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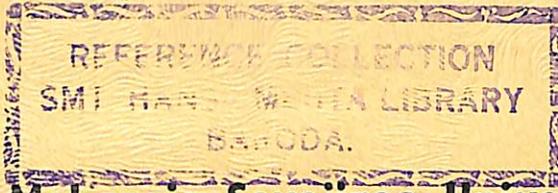
M. S. University of Baroda

Twenty First
Annual Report

1969 - 70

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NOT TO BE ISSUED



The Maharaja Sayajirao University
of Baroda



TWENTY-FIRST ANNUAL REPORT

1969-70



BARODA

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THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA

TWENTY-FIRST ANNUAL REPORT, 1969-70

(1st April, 1969 to 31st March, 1970)

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THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA



TWENTYFIRST ANNUAL REPORT, 1969-70

INTRODUCTION

The idea of establishing a University at Baroda started engaging the attention of the former Government of Baroda State in the year 1909. Some schemes for the establishment of the University were framed but none of them materialised. The Baroda University Commission of 1925 made out a strong case for the immediate establishment of a Unitary Residential University at Baroda having the Faculties of Arts, Science, Technology and Agriculture, Economics, Commerce and Administration. Besides the faculties, the University was to have the Institute for Oriental Studies, the Institute for Gujarati Studies, the School of Fine Arts, the School of Nursing and the School of Domestic Science. Provision was also to be made for extension programmes, the library movement as a University extension movement and compulsory medical examination. Although circumstances at that time were not favourable to the establishment of a separate University, the idea was not given up. During the decades that followed, the following institutions for higher education were established in Baroda:

1. The Secondary Teachers' Training College in 1935.
2. The Sayaji Golden Jubilee Science Institute in 1937.
3. The Pratapsinh College of Commerce and Economics in 1942.
4. Government orders were passed for the establishment of Medical and Engineering Colleges which ultimately began functioning from 1949.

In 1947, the late His Highness Maharaja Sir Pratapsinh Gaekwad revived the idea of the University and appointed a Committee to consider the question of the early establishment of the University. The Committee submitted its report to the Government of Baroda towards the end of the year 1948 and recommended the establishment of a primarily teaching and residential University with power to affiliate mofussil colleges. It favoured the tutorial system of instruction. All

His Highness the Maharaja Sir Sayaji

the existing institutions of higher education including the Central Library, the Oriental Institute and the Kalabhavan were to be taken over by the University. The Committee also recommended that the Government should give a block grant of Rs. 25 lakhs annually to the University for the first five years.

The Government of Baroda in their Order No. (R). 169-39 dated 21st February, 1949, decided to establish a residential University for Baroda and to affiliate to it the Colleges at Visnagar, Petlad and Navsari which were under the State of Baroda. By the subsequent merger of the Baroda State with the State of Bombay, the jurisdiction of the University came to be restricted to a radius of ten miles from the University Office. The University started working on 30th April, 1949 with the following institutions:

(a) Constituent Institutions under the Management of the University:

1. The Baroda Arts and Science College.
2. The Pratapsinh College of Commerce and Economics.
3. The Secondary Teachers' Training College
4. The Kalabhavan and the Engineering College.
5. The Music College.
6. The Oriental Institute.

(b) Constituent College managed by the Government of Bombay:

7. The Baroda Medical College.

(c) Constituent recognised Institutions managed by the Government of Bombay:

8. The Baroda Museum and Picture Gallery.
9. The Baroda Sanskrit Mahavidyalaya.

By June 1950, the institutions taken over were re-organised into the six Faculties of Arts, Science, Education and Psychology, Medicine, Commerce, Technology and Engineering. The first year and the Intermediate classes in Arts and Commerce were organised into a separate institution called the Intermediate College. Three new Faculties of Fine Arts, Home Science and Social Work were also started from June, 1950. The management of the Baroda Sanskrit Mahavidyalaya and the Gujarati Section of the Old Baroda High School were taken over by the University from the then Government of Bombay in 1951. To start with, the University followed the Bombay University courses and the standards of admissions, examinations, etc. The first examinations of the University were held in March-April, 1951.

Student Enrolment: When the University first started functioning in April 1949, it had, as its total strength 2,962 students, of whom 131 were post-graduate students, 902 degree class students and the remaining reading for the under-graduate diploma or certificate courses. In the next twenty years, the

total enrolment has soared up from 2,962 to 15,311 registering an increase of 12349 or almost a five-fold increase. The average yearly increase in the student enrolment since 1949 has been nearly 617.

In 1950, the total number of male students was 3,508. This number increased to 11526 in 1969-70 registering a rise of about three times. The rise in the enrolment of women students has been more remarkable. Between 1950 and 1969-70 their enrolment has increased from 484 to 3785—almost an eight hundred per cent. On an average, the annual increase in the enrolment of women students in the University between 1950 and 1970 has been about 165.

The enrolment trends over the last twenty years in the University are indicated in the following table :

Year	Total enrolment	Increase/decrease over the preceding year	Percentage increase/decrease
1950-51	2405	—	—
1951-52	3398	993	41.2
1952-53	3992	594	17.5
1953-54	4585	593	14.9
1954-55	5600	1015	22.1
1955-56	4883	-717	-12.4
1956-57	4968	85	1.4
1957-58	5785	817	16.5
1958-59	6858	1073	18.5
1959-60	7726	868	12.7
1960-61	8214	488	6.3
1961-62	8974	760	9.2
1962-63	10134	1160	12.9
1963-64	10315	181	1.6
1964-65	10954	639	6.2
1965-66	11629	675	6.1
1966-67	13223	1594	12.1
1967-68	14235	1012	7.1
1968-69	14396	161	1.1
1969-70	15311	915	5.9

Sex-Ratio in Different Faculties: The sex-ratios for students in the different Faculties and Institutions of the University for the years 1950-51, 1960-61 and 1969-70 are given below :

1	1950-51		1960-61		1969-70	
	Men %	Women %	Men %	Women %	Men %	Women %
	2		3		4	
Arts	72.1	27.9	65.7	34.3	48.4	51.6
Science	—	—	87.5	12.5	73.8	26.2
Education and Psychology	87.2	12.7	63.0	37.0	42.9	57.1
Commerce	—	—	82.6	17.4	83.7	16.3
Medicine	89.8	10.2	82.6	17.4	83.3	16.7
Technology and Engineering	99.6	0.4	99.0	1.0	97.8	2.2
Fine Arts	—	—	83.6	16.4	77.1	22.9
Home Science	—	100.0	—	100.0	0.1	99.9
Social Work	85.8	14.2	75.0	25.0	61.3	38.7
Law	—	—	—	—	91.4	8.6
College of Indian Music, Dance and Dramatics	80.0	20.0	63.3	36.7	37.0	63.0
Baroda Sanskrit Mahavidyalaya	—	—	85.7	14.3	70.6	29.4
Preparatory Units	—	—	80.7	19.3	72.3	27.9
Polytechnic	—	—	99.6	0.4	99.7	0.3
Shri M. K. Amin Arts and Science College and College of Commerce, Padra	—	—	—	—	90.0	10.0

Student-Enrolment in Post-graduate Courses: The enrolment of students in various post-graduate courses provided in different Faculties and Institutions of the University has registered a steady rise right from 1950. In 1950-51, the enrolment in the post-graduate courses was 303. This has gone on increasing year by year, and was 1386 in 1969-70, registering an over-all increase of 1083 or 357.4 percent. The average annual increase in the past twenty years has been about 54 students. The number of post-graduate men students has increased between 1950-51 and 1969-70 by 724 about 274.2 percent, and of women students by 358 or 895 percent.

Growth of Enrolment in Degree Courses: In 1950-51 there were 2,437 students reading in the under-graduate classes of different Faculties and Institutions of the University. The figure for 1969-70 is 12,268. Thus, the under-graduate student population of the University has increased by 9,831 showing

a three and a half times increase between 1950-51 and 1969-70. The increase in case of men students and women students during the same period is 7,066 (or about 78.9 per cent) and 3,041 (or about 91 per cent) respectively.

Percentages

(Facultywise in reference to the total of number of students in the University)

Faculty	1965-66	1966-67	1967-68	1968-69	1969-70
Arts	12.0	12.8	12.3	11.6	12.4
Science	8.6	8.9	8.0	9.6	9.9
Education and Psychology	2.7	2.9	2.7	2.9	2.4
Commerce	10.7	9.8	10.6	11.6	11.9
Medicine	5.5	5.8	5.7	4.7	4.6
Technology and Engineering	19.2	18.8	19.3	18.5	17.9
Fine Arts	1.6	1.7	1.5	1.5	1.3
Home Science	5.2	4.4	4.2	4.2	4.3
Social Work	0.7	0.6	0.5	0.5	0.5
Law	4.6	4.1	3.5	3.5	3.6
Preparatory Unit (Arts and Commerce)	8.7	10.1	10.1	11.7	12.0
Preparatory Unit (Science)	7.8	7.8	7.9	7.5	6.9
M. K. Amin Arts and Science College and College of Commerce, Padra	1.3	1.5	2.6	2.9	4.1
College of Indian Music, Dand and Dramatics	0.3	0.3	0.4	0.6	0.5
Sanskrit Mahavidyalaya	0.4	0.4	0.3	0.3	0.3
Polytechnic	11.1	10.1	9.8	8.5	7.4
	100.0	100.0	100.0	100.0	100.0

University Teachers

University Teachers and the Staff-Student Ratio: The total number of teachers (including Assistant Lecturers and Part-time Lecturers) in the Faculties and Institutions of the University during the year under report is 867 (including 89 teachers of Medical College) as against a total student enrolment of 15,311. This gives an over-all teacher-student ratio of 1:17.6. The corresponding strength of University teachers and staff-student ratio over the last five years is indicated below :

Year	No. of University Teachers	Student Enrolment	Staff Student Ratio
1965-66	853	11,629	1:13.6
1966-67	856	13,223	1:15.4
1967-68	874	14,235	1:16.2
1968-69	856	14,396	1:16.8
1969-70	867	15,311	1:17.6

Hostel and Health Services

Halls of Residence With the rapid rise in student enrolment, the pressure of demand from students for residential accommodation in the University Halls of Residence has also been growing. The University has been taking all possible steps to expand hostel facilities. In 1949, the University had accommodation for only 400 men students and no accommodation for women students. At the end of the year under review there were 10 halls for men and 4 for women students. With 2,078 men and 788 women students, that is, 18.7% reside in the University hostels. The figures for the last five years are as under :

Year	Students residing in Hostels			Percentage of Resident Students to the Total Enrolment
	Men	Women	Total	
1965-66	1912	717	2629	22.6
1966-67	2020	769	2789	21.1
1967-68	2059	757	2816	19.8
1968-69	2051	786	2837	19.7
1969-70	2078	788	2866	18.7

Health Service: The health service facilities and medical treatment provided at the University Health Centre Clinic have continued to be availed of by members of the University staff and their families and by the students. The figures of the patients treated and daily average attendance over a period of last five years, are given below :

Year	No. of Cases Treated				Total Cases	Daily Average Attendance
	Staff and their families	%	Students	%		
1965-66	5419	33.4	10795	66.6	16214	44.4
1966-67	7046	38.9	11055	61.1	18101	49.8
1967-68	7133	36.4	12413	63.6	19546	53.4
1968-69	9507	40.1	14218	59.9	23725	65.0
1969-70	12325	42.1	16941	57.9	29266	80.2

Other Developments

In the twenty years of its existence, the Faculties and Institutions of the University have made considerable progress. Courses have been thoroughly revised to keep pace with recent development and advances in various fields of knowledge. Special emphasis continues to be laid on tutorials, seminars and home assignments consistent with the special requirements of a teaching university. Efforts are being made to improve conditions, academic and physical, in the Faculties and Institutions. New departments are added and new programmes of training and research undertaken. Provision of adequate staff, improvement of old buildings, addition of new buildings, increased grants for equipments and teaching aids, provision for a closer contact between teachers and the students, creation of a suitable academic climate, development of library and laboratory facilities for the staff and the students, increasing the research output, introducing innovations in teaching and examination procedures and maintenance of student discipline—all these continued to receive the closest attention.

The new Faculties of Fine Arts, Home Science and Social Work were established in the year 1950 and the Faculty of Law in 1961. In 1965, a new College—Shri Manibhai Kashibhai Amin Arts and Science College and College of Commerce—was started at Padra.

With financial assistance from the University Grants Commission, the University was able to strengthen and consolidate the teaching and research activities in various departments of humanities, social sciences and sciences. The University started the three year degree course in Arts, Science and Commerce and post-graduate courses in bio-chemistry, microbiology, geology and home science. The Departments of Archaeology and Ancient History, and Museology were also developed with the help of the grants received from the University Grants Commission. The Department of Education has been upgraded as a Centre of Advanced Study in Education (CASE) to carry on research on problems of education on an All India basis. The Students' Counselling Centre and the Examination Reform and Research Unit were established in the Second Plan. Buildings for teaching purposes, and residential accommodation for students and teachers were also constructed with the help of substantial grants from the University Grants Commission in the Second and Third Plan periods.

Under an expansion scheme in the Second and Third Plan periods, the Faculty of Technology and Engineering increased the yearly intake capacity of students from 75 to 300 in degree courses in civil, mechanical and electrical engineering. Two new Departments *viz.* Chemical Engineering and Metallurgical Engineering were established in 1963 and 1966 respectively. The Faculty has

also been recognised as a Centre for Technical Teachers' Training. It has also started 10 post-graduate courses in the different branches of applied mechanics and civil, mechanical, electrical and textile engineering, for which grants are being provided by the University Grants Commission. A new institution called the Polytechnic was established in the year 1957 to conduct diploma courses in civil, mechanical and electrical engineering. Two schemes approved by the All India Council of Technical Education and the University Grants Commission enabled the University to raise the in-take capacity of students in diploma classes at the Polytechnic from 180 to 360. The State (Extended) diploma courses in civil, mechanical and electrical engineering with an intake capacity of 100 students were started in the Polytechnic in the year 1963 and completed the 5 year period on 9th December, 1968.

The developmental activities during the preceding years are described in the twenty Annual Reports that have been published so far. This twenty-first Annual Report covers the period from 1st April, 1969 to 31st March, 1970 and is submitted to the Senate in accordance with Section 24 (2) of the Maharaja Sayajirao University of Baroda Act as amended up-to-date.

CHAPTER I—GENERAL

1. Institutions in the University

Constituent and Recognised Institutions (Under Sections 42 and 69 of the Act).

(1) Faculty of Arts, (2) Faculty of Science, (3) Faculty of Education and Psychology, (4) Faculty of Commerce, (5) Faculty of Medicine, (6) Faculty of Technology and Engineering, (7) Faculty of Fine Arts, (8) Faculty of Home Science, (9) Faculty of Social Work, (10) Faculty of Law, (11) Oriental Institute, (12) College of Indian Music, Dance and Dramatics, (13) Baroda Sanskrit Mahavidyalaya, (14) Preparatory Unit—Arts and Commerce, (15) Preparatory Unit—Science, (16) Shri M. K. Amin Arts and Science College and College of Commerce, Padra, (17) Polytechnic and (18) Museum and Picture Gallery.

2. Number of Students

The number of University students during the year was 15,311 (11,526 men students and 3,785 women students) and that of non-University students was 1,202 (678 men students and 524 women students). The details of the students are given in Appendices I and II.

3. Special Features of the year

(1) *The Vice-Chancellor:*

At its meeting held on 29th March, 1970, the University Senate unanimously elected Justice Shri N. K. Vakil, B.A. LL.B. (Bom.) as Vice-Chancellor of the University for a period of three years.

(2) *Convocations:*

(i) The Nineteenth Annual Convocation was held on 22nd November, 1969. Shri Shriman Narayan, Governor of Gujarat delivered the Convocation Address. The Vice-Chancellor presided over the function. 2,164 degrees and diplomas were conferred.

(ii) The Tenth Supplementary Convocation was held on 29th March, 1970. The Vice-Chancellor presided over the function. 399 degrees and diplomas were conferred.

The details about the award of degrees and diplomas at the above Convocations are given in Appendix III.

