow more than once in a year in the same university.

(v) A university while sending the accounts of the grant paid would also send a brief report of the benefits accrued to the university by the appointment of Visiting Fellow(s).

In view of the importance and value of the universities inviting visiting faculty for short or long period for improvement of standards, the Commission has agreed that a grant of Rs. one lakh may be made available to each of the universities and deemed universities during the plan period. This would be in addition to any provision that the universities may have also made within their fifth plan allocation. This amount would be utilised in accordance with the guidelines laid down by the Commission. It will not be necessary for the universities to refer individual cases under the scheme for approval by the Commission.

During 1978-79, a grant of Rs. 4.95 lakhs was paid to the universities for visiting professorships/fellows/faculty. The implementation of the scheme is under review, continuously, to ensure that it would have perceptible impact through high level participation.

6.15 Visiting Lecturers—Honorarium

The Commission in January, 1977 considered matters relating to payment of honorarium etc., to distinguished scholars/scientists for delivering lectures at universities under various programmes. The Commission has agreed that the honorarium payable to visiting lecturers invited by the universities under the programme of Centres of Advanced Study/Department of Special Assistance, and All-India level institutes suggested by the panels may be at Rs. 100 per lecture subject to a maximum of Rs. 400 for any one person in any one academic year.

Departments participating under the Special Assistance Programme as in the case of Centres of Advanced Study and other quality oriented programmes have necessary financial provision for this purpose.

6.16 Readerships in Colleges

The Commission while considering the "Sen Committee Report" on conditions of service of teachers decided that as recommended by the Committee, readerships/professorships be also created in selected undergraduate and postgraduate colleges and preferably in autonomous colleges. Further, the Commission was of the view that the qualifications and the mode of recruitment to these posts should be the same as applicable for corresponding posts in the university departments. It was decided that as a first step, the Commission may assist the colleges to institute readerships on the condition that after the Commission's assistance ceases, the colleges or state governments would take this over as committeed expenditure.

The procedure for recruitment to the posts of readers will be the same as for corresponding posts in the universities. Assistance from the Commission for the creation of these posts will be on 100 per cent basis upto 31st March 1983. In special cases, it has been considered desirable to provide for posts of professors also in colleges, on the basis of high academic criteria so that the colleges could retain such outstanding academics and thereby maintain high standards.

6.17 Utilisation of the Services of Retired Teachers

The scheme is intended to help universities, colleges and approved institutions to avail of the services of teachers of outstanding merit who have crossed the age of superannuation but who are still active in the field of research. The awardee is expected to devote his time to academic pursuits. He is also required to give about six hours a week for contact work with the students which could be in the form of class room teaching or seminars, guiding of research scholars or special lectures etc.

The tenure of a teacher selected under the scheme is limited to a period of three years in the first instance, subject to a maximum period of five years.

Under the scheme the total placement available for retired teachers is 300. As on 1st January, 1978, 248 teachers were working under the scheme Of those 45.5 per cent belonged to the field of humanities, 30.3 per cent to science subjects, 12.5 per cent to professional subjects and 11.7 per cent to social sciences; 47 were running the first year of the award, 103 their second year, 57 their third year, 10 their fourth year and 24 their fifth year. During the year 1978-79, the usefulness of this scheme was under review, on the basis of its implementation over past ten years. The number of awards made during 1978-79 was 55.

SECTION VII

Adult, Continuing and Extension Education and Correspondence Courses

7.01 While the primary role of the university system is to acquire, preserve and disseminate knowledge, it must also inculcate new values and attitudes, imbuing students and teachers with a sense of social responsibility, and enabling them to use the knowledge and skills acquired by them for the benefit of the society. It is, therefore, important for universities to take up programmes of extension and social service as an activity as important as teaching and research. The student and teacher bodies have also to play an important role in mobilising academic opinion in bringing about essential changes in the value system and for their involvement in programmes of national development.

The schemes of the Commission for providing academic guidance and financial support to the universities towards programmes of (a) continuing education (b) adult education and extension work, and (c) institution of correspondence courses at the undergraduate and postgraduate levels are reviewed in this section.

7.02 Adult Education and Extension Programmes

The main objectives of the programme of adult education and extension are: (a) to enable universities/colleges to become aware of their social responsibility and to bring the universities/colleges and the community closer; (b) to provide to teachers and students opportunities for service leading to a learning experience not otherwise provided within the walls of the campus; and (c) to educate the community and to involve it meaningfully in national development.

7.03 The Commission appointed a Working Group to formulate the guidelines for the implementation of the adult education and extension programmes by the universities and colleges. The guidelines on Adult Education & Extension Programmes formulated by the UGC were circulated to all the universities and colleges. In these guidelines, it has been stressed that universities must assume adult education and extension as an important responsibility. Extension should be made an integral part of the objectives and functions of the universities/colleges and an organic link be established between adult education/extension and university curricula. Extension should not be looked upon merely as a welfare activity for the deprived social groups, but as a process of interaction with the society leading to valuable learning experience and as a means for making higher education relevant to the needs of the society and oriented towards a solution of existing problems.

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7.04 The guidelines envisage (a) review of the role and responsibility of each university and college; (b) review of the curriculum to explore possibilities of making national and social service its integral part; (c) encouraging students to produce methodically a report on the project work done by them, which could become a pre-requisite for earning their first degree; and (d) review of the vacation system, including its duration.

7.05 It has been envisaged that the adult education programmes should be (a) relevant to environment and local needs; (b) flexible regarding duration time, location, institutional arrangements etc.; (c) diversified in regard to curriculum, teaching and learning materials and methods and (d) systematic in all aspects of organisation.

7.06 Besides, educational extension work may be in the nature of universities working with the colleges, and universities as well as colleges working with the secondary and elementary schools in the neighbourhood and helping them to improve standards by inservice education of teachers, sharing of facilities, provision of enrichment programmes of students and discovery and cultivation of talent.

7.07 The Commission has so far approved the proposals of 44 universities and 412 colleges and sanctioned 5,190 centres under NAEP. State resource centres have been established at Sri Venkateswara University and Kashmir University. A Regional resource centre has been established at Panjab University for the States of Punjab, Haryana and Himachal Pradesh.

7.08 The universities have been advised to adopt teaching-learning materials which are available either with State resource centres or with other Government/non-Government agencies. Wherever necessary, the universities will produce suitable teaching-learning materials for which financial assistance will be made available. The Bombay University organised a workshop for bringing out a training manual for the functionaries of adult education programme in universities and colleges. The manual is expected to be published shortly so that it may be circulated among the universities and colleges for their guidance.

7.09 A bibliography of the resource material available on the subject is being prepared under the auspices of the Bombay University and will be circulated among the universities and colleges shortly*. Steps are also being taken to prepare a panel of resource persons in the field of adult education which can be used by the universities and colleges for training of adult education functionaries at different levels.

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* This has since been done.

7.10 Steps have been taken to organise training programmes for the adult education functionaries of the universities and colleges (teachers, supervisors, instructors) whose proposals have been accepted. Such training programmes will be organised at different places within the university system with the help of the State resource centres and other institutions, experts and knowledgeable persons available in the respective regions.

7.11 The Commission has already taken steps to arrange workshops and group discussions, with a view to mobilising the opinion of the academic community as well as the students to promote participation of the colleges and universities in the National Adult Education Programme.

Statewise position of number of Centres sanctioned under the National Adult Education Programme

S. No.	*State/Union Territory*	*No. of Universities involved*	*No. of Colleges involved*	*No. of Centres which have been sanctioned*
1.	Andhra Pradesh	3	13	260
2.	Assam	1	23	250
3.	Bihar	3	8	110
4.	Gujarat	5	56	740
5.	Haryana	1	1	10
6.	Jammu & Kashmir	1	1	10
7.	Karnataka	1	1	10
8.	Kerala	2	9	120
9.	Madhya Pradesh	4	27	330
10.	Maharashtra	5	144	1,740
11.	Orissa	3	12	130
12.	Punjab	3	6	70
13.	Rajasthan	1	4	70
14.	Tamil Nadu	2	73	860
15.	Uttar Pradesh	6	28	360
16.	West Bengal	2	2	20
17.	Delhi	1	4	100
	Total	44	412	5,190

7.12 Continuing Education

The Commission continued to implement the scheme of continuing education through universities. As stated in the 1977-78 Annual Report, the Commission formulated guidelines which inter alia provided for the objectives of the programme, methods, areas, organizational set-up etc. These

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No. of Colleges involved	*No. of Centres which have been sanctioned*
13	260
23	250
8	110
56	740
1	10
1	10
1	10
9	120
27	330
144	1,740
12	130
6	70
4	70
73	860
28	360
2	20
4	100
412	5,190

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1977-78 Annual Report, the
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guidelines were circulated to the universities to enable them to formulate their proposals. The Commission also agreed that the programmes of adult education may include the following:

Professional courses;
Courses for human relations, leadership and management skills;
General Education courses;
Programme for the rural community;
Programme for workers' education;
Cultural activities;
Training of personnel;
Research in adult education.

7.13 On the recommendations of the conferences held in 1976-77 and 1977-78 and the thinking of the Commission, universities have been requested to bring within the purview of the programme, schemes relating to the education of people in rural, tribal and backward areas and the weaker sections of the community, as already underlined in the guidelines.

7.14 Eighteen universities and two institutions deemed to be universities as indicated below were participating in the programme during the year under report:

Aligarh Muslim University, Aligarh; Andhra University, Waltair; Bombay University, Bombay; G.B. Pant University of Agriculture and Technology, Nainital; Gujarat University, Ahmedabad; Jabalpur University, Jabalpur; Jadavpur University, Calcutta; Jammu University, Jammu; Madras University, Madras; M.S. University of Baroda, Baroda; Mysore University, Mysore; North Eastern Hill University, Shillong; Panjab University, Chandigarh; Poona University, Poona; Rajasthan University, Jaipur; Saurashtra University, Rajkot; S.N.D.T. Women's University, Bombay and Sri Venkateswara University, Tirupati; Gujarat Vidyapith, Ahmedabad; Indian School of Mines, Dhanbad.

7.15 The Commission had been providing assistance to the universities on a 75 : 25 sharing basis. It has also agreed to provide assistance to the universities for this programme till the end of 1978-79. In August, 1978, the Commission agreed that universities which reorganize their continuing education programme in accordance with the revised guidelines for adult education may be assisted on 100 per cent basis for a further period of 3-5 years, based on the merit of each proposal.

7.16 Correspondence Courses

The University Grants Commission has accepted the view that correspondence education is a recognised form of education and it can be

tried out in diverse areas and at various levels of education. There are two important considerations to be kept in view in supporting programmes of correspondence courses offered by the universities. Firstly, universities offering correspondence courses enrol students on an all-India basis. Secondly, the need for personal contact programmes, study centres and other facilities for students calls for the establishment of centres/institutes of correspondence courses on a regional basis. In other words, the facility of correspondance courses has to be made available as widely as possible at the same time ensuring that there is no duplication of facilities and standards and the quality of instruction does not suffer.

7.17 The University of Delhi introduced correspondence courses in July, 1962. Presently 20 universities and one institution deemed to be university are offering correspondence courses. These are: Allahabad, Andhra, Annamalai, Bhopal, Bombay, Delhi, Himachal Pradesh, Jammu, Kashmir, Kerala, Madurai, Meerut, Mysore, Panjab, Punjabi, Rajasthan, S.N.D.T. Women's, Sri Venkateswara, Utkal, Osmania, and Central Institute of English and Foreign Languages, Hyderabad. A statement giving the present position of universities offering correspondence courses, their enrolment etc. is at Appendix XXIX.

7.18 The objective of correspondence education is to provide an alternative method of education to enable a large number of persons with necessary aptitude to acquire further knowledge and improve their professional competence. Correspondence courses are thus intended to cater to (a) students who had to discontinue education because of lack of aptitude and motivation but who may later on become motivated, (b) students who cannot find a seat or do not wish to join a regular college or university department, although they have the necessary qualifications to pursue higher education and (c) individuals who look upon education as a life-time activity and may either like to refresh their knowledge in an existing discipline or to acquire knowledge in a new area.

7.19 In the beginning of the V plan, the Commission decided to have specific guidelines for the implementation of the scheme. The main focus in the guidelines is on maintenance and coordination of standards. The guidelines inter alia, provide that:

(a) Ordinarily, correspondence courses at the undergraduate level should be introduced by only one university in a state except when a university proposes to introduce correspondence courses in a new faculty at the undergraduate level or when the university already offering correspondence courses reaches the optimum size (say an enrolment of 10,000) or for other valid reasons.

(b) Correspondence courses should be started only by universities which have well established teaching departments noted for their high standards for, in the absence of good teaching departments, standards are likely to suffer. The academic responsibility for the contents of the correspondence courses in any given subject, and its standards must be taken by the corresponding subject department in the university.

(c) It should be compulsory for every student enrolled in correspondence courses to return a certain number of response sheets, say 20 every year, suitably spread over various subjects.

(d) High priority should be given to the setting up of study centres in areas where there is a concentration of students.

(e) The provision of contact programmes should be an essential feature of correspondence courses in order that the mind of the student is exposed to the mind of the teacher through lectures, seminars and other forms of discussion.

(f) Grants for the introduction of correspondence courses at the undergraduate level should be earmarked for such programmes as contact programmes, study centres, writing of lessons, core staff and library facilities.

(g) Correspondence courses at the postgraduate level should be started only in those universities which have experience of running undergraduate correspondence courses properly for atleast three years. The basis of grants and assessment by visiting committee would be the same as at the undergraduate level but the ceiling of UGC assistance will be Rs. one lakh per subject per annum for a period of five years. The grants should be for core staff, preparation of reading materials, contact programmes, provision of visiting lecturers, books and journals and postal library services.

7.20 It will be seen from the above account that the Commission has taken a number of steps towards the maintenance and coordination of the standards of correspondence education in the country. The formulation of the guidelines is an important step in this direction. The Commission is also keen to see that the schools and institutes of correspondence courses are able to attract and retain the services of bright and talented scholars. It is for this reason that the suggestion has been made that staff in the institutes of correspondence courses should be borne on the strength of the university teaching departments. The academic responsibility for the maintenance of standards also vests in the university teaching departments. The guidelines also include a number of suggestions for bringing about improvements in the instructional material, evaluation of response sheets, establishment of study centres and contact programmes. The grants pro-

vided by the Commission are now earmarked grants specially meant for the improvement of quality. Efforts have also been made to bring about as much coordination as possible, specially in regard to the preparation of instructional material and the contact programmes.

7.21 The working of the scheme of Correspondence Courses was reviewed by the Standing Committee on Part-time and Own-time Education in 1977. The main observations of the Committee are summarised below :

(a) It should be possible for the institutes to introduce new subjects or papers within the existing combinations and the framework of the syllabus adopted by the university. The new subjects or papers should be practical oriented and have a direct bearing on the local environment of students.

(b) The schools and institutes of correspondence courses should prepare instructional material on course unit basis and offer these to students in modular form in order to realise the objectives of continuing education for the community. A certificate could be given for an integrated course comprising course units in a well-defined area.

(c) There should be close collaboration between the school of correspondence courses and the university teaching departments. Teachers seconded to the school of correspondence courses should be available in the parent department during the period of secondment. Similarly, teachers in the university teaching departments should be associated with the preparation of lessons/ guidelines, evaluation of response sheets and personal contact programmes.

The Committee is now engaged in revising the guidelines in the light of experience of the past few years.

SECTION VIII

Cultural Exchange Programmes and International Collaboration

8.01 Cultural Exchange Programmes

The University Grants Commission continued to implement such items of the Cultural Exchange Programmes with foreign countries as were assigned to it by the Government of India. These programmes involved exchange of teachers/scholars for lecture-cum-study, exchange of views, scholarships and fellowships, development of bilateral academic links, organisation of joint seminars and provision of foreign language teachers to universities. The main purpose of implementing these programmes is to promote academic and scientific contacts and exchange of visits of teachers, scholars and scientists so as to exchange experience, develop collaborative research programmes of common interest and to have an idea of the developments which are taking place in different countries in various fields of higher education. The visits to foreign countries also help the Indian teachers and scholars to keep themselves abreast of developments that are taking place in those countries in teaching and research in up-dating their knowledge, eventually enabling the institutions to raise their standards of teaching and research and to enable academics abroad to have a better idea of progress in the educational, scientific and cultural fields in India. During the year under report, 58 scholars from foreign countries visited India under these programmes and 45 Indian teachers went abroad.

As already indicated in last year's report, the Commission has now shifted its emphasis in implementing these programmes from general exchange of visits by academics from both sides to the development of bilateral academic links in identified fields. The Commission prefers discipline-to-discipline link between universities in India and those in foreign countries. The identification of priority areas for academic collaboration is done with the help of expert committees. Once the priority areas have been identified, the institutions in the two countries for undertaking collaborative programme which may involve exchange of visits of academics, training programmes and implementation of joint research projects are specified on the basis of criteria laid down for the purpose. It is not necessary that the academic link may be between a single institution in India and that in the foreign country concerned. Also, institutions in each country are expected to function as the focal points and collaborate with others which are doing work in that field in each country. Areas of priority interest have been identified in the case of Belgium, Britain, Czechoslovakia, FRG, France, GDR, Hungary, Rumania, USA and USSR under Cultural Exchange Programme and allied programmes and further action with regard to development of academic programmes between institutions in the above areas is

being taken. During the year, a seven-member delegation from Poland visited India for identifying areas with a view to developing academic collaboration between institutions of higher education in those fields. The areas will be finalised after the return visit of the Indian delegation to Poland (the Indian delegation has since visited Poland during 1978-79 and the areas for collaboration have been finalised).

During 1978-79 the following joint seminars were organised in terms of the provision of the Cultural Exchange Programmes:

(1) Indo-Soviet Seminar held in India in April, 1978 on Management of State/Public Enterprises in India and USSR.
(2) Indo-Soviet Seminar on National Development within the framework of National Planning held in USSR during October-November, 1978.
(3) Indo-Hungarian Seminar held in March, 1979 in India on:
    (a) Functioning of public sector undertakings including planning at the enterprise level.
    (b) Terms of trade between agriculture and industry.
(4) Indo-French Seminar held in France in May, 1978 on Educational Policies and Planning.
(5) Indo-French Seminar held in India in December, 1978 on Urban Growth.
(6) Indo-French Seminar held in India on Transition from Feudalism to Capitalism.

A five-member team of Hungarian scientists organised a workshop on analytical chemistry for two weeks at Panjab University, Chandigarh in January, 1979.

The Commission nominated teachers/students for the award of fellowships/scholarships for higher studies in FRG, France & USSR in terms of provisions of the Cultural Exchange Programmes with these countries.

Foreign language teachers in Russian, German, Polish, Hungarian, Rumanian, Bulgarian, French and Serbo-Croatian languages were provided to various universities as provided in the Cultural Exchange Programmes.

8.02 Indo-British Universities Collaboration Programme

The programme provides for the development of academic collaboration between selected universities in India and UK in identified fields. There was an exchange of 23 academics from both sides in terms of the programme and joint research projects were undertaken for implementation. The concept underlying the Indo-British universities collaboration programme had been reviewed in consultation with the British Council and in the light of this the question of taking up additional bilateral academic links between universities in the two countries in humanities and social sciences is under

consideration. During the year the Commission reviewed the following joint programmes under this scheme:

(a) Indian Institute of Science, Bangalore and Liverpool University, UK in Electrical Engineering.
(b) Department of Physics, Poona University and York University, UK/University College, London.
(c) Department of Chemistry, Poona University and Manchester University, UK.

The programme for providing assistance to university and college teachers for collection of source material (not available in India) from United Kingdom for their research work continued during the year. Seven teachers visited UK under this programme during 1978-79 for the collection of source material for their research work. The international travel was provided by the UGC and hospitality in UK by the British Council.

8.03 CSIR-CNRS (France) Programme

The CSIR, which is implementing the above programme, has allocated 200 man-days for the visit of Indian scientists to France for their research work. The Commission provides to and fro travel expenses of the Indian scientists and the CNRS provides hospitality for the duration of stay in France. The Commission nominated five teachers for a visit to France under this programme in addition to those sponsored under Cultural Exchange Programme.

8.04 Indo-US Fellowship Programme

The Commission was allocated 10 fellowships and visitorships for Indian teachers to go to USA for advanced post-doctoral research work. Under the scheme, each side can convert one fellowship of 10 months duration into 3 visitorships of a maximum period of 13 weeks each. 16 Indian scholars were nominated for 7 fellowships and 9 visitorships under this programme. The Commission accepted 10 fellowships and 15 visitorships for 6 to 12 weeks each for American scholars to visit India for their research work under this programme. In addition, the Commission also accepted the visit of three American scholars for a period of three weeks each under this programme.

The Indo-US Seminar on the relationship of university research in Science and Technology to National Development was organised by the University Grants Commission at Srinagar in September, 1978 under the programmes of the Indo-US Commission on Education and Culture. The proceedings of the Seminar are being published.

8.05 Indo-US Exchange of Scientists Programme

This programme is also being implemented by CSIR in India with

National Science Foundation in USA. The CSIR has made available 150 man-days to UGC for the visit of Indian teachers in USA. The Commission provides to and fro travel expenses and the US authorities the hospitality of the Indian visitor while he is in America. The Commission nominated five Indian teachers for a visit to USA under this programme and also received five American scholars during the course of the year.

8.06 Commonwealth Academic Staff Fellowships/Scholarships

The University Grants Commission has been coordinating with Commonwealth Scholarship Commission in U.K. in making nominations for the Commonwealth Academic Staff Fellowships or Scholarships to enable promising staff members in Indian Universities to obtain experience in a university or similar institution in the U.K. A beginning in this direction was made in 1969-70. The Commonwealth Academic Staff Fellowships are intended primarily, though not exclusively, to help universities in developing Commonwealth countries to enhance the experience of their academic staff. Though no special areas of study have been identified, the fields of medicine and surgery have been excluded as facilities are already available under the Commonwealth Medical Awards for the purpose.

For the year 1978-79, the UGC recommended 22 scholars for fellowships and 15 for scholarships. The Commonwealth Scholarship Commission in U.K. has finally selected the following:

	Selected	*Reserve*
Fellowships	10	5
Scholarships	5	1
Total	15	6

8.07 Programme of Exchange of Visits by Younger Scientists and Social Scientists between India and U.K.

The programme of Exchange of Visits by Younger Scientists between India and U.K. began in 1963, initially with provision for six places each way. Subsequently this number was raised to eight and on the basis of periodical reviews of the benefits accruing to the participating scientists and institutions under this programme, the number of places available has been increased to twenty, making provision for five places for social scientists also to participate in the programme.

The programme enables young scientists in the age group of 25 to 35 years in the universities in India and U.K. who have shown potential and promise of teaching and research work in their chosen areas, to spend

upto three months in one or more laboratories in the host country for exchange of ideas regarding education and research and to establish worthwhile contacts. The opportunity of working with the university research groups has long range significance and value in promotion of contacts at working level between the scientists and social scientists in the universities in India and U.K. Generally it is expected that the visiting scientists or social scientists would spend about one-half to two-third of their total period of three months visit to work in an institution best suited for their scientific, educational and research interests and utilize the remaining part of their time to visit two or three other institutions engaged in work in the area of specialization.

In the case of visits by Indian scholars and scientists, the UGC meets the expenditure on return economy class airfare, by direct route to London and back and the British Council provides allowances to meet expenditure towards board and lodging for the period of their stay in U.K. In the case of visits by British scholars and scientists, the British Council meets the expenditure on the return air fare to India and back, and the UGC provides allowances for stay in India.

During 1978-79, 20 scientists from India visited U.K. and the same number visited India from U.K. under this programme.

8.08 Scheme for assisting Universities for inviting Indian scholars working abroad

The Commission has initiated a scheme of assistance for Indian scholars working in universities abroad who are invited by universities in India during their sabbatical leave period. The Commission's assistance is available to enable these scholars to spend part or whole of their sabbatical leave period for teaching and research in Indian universities. Such assignments under the scheme should be for a period of not less than a term (three months) during the academic year and should not exceed one academic year in any case. The scholars are paid an honorarium of Rs. 1,000 per month for the period of their work in the Indian universities. There is no provision, ordinarily, towards the cost of international travel. The Commission provides necessary assistance to university to meet the admissible expenditure towards payment of honorarium and travel within India in connection with approved programmes at other universities engaged in work in the subject of the scholar's research interest. During 1978-79, two proposals were received under this scheme and only one was implemented.

8.09 Colombo Plan

Under the Colombo Plan, information relating to various courses/ material from Commonwealth countries is received through the Government of India. The material is circulated to universities for sending nominations. The preliminary selection is made by the Government of India

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8.10 Unesco Programmes

The information material regarding various programme courses received from the Ministry of Education and Social Welfare, Ministry of Finance and the Ministry of External Affairs, etc. is circulated to universities/institutions for their information for the submission of applications of suitable candidates, if any, direct to the organisers of the course. The UGC does not have any financial liability. As regards the courses conducted by the International Centre for Theoretical Physics, Trieste, Italy, the nominations of candidate/scholar are done by them under intimation to the UGC. Keeping in view the availability of funds, the UGC supports a number of candidates whose airfare (economy class to and fro) to the extent of 50% is borne by the UGC, subject to the condition that the ICTP meets the other half. During 1978-79, the UGC agreed to support 6 scholars for airfare (50%) for attending three such courses at ICTP, Trieste.

SECTION IX

Development of Universities

9.01 The general approach of the Commission to the development programmes of universities was outlined in Section II of the University Grants Commission report for the year 1975-76. The main emphasis has been on consolidation and reorientation of the existing facilities in relation to their academic teaching/research programmes towards meeting felt social needs, especially those of the under-developed sections and more particularly those living in the rural areas.

Excluding agricultural universities and Gujarat Ayurveda University*, the UGC is presently concerned with the development of higher education in 78 universities. The Commission has been striving to help in bringing about interlinkages between professional areas of agriculture, technology and medical sciences on the one hand and general areas of humanities, social sciences and sciences on the other through a number of programmes and projects, as no area of higher education can develop adequately in isolation.

In regard to the maintenance of standards and coordination of work of facilities in universities within specific frames of reference, the University Grants Commission has been conscious of the fact that best results can only be achieved by developing simultaneously the essential physical infrastructure of class rooms, libraries, laboratories, workshops, hostels etc. all of which demand substantial investment and to initiate programmes for qualitative improvement. The Commission has tried to utilise the limited resources available with it in the best possible manner towards these objectives of growth and change, together constituting development.

9.02 The Commission provides development assistance to the State Universities** but in respect of the Central Universities the Commission pays maintenance as well as development grants. Development grants to

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* Apart from the agricultural and technological universities and Gujarat Ayurveda University, six universities have not yet been declared fit to receive assistance under section 12(A) of the UGC Act. The total number of universities at the end of 1978-79 was 108.

** Maintenance grants are paid to four institutions deemed to be universities viz. Jamia Millia Islamia, Indian Institute of Science, Bangalore, Tata Institute of Social Sciences, Bombay and Central Institute of English and Foreign Languages, Hyderabad and the Roorkee University Centre for Water Resources Development Training.

the universities for the Fifth Plan period were approved on the basis of proposals made by the universities and accepted by the Commission on the basis of evaluation by expert committees. These included projects relating to the construction of academic buildings, library buildings, staff quarters, teachers hostels, student hostels, study homes, non-resident student centres, purchase of books, journals and equipment, appointment of additional teaching staff and technical supporting staff and other miscellaneous schemes approved by the Commission.

9.03 It may also be noted that the Commission pays development grants to the central universities on cent per cent basis whereas in the case of state universities the matching share, contingent in various schemes, is paid by the universities/state governments. Thus the total amount available to the state universities for development prupose is higher than indicated by figures of universitywise allocation which represents the Commission's share only. However, the utilization of plan funds by the state universities remains inadequate or is sometimes delayed by the fact that state universities are required to provide matching contribution and also assurance from the state government regarding the maintenance of faculty positions after the assistance from the Commission ceases, at the end of a plan period.

The assistance during 1978-79 was mainly utilised by the universities to bring to completion the projects accepted in the Fifth Plan.

9.04 Grants for Plan Projects

Development proposals of the universities in the Fifth Plan period were accepted on the basis of the recommendations of the visiting committees keeping in view the availability of resources. The visiting committees consist of experts in various fields of specialization in the major subjects and are generally drawn from the university system and have, therefore, intimate knowledge of the needs and requirements of individual departments, inter-disciplinery approaches and the general direction in which the university should move in order to improve its standards of teaching and research. In the Fifth Plan period it was decided to associate a representative of the state government with the work of the visiting committees so that the state governments become fully involved in the development programmes of the universities even at the initial stage of planning. The visiting committees were specially asked to take a coordinated view of the development of the universities within a state. This procedure ensured the largest measure of participation by the academic community in planning and in determining priorities and programmes and bringing about coordination as well as the optimum utilization of resources. Grants for Plan projects are given in Table IX.1 (page 91).

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TABLE IX.1

(Rupees in lakhs)

Plan Projects	*1974-75*	*1975-76*	*1976-77*	*1977-78*	*1978-79*
A. Grants to central & state universities for humanities.	326.38 1.53*	304.82 1.99*	554.72 0.10*	443.71 0.78*	571.45 8.34*
B. Grants to central & state universities for science.	598.83 10.24*	776.14 5.74*	1,158.84 3.51*	1,060.85 2.66*	1,152.19 8.77*
C. Grants to central & state universities for engineering & technology (including engg. colleges).	270.93	393.34	577.78	442.31	606.54
D. Grants to constituent/ affiliated colleges.	381.07 0.09*	277.34 0.29*	335.70 0.06*	1,199.98 0.56*	1,023.98 4.27*
E. Grants to central & state universities for miscellaneous schemes.**	897.41 7.88*	1,072.82 4.39*	1,197.37 2.97*	1,253.76 0.90*	1,870.85 12.83*
F. Miscellaneous expenditure.	16.17 0.06*	23.42	31.23	38.61	53.35
Total Plan***	2,490.79 19.89*	2,847.88 12.71*	3,849.65 7.35*	4,439.22 5.05*	5,278.36 34.24*

A statement of total development grants disbursed by the UGC to each university (statewise) is given in Appendix XXX.

9.05 The Commission also continued to provide grants under Plan expenditure to the Banaras Hindu University, Aligarh Muslim University and Delhi University for medical education. The following grants were paid in 1978-79 (Table IX.2):

* By Adjustment.

** This has, in fact, reference to grants paid to the central and state universities for various schemes including important programmes such as (a) Examination reforms, restructuring of courses, correspondence courses, adult and continuing education, (b) Summer institutes/seminars, faculty awards, teacher fellowships, cultural and bilateral exchange programmes, establishment of chairs, (c) college science improvement programme and college humanities and social sciences improvement programme, (d) Guest houses, (e) Student welfare programmes including study homes, health centres and non-residential student centres, scholarships, (f) Medical colleges of central universities including hospitals attached to them (g) Grants to central universities for development and (h) Miscellaneous including printing presses, common facilities including publications grant, other academic programmes and unassigned grants. Details of grants under these schemes are given in *Appendix XXX*.

*** From 1977-78 basic grants to colleges for books, journals and equipment and grants for the development of playfields have been included under budget head 'D' and hence the figures are not comparable with those of earlier years.

TABLE IX.2

(Amount in lakhs of Rupees)

	Medical Colleges	*Hospitals*
1. Aligarh Muslim University	21.99	5.62
2. Banaras Hindu University	64.86	77.06
3. Delhi University College of Medical Sciences.	28.95	—

The maintenance expenditure of the medical colleges at the Aligarh Muslim University and the Banaras Hindu university and the attached hospitals was met out of block grant of the universities.

The Commission also continued to pay grants to the central universities for their campus development under plan. During 1978-79, a grant of Rs. 29.68 lakhs was sanctioned for the purpose.

9.06 The following grants were paid to the universities and institutions deemed to be universities during 1974-75, 1975-76, 1976-77, 1977-78 and 1978-79.

TABLE IX.3

(Rupees in lakhs)

Purpose	*1974-75*	*1975-76*	*1976-77*	*1977-78*	*1978-79*
1. Science Departments*	609.07	781.88	1,162.36	1,063.51	1,160.96
2. Humanities & Social Sciences*	327.91	306.82	554.82	444.49	579.79
3. Engineering and Technology*	271.02	393.64	577.88	442.46	606.54
4. Miscellaneous Schemes**	905.28	1,077.21	1,194.34	1,254.66	1,883.68

9.07 Grants for Development of Science

The assistance given to the universities and colleges for science education and research during 1974-75, 1975-76, 1976-77, 1977-78 and 1978-79 is indicated in table IX.4.

It will be seen from this table that expenditure on science education and research in 1978-79 followed the same pattern as noticed since 1974-75 viz. expenditure on equipment accounting for maximum followed by expenditure on books and journals and buildings.

* The figures include research fellowships and support for departmental projects and miscellaneous schemes etc. and hence do not tally with those given in subsequent tables in respect of science departments, humanities and social sciences and engineering and technology.

** Refer to footnote on previous page (*Table IX.1*).

Amount in lakhs of Rupees)

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(Rupees in lakhs)

76-77	*1977-78*	*1978-79*
162.36	1,063.51	1,160.96
554.82	444.49	579.79
577.88	442.46	606.54
194.34	1,254.66	1,883.68

TABLE IX. 4
Grants for the Development of Science

(Rupees in lakhs)

S. No.	*Item of Expenditure*	*1974-75*	*%*	*1975-76*	*%*	*1976-77*	*%*	*1977-78*	*%*	*1978-79*	*%*	*Total expenditure 1974-75—1978-79*	*%*
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*
1.	Staff	59.81	14	12.92	2	161.48	19	48.35	7	52.16	6	334.72	10
2.	Equipment	174.97	39	268.09	50	332.16	39	320.22	14	434.02	47	1529.46	44
3.	Books & Journals	54.54	12	101.30	19	125.28	15	170.93	23	207.71	22	659.76	18
4.	Buildings	80.15	17	52.52	10	77.30	9	107.75	15	116.88	13	434.60	12
5.	Centres of Advanced Study	50.07	10	36.65	7	85.12	10	17.69	2	42.15	5	231.68	7
6.	Special assistance to selected departments	36.41	7	57.72	11	59.03	7	59.76	8	55.45	6	268.37	8
7.	Other schemes	2.38	1	5.70	1	4.16	1	10.07	1	9.12	1	32.44	1
	Total	458.34	100	535.90	100	844.53	100	734.77	100	917.49	100	3491.03	100

9.08 University Service and Instrumentation Centres (USIC)

During the Fifth Plan period the UGC has launched an important programme for the development of Instrumentation and Service Centres in the various universities with the main objective of assisting universities to maintain and repair equipment and also to pool together costly sophisticated equipment so that various departments can use them as a common facility. The programme was initiated during the year 1976. The objectives of the University Service and Instrumentation Centres (USIC) are:

1. To repair and service instruments;
2. To design and fabricate attachments for or modifications to the existing equipment;
3. To train instrument scientists and technicians;
4. To develop instrument R & D; and
5. To provide analytical services by pooling together major equipment in the different departments under the common instrumentation centres.