✓ (3) *New Courses:*

- (i) The University started the 5½ year B.E. Co-operative (Sandwich) course in Electrical and Mechanical Engineering from April 1969 at the Faculty of Technology and Engineering.
- (ii) A condensed M.B.B.S. course of 2 years duration was started at the Medical College, Baroda, for the benefit of students who passed the Comprehensive L.M.P. examination.
- (iii) B.Sc. course in Physiotherapy of three years duration at the Medical College, Baroda.

(4) *Buildings:*

The following buildings were completed during the year:

- (i) Building for the Department of Microbiology
- (ii) Extension to the building of the Faculty of Home Science
- (iii) High Tension Laboratory for the Electrical Engineering Department
- (iv) Extensions to the Rabindranath Tagore and Siddharaj Jaysinh Halls of Residence for men students.

The following works were under construction:

- (i) Building for the Department of Metallurgical Engineering.
- (ii) Building for Post-graduate courses in the Departments of Civil Engineering and Applied Mechanics.

Construction of a hostel for 150 students under the scheme of introduction of five year degree course in Metallurgical Engineering was started during the year.

(5) *Fourth Five Year Plan:*

The University Grants Commission had previously approved development schemes of the University, with their share of Rs. 81.02 lakhs for the Fourth Five Year Plan—1966 to 1971. Now it has been decided that the Fourth Five Year Plan would start from the year 1969-70 and complete 5 years period on 31-3-1974. In view of the above, the Commission have now raised their share from Rs. 81.02 lakhs to Rs. 88.45 lakhs for development schemes (Humanities, Sciences and General Schemes) for the period ending 31st March, 1974. The University has been contemplating to put up a few more schemes to avail of the increase of share now given by the Commission. Further an additional grant of Rs. 2,50,000/- is approved for purchase of books and journals in Humanities and Sciences over and above the allocation of Rs. 88.45 lakhs. A grant of Rs. 1,00,000/- has been sanctioned by the Commission for promoting and strengthening research activities in the University during the Fourth Five Year Plan.

The Government of Gujarat has agreed to provide its matching share of 20% towards the expenditure on the scheme of Publication of a Critical Edition of Valmiki Ramayana and 50% towards the expenditure on the Publication of the Gaekwad Oriental Series in the Fourth Five Year Plan.

A grant of Rs. 4,00,000/- has been approved by the University Grants Commission for purchase of books and journals on engineering and technological subjects including management education. The University has submitted the development schemes of higher education in technology and engineering and they are still under consideration of the University Grants Commission and the Ministry of Education and Youth Services. A proposal in consultation with Professor A. D. Nikoforov, UNESCO Expert, for a grant of \$ 6,35,200 from the UNDP for the development of Post-graduate courses at the Faculty of Technology and Engineering has been also formulated and submitted to the Commission and the Ministry of Education.

A proposal for the introduction of 3½ year diploma courses in Petro Chemicals at the University Polytechnic under the Indo-USSR. Credit Agreement of 1966 has been under active consideration of the Commission, Ministry of Education and Government of Gujarat. The courses are being started from November, 1970.

✓ (6) *Summer Institutes, Schools, Seminars and Conferences:*

The following Summer Institutes, Seminars and Conferences were held during the year:

- (i) Summer School in Home Management
- (ii) Intensive Course in Student Service Seminar
- (iii) Annual Conference of the Indian Association for Programmed Learning
- (iv) Symposium on "Microbe and Molecule."
- (v) International Seminar on 'Nutrition'.

✓ (7) *Distinguished Visitors:*

The following are some of the distinguished visitors to the University:

Name	Date of Visit
(i) Dr. Pitkin, President of Goddard College, Palinfield, Vermont, U.S.A.	5-4-1969
(ii) Dr. D. C. Myrick, Foreign Programmes Co-ordinator, ERS USDA, Washington	30-5-1969

Name	Date of Visit
(iii) Mr. Vepare Kapfo, Education Minister of State, Nagaland	5-11-1969
(iv) Dr. S. I. Potabenko Indologist & Artist, Institution of Oriental Studies, U.S.S.R.	20-11-1969
(v) Professor H. Moehle, Pro-Vice-Chancellor and Head of the Department of Pedagogy, Leipzig University, G.D.R.	5-12-1969
(vi) Dr. S. R. Barooah, Vice-Chancellor, Assam Agriculture University, Jorhat-4.	4-1-1970
(vii) Dr. Fred Weaver and Mr. Harold Howe Programme Advisers, Ford Foundation, New Delhi.	5-1-1970
(viii) Dr. Jan Filopsky, Scientific Worker and Indologist, Oriental Institute, Czech Academy of Sciences, Prague	6-3-1970

(8) *Other Important Events:*

- (i) The University Expedition Team with Shri Jamshed Elavia as Leader successfully scaled Gangotri III, a peak of the Himalayas at a height of 21,700 ft. on 10th June, 1969 at 12-00 noon.
- (ii) A special programme was arranged on 15th August, 1969 to felicitate 781 students of the university as young citizens of Free India, born between 15-8-1947 and 15-8-1948 and attaining the age of 21. Copies of brochure 'Young Citizens of Free India—Rights and Duties' were distributed to the students. The Vice-Chancellor administered to the students the 'National Pledge'.

- (iii) The new building of the Centre of Research and Training in Secondary Education in Rural Areas, at the Faculty of Education and Psychology was inaugurated by Professor Claude A. Eggertsen of the University of Michigan, Ann Arbor, U.S.A. on 2nd January, 1970.
- (iv) The new building of the Microbiology Department at the Faculty of Science was inaugurated by Dr. M. S. Swaminathan, Director, IARI, New Delhi on 19th January, 1970.

4. **Teaching Staff**

The total number of teaching staff (excluding 89 in Medical College) consisted of 51 Professors, 110 Readers, 285 Lecturers, 106 Instructors, 157 Assistant Lecturers, 75 Honorary, Part-time and others, the total being 778 (Appendix IV).

5. **Facilities to the Teaching Staff for further studies abroad:**

- (i) The following teachers who were granted facilities for further studies abroad returned to the University:

Sr. No.	Name of the Teacher	Qualifications and experience acquired
(1)	Shri C. K. Seshadri, Lecturer in English	M.A. in Applied Linguistics (Colorado).
(2)	Dr. D. K. Mainigi, Lecturer in Bio- Chemistry	Worked as Post-Doctorate Fellow, at the Pharmacology Department, Baylor College of Medicine, Houston, U.S.A.
(3)	Dr. A. R. Mehta, Reader in Botany	Worked as Research Associate (Post-Doctorate) at the University of Minnesota (U.S.A.).
(4)	Dr. S. K. Damle, Reader in Applied Mechanics	Ph.D. (Colorado).
(5)	Dr. R. M. Dave, Reader in Civil Engineering	Ph.D. (Wisconsin).
(6)	Shri A. S. Loiwal, Lecturer in Mechanical Engineering	Training in Instrumentation at Leningrad Polytechnical Institute, U.S.S.R.
(7)	Shri M. B. Desai, Lecturer in Mechanical Engineering	Research training in Mechanical Engineering at the Loughborough University of Technology, U.K.,

Sr. No.	Name of the Teacher	Qualifications and experience acquired
(8)	Dr. (Smt.) Arvinda Chandra, Lecturer in Education and Extension	Ph.D. (Iowa)
(9)	Dr. (Kum.) L. S. Saraswathi, Lecturer in Education and Extension	Ph.D. (Iowa)
(10)	Dr. (Miss.) Ella Harrisan, Lecturer in Clothing and Textile	Ph.D. (Iowa)
(11)	Dr. (Smt.) Anjali Mehta, Lecturer in Child Development	Ph.D. (Iowa)

(ii) The following members of the staff were granted facilities during the year for higher studies, research, visit etc., abroad.

Sr. No.	Name and Designation	Purpose
(1)	Shri A. P. Rana, Reader in Political Science	To work at the Indian School of International Studies, New Delhi for a period of 2 months.
(2)	Shri D. Srinivasan, Lecturer in German	To work in Germany under German Government Scholarship for visiting German Institutions and meeting German Professors.
(3)	Shri M. J. Mehta, Assistant Lecturer in Chemistry	For further studies in U.S.A.
(4)	Shri N. C. Shah, Reader in Civil Engineering	To go to Hungary for higher studies in Hydrology at the Research Institute for Work Resource Development, Budapest under the fellowship awarded to him by the Hungarian Government.

Sr. No.	Name and Designation	Purpose
(5)	Kum. M. Chakravarty, Lecturer in Education and Extension	Higher studies for the Ph.D. degree at Iowa State University (U.S.A.).
(6)	Kum. Anjani C. Patel, Lecturer in Child Development	Higher studies for the Ph.D. degree at Iowa State University (U.S.A.).
(7)	Kum. T. S. Saraswathi, Lecturer in Child Development	Higher studies for the Ph.D. degree at Iowa State University (U.S.A.).
(8)	Smt. Zenobia Choksey, Lecturer in Foods and Nutrition	Higher studies for the Ph.D. degree at Iowa State University (U.S.A.).
(9)	Kum. Sunder Gujral, Assistant Lecturer in Foods and Nutrition	Higher studies for the Ph.D. degree at Iowa State University (U.S.A.).
(10)	Shri R. M. Sheth, Lecturer in Mechanical Engineering	Higher studies for the M.S. degree in Mechanical Engineering at the University of Illinois, Institute of Technology, U.S.A.
(11)	Shri R. N. Mehta, Reader in English	To avail of a research grant at the American Studies Research Centre, Hyderabad.

6. University Examination Results

Thirty-two-candidates were declared qualified for the award of the Ph.D. degree of this university during the year 1969-70. A statement showing the names, subjects and titles of the theses is given in Appendix V.

Statements showing the university examination results of (i) March-April-May-June, 1969 and (ii) October-November, 1969 are given in Appendices VI and VII.

7. Endowments and Donations:

The Syndicate accepted the following donations:

(i) *Banco Foundation Gold Medal Fund:*

Donation in form of 40 second preference shares of Tata Iron and Steel Co., Ltd. from Banco Foundation, Baroda for awarding a gold medal at the Annual Convocation, to a student who passes the B.E. (Mech.) Final Year Examination of the M. S. University of Baroda held in March/April in First class, obtaining the highest number of marks in the elective papers (i.e. out of the total marks

of elective paper I and II), at the first attempt, provided further that the student should have passed all his previous examinations at first attempt.

(ii) *Shri Madhavji Bhatt Prize Fund:*

Donation of Rs. 2,000 from Professor N. M. Bhatt and his brothers for awarding every year a prize in cash to a student who passes the F.Y.B.Sc. degree examination of April of the M. S. University of Baroda, with the highest number of marks in aggregate, at the first attempt.

(iii) *Professor N. M. Bhatt Gold Medal, Prize and Lectures in Statistics Fund:*

Donation of Rs. 14,550 from the Old Students Association of Statistics Department, Faculty of Science, Baroda for the awards of (a) Professor N. M. Bhatt Gold Medal in Statistics at the Annual Convocation to a candidate securing a first class with the highest number of marks in Statistics at the first attempt at the M.Sc. (Final) Examination held by the M. S. University of Baroda in March/April, (b) Professor N. M. Bhatt Prize in cash to a candidate securing a first class with the highest number of marks in Statistics at the first attempt at the B.Sc. (Final) Examination held by the M. S. University of Baroda in March/April, provided he continues further studies for M.Sc. degree in Statistics of the M. S. University of Baroda and does not receive any other Scholarship or Fellowship, and (c) Professor N. M. Bhatt Lectures in Statistics to the eminent persons for delivering lecture (s) on Statistics.

(iv) *Sangeet Martand Shree Omkarnath Gold Medal Fund:*

Donation of Rs. 5,000 from the Baroda Municipal Corporation for awarding a gold medal at the Annual Convocation, to a student of the College of Indian Music, Dance and Dramatics, M. S. University of Baroda, who passes B. Mus (Vocal Music) Examination of March/April in first class at first attempt, obtaining the highest number of marks.

8. Finances of the University:

(1) *Capital Accounts:*

Statement showing the income and expenditure of the (i) University General Fund, (ii) Ayurvedic Research Fund and (iii) Post-graduate Instruction and Research Fund during the financial year 1969-70 are given in Appendix VIII.

(2) *Revenue Accounts:*

The receipts and disbursements during the financial year 1969-70 are Rs. 1,38,00,469=97 and Rs. 1,48,35,036=49 respectively leaving a deficit of Rs. 10,34,566=52. Details of the accounts, are given in Appendix IX.

(3) *Grants:*

The University received grants totalling Rs. 61,44,077=72 on development schemes from the University Grants Commission and Government of Gujarat and for various research schemes, studies, projects, etc, from the Central Ministries, State Government Departments, C.S.I.R., United States Department of Agriculture, Ford Foundation and other outside agencies. The details are given in Appendix X.

9. Construction Division

(1) *Capital Works:*

The Construction Division supervised the construction of various buildings, extensions, additions, alterations and an amount of Rs. 16,01,742=03 was spent during the year on capital works.

(2) *Ordinary and Special Repairs:*

The total expenditure on repair works during the year was Rs. 1,65,130=03 and Rs. 1,14,446=85 on ordinary and special repairs respectively. Also an expenditure amounting to Rs. 12,497=01 was incurred on immediate petty repairs.

CHAPTER II—OFFICERS OF THE UNIVERSITY

1. Officers

(1) *The Chancellor:*

His Highness Maharaja Fatehsinh Gaekwad, Maharaja of Baroda is the Chancellor of this University.

(2) *The Vice-Chancellor:*

Dr. C. S. Patel, B.A., MSc., (Bom.), Ph.D. (Leeds) continued to work as Honorary Vice-Chancellor under Statute 115 during the year.

He attended the following meetings during the year :

- (i) Vice-Chancellors' Conference in Delhi on 21st, 22nd and 23rd April, 1969;
- (ii) Meetings of the Coordination Committee for University Education at Ahmedabad on 7th April and 1st May, 1969;
- (iii) Meetings of the Standing Committee of the Inter-University Board of India and Ceylon at New Delhi on 3rd April and 7th October, 1969 and at Madurai on 5th February, 1970;
- (iv) Joint Session of the Members of the Council of Management for Educational Activities of the Nehru Foundation for Development and the Advisory Committee as also the Council Meeting at Ahmedabad on 9th December, 1969;
- (v) Joint Conference of the Standing Committee of the Inter-University Board, the Indian Universities which are members of the Association of Commonwealth Universities and the Executive Council of the Association of Commonwealth Universities at Delhi on 13th and 14th January, 1970.
- (vi) 45th Annual Meeting and 10th Quinquennial Conference of the Inter-University Board of India and Ceylon at Madurai on 6th, 7th and 8th February, 1970.
- (vii) Meeting of the University Grants Commission with the Vice-Chancellors of the Universities in the States of Gujarat and Maharashtra at Bombay on 21st March, 1970.

(3) *The Pro-Vice-Chancellor:*

Professor P. J. Madan, B.Sc. (Eng.), (Edin.), M.Sc. (Eng.), D.I.C., M.Inst. H.E. (London), M.I.E. (India) continued to work as the Pro-Vice-Chancellor under Statute 120 during the year.

He attended the following meetings during the year :

- (i) 2nd Conference of State Directors of Technical Education at New Delhi on 14th and 15th May, 1969;
- (ii) 36th, 39th and 40th Meetings of the Western Regional Committee of the A.I.C.T.E. at Bombay on 15th May, 8th August, 1969 and 16th February, 1970 respectively;
- (iii) 457th Council Meeting of the Institution of Engineers (India) at Shillong from 17th to 19th May, 1969;
- (iv) Finance Committee Meeting and the Golden Jubilee Celebrations of the Institution of Engineers (India) at Calcutta on 5th August, 1969 and from 2nd to 8th February, 1970 respectively;
- (v) 8th Meeting of the Council of Institutes of Technology at New Delhi on 24th November, 1969;
- (vi) Meeting convened by the Ministry of Education and Youth Services at New Delhi on 25th November, 1969 for discussing Sandwich Courses with Dr. Edwards, Vice-Chancellor, Bradford University, U.K.;
- (vii) Meeting of the High Power Committee of the Post-graduate Engineering Studies and Research set up to work for close collaboration between Technical Institutions, Industries, National Laboratories of the C.S.I.R., Ministry of Education and Youth Services, at New Delhi on 11th February, 1970.

(4) *Deans:*

The following Officers worked as Deans of the various Faculties :

Faculty	Deans
(i) Arts	Professor S. C. Misra (upto 10-9-1969) Professor R. N. Mehta (From 11-9-1969)
(ii) Science	Professor N. S. Pandya
(iii) Education and Psychology	Professor D. M. Desai
(iv) Commerce	Dr. K. N. Naik
(v) Medicine	Dr. T. V. Patel
(vi) Technology and Engineering	Professor L. B. Shah
(vii) Law	Professor H. C. Dholakia
(viii) Fine Arts	Professor K. G. Subramanyan
(ix) Home Science	Professor (Kumari) Justina A. Singh
(x) Social Work	Professor G. G. Dadlani (upto 7-8-1969) Kumari Indira M. Patel (from 8-8-1969)

(5) *Registrar:*

Shri B. K. Zutshi continued to work as the Registrar.

(6) *Librarian:*

Shri M. F. Lokhandwala continued to work as Officer-in-charge.

(7) *Other Officers:*

<i>Name</i>	<i>Designation</i>
(i) Dr. S. M. Sen (Upto 4-7-1969) Dr. O. D. Gulati (from 5-7-1969)	Dean, Medical College
(ii) Professor B. J. Sandesara	Director, Oriental Institute
(iii) Shri S. O. Shukla	Principal, College of Indian Music, Dance and Dramatics
(iv) Shri H. C. Mehta	Principal, Sanskrit Mahavidyalaya
(v) Shri K. D. Shah	Principal, Polytechnic
(vi) Shri I. A. Dave	Principal, M. K. Amin Arts and Science College and College of Commerce, Padra
(vii) Shri K. S. Yajnik	Head, Preparatory Unit—Arts and Commerce
(viii) Shri C. J. Shah	Head, Preparatory Unit—Science
(ix) Shri M. M. Chokshi	Principal, University Experimental School

CHAPTER III—THE SYNDICATE AND THE SENATE

The Syndicate

The Syndicate consisted of 15 members. The term of office of the Syndicate members ended on 31st October, 1969, and elections were held in the months of October and November to elect members. Shri N. D. Chokshi, Shrimati Amar B. Patel, Professor S. M. Sethna and Professor H. C. Dholakia ceased to be members on 31st October, 1969. The following persons were the members of the Syndicate :

1. Dr. C. S. Patel, Vice-Chancellor
2. Professor P. J. Madan, Pro-Vice-Chancellor
3. Director of Education or his nominee
4. Shri N. B. Amin
5. Professor D. M. Desai (from 1-11-1969)
6. Shri P. C. Hathi
7. Shri C. C. Mehta
8. Professor N. S. Pandya (from 1-11-1969)
9. Shri C. M. Parikh (from 1-11-1969)
10. Shri J. S. Parikh
11. Dr. C. B. Patel
12. Dr. T. V. Patel
13. Professor B. J. Sandesara (from 1-11-1969)
14. Professor L. B. Shah
15. Dr. (Shrimati) Leela C. Shah (from 1-11-1969)

During the year the Syndicate held 12 meetings in which they considered and passed resolutions on 711 items. The following statement shows the attendance of the members at the Ordinary and Special meetings of the Syndicate during the year :

<i>Name</i>	<i>No. of meetings held</i>	<i>Class of meetings O. Ordinary S. Special</i>	<i>Present</i>	<i>Absent</i>
1	2	3	4	5
Dr. C. S. Patel, Vice-Chancellor	12	O.5 S.7	O.5 S.7	—
Professor P. J. Madan, Pro-Vice-Chancellor	12	O.5 S.7	O.5 S.7	—

1	2	3	4	5
Director of Education or his nominee	12	O.5	O.4	O.1
Shri N. B. Amin	12	S.7	S.5	S.2
Professor D. M. Desai†	5	O.5	O.4	O.1
Shri P. C. Hathi	12	S.7	S.6	S.1
Shri C. C. Mehta	12	S.5	S.5	—
Professor N. S. Pandya†	5	O.5	O.5	—
Shri C. M. Parikh†	5	S.7	S.5	S.2
Shri J. S. Parikh	12	O.5	O.4	O.1
Dr. C. B. Patel	12	S.7	S.6	S.1
Dr. T. V. Patel	12	O.5	O.5	—
Professor B. J. Sandesara†	5	S.7	S.7	—
Professor L. B. Shah	12	S.5	S.5	—
Dr. (Smt.) Leela C. Shah†	5	O.5	O.5	—
Shri N. D. Chokshi*	7	S.7	S.6	S.1
Professor H. C. Dholakia*	7	S.5	S.5	—
Shrimati Amar B. Patel*	7	O.5	O.4	O.1
Professor S. M. Sethna*	7	S.2	S.2	—
		O.5	O.4	O.1
		S.2	S.2	—

† Became a member from 1-11-1969.

* Ceased to be a member from 1-11-1969.

2. The Senate

The Senate consisted of 95 members. The changes in the membership during the year were as under :

(i) The following persons ceased to be members of the Senate :

Professor S. C. Misra, Professor G. G. Dadlani, Dr. S. M. Sen, Shri K. G. Badlani, Shri R. L. Pathak, Shri Rajendra Dev and Shri P. M. Joshi.

(ii) The following persons became members of the Senate :

Her Highness Maharani Shantadevi Gaekwad of Baroda, Professor R. N. Mehta, Kumari Indira M. Patel, Dr. O. D. Gulati, Shri P. R. Chauhan, Shri S. P. Shah, Shri M. H. Dayamakumar, Shri F. H. Palejwala, Shri S. R. Gokhale, Justice Shri D. A. Desai and Shri H. N. Shah.

The Senate met thrice during the year, on 27th April and 26th October, 1969 and 29th March, 1970. 62 members attended the meeting on 27th April, 1969, 72 on 26th October, 1969 and 57 on 29th March, 1970.

First meeting (Special) (27th April, 1969)

The following resolution was passed and was forwarded to the Government of Gujarat for the amendment of the Maharaja Sayajirao University of Baroda Act, 1949 as per the recommendations of the Senate :

“ That the Report of the Committee appointed by the Vice-Chancellor as authorised by the Senate at their Special Meeting held on 20th August, 1967 to take such steps as he may consider necessary on the amendment of the Maharaja Sayajirao University of Baroda Act, be approved and forwarded to the Government for further necessary action, with the following addition and modification :

(a) The following be added as an additional amendment in respect of Section 2 (1) of the Act :

“ Section 2 (1) of the Act be amended to read as follows :
‘ teacher ’ means a professor, a reader, a lecturer, a permanent assistant lecturer, a permanent senior instructor, imparting instruction or giving training or guidance in research in the University, a University college, an affiliated college or a recognised institution, or any other person declared or recognised to be a teacher by the Statutes ”.

(b) The first para of recommendation No. (vii) on page No. 50 of the printed Report be amended to read as follows :

“ Section 10 (1) The Vice-Chancellor shall be the full time principal executive and academic officer, who shall be appointed by the Chancellor on the recommendation of the Syndicate made by it from amongst the panel of three persons recommended under subsection (3) by a Committee appointed for the purpose under subsection (2) ”.

Second meeting (26th October, 1969)

The following business was transacted :

The elections of seven Fellows to the Syndicate, two Deans to the Syndicate, one member each on the Board of Visitors for 8 Institutions, and one member from amongst the members of the Faculty of Medicine to the Medical Council of India were held. 8 members were assigned to the Faculties. Lapsed grants amounting to Rs. 97,702/- in the Capital Budget and Supplementary grants amounting to Rs. 9,44,540/- in the Revised Budget were sanctioned. Ordinances and Rules mentioned in Pamphlet No. 3 of Handbook Part II—1967 and Ordinances relating to Examinations, syllabi, standard of passing etc. for various courses of the Faculty of Law—Handbook Part III were passed. The Twentieth Annual Report and the Twentieth Annual Accounts of the University for the year 1968-69 were passed and the excess of expenditure over the revised estimates for the year 1968-69 was also approved. The Report of the Board of Accounts for the year 1968-69 was considered and passed.

Third meeting (29th March, 1970)

The following business was transacted :

The election of the Vice-Chancellor, and that of one member each on the Board of Visitors for 3 institutions were held. A Fellow was assigned to the Faculty. Replies to questions were given. The Annual Financial Statement comprising of the revised estimates for the year 1969-70 and the estimates for the year 1970-71 were considered and passed. The proposals for the amendment of Statutes 113, 114, 119, 120 and 125 relating to the salaries and honoraria of the Vice-Chancellor, the Pro-Vice-Chancellor and the Rector were considered and passed. Ordinances and Rules mentioned in Pamphlet No. 4 of Handbook Part IV—1967 were passed.

CHAPTER IV—OTHER AUTHORITIES OF THE UNIVERSITY

1. Council of Post-graduate Studies and Research

The Council of Post-graduate Studies and Research met twice during the year on 16th July, 1969 and on 16th January, 1970 and considered in all 52 items referred to it. The following are the main items considered and recommended by the Council and approved subsequently by the Syndicate.

(1) Progress reports of the schemes previously approved and recommendations for their continuation where necessary. Consideration and recommendation of new research schemes for implementation during the year 1970-71.

(2) Panels of names of Referees to examine the theses of 32 students for the award of Ph.D. degree in different subjects.

(3) Recognition of 19 teachers as post-graduate teachers for guiding students for Ph.D. degree in different subjects and for various post-graduate courses in the Faculty of Medicine.

(4) 36th and 37th half-yearly progress reports of the Critical Editions of Old Gujarati Texts (Prachin Gurjar Granthmala).

(5) Recognition of the American Studies Research Centre, Hyderabad for research for the Ph.D. degree.

2. Faculties

There are ten Faculties in the University. Their meetings were held during the year as shown below. There being no important business, meeting of the Faculty of Law was not held:

<i>Sr. No.</i>	<i>Name of the Faculty</i>	<i>Date of the meeting</i>
(i)	Arts	15-11-1969 8-3-1970
(ii)	Science	16-11-1969
(iii)	Commerce	15-11-1969
(iv)	Education and Psychology	15-11-1969
(v)	Medicine	16-11-1969 11-1-1970
(vi)	Technology and Engineering	16-11-1969
(vii)	Fine Arts	15-11-1969
(viii)	Home Science	15-11-1969
(ix)	Social Work	15-11-1969

Important items of business on which the Faculties took decisions or made recommendations are mentioned below:

(1) *Faculty of Arts:*

- (i) Students joining M.A. in History and Archaeology Class without passing B.A. with Indian Ancient Culture and History and Archaeology be not required to appear and pass in two minor papers of Ancient Indian Culture and Archaeology of S.Y.B.A. level. This may be given effect to the candidates to be admitted to the M.A. Class from June, 1970.
- (ii) Students be allowed to combine the subjects of Linguistics and Philosophy offered by them at F.Y.B.A.; S.Y.B.A. and T.Y.B.A. from June, 1970.
- (iii) Students be allowed to take Psychology as one of the optional subjects along with Economics major at the F.Y.B.A. and as one of the minor subjects which can be offered along with Economics major at the S.Y.B.A.
- (iv) Students passing the B.Sc. examination with Mathematics and Economics of this University be considered eligible for admission to M.A. Economics course in this University.
- (v) Recommended the following provisions for the introduction of M.A. into two parts:
 - (a) It should be at the option of the candidate whether or not to take part I at the end of the first year; he can appear at both the parts at the end of the second year.
 - (b) Each part is to be taken as a unit with the minimum of 25% in each paper and 40% in the aggregate.
 - (c) Viva voce should be dropped.
 - (d) 20% be reserved for internal assessment.
 - (e) If a candidate takes part I and part II together and fails to clear part I and clears part II, he should be allowed to take part I later on and he can be given a class.
- (vi) Recommended the institution of a Post-Diploma Course in German from June, 1970.

(2) *Faculty of Science:*

- (i) Recommended introduction of one more optional paper of Actuarial Statistics at M.Sc. (Final) Statistics.

- (ii) Recommended that 30% of theory and practical marks be allotted for periodical tests at the M.Sc. (Previous) and M.Sc. (Final) examinations in the subjects of Bio-Chemistry, Physics and Microbiology.

(3) *Faculty of Commerce:*

- (i) Recommended details of the papers in respect of special subjects to be studied at the S.Y.B.Com. and T.Y.B.Com. courses.
- (ii) Revised the syllabi in certain subjects of F.Y.B.Com., S.Y.B.Com. and T.Y.B.Com. courses.

(4) *Faculty of Education and Psychology:*

- (i) Recommended that existing O.M.Ed. 4 be amended with a view to have the M.Ed. candidate an option to write dissertation in English, Gujarati, Marathi and Hindi.

(5) *Faculty of Medicine:*

- (i) Recommended that (a) the proforma for the Post-graduate Record of training be approved; (b) the M.Sc. Medical Bio-Chemistry Course be introduced; (c) the subject of Tuberculosis be considered as allied to the subject of Medicine and (d) the post-graduate teachers of the Faculty of Medicine recognised by the University be permitted to register additional students in the ratio of one student per year per each Honorary/Assistant Honorary/Lecturer/Part-time lecturer working under them in the Clinical Departments. Similarly such a facility be also extended to the non-clinical departments of the Faculty only upto the category of lecturer.
- (ii) Discontinued the condensed M.B.B.S. Course progressively from the academic year 1970-71.
- (iii) The following recommendation be approved for being implemented by the University in view of the reports of the Review Committee of the Medical Council of India. "In order to be eligible for admission to the I M.B.B.S. course candidate should have completed 17 years at the time of admission or should complete the same by 31st December, of the year of admission."
- (iv) The existing scheme of M.Sc. part I and part II Examinations be modified as under:
 - (a) the part I examination shall consist of two theory papers only each carrying 100 marks and having 3 hours duration; (b) the part II examination shall consist of three theory papers, each of 100 marks and practical and oral examination of 300 marks.

(6) *Faculty of Technology and Engineering:*

- (i) Added the subject of Numerical and Computer Method in Civil Engineering in all the groups of B.E.(V) Civil Course.
- (ii) Introduced the subject of Heat and Mass Transfer in place of Heat Engines IV at the B.E.IV (Mech.) course.
- (iii) Recommended that the participants who have successfully completed the three years' sequential Summer School in Electrical Engineering at the Faculty of Technology and Engineering, Baroda, be considered eligible for admission to the M.E. (Electrical) Courses (EPE or AGE) Courses directly at the part III stage subject to satisfying certain conditions.
- (iv) Recommended introduction of a Five Year Integrated degree course in Electronic Engineering leading to the degree of B.E. (Electronics).
- (v) Recommended that students who have passed B.E. (Electronics) be considered eligible for admission to M.E. (Electrical) course in Automatic Control Engineering.

(7) *Faculty of Fine Arts:*

- (i) Recommended that the Chairman of the Board of Studies in English be requested to see that the courses in English prescribed for the First and Second Preparatory years and the First and Second B.A. (Fine) years as per the new course be so designed as to help students to cultivate correct and grammatical expression in the language.
- (ii) Recommended that candidates seeking admission to M.A. courses in Fine Arts be properly examined for their ability in the use of English Language, at the time of their admission.
- (iii) Recommended admission requirements for M.A. (Fine) in Graphic Course and reworded the provision of admission requirements for Preparatory Degree/Diploma Course in Fine Arts.

(8) *Faculty of Home Science:*

- (i) Approved a uniform pattern in the course for all the B.Sc. students in the Faculty of Home Science.
- (ii) Amended the existing O.H.S. 18 and O.H.S. 19.

(9) *Faculty of Social Work:*

- (i) Recommended that in order to ensure the selection from wider group, necessary procedure for admission be adopted.