A note on the objectives and functions of USIC is given in Appendix XXXI(a). The Commission has constituted a Standing Committee for the purpose of examining the various proposals received from the universities for establishing USICs. Based on the recommendations of this Committee the Commission has so far approved proposals of *fifty* universities for setting up USICs. These centres are being set up in these universities and are expected to play a vital role in improving facilities for teaching and research and training for necessary manpower. A list of universities for which the USICs are approved is given in Appendix XXXI (b).

The Commission has also established two Regional Instrumentation Centres with a view to serving the needs of instrumentation facilities particularly regarding repair of sophisticated equipment, organising courses and also design and develop major instruments in a region. The Commission established one such Centre in the Bombay University and another in the Indian Institute of Science, Bangalore.

9.09 Science Education Centres

The main objective of the establishment of Science Education Centres is to promote the teaching of science, innovative programmes at the university level, design and fabrication of tools required for science teachers,

production of materials including text books, laboratory manuals etc.

The Commission has approved the establishment of Science Education Centres at the Madurai and Rajasthan Universities. A grant of Rs. 5 lakhs has been sanctioned to each of these universities as 'seed money'.

The education centre at Madurai known as the Biology Education and Extension Programme (BEEP) was approved by the Commission on the basis of the work done by it during the first and second phase of COSIP-ULP in Biological Sciences.

The objectives of BEEP relate to:

(i) Development of instructional modules and related activities, and

(ii) Development of teaching aids and the R&D work associated with it.

The UGC assistance for BEEP would mainly provide for creating the essential infrastructural facilities and for working expenses over the next three years.

9.10 UNESCO Coupons

The Commission released to the universities/colleges coupons worth Rs. 2,34,790 equivalent to $26,590. The UNESCO coupons are allotted to the colleges/universities for the import of spare parts, accessories, ancillary equipment and chemicals.

9.11 Development of Wild Life and Research in Universities/Committee on Environmental Education

A reference was made in the earlier report to workshop on wild life studies sponsored by the University Grants Commission and held at the North Eastern Hill University, Shillong from 6th to 8th October, 1976.

The Workshop brought into focus the present status of studies on wild life in India, the need and urgency of promoting studies on wild life conservation and management and the effective role in this important area of biological sciences. The recommendations are being used as a plan for action by the Commission. In pursuance on the deliberations of the workshop, following action was taken:

A special training programme in wild life biology sponsored by the

Commission was organised at the Centre of Wild Life Studies, Indian Institute of Science, Bangalore from 1st January, 1978 to 30th June, 1978. The programme aimed at training resource personnel to initiate activity in the field of Wild Life Biology in the undergraduate colleges. Fifteen university and college teachers from different regions of the country were selected to participate in the programme. The programme included three months of training carried out in field at Mudumalai and Mundathurai Wild Life Sanctuaries with the cooperation of the Karnataka and Tamil Nadu Forest Departments. The course also received assistance from World Wild Life Fund and professional people in wild life. The training programme provided strong theoretical underpinning to research in Ecology and strong field orientation to the participants. This is to be followed by a three month project work by the participants. The project reports dealt with specific problems in Wild Life Biology and have helped in nucleating small research groups in the colleges. Specific research projects from the institution would be considered for support.

9.12 Environmental Education Committee

The University Grants Commission while considering that the universities have a specific role to play in the understanding of environment in all its aspects in an interdisciplinary way has decided to appoint an Environmental Education Committee. The Committee will frame necessary guidelines to develop studies in environmental engineering, ecology, environmental chemistry, environmental biology etc.

9.13 Grants for the Development of Humanities & Social Sciences

The grants paid to the universities during the years 1974-75, 1975-76, 1976-77, 1977-78 and 1978-79 for the development of humanities and social sciences are indicated in table IX.5.

As compared to the expenditure on the development of science departments, the expenditure on the humanities and social science departments was on the whole lower during the entire period from 1974-75 to 1978-79. However, the expenditure on staff was higher in the humanities and social science departments. Year to year variations in regard to itemwise expenditure are not to be given much significance, but the total expenditure for the years 1974-75 to 1978-79 shows the same trend as reflected in the year 1978-79 in respect of expenditure being the highest for books and journals followed by expenditure on staff.

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TABLE IX. 5

Grants for the Development of Humanities and Social Sciences

(Rupees in lakhs)

S. No.	*Item of Expenditure*	*1974-75*	%	*1975-76*	%	*1976-77*	%	*1977-78*	%	*1978-79*	%	*Total Expenditure 1974-75—1978-79*	%
1.	Staff	76.10	32	19.78	11	185.96	44	68.92	21	73.58	16	424.34	26
2.	Equipment	7.80	4	4.57	2	30.93	7	29.13	9	54.23	12	126.66	8
3.	Buildings	42.21	18	33.98	18	24.85	6	31.24	10	38.19	8	170.47	10
4.	Books & Journals	80.48	34	101.09	54	150.18	35	155.00	49	270.34	57	757.09	46
5.	Centres of Advanced Study	13.82	6	13.23	7	19.48	5	13.23	4	9.79	2	69.55	4
6.	Special assistance to selected departments	4.07	2	5.03	3	6.05	1	14.45	5	14.69	3	44.29	3
7.	Other schemes												
	(a) Area Studies	3.11	1	5.52	3	7.65	2	5.63	2	10.20	2	44.73	3
	(b) Teacher Education	8.42	3	4.20	2	—	—	—	—	—	—	—	—
	Total	236.01	100	187.40	100	425.10	100	317.60	100	471.02	100	1637.13	100

9.14 Development Grants for Engineering & Technology

Assistance provided by the Commission to the universities for the development of engineering and technology during 1974-75, 1975-76, 1976-77, 1977-78 and 1978-79 is indicated in Table IX.6.

It will be seen that the expenditure on equipment, which was 46% of the total expenditure on the development of engineering/technology during 1977-78 rose to 60% in 1978-79. Similarly, expenditure on books and journals went up from 10% in 1977-78 to 14% in 1978-79. On the other hand, expenditure on fellowships/scholarships declined from 32% in 1977-78 to 17% in 1978-79.

The total expenditure on engineering and technology which had gone down in 1977-78 as compared to 1976-77 increased substantially during 1978-79. The general trend of expenditure in 1978-79 was the same as in the earlier years viz., expenditure on equipment, fellowships/scholarships and books & journals accounting for a significant proportion of the total expenditure on the development of engineering and technology.

9.15 Development of Studies in Business Management

The Commission continued to provide assistance to 17 universities/ institutions for conducting courses in business administration. An amount of Rs. 10.24 lakhs was paid to the universities during 1978-79.

9.16 Research in Engineering & Technology

During 1977-78, the Commission had accepted 22 research projects involving a total expenditure of Rs. 18.86 lakhs received from engineering/ technology departments of universities. The number of national associateships awarded in engineering and technology during 1978-79 was ten. Books at a cost of Rs. 9.55 lakhs in engineering and technology were under preparation during 1978-79. The total number of projects under implementation was 75 at the end of 1978-79.

In addition to this, the Commission continued to provide assistance for publication of university level books by Indian authors in engineering and technology.

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TABLE IX. 6

Grants for the Development of Engineering and Technology

(Rupees in lakhs)

S. No.	*Item of Expenditure*	*1974-75*	%	*1975-76*	%	*1976-77*	%	*1977-78*	%	*1978-79*	%	*Total Expenditure 1974-75—1978-79*	%
1.	Staff & Maintenance	47.34	18	50.79	18	25.38	7	16.45	5	23.62	5	154.58	9
2.	Equipment	95.86	35	74.92	27	191.13	49	136.33	46	284.18	60	782.42	46
3.	Books & Journals	18.33	7	10.20	4	66.85	17	30.50	10	68.78	14	194.66	11
4.	Buildings	38.02	14	28.12	10	26.51	7	20.05	7	17.89	4	130.59	8
5.	Fellowships and Scholarships	69.68	26	113.26	41	77.08	19	95.57	32	82.73	17	438.32	26
6.	Misc. Schemes	0.25	—	0.52	—	3.18	1	0.65	—	—	—	4.60	—
	Total	269.48	100	277.81	100	390.13	100	299.55	100	477.20	100	1714.17	100

SECTION X

Development of Colleges

10.01 The Commission's policy in regard to the development of colleges is governed mainly by two factors, firstly removal of disparities and regional imbalances and secondly, the improvement of standards and quality of education in the institutions. The Commission's strategy for the development of colleges, keeping in view the limitations of resources and the immensity of the problems, is to bring about qualitative improvements through such programmes as the College Science Improvement Programme and the College Humanities and Social Science Improvement Programme; to restructure courses of first degree level and to give special attention to colleges in the backward areas and to raise the level of assistance for the development of undergraduate courses. Under the scheme of selected colleges, one or two colleges identified in each district would be required to prepare integrated programmes for intensive development. Programmes for student welfare include the establishment of book banks, students' aid fund etc. Additional support is provided for postgraduate studies and research in the colleges towards such items as additional staff, equipment, books and journals and buildings. Promotion of academic freedom and autonomy of selected colleges has also been pursued in order to improve standards.

10.02 There are 64 affiliating universities in the country. The colleges of these universities cater to 88 per cent of the total enrolment of students at the undergraduate level, 53.5 per cent at the postgraduate level and 13.2 percent at the research level. Any attempt at improving standards and achieving coordination in university education will, therefore, have little impact unless adequate attention is paid to the development of colleges. For the majorty of students, seeking university level education, the first degree is the terminal stage and it is, therefore, important that the first degree courses offered, by and large, in the affiliated colleges are adequately strengthened, diversified and made relevant to the needs of the society.

It is also to be noted that nearly 46 per cent of the colleges have an enrolment of below 400 in the case of colleges having three year degree course and 270 in the case of colleges having two year degree course. Colleges with such inadequate numbers find it difficult to become viable either financially or academically. It reflects lack of adequate planning and coordination at the state level. Studies show that while colleges in urban areas and metropolitan towns continue to be over-crowded, the colleges located in backward and remote areas are not able to attract students in sufficient numbers. It is also a fact that several universities are not in a position to exercise adequate academic supervision in regard to the development of colleges.

10.03 The Commission has several on-going programmes for the development of colleges. These include:

General development of colleges.
Support to colleges in backwards regions, women's colleges,
Colleges with a large number of scheduled caste/tribe students.
Student amenities e.g. book banks, student's aid fund etc.
College Science Improvement Programme/College Humanities, Social Sciences Improvement Programme.
Support for postgraduate colleges.
Support for lead colleges.
Support for autonomous colleges.
Faculty Improvement programmes.
Support for innovative programmes like restructuring of courses.

10.04 General Development of Colleges

At the beginning of the Fifth Plan, the Commission agreed to provide assistance upto Rs. five lakhs during the plan period for the development of undergraduate education in arts, science and commerce courses in the colleges. The assistance was available in two phases viz. Rs. three lakhs in phase I and Rs. two lakhs in phase II. In June 1976 the Commission reviewed the position and agreed that in the case of colleges which have a student enrolment and a staff of 50 per cent more than the prescribed eligility conditions, the proposals may be considered for the total Rs. five lakhs instead of limiting them to Rs. three lakhs in the first priority.

It was later decided that colleges having an enrolment beyond 1,000 students in degree classes would be eligible for assistance upto Rs. eight lakhs and beyond 2,000 students upto Rs. ten lakhs. The assistance for the initial Rs. five lakhs will be on the usual sharing basis and the assistance over and above Rs. five lakhs may be made available on 75:25 sharing basis to meet the justified needs of development of such colleges. Such colleges may be enabled to prepare towards attaining an autonomous status.

A college to be eligible to receive assistance from the Commission under Rs. five lakhs scheme should have a minimum enrolment of 400 students excluding those in the pre-university course/pre-degree/intermediate classes and staff of at least 20 suitably qualified permanent teachers. In the case of colleges providing two year course, the minimum required enrolment is 270 students & at least 15 suitably qualified permanent teachers. For a college having a two year degree course in arts, science and commerce as also a three year degree course in agriculture (as in some colleges in Uttar Pradesh) the minimum enrolment required to make it eligible for assistance under the scheme is 335 students and 15 permanent teachers. For women's colleges and colleges where 50 per cent of the enrolment constitutes scheduled caste and scheduled tribe students as also colleges situated in backward areas, the condition has been relaxed to 300 students and 15

suitably qualified permanent teachers in three year degree course colleges, and to 200 students and ten permanent teachers in two year degree course colleges.

10.05 Development of Postgraduate Studies

The Commission has also continued its programme of providing assistance to affiliated colleges for the improvement of facilities for post-graduate courses on selective basis during the Fifth five year Plan. The purpose is to bring to minimum norms, their facilities of staff, laboratories, library etc. so as to maintain adequate standards. The ceiling of assistance available for different postgraduate departments for the plan period is as under :

Departments	*University Grants Commission's share*
(1)	(2)
(i) Humanities & Social Sciences:	
(All postgraduate deptts. in Humanities and Social Sciences Subjects in affiliated Colleges)	**Up to Rs. One lakh per department**
(ii) Postgraduate Science Departments: Physics & Chemistry Departments	Up to Rs. Two lakhs per department
Botany, Zoology, Geology, Bio-Chemistry and Home Science departments	Up to Rs. One and a half lakhs per department
(iii) Anthropology, Geography and Mathematics including Statistics departments	Up to Rs. One lakh per department

The proposals from colleges for the development of their postgraduate departments are examined with the help of visiting committees, specially constituted for the purpose, keeping in view the nature of development proposals. In the first instance and pending assessment of the proposals by the Visiting Committees, assistance to the postgraduate colleges is being provided on the following basis.

(a) All postgraduate departments which are in existence since 1st July 1974 or earlier are eligible for Commission's assistance.

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	University Grants Commission's share
	(2)
	Up to Rs. One lakh per department
	Up to Rs. Two lakhs per department
	Up to Rs. One and a half lakhs per department
	Up to Rs. One lakh per department

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(b) Such postgraduate colleges which have sought assistance for books, journals and equipment only and not for any other item like staff, building etc. and their departments are eligible as per para (a) above may be provided necessary assistance for these items without sending any Visiting Committee. The quantum of grant for each department may be equal to the expenditure incurred by the department on the item (books/equipment) during the past three years within the ceiling for these items fixed by the Commission.

(c) The colleges which seek assistance for additional staff for postgraduate departments and have less than four teachers in an arts department and six in a science department may first reach this figure by appointing persons with research qualification and thereafter, if they need more staff, may send the proposals.

(d) Visiting Committees may be constituted to assess the requirements of postgraduate colleges in cases where assistance has been asked for (i) additional staff over and above the number indicated in (c) above and/or (ii) buildings including animal house, workshops etc. and for other items like faculty improvement etc. or where composite proposals for development have been formulated by the colleges.

10.06 Bearing in mind the widely varying stages of development of colleges in different regions of the country, the Commission has prescribed certain general conditions which a college should satisfy in order to qualify for assistance from UGC programmes. However, these have been modified and relaxed in favour of colleges located in backward and tribal regions or those mainly catering to women or scheduled caste/tribe students. It has been found that during the period 1974-75 to 1978-79 nearly 1,800 colleges qualified for central assistance, whereas 1,600 applied, out of which proposals of 1,200 colleges were accepted, 277 were not accepted and 123 are under correspondence. In addition to above the Commission has provided assistance on 100% basis, through the university concerned, a core grant for books and equipment to all the eligible colleges as per the guidelines framed for the purpose.

10.07 In order that more colleges qualify for UGC assistance, the state Governments will also have to adopt a deliberate policy of curbing proliferation of new colleges, and strengthening the existing ones both to attain essential viability and to strive for better academic standards. In the context of the new pattern of 12-year schooling with possible emphasis on socially useful productive work experience, consideration will have to be given whether some of the non-viable colleges could not be converted into rural polytechnics, or higher secondary schools/junior colleges. Experiments

in this direction in some states such as Gujarat appear to be a step in the right direction.

10.08 The problem of providing a matching grant as required for UGC programmes of college development is a serious problem in some states, especially the less developed ones. Any attempt to raise the proportion of central grant to the colleges would either imply provision of much larger resources to the UGC, or the UGC limiting the number of colleges eligible for central assistance. Since neither of the above appear feasible or desirable, the only way open would appear to be (a) co-ordinating the development of colleges with the state government agencies, and (b) encouraging colleges, especially private colleges, to tap community resources. In this connection, it may be mentioned that in some states, colleges charge development fee from students. The manner, incidence and purpose of these charges could be examined further in order to develop a strategy of development for colleges in the next plan period.

The universities have also been requested to take up in consultation with College Development Councils, surveys with regard to co-ordinated development of colleges under their jurisdiction including the location of new colleges wherever considered absolutely necessary and the nature of development so that facilities for higher education could be created within each university and within the state concerned on a planned basis. The Commission has agreed to support the establishment and work of the College Development Councils so that the colleges sector and its problems receive the consideration due to them.

10.09 College Humanities and Social Sciences Improvement Programme (COHSSIP)

The Commission initiated during the last plan, a programme for Improvement of the Humanities and Social Sciences instruction in the colleges (COHSSIP). Under the scheme, a grant upto a maximum of Rs. three lakhs is made available to the selected colleges for a period of three years for strengthening teaching, initiating tutorial and seminar work, preparing reading material and bibliography and for introducing internal assessment. The colleges will supplement their teaching with the help of additional staff appointed for the purpose, postgraduate and research students on the rolls of the colleges and guest lecturers from other colleges and the universities. Selection of colleges for participation in this programme is determined, inter alia, on the basis of (i) quality of their staff (ii) quality of their proposals (iii) student-teacher ratio (iv) examination results and (v) strength of their libraries.

The Commission has so far selected 146 colleges for participation in COHSSIP. Of these colleges, 20 colleges were selected during the academic session 1978-79.

The UGC has decided to extend its support for a further period of two years for follow up programme to these COHSSIP colleges which have already been assisted for an initial period of three years. The UGC therefore appointed a committee to review the proposals received from such colleges and to recommend the selection of the institutions for the purpose. The committee reviewed the proposals received from 19 colleges and as recommended by the committee, 17 colleges have been selected for continuation of COHSSIP in the second phase for a period of two years. The committee has also recommended that these colleges may be paid a grant of Rs. 2,00,000 @ Rs. 1,00,000 per year during the next two years. The recommendations of the committee have been accepted by the Commission.

10.10 University Leadership Programme in the Humanities and Social Sciences

The University Leadership Programme is primarily aimed at improvement of instruction at the undergraduate level in selected subjects in all the colleges affiliated to a university. The departments concerned in the selected university will provide necessary guidance, advice and assistance to the college departments, regarding improvement of instruction, enrichment of curriculum and methods of instruction, syllabi and courses of study, equipment, workshop, library and other teaching materials. The programme will attempt at not only improving instructions in the subject within the existing framework or prescribed syllabi and examination procedures but would also make concerted efforts to bring about modernization in courses of study, approach to teaching of the subject at the undergraduate level and in examination reform.

The Commission, on the recommendation of the expert panels, has selected certain departments in the various universities for participation in the above programme. Proposals were invited from these departments and Visiting Committees have been appointed to examine their proposals.

10.11 The Commission has so far agreed to invite the following departments of the various universities on the basis of the recommendations of the visiting committees for participation in the above programme:—

(i)	Sociology	(2)	S.N.D.T. and Poona.
(ii)	Political Science	(6)	Punjab, Rajasthan, Osmania, NEHU, Calcutta and Poona.
(iii)	Philosophy	(4)	Calcutta, Rajasthan, Andhra, and Poona
(iv)	Economics	(3)	Osmania, Kurukshetra and Bombay

During the year 1978-79 the Commission paid grants amounting to Rs. 39.09 lakhs to colleges under COHSSIP and Rs. 8.56 to the university departments undertaking university leadership projects.

10.12 College Science Improvement Programme (COSIP)

This programme was initiated by the Commission in 1970-71 to bring about qualitative improvement in the teaching of Science subjects at undergraduate level. During 1977-78, 4 regional conferences were organised to review the progress of implementation of the schemes and plan for future development. On the basis of the recommendations made at the regional conferences and in consultation with the Standing Advisory Committee for this programme, the Commission has taken steps to expand this programme. The publication of COSIP news bulletin in four subjects has been approved. The news bulletins in Physics, Chemistry and Mathematics have already been brought out. State-wise Advisory Committees have been constituted to monitor this programme in different stages. The Commission has also initiated action on various other recommendations made at the Regional Conferences. It has now been decided that the proposals received from colleges would be examined on the basis of overall performance of the college and detailed information in the prescribed proforma is being collected. The status report giving details of activities undertaken by the University Leadership Projects in different subjects is being prepared. The Standing Advisory Committee on COSIP met on 4th November, 1978 to review the implementation of the programme. The Committee noted with satisfaction the implementation of the programme and made various recommendations. The main recommendations of the Committee are given below:—

(a) The Commission may arrange regional conferences of non-COSIP colleges. In these regional conferences, representatives of some identified non-COSIP colleges alongwith representatives from selected colleges which have successfully implemented the COSIP could be invited. The non-COSIP colleges which are to be invited may be identified by the State-level Advisory Committees. Two representatives each from about 50 colleges could be invited for these conferences which could be arranged in 1979. These would help non-COSIP colleges to prepare good proposals.

(b) The proposal of continuing COSIP activities submitted by the Department of Mathematics, Madurai Kamraj University, was considered by the Committee and it recommended that the department may be asked to prepare a specific time bound programme for only such activities arising out of the implementation of COSIP-ULP. The proposal could be considered and the Commission may provide assistance to continue one or two selected activities so that the teachers of the affiliated colleges are continuously involved.

(c) The Committee has recommended some departments which could be asked to take up the University Leadership Projects under COSIP. The proposals are to be examined by the Commission as per usual procedure.

(d) The Committee generally agreed that providing vehicles to ULP's would help in keeping continuous contact with the colleges. The individual proposals may be examined by the Commission keeping in view the programmes, requirements and achievements of the ULP.

(e) The Committee agreed that some programmes for improvement of postgraduate teaching in affiliated colleges, wherever this is in vogue, are necessary. The ULP Departments, if they so desire, can take up programmes of writing books, teacher training etc. for postgraduate courses. Such proposals could be considered by the Commission.

(f) The Committee accepted, in principle, the proposal of Madurai Kamraj University for taking up Biology Education Extension programme and suggested that the financial requirements may be examined by an expert committee (A Committee has since been constituted).

(g) The Committee welcomed the suggestion of mass production and supply of audio visual aids to all the colleges (A Committee has been constituted to consider this question and prepare a plan of action).

(h) The Standing Committee reviewed the COSIP activities and has given detailed evaluation of the impact of this programme and the beneficial results accruing so far both under ULP's and selected colleges part.

(i) It has been now decided to expand this programme subject to availability of funds so that in the course of next 2 or 3 years each state would have at least one University Leadership Project in each major science subject. During 1978-79 the proposals from 30 colleges for taking up COSIP were approved. At present, 177 colleges and 40 university Departments with Leadership Projects are participating in this programme [as per Appendices XXXII (a and b)].

10.13 Colleges in Metropolitan Cities

The Commission recognised the varying needs of colleges situated in metropolitan cities and requested the Vice-Chancellors of the following universities in June, 1975 to send consolidated proposals for centralized facilities for use of colleges as under:—

Bombay University (Rs. One crore)

Calcutta University (Rs. Two crores)
Madras University (Rs. One crore)

The above allocations are in addition to the normal assistance available for the development of colleges and assistance for the purpose is provided on 100 per cent basis. The Commission has already approved projects of the Madras University at an estimated cost of Rs. 46 lakhs for extension libraries, study room for poor students, inter-collegiate hostel and purchase of text books and reference books. In the case of Calcutta University the amount is to be utilised for creating common facilities for use by colleges in the metropolitan Calcutta.

In case of Bombay University, allocation has been utilised for organising practical training courses at the Rural Development Centres for students offering 'Rural Development' as a subject at the degree level. The university has arranged orientation courses for the teachers in colleges in different new subjects which have been introduced for the first time in the new 'three year degree' course. The proposal from the university to provide equipment grants to each college, which has introduced life science courses at the undergraduate level, has also been accepted.

10.14 Colleges in Backward/Tribal Areas/Districts

The University Grants Commission in early 1979 considered a proposal regarding assistance to colleges located in the predominantly tribal areas in various parts of the country. The Commission desired that the colleges located in the tribal areas and catering largely to the needs of the tribal students may be provided special assistance in the current plan. Such colleges may also be encouraged to provide facilities for teaching of science subjects and also for offering special courses to enable these students to compete for jobs in the public and private sectors. The universities be requested to identify such colleges on the basis of the following criteria:—

(a) The college should be located in a tribal/rural/ semi-urban area.
(b) At least 1/3rd of the students on the rolls of the college should belong to scheduled tribes.
(c) The college has maintained adequate standards.

It was further agreed that the assistance may be provided to such colleges for the following:—

1. Appointment of adequate qualified staff.
2. Exchange of teachers to enable these colleges to have outstanding teachers from other universities for short period.
3. Remedial courses for enabling Scheduled Caste and Scheduled Tribe students to come up to the requisite standards.
4. Programmes of educational extension whereby the colleges could assist the higher secondary schools in the neighbourhood.

5. For construction of building viz., class rooms, laboratories, libraries and hostels for students and teachers and for bringing up the facilities of laboratory and libraries adequate to their teaching programmes.

Assistance for Item No. 1 above be provided by the State Government concerned.

Assistance for Item Nos. 2, 3 & 4 may be provided by the UGC on 100% basis and that for Item No. 5 on 75:25 sharing basis.

The above decision of the Commission has been brought to the notice of the universities.

10.15 Lead Colleges

The Commission decided in June, 1976 that steps should be taken to identify one or two colleges in each district which will have/will be enabled to work with optimal facilities required to maintain proper standards. Such an institution should have a good enrolment, good student teacher ratio and good facilities so that the institution could be developed to take up innovative academic programmes on the principles of diversification, relevance, flexibility and in relation to the local, regional and national needs. Assistance upto Rupees Three lakhs (in addition to Rupees Five lakhs already available) on 75% (University Grants Commission): 25% (College) sharing basis would be made available to such colleges to meet their identified and justified needs for buildings, equipment, books, staff etc. The vice-chancellors of the universities were requested in July, 1976 to select one or two such colleges within each district keeping in view the criteria laid down above. Such colleges were required to prepare an integrated programme for intensive development to take up new programmes and new courses in collaboration with local industries, business organisations and other employment agencies. It will also be necessary for such colleges to make due provision for the Scheduled Castes/Scheduled Tribes and students from other weaker sections.

10.16 Single Faculty Colleges

The Commission provides assistance upto Rs. One and a half lakhs for the development of single faculty colleges viz. teacher training colleges, colleges of physical education, colleges of home science, colleges of fine arts, music and social work etc.

The assistance (Rs. 1.5 lakhs) may be utilised for (i) extension of libraries and laboratories including furniture and fittings (ii) purchase of books and journals and equipment (iii) additional staff for improvement of practice teaching, and (iv) developing teaching material and audio visual aids. Assistance under this scheme is not available for construction/extension of other buildings including hostels, staff quarters, principal's residence etc.

In the case of other single faculty colleges the existing conditions

under Rs. One and a half lakh or Rs. Five lakhs scheme may be followed. The Commission further desired that in the case of law colleges, assistance may be provided under Rs. Five lakhs scheme. However, the question of strength of permanent teachers, both full-time and part-time may be decided in consultation with the Law panel.

10.17 Basic Grants to Colleges for Books and Equipment

With a view to improving the facilities in the colleges in the matter of providing books (including text books and other reading materials) and equipment for science laboratories to support the undergraduate programmes, the Commission has decided to make available to every college affiliated to a university and eligible to receive grants from the Commission, some basic grants during the current plan period as indicated below:—

I	II	III
Student Enrolment excluding PUC/ Inter/Pre.Engg.	*Grants to be paid for Books (in Rs.)*	*Grants to be paid for Equipment (either Physical or Biological Science Group) (in Rs.)*
150–400	10,000	10,000
401–800	20,000	20,000
801–1500	30,000	30,000
1501 and above	40,000	40,000

Wherever a college also provides both physical and biological science groups and/or geology, home science, the grant for purchase of equipment may be increased by 50% of the allocation indicated above (Col. III).

If a college provides first degree course in geography, psychology, statistics, music, fine arts, it would be permitted, it is so desires, to use upto 25% of the grant suggested for books to be used for equipment for any or all of these departments.

Grants paid amounted to Rs. 91.25 lakhs for equipment to 42 colleges and Rs. 90.90 lakhs for books to 77 colleges.

10.18 Other programmes of assistance to the colleges

(i) It has been decided to provide assistance to colleges having enrolment of 1,000 students and above (excluding Pre-University Course/Intermediate classes) for setting up canteens.

(ii) Assistance is also available under faculty improvement programmes for teachers in affiliated colleges. Under this scheme, teachers in the affiliated colleges have been provided teacher fellowships to pursue research work for M.Phil./Ph.D. degree in 338 departments of universities and institutions.

(iii) Centenary grant upto Rs. One lakh for a capital project is available to a college on completion of 100 years of its existence.

(iv) There are a number of schemes for the welfare of students in the colleges viz. students' aid fund, book banks, improvement of existing hostel facilities, development of play fields and purchase of accessories for games and sports, canteens/cafetaria, establishment of study centres, construction of gymnasia etc. as detailed in Section XI of the Report.

TABLE X. 1

Grants paid to colleges for General development and other schemes*

(Rupees in lakhs)

	Name of the Scheme	*1974-75*	*1975-76*	*1976-77*	*1977-78*	*1978-79*
1.	Development of Affiliated colleges	224.52	99.03	176.76	950.85	852.21
2.	Book Banks	58.14 (602)	96.37 (1291)	75.88 (1211)	46.19 (1078)	18.37 (567)
3.	College Science Improvement Programme	46.56	39.36	42.14	39.11	23.62
4.	College Humanities & Social Sciences Improvement Programme	—	8.38	18.28	42.52	39.09
5.	Students' Aid Fund	23.13 (1247)	23.48 (1352)	25.94 (1467)	43.76 (1444)	29.33 (924)
6.	Centenary Grants	1.15	0.46	—	1.50	1.05
7.	Development of Postgraduate studies in Science	13.87	10.75	10.54	72.04	52.26
8.	Development of Postgraduate studies in Humanities and Social Sciences	5.01	9.91	7.33	46.07	32.37

* A Statement of development grants to colleges (State-wise) is given in *Appendix XXXIII.*

Note: Figures in brackets denote number of colleges assisted.

10.19 Autonomous Colleges

The Commission has been supporting the concept of autonomous colleges by which the universities could give a number of carefully selected colleges the much needed autonomy in formulating curricula and courses of study, evaluation methods and other related matters. The Commission with the help of an expert Committee and after consulting a number of principals and educationists finalised a set of criteria, guidelines and pattern of assistance to autonomous colleges.

During 1976 and 1977 the Commission gave its concurrence to conferring autonomous status on nine colleges of Madras and Madurai Universities and the concerned universities have issued necessary notification in this regard. It was reported last year that these colleges had been requested to formulate their needs, arising out of autonomy and indicate the funds required for implementation of their new academic programmes and activities. On receipt of these proposals it has been decided that the UGC would provide over the next 5 years, to each of these colleges, a non-lapsable annual grant of Rs. One lakh of which 75% can be used for academic activities and balance of 25% for administrative support arising out of the autonomous status. A grant of Rs. One lakh has been accordingly paid to these colleges in 1978-79.

Similar proposals are under consideration by other universities for granting autonomy to some selected colleges, in consultation with the Commission.

SECTION XI

Students

11.01 The provision of general amenities for students in the universities and colleges is not merely a welfare activity but also constitutes an integral part of education and contributes substantially to maintenance as well as improvement of standards. These include the provision of scholarships and fellowships, hostel facilities and non-resident student centres, study centres, students' aid fund, health centres, book banks, sports and physical education. It may be mentioned in this connection that all development programmes of the Commission including appointment of staff, construction of academic buildings, libraries and laboratories, purchase of equipment and books and journals etc. have a direct or indirect bearing on the well-being of the students and on the promotion of a congenial environment and conditions for studies and researches. However, the main focus of the Commission's programme in relation to student welfare is on the creation of conditions conducive to study and learning, specially in regard to needy and poor students on the one hand and the meritorious students on the other. The Commission's programmes having a direct bearing on students' study and learning are reviewed below:

11.02 Scholarships and fellowships

The Commission has given high priority to the award of scholarships and fellowships for the development of research in the universities and colleges. The objective of the scheme is to enable academically bright students to carry on their research as an independent and full time activity through adequate support for their maintenance and for the purchase of books, journals, equipment etc. by them. In addition to the fellowships specially created for centres of advanced study and those provided for approved programmes of research and departments selected for special assistance, the University Grants Commission awards annually senior and junior research fellowships in science and humanities (including social sciences) and research fellowships in engineering and technology on an all India basis.

11.03 The Commission constituted a committee to review the scheme of junior/senior research fellowships in sciences, humanities and social sciences. The committee met in 1978 and *inter alia* made the following recommendations:

(a) In order to make a review of the schemes of junior research fellowships/senior research fellowships, it would be necessary to make an in-depth study relating to the awards and utilization of the fellowships.

(b) The in-depth study should indicate as to how the schemes have been implemented by the universities keeping in view the objectives of the scheme as visualized by the UGC.

Information is being collected from the universities on various parameters suggested by the Review Committee to enable it to make an in-depth study and analysis of the scheme.

11.04 Senior Research Fellowships

The Commission awards 100 senior research fellowships every year in science, humanities and social sciences to provide an opportunity to research scholars and teachers to undertake advanced study and research. The fellowships are intended for students and teachers preferably below the age of 45 who have obtained a doctorate degree or have equivalent published research work to their credit and have already proved their aptitude for original and independent research. The value of the senior research fellowship is Rs. 600. An annual contingency grant of Rs. 2,000 is also attached to these fellowships for meeting working expenses. The tenure of fellowships is two years. During the year 1978-79, the Commission awarded 45 senior fellowships in science subjects and 26 in the humanities and social sciences.

11.05 Junior Research Fellowships

The Commission has been awarding junior research fellowships to the universities for the promotion of research in the humanities, social sciences and science subjects. The value of the fellowship is Rs. 400 per month for the first two years and Rs. 500 per month thereafter for another two years after the work of the fellow has been assessed and found satisfactory. The contingency grant attached with the fellowship is Rs. 1,500 per annum. Six hundred and fiftyfive junior research fellowships have been allocated to the universities to be awarded directly by them. In addition, the Commission had been awarding 250 fellowships to the universities on the basis of selections made at the central level with ten per cent of the fellowships reserved for Scheduled Caste and Scheduled Tribe candidates.

From 1978-79, the junior research fellowship scheme has been decentralized, and these have been allocated to the universities based on two factors (i) number of Ph.Ds. produced during the year; (ii) number of departments in the university in the faculty of arts and science. Accordingly 185 junior research fellowships have been allocated to the universities.

11.06 Senior/Junior Research Fellowships for Scheduled Caste/Scheduled Tribe students

The Commission has instituted 50 junior and 20 senior research fellowships in science, humanities and social sciences for the candidates be-

longing to Scheduled Castes and Scheduled Tribes. The Commission awarded 97 junior research fellowships in the category in 1978-79 (44 in science subjects and 53 in the humanities and social sciences) as compared to 48 junior research fellowships awarded in 1977-78.

11.07 Research Fellowships in Engineering and Technology

The Commission awards 50 post-master fellowships in engineering and technology to enable students to undertake advanced study and research in their fields of specialization. These fellowships are open to students preferably below the age of 40 years. The duration of the fellowship is four years and the value Rs. 500 per month for the first two years and Rs. 600 per month for subsequent years subject to the condition that the research work is found satisfactory on assessment after the initial period of two years. Each fellowship carries an annual contingency grant of Rs. 1,000 per annum. Provision also exists for a grant of Rs. 2,000 during the tenure of award for publication of research work completed during the period of fellowship and approved field work undertaken by the fellow. During the year under review, the Commission awarded 36 research fellowships in engineering and technology.

11.08 Grants paid for Fellowships in Science, Humanities, Engineering and Technology

The following grants were paid by the Commission towards the award of senior/junior research fellowships during 1978-79:

Scheme	*Rs. in lakhs*
(i) Science	83.02
(ii) Humanities and Social Sciences	76.17
(iii) Engineering and Technology	5.91

11.09 Border Hill Areas Scholarships

In order to promote channels of academic communication between the students of border hill areas and the rest of the country, the Commission has instituted 25 scholarships for postgraduate studies for meritorious students from these regions for study anywhere in the country. Preference is given to scholars who intend to pursue studies in subjects of relevance to the problems of border hill areas. During 1978-79, 24 postgraduate scholarships were awarded by the Commission under this programme.

11.10 Scholarships for Postgraduate Studies in Sanskrit/Pali/Prakrit/Ardhmagadhi and Arabic /Persian

Special attention has been paid by the University Grants Commission

to the promotion of studies in Sanskrit/Pali/Prakrit/Ardhmagadhi and Arabic/Persian by offering scholarships for postgraduate studies. The value of these scholarships is Rs. 250 per month. During the year 1978-79, 712 scholarships were awarded in Sanskrit/Pali/Prakrit/Ardhmagadhi and 23 in Arabic/Persian.

11.11 Scholarships for Full-time LL.M. courses

The Commission has instituted 50 scholarships for LL.M. studies to be administered directly by the Commission to enable talented students to pursue their full-time LL.M. courses in universities. The first selection was made during 1976-77 and 50 scholarships were awarded. During the years 1977-78 and 1978-79, the Commission again awarded 50 scholarships each year to LL.M. students.

11.12 Award of Junior/Senior Research Fellowships in Science and Technology for Students from Developing countries

The Commission has instituted five senior and ten junior research fellowships in science and humanities (including social sciences) for foreign students from the developing countries. The value of the junior fellowships is Rs. 400 per month for the first two years and Rs. 500 per month for the remaining period with a contingency grant of Rs. 1,500 per annum. The value of the senior research fellowship is Rs. 600 per month with a contingency grant of Rs. 2,000 per annum.

During the year 1978-79. the Commission awarded four junior research fellowships and two senior research followships to students from developing countries. In addition, one research associateship, has also been awarded during the year.

11.13 Research Associateships

The Commission offers research associateships to provide opportunity to research students and teachers who have shown extraordinary talent for research and competence to take up research work independently. During the year 1977-78, the Commission rationalized the scales and put them under three categories as under:

(i) Rs. 1,000 per month fixed
(ii) Rs. 1,200 per month fixed
(iii) Rs. 1,400 per month fixed

The associateship also carries a contingency grant of Rs. 2,000 per annum. During the year under review, the Commission awarded 68 research associateships in science and humanities (including social sciences) and engineering and technology. The Commission has also agreed that with effect from 1979-80, 20 research associateships may be awarded to Scheduled

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Caste/Tribe students to enable such candidates to obtain necessary teaching and research experience in the university departments.

11.14 Award of Studentship for M.Sc./M.Sc. (Tech.) courses in Applied Sciences and post-M.Sc. diploma courses

On the recommendations of a Committee, the Commission has agreed that there should be uniformity in the nomenclature of M.Sc. (Tech.) degrees being awarded by various universities. Nomenclature of M.Sc. (Tech.) should be confined to a three-year integrated course after the B.Sc. degree course and should not be used for one year post-M.Sc. course. The one year post-M.Sc. course should be designated as post-M.Sc. diploma.

The Commission has also agreed that students pursuing the three-year integrated M.Sc. (Tech.) course already approved by the UGC be given a studentship of Rs. 400 per month instead of Rs. 250 per month in their third year as at present, to bring them at par with the studentship of Rs. 400 per month available to those doing one year post-M.Sc. courses. In respect of one year post-M.Sc. courses where the Commission in consultation with the subject panels concerned is satisfied in regard to the academic content of the course and its relevance to national needs and the employability of the students trained, the Commission may award a studentship of Rs. 400 per month for a specified period.

While awarding such scholarships, it would be ensured that the assistance from the Commission would be available for the period ending 1982-83 and the state governments will have to treat this as committed expenditure thereafter.

11.15 Construction of Hostels

The Commission has been giving a high priority for the programme of hostels for students in universities and colleges in view of the fact that improvement of the conditions in which students live and work has an important bearing on their academic performance. Provision of hostel facilities is one of the important items included in the general programme of development of universities and colleges.

In the interest of social justice, the Commission has decided that in the Fifth Plan, all institutions assisted by it to construct students' hostels would be required to reserve 20 per cent of the seats in such hostels for students belonging to scheduled castes and scheduled tribes. The Commission has also decided that its assistance for construction of hostels in backward areas will be at the rate of 75 per cent of the total expenditure as against 50 per cent available for other areas. In order to keep the cost of construction low, the Commission has been encouraging the construction of dormitories and/or double or triple seated rooms rather than single seated rooms in the hostels.

During 1969-74, the Commission provided hostel facilities for, 12,559

students in 63 universities and 15,312 students in 286 colleges.

During 1978-79, a grant of Rs. 70.22 lakhs was paid to 36 univer towards the construction of hostels. A grant of Rs. 64.84 lakhs was pa the colleges for the purpose during the year. This is substantially hi than the grants paid during the last three years.

The position of grants paid during the period 1974-79 for the const tion of hostels is summarized below:

TABLE XI.1

Construction of Hostels

Grants Paid (Rupees in Lakhs)

Year	*Universities*	*Colleges*
1974-75	77.59	45.97
1975-76	57.41	16.33
1976-77	43.51	24.22
1977-78	36.88	40.54
1978-79	70.22	64.84
Total	**285.61**	**191.90**

11.16 Assistance for the Improvement of Existing Hostel Facilities i Universities and Colleges

On the recommendations of the Working Group on Students Welfar Programmes, the Commission decided to provide assistance during the Fiftl Plan to universities and colleges for the improvement of living condition in hostels which were constructed without the financial assistance from the University Grants Commission e.g. sanitary facilities, proper dining halls etc. The Commission's assistance for this scheme is outside the Fifth Plan allocation of the university or the scheme of general development of colleges and on 75:25 sharing basis.

A grant of Rs. 5.07 lakhs was paid to nine universities for the purpose during the year 1978-79.

11.17 Scheme for the Improvement or Establishment of Study Centres in Universities

During the Fourth Five year Plan, the Commission had introduced a scheme for the establishment of study centres to provide students in the residential areas, with essential library facilities, multiple copies of text books

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etc. While agreeing to provide assistance for the study centres upto 1978-79, the Commission had desired that the scheme may be reviewed to assess the working of the study centres already established, additional requirements and the assistance that may be provided for the establishment of new study centres during the plan. Accordingly, the scheme of study centres has been reviewed by the Working Group on Student Welfare Programmes and the Commission has now decided to provide the following assistance for the existing study centres and for the establishment of new study centres:

	Additional provision for existing Centres	*Provision for new Study Centre*
(i) Non-Recurring		
Books	Rs. 20,000	Rs. 30,000
Stacks & Furniture	—	Rs. 15,000
(ii) Recurring (per annum till the end of Fifth Plan)		
(a) Staff	Rs. 5,000	Rs. 15,000
(b) Contingencies (including electricity charges etc.)	Rs. 5,000	Rs. 4,500

A grant of Rs. 10.19 lakhs was paid to 23 universities during the year under report towards study centres. The assistance for study centres is outside the general plan allocation for the university.

11.18 Student Homes/Non-Resident Student Centre

Non-resident student centres and student homes set up by the universities and colleges with assistance from the Commission provide facilities for study to day scholars through their leisure hours. Student homes provide facilities for about 100 students and rack space for 5,000 books, besides a cafeteria. The Commission's share towards each student home in the universities is limited to Rs. One lakh or the actual cost whichever is less. A non-recurring grant of Rs. 24,000 is also available for purchase of books and furniture for the student homes.

The Commission has taken a decision that assistance for establishment of non-resident student centre will also be made available from within the Rs. Five lakhs scheme for colleges, within the overall provision available for construction of buildings. The colleges may, accordingly, if they assign priority to this programme, include a proposal for the setting up of a non-resident student centre in their programme for general development.

In the case of a college which has a student enrolment of 1,000 or above, the assistance available from the Commission will be Rs. 70,000. In the case of colleges which have a student enrolment of less than 1,000 in the degree classes, the University Grants Commission assistance will be limited to Rs. 35,000. Colleges which have already received assistance from the Commission for the establishment of non-resisdent centre in the earlier plans will be eligible for further assistance under this programme. If a college with a student enrolment of 1,000 and above has availed of assistance upto Rs. 35,000 only a further grant for extension of the existing centre or for construction of another centre would also be given by the Commission but such assistance will be within the total grant of Rs. 70,000 admissible for such a college.

The following grants were paid for student homes/non-resident student centres during the year 1978-79:

TABLE XI.2

Grants Paid

(*Rupees in lakhs*)

Universities	
Non-Resident Student Centres	0.50
Student Homes	0.74
Colleges	
Non-resident Student Centres	0.97

11.19 Students' Aid Fund

Earlier the Commission used to provide assistance to universities and colleges equivalent to the amount collected by the university/college and subject to a maximum of Rs. 25,000 for a university and Rs. 5,000 for a college. From 1st July, 1977 the Commission's assistance under the Student's Aid Fund scheme was fixed at double the amount collected by a university/college subject to a ceiling of Rs. 25,000 for universities having direct enrolment below 5,000, Rs. 50,000 for universities having direct enrolment of 5000 and above and Rs. 10,000 for a college having enrolment above 2,500. The minimum assistance to a college under this scheme was raised from Rs. 750 per annum to Rs. 1,500 per annum subject to the collections made by the college.

In 1977-78, a grant of Rs. 4.80 lakhs was paid to 38 universities and a grant of Rs. 43.76 lakhs to 1,449 colleges under the scheme. In 1978-79, a

grant of Rs. 4.41 lakhs was paid to 31 universities and a grant of Rs. 29.33 lakhs to 924 colleges for the purpose.

11.20 Book Banks in the Colleges

The Commission has been providing financial assistance for the establishment of book banks in the college libraries. A college should have an enrolment of atleast 100 students (70 students in a teacher's training college) to claim this grant. The Commission provides assistance on the following basis :

Student enrolment	*Total allocation*	*Sharing basis*
(a) Below 250	Rs. 8,000	UGC 75 per cent and College 25 per cent
(b) Between 251-500	Rs. 10,000	
(c) between 501-1000	Rs. 15,000	
(d) between 1001-1500	Rs. 20,000	
(e) between 1501-2000	Rs. 25,000	
(f) 2000 and above	Rs. 30,000	

By the end of March, 1979, grants amounting to Rs. 253.60 lakhs had been released for the establishment of book banks in 2,528 affiliated colleges in the country. During 1978-79, grants amounting to Rs. 18.37 lakhs were paid to 567 colleges under the scheme.

11.21 Play Fields and Gymnasia

Upto 1975-76, assistance for play fields and gymnasia was being provided to universities and colleges from the earmarked funds provided by the Ministry of Education and Culture under the National Sports Organization programme. However, to encourage participation in games and sports of as large a number of students as possible, the Commission decided to provide assistance for improvement/development of play fields in addition to those institutions which were earlier assisted under the National Sports Organization programme. During 1977-78, it was decided that assistance for improvement/development of play fields may be made a continuous process and even those institutions which were assisted during the Fourth Five year Plan, may be provided assistance during the Fifth Plan. For construction of gymnasia, the Commission had earlier agreed to provide assistance to institutions with a minimum enrolment of 1,500 students. During 1977-78, the minimum enrolment was brought down to 1,000 students.

11.22 Provision of Assistance for the Extension or Construction of Canteens including Furniture or Equipment in Universities and Colleges

It has been decided that assistance may be provided for the extension or construction of canteens including furniture or equipment subject to the following:

(a) Under the scheme (i) universities having a direct enrolment of 1,000 students and above, and (ii) colleges having an enrolment of 1,000 students and above in three year degree course and 650 and above in two year degree courses but excluding pre-university course or intermediate classes would be eligible for assistance. The assistance will be provided outside the Fifth Plan allocation on a sharing basis 2/3 (University Grants Commission) : 1/3 (Institutions) for construction/extension and furniture and equipment. No assistance will be provided for crockery and utensils.

(b) The seating capacity in the canteen or cafeteria may not be provided for more than 10% of the students on roll (excluding pre-university/ intermediate) but the maximum seating capacity that may be provided should not exceed 200 students at any given time.

(c) Areas to be provided in the canteen and the kitchen attached to it should not exceed the norms provided by the Commission for dining halls of hostels.

(d) The canteens to be provided should neither be constructed nor furnished as restaurant but on an austere basis. While designing the construction, the institutions, wherever possible, should take advantage of the open space that may be available for outdoor seating.

The Commission has also decided to provide assistance for the establishment or improvement of canteens on a sharing basis of 2/3 (University Grants Commission): 1/3 (Institution), also to those colleges which have enrolment of less than 650 for colleges offering two year degree courses and less than 1,000 for colleges offering three year degree courses. But in such cases the assistance to be provided would be treated as one of the schemes under the Rupees Five lakhs scheme provided the college is qualified to be considered under the scheme.

During 1978-79, a grant of Rs. 4.85 lakhs was paid to the universities for the establishment/improvement of canteen facilities and a grant of Rs. 29.16 lakhs to the colleges for canteens including non-resident student centres.

SECTION XII

Facilities for Scheduled Castes and Scheduled Tribes

12.01 Reservation of Seats for Scheduled Caste/Scheduled Tribe Students in the Universities/Colleges

As already reported, the Commission in January, 1973 invited the attention of the universities to the guidelines issued by the Ministry of Education and Social Welfare regarding reservation of seats for Scheduled Caste/Scheduled Tribe students in universities/colleges. It was mentioned that according to the present arrangement 20% of the seats are reserved for Scheduled Caste/Scheduled Tribe candidates who are also given a concession of five per cent marks in the minimum percentage of marks required for admission to any course. It was later observed that even with these concessions, some of the seats in the reserved quota remained unfilled as adequate number of Scheduled Caste/Scheduled Tribe candidates with requisite marks were not available. Accordingly, it was suggested that in case the 20% seats earmarked for them remain unfilled, a further relaxation in the marks may be given to them in order of merit, amongst themselves so that all the reserved seats can be filled by candidates belonging to these categories.

Subsequently, the Committee on Welfare of Scheduled Castes/Scheduled Tribes at its 42nd meeting observed that the percentage of reservation for Scheduled Castes and Scheduled Tribes are not uniform and varied from two to twenty in universities. Some of the universities had not even adopted the principle of reservation of seats for Scheduled Castes and Scheduled Tribes. The Committee desired that the causes and factors in making provision for reservation/relaxation for Scheduled Caste and Scheduled Tribe students in the universities/colleges may be looked into and immediate effective remedial measures taken in the matter.

In the light of these observations, the Commission in April, 1976 again requested the universities to intimate the present position regarding reservation of seats in the light of the instructions issued by the Government of India.

In March, 1977 the Commission considered the latest position and decided that the universities be advised to implement the provision for reservation quota for Scheduled Castes and Tribes. The matter has been considered further and the universities have been requested to reserve 20% of the seats for candidates belonging to Scheduled Castes and Tribes in the undergraduate courses in the universities and colleges.

The Commission has finalised a comprehensive proforma in consultation with the Ministry of Education and Social Welfare and the Commissioner for Scheduled Castes and Tribes for collection of statistics regarding reservation for SC/ST in universities and colleges. These proformae regarding information for the year 1977-78 have been issued to all the universities/

institutions deemed to be universities and all colleges included in the list under Section 2(f) of the UGC Act. Information from 1646 colleges and 39 universities has since been received and three copies each of the proforma for colleges/universities has been passed on to the Ministry of Education and Social Welfare for further necessary action. This will be an annual feature.

12.02 Creation of separate cells in Universities to ensure implementation of orders regarding reservation for Scheduled Castes and Scheduled Tribes issued by the Government of India from time to time

In its 42nd Report the Committee on Welfare of Scheduled Castes and Scheduled Tribes had recommended as under:

"The Committee would like all the universities in the country to set up within the universities special cells to ensure implementation of the orders regarding reservation for scheduled castes and scheduled tribes issued by the Government of India from time to time. The University Grants Commission should keep a watch that all the universities set up such cells without any loss of time."

This recommendation had been accepted by the Commission and all universities were requested to set up such cells without loss of time. From 73 universities which have responded, it is seen that only 27 universities have responded positively either intimating that special cells have been set up or indicating that steps will be taken to set up such a machinery. The remaining universities are yet to take a final decision in the matter. Further there are certain universities which do not have such cells or which do not consider it necessary to have such cells. The matter is being pursued.

12.03 Reservation of seats in Hostels for Students belonging to Scheduled Castes and Scheduled Tribes

The Commission in the light of the recommendations made in the 22nd report of the Commission for Scheduled Castes and Scheduled Tribes (1973-74) relating to the reservation of seats in hostels in universities and colleges for students belonging to Scheduled Castes and Scheduled Tribes agreed that the universities/colleges may be advised to provide reservation of 20% seats in hostels for Scheduled Castes and Scheduled Tribes students irrespective of whether the hostels were constructed with assistance from the Commission or from other sources. The Commission has subsequently followed up with the universities the progress made in this respect.

12.04 Reservation of Fellowships for Students Belonging to Scheduled Castes and Scheduled Tribes

The Commission in May, 1977 while considering the recommendations made in the 53rd report of the Committee on the Welfare of Scheduled Castes/ Scheduled Tribes regarding educational facilities to Scheduled Castes/ Scheduled Tribes in the Union Territory of Delhi decided that with a view to

ensuring that all the university fellowships reserved for Scheduled Caste and Scheduled Tribe students are awarded to them, of agreed that the Delhi University, may, without lowering the eligibility/minimum qualification, select such candidates through a selection committee specially constituted for candidates belonging to scheduled castes/scheduled tribes. This would also be applicable to the other universities. The decision of the Commission has been brought to the notice of the universities. Further the UGC had taken the following measures for providing fellowships under various schemes.

(i) Junior Research Fellowships

Out of 250 junior research fellowships awarded annually on all-India basis, 10 per cent are reserved for Scheduled Castes/Scheduled Tribes candidates in science, humanities, including social sciences. In addition to this, 50 junior research fellowship are exclusively reserved for Scheduled Caste/Scheduled Tribe candidates in science, humanities including social sciences.

(ii) Senior Research Fellowships

Out of 100 senior research fellowships awarded by the Commission on all India basis, 10 per cent are reserved for Scheduled Caste/Scheduled Tribe candidates in science and humanities including social sciences. In addition to this, 20 senior research fellowships are exclusively reserved for Scheduled Caste/Scheduled Tribe candidates.

(iii) Research Associateships for persons belonging to Scheduled Castes/ Scheduled Tribes

Out of 50 positions available under this scheme 10 percent are reserved for Scheduled Caste/Scheduled Tribe candidates.

(iv) Scholarships in Science and Humanities including Social Sciences to Candidates belonging to Scheduled Tribes of the Border Hill Areas

The Commission has instituted 25 scholarships to be awarded every year to students belonging to scheduled Tribes of border hill areas for undertaking postgraduate studies in science and humanities including social sciences.

(v) Research Fellowships in Engineering and Technology

Out of 60 research fellowships in Engineering and Technolgy awarded annually on an all India basis by the Commission, 10% are reserved for Scheduled Caste/Scheduled Tribe candidates.

(vi) Scholarships for Postgraduate Studies in Sanskrit/Pali/Prakrit/Ardh-magadhi and Arabic/Persian

Out of 40 scholarships awarded annually for postgraduate studies

in the above subjects, 10% are reserved for Scheduled Caste/Scheduled Tribe candidates.

(vii) **Junior Research Fellowships in Science and Humanities (including Social Sciences) being implemented by the Universities**

Out of 650 junior research fellowships allocated annually to the universities/institutions, 10% are reserved for scholars belonging to Scheduled Castes/Scheduled Tribes. These awards are made by the universities/institutions themselves.

12.05 Reservation for Scheduled Castes/Scheduled Tribes in the matter of Appointment to the Teaching Posts in Universities/Colleges

The Commission, in July, 1975 agreed in principle that reservations may be provided for Scheduled Castes/Scheduled Tribes for recruitment to the posts of lecturers in the universities/colleges and mechanics for such reservations may be worked out. The Commission further decided that in order that a teaching post may not remain vacant for long period such reservations may not be operated on roaster basis nor should the reserved posts be carried forward from year to year. The decision was brought to the notice of the universities/colleges for their guidance.

Subsequently, the University Grants Commission in June, 1976 in the light of the recommendations made by the committee of Vice-Chancellors of the Central Universities agreed to observe the following mechanics to ensure reservations for Scheduled Castes/Scheduled Tribes for recruitment to the post of lecturers in the university/college.

(i) Before the beginning of each academic year the university should determine the likely vacancies that may occur during the year for recruitment to the post of lecturers.

(ii) The number of posts to be filled under the reserved category may be determined faculty-wise, although no individual post may be designated as "reserved post". The advertisement for these posts should indicate that preference would be given to Scheduled Caste/Scheduled Tribes candidates who are considered fit. On receipt of applications, the university may invite for interview all Scheduled Caste/Scheduled Tribe candidates who fulfil the minimum qualifications prescribed for recruitment to the post of lecturer.

(iii) The candidates belonging to Scheduled Castes and Scheduled Tribes may be interviewed separately in the first instance. The candidates belonging to the general category may then be interviewed separately keeping in view the recommendations made by the selection committee in respect of Scheduled Caste/Scheduled Tribe candidates.

(iv) In the case of Scheduled Caste/Tribe candidates interviewed by the committee, if suitable candidates are not available for appointment to

the posts of lecturers, the selection committee may recommend the appointment of suitable candidates as research associates for a period upto three years and these persons could later compete for the posts of lecturers as and when vacancies occur. The recommendations made by the selection committee in this regard for appointment as research associates may be sent to the Commission for consideration.

In January, 1978 the Commission again reiterated its decision that for recruitment to the post of lecturers, candidates belonging to Scheduled Castes and Scheduled Tribes should be interviewed separately by the selection committee. In such cases, where a candidate belonging to Scheduled Castes and Scheduled Tribes was not found suitable for the post of lecturer and the selection committee recommended him/her for appointment as a research associate, the person should possess the minimum qualifications prescribed for recuitment to the post of lecturer. The Commission has also ascertained from the universities to what extent SC/ST candidates have benefited from the policy of reservation in the matter of teaching appointments. A summary prepared on the basis of replies received from various universities is at Appendix XXXIV.

12.06 Remedial courses for weaker sections

The Commission while framing the guidelines for the preparation of development proposals by colleges for the Fifth Plan made a specific reference that the universities/colleges may consider organising special supplementary, remedial programmes to make up for the deficiency of earlier school education of the students from weaker sections of the society like Scheduled Castes and Scheduled Tribes.

The Commission has also accepted the following recommendations and observations of a committee appointed by it to elaborate the concept and modalities of the implementation of the remedial courses in the universities and colleges.

(a) Remedial courses are necessary for the students coming from the weaker sections of the society, poor peasants and working classes, from rural and city areas. Such students would receive special assistance and be provided necessary guidance and training to come up to the level necessary for pursuing higher studies efficiently.
(b) Diagnostic tests could be used to identify such groups of students.
(c) It would be necessary to divide the students requirements for special help into two classes.

(i) those needing intensive help; and
(ii) those needing marginal help.

For those requiring intensive help, it would be necessary if they were

to complete the course in time to utilise the long vacation during summer and during October-December.

(d) A lump sum amount may be provided to a college which should be utilised for the appointment of supplementary staff or for payment of honorarium to the existing staff and also for meeting contingency expenditure, if any.

(e) It would be desirable to have only one teacher for each subject in each class which may consist of not more than 20 students so that responsibility could be fixed and the teachers themselves could get to know their students better. It should be for the universities and colleges to engage the services of motivated teachers for the purpose.

(f) During the working days when universities are open, perhaps not more than three periods a week could be fitted in the time table for this purpose and this would be planned for those students who need marginal help.

(g) The summer courses should have approximately five classes per day of which only three should be lecture periods, and the others should be tutorials and practicals.

(h) In providing remedial training the main emphasis should be on overcoming deficiency in language, science and mathematics.

The Central Institute of English and Foreign Languages, Hyderabad, on a request from the UGC, has prepared material for improvement of standards in English on the basis of tests for identifying the weak students.

12.07 Reservation in recruitment of staff in the office of the University Grants Commission

(i) Efforts continued to give due representation to the reserved categories of Scheduled Castes and Scheduled Tribes and to complete the backlog in the office of the University Grants Commission in pursuance of the recommendations of the Parliamentary Committee on the Welfare of Scheduled Castes and Scheduled Tribes. A candidate belonging to the category of Scheduled Tribes was appointed as deputy secretary on deputation on foreign service terms. A candidate each belonging to the category of Scheduled Castes was appointed as stenographer, lower division clerk, chowkidar, farash and sweeper during the year under report.

(ii) A post each of senior statistical assistant and technical assistant meant for the category of Scheduled Caste was filled by promotion as a regular measure by candidates belonging to the category of Scheduled Castes.

(iii) Out of the two candidates sponsored for training in public administration studies programme at the University of Manchester (U.K.) under the Colombo Plan for the academic year 1978-79, one candidate belonged to the category of Scheduled Caste who received training in U.K. from 21st

September, 1978 to 15th June, 1979, the period having been treated as deputation.

(iv) The Cell created in the Office of the University Grants Commission consequent to the recommendations made by the Parliamentary Committee on the Welfare of Scheduled Castes and Scheduled Tribes for the effective implementation of the reservation orders in favour of Scheduled Castes and Scheduled Tribes has since started functioning.

SECTION XIII

Higher Education and Women

13.01 The UGC has from time to time considered the references received from Government of India with regard to status of women, with particular reference to higher educational opportunities at the university level and the educational development of women. Where specific policy matters were concerned, the Commission has benefited from the detailed consideration of such issues with the help of expert committees or working groups, and has taken necessary measures to facilitate the implementation of the recommendations. The general approach of the Commission has been that, any plan for educational development of women has to take into account the imbalances and variations in regional/sectional attitudes towards women's education which have contributed to the increase in the inequalities between different sections of the population. The Commission has also held the view that opportunities for vocational training and employment should all be open to women, as they are to men. Further it would be necessary to undertake special programmes to bring about equality of educational opportunities to benefit the majority of women.

In consideration of some specific recommendations made by the Committee on Status of Women and the UGC Committee on Development of Colleges which *inter alia* included opening of women's colleges, the view taken is that women's colleges should be opened on the basis of a proper survey and genuine need based on academic considerations. The Commission has always relaxed the eligibility conditions for women's colleges for seeking assistance under various development schemes with regard to student enrolment and faculty strength; these conditions are to be on par with those prescribed for colleges located in backward regions. These include lower enrolment and staff strength, better and favourable matching grant from the Commission for development programmes and women's hostels in such colleges.

During the current year, a reference was received from the Ministry of Education to indicate that the Government had decided that in the plans of Ministries and other Government organisations, a reasonable percentage of allocations should be earmarked for programmes relating to women and these should be separately monitored. This would be kept in view in formulating the schemes during the current plan period, to the extent possible within the resources placed at the disposal of the Commission.

13.02 A general survey of the facilities for women in higher education during the 1970s (from 1969-70 to 1976-77) indicates the position briefly given below.

Table XIII(a) shows women enrolment as a proportion of total

enrolment during the period 1969-70 to 1976-77. It will be seen that women enrolment as a percentage of total enrolment has increased progressively from 22.0% in 1969-70 to 23.3% in 1973-74 and 25.8% in 1976-77.

Table XIII(b) shows the number of colleges meant exclusively for women. This number has gone up by nearly 25% over the period 1971-72 to 1976-77. In absolute terms, the number increased from 430 in 1971-72 to 543 in 1976-77.

TABLE XIII (a)

Total enrolment and enrolment of Women

Year	*Total enrolment*	*Women enrolled*	*% of Women*
1969-70	17,92,700	3,94,594	22.0
1970-71	19,53,640	4,30,822	22.1
1971-72	20,65,041	4,68,696	22.7
1973-74	22,34,385	5,20,825	23.3
1974-75	23,66,541	5,53,009	23.4
1975-76	24,26,109	5,95,162	24.5
1976-77	24,31,563	6,27,346	25.8

(1972-73 not given above)

TABLE XIII (b)

Colleges exclusively meant for women

Year	*No. of colleges for women only*
1971-72	430
1974-75	506
1975-76	528
1976-77	543

13.03 State-wise distribution of women enrolment during the period 1974-75 to 1976-77 is given in Appendix XXXV. Women enrolment as a percentage of total enrolment has gone up in all the States, except the Union territory of Delhi, during the period. However, Delhi along with Kerala continues to record the highest percentage of women enrolment over the period. During 1976-77, Kerala had 44.1% of the total enrolment (all levels) as women and Delhi had 40.4%. States of Bihar, Orissa, Rajasthan and Uttar Pradesh had less than 20% women enrolled as students.

13.04 Level-wise enrolment of women students is given in Appendix XXXVI. During 1969-70 to 1975-76, women enrolment at the research level showed a much better progress as compared to women enrolment at other levels. Percentage of women enrolment at the research level increased from 18.8% in 1969-70 to 22.0% in 1973-74 and 24.4% in 1975-76. In contrast, there was only a marginal increase of 0.4% in women enrolment at the post-graduate level in 1975-76 as compared to 1969-70. Rather, women enrolment at the postgraduate level declined from 24.5% in 1969-70 to 23.7% in 1974-75. At the graduate level, women enrolment went up only gradually from 21.8% in 1969-70 to 24.5% in 1975-76.

13.05 Faculty-wise distribution of women enrolment is given in Appendix XXXVII While there was an increase in women enrolment as a percentage of total enrolment in most of the faculties during the period 1969-70 to 1975-76, this increase was particularly notable in the faculty of commerce where women enrolment, although substantially low vis-a-vis enrolment in the faculties of arts, science and education, went up from 2.6% in 1969-70 to 6.6% in 1975-76 thereby marking an increase of nearly $2\frac{1}{2}$ times. In the faculty of medicine, women enrolment as a percentage of total enrolment declined progressively from 22.4 in 1969-70 to 20.8 in 1973-74 and 18.3 in 1975-76. In the faculties of arts and science, women enrolment maintained a steady upward trend whereas in the faculty of education periods of rising enrolment were interspersed with periods of falling enrolment during 1969-70 to 1975-76. Women enrolment in other professional faculties like agriculture, veterinary science and law also showed a gradual upward trend during the period under reference.

13.06 The participation of women in the research effort in the universities has increased considerably with the result that presently a number of major and minor research projects funded by the UGC and other agencies have been taken up by women, as principal investigators and research staff on projects. The number of women selected in Faculty Improvement Programmes and in award of Research Fellowships, Research Associateships, National Associateships and other faculty awards of the UGC has also increased largely in the past five years. Out of a total number of 68 Research Associateships awarded during 1978-79, 25 were women. Likewise, out of 29 persons selected under National Lectures Scheme, three were women. Among 17 selections made for Career Awards during 1978-79, two were women.

It would be the continued endeavour of the Commission to encourage active participation of women in all matters relating to higher education and to provide for greater opportunities as well as to look into the special needs of women in the development of higher education, both formal and informal, including programmes of adult education and educational extension.

SECTION XIV

Non-Plan Grants to Universities

14.01 The maintenance grants are paid to the central universities in terms of the statutory provision under Section 12 (b) of the UGC Act to meet the deficit after taking into account salaries of teaching and non-teaching staff, maintenance of laboratories, libraries, and other day to day requirements of the universities including funds for the retirement benefits of the employees. It also includes the institutions for professional education i.e. Aligarh Muslim University—technical and medical; Banaras Hindu University—technical, medical and agricultural; and Visva-Bharati—agricultural. In addition, the maintenance of the hospitals attached to medical colleges at the Aligarh and Banaras Universities is also met out of

TABLE XIV. 1

(Amount in lakhs of Rupees)

	1974-75	*1975-76*	*1976-77*	*1977-78*	*1978-79*
NON-PLAN PROJECTS					
A. Administration Charges.***					
B. Block grants to					
(i) Central Universities	1,200.00	1,721.00	1,950.00	2,035.00	2,144.36
(ii) Institutions deemed to be universities	—	176.77	366.90	286.18	405.17
(iii) Grants paid to universities/ institutions for specific purposes.	—	—	7.00	7.00	0.11* 9.00
C.					
(i) Maintenance grants to constituent/affiliated colleges of Delhi University****	464.04	821.30 2.98*	878.09 32.39*	969.60 25.21*	977.90 61.83*
(ii) Revision of pay scales and additional dearness allowance to academic and non-academic staff.	153.14	—	—	—	—
Development schemes not covered under block grants**	314.24	198.96	1.00	11.99	5.14
Total Non-Plan***	2,131.42	2,918.02 2.98*	3,202.98 32.39*	3,409.16 25.21*	3,617.89 61.94*

* By adjustment.