3. **Board of Studies**

There are 48 Boards of Studies in different subjects. All the 48 Boards met during the year as shown below :

<i>Sr. No.</i>	<i>Name of the Board</i>	<i>Date of the meeting</i>
(i)	Sanskrit, Pali and Prakrit Language and Literature	10- 9-1969
(ii)	Persian, Urdu and other Asian Language and Literature	6-10-1969
(iii)	Hindi Language and Literature	11- 9-1969
(iv)	Gujarati Language and Literature	16- 9-1969
(v)	Marathi Language and Literature	11- 9-1969
(vi)	English Language and Literature	12- 9-1969
(vii)	Modern and Ancient European Language and Literature	12- 9-1969
(viii)	Sociology	6-10-1969
(ix)	History, Archaeology and Ancient Indian Culture	13- 9-1969
(x)	Philosophy	18- 9-1969
(xi)	Linguistics	11- 9-1969
(xii)	Library Science	11-10-1969
(xiii)	Political Science	16- 9-1969
(xiv)	Economics	16- 9-1969
(xv)	Physics and Meteorology	17- 9-1969
(xvi)	Chemistry	22- 9-1969
(xvii)	Botany	6-10-1969
(xviii)	Zoology	16- 9-1969
(xix)	Bio-Chemistry	12- 9-1969
(xx)	Microbiology	17-10-1969
(xxi)	Geology	10-10-1969
(xxii)	Mathematics	22- 9-1969
(xxiii)	Geography	20- 9-1969
(xxiv)	Statistics and Acturial Science	11-10-1969
(xxv)	Education and Educational Administration	16- 9-1969
(xxvi)	Psychology	14-10-1969
(xxvii)	Banking and Business Finance	18-10-1969
(xxviii)	Accounts	18-10-1969
(xxix)	Commerce including Business Administration	15-10-1969
(xxx)	Co-operation	15-10-1969
(xxxi)	Anatomy and Physiology	13-10-1969
(xxxii)	Pharmacology and Pathology	11-10-1969
(xxxiii)	Medicine, Surgery, Midwifery etc.	21- 9-1969
(xxxiv)	Technology (Textile)	14-10-1969
(xxxv)	Civil Engineering and Applied Mechanics	13-10-1969

<i>Sr. No.</i>	<i>Name of the Board</i>	<i>Date of the meeting</i>
(xxxvi)	Mechanical Engineering and Metallurgical Engineering	13-10-1969
(xxxvii)	Electrical Engineering and Electronics	13-10-1969
(xxxviii)	Chemical Engineering	26- 9-1969
(xxxix)	Architecture	14-10-1969
(xxxx)	Law	14- 9-1969
(xxxxi)	Painting, Sculpture, Applied Arts and Art History	16-10-1969
(xxxxii)	Music, Dance and Dramatics	17-10-1969
(xxxxiii)	Museology	17-10-1969
(xxxxiv)	Child Development	18-10-1969
(xxxxv)	Foods and Nutrition	17-10-1969
(xxxxvi)	Home Science Education and Extension	16-10-1969
(xxxxvii)	Clothing and Textiles and Home Management	16-10-1969
(xxxxviii)	Social Work	18-10-1969

Important recommendations made by the Boards have been included in the recommendations of the Faculties mentioned in the preceding paragraphs.

CHAPTER V—OTHER BOARDS AND COMMITTEES

General

A brief summary of the important business transacted by the various Boards and Committees, during the year, is given below :

1. University Board of Sports

Five meetings of the Board of Sports were held during the year. The Board appointed (i) a Committee to select teams for participating in All India Tournaments, (ii) a Committee to look into the whole programme of coaching the University teams and also to appoint full-time and/or part-time coaches for various games, (iii) a Committee to consider increasing the pay of boys and to work out in details the normal working hours for boys, (iv) a Committee to consider giving exemption to students from Physical Education, and (v) a Committee to organise the All India Inter-University Athletic Meet at Baroda.

2. Students Welfare Board

A meeting of the Board was held on 18th November, 1969. The Board recommended that (i) an amount of Rs. 3,200/- be provided for installation of electric fittings, etc. in the Canteen of the College at Padra and (ii) to appoint a local Hospitality Committee to provide for necessary help and advice to Foreign Students and also to sanction Rs. 300/- as a matching share for the activities of Foreign Students.

3. Publication Board

A meeting of the Board was held on 6th September, 1969. It considered and recommended the Publication of " Persian literature during the time of Jahangir and Shahjahan "—by Shri M. L. Rehman. The Board also considered and recommended the amendment of rule C of Ordinance 23, and approved the programme of publication of two works under the Gaekwad's Oriental Series.

4. Board of Extra-Mural Studies

The Board met on 17th January, 1970 and recommended a programme of extension lectures by university teachers and outside experts. An amount of Rs. 7,700/- was sanctioned for the purpose. It also recommended that the Board should meet in the month of July every year.

5. Library Committee

A meeting of the Committee was held during the year on 12th July, 1969. It approved the terms and rates for the supply of books by approved vendors

for the year 1969-70, the procedure to be adopted for the purchase of books etc. from the vendors and also recommended the General Rules to be revised for Smt. Hansa Mehta Library.

6. Building and Planning Committee and University Buildings Committee

The Committee met on 28th November, 1969. It recommended that (i) the works of Special Repairs, Water Supply Scheme in the University campus be carried out and (ii) the works under construction and those for the year 1970-71 out of 4th Five Year Plan be executed when the concurrence of the shares is received from the University Grants Commission/State Government.

7. Standing Committee on Equivalence of Examinations

The Committee met once during the year on 16th July, 1969. It considered a number of items regarding equivalence of various examinations and cases of eligibility of students. It also considered various recommendations of the Inter-University Board of India and Ceylon regarding equivalence of examinations. The important recommendations made by it are as under :

- (i) the B.E. I (C.M.E.) examination under Five Year integrated degree course of Gujarat University be recognised as equivalent to our F.Y.B.Sc. examination for admission to S.Y.B.Sc. class;
- (ii) the Newzealand School Certificate of Attainment conducted in Fiji by the Newzealand Department of Education be recognised as equivalent to S.S.C. examination of Gujarat State for admission to available higher courses of studies in this University, provided it is passed with the required subjects as per existing rules;
- (iii) the degree of B.Sc. (Hons.) in Economics of the University of London be not recognised as equivalent to our M.A. (Economics);
- (iv) students who have passed qualifying examinations of other Universities and examining bodies as external candidates cannot be permitted to join higher courses of studies in view of O. 173.

8. Academic Committee

The Committee met on 14th February, 1970. It appointed a Sub-Committee to work out the details for introduction of Military Science as a subject of study in the University, (ii) the recommendations of the Conference of student Representatives convened jointly by the Ministry of Education and Youth Services and the University Grants Commission be referred to the various Boards of Studies for consideration, (iii) The University Grants Commission be informed that the University provides instructions for the various degree, diploma, post-graduate courses which cater for different jobs and that due

attention will be given to the need and interests of the students and the Society while introducing new courses, (iv) There be no University examination in the subject of General Education from the year 1970-71 and it be continued as a voluntary subject, (v) The report on the I.A.S. examination be noted and that the Deans and Heads be requested to make efforts to induce students to take interest in I.A.S. examination.

9. Preparatory Courses Committee

The Committee met twice during the year on 4th August and 9th September, 1969. It recommended that atleast three tests in each subject in each term should be taken by the teacher concerned in consultation with the Heads of the respective Departments instead of two tests as at present. It also recommended that Preparatory Arts and Preparatory Commerce be bifurcated into separate Units with a view to maintain proper discipline amongst students and smoothen the working of the Units. In its second meeting the Committee recommended that status quo be maintained in the matter of holding three periodical tests. It also recommended that a Pilot Project be started for arranging special English classes from November 1969 without charging any tuition fees.

10. Deans' Meeting

Three meetings of the Committee of the Deans of Faculties and the Heads of Institutions were held during the year. The Committee recommended as under :

- (i) Following be added as rule No. 16 in Chapter XLIX—regarding discipline and conduct of university employees, and also Clause No. 7 (B) in the service agreement to be signed by the employees of the University.

“ University teachers should refrain from any activity which tends to create communal disharmony. ”
- (ii) Professor M. B. Achwal and his representatives be helped in getting the questionnaire filled up by students about the places of and facilities available in their residence.
- (iii) A brief note on the National Service Scheme prepared by the Hon. Administrative Officer, N.S.S. was noted and the Deans of Faculties and Heads of Institutions were requested to extend all assistance and co-operation for the successful implementation of the new scheme.
- (iv) The payment to the staff member in respect of the follow-up medical treatment work be made at the rate of 25 paisa per student.

- (v) Co-operation be given in the organisation of holding the rehearsals as well as promise parades of N.C.C. in the evening time.
- (vi) P.T. Instructors be continued to be spared for the Medical Examination work as was done till now.
- (vii) Inter-Faculty Leaving Certificate be issued by the Faculty concerned within one month on receipt of the request from the Faculty where the candidate is migrating.
- (viii) The Scheme of Establishment of a Welfare Fund in the University be approved and processed for approval of the University Grants Commission.

11. Finance and Establishment Standing Committee

Nine meetings of the Committee were held during the year. The Committee considered several items concerning request for additional establishment grants, purchase of equipments, approval of plans, estimates and tenders for construction work, contract for supply of petrol, servicing of vehicles, cleaning and adjustment of typewriters, and requests from staff members regarding study leave, leave without pay for study abroad, extension of leave, etc. The recommendations of the Committee were placed before the Syndicate .

The Committee met as the Budget Committee on 22nd January, 1970. It submitted to the Syndicate, the revised estimates for the year 1969-70 and the estimates for the year 1970-71 after scrutinising various proposals received from the Faculties, Institutions and Office of the University.

The Finance and Establishment Standing Committee at their meeting held on 27th November, 1969 recommended to the Syndicate the constitution of a Purchase Committee for considering and recommending purchase of individual items costing Rs. 5,000/- or more.

12. Investment Committee

The Committee held six meetings during the year. The recommendations of the Committee concerning the investment etc. of the University Funds were approved by the Syndicate.

13. Press Supervisory Committee

Eight meetings of the Committee were held during the year. They considered the monthly reports of the Manager regarding the work of the Press, the Stationery Unit and the Publication Sales Unit and also the Printing Programme and made recommendations regarding purchase of paper, stationery, equipment etc.

14. Shri Sayaji Sahityamala Publication Committee

The Committee met on 17th September, 1969 and recommended the following works for publication :

- (i) भारतीय वीणा —by Shri Rasiklal Maneklal Pandya
- (ii) आपणां सुशोभन वृक्षो —by Shri A. P. Kothari
- (iii) सङ्गतिग अने रुद्रमहालय —by Shri Sureshchandra K. Dave

It also recommended the reprinting of the following Marathi works :

- (i) छत्रपती संभाजी
- (ii) महाराव होळकर
- (iii) जीववादादा केळकर

15. Sir Sayajirao III Memorial Research Prize Fund Committee

The Committee met on 17th September, 1969 for scrutinising the essays on "गुजरातमां ज्ञातिसंस्थाः भूत अने भावि". None of the essays was considered to merit the prize and hence the award was not declared. It decided to invite essays on the subject "कृषिक्षेत्रे विज्ञाननी सिद्धिभ्यो" for the year 1969-70.

16. Advisory Committee for the Halls of Residence

The Committee met on 9th September, 1969 and discussed the following points :

- (i) Problem of providing extra accommodation by recognising "approved houses".
- (ii) General policy for admission of students to the Halls of Residence.
- (iii) Setting up a "Hostel Alumni Association".
- (iv) Exploring possibilities of finding out part-time employments for students in the work of Halls of Residence.

17. Wardens' Committee

Three meetings of the Committee were held during the year. It approved (i) the transfers of the Hall Attendants/Sweepers, (ii) the experiment of having a separate hall for the Preparatory students be kept in abeyance from the year 1969-70, (iii) Statement showing the number of students admitted in the 1st term 1969-70 Hallwise and Facultywise, (iv) Re. 0-75 P. per day per delegate towards the accommodation charges with the bifurcation of Re. 0-25 P. towards service charges and Re. 0-50 P. towards electric charges, (v) Purchase of furniture, and (vi) the present practice of refunding Mess Deposits be continued. The revised budget for the year 1969-70 and the estimates for the year 1970-71 were prepared and submitted to the Syndicate for approval.

18. Advisory Committee for the University Health Centre

The Committee met on 11th April, 1969. It recommended that (i) the maximum charge for the university students be Re. 0-50 P. per day for pills,

tablets or capsules. The mixtures, dressing, powders and ointments be dispensed free of charge and the cost price of any injection be charged from the university students in addition, (ii) a new Family Planning Centre be established at the University Health Centre, (iii) the Medical Officer be permitted to do private consulting practice between 5-00 p.m. to 7-00 p.m. and (iv) an Honorary Gynaecologist be appointed on an honorarium of Rs. 150/- p.m.

19. Advisory Board of University Journal

The Board met on 12th August, 1969 and recommended the names of teachers as members on the three Editorial Boards of the University Journal for a period of two years from 1st September, 1969.

20. Sheth U.P.A.R. Unit Committee

The Committee met on 28th August, 1969 and recommended (i) implementation of three clinical research schemes (one in the Department of Medicine, one in the Department of Obstetrics and Gynaecology and one in the Department of Psychiatry) and payment of honorarium of Rs. 100/- p.m. to the Clinician in charge of each scheme, (ii) the posts of two Registrars qualified in the modern system of Medicine and two in the Ayurvedic System of Medicine were sanctioned for appointment, (iii) that six extra beds over and above the existing beds in S.S.G. Hospital, Baroda for Clinical research, out-door unit of SUPARU be continued on a trial basis for a period of one year, and (iv) that a course of 10 lectures (5 on Modern Medicine and 5 on Ayurved) on History of Medicine and a series of 5 open lectures in the beginning of IIInd M.B.B.S. term be approved.

21. Selection Committees

During the period from 1-4-1969 to 31-3-1970 there were 25 meetings of the Selection Committees, appointed under Section 48 (2) of the Act and they recommended 30 candidates for appointment to the posts of Professors and Readers in various Faculties and Institutions in the University. There were 45 meetings of the Standing Selection Committee for Junior Posts and 27 meetings of the Standing Selection Committee for Class III Posts and 104 and 25 candidates respectively were recommended by these Committees for appointment to different posts in the University.

22. Committee to Select Wardens

The Committee met on 25th February, 1970 and recommended Shri V. M. Shah, Dr. L. M. Padhya Dr. J. R. Pandya, and Dr. D. C. Kantawala for appointment as Wardens of Halls of Residence for men students.

23. M. S. University Students' Aid Fund

The Committee met on 9th October, 1969. The total amount of help given to the students by way of tuition fees, examination fees, books, educational materials, loan etc. during the year 1969-70 was Rs. 27,502/-.

CHAPTER VI—RESEARCH WORK IN THE UNIVERSITY

Five hundred twenty-eight students, who were registered for the Ph.D. degree in previous years, continued work on their research dissertations. 73 new students (19 in Faculty of Arts, 18 in Faculty of Science, 24 in Faculty of Education and Psychology, 2 in Faculty of Fine Arts, 2 in Faculty of Technology and Engineering, 3 in Faculty of Home Science and 5 in Faculty of Medicine) were registered for the Ph.D. degree during the period under report. Their details are as under :

Name of the Scholar	Name of the Guiding Teacher	Title of the Thesis
Faculty of Arts		
<i>Economics</i>		
Dadi Mohammed Kasim Musa	Professor V. N. Kothari	An Analysis of Factory Labour Income Share in India.
Acharya Bhupendra Vasantlal	Professor V. N. Kothari	Education and Manpower in India's Economic Development.
Dholakia Bakulrai Harshadrai	Professor V. N. Kothari	The Sources of Economic Growth in India.
Patel Babubhai Bhaichand	Professor V. N. Kothari	A study of Inter District and Inter Sectional Wage Differentials in Gujarat.
Rajagopal Ramanujan	Dr. H. P. Chokshi	Growth and scope of Municipal Finance in Tamil Nadu.
<i>Hindi</i>		
Bharadwaj Narayan Kalyanmal	Dr. M. G. Gupta	Comparative study of Historical Novels in Hindi and Gujarati Literature.
Patel Fakirbhai Gordhanbhai	Dr. D. S. Shukla	स्वातंत्र्योत्तर (सन् १९४७ से १९६७) हिन्दी तथा गुजराती के सामाजिक उपन्यास की तुलनात्मक अध्ययन।
Chaturvedi Vishnu-prasad Baijnath	Dr. D. S. Shukla	Goswami Hariray aur Unka Brajhasha Sahitya.