** These include revision of pay scales and additional dearness allowance to academic and non-academic staff.

(Continued on page 134)

the maintenance grants. Table XIV. 1 shows the break-up of Non-Plan grants paid to the Universities for the years 1974-75 to 1978-79.

14.02 Grants to Central Universities

Grants paid by the Commission towards the maintenance of Central Universities***** for the years 1974-75 to 1978-79 are indicated in Table XIV. 2 below:

TABLE XIV. 2

(Amount in lakhs of Rupees)

	1974-75	*1975-76*	*1976-77*	*1977-78*	*1978-79*
1. Aligarh Muslim University	325.00	500.00	557.50	585.37	629.79
2. Banaras Hindu University	445.00	650.00	717.50	746.01	783.31
3. Delhi University	225.00	301.00	365.00	378.11	367.00
4. Jawaharlal Nehru University	113.00	143.00	165.00	173.25	194.56
5. Visva-Bharati	92.00	127.00	145.00	152.25	169.70
Total	**1,200.00**	**1,721.00**	**1,950.00**	**2,035.00**	**2,144.36**

(Continued from page 133)

*** The figures do not include the administration charges of UGC amounting to Rs. 58.69, 63.62, 66.68, 71.52 and 76.31 lakhs during the years 1974-75, 1975-76, 1976-77, 1977-78 and 1978-79 respectively under budget head 'A'.

**** Since the transfer of the scheme from the Ministry in 1955-56, the Commission has been paying maintenance and development grants to a number of colleges of the University of Delhi. The Commission pays 95% of the approved deficit for affiliated/constituent colleges and 100% of the approved deficit for university maintained colleges. The maintenance grants, *inter-alia*, include pay and allowances of the teaching and non-teaching staff, expenditure on repairs of buildings, replacement of furniture and equipment, water and electricity, books and journals, grants towards revision of pay scales, payment of dearness allowance, retirement benefits etc. The Commission also pays grants to the mess for the hostels attached to some of the Delhi Colleges for the approved staff on sharing basis of 75:25.

***** Grants to North Eastern Hill University and Hyderabad University were paid under plan.

k-up of Non-Plan
1978-79.

ntenance of Central
indicated in Table

nount in lakhs of Rupees)

'7	*1977-78*	*1978-79*
50	585.37	629.79
50	746.01	783.31
00	378.11	367.00
00	173.25	194.56
00	152.25	169.70
00	2,035.00	2,144.36

of UGC amounting to
years 1974-75, 1975-76,
head 'A'.

955-56, the Commission
a number of colleges of
the approved deficit for
eficit for university main-
ude pay and allowances
repairs of buildings, re-
city, books and journals,
ness allowance, retirement
ness for the hostels atta-
staff on sharing basis of

bad University were paid

Visits Abroad

In pursuance of the decision taken on Recommendation 3.8 contained in the 73rd Report of the Public Accounts Committee (Sixth Lok Sabha) on University Grants Commission, the information in respect of the visits abroad of the Chairman, Vice-Chairman and officers of the Commission during the year 1978-79 is given in Appendix XXXVIII.

R.K. Chhabra
Secretary

Professor Satish Chandra
Chairman

Professor B. Ramachandra Rao
Vice-Chairman

Members

Shri P. Sabanayagam
Shri S. Vasudevan
Professor Amales Tripathi
Professor C.V. Subramanian
Professor Wahid U. Malik
Professor Usha H. Mehta
Professor Mrinal Miri
Professor Ram Lal Parikh
Mr. Justice S.M. Sikri

APPENDIX I

Grants paid by UGC under Quality Programmes (1969-70 to 1973-74)

(Figures in lakhs of rupees)

Sl.No.	Programme/Year	1969-70	1970-71	1971-72	1972-73	1973-74	Total
1	2	3	4	5	6	7	8
1.	**Faculty Improvement Programme**						
	(a) Seminars, Summer Institutes and Workshops	44.22	29.77	11.04	40.99	27.16	153.18
	(b) National Fellowships	—	—	—	0.43	1.24	1.67
	(c) National Associateships	—	—	—	—	—	—
	(d) Visiting Professorships, Visiting Fellows, Visiting Faculty	—	0.12	—	—	—	0.12
	(e) Research Associateships	—	—	—	—	—	—
	(f) Teacher Fellowships	—	—	—	—	—	—
	(g) National Lectures	—	—	—	—	—	—
	(h) Utilization of Services of Retired Teachers	11.09	10.84	12.11	15.33	14.60	63.97
	(i) Travel Grants	0.63	0.82	1.07	1.46	0.17	4.15
	Total						**223.09**
2.	**Support for Research Work**						
	(a) Projects and Institutions	—	—	—	—	—	—
	(b) Research Fellowships	84.08	86.53	130.07	120.01	111.90	532.59
	(c) Scholarships in Arabic & Persian	0.41	0.50	0.62	0.52	0.38	2.43
	(d) PG Scholarship for Sanskri/ Pali/Prakrit	—	—	0.15	0.20	0.45	0.80
	(e) Financial assistance to teachers for research work	4.73	—	4.84	7.22	7.01	23.80
	(f) Publications of theses & learned research works	0.78	0.85	1.57	2.87	2.60	8.67
	Total						568.29
3.	**Student Welfare Programmes**						
	(a) Student Aid Fund	25.06	40.55	41.60	46.66	41.35	195.22
	(b) Non-Resident Student Centre	7.06	9.90	13.84	18.42	14.52	63.74
	(c) Student Study Homes	2.48	4.40	7.07	3.85	4.90	22.70
	(d) Book Bank	—	—	114.13	23.68	9.91	147.72
	Total						429.38

1969-70 to 1973-74)

(*Figures in lakhs of rupees*)

' 1972-73	1973-74	Total
6	7	8
40.99	27.16	153.18
0.43	1.24	1.67
—	—	—
—	—	0.12
—	—	—
—	—	—
—	—	—
15.33	14.60	63.97
1.46	0.17	4.15
		223.09
—	—	—
120.01	111.90	532.59
0.52	0.38	2.43
0.20	0.45	0.80
7.22	7.01	23.80
2.87	2.60	8.67
		568.29
46.66	41.35	195.22
18.42	14.52	63.74
3.85	4.90	22.70
23.68	9.91	147.72
		429.38

APPENDIX I (*Contd.*)

1	2	3	4	5	6	7	8
4.	**Other Schemes**						
	(a) Correspondence Courses	2.80	2.95	3.05	0.25	3.15	12.20
	(b) Adult Education	—	—	0.15	0.90	0.97	2.02
	(c) Cultural & Bilateral Exchange Programmes	0.02	6.92	4.01	10.41	2.60	23.96
	(d) Examination Reforms	0.15	0.04	—	0.23	0.40	0.82
	(e) Centres of Advanced Study and Departments of Special assistance	69.41	72.33	85.05	109.06	90.88	426.73
	(f) University Centres for PG Studies	36.90	38.80	20.51	31.08	30.37	157.66
	(g) Area Studies	3.88	3.49	2.37	8.79	5.56	24.09
	Total						647.48
	Grand Total						1868.35

APPENDIX II

Grants paid by UGC under Quality Programmes (1974-75 to 1978-79)

(Figures in lakhs of rupees)

Sl.No.	*Programme/Year*	*1974-75*	*1975-76*	*1976-77*	*1977-78*	*1978-79*	*Total*
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*
1.	**Faculty Improvement Programme**						
	(a) Seminars, Summer Institutes & workshops	29.26	21.99	55.59	42.23	66.40	215.47
	(b) National Fellowships	1.38	2.75	2.54	2.07	4.04	12.78
	(c) National Associateships	0.20	0.39	0.99	0.98	1.26	3.82
	(d) Visiting Professorships, Visiting Fellowships, Visiting Faculty	0.02	—	37.38	8.50	4.95	50.85
	(e) Research Associateships	—	1.11	2.30	2.96	5.35	11.72
	(f) Teacher Fellowships	—	—	7.27	115.64	241.26	364.17
	(g) National Lectures	0.61	0.84	1.16	1.34	1.30	5.25
	(h) Utilization of services of retired teachers	8.83	17.77	35.60	20.35	23.80	106.35
	(i) Travel grants	0.91	0.65	1.97	2.15	3.05	8.73
	Total						779.14
2.	**Support for Research Work**						
	(a) Projects & Institutions	**17.37**	**96.80**	**163.52**	**167.30**	**108.22**	**553.21**
	(b) Research Fellowships	**266.79**	**262.96**	**251.15**	**224.24**	**165.10**	**1170.24**
	(c) Scholarships in Arabic & Persian	0.34	0.56	0.66	0.92	0.53	3.01
	(d) PG Scholarships for Sanskrit/ Pali/Prakrit	0.54	0.57	0.66	1.08	0.66	3.51
	(e) Financial Assistance to Teachers for research work	8.41	14.70	37.15	67.34	25.59	153.19
	(f) Publication of Theses and learned research works	3.69	2.88	8.23	9.78	10.66	35.24
	Total						1918.40
3.	**Student Welfare Programmes**						
	(a) Student Aid Fund	27.92	27.80	31.28	48.56	33.72	169.28
	(b) Non-Resident Student Centre	11.53	4.30	2.38	2.69	1.47	22.37
	(c) Student Study Homes	8.45	2.58	1.08	0.89	—	13.00
	(d) Book Banks	58.14	96.44	75.91	46.19	—	276.68
	Total						481.33

(1974-75 to 1978-79)

(*Figures in lakhs of rupees*)

'7	1977-78	1978-79	Total
	6	7	8
	42.23	66.40	215.47
	2.07	4.04	12.78
	0.98	1.26	3.82
	8.50	4.95	50.85
	2.96	5.35	11.72
	115.64	241.26	364.17
	1.34	1.30	5.25
	20.35	23.80	106.35
	2.15	3.05	8.73
			779.14
	167.30	108.22	553.21
	224.24	165.10	1170.24
	0.92	0.53	3.01
	1.08	0.66	3.51
	67.34	25.59	153.19
	9.78	10.66	35.24
			1918.40
	48.56	33.72	169.28
	2.69	1.47	22.37
	0.89	—	13.00
	46.19	—	276.68
			481.33

APPENDIX II (*Contd.*)

1	2	3	4	5	6	7	8
4.	**Other Schemes**						
	(a) Correspondence Courses	2.88	12.72	10.06	4.28	10.06	40.00
	(b) Adult Education	2.72	3.70	0.60	8.70	17.80	33.52
	(c) Cultural & Bilateral Exchange Programmes	7.98	7.25	5.16	23.61	25.77	69.77
	(d) Examination Reforms	0.69	2.12	7.06	5.16	17.77	32.80
	(e) Centres of Advanced Study and Departments of Special Assistance	104.36	112.62	169.68	105.13	110.58	602.37
	(f) University Centres for PG Studies	31.55	46.21	48.92	46.50	60.60	233.78
	(g) Area Studies	3.11	5.52	7.65	5.63	10.20	32.11
	Total						1044.35
	Grand Total						4223.22

APPENDIX III

V Plan Outlays

	Original	Finally approved in Nov. 1976	Actual Expenditure during 1974-79 (in lakhs of Rs.)						
			1974-75	1975-76	1976-77	1977-78	1978-79*	Total 1974-79	%
I. General development programmes of Universities (other than Engg./Tech.)	9500	7866	1064.14	1228.31	1721.13	1537.28	2190.66	7741.52	41%
II. General development of Colleges	4500	3425	381.16	277.62	33.36	736.66	733.26	2465.06	13%
III. Special Quality Improvement Programme and Support for Research	7000	5798	573.64	901.01	1089.22	1628.94	1583.51	5776.32	30.4%
IV. Development of Medical Colleges and attached Hospitals of Central Universities	—	787	98.60	60.31	132.41	98.94	198.48	588.74	3.1%
Total	21000	17876	2117.54	2467.25	3279.12	4001.82	4705.91	16571.64**	
V. Engineering and Technology development programmes in the universities (affiliated colleges excluded)			393.14	393.34	577.88	442.46	606.55	2413.37	12.5%
Grand Total			2510.68	2860.59	3857.00	4444.28	5312.46	18985.01	

*Provisional

**Includes 79.23 paid by adjustment.

V. Engineering and Technology development programmes in the universities (affiliated colleges excluded)	393.14	393.34	577.88	442.46	606.55	2413.37	12.5%
Grand Total	2510.68	2860.59	3857.00	4444.28	5312.46	18985.01	

*Provisional
**Includes 79.23 paid by adjustment.

APPENDIX IV

List of Universities and Institutions Deemed to be Universities in India 1978-79

Year of Establishment	*Sl. No.*	*University*	*Total Enrolment*	*Number enrolled directly in the teaching Deptts. of the University*
1	*2*	*3*	*4*	*5*
1857	1.	Calcutta University	1,69,353	13,753
	2.	Bombay University	1,25,431	4,173
	3.	Madras University	1,09,844	2,785
1887	4.	Allahabad University	28,109	13,466
1916	5.	Banaras Hindu University	19,902	16,824
	6.	Mysore University	61,859	2,361
1917	7.	Patna University	10,451	2,576
1918	8.	Osmania University (Hyderabad)	37,123	4,695
1921	9.	Aligarh Muslim University	11,045	11,045
	10.	Lucknow University	32,675	15,401
1922	11.	Delhi University	78,328	11,187
1923	12.	Nagpur University	46,141	2,402
1926	13.	Andhra University (Waltair)	50,936	6,996
1927	14.	Agra University	44,847	514
1929	15.	Annamalai University	7,552	7,552
1937	16.	Kerala University (Trivandrum)	64,599	982
1943	17.	Utkal University (Bhubaneshwar)	27,992	2,209
1946	18.	Saugar University	29,507	7,494
1947	19.	Rajasthan University (Jaipur)	1,13,062	7,935
1947	20.	Punjab University (Chandigarh)	50,726	5,171
1948	21.	Gauhati University	37,262	2,477
	22.	Kashmir University (Srinagar)	11,939	1,484
1949	23.	Roorkee University	2,231	2,231
	24.	Poona University (Pune)	70,130	2,981
	25.	M.S. University (Baroda)	19,331	19,331
	26.	Karnatak University (Dharwar)	54,599	3,753
1950	27.	Gujarat University (Ahmedabad)	86,786	2,061
1951	28.	S.N.D.T. Women's University (Bombay)	13,853	—
	29.	Visva-Bharati (Santiniketan)	1,417	1,417
1952	30.	Bihar University (Muzaffarpur)	20,066	1,539
1954	31.	Sri Venketeswara University (Tirupati)	26,838	2,527
1955	32.	Sardar Patel University (Vallabh Vidyanagar)	9,447	1,142
	33.	Jadavpur University (Calcutta)	4,981	4,439
1956	34.	Kurukshetra University	30,779	2,987
	35.	Indira Kala Sangit Visvavidyalaya (Khairagarh)	2,075	122
1957	36.	Vikram University (Ujjain)	25,144	710
	37.	Gorakhpur University	69,283	7,196
	38.	Jabalpur University	19,659	1,050

APPENDIX IV (*Contd.*)

1	2	3	4	5
1958	39.	Sampurnanad Sanskrit Vishwavidyalaya (Varanasi)	2,801	860
	40.	Marathwada University (Aurangabad)	33,088	1,767
1960	41.	G.B. Pant University of Agriculture & Technology (Pantnagar)	2,395	2,395
	42.	Burdwan University	37,642	1,357
	43.	Kalyani University	2,260	1,443
	44.	Bhagalpur University	12,332	1,543
	45.	Ranchi University	32,450	1,838
1961	46.	K.S. Darbhanga Sanskrit Visvavidyalaya	3,427	833
1962	47.	Punjab Agricultural University (Ludhiana)	2,719	2,719
	48.	Punjabi University (Patiala)	22,431	1,956
	49.	Orissa University of Agriculture & Technology (Bhubaneshwar)	913	913
	50.	North Bengal University (Siliguri)	17,073	814
	51.	Rabindra Bharati (Calcutta)	2,649	2,649
	52.	Magadh University (Gaya)	28,422	1,058
	53.	Jodhpur University	13,040	11,752
	54.	Udaipur University	9,120	5,322
	55.	Shivaji University (Kolhapur)	49,674	3,025
1964	56.	Indore University	20,334	576
	57.	Jiwaji University (Gawlior)	26,036	228
	58.	Ravi Shankar University (Raipur)	35,790	759
	59.	University of Agricultural Science (Bangalore)	3,460	3,460
	60.	Andhra Pradesh Agricultural University (Hyderabad)	2,371	2,371
	61.	Bangalore University	54,009	4,387
	62.	Jawaharlal Nehru Krishi Visvavidyalaya (Jabalpur)	2,343	2,343
1965	63.	Dibrugarh University	15,232	772
	64.	Kanpur University	56,065	—
	65.	Meerut University	62,188	288
	66.	Madurai University	46,611	829
	67.	Saurashtra University (Rajkot)	33,619	421
	68.	South Gujarat University (Surat)	21,455	612
1967	69.	Berhampur University	6,691	669
	70.	Sambalpur University	11,321	732
1968	71.	Gujarat Ayurved University (Jamnagar)	2,044	629
	72.	Jawaharlal Nehru University (New Delhi)	3,201	2,951
	73.	Mahatma Pule Krishi Vidyapith (Rahuri, Ahmednagar Dt.)	1,701	1,701
	74.	Calicut University	32,650	648
	75.	Awadesh Pratap Singh University (Rewa)	18,714	41
	76.	Assam Agricultural University (Jorhat)	863	863
1969	77.	Guru Nanak Dev University (Amritsar)	36,898	1,095
	78.	Jammu University	6,818	1,586
	79.	Punjabrao Krishi Vidyapith (Akola)	1,999	1,999

APPENDIX IV (*Contd.*)

4	5
2,801	860
33,088	1,767
ology	
2,395	2,395
37,642	1,357
2,260	1,443
12,332	1,543
32,450	1,838
3,427	833
2,719	2,719
22,431	1,956
gy	
913	913
17,073	814
2,649	2,649
28,422	1,058
13,040	11,752
9,120	5,322
49,674	3,025
20,334	576
26,036	228
35,790	759
) 3,460	3,460
2,371	2.371
54,009	4,387
2,343	2,343
15,232	772
56,065	—
62,188	288
46,611	829
33,619	421
21,455	612
6,691	669
11,321	732
2,044	629
3,201	2,951
1,701	1,701
32,650	648
18,714	41
863	863
36,898	1,095
6,818	1,586
1,999	1,999

1	2	3	4	5
1970	80.	Haryana Agricultural University (Hissar)	1,811	1,811
	81.	Himachal Pradesh University (Simla)	10,720	974
	82.	Bhopal University	19,536	132
	83.	Rajendra Agricultural University (Dholi) (Muzaffarpur Dt.)	1,345	1,345
1971	84.	Tamil Nadu Agricultural University (Coimbatore)	2,508	2,508
	85.	Cochin University	1,641	737
1972	86.	Kerala Agricultural University (Trichur)	1,085	1,085
	87.	Gujarat Agricultural University (Ahmedabad)	1,664	1,664
	88.	Konkan Krishi Vidyapith (Dapoli)	577	577
	89.	Marathwada Krishi Vidyapith (Parbhani)	1,325	1,325
	90.	Mithila University (Darbhanga)	16,801	504
	91.	Jawaharlal Nehru Technological University (Hyderabad)	3,316	3,316
1973	92.	North Eastern Hill University (Shillong)	6,644	584
	93.	Kumaon University (Nainital)	7,197	—
	94.	Garhwal University (Srinagar, Garhwal)	11,981	—
1974	95.	Kashi Vidyapeeth (Varanasi)	4,567	4,567
	96.	Bidhan Chandra Krishi Visvavidyalaya (Kalyani)	1,074	1,074
	97.	University of Hyderabad	211	211
	98.	Narendra Deo University of Agriculture & Technology (Faizabad)	24	24
	99.	Chandrasekhar Azad University of Agriculture & Technology, (Kanpur)	1,178	1,178
1975	100.	Avadh University (Faizabad)	20,613	—
	101.	Bundelkhand University (Jhansi)	11,249	—
	102.	Rohilkhand University (Bareilly)	29,037	—
1976	103.	Maharishi Dayanand University (Rohtak)	27,890	1,116
	104.	Kakatiya University (Warangal)	6,235	785
	105.	Nagarjuna University (Nagarjunanagar, Guntur)	16,213	913
1978	106.	Bhavnagar University (Bhavnagar)	—	—
	107.	Perarignar Anna University of Technology (Madras)	3,578	3,578
	108.	Himachal Pradesh Krishi Visvavidyalaya (Palampur)	576	576

APPENDIX IV (*Contd.*)

1*	2	3	4	5
		Institutions Deemed to be Universities		
1958	1.	Indian Institute of Sciences (Bangalore)	1,071	1,071
	2.	Indian Agricultural Research Institute (New Delhi)	571	571
1962	3.	Gurukul Kangri Visvavidyalaya (Hardwar)	181	181
	4.	Jamia Millia Islamia (New Delhi)	1,444	1,444
1963	5.	Gujarat Vidyapith (Ahmedabad)	423	423
1964	6.	Tata Institute of Social Sciences (Bombay)	184	184
	7.	Birla Institute of Technology & Science (Pilani)	2,210	2,210
1967	8.	Indian School of Mines (Dhanbad)	608	608
1973	9.	Central Institute of English & Foreign Languages (Hyderabad)	352	352
1976	10.	Gandhigram Rural Institute (Gandhigram)	437	437
		Grand Total	26,18,228	3,07,237

Note:—1. The Universities have been arranged according to the year in which the respective Acts were adopted; the position shown above is upto 31.3.1979.

2. The enrolment figures which include the enrolment in constituent/affiliated colleges of the Universities generally indicate the position as on Sept. 30, 1978. The figures for Rabindra Bharati relate to the University campus only. In case of K.S. Darbhanga Sanskrit Visvavidyalaya and Sampurnanand Sanskrit Visvavidyalaya the enrolment includes the University campus as well as such of the colleges from whom information was received in time. In case of some colleges data for the previous year have been used.

3. Enrolment figures have not been furnished in the case of Bhavnagar University as it had not yet started functioning.

*Year of recognition as Institution deemed to be university under Section 3 of the UGC Act 1956.

4	5
1,071	1,071
571	571
181	181
1,444	1,444
423	423
184	184
2,210	2,210
608	608
352	352
437	437
26,18,228	3,07,237

the year in which the res-
ove is upto 31.3.1979.

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osition as on Sept. 30, 1978.
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ampus as well as such of the
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ase of Bhavnagar University

under Section 3 of the UGC

APPENDIX V

Growth of Student Enrolment
1960-61 to 1969-70 and 1969-70 to 1978-79

Year	*Total enrolment*	*Increase over the preceding year*	*Percentage increase*
1960-61	5,56,559	75,025	15.6
1961-62	6,63,661	1,07,102	19.2
1962-63	7,52,095	88,434	13.3
1963-64	8,42,110	90,015	12.0
1964-65	9,50,277	1,08,167	12.8
1965-66	10,66,884	1,16,607	12.3
1966-67	11,90,713	1,23,829	11.6
1967-68	13,70,261	1,79,548	15.1
1968-69	15,66,103	1,95,842	14.3
1969-70	17,92,780	2,26,677	14.5
1969-70	17,92,780	2,26,677	14.5
1970-71	19,53,700	1,60,920	9.0
1971-72	20,65,041	1,11,341	5.7
1972-73	21,68,107	1,03,066	5.0
1973-74	22,34,385	66,278	3.1
1974-75	23,66,541	1,32,156	5.9
1975-76	24,26,109	59,568	2.5
1976-77	24,31,563	5,454	0.2
1977-78	25,64,972	1,33,409	5.5
1978-79	26,18,228	53,256	2.1

APPENDIX VI

Growth of Enrolment (excluding PUC/Inter/PP) during the period from 1974-75 to 1978-79 (State-wise)

S. No.	State/Union Territory	1974-75 Enrolment	1975-76 Enrolment	1975-76 Increase over the preceding year	1975-76 Percentage Increase	1976-77 Enrolment	1976-77 Increase over the preceding year	1976-77 Percentage Increase	1977-78 Enrolment	1977-78 Increase over the preceding year	1977-78 Percentage Increase
1	2	3	4	5	6	7	8	9	10	11	12
1.	Andhra Pradesh	1,54,007	1,58,193	4,186	2.7	1,38,960	—19,233	—12.2	1,41,963	3,003	2.2
2.	Assam/Manipur	45,457	41,522	—3,935	—8.7	42,688	1,166	2.8	47,957	5,269	12.3
3.	Bihar	83,099	99,434	16,335	19.7	1,05,778	6,344	6.4	1,17,754	11,976	11.3
4.	Gujarat	1,84,164	1,74,696	—9,468	—5.1	1,68,803	—5,893	—3.4	1,80,375	11,572	6.9
5.	Haryana	54,100	58,565	4,465	8.3	57,219	—1,346	—2.3	61,010	3,791	6.6
6.	Himachal Pradesh	12,339	11,949	—390	—3.2	9,255	—2,694	—22.5	10,866	1,611	17.4
7.	Jammu & Kashmir	24,377	20,738	—3,639	—15.0	18,806	—1,932	—9.3	18,393	—413	—2.2
8.	Karnataka	1,34,516	1,42,027	7,511	5.6	1,45,404	3,377	2.4	1,60,157	14,753	10.1
9.	Kerala	78,701	78,854	153	0.2	83,671	3,817	6.1	91,909	8,238	9.8
10.	Madhya Pradesh	1,56,216	1,56,252	36	Negligible	1,60,345	4,093	2.6	1,88,530	28,185	17.6
11.	Maharashtra	2,94,929	3,09,575	14,646	5.0	3,09,753	178	0.1	3,37,400	27,647	8.9
12.	Meghalaya/Nagaland	5,091	4,756	—335	—6.6	5,041	285	6.0	6,115	1,074	21.3
13.	Orissa	40,207	44,348	4,141	10.3	43,498	—850	—1.9	42,339	—1,159	—2.7
14.	Panjab	1,04,532	1,05,715	1,183	1.1	1,04,656	—1,059	—1.0	1,03,345	—1,311	—1.3
15.	Rajasthan	1,04,690	97,019	—7,671	—7.3	98,572	1,553	1.6	1,20,286	21,714	22.0
16.	Tamil Nadu	1,60,206	1,62,734	2,528	1.6	1,63,902	1,168	0.7	1,65,748	1,846	1.1
17.	Uttar Pradesh	3,51,537	3,51,483	—54	Negligible	3,62,970	11,487	3.3	4,03,062	40,092	11.0
18.	West Bengal/Tripura	2,96,979	3,26,167	29,188	9.8	3,27,022	855	0.3	2,73,086	—53,936	—16.5
19.	Delhi	81,394	82,082	688	0.8	85,220	3,138	3.8	94,677	9,457	11.1
	All India	23,66,541	24,26,109	59,568	2.5	24,31,563	5,454	0.2	25,64,972	1,33,409	5.5

Note : The enrolment relating to the Union Territories of Andaman & Nicobar Islands, Arunachal Pradesh, Mizoram, Pondicherry, Goa, Daman & Diu have been clubbed with the enrolments of Punjab, Assam, Meghalaya, Tamil Nadu, Maharashtra and Gujarat respectively. The enrolment of Chandigarh has been merged with that of Punjab.

15.	Rajasthan	1,04,690	97,019	—7,671	—7.3	98,572	1,553	1.6	1,20,286	21,714	22.0
16.	Tamil Nadu	1,60,206	1,62,734	2,528	1.6	1,63,902	1,168	0.7	1,65,748	1,846	1.1
17.	Uttar Pradesh	3,51,537	3,51,483	—54	Negligible	3,62,970	11,487	3.3	4,03,062	40,092	11.0
18.	West Bengal/Tripura	2,96,979	3,26,167	29,188	9.8	3,27,022	855	0.3	2,73,086	—53,936	—16.5
19.	Delhi	81,394	82,082	688	0.8	85,220	3,138	3.8	94,677	9,457	11.1
	All India	23,66,541	24,26,109	59,568	2.5	24,31,563	5,454	0.2	25,64,972	1,33,409	5.5

Note : The enrolment relating to the Union Territories of Andaman & Nicobar Islands, Arunachal Pradesh, Mizoram, Pondicherry, Goa, Daman & Diu have been clubbed with the enrolments of Punjab, Assam, Meghalaya, Tamil Nadu, Maharashtra and Gujarat respectively. The enrolment of Chandigarh has been merged with that of Punjab.

APPENDIX VI (*Contd.*)

Enrolment (Statewise): Continued 1978-79

S.No.	*State/Union Territory*	*1978-79*			*Average annual compound rate of growth during the period from 1974-75 to 1978-79*
		Enrolment	*Increase over the preceding year*	*Percentage Increase*	
1.	Andhra Pradesh	1,43,595	1,632	1.1	—1.74
2.	Assam/Manipur	53,357	5,400	11.3	4.10
3.	Bihar	1,25,902	8,748	6.9	10.90
4.	Gujarat	1,74,769	—5,606	—3.1	—1.30
5.	Haryana	60,480	—530	—0.9	2.80
6.	Himachal Pradesh	11,296	430	4.0	—2.17
7.	Jammu & Kashmir	18,757	364	2.0	—6.33
8.	Karnataka	1,74,998	14,841	9.3	6.80
9.	Kerala	99,975	8,066	8.8	6.20
10.	Madhya Pradesh	1,99,138	10,608	5.6	6.30
11.	Maharashtra	3,44,103	6,703	2.0	4.00
12.	Meghalaya/Nagaland	6,644	529	8.7	6.90
13.	Orissa	46,917	4,578	10.8	4.00
14.	Punjab	1,12,774	9,429	9.1	2.00
15.	Rajasthan	1,37,432	17,146	14.3	7.00
16.	Tamil Nadu	1,70,530	4,782	2.9	1.60
17.	Uttar Pradesh	4,17,568	14,506	3.6	4.40
18.	West Bengal/Tripura	2,36,449	—36,637	—13.4	—5.55
19.	Delhi	83,544	—11,133	—11.8	0.70
	All India	26,18,228	53,256	2.1	2.50

Note : Enrolment relating to the Union Territories of Andaman & Nicobar Islands, Arunachal Pradesh, Mizoram, Pondicherry, Goa, Daman & Diu has been clubbed with the enrolment of Punjab, Assam, Meghalaya, Tamil Nadu, Maharashtra and Gujarat respectively. Enrolment of Chandigarh has been merged with that of Punjab.

APPENDIX VII

Student Enrolment in the Universities: Stagewise (1975-76 to 1978-79)

Stage	*1975-76 Enrolment*	*Percentage of Total*	*1976-77 Enrolment*	*Percentage of Total*	*1977-78 Enrolment*	*Percentage of Total*	*1978-79 Enrolment*	*Percentage of Total*
Graduate	21,46,919	88.5	21,41,542	88.1	22,55,306	87.9	22,94,785	87.7
Postgraduate	2,19,826	9.1	2,18,128	9.0	2,33,644	9.1	2,49,528	9.5
Research	18,381	0.7	21,910	0.9	26,659	1.1	30,078	1.1
Diploma/Certificate	40,983	1.7	49,983	2.0	49,363	1.9	43,837	1.7
Total	24,26,109	100.0	24,31,563	100.00	25,64,972	100.0	26,18,228	100.0

APPENDIX VIII

Stagewise Enrolment: Universities and Affiliated Colleges (1978-79)

Stage	*University Departments*	*University Colleges*	*Affiliated Colleges*	*Total*	*Percentage in Affiliated Colleges*		
					1978-79	1977-78	1976-77
Graduate	1,49,743	1,25,635	20,19,407	22,94,785	88.0	88.8	89.7
Postgraduate	1,10,385	5,739	1,33,404	2,49,528	53.5	53.9	53.5
Research	25,379	716	3,983	30,078	13.2	14.4	11.2
Diploma/Certificate	21,730	713	21,394	43,837	48.8	55.2	58.7
Total	3,07,237	1,32,803	21,78,188	26,18,228	83.2	84.2	85.1

APPENDIX IX

Student Enrolment in Universities: Faculty-wise (1975-76 to 1978-79)

Faculty	*1975-76*		*1976-77*		*1977-78*		*1978-79*	
	Enrolment	*% of Total*	*Enrolment*	*% of Total*	*Enrolment*	*% of Total*	*Enrolment*	*% of Total*
Arts (including Oriental Learning)	10,79,990	44.5	10,78,967	44.4	11,21,238	43.7	11,07,407	42.3
Science	4,63,841	19.1	4,43,013	18.2	4,72,981	18.4	4,92,143	18.8
Commerce	4,14,946	17.1	4,30,387	17.7	4,63,967	18.1	4,93,449	18.8
Education	76,641	3.2	72,512	3.0	73,258	2.9	71,213	2.7
Engineering/Technology	96,067	4.0	1,00,040	4.1	1,03,706	4·0	1,11,659	4.3
Medicine	1,05,140	4.3	1,13,151	4.6	1,12,915	4.4	1,11,655	4.3
Agriculture	30,160	1.2	31,860	1.3	35,415	1.4	39,019	1.5
Veterinary Science	6,377	0.3	6,700	0.3	6,777	0.3	6,949	0.2
Law	1,41,298	5.8	1,40,680	5.8	1,58,522	6.2	1,66,897	6.4
Others	11,649	0.5	14,253	0.6	16,193	0.6	17,837	0.7
Total	24,26,109	100.0	24,31,563	100,0	25,64,972	100.0	26,18,228	100.0

Veterinary Science	6,377	0.3	6,700	0.3	6,777	0.3	6,949	0.2
Law	1,41,298	5.8	1,40,680	5.8	1,58,522	6.2	1,66,897	6.4
Others	11,649	0.5	14,253	0.6	16,193	0.6	17,837	0.7
Total	24,26,109	100.0	24,31,563	100,0	25,64,972	100.0	26,18,228	100.0

APPENDIX X

Distribution of Colleges According to Courses of Study (1974-75 to 1978-79)

(Number of Colleges)*

Courses of Study	*1974-75*	*1975-76*	*1976-77*	*1977-78*	*1978-79*
Arts, Science and Commerce	3009	3085	3123	3160	3240
Technical/Professional	409	412	412	425	433
Break up					
(a) Engineering/Technology	109	109	111	113	117
(b) Medicine/Pharmacy/Ayurveda/Nursing/ Dentistry/Homeopathy	218	224	225	236	240
(c) Agriculture	57	56	53	52	52
(d) Veterinary Science	25	23	23	24	24
Law	122	132	138	141	143
Physical Education and Education	322	330	332	343	340
Oriental Learning	269	271	268	262	259
Music/Fine Arts	39	42	44	44	45
Total	4170	4272	4317	4375	4460

*excludes Junior Colleges and Colleges having only Diploma/Certificate Courses.

APPENDIX XI—Increase in number of colleges during the period 1974-75 to 1978-79 (Statewise)

S. No.	State/Union Territory	1974-75	1975-76		1976-77		1977-78		1978-79		Increase during 1974-75 to 1978-79
		No. of Colleges (UC+AC)	No. of Colleges (UC+AC)	Increase over the preceding year	No. of Colleges (UC+AC)	Increase over the preceding year	No. of Colleges (UC+AC)	Increase over the preceding year	No. of Colleges (UC+AC)	Increase over the preceding year	
1	2	3	4	5	6	7	8	9	10	11	12
1.	Andhra Pradesh	289	307	18	314	7	322	8	326	4	37
2.	Assam/Manipur	139	142	3	146	4	148	2	157	9	18
3.	Bihar	273	282	9	305	23	318	13	329	11	56
4.	Gujarat	272	276	4	279	3	274	—5	275	1	3
5.	Haryana	123	129	6	129	—	132	3	132	—	9
6.	Himachal Pradesh	34	33	—1	27	—6	26	—1	26	—	—8
7.	Jammu & Kashmir	37	37	—	37	—	38	1	39	1	2
8.	Karnataka	332	350	18	347	—3	357	10	361	4	29
9.	Kerala	142	146	4	152	6	155	3	168	13	26
10.	Madhya Pradesh	351	347	—4	343	—4	341	—2	342	1	—9
11.	Maharashtra	550	559	9	563	4	571	8	589	18	39
12.	Meghalaya/Nagaland	21	25	4	23	—2	23	—	24	1	3
13.	Orissa	102	107	5	107	—	108	1	115	7	13
14.	Punjab	206	211	5	213	2	213	—	215	2	9
15.	Rajasthan	160	166	6	168	2	182	14	185	3	25
16.	Tamil Nadu	258	261	3	264	3	267	3	271	4	13
17.	Uttar Pradesh	511	520	9	523	3	522	—1	526	4	15
18.	West Bengal	314	318	4	321	3	321	—	323	2	9
19.	Delhi	56	56	—	56	—	57	1	57	—	1
	All India	4170	4272	102	4317	45	4375	58	4460	85	290

Note : Colleges situated in the Union Territories of A&N Islands, Arunachal Pradesh, Mizoram, Pondicherry, Goa, Daman & Diu has been merged with the colleges of Punjab, Assam, Meghalaya, Tamil Nadu, Maharashtra & Gujarat respectively; Colleges in Chandigarh have been merged with those in Punjab.

UC—University Colleges AC—Affiliated Colleges

15.	Rajasthan	160	166	6	168	2	182	14	185	3	25
16.	Tamil Nadu	258	261	3	264	3	267	3	271	4	13
17.	Uttar Pradesh	511	520	9	523	3	522	—1	526	4	15
18.	West Bengal	314	318	4	321	3	321	—	323	2	9
19.	Delhi	56	56	—	56	—	57	1	57	—	1
	All India	4170	4272	102	4317	45	4375	58	4460	85	290

Note : Colleges situated in the Union Territories of A&N Islands, Arunachal Pradesh, Mizoram, Pondicherry, Goa, Daman & Diu has been merged with the colleges of Punjab, Assam, Meghalaya, Tamil Nadu, Maharashtra & Gujarat respectively; Colleges in Chandigarh have been merged with those in Punjab.

UC—University Colleges AC—Affiliated Colleges

APPENDIX XII—Increase in number of Affiliated Colleges (Arts, Science, Commerce only) during the period from 1974-75 to 1978-79 (State-wise)

S. No.	*State/Union Territory*	*1974-75*	*1975-76*		*1976-77*		*1977-78*		*1978-79*		*Increase from 1974-75 to 1978-79*
		No. of Colleges	*No. of Colleges*	*Increase over the preceding year*	*No. of Colleges*	*Increase over the preceding year*	*No. of Colleges*	*Increase over the preceding year*	*No. of Colleges*	*Increase over the preceding year*	
1.	Andhra Pradesh	189	204	15	210	6	216	6	221	5	32
2.	Assam/Manipur	113	117	4	119	2	118	—1	128	10	15
3.	Bihar*	187	194	7	210	16	226	16	236	10	49
4.	Gujarat	185	188	3	190	2	186	—4	186	—	1
5.	Haryana	92	95	3	96	1	95	—1	95	—	3
6.	Himachal Pradesh	20	20	—	22	2	21	—1	22	1	2
7.	Jammu & Kashmir	22	22	—	22	—	22	—	23	1	1
8.	Karnataka	221	227	6	227	—	234	7	240	6	19
9.	Kerala	97	100	3	105	5	107	2	119	12	22
10.	Madhya Pradesh	244	239	—5	240	1	237	—3	239	2	—5
11.	Maharashtra	400	406	6	404	—2	407	3	419	12	19
12.	Meghalaya/Nagaland	19	21	2	18	—3	18	—	18	—	—1
13.	Orissa	82	86	4	86	—	84	—2	91	7	9
14.	Paniab	161	167	6	167	—	165	—2	166	1	5
15.	Rajasthan	89	93	4	97	4	110	13	111	1	22
16.	Tamil Nadu	182	185	3	188	3	193	5	195	2	13
17.	Uttar Pradesh	340	344	4	349	5	349	—	353	4	13
18.	West Bengal/ Tripura/Sikkim	245	247	2	248	1	248	—	252	4	7
19.	Delhi	38	38	—	38	—	38	—	37	—1	—1
	All India	2926	2993	67	3036	43	3074	38	3151	77	225

Note : Colleges situated in the Union Territories of 'A & N' islands, Arunachal Pradesh, Mizoram, Pondicherry, Goa, Daman & Diu have been merged with the Colleges of Punjab, Assam, Meghalaya, Tamil Nadu, Maharashtra & Gujarat respectively. Colleges in Chandigarh have been merged with Colleges in the Punjab.

*Also includes Constituent Colleges

APPENDIX XIII

Number of Postgraduate Colleges (Arts, Science & Commerce only) (Affiliated): Statewise (1974-75 to 1978-79)

S.No.	*State*	*1974-75*	*1975-76*	*1976-77*	*1977-78*	*1978-79*	*Increase during the period*
1.	Andhra Pradesh	10	11	16	15	13	3
2.	Assam/Manipur	4	5	2	2	2	—2
3.	Bihar	—	1	2	4	2	2
4.	Gujarat	56	56	30	20	12	—44
5.	Haryana	14	13	16	17	17	3
6.	Himachal Pradesh	—	1	—	1	1	1
7.	Jammu & Kashmir	—	—	—	—	—	—
8.	Karnataka	4	3	5	3	2	—2
9.	Kerala	40	41	41	41	45	5
10.	Madhya Pradesh	114	116	116	110	114	—
11.	Maharashtra	120	123	130	141	145	25
12.	Meghalaya/Nagaland	—	—	—	—	—	—
13.	Orissa	4	3	3	3	4	—
14.	Punjab	35	34	33	36	40	5
15.	Rajasthan	19	17	18	35	38	19
16.	Tamil Nadu	57	60	64	66	74	17
17.	Uttar Pradesh	128	106	108	114	128	—
18.	West Bengal/Tripura	4	5	6	4	5	1
19.	Delhi	—	—	—	—	—	—
	Total	609	595	590	612	642	33

| | | |

APPENDIX XV

Number and Distribution of Teaching Staff in the Affiliated Colleges According to Designation (1973-74 to 1978-79)

Year	*Senior Teachers**	*Lecturers***	*Tutors/ Demonstrators*	*Total*
1973-74	15,226	1,00,177	14,500	1,29,903
	(11.7)	(77.1)	(11.2)	(100.0)
1974-75	16,396	1,03,456	14,100	1,33,952
	(12.2)	(77.2)	(10.6)	(100.0)
1975-76	16,513	1,06,243	13,243	1,35,999
	(12.1)	(78.1)	(9.8)	(100.0)
1976-77	16,797	1,07,255	13,421	1,37,473
	(12.2)	(78.0)	(9.8)	(100.0)
1977-78	16,391	1,11,692	13,119	1,41,202
	(11.6)	(79.1)	(9.3)	(100.0)
1978-79	16,662	1,15,596	10,566	1,42,824
	(11.7)	(80.9)	(7.4)	(100.0)

Note: Figures in Parentheses indicate the Percentage of the cadre to the total staff in the corresponding year.

* Including Principals/Sr. Lecturers/Readers.

** Including Assistant Professors & Assistant Lecturers.

in the Affiliated
-74 to 1978-79)

tors/ nstrators	Total
14,500	1,29,903
(11.2)	(100.0)
14,100	1,33,952
(10.6)	(100.0)
13,243	1,35,999
(9.8)	(100.0)
13,421	1,37,473
(9.8)	(100.0)
13,119	1,41,202
(9.3)	(100.0)
10,566	1,42,824
(7.4)	(100.0)

e cadre to the total staff in

APPENDIX XVI

Number of Doctorate Degrees Awarded: Faculty-wise (1973-74 to 1977-78)

Faculty	*1973-74*	*1974-75*	*1975-76*	*1976-77*	*1977-78*
Arts	1,093	1,258	1,282	1,364	1,677
Science	1,327	1,515	1,516	1,671	1,901
Commerce	58	55	41	70	96
Education	60	77	82	98	92
Engineering/ Technology	95	163	136	152	168
Medicine	46	50	42	49	51
Agriculture	276	281	289	334	329
Veterinary Science	56	60	44	66	81
Law	4	5	14	15	5
Others	41	14	19	24	44
Total	3,056	3,478	3,465	3,843	4,444

APPENDIX XVII (A)

State-wise number of Viable and Non-viable colleges: 1973-74 and 1978-79 (Arts, Science & Commerce Colleges only)

States having Three Year degree courses in Arts, Science & Commerce.

(NOTE: *A viable college is a college having an enrolment of 400 or more after excluding PUC/Inter/PP*)

S. No.	State	1973-74			1978-79		
		Viable colleges	*Non-viable colleges*	*Total*	*Viable colleges*	*Non-viable colleges*	*Total*
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*
1.	Andhra Pradesh	101 (59.4)	69 (40.6)	170 (100.0)	96 (42.7)	129 (57.3)	225 (100.0)
2.	Assam	30 (25.4)	88 (74.6)	118 (100.0)	Shown in Table (B)		
3.	Bihar	Shown in Table (B)					
4.	Gujarat	84 (49.4)	86 (50.6)	170 (100.0)	130 (69.5)	57 (30.5)	187 (100.0)
5.	Haryana	37 (47.4)	41 (52.6)	78 (100.0)	37 (38.9)	58 (61.1)	95 (100.0)
6.	Himachal Pradesh	9 (42.9)	12 (57.1)	21 (100.0)	7 (30.4)	16 (69,6)	23 (100.0)
7.	Jammu & Kashmir	11 (64.7)	6 (35.3)	17 (100.0)	10 (43.5)	13 (56.5)	23 (100.0)
8.	Karnataka	80 (41.9)	111 (58.1)	191 (100.0)	126 (51.0)	121 (49.0)	247 (100.0)
9.	Kerala	66 (74.2)	23 (25.8)	89 (100.0)	79 (66.9)	39 (33.1)	118 (100.0)
10.	Madhya Pradesh	89 (40.6)	130 (59.4)	219 (100.0)	120 (50.6)	117 (49.4)	237 (100.0)
11.	Manipur	5 (29.4)	12 (70.6)	17 (100.0)	Shown in Table (B)		
12.	Maharashtra	148* (44.3)	186* (55.7)	334* (100.0)	188 (45.4)	226 (54.6)	414 (100.0)
13.	Meghalaya	3 (18.8)	13 (81.2)	16 (100.0)	Shown in Table (B)		
14.	Nagaland	— (0.0)	4 (100.0)	4 (100.0)	Shown in Table (B)		
15.	Orissa	16 (20.5)	62 (79.5)	78 (100.0)	Shown in Table (B)		
16.	Punjab	62 (42.2)	85 (57.8)	147 (100.0)	71 (42.5)	96 (57.5)	167 (100.0)
17.	Rajasthan	52 (49.1)	54 (50.9)	106 (100.0)	67 (62.0)	41 (38.0)	108 (100.0)

)

leges: 1973-74 and 1978-79

: Commerce.

of 400 or more after excluding

1978-79		
Viable colleges	*Non-viable colleges*	*Total*
6	*7*	*8*
96 (42.7)	129 (57.3)	225 (100.0)
Shown in Table (B)		
ble (B)		
130 (69.5)	57 (30.5)	187 (100.0)
37 (38.9)	58 (61.1)	95 (100.0)
7 (30.4)	16 (69,6)	23 (100.0)
10 (43.5)	13 (56.5)	23 (100.0)
126 (51.0)	121 (49.0)	247 (100.0)
79 (66.9)	39 (33.1)	118 (100.0)
120 (50.6)	117 (49.4)	237 (100.0)
Shown in Table (B)		
188 (45.4)	226 (54.6)	414 (100.0)
Shown in Table (B)		
Shown in Table (B)		
Shown in Table (B)		
71 (42.5)	96 (57.5)	167 (100.0)
67 (62.0)	41 (38.0)	108 (100.0)

APPENDIX XVII(A) (*Contd.*)

1	*2*	*3*	*4*	*5*	*6*	*7*	*8*
18.	Sikkim	Did not exist	—	—	—	1 (100.0)	1 (100.0)
19.	Tamil Nadu	101 (60.5)	66 (39.5)	167 (100.0)	119 (61.7)	74 (38.3)	193 (100.0)
20.	Tripura	6 (100.0)	— (0.0)	6 (100.0)	4 (66.7)	2 (33.3)	6 (100.0)
21.	Uttar Pradesh**	2 (50.0)	2 (50.0)	4 (100.0)	2 (40.0)	3 (60.0)	5 (100.0)
22.	West Bengal	138 (69.0)	62 (31.0)	200 (100.0)	147 (61.0)	94 (39.0)	241 (100.0)
23.	Delhi (Union Territory	40 (93.0)	3 (7.0)	43 (100.0)	50 (96.2)	2 (3.8)	52 (100.0)
	Total:	1,080 (49.2)	1,115 (50.8)	2,195 (100.0)	1,253 (53.5)	1,089 (46.5)	2,342 (100.0)

* Relates to all Universities except Bombay.

** Relates to only Banaras Hindu University.

APPENDIX XVII (B)

State-wise Number of viable & non-viable colleges 1973-74 and 1978-79.

States having Two-year degree courses in Arts, Science & Commerce.

(NOTE: *A viable college is a college having an enrolment of 270 or more after excluding PUC/Inter/PP.*)

S.No.	State	1973-74			1978-79		
		Viable colleges	*Non-viable colleges*	*Total*	*Viable colleges*	*Non-viable colleges*	*Total*
1.	Assam	Shown in Table (A)			42 (33.9)	82 (66.1)	124 (100.0)
2.	Bihar	49 (25.0)	147 (75.0)	196 (100.0)	100 (41.3)	142 (58.7)	242 (100.0)
3.	Maharashtra*	42 (80.8)	10 (19.2)	52 (100.0)	Shown in Table (A)		
4.	Manipur	Shown in Table (A)			8 (47.1)	9 (52.9)	17 (100.0)
5.	Meghalaya	Shown in Table (A)			8 (47.1)	9 (52.9)	17 (100.0)
6.	Nagaland	Shown in Table (A)			1 (14.3)	6 (85.7)	7 (100.0)
7.	Orissa	Shown in Table (A)			41 (45.6)	49 (54.4)	90 (100.0)
8.	Uttar Pradesh**	196 (61.2)	124 (38.8)	320 (100.00)	243 (70.8)	100 (29.2)	343 (100.0)
	Total (B)	287 (50.5)	281 (49.5)	568 (100.0)	443 (52.7)	397 (47.3)	840 (100.0)
	Grand Total (A&B)	1,367 (49.5)	1,396 (50.5)	2,763 (100.0)	1,696 (53.3)	1,486 (46.7)	3,182 (100.0)

* Relates to only Bombay University.

** Relates to all Universities except Banaras Hindu University.

NOTE: (a) Figures in Parenthesis indicate percentage of viable and non-viable colleges to the total.

(b) The above analysis is confined to the colleges for which enrolment data for the relevent years was available.

(c) The colleges of Union Territories other than Delhi have been included in the respective states.

(d) Colleges which had only PUC/Inter or equivalent courses have been excluded from the above analysis.

(e) The above analysis covers also university colleges which were not functioning as Departments.

APPENDIX XVIII

Record of Higher Education during the period from 1974-75 to 1978-79

Division/State	*Average growth of Students per annum*	*Total* Colleges (Arts, Science & Commerce added)*	*Non-Viable Colleges*	
			1973-74	*1978-79*
Div. I. South				
Andhra Pradesh	—1.74%	32	69 (40.6%)	129 (57.3%)
Karnataka	6.80%	21	111 (58.1%)	121 (49.0%)
Kerala	6.20%	22	23 (25.8%)	39 (33.1%)
Tamil Nadu	1.60%	13	66 (39.5%)	74 (38.3%)
Div. II. North				
Delhi	0.70%	—	3 (7.0%)	2 (3.8%)
Haryana	2.80%	2	41 (52.6%)	58 (61.1%)
Himachal Pradesh	—2.17%	1	12 (57.1%)	16 (69.6%)
Jammu & Kashmir	—6.33%	1	6 (35.3%)	13 (56.5%)
Punjab	2.00%	4	85 (57.8%)	96 (57.5%)
Uttar Pradesh	4.40%	17	126 (38.9%)	103 (29.6%)
Div. III East				
Assam/Manipur	4.10%	15	100 (74.1%)	91 (64.5%)
Bihar	10.90%	49	147 (75.0%)	142 (58.7%)
Meghalaya/Nagaland	6.90%	—1	17 (85.0%)	15 (62.5%)
Orissa	4.00%	8	62 (79.5%)	49 (54.4%)
West Bengal/Tripura/Sikkim	—5.55%	7	62 (31.0%)	97 (39.1%)
Div. IV West				
Gujarat	—1.30%	—	86 (50.6%)	57 (30.5%)
Madhya Pradesh	6.30%	—5	130 (59.4%)	117 (49.4%)
Maharashtra	4.00%	23	196 (50.8%)	226 (54.6%)
Rajasthan	7.00%	22	54 (50.9%)	41 (38.0%)
Total (All India)	2.50%	231	1,396 (50.5%)	1,486 (46.7%)

* The figures include total increase in Arts, Science Commerce Colleges (both Affiliated and University Colleges) in 1978-79 as compared to 1974-75.

APPENDIX XIX

Trends During 1978-79

Division/State	*Growth of Students over the preceding year in percentage*	*Colleges added [University Colleges and Affiliated Colleges (Arts, Science, and Commerce)]*	*Increase in the number of post-graduate Affiliated Colleges (Arts, Science and Commerce) over the preceding year*
Div. I South			
Andhra Pradesh	1.1	5	—2
Karnataka	9.3	6	—1
Kerala	8.8	12	4
Tamil Nadu	2.9	2	8
Div. II North			
Delhi	—11.8	—	—
Haryana	—0.9	—	—
Himachal Pradesh	4.0	1	—
Jammu & Kashmir	2.0	1	—
Punjab	9.1	2	4
Uttar Pradesh	3.6	3	1.4
Div. III East			
Assam/Manipur	11.3	10	—
Bihar	6.9	10	—2
Meghalaya/Nagaland	8.7	—	—
Orissa	10.8	7	1
West Bengal/ Tripura/Sikkim	—13.4	4	1
Div. IV West			
Gujarat	—3.1	—	—8
Madhya Pradesh	5.6	2	4
Maharashtra	2.0	14	4
Rajasthan	14.3	1	3
Total (All India)	2.1	80	30

APPENDIX XX

Guidelines for the Re-organisation of Courses at the plus three stage

Increase in the number of post-graduate Affiliated Colleges (Arts, Science and Commerce) over the preceding year
—2
—1
4
8
—
—
—
—
4
1.4
—
—2
—
1
1
—8
4
4
3
30

The Commission set up a Standing Committee to advise it on the general policy regarding courses at the plus three stage. The Committee has finalised the guidelines, set out the objectives of the first degree courses, principles for re-organising the courses and supportive measures with particular reference to practical orientation, flexibility and inter-disciplinary approaches.

The guidelines formulated by the Standing Committee are given below:—

1. Objectives of the First Degree Courses

1.01 Education is essentially a three-fold process. It imparts knowledge and skills and inculcates values. The present system is almost wholly geared to the first, a little to the second and only marginally to the third. The need to transform the education system so that the teaching of skills and inculation of values get their due emphasis is thus obvious; it alone can make education a powerful tool for social change and the realisation of our national objectives.

1.02 Keeping in view the three-fold functions of education, the following may be the objectives of the restructured course pattern at the first degree level:

(i) To provide a broad based education to the student so that, after his training, he emerges as an informed and mature person who is sensitive to the world around him.

(ii) To so structure the curriculum in the faculty/field of specialisation that, while acquiring the latest available theoretical knowledge in the field, the student is also exposed to some application area and made conversant with the real life issues that will face him when he embarks upon his career as a professional person and, in general, to bridge the gap between the 'World of Work' and the 'World of Study'.

(iii) To enable the student to learn several neighbouring or allied disciplines in a manner that will help him to undertake interdisciplinary studies and to sensitize him to an inter-disciplinary and problem-oriented way of approaching and handling situations and issues.

(iv) To enable the student to acquire study habits which will enable him to add to his intellectual acumen and skill throughout life.

(v) Within this broad academic framework, to focus attention on issues of social transformation in general and regional development in particular, so that academic excellence and concern for social relevance may go together.

2. Principles under-lying the Re-organisation of Courses

2.01 The improvement of curricula and re-structuring of courses should be governed by certain basic considerations outlined in the Policy Frame, which forms our perspective for the next 10-15 years. These are: modernisation, diversification, flexibility, social responsibility, relevance, inter-disciplinary approaches and practical orientation: are summarised below.

2.02 Modernisation: Several of our courses are out-dated, in some cases, by as long as 30-50 years. It is essential that the courses are updated and kept abreast of recent advances in the field. Revision and updating of courses should be a continuous process.

2.03 Flexibility: Another area of significance in so far as undergraduate education is concerned is the principle of flexibility, which should enable students to break away from the traditional combinations of subjects and to offer new combinations thus bringing a new approach to study and learning. This is possible only if courses are divided into smaller units, care being taken to ensure that only those courses units are taught for which there is a sufficient demand.

2.04 Diversification: The courses should be diversified especially to include newly emergent and inter-disciplinary areas and borderline subjects.

2.05 Social Responsibility: The university must assume extension as an important responsibility. In order to achieve this goal, the universities and colleges will have to go outside the campus and get involved in a participatory understanding that would help in realistic solutions of some of the social, economic and technical problems.

2.06 Relevance: The courses at the first degree level should be made more relevant to the rural or urban environment and to the developmental needs of the community. This implies re-orientation of traditional subjects to the needs of the rural community and the introduction of some relevant applied disciplines which may be related to basic subjects or subject groups.

2.07 Inter-disciplinary Approach: It needs to be emphasised that the inter-disciplinary approach to the structure of courses at the first degree level does not mean the introduction of new subjects bordering on two or more disciplines but is essentially a question of a new approach to studies, learning and teaching. The objectives of inter-disciplinary studies can best be promoted through seminar discussions on an inter-departmental basis, involving studies as well as teachers, from different departments/faculties.

2.08 Practical Orientation: The first degree courses should be linked with work/practical/field experience. This would imply the participation of university and college students, as part of their field and project work, in various institutional activities, with emphasis on rural re-orientation.

3. Contents of Courses

3.01 Foundation Courses: The new curriculum should provide a set of foundation courses in the three broad areas of knowledge, viz. humanities, social sciences, and sciences and these together with applied studies/projects and extension should be provided within 20 to 25 per cent of the time available for all studies in the three-year course. The purpose is to create a greater awareness of the social, cultural, and natural environment.

There should be a large number of alternative courses or a basket from which a student could choose the stipulated number of courses in a faculty other than this own. The alternatives should be so provided that there is some degree of equivalence as well as flexibility and the colleges are enabled to select relevant courses, depending upon their teaching resources.

Under the foundation courses, one may introduce themes such as Indian History and culture, history of the freedom struggle in India and other parts of the world; social and economic life in India, concepts and processes of development; alternative value systems and societies based thereon; culture of Asia and Africa (selected countries), Gandhian thought, science and society, scientific methods, science in everyday life and so on.

Given the fact that the foundation courses are conceived as awareness courses, the responsibility for teaching them can be taken by existing teachers in related disciplines, after providing suitable, shorterm orientation courses, wherever necessary.

3.02 Core Programme: The remaining 75 to 80% of the time available should be devoted to a core programme within each faculty which would provide the student with a broad exposure to several disciplines and an opportunity to study some chosen discipline or disciplines in depth. Universities may decide whether the core programme will consist of the study of several subjects with equal weight or the study of one or two subjects in depth along with some ancillaries.

3.03 It would be desirable to incorporate applied studies, project work and field studies as an integral part of the core programme. In this connection, attention is invited to the guidelines on the restructuring of courses, already circulated to the universities. Here again, the aim would not be to make the student an expert in the applied area chosen but to enable him to understand the practical/field aspects of his discipline.

3.04 In introducing subjects of an applied nature, universities may enlist the collaboration of user agencies like industries, business houses, national laboratories etc.

3.05 Teaching of social sciences, biological sciences etc. should be marked by an integrated approach. Further, where quantitative analysis is required, elements of mathematics and statistics would need to be inducted into the courses concerned.

3.06 Extension programmes should also be introduced as a means for making courses and studies relevant to the needs of the society and oriented towards a solution of existing problems. Extension work should be integrated with the curriculum in order that it may have impact on course contents on the one hand, and the value system promoted by the academic programmes on the other.

3.07 Keeping in view the above considerations and guiding principles, every undergraduate student should be given a grounding in four important areas (i) a set of foundation courses which are designed to create an awareness of different areas; (ii) a set of core courses which will give the student an opportunity to acquire a broad familarity with some chosen disciplines, including a study of one or more of them in depth; (iii) some applied studies/projects/field activity; and (iv) involvement in extension programmes.

4. Supplementary Measures

4.01 Several important measures as detailed below will have to be adopted in order to secure the fullest advantage of the new pattern of education. It hardly needs to be emphasised that the proposed changes will require considerable preparation, including the preparation of new courses/materials and the orientation of teachers.

4.02 New Methods of Teaching: The existing teaching methods which are largely based on rote-memory lectures and re-production should be replaced by new teaching methods which awaken curiosity, encourage self-study habits and promote problem-solving skills.

It is necessary to recognise the importance of problem-solving exercises and seminar discussions in the case of science subjects and case studies, tutorials and seminars in the case of social sciences. There should, therefore, be adequate time explictly allocated in the time-table for tutorials, seminars, self-study sessions etc. The work involved in conducting tutorials/seminars/guided reading etc. should be taken into account in defining the work load of the teacher. It is suggested that formal lecturing should not constitute more than two-third of the teaching-learning situation. Especially during the third year, the proportion of formal lecturing could be reduced even more and greater emphasis laid on guided self-study. Class room lectures should be substituted, to an increasing extent, by

seminar discussions with a view to ensuring a two-way participation in instruction. Individual and group assignments should be given, evaluated and discussed frequently as an aid to better learning.

It may not be possible to introduce project work for every student immediately but planning should be done in such a way that in about five years project becomes an integral part of the curriculum.

There must be some component in the curriculum which requires every student to use the library for reference work. Once such a component is introduced, this should be taken into account in strengthening the library for reading and reference materials, including journals.

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nd reference materials, in-

APPENDIX XXI

List of Centres of Advanced Study in the Humanities and Social Sciences

Sl. No.	*Name of the Centre*	*Subject*	*Area of specialisation*	*Year of recognition*
1.	Deptt. of Economics, Bombay University, Bombay-32.	Economics	Public Finance and Industrial Economics	1963
2.	Deptt. of Economics, Delhi University, Delhi.	Economics	Economics of Development and Economic History	1963
3.	Gokhale Instt. of Politics & Economics Pune University, Pune.	Economics	Agricultural Economics	1963
4.	Deptt. of Philosophy, Madras University, Madras.	Philosophy	Advaita and Allied Systems of Philosophy	1964
5.	Deptt. of Sanskrit, Poona University, Poona.	Sanskrit	Sanskrit Literature	1964
6.	Deptt. of Linguistics, Annamalai University.	Linguistics	Dravidian Linguistics	1963
7.	Deptt. of Education, MS University, Baroda.	Education	Educational Research	1963
8.	Deptt. of History, Aligarh Muslim University.	History	Medieval Indian History	1968
9.	Deptt. of Sociology, Delhi University.	Sociology	Sociology	1968

APPENDIX XXII

List of Departments of Special Assistance in the Humanities and Social Sciences

Subject	*Name of the University/College*	*Year of recognition*
A. Economics	1. Osmania	1972
	2. Presidency College, Calcutta	1972
	3. Andhra	1977
	4. Punjabi	1977
	5. Calcutta	1977
B. History	1. Patna	1972
	2. Allahabad	1977
	3. Mysore	1977
	4. Calcutta	1977
	5. Baroda	1977
C. Sociology	1. Bombay	1972
	2. Panjab	1977
D. Anthropology	1. Saugar	1972
	2. Ranchi	1977
E. Archaeology	1. Deccan College, Post-graduate & Research Institute, Poona	1972
F. Psychology	1. Utkal	1976
	2. Allahabad	1977
G. Linguistics	1. Osmania	1977
H. Philosophy	1. Jadavpur	1977
	2. Rajasthan	1977

es and Social Sciences

	Year of recognition
	1972
	1972
	1977
	1977
	1977
	1972
	1977
	1977
	1977
	1977
	1972
	1977
	1972
	1977
&	
	1972
	1976
	1977
	1977
	1977
	1977

APPENDIX XXIII

List of Centres of Advanced Study in Sciences

S. No.	Subject	Area of Specialisation	Department	Year of recognition
1.	Physics	Theoretical Physics and Astrophysics	Department of Physics & Astrophysics, Delhi University	1963
2.	Physics	Radiophysics & Electronics	Institute of Radiophysics & Electronics Calcutta University	1963
3.	Chemistry	Chemistry of Textile Fibres and Dyes	Department of Chemical Technology, Bombay University.	1963
4.	Chemistry	Chemistry of Natural Products	Department of Chemistry, Delhi University	1963
5.	Botany	Plant Morphology and Embryology	Department of Botany, University of Delhi	1963
6.	Botany	Plant Pathology and Mycology	Department of Botany University of Madras	1963
7.	Zoology	Cell Biology and Endocrinology	Department of Zoology Delhi University	1963
8.	Zoology	Marine Biology	Department of Marine Biology, Anamalai University	1963
9.	Geology	Himalayan Geology and Palaeontology	Department of Geology Panjab University	1963
10.	Mathematics	Pure Mathematics	Department of Mathematics, Bombay University (in collaboration with the Tata Institute of Fundamental Research Bombay)	1963
11.	Mathematics	Pure Mathematics	Department of Mathematics, Panjab University	1963
12.	Mathematics	Pure Mathematics	Department of Mathematics, University of Madras & Ramanujan Institute of Mathematics Madras	1967
13.	Astronomy	Experimental Astronomy	Department of Astronomy Observatory, Osmania University, Hyderabad	1964
14.	Biochemistry	Protein, Lipids, Vitamins	Department of Bio-chemistry, Indian Institute of Science Bangalore.	1968

APPENDIX XXIV

List of Departments of Special Assistance in Science Subjects

Sl. No.	*Department*	*University*
1.	Bio-Chemistry	1. Lucknow University
2.	Bio-Chemistry	2. M.S. University, Baroda
3.	Bio-Physics	1. Indian Institute of Science
4.	Biological Sciences	1. Madurai University
5.	Botany	1. Andhra University
6.	Botany	2. Banaras Hindu University
7.	Botany	3. Calcutta University
8.	Botany	4. Lucknow University
9.	Botany	5. Panjab University
10.	Botany	6. Patna University
11.	Chemistry	1. Allahabad University
12.	Inorganic & Physical Chemistry	2. Indian Institute of Science
13.	Pure Chemistry	3. Calcutta University
14.	Physical Chemistry	4. Madras University
15.	Chemistry	5. Osmania University
16.	Chemistry	6. Panjab University
17.	Chemistry	7. Poona University
18.	Chemistry	8. Rajasthan University
19.	Chemistry	9. Sardar Patel University
20.	Geography	1. Aligarh Muslim University
21.	Geography	2. Osmania University
22.	Geology	1. Andhra University
23.	Geology	2. Jadavpur University
24.	Geology	3. Mysore University
25.	Geology & Geophysics	1. Roorkee University
26.	Metallurgical Engineering	1. Banaras Hindu University
27.	Physics	1. Allahabad University
28.	Physics	2. Andhra University
29.	Physics	3. Roorkee University
30.	Statistics	1. Poona University
31.	Zoology	1. Banaras Hindu University
32.	Zoology	2. Calcutta University
33.	Zoology	3. Marathwada University

APPENDIX XXV

Statement Showing the Financial Assistance Provided to Teachers in the Universities and Colleges for Short Term Research Projects in the Humanities and Social Sciences

S. No.	*Year of award*	*No. of applicants*	*No. of awards made*	*Total amount approved*
1.	1963-64	229	16	33,500.00
2.	1964-65	687	123	85,663.00
3.	1965-66	796	235	1,34,774.14
4.	1966-67	724	174	1,11,405.21
5.	1967-68	613	175	1,25,464.11
6.	1968-69	542	255	1,38,520.24
7.	1969-70	553	180	1,65,918.16
8.	1970-71	768	233	1,51,325.00
9.	1971-72	997	213	1,60,725.00
10.	1972-73	925	757	4,22,589.00
11.	1973-74	960	277	2,26,455.52
12.	1974-75	918	238	4,88,650.00
13.	1975-76	698	297	7,59,767.00
14.	1976-77	425	231	6,01,465.00
15.	1977-78	391	312	8,56,300.00
16.	1978-79	717	461	12,79,135.00
	Total	10,943	4,177	57,41,656.38

APPENDIX XXVI

Financial Assistance to University/College Teachers for Minor Research Work in Science

S. No.	*Year of Award*	*No. of applicants*	*No. of awards*	*Total Amount sanctioned* in Rupees
1.	1963-64	306	65	1,03,000
2.	1964-65 (First)	600	157	2,19,235
3.	1964-65 (Second)	562	121	1,09,000
4.	1965-66 (First)	592	154	1,47,850
5.	1965-66 (Second)	571	190	1,99,600
6.	1966-67 (First)	647	255	2,23,800
7.	1966-67 (Second)	435	63	63,450
8.	1967-68 (First)	510	136	1,56,000
9.	1967-68 (Second)	455	167	1,99,000
10.	1968-69 (First)	663	313	2,10,450
11.	1968-69 (Second)	470	196	1,76,650
12.	1969-70 (First)	526	151	1,81,000
13.	1969-70 (Second)	596	278	2,29,300
14.	1970-71 (First)	649	268	2,39,550
15.	1970-71 (Second)	756	355	2,01,550
16.	1971-72 (First)	932	234	2,15,500
17.	1971-72 (Second)	802	210	1,93,150
18.	1972-73 (First)	869	742	4,29,400
19.	1972-73 (Second)	778	576	3,76,200
20.	1973-74 (First)	934	329	3,70,000
21.	1973-74 (Second)	552	106	1,87,800
22.	1974-75	1142	275	10,21,650
23.	1975-76	1770	660	21,23,121
24.	1976-77	2016	1021	35,20,233
25.	1977-78	1826	1102	42,50,974
26.	1978-79	2397	814	41,79,198
	Total		8938	1,95,25,261

achers for

Total Amount sanctioned in Rupees
1,03,000
2,19,235
1,09,000
1,47,850
1,99,600
2,23,800
63,450
1,56,000
1,99,000
2,10,450
1,76,650
1,81,000
2,29,300
2,39,550
2,01,550
2,15,500
1,93,150
4,29,400
3,76,200
3,70,000
1,87,800
10,21,650
21,23,121
35,20,233
42,50,974
41,79,198
1,95,25,261

APPENDIX XXVII

APPENDIX XXVIII

National Lectures Programme for 1978-79

PHYSICS
- Dr. C.K. Majumdar
- Professor M.R. Bhiday
- Professor V. Lakshminarayana

CHEMISTRY
- Professor M.M. Taqui Khan
- Professor O.P. Vig
- Dr. R.C. Kapoor

BIO-CHEMISTRY
- Dr. A.N. Radhakrishnan

BOTANY
- Professor V.S. Rama Das

ZOOLOGY
- Professor B.I. Sundararaj

BIO-SCIENCES
- Dr. John. Barnabas
- Professor S.C. Pandeya

GEOLOGY
- Professor B.B.S. Singhal
- Professor K. Naha

MATHEMATICS AND STATISTICS
- Professor G. Kalyanpur
- Professor M.S. Narsimhan
- Professor R.S. Kushwaha

HISTORY
- Professor Barun De
- Dr. (Miss) R. Champakalakshmi

POLITICAL SCIENCE
- Dr. K.P. Karunakaran
- Professor P.N. Masaldan

SOCIOLOGY
- Professor Victor S. D'Souza

ECONOMICS
- Professor (Mrs.) Krishna Bhardwaj

PHILOSOPHY
- Professor S. Bhattacharya

PSYCHOLOGY
- Professor S.D. Singh

COMMERCE
- Professor Q.H. Farooquee

HINDI
- Dr. Bachchan Singh

TAMIL
- Dr. M. Shanmugam Pillai

LAW
- Professor (Mrs.) Lotika Sarkar

EDUCATION
- Professor V.R. Taneja

APPENDIX XXIX

Universities Offering Correspondence Courses

S. No.	Name of the University	Courses offered	Year of starting	Medium of Examination/ Instruction	Duration of courses	Total No. of students enrolled			Remarks
						1976-77	1977-78	1978-79	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1.	Delhi	B.A. (P)	1962	English/ Hindi	3 Years	6544	6302	5016	
		B. Com. (P)	1971	-do-	-do-	6930	6265	5237	
		B. Com. (Hons.)	1971	-do-	-do-	—	365	368	
		M.A. (Hindi)	1977	Hindi	2 Years	—	77	256	
		M.A. (Pol. Sc.)	1977	English	-do-	—	194	256	
2.	Meerut	B.A.	1969	Hindi/English	2 Years	950	850	907	
3.	Bhopal	B.A.	1975	Hindi/English	3 Years	326	747	973	
		B. Com.	1975	-do-	-do-	96	172	264	
4.	Sri Venkateswara	B.A.	1972-73	English/Telugu	3 Years	186	239	237	
		B.Com.	-do-	-do-	-do-	396	385	388	
5.	Utkal	B.A.	1975	Oriya/English	2 Years	1669	1456	905	
		B.Com.	1979	-do-	-do-	—	—	—	

Appendix XXIX (Contd.)