<i>Name of the Scholar</i>	<i>Name of the Guiding Teacher</i>	<i>Title of the Thesis</i>
<i>History</i>		
Patel Maganbhai Mathurbhai	Dr. B. S. Suryawanshi	The Malavas.
Kumari Deshpande Jayashri Waman	Dr. V. K. Chavda	Baroda in Seventeenth Century—A Socio-Economic study.
Pander Gulam Husen Ahmed	Professor S. C. Misra	The Nawabates of Surat and Broach in the Eighteenth Century.
<i>Political Science</i>		
Anadkat Nalinkumar Karshandas	Shri A. P. Rana	The C.P.I.'s attitude towards the security issues of India.
Patel Manubhai Somabhai (Blind Student)	Shri A. P. Rana	Pakistan as a Factor Influencing India's Foreign Policy.
<i>Archaeology</i>		
Chaudhary Surajbhan Ratansingh	Professor R. N. Mehta	Protohistoric Archaeology of the Sarasvati and Drisadvati Valleys in Haryana.
Parikh Ratilal Trikamlal	Professor R. N. Mehta	Archaeology of the Banas-kantha District (North Gujarat).
<i>Sanskrit</i>		
Kumari Mehta Vandana Dhirajlal	Professor A. N. Jani	Gadadhari—A commentary on Sriharsa's Naisadhiya-Caritam by Gadadhara Text with introduction.
<i>English</i>		
Mehta Rashmikant Nanubhai	Working Independently	The short stories of Nathaniel Hawthorne.
Raval Rajankumar Ramubhai	Professor V. Y. Kantak	English Romantic Poetry and Painting—some parallels.
<i>American Literature</i>		
Pepalla Ankamma Venkaiah	Dr. M. G. Krishnamurthi	John Steinbeck.

<i>Name of the Scholar</i>	<i>Name of the Guiding Teacher</i>	<i>Title of the Thesis</i>
Faculty of Science		
<i>Bio-chemistry</i>		
K. V. Joseph	Professor C. V. Ramkrishnan	Studies on cereals and pulses.
<i>Botany</i>		
Patel Shivabhai Ishwarlal	Dr. S. D. Sabnis	Studies on the flora vegetation and ethnobotany of selected area in Dadra and Nagar Haveli.
Thakar Dharmendrakumar Natwarlal	Dr. S. B. Sabnis	Floristic and Ethnobotanical Studies on certain forest areas in Central Gujarat
<i>Zoology</i>		
R. Govinda Panickar	Professor R. V. Shah	Anatomy and Physiology of some vertebrates
Majithia Suwarna H.	Professor R. V. Shah	Histological, histo-chemical, developmental and physiological studies on certain tissues of vertebrates.
C. George	Professor R. V. Shah	Experimental and histophysiological studies on vertebrate tissues.
Menon K. Gopinath	Professor R. V. Shah	Histophysiological and biochemical investigations on some vertebrate tissues.
<i>Physics</i>		
Chakravorty Manjusha Devi	Dr. M. M. Patel	Study of the spectra of some Diatomic Molecules.
Dhake Kamalakar Pundalik	Dr. (Smt.) Padmini Agarwal	Ultrasonic studies in liquids and solutions.
<i>Microbiology</i>		
Desai Harish Gulabray	Professor V. V. Modi	Comparative studies on carotenogenesis in molds and fruits.
Chhatpar Hari Shewaram	Professor V. V. Modi	Some problems of post harvest physiology in Mango.

<i>Name of the Scholar</i>	<i>Name of the Guiding Teacher</i>	<i>Title of the Thesis</i>
Dhruva Bharati Ramanlal	Dr. M. R. Raghavendra Rao	Chemical, Nutritional and Bio-chemical studies in Plant Tissues Culture such as Tectno Grandis (teak).
<i>Mathematics</i>		
Asti Navinchandra Madhavlal	Dr. A. P. Verma	On mathematical solutions of single phase fluid flow problems through porous media.
<i>Chemistry</i>		
Shah Joel Edwin	Dr. S. L. Bafna	Sorption and related studies with ion exchangers.
Vyas Arunkumar Hiralal	Dr. S. L. Bafna	Some studies with ion exchange resins.
Prajapati Shankerlal Parsottam	Professor Suresh Sethna	Studies in Oxygen Heterocycles.
George Kurian V.	Professor J. S. Dave	Studies in Liquid crystalline State.
<i>Geology</i>		
Trivedi Mahendra-prasad Chhotalal	Dr. S. D. Desai	Geology of the area between Wankaner and Wadhwan (Saurashtra) with special reference to the engineering aspects of its rocks and soils.
Faculty of Education and Psychology		
<i>Education</i>		
Thomas K. T.	Dr. M. A. Quraishi	The Educational Philosophy of the Bible.
Goyal Bhagat Ram	Dr. M. A. Quraishi	Education of the Backward classes in India (1813-1947) Postscript 1947-1966.
Modi Damyanti Jadavji	Professor A. S. Patel	Construction and Standardisation of listing comprehension test of Class VIIIth in Gujarati.

<i>Name of the Scholar</i>	<i>Name of the Guiding Teacher</i>	<i>Title of the Thesis</i>
Patel Bhikhubhai Narsinhbhai	Professor D. M. Desai	Innovating supervision in and for secondary schools of Gujarat (with special reference to the Surat District).
Pandya Kulin Dhimatram	Dr. G. B. Shah	Construction and Standardization of a Language Aptitude Test in Gujarati for College entrants in the State of Gujarat.
Panchal Bhagwandas Ranchhodlal	Dr. G. B. Shah	An enquiry into the Programmes of Science Education in Elementary School of India.
Smt. Mehta Siddhida Janardan	Dr. G. B. Shah	An investigation into the effectiveness of programmed material in English in developing reading ability.
Chugh Har Kishanlal	Professor M. B. Buch	Standardisation of an individual scale of intelligence for the age group 13-17.
Patel Yashomati Fulabhai	Professor M. B. Buch	An investigation into the factors contributing to teacher effectiveness.
M. R. Santhanam	Professor M. B. Buch	A study of the patterns of teacher influence in selected schools in Madras.
Singh Lal Pratap	Professor M. B. Buch	A study of classroom behaviours of teacher and its impact on pupils' learning
Kum. Kamala Rai	Professor M. B. Buch	Factors affecting diffusion of innovations in Secondary Schools.
Lulla Taravati Parasram	Professor M. B. Buch	An investigation into the effects of teachers' classroom behaviours on pupils' achievement.
N. S. Narayana Swamy	Dr. G. B. Shah	A study of characteristics of innovative schools.

<i>Name of the Scholar</i>	<i>Name of the Guiding Teacher</i>	<i>Title of the Thesis</i>
Hiranandani Kishna Dharmdas	Dr. B. P. Lulla	A study of controversial Issue in Indian Education 1947-1970.
Kapadia Gahver Godrej	Dr. G. B. Shah	A study of effectiveness of Programmed learning material with reference to some personality variables.
Rupkula Venkateswara Rao Laxmaiah	Professor M. B. Buch	A critical study of the supplementary reading material available for children in the age groups 6 + to 14 + in Telugu.
Dhagat Narendra-kumar Chimanlal	Professor M. B. Buch	A study of the effect of Programmed Learning material on scholastic achievement of pupils in Secondary School.
Veeravalli Krishna Murthy	Dr. G. B. Shah	An investigation into the relative effectiveness of different forms of Programmed Learning material.
Sreedasyam Shreedhara Swamy	Dr. B. P. Lulla	The role and effectiveness of the professional organization of teachers in India.
Upreti Dharendra Chandra	Professor M. B. Buch	An enquiry into the position of Mathematics education in the Elementary Schools of India.
Smt. Pathak Yogini Chandravadan	Professor A. S. Patel	A study of the physical development of infants as related to mother's age and birth order of children in families of various sizes from urban and rural milian.
<i>Psychology</i> Parikh Sunderlal Himatlal	Dr. N. S. Pathak	An investigation to study vocational choice in relation to personality.

<i>Name of the Scholar</i>	<i>Name of the Guiding Teacher</i>	<i>Title of the Thesis</i>
Pandit Kalpana Moreshwar	Dr. (Smt.) M. S. Warty	The adjustment problems of the gifted children and their reaction to frustration.
Faculty of Fine Arts		
<i>Painting</i>		
Mehta Ushakant Chimanlal	Professor K. G. Subramaniam	Folk Embroidery of Saurashtra.
Sheth Suresh Jayantilal	Professor K. G. Subramanyam	Arts of Kharak Community.
Faculty of Technology and Engineering		
<i>Soil Mechanics and Foundation Engineering</i>		
Shah Anandji Kalyanji	Dr. Piyush Parikh	Shear Strength of Soil.
Shroff Arvind Vithaldas	Dr. Piyush Parikh	Isotropic compression of Montmorillonitic soil.
Faculty of Home Science		
<i>Clothing and Textiles</i>		
Batchu Balakrishnaiah	Dr. B. N. Chaulkar	Study of the changes in the absorption characteristics of Dyes due to light and washing.
Smt. Shinde Shashikala Jaysinghrao	Dr. B. N. Chaulkar	Adoptation of basic patterns for various body types determined by the actual anthropometric measurements.
<i>Child Development</i>		
Smt. Mehta Anjali Dhawal	Dr. (Smt.) P. Phatak	A study of continuities and discontinuities in the lives of adolescence in three cultures.
Faculty of Medicine		
<i>Pharmacology</i>		
Sherlekar Mangesh Laxman	Dr. O. D. Gulati	Formation and efficiency of false adrenergic transmitters.
Smt. Dave Taruna Devprasad	Dr. O. D. Gulati	Role of ions in the uptake of adrenergic drugs.

<i>Name of the Scholar</i>	<i>Name of the Guiding Teacher</i>	<i>Title of the Thesis</i>
<i>Bio-Chemistry</i>		
Shah Purushottam Bhogilal	Dr. P. T. Acharya	Studies on acid-base and electrolyte status in the neonatal infant.
Parikh Sureshchandra Chimanlal	Dr. P. T. Acharya	Studies on carbohydrate metabolism in the neonatal infant.
<i>Medical Microbiology</i>		
Sayed Shokat Munir	Dr. B. R. Joglekar	Studies on wound infections.

Faculty of Law

Abhichandani Ramesh Kundanlal	Professor H.C. Dholakia	Constitutional Law.
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2. Research Scheme financed by the University

<i>Faculty/Department</i>	<i>Research Schemes</i>
Faculty of Arts	
History	(i) History of Gujarat under the Muslims.
Economics	(i) Earning Structure in India.
Sanskrit	(i) Preparing a critical edition of the Sahitya Vidya-dhari, the earliest commentary on Shriharsha's Naishadhiyacharitam
Gujarati	Publication of late Shri B. K. Thakore Series.
Faculty of Science	
Botany	(i) Studies on the changes in Respiration rate and Nitrogen content associated with the growth of plant tissue cultures. (ii) Investigations on the role of plant growth regulators as in-habitors of respiration in some common crop plants. (iii) Investigations on eascuta parasitism in particular and host parasite relationship in general. (iv) Histochemical studies of the shoot apex during transition to flowering.

<i>Faculty/Department</i>	<i>Research Schemes</i>
Bio-Chemistry	(i) Amino Acid metabolism in plant tumour tissues cultivated in vitro. (ii) Effect of irradiation on the microbial decomposition of Sewage. (iii) Studies on lemon fruit vesicle cultivated in vitro.
Chemistry	(i) Studies on the Synthesis of Furochromones. (ii) Synthesis of Phenanthroindolizidines as possible antileukamia compounds. (iii) Electron transfer and Oxygen absorption reactions.
Geography	(i) Population Pattern in the Towns of Gujarat. (ii) Morphology of the Towns of Gujarat. (iii) Small Ports of Gujarat. (iv) Kandala Port.
Geology	(i) A detailed structural and metamorphic study of the cultural Kumaon Himalayas. (ii) Mineralization and genetic problems of the Fluorite deposits at Ambadoongar (Baroda District).
Mathematics	(i) Special phenomena in Polyphase flow through porous mediatheoretical study.
Physics	(i) Fabrication of Field-ion-Microscope for studying atomic arrangement on crystal surfaces.
Zoology	(i) Endocrines and their role in regeneration. (ii) Fecundity, Mortality and Population Dynamic of the House Swift. (iii) Gonadal Cycles of the House Sparrow <i>Passer domesticus</i> in Baroda.
Faculty of Technology and Engineering	
Chemistry	(i) Intermediates and dyes Part I—Synthesis of anthracene derivatives. (ii) Studies in mixed misomorphism.
Faculty of Education and Psychology	
Psychology	The M. P. University and the Community—a Psychological study on their perceptions and expectations as well as consequent problems and tensions affecting the personal relationships and understanding.

Faculty/Department

Research Scheme

Faculty of Medicine

Pathology

Distribution of Blood Groups in an indigenous community of Bohras of Baroda City.

3. Research Schemes sponsored by outside Agencies

The following schemes have been sponsored by the University Grants Commission, Ministries of Central Government, Departments of the Government of Gujarat and other agencies.

Department	Title	Name of the Financing Agency	Remarks regarding the progress of the Scheme
Agricultural Economics	(i) Implementation of Tenancy Abolition-emerging pattern of land rights and Agricultural production in Gujarat State	Research Programmes Committee, Planning Commission, New Delhi	Tabulation and analysis completed. Report writing is undertaken.
	(ii) Changing Farm Production and organization in developing Agriculture. A case study of the impact of developmental efforts in Agriculture in a District in Gujarat State	American PL 480 Fund Sactioned and started in May 1967	Both the permanent staff members were actively engaged in the work of the new Research Project and were preoccupied for most of the time during the year. The project work is in progress.
Sociology	Democratic Socialization and participant alienation in Mahi Village Panchayat (Kaira Dist.), Vol. III	N.I.C.D., Hyderabad	Vol. 3 of the Project Report to the N.I.C.D. is nearing completion.
Political Science	A behavioural analysis of the Congress, Swatantra and P.S.P. Organisations in Baroda City	U.G.C.	Under progress.
Bio-Chemistry	(i) FG-IN-178 Studies on Pyridinonucleotide metabolism in normal tissues and crown-gall tumour of <i>Althea rosea</i> Holly-hock	United States Department of Agriculture, Agricultural Research Service, American Embassy, New Delhi under AmPL 480 grants	Completed on 30-8-1969.

<i>Department</i>	<i>Title</i>	<i>Name of the Financing Agency</i>	<i>Remarks regarding the progress of the Scheme</i>
	(ii) FG-IN-224 Ascorbic Acid Secretion during lactation	United States, Department of Agriculture, Agricultural Research Service, American Embassy, New Delhi under AmPL 480 grants	Completed on 14-9-1969.
	(iii) FG-IN-240 Laboratory studies of the fermentative production of microbial lipases that are useful in converting vegetable oils to products of higher value, as a basis for increasing the utilisation of soyabean and linsed oils	—do—	Completed on 24-3-1970.
	(iv) FG-IN-245 Studies on Sewage Purification	—do—	Completed on 15-1-1970.
	(v) FG-IN-258 Studies of organic acid metabolism in fruit tissues, leading to development of processing methods yielding fruit products of improved flavour and texture	—do—	In progress.
	(vi) FG-IN-402 Formulation of low cost meals for post-weaning children in the age group 2-5	—do—	Has commenced from 1-3-1969 and is in progress.

<i>Department</i>	<i>Title</i>	<i>Name of the Financing Agency</i>	<i>Remarks regarding the progress of the Scheme</i>
Botany	years and their chemical and biological evaluation		
	(i) FG-IN-265 Studies on Effect of Gibberellic acid, a growth stimulating hormone on cotton and sorghum	United States Department of Agriculture, Agricultural Research Service, Americal Embassy, New Delhi under AmPL, 480 grants	In progress.
	(ii) FG-IN-379, Survey of Gujarat Forests for (a) Sources of gallo-tannic acid, (b) Medicinal Alkaloids and (c) Tribe uses of plants for medicine, food etc., (d) Academic Studies (Floristic work)	—do—	In progress.
	(iii) In vitro studies of pollen culture of plants	S.I.R.C. Government of Gujarat	In progress.
Chemistry	(i) Studies in Liquid Crystalline State	C.S.I.R.	In progress.
	(ii) Recovery and separation of alkaloids using ion exchange compounds	Government of Gujarat	In progress.

<i>Department</i>	<i>Title</i>	<i>Name of the Financing Agency</i>	<i>Remarks regarding the progress of the Scheme</i>
Geology	Causes and Pattern of Inundation of Rann of Kutch	Ministry of Defence	In progress.
Microbiology	(i) FG-IN-276 Metabolic changes involved in ripening of mangoes	United States Department of Agriculture, Agricultural Research Service, American Embassy, New Delhi under AmPL 480 grants	In progress.
	(ii) FG-IN-394 Genetic transformation in Rhizobia	—do—	In progress.
Physics	(i) Optical Study of metal crystals	Government of Gujarat	In progress.
	(ii) Optical Studies of micro indentation hardness of natural and synthetic crystals	—do—	In progress.
	(iii) Studies on Molecular Spectroscopy	—do—	In progress.
Zoology	FG-IN-242 Physiology of Khapra Beetle, Trogoderma granarium	United States Department of Agriculture, Agricultural Research Service, American Embassy, New Delhi under AmPL 480 grants	Completed on 24th December, 1969.

<i>Department</i>	<i>Title</i>	<i>Name of the Financing Agency</i>	<i>Remarks regarding the progress of the Scheme</i>
Psychology	(i) Development of a Scale to measure dependence proneness in the class-room situation	Faculty of Education and Psychology University Grants Commission	The research is completed.
	(ii) Family Planning communication and Action Research Project—Measurement of Family size Norms	Ministry of Health, Government of India	The Scheme is completed.
Economics	Mobilisation of resources for Village Panchayats in the Baroda District	Faculty of Commerce Village Planning Commission	The research is completed.
Physics	(i) Study of Ultrasonic Velocity and absorption in Metals and organic crystals	Department of Atomic Energy, Bombay	The composite oscillator technique to determine the elastic constants of solids is developed. The Electronic units required are an amplifier and a cathode follower and are designed and constructed. Special type of crystal holders are designed for mounting the crystal and the specimen. A temperature controlled bath is designed and fabricated. The Polycrystals (Sb-Bi) alloy system are grown up



<i>Department</i>	<i>Title</i>	<i>Name of the Financing Agency</i>	<i>Remarks regarding the progress of the Scheme</i>
	(ii) Visco elastic properties of liquids	University Grants Commission, New Delhi	<p>at different concentration. The Young's modulus is measured for pure crystals at different temp. A short paper embodying these results is communicated to Journal of Physical Society of Japan.</p> <p>The interferometer method is developed for measuring the Ultrasonic velocities in liquid crystals. Special type of interferometric cell is designed and constructed for this purpose. A temperature controlled bath is fabricated. The cholesteric type of liquid crystals-cholesteryl Acetate and cholesteryl formate are prepared by following the method given in Chemical Abstracts. Ultrasonic Velocity Studies are carried out in these cholesteryl Acetate, Formate and Benzoinite and the results are communicated to Indian Journal of Pure and Applied Physics for favour of publication.</p>

<i>Department</i>	<i>Title</i>	<i>Name of the Financing Agency</i>	<i>Remarks regarding the progress of the Scheme</i>
Mathematics	(i) Analytical study of nonlinear processes in single and multiple fluid flow through porous media	University Grants Commission, New Delhi	<p>The concept of the complex interaction phenomenon of fingering and imbibition has been introduced and analytically examined for the case of ground-water Replenishment through fractured porous media (Water Resources Research. American Geophysical Union, Vol. 6, No. 3, June, 1970).</p>
Faculty of Home Science			
Home Science Education and Extension	(i) Jobs held by home Science graduates and competencies needed on the jobs held, as perceived by employed Home Science graduates of Baroda District	Ford Foundation	Started recently.
	(ii) Values of urban home-makers and the acceptance of Home Science extension programmes	Ford Foundation	Preliminary arrangements being made.

<i>Department</i>	<i>Title</i>	<i>Name of the Financing Agency</i>	<i>Remarks regarding the progress of the Scheme</i>
	(iii) Survey of knowledge shown by village mothers of Asoj regarding Child Health as a basis for planning an Extension Educational Programme in the area of health and sanitation	Ford Foundation	Instrument being prepared.
	(iv) Study of the feasibility of a selected constitution for organization of rural mahila mandals	Ford Foundation	Contacts with the population being established.
Foods and Nutrition	(i) Assessment of nutritional status of pre-adolescent girls	Ford Foundation	Anthropometric measurements of girls and boys were taken. Diet survey was made. Urine collection was made and analyzed for creatinine, thiamine, riboflavin and Vit. C.
	(ii) Research on nutritional status and requirements of pre-adolescent girls in village Asoj	Ford Foundation	A diet survey was made by questioner method and weightment method.
	(iii) Organization and management of the dietary department in the university residence halls	Ford Foundation	Personnel in the dietary departments was trained in the cooking methods and sanitation.

<i>Department</i>	<i>Title</i>	<i>Name of the Financing Agency</i>	<i>Remarks regarding the progress of the Scheme</i>
	(iv) Interrelationship of nutrients	Ford Foundation	Influence of the quality and quantity of dietary facts on the availability of protein from a wheat bengalgram diet in albino rats was assessed.
Child Development	Longitudinal Study of Indian Babies	PL 480, through I.C.M.R. and Ford Foundation	The project will be completed in May, 1970. Data has been collected and analysed. The report writing has commenced.
Clothing and Textiles	(i) Study of simulated laundry abrasion and its effects on important properties of textiles	University Grants Commission, New Delhi	Some parts for fabrication purchased. An extension of the project has been granted.
	(ii) Anthropometric study of pre-adolescent girls and adoption of the basic block of this size to various dresses	Ford Foundation	Anthropometric was continued by Miss Shashi Taneja.
	(iii) A comparative study of effect of light on strength characteristics of silks from different parts of India	Ford Foundation	Sound of physical properties was continued by Miss Baruah.

<i>Department</i>	<i>Title</i>	<i>Name of the Financing Agency</i>	<i>Remarks regarding the progress of the Scheme</i>
Home Management	(i) A study of the attitudes and existing practices of selected sample of 'Patidar Patels' on some issues related to dowry and marriage (ii) Guides for standards on the kitchen for urban and rural families	Ford Foundation	Project I-B Data has been collected and a part of it is ready in form of thesis.
	(iii) Housing values and housing satisfactions of families	Ford Foundation	Project No. II Phase I dealing with identification of existing practices and facilities in kitchen is complete. Phase II dealing with body measurements of urban women is continued.
	(iv) Performance characteristics of household appliances used by urban families for meal preparation	Ford Foundation	Project No. III Phase I dealing with seven housing values is complete. Project No. IV Preliminary experience to standardize the procedure and formulate the problem is complete. Data is further being analysed to find out the time taken for each of the appliance to heat to a specific quantity of water through a temperature.
Faculty of Social Work			
Social Work	Socio-Economic conditions and Activity Pattern of Retired Employees of Alembic Chemicals	Alembic Chemicals Ltd.,	The scheme is in progress.

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<i>Department</i>	<i>Title</i>	<i>Name of the Financing Agency</i>	<i>Remarks regarding the progress of the Scheme</i>
M. K. Amin Arts and Science College and College of Commerce, Padra			
Zoology	Histo-Chemical study of Diaphragm of female rate during pregnancy	University Grants Commission, New Delhi	The work is in progress.
Hindi	Critical Edition of 'Sant Priya' written by Sant poet Akhaji	University Grants Commission, New Delhi	The work is in progress.
Physics	" Study of Cermets "	Polytechnic Gujarat State Industrial Research Committee, Government of Gujarat	Research is in progress.

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CHAPTER VII—LECTURES AND DEPUTATIONS

1. Lectures

The following lectures were delivered under the auspices of the University, University Grants Commission's Scheme of Exchange of Teachers between the Universities and/or National Laboratories, etc.:

(1) Lectures under Tagore Chair in Humanities

Name of the Lecturer	Date	Subject
Dr. H. D. Sankalia, Fellow, Jawaharlal Nehru Memorial Fund, Deccan College Post-graduate and Research Institute, Poona	5-3-1970	Historical and Archaeological Study of the Epics and Puranas—Justification.
	7-3-1970	1. Archaeological Evidence and the Ramayana. 2. Application of Archaeological knowledge and dates to the Ramayana.

(2) Lectures under the Extra Mural Grant, U.G.C. Unassigned Grant Faculty of Arts

Professor J. C. Sandesara, Professor of Industrial Economics, University of Bombay, Bombay	January, 1970	4 lectures on problem of Monopoly and Contraction in India.
Dr. Kamlakant Pathak, Professor and Head, Department of Hindi, Nagpur University, Nagpur.	28-1-1970 to 30-1-1970	1. Maithili Sharan Gupta Ki Kavya Pravrutiya. 2. Chhayavadi Ki Kavita. 3. Nai Kavita. 4. Naya Sahitya Chintan. 5. Rasasidhanta Ka Adhunic Akhyan.
Professor D. T. Lakdawala, Director, Sardar Patel Institute of Economics, Ahmedabad	February, 1970	4 lectures on Public Finance and International Economics.
Dr. B. H. Kapadia, Reader and Head, Department of Sanskrit, Sardar Patel University, Vallabh-Vidyanagar	26-2-1970 to 28-2-1970	1. Agni in the Rigveda. 2. Soma in the Rigveda. 3. Uttar-Ram Charitam.
Dr. Rammurthi Tripathi, Reader and Head, Department of Hindi, Vikram University, Ujjain	4-3-1970	Rahsyavad.

Name of the Lecturer	Date	Subject
Professor Rajani Kothari, Director of the Centre for the study of Developing Societies, Delhi	6-3-1970 to 8-3-1970	1. Theorizing in Politics. 2. Recent developments in Political Theory. 3. Methodological issues in Modern Political Theory. 4. Critique of Political Theory as developed in the West. 5. New issues facing Political Theory. 6. Application to the New Nations.
Dr. R. K. Kaul, Professor and Head, Department of English, Rajasthan University, Jaipur	7-3-1970	Johnson's Preface to Shakespeare.

Faculty of Science

Dr. Srinivasan, Fisheries Department, Madras	11-6-1969	Fish Productivity in Madras State.
Dr. Krishnaswamy, Central Salt Research Institute, Bhavnagar	18-6-1969	Ion exchange resins.
Dr. H. D. Cremer, Director, Max Plan Institute, West Germany	13-12-1969	Algal Proteins.
Dr. C. W. Hassaltine, Chief, Fermentation Laboratory, Illinois, U.S.A.	13-12-1969	Fermented foods and Aflotoxins.
Professor J. J. Shah, Sardar Patel University, Anand	October, 1969	The Cells that transport food in plants.
Professor Mistry, Vallabh Vidyanagar	November, 1969	Plant and Components of Weather and Crop production.
Dr. T. V. Subbaiah, Senior Research Officer, Alembic Chemicals, Baroda-3	24-1-1970	Protein Biosynthesis.
Dr. J. J. Chinoy, Head, Department of Botany, Uni- versity School of Sciences, Ahmed- abad	4-2-1970	Role of ascorbic acid—I-II.

Name of the Lecturer	Date	Subject
Shri P. L. Ganju, Senior Research Officer, Alembic Chemicals, Baroda-3	10-2-1970	Semi-synthetic penicillin.
Dr. L. P. Mall, Head, Department of Botany, Vikram University, Ujjain	20-2-1970 21-2-1970	General Ecology and Ecosystem and its relationship. (Lecture and Demonstration at Pava- gadh). Plant Succession.
Shri C. T. Patel, Cotton Specialist, Government of Gujarat, Surat	25-2-1970	Story of Hybrid Cotton.
Dr. B. D. Pathak, Director, Geological Survey of Indian Groundwater Division, Jaipur	24-2-1970	Ground Water Geology of Gujarat.
Dr. J. D. Mensies, U. S. Soil Microbiologists, Depart- ment of Agriculture	15-10-1969	Auarentine test and examina- tion of moon rock.
Dr. M. V. Desai, Institute of Agriculture, Anand	12-12-1969	Current trends in plant patho- logy. National and local problem of plant pathology.
Dr. Umakanth Sinha, Department of Botany, Delhi Uni- versity	20-12-1969	Cascket regulate metabolism in <i>A. nidulans</i> .
Dr. T. V. Subbaiah, Alembic Chemical Works, Baroda	6-12-1970 13-2-1970 20-2-1970 27-2-1970	Microbial Genetics.
Dr. N. G. Mehta	13-2-1970	A model for the regulation of repressed synthesis.
Dr. N. K. Notani, Biology Division, BARC, Bombay	16-2-1970	The molecular basis of genetic recombination during bacterial transformation.

Name of the Lecturer	Date	Subject
Dr. Suresh Amin, Pathologist, Baroda	10-2-1970	Role of pathologists in medical profession.
Smt. I. Radhasanmukasundaran, Biochemistry Department, Madras University	21-2-1970	Temperature Sensitive mutants of <i>A. nidulans</i> .
Dr. Blakebrough	25-2-1970	Mass transfer in microbial sys- tems to scale up of microbial process.
Dr. M. S. Swaminathan, Indian Agricultural Research Institute, Delhi	19-2-1970	Genetic harvest of our bio- logical resources.
Dr. P. R. Mahdevan, Modular Laboratory, Biomedical, B.A.R.C., Bombay	18-1-1970	Genes and Proteins.
Dr. O. Siddiqui, Molecular Biology Division, T.I.F.R., Bombay	19-1-1970	Genes and Regulation.
Dr. T. V. Subbaiah, Alembic Chemical Works, Baroda	27-2-1970	Callwall Polymers.
Dr. (Smt.) Maharani Chakravorty, Department of Bio-chemistry and Biophysics, Banaras Hindu Uni- versity, Varanasi	19-1-1970	Hos-Virus Interaction.
Dr. L. M. Joshi, Mycology Division, I.A.R.I., Delhi	19-1-1970	Variability in reefflora of rusts of wheat.
Dr. M. J. Thirumalachar, Research Division, Hindustan Antibiotics, Pimpri, Poona	19-1-1970	Micro-organisms and their culti- vation.
Dr. M.R.S. Iyengar, Microbiological Research Labo- ratory, Alembic Chemical Works, Baroda	20-2-1970	Molecular transformations by microbes.
Professor P. P. Kane, Head, Physics Department, I.I.T., Bombay	4-12-1969 5-12-1969 6-12-1969	Experimental Nuclear Physics.

Name of the Lecturer	Date	Subject
Dr. N. K. Chakrabarti, Joint Director, Central Statistical Organization, New Delhi	August, 1969	Some aspects of the structure of Indian Economy as revealed through National Sample Survey.
Dr. S. M. Shah, Head, Department of Mathematics and Statistics, Vallabh Vidyanagar	25-12-1969 to 28-12-1969	Design of Experiments.
Shri D.V.N. Sharma, Director Operation, Research Group, Sarabhai Management, Baroda	10-2-1970 11-2-1970 16-2-1970 19-2-1970	Market Research.
Dr. K. S. Yavalkar, Agronomist, Nagpur	5-2-1970	Insecticides and health hazards.

Faculty of Education and Psychology

Professor C. C. Shah	5-3-1970 to 7-3-1970	Series of 6 talks on Educational Development in India.
Dr. K. G. Desai	9-3-1970	Two lectures on Experimental Psychology.
Dr. T. V. Srinivasiah	10-3-1970 11-3-1970	Motivation in Industry. Personnel Selection.
Shri P. M. Mathews	11-3-1970	Role of Social Scientist in Industry.

Faculty of Commerce

Dr. S. B. Mahabal, Dy. Chief Officer, Agricultural Credit Department, Reserve Bank of India, Ahmedabad	18-2-1970	Agricultural Finance in India.
Dr. V. S. Vyas, Professor of Economics, Sardar Patel University, Vallabh Vidyanagar	24-2-1970	Agricultural Taxation in India.
Shri J. P. Shah, Personnel Adviser, Gujarat State Fertilizers, Bajjuva	26-2-1970	Policies and procedures in promotion of employees in Public enterprise in India.

Name of the Lecturer	Date	Subject
Shri M. R. Raman, Production Director, Sarabhai Chemicals, Baroda	28-2-1970	Production planning.
Faculty of Medicine		
Professor B. C. Johnson, University of Oklahoma	20-2-1970	Biochemistry of Nutrition.
Dr. P. M. Dalal, Professor of Medicine, Topiwala National Medical College and B.Y.L. Nair Charitable Hospital, Bombay	26-2-1970	Cerebrovascular Diseases.
Dr. M. V. Sant, Director, All India Institute of Physical Medicine and Rehabilitation, Bombay	12-3-1970	Rehabilitation.
Dr. B. B. Gaitonde, Professor of Pharmacology, Grant Medical College, Bombay	27-3-1970 28-3-1970 29-3-1970	1. Chemoreceptors in the Central Nervous System. 2. Pharmacology of Urinary Bladder, 3. Receptors of the Uterine Smooth Muscle.