1	2	3	4	5	6	7	8	9	10
6.	Jammu	B.A.	1976	English	2 Years	201	268	—	
		B.Com.			-do-				
		B. Ed.			14 months	221	—	—	
		L.L.B.			2 Years	802	1103	—	On the recommendation of Bar Council the University has been requested to discontinue the L.L.B. Course.
7.	Madurai	B.A.		English &	3 Year				
		B.Com.	1972	Tamil	-do-				
		M.A. (His.)	1976-77	-do-	2 Year	1136	1454	1970	
		M.A. (Eco.)		-do-	-do-	—	1290	2546	
		M.A. (Tamil)		-do-	-do-	1408	1620	2396	
		M.A. (Eng.)		-do-	-do-	3294	4307	5773	
		M. Com.		-do-	-do-	1704	2506	3233	
		B.G.C. (Professional)		-do-	-do-	3247	2881	2926	
8.	Punjab	B.A.	1971-72	English/Hindi/	3 Year	6165	4770	3975	
		B.Com.	1973-74	Punjabi	-do-	686	724	628	
		M.A. (Eng.)			2 Year	839	863	956	
		M.A. (Eco.)	1976-77		-do-	795	813	856	
		M.A. (His.)			-do-	2265	364	329	
		M.A. (P.Sc.)			-do-	423	495	433	
		M.A. (Pub. Ad.)			-do-	530	874	847	

8. Punjab	B.A.	1971-72	English/Hindi/	3 Year	6165	4770	3975
	B.Com.	1973-74	Punjabi	-do-	686	724	628
	M.A. (Eng.)			2 Year	839	863	956
	M.A. (Eco.)	1976-77		-do-	795	813	856
	M.A. (His.)			-do-	2265	364	329
	M.A. (P.Sc.)			-do-	423	495	433
	M.A. (Pub. Ad.)			-do-	530	874	847

Appendix XXIX (Contd.)

1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
9.	Punjabi	B.A.	1968-69	Hindi/English/	3 Year	1083	939	2105	
		M.A. (Pun.)	1974-75	Punjabi	2 Year	250	305	412	
		M.A. (Eng.)	1976-77		-do-	243	220	209	
		M.A. (P.Sc.)	-do-		-do-	212	235	342	
		M.A. (His.)	-do-		-do-	103	139	224	
10.	Mysore	B.A.	1969-70	Kannada	3 Years	7846	10789	11837	
		B. Com.	1972-73	and	-do-	793	1432	2125	
		B.Ed.	1975-76	English	18 months	}			
		B.G.L.	1974-75		2 Years	}	—	Not indicated—	
		M.A. (Kannada)	1973-74		2 Years	413	509	445	
		M.A. (English)	-do-		-do-	590	688	803	
		M.A. (History)	1974-75		-do-	685	990	1152	
		M.A. (Pol. Sc.)	1975-76		-do-	688	1195	1405	
		M.A. (Sociology)	-do-		-do-	908	1675	1741	
11.	Bombay	B.A.	1973-74	English	2 Year	925	1171	3011	
		B.Com.	-do-	-do-	-do-	6889	939	1770	
		M.A.	1975-76	-do-	-do-	623	928	946	
		M.Com.	-do-	-do-	-do-	510	1116	1671	
		Diploma in financial Management	1975-76	-do-	1 Year	98	92	208	
		Diploma in operations research for Management	-do-	-do-	-do-	69	43	113	

Appendix XXIX (Contd.)

1	2	3	4	5	6	7	8	9	10
12.	CIEFL, Hyderabad	P.G.C.T.E.	1973	English	1 Year	246	554	701	
		P.G.D.T.E.	1978	-do-	-do-	—	—	95	
		M.A. in:							
		French	1977	French	3 Year	9	16	12	
		German	1977	German	-do-	—	9	5	
		Russian	1976	Russian	-do-	14	11	5	
13.	Osmania	B.A.	1977-78	English/	3 Years	—	163	223	
		B. Com.		Telugu	-do-	—	126	257	
14.	Annamalai	B. Com.	1979	English/	3 Years	—	—	—	
		B.Ed.	-do-	Tamil	1 Year	—	—	—	
		Diploma in Law	-do-		-do-	—	—	—	
15.	Kerala	Degree	1979-80	English only	3 Years	—	—	597	
16.	Allahabad	B.A.	1978-79	Hindi/	2 Years	—	—	176	
		B. Com.		English	-do-	—	—	104	
17.	Kashmir	B.A.	1976	English	3 Year	148	348	383	
		B.Com.		-do-	-do-				
		B.Ed.		-do-	14 months	—	239	241	
		L.L.B.		-do-	2 Years	—	—	350	
		Elementary Certificate course in Hindi		Hindi	6 months	—	95	76	
		-do- in Urdu		Urdu	-do-	—	2	12	

17. Kashmir	B.A.	1976	English	3 Year	148	348	383	
	B.Com.		-do-	-do-				
	B.Ed.		-do-	14 months	—	239	241	
	L.L.B.		-do-	2 Years	—	—	350	
	Elementary Certificate course in Hindi		Hindi	6 months	—	95	76	
	-do- in Urdu		Urdu	-do-	—	2	12	

Appendix XXIX (Contd.)

1	2	3	4	5	6	7	8	9	10
18.	Andhra	B.A.	1972-73	English &	3 Years	771	992	Not received	
		B.Com.		Telugu	-do-	809	689	-do-	
		M.A. Ecom.			2 Years	—	—	-do-	
		M.Com.	1978-79		-do-	—	—	-do-	
19.	Himachal Pradesh	B.A.	1971-72	Hindi/English	3 Years	818	867	Not received	
		M.Ed.			1 Year	1024	1448	-do-	
		M. Com.			2 Years	809	727	-do-	
		M.A. English			-do-	437	465	-do-	
		M.A. History			-do-	209	213	-do-	
		M.A. Economics			-do-	527	501	-do-	
		M.A. Pol. Science			-do-	481	489	-do-	
		M.A. Hindi			-do-	182	248	-do-	
		M.A. Sanskrit			-do-	38	31	-do-	
20.	Rajasthan	B.A.	1976	Hindi/English	3 Years	760	1128	Not received	
		B. Com.	1968		-do-	1733	1942	-do-	
		M. Com.	1976		2 Years	780	1344	-do-	
		M.A. in Hindi	1976	-do-	-do-	216	432	-do-	
		M.A. in History	1968		-do-	1300	1168	-do-	
		M.A. in Sociology	1976		-do-	316	518	-do-	
		M.A. in Pol. Science	1968		-do-	1724	1273	-do-	
		M.A. in Pub. Admn.	1976		-do-	357	514	-do-	
		M.A. in Economics	1976		-do-	1094	1521	-do-	
21.	S.N.D.T. Women's University	Details awaited							

APPENDIX

Statement showing grants paid to Central Universities/Institutions Deemed (Major Headwise) Under Plan

Central Universities	*A Humanities*	*B Science*	*C Engg. & Tech.*	*D Dev. of Colleges*
1. Aligarh	7,16,801-89	30,67,365-67	29,74,821-60	—
2. Banaras	11,78,067-38	36,93,179-05	1,01,39,100-30	—
3. Delhi	21,49,369-90	22,04,067-17	2,81,076-20	—
4. Hyderabad	83,000-00	2,22,600-00	—	—
5. Jawaharlal Nehru	2,80,638-60	3,42,658-83	—	—
6. North Eastern Hill University	59,828-57	36,800-00	4,800-00	—
7. Visva Bharati	8,15,158-13	11,89,473-62	—	—
Total	52,82,864-47	1,07,56,144-34	1,33,99,798-10	—
Institutions deemed to be universities				
1. B.I.T.S.	1,32,728-94	10,82,843-87	5,02,470-10	—
2. C.I.E.F.L.	28,000-00	—	—	—
3. Gandhigram Rural	30,000-00	—	—	—
4. Gujarat Vidyapeeth	13,70,275-00	3,24,000-00	—	—
5. I.A.R.I.	—	—	—	—
6. I.I.Sc.	4,800-00	5,61,655-55	50,69,555-63	—
7. Indian School of Mines	1,425-00	38,000-00	63,45,085-00	—
8. Jamia Millia Islamia	14,59,000-00	46,900-00	—	—
9. T.I.S.Sc.	9,64,204-87	—	—	—
Total	39,90,433-81	20,53,399-42	1,19,17,110-73	—
State universities				
ANDHRA PRADESH				
1. Andhra	13,86,876-50	38,47,214-04	28,55,223-19	12,15,000-00
2. Andhra Pradesh Ag.	—	—	1,093-33	—
3. Kakatiya	—	7,100-00	—	—
4. Nagarjuna	—	4,800-00	—	—
5. Osmania	14,87,849-52	35,84,111-40	29,36,000-00	7,70,000-00
6. Sri Venkateswara	11,29,855-10	14,04,521-36	9,49,937-84	2,00,000-00
Total	40,04,581-12	88,47,746-80	67,42,254-36	21,85,000-00
ASSAM				
1. Dibrugarh	8,56,125-00	12,01,600-00	—	97,500-00
2. Gauhati	4,36,513-00	14,54,500-00	—	—
Total	12,92,638-00	26,56,100-00	—	97,500-00

APPENDIX

es/Institutions Deemed Headwise) Under Plan

C *rg. & Tech. Dev.*	D *of Colleges*
74,821-60	—
39,100-30	—
81,076-20	—
—	—
—	—
4,800-00	—
—	—
,99,798-10	—
,02,470-10	—
—	—
—	—
—	—
—	—
),69,555-63	—
;,45,085-00	—
—	—
—	—
),17,110-73	—
3,55,223-19	12,15,000-00
1,093-33	—
—	—
—	—
),36,000-00	7,70,000-00
),49,937-84	2,00,000-00
7,42,254-36	21,85,000-00
—	97,500-00
—	—
—	97,500-00

XXX

to be Universities and State Universities during the year 1978-79 including Section III

E *Misc. Schemes*	F *Misc. Exp.*	*Total*	*Sec. III Specific purposes*	*Grand Total*
54,02,915-27	9,233-90	1,21,71,138-33	—	1,21,71,138-33
2,32,28,238-84	12,183-97	3,82,50,769-54	13,000-00	3,82,63,769-54
70,72,222-80	—	1,17,06,736-07	10,000-00	1,17,16,736-07
*2,13,406-42		*2,13,406-42		*2,13,406-42
2,28,98,226-95	—	2,32,03,826-95	—	2,32,03,826-95
98,59,327-38	8,840-00	1,04,91,464-81	—	1,04,91,464-81
1,40,31,477-99	—	1,41,32,906-56	—	1,41,32,906-56
14,95,674-69	2,000-00	35,02,306-44	1,48,000-00	36,50,306-44
8,39,88,083-92	32,257-87	11,34,59,148-70	1,71,000-00	11,36,30,148-70
1,76,220-00	—	18,94,262-91	10,000-00	19,04,262-91
21,41,875-75	—	21,69,875-75	—	21,69,875-75
42,940-00	—	72,940-00	—	72,940-00
7,39,457-97	—	24,33,732-97	—	24,33,732-97
—	2,904-10	2,904-10	—	2,904-10
53,18,080-64	10,601-76	1,09,64,693-58	—	1,09,64,693-58
1,04,014-50	—	64,88,524-50	15,000-00	65,03,524-50
24,32,641-16	—	39,38,541-16	—	39,38,541-16
11,66,500-00	6,438-60	21,37,143-47	8,000-00	21,45,143-47
1,21,21,730-02	19,944-46	3,01,02,618-44	33,000-00	3,01,35,618-44
25,49,508-79	—	1,18,53,822-52	28,000-00	1,18,81,822-52
—	—	1,093-33	—	1,093-33
—	—	7,100-00	—	7,100-00
—	—	4,800-00	—	4,800-00
13,84,644-18	3,696-77	1,01,66,301-87	—	1,01,66,301-87
21,44,947-06	1,329-03	58,30,590-39	18,000-00	58,48,590-39
60,79,100-03	5,025-80	2,78,63,708-11	46,000-00	2,79,09,708-11
2,47,603-00	—	24,02,828-00	—	24,02,828-00
1,37,321-63	—	20,28,334-63	—	20,28,334-63
3,84,924-63	—	44,31,162-63	—	44,31,162-63

*By Adjustment

Appendix XXX (Contd.)

State Universities	*A*	*B*	*C*	*D*
BIHAR				
1. Bhagalpur	2,55,000-00	3,92,685-48	—	—
2. Bihar	3,77,531-75	5,15,600-00	—	—
3. K.S. Darbhanga Sanskrit	1,35,000 00	—	—	—
4. Lalit Narayan Mithila	10,609-80	29,600-00	—	—
5. Magadh	8,60,703-90	10,54,664-52	—	2,27,500-00
6. Patna	5,61,342-86	16,37,600-00	10,04,000-00	—
7. Rajendra Ag.	—	17,800-00	—	—
8. Ranchi	3,58,500-00	3,64,951-61	—	—
Total	25,58,688-31	40,12,901-61	10,04,000-00	2,27,500-00
GUJARAT				
1. Gujarat	1,23,700-00	12,42,310-60	1,00,000-00	10,92,500-00
2. M.S. Univ. of Baroda	5,14,161-29	18,01,792-86	20,32,107-96	—
3. Sardar Patel	8,45,122-00	35,81,150-00	—	—
4. Saurashtra	3,88,000-00	10,37,300-00	—	—
5. South Gujarat	6,03,000-00	6,71,000-00	92,500-00	—
Total	24,73,983-29	83,33,553-46	22,24,607-96	10,92,500-00
HARYANA				
1. Haryana Agricultural	—	40,090-32	—	—
2. Kurukshetra	14,18,866-80	15,84,729-03	1,20,000-00	5,00,000-00
3. Maharishi Dayanand	2,250-00	—	—	—
Total	14,21,116-80	16,24,819-35	1,20,000-00	5,00,000-00
HIMACHAL PRADESH				
1. Himachal Pradesh	3,36,350-00	6,09,942-44	—	—
Total	3,36,350-00	6,09,942-44	—	—
JAMMU & KASHMIR				
1. Jammu	1,71,566-13	4,44,509-68	—	—
2. Kashmir	7,37,000-00	30,79,900-00	—	2,00,000-00
Total	9,08,566-13	35,24,409-68	—	2,00,000-00
KARNATAKA				
1. Bangalore	6,52,725-00	22,14,297-60	18,17,000-00	4,00,000-00
2. Karnatak	7,71,725-00	10,06,342-48	1,12,000-00	10,37,500-00
3. Mysore	2,18,877-46	2,55,608-99	—	3,07,500-00
4. Univ. of Ag.	15,800-00	3,600-00	—	—
Total	16,59,127-46	34,79,849-07	19,29,000-00	17,45,000-00

C	D	E	F	Total	Sec. III	Grand Total
—	—	3,17,786-96	—	9,65,472-44	—	9,65,472-44
—	—	1,84,726-70	—	10,77,858-45	—	10,77,858-45
—	—	1,05,000-00	—	2,40,000-00	—	2,40,000-00
—	—	88,500-00	—	1,28,709-80	—	1,28,709-80
—	2,27,500-00	11,09,272-97	—	32,52,141-39	—	32,52,141-39
04,000-00	—	8,50,308-28	500-00	40,53,751-14	—	40,53,751-14
—	—	1,500-00	—	19,300-00	—	19,300-00
—	—	3,86,703-50	—	11,10,155-11	—	11,10,155-11
04,000-00	2,27,500-00	30,43,798-41	500-00	1,08,47,388-33	—	1,08,47,388-33
00,000-00	10,92,500-00	12,78,890-43	330-10	38,37,731-13	52,500-00	38,90,231-13
32,107-96	—	9,91,821-01	1,007-25	53,40,890-37	6,840-60	53,47,730-97
—	—	23,46,947-62	—	67,73,219-62	7,000-00	67,80,219-62
—	—	1,59,319-00	—	15,84,619-00	—	15,84,619-00
92,500-00	—	7,28,590-00	—	20,95,090-00	—	20,95,090-00
24,607-96	10,92,500-00	55,05,568-06	1,337-35	1,96,31,550-12	66,340-60	1,96,97,890-72
—	—	16,000-00	6,200-00	62,290-32	—	62,290-32
20,000-00	5,00,000-00	12,67,042-08	13,217-08	49,03,854-99	6,000-00	49,09,854-99
—	—	12,451-61	—	14,701-61	—	14,701-61
20,000-00	5,00,000-00	12,95,493-69	19,417-08	49,80,846-92	6,000-00	49,86,846-92
—	—	16,50,659-50	—	25,96,951-94	—	25,96,951-94
—	—	16,50,659-50	—	25,96,951-94	—	25,96,951-94
—	—	18,38,713-49	—	24,54,789-30	—	24,54,789-30
—	2,00,000-00	8,44,020-70	—	48,60,920-70	7,500-00	48,68,420-70
—	2,00,000-00	26,82,734-19	—	73,15,710-00	7,500-00	73,23,210-00
17,000-00	4,00,000-00	6,43,223-48	20,167-57	57,47,413-65	12,000-00	57,59,413-65
,12,000-00	10,37,500-00	14,08,940-38	2,000-00	43,38,507-86	—	43,38,507-86
—	3,07,500-00	10,40,222-27	—	18,22,208-72	—	18,22,208-72
—	—	—	—	19,400-00	—	19,400-00
),29,000-00	17,45,000-00	30,92,386-13	22,167-57	1,19,27,530-23	12,000-00	1,19,39,530-23

State Universities	*A*	*B*	*C*	*D*
KERALA				
1. Calicut	3,91,799-00	12,84,050-00	—	2,00,000-00
2. Cochin	3,41,000-00	8,09,242-40	—	—
3. Kerala	6,52,416-78	10,32,303-85	—	—
Total	13,85,215-78	31,25,596-25	—	2,00,000-00
MADHYA PRADESH				
1. A.P. Singh	1,49,185-60	4,30,800-00	—	—
2. Bhopal	3,30,906-45	4,42,086-67	—	—
3. Indira Kala Sangit	1,14,274-46	1,00,000-00	—	—
4. Indore	2,75,000-00	12,98,600-00	—	52,500-00
5. Jabalpur	8,06,100-00	12,99,800-00	—	—
6. Jawaharlal Nehru Krishi	1,875-00	4,400-00	—	—
7. Jiwaji	7,51,800-00	3,94,346-67	—	—
8. Ravi Shankar	3,21,375-34	12,17,152-85	—	—
9. Saugar	11,11,997-21	26,26,312-08	4,20,500-00	30,000-00
10. Vikram	2,85,067-74	7,63,179-43	—	—
Total	41,47,581-80	85,76,677-70	4,20,500-00	82,500-00
MAHARASHTRA				
1. Bombay	11,77,685-03	6,97,350-00	31,35,356-45	15,17,500-00
2. Konkan Krishi	—	1,000-00	—	—
3. Mahatma Phule Krishi	—	—	1,251-61	—
4. Marathwada	4,61,135-48	18,89,197-92	—	9,50,000-00
5. Nagpur	4,94,192-86	11,77,565-28	5,73,504-29	12,50,000-00
6. Poona	7,89,218-98	12,89,023-33	—	17,95,000-00
7. SNDT Women's	8,09,077-00	39,000-00	14,91,426-10	75,000-00
8. Shivaji	4,75,882-26	10,05,566-96	—	9,60,000-00
Total	**42,07,191-61**	**60,98,703-49**	**52,01,538-45**	**65,47,500-00**
ORISSA				
1. Berhampur	3,28,950-99	10,99,235-00	—	37,500-00
2. Orissa Univ. of Agr. & Tech.	—	—	—	—
3. Sambalpur	4,47,050-00	7,51,566-45	6,03,000-00	1,00,000-00
4. Utkal	10,26,198-76	18,46,485-58	—	3,00,000-00
Total	18,02,199-75	36,97,287-03	6,03,000-00	4,37,500-00
PUNJAB				
1. Guru Nanak Dev	6,28,980-65	2,93,728-00	—	6,00,000-00
2. Panjab	13,58,491-42	51,12,512-82	5,88,924-36	2,10,000-00
3. Punjab Agricultural	4,000-00	61,279-04	—	—
4. Punjabi	3,74,881-03	16,87,558-10	—	—
Total	23,66,353-10	71,55,077-96	5,88,924-36	8,10,000-00

C	D	E	F	Total	Sec. III	Grand Total
—	2,00,000-00	8,00,480-70	3,909-68	26,80,239-38	—	26,80,239-38
—	—	2,24,621-31	6,878-57	12,81,742-28	8,000-00	13,89,742-28
—	—	15,76,785-16	—	32,61,505-79	—	32,61,505-79
—	2,00,000-00	26,01,887-17	10,788-25	73,23,487-45	8,000-00	73,31,487-45
—	—	5,68,500-00	—	11,48,485-60	—	11,48,485-60
—	—	5,10,708-00	—	12,83,701-12	—	12,83,701-12
—	—	2,10,346-67	—	4,24,621-13	—	4,24,621-13
—	52,500-00	3,55,795-87	—	19,81,895-87	—	19,81,895-87
—	—	2,07,034-78	—	23,12,934-78	5,000-00	23,17,934-78
—	—	—	—	6,275-00	—	6,275-00
—	—	6,26,256-00	—	17,72,402-67	—	17,72,402-67
—	—	3,34,305-55	4,000-00	18,76,833-74	4,494-00	18,81,327-74
,500-00	30,000-00	9,73,715-99	3,993-55	51,66,518-83	7,500-00	51,74,018-83
—	—	3,48,562-95	1,000-00	13,97,810-12	—	13,97,810-12
500-00	82,500-00	41,35,225-81	8,993-55	1,73,71,478-86	16,994-00	1,73,88,472-86
356-45	15,17,500-00	19,55,887-77	—	84,83,779-25	—	84,83,779-25
—	—	—	—	1,000-00	—	1,000-00
251-61	—	—	—	1,251-61	—	1,251-61
—	9,50,000-00	6,33,410-09	8,958-36	39,42,701-85	—	39,42,701-85
504-29	12,50,000-00	8,64,467-60	—	43,59,730-03	—	43,59,730-03
—	17,95,000-00	22,77,833-15	6,687-05	61,57,762-51	—	61,57,762-51
426-10	75,000-00	10,02,616-81	—	34,17,119-91	10,000-00	34,27,119-91
—	9,60,000-00	7,88,617-40	—	32,30,066-62	2,01,250-00	34,31,316-62
538-45	65,47,500-00	75,22,832-82	15,645-41	2,95,93,411-78	2,11,250-00	2,98,04,661-78
—	37,500-00	6,03,773-59	—	20,69,459-58	—	20,69,459-58
—	—	5,641-67	—	5,641-67	—	5,641-67
)00-00	1,00,000-00	8,82,295-04	—	27,83,911-49	3,000-00	27,86,911-49
—	3,00,000-00	11,67,941-92	3,600-00	43,44,226-26	2,218-00	43,46,444-26
)00-00	4,37,500-00	26,59,652-22	3,600-00	92,03,239-00	5,218-00	92,08,457-00
—	6,00,000-00	2,38,522-79	—	17,61,231-44	7,000-00	17,68,231-44
)24-36	2,10,000-00	63,58,529-94	—	1,36,28,458-54	—	1,36,28,458-54
—	—	52,000-00	—	1,17,279-04	—	1,17,279-04
—	—	6,54,100-00	2,000-00	27,18,539-13	6,000-00	27,24,539-13
)24-36	8,10,000-00	73,03,152-73	2,000-00	1,82,25,508-15	13,000-00	1,82,38,508-15

State Universities	*A*	*B*	*C*	*D*
RAJASTHAN				
1. Jodhpur	8,35,423-74	19,41,638-06	3,31,790-32	—
2. Rajasthan	16,03,755-36	24,05,414-52	—	21,18,000-00
3. Udaipur	3,83,025-00	8,49,966-67	—	—
Total	28,22,204-10	51,97,019-25	3,31,790-32	21,18,000-00
TAMILNADU				
1. Annamalai	9,99,441-14	13,90,068-21	13,15,000-00	—
2. Madras	12,05,125-80	54,19,425-62	2,67,641-94	16,22,350-00
3 Madurai	6,23,350-00	40,73,103-23	—	3,27,500-00
4. Tamilnadu Agricultural	—	—	1,212-90	—
Total	28,27,916-94	1,08,82,597-06	15,83,854-84	19,49,850-00
UTTAR PRADESH				
1. Agra	62,500-00	91,000-00	—	—
2. Allahabad	37,40,756-57	33,82,274-19	1,48,000-00	—
3. C.S. Azad Univ. of Ag. & Tech.	—	4,800-00	—	—
4. Garhwal	15,000-00	85,000-00	—	—
5. G.B. Pant Univ. of Ag. of Tech.	7,500-00	15,900-00	72,000-00	—
6. Gorakhpur	10,40,371-43	30,06,113-88	—	7,50,000-00
7 Kanpur	1,31,800-00	1,41,000-00	—	—
8. Kashi Vidyapith	4,61,655-18	—	—	—
9. Kumaon	36,100-00	3,59,050-00	—	—
10. Lucknow	9,56,196-77	27,88,429-89	—	—
11. Meerut	2,80,750-00	5,83,600-00	—	7,90,000-00
12. Roorkee	3,18,000-00	26,39,300-00	70,10,743-13	—
13. Sampurnanand Sanskrit	7,52,416-12	—	—	—
Total	78,03,046-07	1,30,96,467-96	72,30,743-13	15,40,000-00
WEST BENGAL				
1. Bidhan Chandra Krishi	—	8,819-35	—	—
2. Burdwan	6,03,300-00	11,53,300-00	—	13,00,000-00
3. Calcutta	25,66,036-45	47,33,536-10	10,32,724-52	4,48,500-00
4. Jadavpur	4,54,554-84	5,52,187-76	55,73,395-43	10,000-00
5. Kalyani	1,46,750-00	13,24,028-57	—	—
6. North Bengal	5,96,000-00	11,59,650-00	—	—
7. Rabindra Bharati	1,63,768-67	—	—	—
Total	45,30,409-96	89,31,521-78	66,06,119-95	17,58,500-00
Grand Total	5,58,20,468-50	11,26,59,814-65	5,99,03,242-20	2,14,91,350-00

C	D	E	F	Total	Sec. III	Grand Total
1,790-32	—	5,28,230-87	5,989-81	36,43,072-80	3,20,000-00	39,63,072-80
—	21,18,000-00	8,47,020-30	39,495-83	70,13,686-01	3,000-00	70,16,686-01
—	—	2,80,500-00	—	15,13,491-67	—	15,13,491-67
1,790-32	21,18,000-00	16,55,751-17	45,485-64	1,21,70,250-48	3,23,000-00	1,24,93,250-48
5,000-00	—	13,53,238-26	—	50,57,747-61	—	50,57,747-61
7,641-94	16,22,350-00	48,82,082-52	1,000-00	1,33,97,625-88	5,010-00	1,34,02,635-88
—	3,27,500-00	11,25,573-74	13,329-03	61,62,856-00	5,000-00	61,67,856-00
1,212-90	—	5,000-00	—	6,212-90	—	6,212-90
3,854-84	19,49,850-00	73,65,894-52	14,329-03	2,46,24,442-39	10,010-00	2,46,34,452-39
—	—	29,525-00	—	1,83,025-00	2,540-44	1,85,565-44
8,000-00	—	8,71,722-29	26,217-58	81,68,970-63	—	81,68,970-63
—	—	31,000-00	—	35,800-00	—	35,800-00
—	—	37,602-00	—	1,37,602-00	—	1,37,602-00
2,000-00	—	3,574-53	1,500-00	1,00,474-53	—	1,00,474-53
—	7,50,000-00	3,70,208-21	2,983-87	51,69,677-39	8,000-00	51,77,677-39
—	—	62,925-00	—	3,35,725-00	—	3,35,725-00
—	—	4,57,626-59	—	9,19,281-77	24,000-00	9,43,281-77
—	—	94,500-00	—	4,89,650-00	—	4,89,650-00
—	—	6,57,272-10	2,000-00	44,03,898-76	—	44,03,898-76
—	7,90,000-00	6,28,250-07	—	22,82,600-07	—	22,82,600-07
0,743-13	—	63,00,715-78	6,256-73	1,62,75,015-64	11,000-00	1,62,86,015-64
—	—	9,90,834-14	—	17,43,250-26	—	17,43,250-26
0,743-13	15,40,000-00	1,05,35,755-71	38,958-18	4,02,44,971-05	45,540-44	4,02,90,511-49
—	—	—	—	8,819-35	—	8,819-35
—	13,00,000-00	6,56,446-00	—	37,13,046-00	—	37,13,046-00
32,724-52	4,48,500-00	20,16,224-06	—	1,07,97,021-13	—	1,07,97,021-13
73,395-43	10,000-00	5,61,500-00	7,200-00	71,58,838-03	—	71,58,838-03
—	—	3,69,104-20	5,753-80	18,45,636-57	1,250-00	18,46,886-57
—	—	9,86,785-93	—	27,42,435-93	—	27,42,435-93
—	—	78,890-97	—	2,42,659-64	—	2,42,659-64
06,119-95	17,58,500-00	46,68,951-16	12,953-80	2,65,08,456-65	1,250-00	2,65,09,706-65
03,242-20	2,14,91,350-00	16,82,93,581-89	2,53,403-99	41,84,21,861-23	9,76,103-04	41,93,97,964-27

APPENDIX XXX (A)