Faculty of Technology and Engineering

Shri J. G. Bedhe, Chairman, Civil Engineering Division, Institution of Engineers (India), Bombay	10-9-1969	Bio-Engineering.
Shri R. N. Joshi, Director, M/s. S. B. Joshi and Co. Ltd., Bombay	11-9-1969	1. Koyna Project 2. Unemployment of Engineers.
Professor V. T. Chiplunkar, Professor of Physics, Institution of Science, Bombay	3-10-1969 and 4-10-1969	Plasma Physics.
Dr. K. N. Kotadia, Reader, University School of Sciences, Gujarat University, Ahmedabad-9	21-10-1969	Ionosphere.

Name of the Lecturer	Date	Subject
Mr. Charles Correa, Architect, Bombay	13-1-1970	Urban Renewat.
Dr. H. R. Sharma, Research Officer, U.P. Irrigation Research Institute, Roorkee	3-3-1970 and 4-6-1970	1. Description below Hydraulic Studies. 2. Technique of Hydraulic Model Studies.
Dr. A. P. Kanvinde, Architect, New Delhi	7-2-1970	University Campus Planning.
Dr. Ram Murthy, Assistant Professor I.I.T., Kanpur	7-3-1970	1. EHU Transients. 2. Solid State Relaying.
Faculty of Fine Arts		
Kanti Sen Shroff	7-3-1970	Use of industrial materials in Art.
Chaitanyadeva	August 1969	The Spiritual aspect in Indian Art.
Dr. Still	19-12-1969	Visual perception.
Faculty of Home Science		
Dr. G. C. Mathur from N.B.O., Delhi	September, 1969	Housing situation in India today and Government Housing Plans.
Dr. J. F. Bulsara, Bombay	December, 1969	Urbanisation and its impact on the family in India.
Kum. Malani Indira, N.C.E.R.T., New Delhi	9-2-1970 to 12-2-1970	1. Cognitive development. 2. Historical perceptives. 3. Piaget cognitive develop- ment in early childhood. 4. Role of the pre-school in cognitive development. 5. Review of research in cogni- tion and future prospectus for research with special reference to Indian scene.
Kum. Gulbai, B.M. Institute, Ahmedabad	18-2-1970	Education for mentally retarded children.

Name of the Lecturer	Date	Subject
Dr. Swayampathi, C/o. Suhrid Geigy, Baroda	13-3-1970	Optical Brighteners.
Faculty of Social Work		
Miss Dorothy Baker, Principal, Nirmal Niketan, Bombay	13-12-1969	Values in Social Work.
Dr. Perin Vakharia, Special Officer, Social Service Bureau, United Nations, New York	17-12-1969	New Trends in Social Work.
Swami Atmasthananda, President, Ramkrishna Ashram, Rajkot	16-1-1970	Social Service and the Ram- krishna Mission.
Mr. Pollock, Ford Foundation, New Delhi	10-3-1970	Communication and Inter- personal relationship.
Dr. J. F. Bulsara, Member, Central Social Welfare Board, Bombay	13-3-1970	National Policy for Child Welfare.
Dr. (Smt.) Jyotsna H. Shah, Director, Central Bureau of Cor- rectional Services, New Delhi	18-3-1970	Recent Trends in the field of Child Welfare.
Shri J. N. Kaul, Director, SOS Children's Village of India, New Delhi	18-3-1970	SOS Village Programme for Children in India.
Padmavibhushan Kakasaheb Kalelkar, Delhi	24-3-1970	1. Gandhian approach to Social Work. 2. Concept and role of Social Workers—A Personal View.
Faculty of Law		
Shri A. R. Bakshi, Retired Judge of the Gujarat High Court	18-1-1970 to 23-1-1970	Six lectures on Jurisprudence.
College of Indian Music, Dance and Dramatics		
Shri Sunil Bose, Director, T.P.E.S. All India Radio, New Delhi	7-3-1970	Evolution of Thumari.

Name of the Lecturer	Date	Subject
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Sanskrit Mahavidyalaya

Shri Chimanlal Shastri Surat	2-3-1970	शुद्धद्वैते जगतः सत्यत्वम्
Pandit Gajanan K. Godse, Varanasi	3-3-1970	श्रौतसाहित्ये शतपथब्राह्मणमहत्त्वम्

2. Deputation to Conferences

The following members of the University Staff were deputed to attend Conferences, Seminars, etc. shown against their names, as delegates of the University :

Name of the members of the staff	Name, place and dates of the Conferences, Seminars etc.
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Faculty of Arts

Shri M. M. Dadi, (Economics)	9th Indian Econometric Conference held at Patna, December, 1969.
Shri B. B. Patel, (Economics)	52nd All India Economic Conference held at Patna, December, 1969.
Professor K. S. Desai, (Political Science)	A Seminar on "Local Self Government" held at Mussoorie.
Shri H. C. Shukul, (Political Science)	A seminar on "American Political System" held at Hyderabad on 5-1-1970 to 16-1-1970.
Dr. K. C. Panchanadikar, and Dr. (Smt.) J. M. Panchanadikar (Sociology)	Participated in the Golden Celebrations of the Department of Sociology, University of Bombay in November, 1969.
Professor S. C. Misra, (History)	1. Gujarat Itihas Parishad 5th Session held at Rajkot from 28-2-1970 to 1-3-1970. 2. Seminar on Medieval Epigraphy held at the Muslim University, Aligarh from 7-2-1970 to 9-2-1970.
Dr. V. K. Chavda, (History)	31st Session of the All India History Congress held at Varanasi from 28-12-1969 to 30-12-1969.
Professor A. G. Javadekar, (Philosophy)	14th Session of the Akhil Bharatiya Darshan Parishad held at Jodhpur in December, 1969.
Professor V. Y. Kantak, (English)	1. U.G.C. Seminar on Gandhi organised by the Mysore University in December, 1969.

Name of the members of the staff	Name, place and dates of the Conferences, Seminars etc.
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Dr. J. D. Birje-Patil, (English)	2. Seminar on Australian and Indian Literature organised by the Indian Council for Cultural Relations at Delhi in January, 1970. 1. Seminar on American Literature arranged by U.S.E.F.I. at Nagpur in December-January, 1969-70. 2. Seminar on Fiction organised by U.S.E.F.I. at Batala in Punjab in February, 1970.
Dr. S. H. Joshi, (Gujarati)	Gujarati Sahitya Parishad held at Junagadh on 26, 27 and 28th December, 1969.
Dr. M. G. Gupta, (Hindi)	Seminar on "New trends of Hindi Literature" organised by Parishad Literary Society of Bombay on 13-2-1970.
Professor A. N. Jani and Dr. S. G. Kantawala, (Sanskrit)	All India Oriental Conference, Jadavpur University, Calcutta from 29-10-1969 to 31-10-1969.
Dr. S. G. Kantawala, (Sanskrit)	Kalidasa Samaroha, Vikram University, Ujjain from 19-11-1969 to 24-11-1969.
Faculty of Science	
Professor C. V. Rama- krishnan, (Bio-Chemistry)	1. Summer School in Nutrition at Lady Irvin College, Delhi in May, 1969. 2. Summer School in Nutrition at Ludhiana, Agricultural University in June, 1969.
Dr. S. J. Bedi, (Botany)	Symposium on Deccan Trap Country, Poona in September, 1969.
Professor S. M. Sethna, (Chemistry)	Indo-U.S. Conference on Chemical Education at Srinagar in June, 1969.
Dr. P. K. Bhattacharya, (Chemistry)	1. Indian Science Congress and Annual Convention of Chemists at Kharagpur in December, January, 1969-70. 2. Atomic Energy Chemistry Symposium at Chandigarh in September, 1969.
Dr. K. N. Trivedi, (Chemistry)	Annual Convention of Chemists at Kharagpur in December-January, 1969-70.

<i>Name of the members of the staff</i>	<i>Name, place and dates of the Conferences, Seminars etc.</i>
Shri V. M. Shah and Dr. O. P. Goyal, (Mathematics)	35th Annual Conference of the Indian Mathematical Society at Nagpur in December, 1969.
Professor V. V. Modi, (Microbiology)	1. All India Microbiologists Conference at HISSAR in November, 1969. 2. Conference on Sub-tropical and Tropical Fruits held at London in September, 1969. 3. International symposium on Mango Culture at Delhi in June-July, 1969. 4. Symposium on 'Macromolecules in storage and transfer of biological information' at Bhabha Atomic Research Centre at Bombay during December, 1969.
Shri R. C. Shah, (Physics)	Indian Science Congress at Kharagpur in January, 1970.
Shri D. R. Gadekar, (Petroleum Geology)	4th Session Marathi Vignyan Parishad at Nasik in December, 1969.
Dr. A. K. Mattoo, (Microbiology)	International Symposium on Mango Culture at Delhi in June-July, 1969.

General

Professor S. M. Sethna was elected Vice-President of the Institution of Chemists (India) for the year 1970 and also Hon. Editor, Journal of Indian Chemical Society.

Professor V. V. Modi attended the Conference on Sub-tropical and Tropical Fruits in London. He also visited various Research Institutions at London, Edinburgh and Liverpool.

<i>Name of the members of the staff</i>	<i>Name, place and dates of the Conferences, Seminars etc.</i>
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Faculty of Education and Psychology

Professor D. M. Desai (Education)	1. Seminar on the Implementation of the Recommendations of Kothari Commission at Aligarh, 15th to 17th December, 1969.
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<i>Name of the members of the staff</i>	<i>Name, place and dates of the Conferences, Seminars etc.</i>
	2. Meeting of the Inter-University Board of India and Ceylon at Ma'urai, 6th to 8th February, 1970.
Professor A. S. Patel (Psychology)	All India Science Congress, Kharagpur, 2nd to 8th January, 1970.
Professor M. B. Buch (Education)	Seminar on Educational Planning and Administration for Officers of the State, Ahmedabad, 3rd to 8th December, 1969.
Dr. B. P. Lulla (Education)	Meeting of the Working Group on Principles of Preparation and Evaluation of Text-Books in History, New Delhi, 9th to 14th March, 1970.
Dr. G. B. Shah (Education)	Zonal Seminar on Programmed Learning, Vallabh Vidyanagar, 23rd June to 2nd July, 1969.
Shri G. R. Sudame (Education)	Workshop on Formulation of a Common Syllabus of Audio-Visual Education in the B.Ed. Teacher Training Colleges of India, New Delhi, November 1969.
Smt. S. J. Mehta (Education)	Seminar for the Method Masters in English organised by N.C.E.R.T. and the Regional College of Education, Bhopal, at Cambay, 20th to 29th August, 1969.

Faculty of Commerce

Seminar on problems and prospects of educated youth in Gujarat organised by the Department of Economics, Sardar Patel University, Vallabh Vidyanagar, 2nd and 3rd March, 1970.

Faculty of Medicine

15th All India Congress of Obstetrics and Gynaecology at Goa, 27th to 29th December, 1969.

Faculty of Technology and Engineering

Shri V. L. Gadgeel (Metallurgy)	Annual Technical meeting of the Indian Institute of Metals held at Bombay, 14th to 18th November, 1969.
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<i>Name of the members of the staff</i>	<i>Name, place and dates of the Conferences, Seminars etc.</i>
Dr. M. H. Vasavada (Mathematics)	Seminar on Functional Analysis at I.I.T., Kanpur, 12th to 21st December, 1969.
Professor M. B. Achwal (Architecture)	Housing Convention organised by All India Institute of Architects, New Delhi, 26th to 29th December, 1969.
Dr. A. P. Verma (Mathematics)	Fourteenth Congress on Theoretical and Applied Mechanics, ISTAM held at Kurukshetra, 26th to 28th December, 1969.
Professor J. S. Dave and Dr. A. M. Talati (Chemistry)	Convention of Chemists-Indian Chemical Society, Kharagpur, 28th to 31st December, 1969.
Dr. A. P. Verma (Mathematics) Dr. J. S. Dave and Dr. A. M. Talati (Chemistry)	57th Session of Indian Science Congress held at Kharagpur, 3rd to 9th January, 1970.
Dr. R. C. Desai (Electrical Engineering)	Third Hawaii International Conference on System Sciences held at Honolulu, Hawaii, U.S.A., 14th to 16th January, 1970.
Professor S. M. Sen (Electrical Engineering)	Tenth Quinquennial Conference held at Madurai, 6th to 8th February, 1970.
Dr. J. R. Pandya (Physics)	Symposium on Material Science Research held at National Aeronautical Laboratory, Bangalore, 24th to 28th February, 1970.
Dr. R. C. Desai and Shri Y. K. Kardile (Electrical Engineering)	All India Convention on Instrumentation and Automation held at Birla Institute of Technology, Ranchi, 7th to 10th March, 1970.
Faculty of Home Science	
Kum. Navaz Bhavnagari Kum. Vidya Dave Kum. Jyoti Parikh Smt. Aruna Dave	Annual Conference of the Indian Association of Pre-School Education, Indore., 26th to 28th December, 1969.
Smt. Parul Dave (Child Development)	Conference-cum-workshop on a developing condensed course for teacher educators, organized by N.C.E.R.T. at Delhi, 16th to 21st March, 1970.

<i>Name of the members of the staff</i>	<i>Name, place and dates of the Conferences, Seminars etc.</i>
Faculty of Social Work	
Kum. I. M. Patel, (Social Work)	1. Central Board for Worker's Education sponsored by Ministry of Labour and Rehabilitation, Government of India, at New Delhi, November, 1969. 2. XVth National Conference of Indian Council of Social Welfare held at Ahmedabad, January 1970. 3. IInd Regional Seminar on National Service Scheme, held at Bombay, February 1970.
Shri S. K. Majmudar	XVth National Conference of Indian Council of Social Welfare held at Ahmedabad, January 1970.
Dr. V. B. Shah	Workshop on Curriculum Development for mentally retarded children in India, held at Varanasi (U.P.), February 1970.
Shri I. P. Shelat	1. Antar Bharti Shram Sanskar Chhavani organised by Maharogi Seva Samiti at Somnath, May, 1969. 2. XVth National Conference of Indian Council of Social Welfare, held at Ahmedabad, January 1970 3. IInd Regional Seminar on National Service Scheme, held at Bombay, February 1970.
Shri J. K. Motwani	1. XVth National Conference of Indian Council of Social Welfare, held at Ahmedabad, January 1970. 2. National Conference on Population Policy, held at Delhi, December, 1969.
M. K. Amin Arts and Science College and College of Commerce, Padra	
Shri R. R. Joshi (Mathematics)	6th Annual Conference of the Gujarat Ganit Mandal, 12th to 14th November, 1969.

CHAPTER VIII—FACULTY OF ARTS

1. Some New Experiments

With a view to making the study of Linguistics as practical as possible, the Department of Linguistics with the help of the Department of Archaeology and Ancient History arranged a study tour for dialect study at Champaner.

The Department of English in collaboration with the Lion Club, Baroda organized a special coaching class in English for graduates seeking professional careers in industrial and other establishments.

2. Courses of Studies

There was provision for the following courses during the year:

- | | |
|---------------------------------|--|
| (1) B.A., M.A., Ph.D. | Archaeology and Ancient Indian Culture, Economics, English, Gujarati, Hindi, History, Linguistics, Marathi, Philosophy, Pali, Political Science, Psychology, Sanskrit and Sociology. |
| (2) B.A. and M.A. | Persian |
| (3) B.A. (Sub.) and M.A. (Sub.) | Pali, Prakrit and Urdu. |
| (4) B.A. (Sub.) | Education, Mathematics and Statistics. |
| (5) B. Lib. Science | Library Science |
| (6) Diploma | German and Russian Languages. |
| (7) Certificate Courses | German and Russian Languages. |

Linguistics was permitted to be offered as an allied subject with Philosophy at B.A.

In all subjects S.Y.B.A. was bifurcated from T.Y.B.A. Students appeared in two papers of the Major subject, along with two papers of the subsidiary subject and in compulsory English.

At the Post-graduate level the Faculty accepted the holding of the M.A. Examination in two parts and students will take examination accordingly in the year 1971.