Grants to Central and State Universities for Other Schemes

1. Grants to Jawaharlal Nehru University		82,59,711-00
2. Grants to North Eastern Hill University		1,39,57,000-00
3. Grants to Delhi University (for Development of South Delhi Campus)		3,17,356-00 *2,13,406-42
4. Grants to Central Institute of English & Foreign Languages Hyderabad		8,00,000-00
5. **Grants to New Central Universities** Hyderabad		2,28,80,984-35
6. **University Postgraduate Centres**		
(i) Universities	57,25,000-00 *1,65,000-00	
(ii) Colleges	3,35,000-00	
		60,60,000-00 *1,65,000-00
7, College Development Council in the University		1,40,000-00
8. Vacant		
9. **Faculty Awards**		
(a) National Fellowship		
(i) Universities	3,88,929-93	
(ii) Colleges	15,240-47	
		4,04,170-40
(b) National Lectures		—
(c) National Associates		
(i) Universities	96,637-25	
(ii) Colleges	29,592-01	
		1,26,229-26
(d) Sabbatical Leave		63,559-05
(e) Visiting Professorships		4,95,000-00
(i) Visiting Fellows		
(ii) Visiting Faculty		
(f) Utilisation of Services of Retired Teachers		
(i) Universities	14,66,630-94	
(ii) Colleges	9,13,380-93	
		23,80,011-87
(g) Research Associateships		
(i) Universities	4,30,543-71	
(ii) Colleges	61,948-38	
		4,92,492-09
(h) Institution of Professor of Eminence		—

*By Adjustment

10. Faculty Improvement Programme		
(a) Summer Institutes		
(i) Universities	28,97,384-68	
Colleges	2,96,686-45	
		31,94,071-13
(ii) Teacher Fellowships		
Universities	84,09,446-78	
Colleges	1,50,81,232-41	
	*5,395-06	
		2,34,90,679-19
		*5,395-06
(b) Seminars/Orientation Courses & Conferences		
(i) Universities	28,53,267-93	
(ii) Colleges	3,51,348-52	
		32,04,616-45
(c) Training Programme for Laboratory & Workshop Technicians		—
11. Examination Reforms and Restructuring of Courses		
(i) Universities	10,00,395-99	
(ii) Colleges	7,76,500-00	
		17,76,895-99
		10,06,226-00
12. Correspondence Courses		
13. Unassigned Grants		
(i) Universities	23,21,306-89	
	*46,623-53	
	10,000-00	
(ii) Colleges		23,31,306-89
		*46,623-53
14. Publication of Research Work (including Doctorate Thesis)		
(i) Universities	10,64,933-57	
(ii) Colleges	1,000-00	
		10,65,933-57
15. Adult Education & Continuing Education		
(i) Universities	11,77,765-72	
(ii) Colleges	6,02,000-00	
		17,79,765-72
16. Construction of Library Building		
(i) Universities	43,20,470-61	
	*5,029-39	
	15,000-00	
(ii) Colleges		43,35,470-61
		*5,029-39
17. Construction of Residential Accommodation for Teachers		
(a) Staff Quarters		1,83,96,188-00
		*7,46,891-00
(b) Teachers Hostels		9,54,220-00

*By Adjustment

Other Schemes
82,59,711-00
1,39,57,000-00
3,17,356-00
*2,13,406-42
8,00,000-00
2,28,80,984-35
)0-00
)0-00
)0-00
60,60,000-00
*1,65,000-00
1,40,000-00
29-93
40-47
4,04,170-40
—
37-25
92-01
1,26,229-26
63,559-05
4,95,000-00
30-94
80-93
23,80,011-87
43-71
48-38
4,92,492-09
—

18. (a)	Construction of Hostels		69,72,392-62
			*50,000-00
(b)	Improvement of Hostel facillities		5,06,894-87
19.	Guest House		2,66,049-00
20.	Printing Press		5,65,000-00
21.	**Welfare Schemes**		
(a)	Student Aid Fund		4,20,805-50
			*20,636-00
(b)	Non-Resident Students Centre		50,000-00
(c)	Students Study Homes		74,000-00
(d)	Health Centres		8,69,992-72
(e)	Water Coolers		—
(f)	Study Centre		9,88,091-55
			30,502-00
(g)	Visiting Studentship		50,000-00
(h)	Employment Information Career Advising & Educational Guidance for University Students		—
(i)	Establishment/Improvement of Canteen facilities		4,85,400-00
(j)	Construction of Gymnasium		—
(k)	Assistance for Development of Play fields		—
22.	**Scholarships**		
(a)	**Arabic & Persian**		
	(i) Universities	36,000-00	
	(ii) Colleges	16,800-00	
			52,800-00
(b)	**Hill Area Scholarships**		
	(i) Universities	84,621-67	
	(ii) Colleges	4,800-00	89,421-67
(c)	Sanskrit/Pali/Prakrit		
	(i) Universities	39,000-00	
	(ii) Colleges	27,000-00	
			66,000-00
23.	Cultural & Bilateral Exchange Programme		—
24.	Indo-USSR Credit Projects		—
25.	**Medical Colleges (Central Universities)**		
(a)	**Aligarh Muslim University**		
	(i) Building		2,00,000-00
	(ii) Equipment		17,00,000-00
	(iii) Library		1,50,000-00
	(iv) Furniture		50,000-00
	(v) Staff & Maintenance		50,000-00
	(vi) Other Schemes		48,669-08

*By Adjustment

(b) **Banaras Hindu University**		
(i) Building		4,50,000-00
(ii) Equipment		40,00,000-00
(iii) Library		6,90,000-00
(iv) Furniture		1,70,000-00
(v) Staff & Maintenance		11,75,597-00
(vi) Other Schemes		581-14
(c) **Delhi University**		
(i) Building		—
(ii) Equipment		3,00,000-00
(iii) Library		2,00,000-00
(iv) Furniture		75,000-00
(v) Staff & Maintenance		—
(vi) Other Schemes		23,20,000-00
26. Hospitals attached to Medical Colleges of Central Universities		
(i) Non-Recurring		82,67,463-72
(ii) Recurring		—
27. Development of Campus		29,67,664-73
28. Students Amenities (Central Universities)		2,55,075-00
29. Revision of Salary Scales of Non-technical Teachers		1,45,846-00
30. Centenary & Jubilee Grants		16,57,500-00
31. National Integraties Samities		20,800-00
32. Establishment of Chairs		
(i) Tagore Chairs		1,431-75
(ii) Guru Gobind Singh Chairs		—
(iii) Nanak Chairs		—
33. Nanak Centenary		—
34. Gandhi Centenary		—
35. Gandhi Bhavan		60,000-00
36. Collection & Preservation of Manuscripts		26,000-00
37. Appointment of Development Officers		48,000-00
38. Appointment of Trained Coaches		24,497-75
39. Common Facilities Programme		
(a) Development of Computer Facilities		2,08,12,941-67
(b) Central Instrumentational Facilities		91,38,687-64
(c) Science Education Centres		1,00,000-00
(d) Regional Library Centres		1,00,000-00
40. Travel Grant to research fellow/Scholars-College Teachers for attending conferences within the country and abroad		
(i) Universities	50,985-50	
(ii) Colleges	2,53,793-35	
		3,04,778-85
41. Miscellaneous		23,05,634-58
Total		18,70,84,904-41
		*12,83,563-40

*By Adjustment

APPENDIX XXXI (A)

Objectives and Functions of USIC

The objectives and functions of the University Service and Instrument Centre (USIC) would be to (i) repair and service instruments (ii) design and fabricate attachments for or modifications to existing equipment (iii) training of instrument scientists and technicians (iv) instrument R & D and (v) provide analytical services, as indicated below:—

(i) Repair and servicing of instruments should be provided at these centres as an immediate measure, irrespective of the state of development of the university. The other objectives mentioned above may be added wherever the necessary infrastructure and expertise is available.

(ii) To make the most effective use of costly instruments available in universities, these may be brought under the control of the USIC. Instruments available in different departments may not necessarily be collected and put in one place, but the centre should be responsible for the proper maintenance, servicing and effective use of the instruments.

(iii) All instruments costing Rs. 1 lakh or more in each university and used by more than two research groups may be brought under the control of the USIC.

(iv) Centre should have an adequate workshop under its control, with facilities for mechanical, glass blowing, electronics and optical shops and an analytical instrument section. The Central Workshops, other than those in Engineering Campus which are usually under the Mechanical Engineering Departments, may be brought under the control of USIC. The small workshops, glass blowing and electronics shops already attached to departments may continue to serve these departments for their routine needs. Where there is no Central Workshop such facilities must be created as part of USIC.

ORGANISATION

(a) (i) The Centre should be managed by a full time scientist/Engineer with academic privileges identical with those of any other Head of a Department, and who will be responsible directly to the Vice-Chancellor. Head of USIC could be a Professor, or Associate Professor/PSO, or Reader/Senior Scientific Officer.

(ii) A person who is Head of any Science Department shall not simultaneously be Head of USIC, and vice-versa.

(b) The Centre will have an Advisory Committee consisting of representatives of user departments with the Head of USIC as convener and Vice-Chancellor as Chairman.

(c) For running the analytical services and for the operation of specialised equipment, faculty members from other departments may be seconded to the USIC.

(d) Where equipment already with a department is brought under the Centre, the Advisory Committee may give priority for the work of the department.

(e) When a new instrument is purchased, 10% of the cost of the equipment may be provided for the purchase of spares.

(f) The centre should organise programmes to train teachers and other research workers in the operation, servicing and maintenance of instruments which they use in their research work, and in the interpretation of the data they collect.

(g) In due course USIC should also organise an instrument service and repair course for teachers coming from colleges and also encourage the colleges to develop small electronics and mechanical workshops besides photography and glass blowing, etc.

(h) The Universities may give priority to designing instruments which are required for teaching. This may be done in collaboration with the ULP-COSIP groups.

(i) USIC should identify talent for instrument design and development in different departments and encourage the faculty to be actively associated with the centre for undertaking R & D work. These centres can fund such projects.

(j) USIC may also undertake R & D work for industries using the talent available in universities.

(k) No charge may be made for services rendered to teachers/researchers within the same university.

(l) Charges to cover actual expenses may be made for services rendered to other universities.

(m) Services may be rendered to industry only if the instruments can be spared for such purposes. They may be charged at a higher rate to cover depreciation, service etc.

(n) M.Sc. degree programmes should have a course component of appropriate instrumentation in all Sciences to help create indigenous capability in designing and fabricating whole instruments or parts thereof as needed for research and development work.

APPENDIX XXXI (B)

List of USICs approved by the Commission

Name of the University	*Name of the University*
1. Allahabad	26. Kurukshetra
2. Andhra	27. Madras
3. Banaras Hindu	28. Madurai Kamraj
4. Bangalore	29. Magadh
5. Bhagalpur	30. Marathwada
6. Bhopal	31. Mysore
7. Burdwan	32. Nagpur
8. Calicut	33. North Bengal
9. Cochin	34. Osmania
10. Delhi	35. Panjab
11. Dibrugarh	36. Patna
12. Gauhati	37. Poona
13. Gujarat	38. Punjabi
14. Guru Nanak Dev	39. Rajasthan
15. Himachal Pradesh	40. Ravi Shankar
16. Indore	41. Roorkee
17. Jabalpur	42. Sambalpur
18. Jadavpur	43. Sardar Patel
19. Jawaharlal Nehru	44. Saugar
20. Jiwaji	45. Shivaji
21. Jodhpur	46. South Gujarat
22. Kalyani	47. Sri Venkateswara
23. Karnatak	48. Udaipur
24. Kashmir	49. Utkal
25. Kerala	50. Vikram

APPENDIX XXXII (A)

List of Colleges Participating in College Science Improvement Programme

Sl. No.	*Name of the University*	*Name of the College*
1	*2*	*3*
1.	Agra	1. St. John's College, Agra.
		2. Agra College, Agra.
		3. Raja Balwant Singh College, Agra.
		4. D.S. College, Aligarh.
		5. Shri Varshnaya College, Aligarh.
2.	Allahabad	6. Ewing Christian College, Allahabad.
		7. Chaudhari Mahadeo Prasad Degree College, Allahabad.
3.	Andhra	8. Mrs. A.V.N. College, Visakhapatnam.
		9. Andhra Christian College, Guntur.
		10. D.N.R. College, Bhimavaram.
		11. Andhra Loyala College, Vijayawada.
		12. Maharajah's College, Vizianagaram.
		13. Government Arts College, Rajamundry.
		14. P.R. Government College, Kakinada.
		15. V.S.R. College, Tenali.
		16. St. John's College for Women, Waltair.
		17. The Hindu College, Machilipatnam.
		18. St. Theresa's College, Eluru.
		19. V.R.S. & Y.R.N. College, Chirala.
		20. S.V.R.M. College, Nagaram, Guntur.
4.	Awadesh Pratap Singh University	21. Government Science College, Rewa.
5.	Bangalore	22. St. Joseph's Collge, Bangalore.
		23. Vijaya College, Bangalore.
		24. National College, Bangalore.
		25. Maharani's College for Women, Bangalore.
		26. Government Science College, Bangalore.
		27. Mount Carmal College, Bangalore.
		28. S. Nijalingappa College, Bangalore.
		29. V.H.D. Central Institute of Home Science, Bangalore.
6.	Berhampur	30. Khallikote College, Berhampur.
7.	Bhagalpur	31. T.N.B. College, Bhagalpur.
		32. Marwari College, Bhagalpur.
8.	Bhopal	33. S.S.L. Jain College, Vidisha.
		34. Motilal Vigyan College, Bhopal.
9.	Bombay	35. Sophia College for Women, Bombay.
		36. Ramnarain Ruia College, Bombay.
		37. St. Xavier's College, Bombay.
		38. Wilson College, Bombay.
		39. Kirti M. Doongursee College, Bombay.
		40. R.P.G. College of Arts & Science & R.V.J. College of Commerce, Ratnagiri.

1	*2*	*3*
10.	Bundelkhand	41. Bipin Behari College, Jhansi.
11.	Burdwan	42. B.N. Mahavidyalaya, Hooghly.
12.	Calcutta	43. M.B.B. College, Agartala.
		44. Serampore College, Serampore, Hooghly.
		45. Bangabasi College, Calcutta.
		46. St. Xavier's College, Calcutta.
		47. Ramkrishna Mission Residential College, Narendrapur.
		48. Belur Rama Krishna Mission Residential College, P.O. Belurmath.
		49. Vidyasagar College, Calcutta.
		50. Lady Brabourne College, Calcutta.
		51. Presidency College, Calcutta.
13.	Calicut	52. Guruvayurappan College, Calicut.
		53. St. Thomas College, Trichur.
		54. Vimla College, Trichur.
14.	Dibrugarh	55 Sibsagar College, Joysagar.
		56. J.B. College, Jorhat.
15.	Garhwal	57. D.B.S. College, Dehradun.
16.	Gorakhpur	58. St. Andrew's College, Gorakhpur.
		59. Postgraduate College, Ghazipur.
17.	Gujarat	60. St. Xavier's College, Ahmedabad.
		61. J.J. College of Science, Nadiad.
18.	Guru Nanak Dev	62. D.A.V. College, Jullundur.
		63. D.A.V. College, Amritsar.
		64. B.U. Christian College, Batala.
19.	Gauhati	65. Arya Vidyapeeth College, Gauhati.
		66. Cotton College, Gauhati.
20.	Himachal Pradesh	67. R.P.C.S.D.R. College, Simla.
21.	Indore	68. Holkar Science College, Indore.
22.	Jabalpur	69. Government Science College, Jabalpur.
23.	Jiwaji	70. Government Science College, Gwalior.
24.	Kanpur	71. Christ Church College, Kanpur.
		72. D.A.V. College, Kanpur.
		73. Acharya Narendra Deo Nagar Mahapalika Mahila Mahavidyalaya, Kanpur.
		74. P.P.N. College, Kanpur.
		75. V.S.S.D. College, Kanpur.
		76. Janta College, Bakewar.
25.	Karnatak	77. Raja Lakhmagowda Science Institute, Belgaum.
		78. Veerasaiva College, Bellary.
		79. Government College, Gulbarga.
26.	Kashmir	80. Government Degree College, Anantnag.
27.	Kerala	81. Maharaja's College, Ernakulam.
		82. University College, Trivandrum.
		83. C.M.S. College, Kottayam.
		84. S.N. College, Quilon.
		85. Union Christian College, Alwaye.
		86. St. Teresa's College, Ernakulam.
		87. St. Thomas College, Palai.

1	2	3
		88. Government College, Almora.
28.	Kumaon	89. D.S.B. College, Nainital.
		90. C.M. Science College, Darbhanga.
29.	L.N. Mithila	91. Isabella Thouburn College, Lucknow.
30.	Lucknow	92. Shia College, Lucknow.
		93. Shri Jai Narain Degree College, Lucknow.
		94. Lucknow Christian College, Lucknow.
		95. Madras Christian College, Madras.
31.	Madras	96. Pachaiyappa's College, Madras.
		97. Vivekananda College, Madras.
		98. St. Joseph's College, Tiruchirapalli.
		99. P.S.G. Arts College, Coimbatore.
		100. Presidency College, Madras.
		101. Seethalakshmi Ramaswami College, Tiruchirapalli.
		102. Loyola College, Madras.
		103. Raja Sarfoji Government College, Tanjavur.
		104. Avinashlingam Home Science College for Women, Coimbatore.
		105. Women's Christian College, Madras.
		106. D.D.G. Dass Vaishnav College, Madras.
		107. A.V.C. College, Mannampandal.
32.	Madurai Kamaraj	108 American College, Madurai.
		109. Madura College, Madurai.
		110. Lady Doak College, Madurai.
		111. Alagappa College, Karaikudi.
		112. V.H.N.S.N. College, Virudhu Nagar.
		113. Arulimigu Palaniandavar Arts College, Palani.
		114. S.C. College, Nagercoil.
		115. St. John's College, Palayamkottai.
		116. Aditanar College of Arts & Science, Virapandian-patnam, Tiruchendur.
		117. Sri Meenakshi Govt. College, Madurai.
		118. St. Mary's College, Tuticorin.
		119. Sri Parasakthi College for Women, Courtallam, Tenkasi, Tirunelveli Dist.
		120. G. Venkataswamy Naidu College, Kovilpatti.
		121. V.O.C. College, Tuticorin.
33.	Magadh	122. A.N. College, Patna.
34.	Marathwada	123. Nanded Education Society's Science College, Nanded.
		124. Yogeshwari Mahavidyalaya, Ambajogai.
		125. Milind College of Science, Aurangabad.
		126. M.B. Mahavidyalaya, Latur.
		127. Dayanand Science College, Latur.
		128. Mahatma Gandhi Mahavidyalaya, Ahmedpur.
35.	Meerut	129. S.D. College, Muzaffarnagar.
		130. M.S. College, Saharanpur.
		131. Raghunath Girls College, Meerut.
		132. D.A.V. College, Muzaffarnagar.
		133. D.N. College, Meerut.

1	*2*		*3*
35	Meerut	134.	Multanimal Modi College, Modinagar.
		135.	M.M.H. College, Ghaziabad.
		136.	N.R.E.C. College, Khurja.
36.	Mysore	137.	Mahatma Gandhi College, Udipi.
		138.	St. Aloysius College, Mangalore.
		139.	St. Agnes College, Mangalore.
37.	Nagpur	140.	Hislop College, Nagpur.
		141.	Vidarbha Mahavidyalaya, Amravati.
		142.	Jankidevi Bajaj College of Science, Wardha.
38.	North Eastern Hill	143.	St. Edmund's College, Shillong.
39.	Osmania	144.	New Science College, Hyderabad.
		145.	N.B. Science College, Hyderabad.
40.	Patna	146.	Bihar National College, Patna.
41.	Poona	147.	Fergusson College, Poona.
		148.	Ahmednagar College, Ahmednagar.
		149.	Nowrosji Wadia College, Poona.
		150.	S.P. College, Poona.
		151.	H.P.T. College, Nasik.
		152.	Pratap College, Amalner.
		153.	Science College, Dhulia.
		154.	Mooljee Jaitha College, Jalgaon.
		155.	S.P.N. Arts, D.J.M. Commerce & B.N.S. Science College, Sangamner.
		156.	M.E.S.A.G. College, Pune.
42.	Rajasthan	157.	Government College, Ajmer.
		158.	Maharaja's College, Jaipur.
		159.	Government College, Kota.
43.	Ranchi	160.	Tata College, Chaibasa.
		161.	St. Columba's College, Hazaribagh.
44.	Rohilkhand	162.	Hindu College, Moradabad.
45.	Rohtak	163.	N.R.S. Government College, Rohtak.
46.	Shivaji	164.	Willingdon College, Sangli.
		165.	D.B.F.C. Dayanand College of Arts & Science, Sholapur.
47.	South Gujarat	166.	B.P. Baria Science Institute, Navsari.
		167.	Ballabha Krishna Lal Majumdar Science College, Valsad.
		168.	P.T.S. College, Surat.
48.	Sri Venkateswara	169.	Jawahar Bharati, Kavali (Nellore Distt.)
		170.	Smt. Padmavathi College for Women, Tirupati.
		171.	S.S.S. Arts & Science College for Women, Anantapur.
		172.	Silver Jubilee Government College, Kurnool.
49.	Utkal	173.	Ravenshaw College, Cuttack.
		174.	S.C.S. College, Puri.
		175.	Bhadrak College, Bhadrak.
50.	Vikram	176.	Madhav Vigyan Mahavidyalaya, Ujjain.
		177.	Government College, Ratlam.

TOTAL COLLEGES: 177

APPENDIX XXXII (B)

List of the University Departments implementing University Leadership Project under College Science Improvement Programme

Department	*University*	*Date of approval*	*Name & Designation of the Project Coordinator*
1	*2*	*3*	*4*
Physics	Rajasthan	3.3.1971	Professor B. Saraf, Professor of Physics.
	Mysore	17.10.1970	Professor B. Sanjeevaiah, Head of the Department.
	Andhra	18.3.1971	Professor P.T. Rao, Head of the Department.
	Poona	26.3.1974	Professor M.R. Bhiday. Head of the Department.
	Panjab	26.3.1974	Professor H.S. Hans, Head of the Department.
	Nagpur	26.3.1974	Professor C. Mande, Head of the Department.
	Bangalore	16.11.1975	Professor K.N. Kuchela, Head of the Department.
	Bombay	16.11.1975	Professor M.C. Joshi, Head of the Department.
	Madurai	16.11.1975	Professor K.S. Chandrasekaran, Head of the Department.
	Meerut	7.1.1976	Professor S.P. Khare, Professor of Physics.
	Ranchi	16.11.1975	Professor M.P. Gupta, Head of the Department.
	Osmania	16.11.1975	Dr. V.C. Krishna Murty, Reader in Physics.
	Calicut	16.11.1975	Professor J.C. Palathiangal, Head of the Department.
Chemistry	Panjab	26.9.1970	Professor O.P. Vig, Head of the Department.
	Osmania	26.9.1970	Professor T. Navaneeth Rao, Head of the Department.

Appendix XXXII (b) (*Continued*)

1	2	3	4
Chemistry	Poona	8.12.1970	Professor V.K. Phansalkar, Head of the Department.
	Madras	8.4.1975	Professor R. Ganesan, Head of the Department.
	Gorakhpur	26.3.1974	Professor R.P. Rastogi, Head of the Department.
	Rajasthan	26.3.1974	Professor K.C. Joshi, Department of Chemistry.
	Andhra	26.3.1974	Professor M.N. Sastri, Head of the Department.
	Bangalore	16.11.1975	Professor G.K. Narayana Reddy, Head of the Department.
	Karnatak	16.11.1975	Professor E.S. Jayadevappa, Head of the Department.
	Gujarat	16.11.1975	Dr. M.N. Desai, Reader and Head of the Department.
	Saugar	23.9.1976	Professor S.S. Nigam, Head of the Department.
Mathematics	Panjab	26.9.1970	Professor R.P. Bambah, Head of the Department.
	Madurai	26.9.1970	Professor Nagarajan, Head of the Department.
	Bangalore	18.3.1971	Professor T. Ramesan, Head of the Department.
	Bombay	20.1.1975	Dr. J.V. Deshpande Reader in the Department.
	Meerut	27.4.1972	Professor M.K. Singal Head of the Department.
Biological Sciences	Madurai	26.9.1970	Professor A. Gnanam, Head of the Department.
	Gujarat (Botany & Zoology)	8.4.1975	Professor V.C. Shah, Head of the Department of Zoology.
Biological Sciences	Madras (Botany)	16.1.1971	Professor A. Mahadevan, Head of the Department.
	Gorakhpur (Botany & Zoology)	16.11.1975	Professor K.S. Bhargava, Head of the Department of Botany.

Appendix XXXII (b) (*Continued*)

1	2	3	4
Biological Sciences	Marathwada (Botany & Zoology)	15.11.1975	Professor R. Nagabhushanam, Head of the Department of Zoology. Professor K.B. Deshpande, Head of the Department of Botany.
	Rajasthan (Botany & Zoology)	28.8.1977	Professor A.S. Kapoor, Department of Zoology.
	Sri Venkateswara (Botany & Zoology)	15.7.1977	Professor V.S. Rama Das, Head of the Department of Botany. Professor K.S. Swami, Head of the Department of Zoology.
	Madras (Zoology)	20.10.1978	Professor K. Ramalingam, Head of the Department of Zoology.
	Calcutta (Botany)	18.11.1978	Professor A.K. Sharma, Head of the Department of Botany.
Geology	Mysore	10.3.1978	Professor M. Vishwanathaiah, Head of the Department.
	Jadavpur	17.7.1978	Professor B. Mukherjee, Head of the Department.

APPENDIX

Statement showing grants paid to colleges during the year

Central Universities	*A*	*B*	*C*	*D*
1. Aligarh	—	—	—	—
2. Banaras	1,875-00	—	—	52,355-82
3. Delhi	90,801-55	1,91,100-00	5,71,750-00	32,89,686-00
4. N.E.H.U.	1,500-00	2,000-00	—	3,41,857-00
Total	94,176-55	1,21,100-00	5,71,750-00	36,83,898-82
State Universities				
ANDHRA PRADESH				
1. Andhra	43,775-00	36,650-00	—	32,22,121-29
2. Kakatiya	—	27,300-00	60,000-00	1,78,492-97
3. Nagarjuna	—	—	—	8,89,404-00
4. Osmania	7,875-00	1,00,800-00	—	11,72,726-21
5. Sri Venkateswara	3,000-00	43,548-39	—	12,10,455-13
Total	54,650-00	2,08,298-39	60,000-00	66,73,199-60
ASSAM				
1. Dibrugarh	2,250-00	3,000-00	—	3,81,578-00
2. Gauhati	25,294-00	11,600-00	—	11,66,845-33
Total	27,544-00	14,600-00	—	15,48,423-33
BIHAR				
1. Bhagalpur	21,538-00	4,000-00	—	5,64,580-64
2. Bihar	21,321-43	24,500-00	—	1,98,500-00
3. L.N. Mithila	4,500-00	1,250-00	—	6,68,821-33
4. Magadh	21,875-00	14,250-00	—	10,49,676-00
5. Patna	7,125-00	—	—	2,66,920-00
6. Ranchi	13,050-00	972-00	—	14,59,140-66
Total	89,409-43	44,972-00	—	42,07,638-63
GUJARAT				
1. Gujarat	6,000-00	2,000-00	—	16,84,150-13
2. Saurashtra	2,250-00	—	—	3,68,978-00
3. Sardar Patel	—	—	—	1,10,594-00
4. South Gujarat	5,400-00	31,850-00	6,000-00	3,95,727-50
Total	13,650-00	33,850-00	6,000-00	25,59,449-63

APPENDIX XXXIII

lleges during the year 1978-79 (Major Headwise) under Plan and Section III

C	D	E	F	Total	Sec. III	Grand Total
—	—	—	393-03	393-03	—	393-03
—	52,355-82	6,000-00	—	60,230-82	—	60,230-82
71,750-00	32,89,686-00	1,59,086-00	49,321-72	42,79,745-27	—	42,79,745-27
—	3,41,857-00	71,429-50	—	4,16,786-50	10,000-00	4,26,786-50
71,750-00	36,83,898-82	2,36,515-50	49,714-75	47,57,155-62	10,000-00	47,67,155-62
—	32,22,121-29	6,70,111-86	—	39,72,658-15	—	39,72,658-15
60,000-00	1,78,492-97	21,725-00	—	2,87,517-97	—	2,87,517-97
—	8,89,404-00	51,832-46	—	9,41,236-46	—	9,41,236-46
—	11,72,726-21	4,29,528-10	2,000-00	17,12,929-31	—	17,12,929-31
—	12,10,455-13	7,79,258-02	—	20,36,261-54	—	20,36,261-54
60,000-00	66,73,199-60	19,52,455-44	2,000-00	89,50,603-43	—	89,50,603-43
—	3,81,578-00	54,238-66	—	4,41,066-66	—	4,41,066-66
—	11,66,845-33	2,27,050-83	—	14,30,790-16	—	14,30,790-16
—	15,48,423-33	2,81,289-49	—	18,71,856-82	—	18,71,856-82
—	5,64,580-64	3,34,844-23	—	9,24,962-87	—	9,24,962-87
—	1,98,500-00	2,16,440-26	—	4,60,761-69	10,000-00	4,70,761-69
—	6,68,821-33	18,000-00	10,666-70	7,03,238-03	—	7,03,238-03
—	10,49,676-00	95,733-33	—	11,81,534-33	—	11,81,534-33
—	2,66,920-00	7,362-00	—	2,81,407-00	—	2,81,407-00
—	14,59,140-66	1,41,355-97	—	16,14,518-63	—	16,14,518-63
—	42,07,638-63	8,13,735-79	10,666-70	51,66,422-55	10,000-00	51,76,422-55
—	16,84,150-13	1,08,236-23	—	18,00,386-36	—	18,00,386-36
—	3,68,978-00	37,398-00	—	4,08,626-00	—	4,08,626-00
—	1,10,594-00	14,000-00	—	1,24,594-00	—	1,24,594-00
6,000-00	3,95,727-50	1,05,150-00	—	5,44,127-50	—	5,44,127-50
6,000-00	25,59,449-63	2,64,784-23	—	28,77,733-86	—	28,77,733-86

Appendix XXXIII (Contd.)

State Universities	*A*	*B*	*C*	*D*
HARYANA				
1. Kurukshetra	16,425-00	19,650-00	—	19,80,137-57
2. Maharishi Dayanand	750-00	9,000-00	—	2,88,891-38
Total	17,175-00	28,650-00	—	22,69,028-95
HIMACHAL PRADESH				
1. Himachal Pradesh	—	8,000-00	—	2,05,100-00
Total	—	8,000-00	—	2,05,100-00
JAMMU & KASHMIR				
1. Jammu	3,956-00	—	—	1,08,300-00
2. Kashmir	9,000-00	17,600-00	—	4,57,423-12
Total	12,956-00	17,600-00	—	5,65,723-12
KARNATAKA				
1. Bangalore	2,625-00	54,100-00	—	3,87,627-62
2. Karnatak	7,250-00	3,000-00	—	6,35,062-77
3. Mysore	4,500-00	21,300-00	12,000-00	10,63,277-28
Total	14,375-00	78,400-00	12,000-00	20,85,967-67
KERALA				
1. Calicut	7,125-00	5,000-00	—	29,01,269-17
2. Kerala	9,750-00	52,550-00	—	42,00,980-41
Total	16,875-00	57,550-00	—	71,02,249-58
MADHYA PRADESH				
1. A.P. Singh	3,375-00	19,500-00	—	6,15,805-12
2. Bhopal	750-00	42,200-00	—	2,77,032-50
3. Indore	49,305-65	28,400-00	7,000-00	3,75,242-50
4. Jabalpur	1,875-00	—	8,000-00	2,00,795-90
5. Jiwaji	—	6,526-67	—	2,53,210-28
6. Ravi Shankar	—	3,400-00	—	7,29,439-11
7. Saugar	1,500-00	—	—	3,26,042-79
8. Vikram	19,950-00	2,250-00	—	11,29,831-33
Total	76,755-65	1,02,276-67	15,000-00	39,07,399-53

C	D	E	F	Total	Sec. III	Grand Total
—	19,80,137-57	2,52,927-54	—	22,69,140-11	—	22,69,140-11
—	2,88,891-38	88,545-53	—	3,87,186-91	—	3,87,186-91
—	22,69,028-95	3,41,473-07	—	26,56,327-02	—	26,56,327-02
—	2,05,100-00	4,346-00	—	2,17,446-00	—	2,17,446-00
—	2,05,100-00	4,346-00	—	2,17,446-00	—	2,17,446-00
—	1,08,300-00	3,940-00	—	1,16,196-00	—	1,16,196-00
—	4,57,423-12	42,264-84	—	5,26,287-96	—	5,26,287-96
—	5,65,723-12	46,204-84	—	6,42,483-96	—	6,42,483-96
—	3,87,627-62	1,78,522-18	1,000-00	6,23,874-80	—	6,23,874-80
—	6,35,062-77	3,15,998-81	—	9,61,311-58	—	9,61,311-58
,000-00	10,63,277-28	1,75,864-73	2,000-00	12,78,942-01	—	12,78,942-01
,000-00	20,85,967-67	6,70,385-72	3,000-00	28,64,128-39	—	28,64,128-39
—	29,01,269-17	62,264-29	—	29,75,658-46	75,000-00	30,50,658-46
—	42,00,980-41	3,15,784-63	1,000-00	45,80,065-04	75,000-00	46,55,065-04
—	71,02,249-58	3,78,048-92	1,000-00	75,55,723-50	1,50,000-00	77,05,723-50
—	6,15,805-12	38,000-00	—	6,76,680-12	—	6,76,680-12
—	2,77,032-50	98,326-34	—	4,18,308-84	—	4,18,308-84
,000-00	3,75,242-50	1,03,653-63	—	5,63,601-78	—	5,63,601-78
,000-00	2,00,795-90	79,210-90	—	2,89,881-80	—	2,89,881-80
—	2,53,210-28	1,38,698-97	—	3,98,435-92	—	3,98,435-92
—	7,29,439-11	1,67,505-60	—	9,00,344-71	—	9,00,344-71
—	3,26,042-79	1,55,014-66	—	4,82,557-45	—	4,82,557-45
—	11,29,831-33	1,23,703-45	—	12,75,734-78	—	12,75,734-78
5,000-00	39,07,399-53	9,04,113-55	—	50,05,545-40	—	50,05,545-40

Appendix XXXIII (Contd.)

State Universities	*A*	*B*	*C*	*D*
MAHARASHTRA				
1. Bombay	5,000-00	55,280-80	—	32,67,749-29
2. Marathwada	2,625-00	26,750-00	—	22,57,414-04
3. Nagpur	22,125-00	12,000-00	—	22,01,958-39
4. Poona	2,99,403-44	27,793-40	—	51,01,426-31
5. Punjabrao Krishi	—	—	—	6,000-00
6. SNDT Women's	—	—	—	1,11,644-79
7. Shivaji	9,275-00	20,050-00	—	24,75,371-20
Total	3,38,428-44	1,41,874-20	—	1,54,21,564-02
ORISSA				
1. Berhampur	3,750-00	12,374-20	—	10,24,401-00
2. Sambalpur	7,125-00	18,000-00	—	5,49,067-00
3. Utkal	30,300-00	39,300-00	—	20,87,169-00
Total	41,175-00	69,674-20	—	36,60,637-00
PUNJAB				
1. Guru Nanak Dev	3,750-00	5,374-45	—	13,66,587-99
2. Panjab	7,875-00	14,452-39	—	13,20,171-80
3. Panjab Agriculture	—	—	—	95,880-48
4. Punjabi	—	—	—	3,92,077-50
Total	11,625-00	19,826-84	—	31,74,717-77
RAJASTHAN				
1. Jodhpur	—	5,750-00	—	33,500-00
2. Rajasthan	31,400-00	34,553-23	—	38,83,408-72
3. Udaipur	8,725-00	3,500-00	—	1,90,887-75
Total	40,125-00	43,803-23	—	41,07,796-47
TAMIL NADU				
1. Madras	66,453-48	1,59,712-29	19,500-00	47,24,863-79
2. Madurai Kamraj	17,737-00	1,58,770-00	—	26,84,461-26
Total	84,190-48	3,18,482-29	19,500-00	74,09,325-05

C	D	E	F	Total	Sec. III	Grand Total
		2,90,070-18	4,519-00	36,22,619-27	—	36,22,619-27
-	32,67,749-29	2,24,956-60	—	25,11,745-64	—	25,11,745-64
-	22,57,414-04	5,00,010-83	—	27,36,094-22	—	27,36,094-22
-	22,01,958-39	8,87,410-62	—	63,16,033-77	70,438-36	63,86,472-13
-	51,01,426-31	—	—	6,000-00	—	6,000-00
-	6,000-00	14,500-00	—	1,26,144-79	—	1,26,144-79
-	1,11,644-79	2,68,116-01	—	27,72,812-21	30,000-00	28,02,812-21
-	24,75,371-20					
-	1,54,21,564-02	21,85,064-24	4,519-00	1,80,91,449-90	1,00,438-36	1,81,91,888-26
		3,91,057-73	—	14,31,582-93	—	14,31,582-93
-	10,24,401-00	2,13,879-40	—	7,88,071-40	—	7,88,071-40
-	5,49,067-00	7,74,538-33	7,620-00	29,38,927-33	—	29,38,927-33
-	20,87,169-00					
-	36,60,637-00	13,79,475-46	7,620-00	51,58,581-66	—	51,58,581-66
		1,74,239-65	—	15,49,952-09	40,000-00	15,89,952-09
—	13,66,587-99	2,91,987-37	—	16,34,486-56	—	16,34,486-56
—	13,20,171-80	—	—	95,880-48	—	95,880-48
-	95,880-48	63,217-78	—	4,55,295-28	—	4,55,295-28
-	3,92,077-50					
—	31,74,717-77	5,29,444-80	—	37,35,614-41	40,000-00	37,75,614-41
		—	—	39,250-00	—	39,250-00
-	33,500-00	7,73,383-91	—	47,22,745-86	—	47,22,745-86
-	38,83,408-72	26,026-77	2,883-74	2,32,023-26	—	2,32,023-26
-	1,90,887-75					
-	41,07,796-47	7,99,410-68	2,883-74	49,94,019-12	—	49,94,019-12
		16,92,521-15	2,000-00	66,65,050-71	17,433-65	66,82,484-36
00-00	47,24,863-79	6,59,663-00	—	35,20,631-26	6,250-00	35,26,881-26
-	26,84,461-26					
00-00	74,09,325-05	23,52,184-15	2,000-00	1,01,85,681-97	23,683-65	1,02,09,365-62

Appendix XXXIII (Contd.)

State Universities	*A*	*B*	*C*	*D*
UTTAR PRADESH				
1. Agra	50,160-37	2,18,954-52	24,000-00	10,32,031-85
2. Allahabad	—	34,800-00	17,875-00	5,26,963-00
3. Avadh	15,685-48	50,506-45	—	6,90,562-25
4. Bundelkhand	7,500-00	5,000-00	—	4,58,504-00
5. Garhwal	19,185-71	32,800-00	—	1,87,384-40
6. Gorakhpur	26,800-00	31,000-00	—	22,59,403-00
7. Kanpur	20,175-00	17,250-00	23,875-00	11,20,450-48
8. Kumaon	—	10,000-00	—	1,64,031-00
9. Lucknow	2,250-00	11,250-00	—	3,02,917-00
10. Meerut	39,211-29	1,53,200-00	—	23,66,251-06
11. Rohilkhand	28,838-00	30,450-00	—	5,61,604-65
Total	2,09,805-85	5,95,210-97	65,750-00	96,70,102-69
WEST BENGAL				
1. Burdwan	10,875-00	2,500-00	—	8,13,580-50
2. Calcutta	1,60,658-00	6,47,250-00	1,517-86	16,61,612-84
3. Jadavpur	—	—	—	2,500-00
4. North Bengal	10,125-00	5,500-00	—	1,76,573-50
Total	**1,81,658-00**	**6,55,250-00**	**1,517-86**	**26,54,266-84**
Total Colleges	13,24,574-40	25,59,418-79	7,51,517-86	8,09,06,488-70
Total Universities	5,58,20,468-50	11,26,59,814-65	5,99,03,242-20	2,14,91,350-00
Grand Total	5,71,45,042-90	11,52,19,233-44	6,06,54,760-06	10,23,97,838-70

C	D	E	F	Total	Sec. III	Grand Total
,000-00	10,32,031-85	6,26,892-22	—	19,52,038-96	—	19,52,038-96
,875-00	5,26,963-00	2,49,261-62	—	8,28,899-62	—	8,28,899-62
—	6,90,562-25	2,09,795-16	—	9,66,549-34	—	9,66,549-34
—	4,58,504-00	1,97,938-37	—	6,68,942-37	50,000-00	7,18,942-37
—	1,87,384-40	1,02,171-15	—	3,41,541-26	—	3,41,541-26
—	22,59,403-00	8,35,901-40	—	31,53,104-40	—	31,53,104-40
,875-00	11,20,450-48	5,43,805-05	7,200-00	17,32,755-53	—	17,32,755-53
—	1,64,031-00	4,800-00	—	1,78,831-00	—	1,78,831-00
—	3,02,917-00	2,93,737-51	—	6,10,154-51	—	6,10,154-51
—	23,66,251-06	11,08,951-14	—	36,67,613-49	—	36,67,613-49
—	5,61,604-65	3,51,415-38	—	9,72,308-03	—	9,72,308-03
,750-00	96,70,102-69	45,24,669-00	7,200-00	1,50,72,738-51	50,000-00	1,51,22,738-51
—	8,13,580-50	2,82,180-72	—	11,09,136-22	—	11,09,136-22
,517-86	16,61,612-84	6,93,044-49	21,645-16	31,85,728-35	—	31,85,728-35
—	2,500-00	—	—	2,500-00	—	2,500-00
—	1,76,573-50	1,52,496-43	—	3,44,694-93	—	3,44,694-93
,517-86	26,54,266-84	11,27,721-64	21,645-16	46,42,059-50	—	46,42,059-50
,517-86	8,09,06,488-70	1,87,91,322-52	1,12,249-35	10,44,45,571-62	3,84,122-01	10,48,29,693-63
,242-20	2,14,91,350-00	16,82,93,581-89	2,53,403-99	41,84,21,861-23	9,76,103-04	41,93,97,964-27
4,760-06	10,23,97,838-70	18,70,84,904-41	3,65,653-34	52,28,67,432-85	13,60,225-05	52,42,27,657-90

APPENDIX XXXIV

Statement showing Total Number of Teaching Positions and Posts held by Scheduled Castes and Tribes (information received upto 23rd July, 1978)

Names of the University	*Total No. of Posts*			*No. of Posts held by SC/ST*					*Remarks*
	P	*R*	*L*	*D*	*P*	*R*	*L*	*D*	
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
ANDHRA PRADESH									
1. Andhra	116	221	412	28	1	3	38	2	
2. Andhra Pradesh Agricultural	38	80 (Asstt. Prof.)	171 (Asstt. Prof.)	198	—	—	—	1	
3. Hyderabad University	16	29	34	—	—	—	—	—	
4. Jawaharlal Nehru Technological	33	72	174	11	—	1	5	—	
5. Kakatiya	11	38	113	—	—	—	—	—	
6. Osmania	100	469	398	—	—	1	6	—	Reservation for SC/ST w.e.f. 6.8.74 to the extent of lecturers only
7. Sri Venkateswara	35	87	175	—	—	—	9	—	
8. CIEFL, Hyderabad	11	20	37	—	—	—	—	—	
9. Nagarjuna	11	20	45	—	—	—	4	—	
ASSAM									
10. Dibrugarh	08	23	62	—	—	—	4	—	
11. Gauhati	20	61	137*	2 (Curators)	—	—	1	—	*Includes 9 part-time
BIHAR									
12. K.S. Darbhanga Sanskrit	4*	7*	6	—	—	—	—	—	*Appointment has not been made so far

ASSAM									
10. Dibrugarh	08	23	62	—	—	—	4	—	
11. Gauhati	20	61	137*	2 (Curators)	—	—	1	—	*Includes 9 part-time
BIHAR									
12. K.S. Darbhanga Sanskrit	4*	7*	6	—	—	—	—	—	*Appointment has not been made so far

Appendix XXXIV (Contd.)

1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
13. Magadh	17	104	2277	387	—	—	8	2	Figures relate to PG Deptt. and Colleges under M.U.
14. Mithila	18	36	1158	211	—	—	15	—	In the PG Deptt. & Constituent Colleges
15. Rajendra Agricultural	32	87	297	260	—	3	—	1	
16. Patna	(Figures not given)				—	2	—	—	
17. Ranchi	25	52+93 (College Profs.)	285	—	—	1 SC 2 ST	2 SC 40 ST	4 ST	
18. Indian School of Mines	33	38*	54	6 (Instructors)	—	—	—	—	*Includes Asstt. Professors
GUJARAT									
19. Bhavnagar	—	—	—	—	—	—	—	—	There is no teaching instt.
20. Gujarat Ayurveda	12	8	18	17+2*	—	—	—	—	*Clinical Registrars
21. Gujarat Agricultural	62	94	138	—	1	—	2	—	
22. Gujarat	16	31	58	1	—	—	—	—	There is no Prof. etc. belonging SC/ST
23. Mahatma Phule Krishi	140	400	—	—	3	11	—	—	
24. MS University Baroda	69	134	622	—	—	2	3	—	
25. Sardar Patel	17+1 Princ.	43	76	—	—	1	—	—	
26. Saurashtra (Rajkot)	6	9	17	—	—	—	—	—	
(Bhavnagar Office)	3	5	7	—	—	—	—	—	
27. South Gujarat	13	16	25	—	—	1	—	—	
HARYANA									
28. Haryana Agricultural	37	58	172	—	—	—	—	—	

Appendix XXXIV (Contd.)

1	2	3	4	5	6	7	8	9	10
29. Kurukshetra	23	74	210*	3*	—	—	1	—	*One part time
30. Maharishi Dayanand	(Figures not given)				—	—	—	—	There are no Professors, Readers, Lecturers belonging to SC/ST. However 20% reservation for these posts exists
HIMACHAL PRADESH									
31. Himachal Pradesh	15*	22	119	3	—	—	—	—	*Includes one Director-cum-Professor of Edn.
	(including one Principal of Eve. College)								
32. Himachal Pradesh Agricultural	10	34	214	—	—	1	10	—	
JAMMU & KASHMIR									
33. Jammu	(Figures not given)								At present there is no teacher belonging to SC/ST
34. Kashmir	-do-				—	—	—	—	No SC/ST staff.
KARNATAKA									
35. Bangalore	59*	112	253	—	3	—	4	—	*Including 4 Part-time Professor and 9 Part-time Associate Professors No. of vacancies P-23, R-33 & L-55
36. Karnatak	31	76	226	—	—	—	5	—	
37. Mysore	90	142	364	—	1	2	9	—	
38. University of Agricultural Sciences, Bangalore	87	117	347	411 Sr. Asstts.	—	1	3	—	
39. Indian Institute of Science	75	161	114	131	—	—	—	1	
KERALA									
40. Calicut	20	29	75	2(Res. Asstt.)	—	—	2	—	

Appendix XXXIV (Contd.)

36. Karnatak	31	76	226	—	—	—	—	& L-55	
37. Mysore	90	142	364	—	1	2	9	—	
38. University of Agricultural Sciences, Bangalore	87	117	347	411 Sr. Asstts.	—	1	3	—	
39. Indian Institute of Science	75	161	114	131	—	—	—	1	
KERALA									
40. Calicut	20	29	75	2(Res. Asstt.)	—	—	2	—	

Appendix XXXIV (Contd.)

1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
41. Cochin	25(13)	44(33)	70(60)	9(8)	—	—	—	—	Figures in bracket show posts actually filled
42. Kerala	35	60	72	—	1	1	4	—	
43. Kerala Agricultural	30	102	135	123	—	1	—	5	
MADHYA PRADESH									
44. A.P. Singh	1	3	3	—	—	—	—	—	
45. Bhopal	3	8	8	—	—	—	—	—	
46. Indore	7	11	17	—	—	—	—	—	Inf. may be treated as nil
47. Indira Kala Sangeet	1	4	15	1(Asstt. Lect.)	—	—	—	—	No post held by SC/ST
48. Jabalpur	12	25	38	—	—	—	—	—	
49. Jawaharlal Nehru Krishi	49	195	443	451	—	—	—	1	
50. Jiwaji	6	7	15	—	—	—	—	—	
51. Ravi Shankar	9	6	22	4	—	—	—	—	No teacher belongs to SC/ST
52. Vikram	(not given)								
MAHARASHTRA									
53. Bombay	51	74	46	15	—	—	—	—	Relates to PG Deptt. of the University
(Goa Centre)	1	6	12	2	—	—	—	—	
54. Konkon K. Vidyapith	38	4	111	—	1	—	—	—	
55. Marathwada	17	38	60	8*	—	—	7	1	*Since upgraded to those of Lecturer
56. Marathwada Krishi	33	47	211	2	—	1	9	—	
57. Nagpur	42	74	169	—	1	—	8	—	
58. Poona	41	—	130	17	—	—	—	—	
59. SNDT Bombay	11	21	115	11	—	—	6*	—	*Includes those belonging to other backward classes also

Appendix XXXIV (Contd.)

1	2	3	4	5	6	7	8	9	10
60. Shivaji	(not given)								
61. Tata Institute of Social Sciences	61*	10	17	2	—	—	—	—	
62. Punjab Rao Krishi Vidyapeeth	48	156	285	—	1 SC.	5 Sc.	23 SC. 6 ST	—	
MEGHALAYA									
63. North Eastern Hill	11	38	56+1RA	—	1	3	15+1RA	—	
ORISSA									
64. Berhampur	13	31	36	11	—	—	—	—	
65. Orissa Univ. of Agriculture & Technology	17	76	250	126 (Lab. & RA)	—	2	—	—	
66. Sambalpur	13	25	35	—	—	—	—	—	
67. Utkal	(Figures not given)			—	—	—	1	—	
PUNJAB									
68. Guru Nanak Dev	22	46	81	—	—	—	—	—	
69. Panjab	98	207	417	—	—	—	2	—	
70. Punjabi	34	82	174	—	—	—	—	—	No post held by SC/ST
RAJASTHAN									
71. Rajasthan	26	80	427	—	—	—	—	—	No position belongs to SC/ST
72. Birla Institute of Technology & Science	41+29 (Asso. Prof.)	74 including Asstt. Prof.	105	36*18 (Asstt. Lect.)	—	—	—	—	
73. Udaipur	36	140	451	271	—	—	1	—	Includes Res. Asso., Jr. Lect. etc.
TAMILNADU									
74. Madras	85	125	205	—	1	—	5	—	

RAJASTHAN									No position belongs to SC/ST
71. Rajasthan	26	80	427	—	—	—	—	—	
72. Birla Institute of Technology & Science	41+29 (Asso. Prof.)	74 including Asstt. Prof.	105	36*18 (Asstt. Lect.)	—	—	—	—	
73. Udaipur	36	140	451	271	—	—	1	—	Includes Res. Asso., Jr. Lect. etc.
TAMILNADU									
74. Madras	85	125	205	—	1	—	5	—	

Appendix XXXIV (Contd.)

1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
75. Tamilnadu Agricultural	62	192	919	3	—	2	5	1	
76. Gandhi Gram Rural Institute	10	1	37	7	—	—	1	—	
77. Madurai Kamraj	50	29	100	—	—	—	2	—	
78. Annamalai	32	52	259	38	1	1	1	—	
79. Perarignar Anna Univ. of Technology	54(36)	115(90)	198(30)	41(28)	1	—	6	—	Figures within brackets indicate the number actually employed
UTTAR PRADESH									
80. Agra	(Figures not given)				—	—	—	—	No SC/ST teacher amongst the aforesaid posts
81. Aligarh Muslim	87	215	518	21	—	—	—	—	Persons applying for the post of teacher do not indicate their caste; as such not possible to send correct inf. reg. SC/ST
82. Allahabad	53	140	311	9	—	—	—	—	
83. Bundelkhand	No University Departments								
84. Chander Shekhar Azad	10	48	41	2	—	1	2	—	
85. Garhwal	(Figures not given)				2	—	—	—	
86. Meerut	12 (1 Prof.)	13	27 (1R Teachers' Scheme)	—	—	—	—	—	
87. Avadh	Nil				—	—	—	—	It is an affiliated university
88. Rohilkhand	Nil			—	—	—	—	—	It is an affiliated university
89. Kashi Vidyapith	12	19	65	—	—	—	1 Res Assoc.	—	
90. Kumaon	4	7	193	—	—	—	3	—	
91. Lucknow	95	191	461	53	—	—	2	—	
92. Roorkee	107	185	205	—	2	—	—	—	
93. Sampurnanand Sanskirit	14	9	43	28*	—	—	—	—	*Instructor
94. Gurukul Kangri	—	10	41	—	—	—	—	—	

Appendix XXXIV (Contd.)

1	2	3	4	5	6	7	8	9	10
95. Narendra Deo University of Agriculture & Technology	14 (1 Dean)	13 (1 filled)	10	—	—	—	—	—	
96. G.B. Pant University of Agriculture & Technology	48	20	—	—	—	—	—	—	
WEST BENGAL									
97. Burdwan	(Figures not given)				—	—	—	—	No one belongs to SC/ST
98. Calcutta	93	184	343+22 Hony.	—	—	—	—	—	No declaration is taken from candidates reg. their caste or creed at the time of appointment
99. Jadavpur	79	168	257	—	—	—	3	—	
100. Viswa Bharati	30	71	191	137*	—	1	1	2	*Asstt. Lects & other equivalent academic posts
101. North Bengal	16	32	70	—	—	—	—	—	
102. Rabindra Bharati	(Figures not given)				—	—	—	—	Univ. has not app. any SC/ST
103. Kalyani	18	51	103	—	—	—	—	—	There is no provision for reservation of teaching posts and relaxation of qualifications there is no record of SC/ST teachers
DELHI									
104. Delhi	103	250	216	—	—	—	2	—	
105. Jawaharlal Nehru	69 (57 filled)	134 Asso. Prof. (106 filled)	164 Asstt. Prof. (168 filled)	—	—	—	—	—	Figures include staff at Imphal Centres
106. Indian Agricultural Research Institute	17	S-3 (137)*	S-2 (292)	S-1 (426)	—	1	5	23	S-1 Rs. 1500-2000 & above S-2 Rs. 1100-1800 S-3 Rs. 700-1300
107. Jamia Millia Islamia	10	29	113	16 (Instructors)	—	—	—	—	No person holding post belonging to SC/ST
Grand Total	3181	6998	11369+ (22 Hony)	3095	20	46	257	42	

106.	Indian Agricultural Research Institute	17	(106 filled) S-3 (137)*	(168 filled) S-2 (292)	S-1 (426)	—	1	5	23	S-1 Rs. 1500-2000 & above S-2 Rs. 1100-1800 S-3 Rs. 700-1300
107.	Jamia Millia Islamia	10	29	113	16 (Instructors)	—	—	—	—	No person holding post belonging to SC/ST
	Grand Total	3181	6998	11369 + (22 Hony)	3095	20	46	257	42	

APPENDIX XXXV

Percentage of Women Enrolment to Total Enrolment: Statewise 1974-75 to 1976-77 (Excluding Pre-university/Intermediate/Pre-professonal Levels)

S. No.	State	1974-75			1975-76			1976-77		
		Total Enrolment	Women Enrolment	% of Women	Total Enrolment	Women Enrolment	% of Women	Total Enrolment	Women Enrolment	% of Women
1.	Andhra Pradesh	1,54,007	27,624	17.9	1,58,193	31,103	19.7	1,38,960	33,453	24.1
2.	Assam/Manipur	45,457	9,822	21.6	41,522	9,377	22.6	42,688	10,570	24.8
3.	Bihar	83,099	10,132	12.2	99,434	12,713	12.8	1,05,778	13,814	13.1
4.	Gujarat	1,84,164	43,193	23.5	1,74,696	45,134	25.8	1,68,803	45,195	26.0
5.	Haryana	54,100	13,628	25.2	58,565	14,898	25.4	57,219	15,865	27.7
6.	Himachal Pradesh	12,339	2,858	23.2	11,949	2,628	22.0	9,255	2,179	23.5
7.	Jammu & Kashmir	24,377	5,816	23.9	20,738	6,023	29,0	18,806	5,772	30.7
8.	Karnataka	1,34,516	26,058	19.4	1,42,027	29,591	20.8	1,45,404	31,797	21.9
9.	Kerala	78,701	32,929	41.3	78,854	33,462	42.4	83,671	36,862	44.1
10.	Madhya Pradesh	1,56,216	34,397	22.0	1,56,252	36,551	23.4	1,60,345	40,144	25.0
11.	Maharashtra	2,94,929	69,231	20.5	3,09,575	78,382	25.3	3,09,753	81,872	26.4
12.	Meghalaya/Nagaland	5,091	1,733	34.0	4,756	1,481	31.1	5,041	1,782	35.4
13.	Orissa	40,207	5,145	12.8	44,348	5,899	13.3	43,498	6,694	15.4
14.	Punjab	1,04,532	33,986	32.5	1,05,715	37,339	35.3	1,04,656	38,028	36.3
15.	Rajasthan	1,04,690	17,614	16.8	97,019	17,166	17.7	98,572	18,428	18.7
16.	Tamilnadu	1,60,206	42,012	26.2	1,62,734	43,633	26.8	1,63,902	46,199	28.2
17.	Uttar Pradesh	3,51,537	59,906	17.0	3,51,483	63,942	18.2	3,62,970	68,786	19.0
18.	West Bengal/Tripura	2,96,979	82,938	27.9	3,26,167	92,699	28.4	3,27,022	95,474	29.2
19.	Delhi	81,394	33,987	41.8	82,082	33,141	40.4	85,220	34,432	40.4
	Total	23,66,541	5,53,009	23.4	24,26,109	5,95,162	24.5	24,31,563	6,27,346	25.8

APPENDIX XXXVI

Sex-wise Distribution of Enrolment—Stagewise 1969-70 to 1976-77

Year	Graduate			Postgraduate			Research			Diploma/Certificate			Total		
	T	W	%	T	W	%	T	W	%	T	W	%	T	W	%
1969-70	1603898	349518	21.8	146804	36024	24.5	12474	2342	18.8	29524	6710	22.7	1792700	394594	22.0
1970-71	1746090	378843	21.7	161182	41516	25.8	13311	2753	20.7	33057	7710	23.3	1953640	430822	22.1
1971-72	1835077	411307	22.2	180343	45952	25.5	14995	3097	20.7	34626	8340	24.1	2065041	468696	22.7
1972-73	1920364	N.A.	—	195307	N.A.	—	16443	N.A.	—	35993	N.A.	—	2168107	N.A.	—
1973-74	1964432	454972	23.2	214691	53871	25.1	16417	3605	22.0	38845	8378	21.6	2234385	520825	23.3
1974-75	2075039	484382	23.3	234114	55572	23.7	17977	4107	22.8	39411	8948	22.7	2366541	553009	23.4
1975-76	2146919	526260	24.5	219826	54824	24.9	18381	4477	24.4	40983	9601	23.4	2426109	595162	24.5
1976-77	2141542	N.A.	—	218128	N.A.	—	21910	N.A.	—	49983	N.A.	—	2431563	627346	25.8

T=Total Enrolment W=Women Enrolment N.A.=Not Available

1975-76	2146919	526260	24.5	219826	54824	24.9	18381	4477	24.4	40983	9601	23.4	2426109	595162	24.5
1976-77	2141542	N.A.	—	218128	N.A.	—	21910	N.A.	—	49983	N.A.	—	2431563	627346	25.8

T=Total Enrolment W=Women Enrolment N.A.=Not Available

APPENDIX XXXVII

Distribution of Student Enrolment Sex-wise & Faculty-wise 1969-70 to 1976-77 (Excluding PUC/Inter/PP)

FACULTY

Year	*Arts*			*Science*			*Commerce*			*Education*			*Engg./Tech.*		
	T	*W*	%	*T*	*W*	%	*T*	*W*	%	*T*	*W*	%	*T*	*W*	%
1969-70	765081	254902	33.3	487353	89710	18.4	212282	5485	2.6	51854	19620	37.8	94774	1027	1.1
1970-71	842162	279702	33.2	513163	95601	18.6	254572	7722	3.1	56922	20799	36.5	87257	870	1.0
1971-72	906068	303063	33.4	505925	101215	20.0	289946	10549	3.6	63658	24003	37.7	82804	958	1.2
1972-73	963044	N.A.	—	494599	N.A.	—	318888	N.A.	—	67848	N.A.	—	82674	N.A.	—
1973-74	1003375	341238	34.0	473685	101244	21.4	340392	16121	4.7	76680	27571	39.0	86665	1026	1.2
1974-75	1056077	362979	34.4	46344	106203	22.9	289504	22127	5.7	77179	29055	37.6	90685	1341	1.5
1975-76	107990	392737	36.4	46384	111714	24.1	414946	27551	6.6	76641	30110	39.3	96067	2061	2.1
1976-77	1078967	N.A.	—	443013	N.A.	—	430387	N.A.	—	75512	N.A.	—	100040	N.A.	—

T=Total Enrolment W=Women Enrolment N.A.=Not Available

APPENDIX XXXVII *(Contd.)*

Year	Medicine			Agriculture			Veterinary Science			Law			Others			Total		
	T	*W*	%	*T*	*W*	%	*T*	*W*	%	*T*	*W*	%	*T*	*W*	%	*T*	*W*	%
1969-70	85913	19233	22.4	27502	163	0.6	6035	43	0.7	56240	1984	3.5	5666	2427	42.8	1792700	394594	22.0
1970-71	89569	20479	22.9	27195	148	0.5	6196	44	0.7	70618	2626	3.7	5986	2831	47.2	1953640	430822	22.1
1971-72	889921	19919	22.2	25971	274	1.1	6086	59	1.0	84443	4551	5.3	10219	4105	40.2	2065041	468696	22.7
1972 73	99643	N.A.	—	25882	N.A.	—	5954	N.A.	—	98855	N.A.	—	10720	N.A.	—	2168107	N.A.	—
1973-74	102242	21314	20.8	26520	233	0.8	6334	50	0.8	113230	5769	5.1	11262	6269	55.7	2234385	520825	23.3
1074-75	106340	20992	19.7	29293	272	0.9	6736	80	1.2	134811	5888	4.4	12475	4072	32.6	2366541	553009	23.4
1975-76	105140	19208	18.3	30160	432	1.4	6377	91	1.4	141298	7053	5.0	11649	4205	36.1	2426109	595162	24.5
1976-77	113151	N.A.	—	31860	N.A.	—	6700	N.A.	—	140680	N.A.	—	14253	N.A.	—	2431563	627346	25.8

APPENDIX XXXVIII

Details of Tours undertaken by the Chairman, Vice-Chairman and Officers of the Commission during the year 1978-79.

S. No.	*Name & Designation of the Officer*	*Name of the country visited*	*From*	*To*	*Purpose*	*Remarks*
1	*2*	*3*	*4*	*5*	*6*	*7*
1.	Prof. Satish Chandra, Chairman	(a) Bucharest and Damascus	22.8.78	4.9.78	To attend meeting of Bureau of the International Committee of Historical Sciences as a Member at Bucharest.	Air ticket and hospitality was provided by the Organiser upto 29.8.78.
			30.8.78	4.9.78	At Damascus to discuss matters relating to cultural links with Syrian Ministry of Education and Indian Ambassador in Damascus.	Maintenance expenditure & D.A. were paid by UGC.
		(b) Paris and London	26.11.78	4.12.78	To attend meeting of International Council for Philosophy and Humanistic Studies (UNESCO).	Air Ticket and Hospitality for 27th and 28th Nov. was provided by the UNESCO.
				29.11.78	At Paris to discuss Indo-French Cultural Exchange programme.	Maintenance expenses and additional air fare borne by the UGC.
			30.11.78	4.12.78	At London to discuss Indo-British Collaborative Programme.	
2.	Prof. B. Ramachandra Rao, Vice-Chairman.	(a) Bangladesh	11.4.78	12.4.78	To attend UN Conference on Science & Technology for Development held at Dacca.	Air ticket and per diem was provided by UNESCO.

APPENDIX XXXVII (Contd.)

Appendix XXXVIII (Continued)

1	2	3	4	5	6	7
2.	(*Continued*)	(b) Japan	14.4.78	19.4.78	To attend the meeting of 'Ashoka Forum' of DST	International air ticket was provided by UGC.
		(c) Romania (Bucharest)	26.6.78	29.6.78	UNESCO meeting on PG Trg. in the Basic Sciences.	International air ticket and per-diem was provided by UNESCO.
		(d) Afghanistan	1.10.78	4.10.78	To attend COSTED Regional meeting on 'Science Education & National Development'.	-do-
3.	Shri R.K. Chhabra, Secretary	(a) Iran	17.4.78	22.4.78	To discuss and finalise the Indo-Iran Cultural Exchange Programme for 1978-1979 & 1980.	(i) Included as a member in the Govt. of India delegation sent by the Deptt. of Culture. (ii) Expenditure debited to the existing sources.
		(b) Canada & USA	18.8.78	31.8.78	To attend the Twelfth Quinquennial Congress of the Association of Commonwealth Universities held at the University of British Columbia in Vancouver from 19.8.78 to 25.8.78. He also spent a couple of days at the California State University.	(i) Initiated by the Commonwealth Foundation, London and cleared by the Govt. of India. (ii) Expenditure on passage to and fro Vancouver to the extent of 75% met by the Commonwealth Foundation and the remaining 25% including foreign travel tax and on pay and allowances debited to the existing sources.
		(c) United Kingdom	1.9.78	2.9.78	To discusscuss official matters on return journey.	
4.	Dr. D. Shankar Narayan Additional Secretary	(a) Singapore	15.4.78	22.4.78	To particinate in th...	

				versities held at the University of British Columbia in Vancouver from 19.8.78 to 25.8.78. He also spent a couple of days at the California State University.	India. (ii) Expenditure on passage to and fro Vancouver to the extent of 75% met by the Commonwealth Foundation and the remaining 25% including foreign travel tax and on pay and allowances debited to the existing sources.
		(c) United Kingdom	1.9.78	2.9.78	To discusscuss official matters on return journey.	

1	2	3	4	5	6	7
4.	Dr. D. Shankar Narayan Additional Secretary	(a) Singapore	15.4.78	22.4.78	To participate in the COSTED Seminar on "Bioscience Education in developing countries".	(i) Invited by the International Council of Scientific Union Committee on Science and Technology in developing countries. (ii) Expenditure on travel per-diem met by the Committee on Science & Technology in developing countries.
		(b) Bulgaria, Hungary and Romania	7.2.79	19.2.79	To finalise the Cultural Exchange Programmes with Bulgaria, Hungary and Romania.	(i) Included as a member in the Govt. of India delegation sent by the Department of Culture. (ii) Expenditure debited to the existing sources.
5.	Shri L.R. Mal Offg. Deputy Secretary	(a) Sri-Lanka	17.10.78	24.10.78	To have exploratory consultations for preparation of a Cultural Exchange Programme between India and Sri-Lanka.	(i) Included as a member in the Govt. of India delegation sent by the Deptt. of Culture. (ii) Expenditure debited to the existing sources.
		(b) Iraq	24.2.79	2.3.79	To finalise and sign the Cultural Exchange Programme with Iraq.	(i) Included as a member in the Govt. of India delegation sent by the Deptt. of Culture. (ii) Expenditure debited to the existing sources.

APPENDIX XXXVII *(Contd.)*

Appendix XXXVIII (Continued)

1	2	3	4	5	6	7
5.	*(Continued)*	(c) Vietnam and Thailand	11.12.78	27.12.78	To work out details of exchanges under Cultural exchange programme between India and Vietnam and India and Thailand for 1978-79.	(i) Included as a member in the Govt. of India delegations sent by the Deptt. of Culture. (ii) Expenditure debited to the existing sources.
6.	Shri Manoranjan Sarkar, Education Officer	United Kingdom	21.9.78	15.6.79	To receive training in Public Administration Studies Programme at the University of Manchester (UK) under the Colombo Plan.	(i) Sponsored in response to a circular recd. from the Ministry of Finance (Department of Economic Affairs). (ii) Cost of international travel to UK and back suitable subsistance allowance to cover the cost of lodging and boarding and other expenses/connected with the above training met by the British Council.
7.	Dr. P.H. Sethumadhava Rao, Education Officer	United Kingdom	21.9.78	11.6.79	To receive training in Public Administration Studies Programme at the University of Manchester (UK) under the Colombo Plan.	(i) Sponsored in response to a circular received from the Ministry of Finance (Department of Economic Affairs). (ii) Cost of international travel to UK and back, suitable subsistence allowance to cover the cost of lodging and other expenses/connected with the above training met by the British Council.