3. Number of Students

The number of students enrolled in the various classes at the commencement of the year 1969-70 was as under :

Class	Men	Women	Total
1. Certificate Course in German	65	13	78
2. Certificate Course in Russian	14	3	17
	79	16	95
3. Diploma Course in Russian	7	2	9
4. Advanced Course in Russian	2	1	3
5. Diploma Course in German	44	3	47
	53	6	59
6. F.Y.B.A.	304	410	714
7. S.Y.B.A.	186	191	377
8. T.Y.B.A.	189	260	449
	679	861	1540
9. Library Science Degree	12	5	17
10. Jr. M.A.	79	53	132
11. Sr. M.A.	76	50	126
	155	103	258
12. Ph.D.	17	1	18
	995	992	1987
Grand Total	995	992	1987

4. Staff

(a) During the year, the staff of the Faculty consisted of 9 Professors (three of whom are in Senior Scale), 14 Readers, 41 Lecturers, 21 Assistant Lecturers, 3 Part-time Lecturers, one Hon. Lecturer, 19 class III other staff including technicians and 21 class IV staff. The teachers of the Faculty carried out assignments in other Faculties and Institutions where Humanities and Social Sciences are included in courses.

(b) New Appointments

- (i) Dr. K. N. Reddy as Reader in Economics
- (ii) Dr. J. D. Birje Patil as Reader in English
- (iii) Dr. P. N. Jha as Lecturer in Hindi
- (iv) Shri R. N. Talati as Lecturer in Hindi
- (v) Kumari U. R. Patel as Lecturer in History
- (vi) Mr. Birger Maiwald as Honorary Lecturer in German.

(c) Teachers who left

Name	Designation	Date of leaving	Reasons of leaving
(1) Shri M. L. Rehman	Lecturer in Persian	21-3-1970	Retirement (Expired on 31-3-1970)
(2) Shri C. M. Patel	Lecturer in Economics	3-9-1969	For better prospects.

5. Professional Growth of the Staff

(a) Published Articles/Papers in Indian and/or Foreign Journals of repute:

Name	Title of Articles or papers	Name of the Journal wherein published with month of Publication
Archaeology Department		
(1) Professor R. N. Mehta	(i) Marki Athawa Murki	Swadhyay Book VI. No. 2
	(ii) Nagarkhanda	Journal of M. S. University of Baroda, Vol. XVII, April, 1969.
	(iii) Ring Wells	Journal of M. S. University of Baroda, Vol. XVII, No. 1, April, 1969.
	(iv) Silver Coins of Sarva and Sas Bhattakha	J.N.S.I. Vol. XXXI.
	(v) Itihasni Shodhama	Vidyapith, September-October, 1969.
	(vi) Nagarkhanda Samayankan	Swadhyaya Book VII, No. 2.
(2) Dr. K.T.M. Hegde with Mr. B. Allachin	The Background of Early Man in the Narmada Valley, Gujarat	Journal of M. S. University of Baroda, Vol. XVII, No. 1, April 1969.
Economics Department		
(3) Professor V. N. Kothari and Dr. I. S. Gulati	Land Tax as an Incentive for Better Land Utilization	Artha-Vikas, July, 1969.

Name	Title of Articles or papers	Name of the Journal wherein published with month of Publication
Political Science Department		
(4) Shri Thomas Pantham	Review of Party Democracy by S. H. Barnes	Indian Journal of Political Science—July to September, 1969.
English Department		
(5) Professor V. Y. Kantik	(i) An Approach to Shakespeare Comedy	Shakespeare Survey, 22 Cambridge University Press, 1970.
	(ii) Art and Artifice in American Poetry	Indian Essays in American Literature—1969.
(6) Dr. J. D. Birje-Patil	(i) Marriage Contract in Measure for Measure	Shakespeare Studies Vol V, U.S.A.
Gujarati Department		
(7) Dr. R. M. Patel	(i) Purvalapana Pras	Swadhyaya Book 6, No. 3.
	(ii) Bhavvaijayanti Maitri	Professor B. K. Thakore Adhyayan, Grantha, October 1969.
(8) Dr. Y. J. Tripathi	Professor B. K. Thakore & Samsmarano	Professor B. K. Thakore Adhyayan Grantha
(9) Dr. H. M. Trivedi	(i) Premmo Divas Sone-toni Pathantar Charcha	Professor B. K. Thakore Adhyayan Grantha.
	(ii) Professor B. K. Thakore Kalanukram	—do—
(10) Shri M. D. Desai	(i) Kavyabhavan	Swadhyaya, April 1969.
	(ii) Vagarthana Upasak Professor B. K. Thakore	Professor B. K. Thakore Adhyayan Grantha.
(11) Dr. S. H. Joshi and Dr. J. D. Birje-Patil	(i) Life Against Death —Poetry of Ravji	Books Abroad, University of Oklahoma, U.S.A., September 1969,

Name	Title of Articles or papers	Name of the Journal wherein published with month of Publication
	(ii) Contemporary Gujarati Literary Scene	Indian Literature Sahitya Akademi, Delhi. September, 1969.
Hindi Department		
(12) Dr. M. G. Gupta	(i) Premchand Ke Upanyaso me Samajic Samasya Ka Swarup	Gujarat Vidyapith Patrika, February, 1970.
	(ii) Sant Kavi Akhaki Hindi Vani	Published by Sardar Patel University "Gujarat Ke Sant Ki Hindi Vani" March, 1970.
	(ii) Pathik Aur Am	'Smruti Pushpa', March 1970.
(13) Dr. D. S. Shukla	Do Bhinna Yugoke Sahiyaka Mulankan	'Smruti Pushpa', March 1970.
(14) Dr. P. N. Jha	Prasodottar Natya Sahitya	'Smruti Pushpa', March 1970.
(15) Dr. (Kum.) P. R. Bafna	(i) Surti Mishra Ki Durlabh Krityan	—do—
	(ii) Nayi Kavita-Kuch Vichar	—do—
(16) Dr. B. D. Sharma	(i) Santa Kayi Kripa Nivas Swami Ke Hindi Grantha	Sammelan Patrika, Allahabad.
	(ii) Nayi Kavita	'Smruti Pushpa', March 1970.
(17) Shri R. N. Talati	आ. विष्णुस्वामी एवं ब्रह्मभार्य	ज्ञानदा Research Magazine, September 1969.
Sanskrit Department		
(18) Professor A. N. Jani	(i) An Exposition of the Rasa Theory as in the Rasa Kaumudi	Journal of the M. S. University, Baroda, Vol. XVII.
	(ii) A Tribute to Prof. Walther Schybring	"Jain", Vol. 66, No. 46, December, 1969.

Name	Title of Articles or papers	Name of the Journal wherein published with month of Publication
(19) Dr. S. G. Kantawala	(i) Mahakavi Bhasa (in Sanskrit)	Surabharati, 'published' by the Sanskrit Mahavidyalaya, Baroda, 1969.
	(ii) The vocable ghrtasnu in the Rigveda 4.2.3	Journal of the M. S. University, Baroda, Vol. XVII.
(b) Published Books and Brochures:		
(1) Dr. K. C. Panchanadikar	Determinants of social structure and social change in India	Popular Prakashan, Bombay, February 1970.
(2) Dr. V. K. Chavda	Harsha by V. D. Gangal—Translated in Gujarati	N.B.T. India, September 1969.
(3) Shri M. L. Rehman	Persian Literature in India during the time of Jahangir and Shahjahan	M. S. University Press, March 1970.
(4) Dr. S. H. Joshi	Kathopakathan	R. R. Sheth Ni Company, Bombay-2, June 1969.
(5) Dr. H. M. Trivedi (Co-ed)	Professor B. K. Thakore Adhyayan Granth Professor B. K. Thakore ni Dinki, Part I	M. S. University of Baroda, October 1969. —do—
(6) Dr. Y. J. Tripathi	Tamaso Ma-Jyotir gamaya	Uday Prakashan, Baroda, February, 1970.
(7) Dr. R. M. Patel (Ed.)	Batrisi	Gujarati Department, M. S. University, Baroda, March, 1970.
(8) Dr. M. G. Gupta	(i) Bharatiya Sanskriti Avam Sahitya	Kala Prakashan, Delhi, September, 1969.
	(ii) Sravan Akhyan	M. S. University, Baroda, February, 1970.
(9) Dr. (Kum.) P. R. Bafna	Panta Kavya (Shodh Prabandh)	Sahitya Sadan, Dehradun, September, 1969.

(c) Papers presented at All India level Seminars, Conference, etc.

Name	Title of the paper	Name of the Seminar or Conference
(1) Professor V. N. Kothari	(i) Problems of Educated unemployed in Gujarat	Seminar at the Sardar Patel University, February, 1970.
	(i) Monopoly and Restrictive practices in India	Seminar at the Bombay University, March, 1970.
(2) Professor V. Y. Katak	Gandhi and Tolstoy	Seminar on Gandhi at the Mysore University.
(3) Dr. J. D. Birje Patil	Value and Destiny of Man in Robinson's Poetry	Seminar on American Literature at Nagpur, December-January, 1969.
(4) Shri M. M. Dadi	Inter-state Difference in Income, Productivity and Industrial Structure	Indian Economic Association Conference, November, 1969.
(5) Shri B. B. Patel	Inter-District Disparities in Living Standard of Agricultural Labour in Gujarat	—do—
(6) Professor M. B. Desai	Gandhiji and Village Economy	Seminar on Gandhiji's Economic Thought at Surat, January, 1970.
(7) Professor K. S. Desai	Panchayati Raj in Gujarat—Problems and Prospects	All India Seminar on Local Government, National Academy of Administration, Mussorie
(8) Professor A. G. Javadekar	(i) Presidential address	14th Session of Akhil Bharatiya Darshan Parishad at Jodhpur in December, 1969.
	(ii) Two Lectures under Dr. R. D. Ranade Memorial Lecture Series	Poona University, Poona.
(9) Shri D. D. Mahulkar	An Algorithmic Approach to Syntactic Analysis	Communications Research Centre, London.

Name	Title of the paper	Name of the Seminar or Conference
(10) Professor A. N. Jani	Study in the Geneology of the Haihaya Kings	All India Oriental Conference, Jabalpur.
(11) Dr. S. G. Kantawala	(i) A comparative study of the Hymn to Aranyani in the Rigveda and the Taittiriya Brahman	—do—
	(ii) Union Gem Episode in the Vikramorvashiyam	Kalidasa Samaroha, Vikram University, Ujjain, November, 1969.
(12) Sarvashri S. D. Joshi and P. J. Patel	Status Seekers—their socio-economic background and its effect on their performance and comments—a case study	9th Sociological Conference at Delhi, November, 1969.

(d) Research work done by teachers of their own without any financial assistance from the University or any outside Agencies :

(1) Shri R. M. Pancholi	Critical Theory of Mathew Arnold.
(2) Shri R. K. Raval	English Romantic Poetry and Painting : Some analogues.
(3) Dr. M. G. Gupta	A critical edition of Rama Rasamrita Sindhu of Kripa Nivas.
(4) Professor A. N. Jani	(i) Preparing text and translation of the Kalika Purana. (ii) Preparing a critical edition of the Sahitya Vidyadhari.
(5) Dr. S. G. Kantawala	Research in the fields of Vedic Studies, Puranic Studies and Classical Sanskrit.
(6) Dr. V. K. Chavda	(i) A Select Bibliography of Gujarat, its History and Culture 1600-1857. (ii) Col. Alex. Walker—A mission of peace in Gujarat.
(7) Shri D. H. Mohite	A Study of the Election of Baroda Municipal Corporation, June 1968.
(8) Professor A. G. Javadekar	Articles on Vaisesika Philosophy.

- (9) Shri D. D. Mahulkar Mathematical Linguistics.
 (10) Dr. D. S. Shukla A critical study of Hindi works on Alankara Shastra produced in Gujarat.

7. Library

Some Departments maintain small Departmental Library for the use of the staff and research students. The students and the staff of the Faculty make use of the Shrimati Hansa Mehta Library which is on the premises. The Faculty Central Hall is currently being used as an annexe of the University Library.

8. Museum, Laboratory, Studios, Workshops etc.]

The following is the statement of the cost of equipments :

Sr. No.	Item	Cost of equip-ment as on 1-4-1969	Cost of equip-ment written off during the year	Cost of equip-ment added during the year	Cost of equip-ment as on 31-3-1970
1	2	3	4	5	6
		Rs.	Rs.	Rs.	Rs.
(1)	Museum	4533-98	—	—	4533-98
(2)	Studio	15320-40	—	—	15320-40
(3)	Drawing Equipment	1806-75	—	—	1806-75
(4)	Deadstock	63138-17	—	—	63138-17
(5)	Excavation Equipment	1622-05	—	—	1622-05
		<u>86421-35</u>	<u>—</u>	<u>—</u>	<u>86421-35</u>

9. Faculty Publications

- (1) The Hindi Department published "Smruti Pushpa", a research journal containing critical and scholarly articles.
 (2) The M. S. University Journal (Humanities) was published under the editorship of Professor A. G. Javadekar, Head of the Philosophy Department.
 (3) The Economics Society brought out a magazine 'Amateur Economist'.

10. Distinguished Visitors during the Year

- (1) Dr. Pitkin, President of Goddard College, Palinfield, Vermont, U.S.A. Visited the Department of Archaeology.
 (2) Monseieur M. Kebaili, Consul General for France Visited the Department of Archaeology.

- (3) Dr. Theodore W. Wright, Associate Professor of Political Science, State University of New York Visited the Department of History and gave a talk to B.A. and M.A. students on "Objectivity and Nationalism in the writing and teaching of History" on 14-2-1970.
 (4) Professor Bcoadbent, from England Visited the Department of English and conducted a seminar on "Death by Water" and lectured to the students of the Department on the Modern Pastoral, December 196

11. Other Important Events

(1) An exhibition on the finds of Dhatwa, Jokha, Champaner, Junagadh and Devnimori organised by the Department of Archaeology and Ancient History was inaugurated by Shri V. R. Mehta, I.A.S. Secretary, Education and Labour Department, Government of Gujarat on 19th November, 1969.

(2) Professor M. B. Desai, continued to work as Vice-President on the Board of Directors of the State Bank of India, Ahmedabad Circle; he also worked on the Second Central Wage Board for Cotton Textile Industry, Union Ministry of Labour and Employment, and on the Editorial Board of the Indian Journal of Agricultural Economics, Bombay.

(3) Professor K. S. Desai, worked as Chairman for the two sessions of the working group on Local Government (Rural) at the Mussoorie Seminar on Local Government.

(4) Professor S. C. Misra presided over the 5th session of the Gujarat. Itihas Parishad at Rajkot in February-March, 1970 and delivered Presidential address on "The Indian Historian and his Craft."

(5) The Shakespeare Society of the English Department presented the following plays :

- (i) 'The Crucible' by Arthur Miller at Ahmedabad.
 (ii) 'Arms and the Man' by Bernard Shaw " "
 (iii) 'Pillars of Society' by Ibsen at Baroda.
 (iv) 'See How They Run' by Philip King " "

(6) Professor B. K. Thakore Centenary Programme was arranged on 23rd October, 1969 under the Chairmanship of Shri Umashanker Joshi, Vice-Chancellor, Gujarat University. Among the distinguished speakers were Shri Sundaram, Shri Anantrai Raval and Shri Y. P. Shukla. On this occasion two books (i) Professor B. K. Thakore Adhyayan Grantha and (ii) Professor B. K. Thakore-ni Dinki (Diary), Part I were published.

CHAPTER IX—FACULTY OF SCIENCE

1. Some New Experiments

(1) A new experiment on 'Hydroponikes' is started in the Department of Botany.

(2) Marks for periodic examinations and class work will be considered from the session commencing from July 1970 in the M.Sc. Biochemistry, Microbiology and Physics classes; 30% of marks of these are to be considered as in the annual examination which will be only for the remaining 70%.

2. Courses of Studies

(a) There is provision for teaching the following courses :

- (1) B.Sc., M.Sc. and Ph.D. Botany, Chemistry, Geography, Geology, Mathematics, Physics, Statistics and Zoology.
- (2) M.Sc. and Ph.D. Biochemistry and Microbiology.
- (3) M.Sc. (Applied Geology) One year course after M.Sc. (Geology).
- (4) Pre-Medical One year course after Preparatory Science.
- (5) Diploma in Laboratory Techniques Two years course after S.S.C.E.

(b) New courses introduced during the year :

(1) A course on the Quantum Mechanics in the M.Sc. Previous Examination instead of at the final year and a course of Advanced Quantum Mechanics at the M.Sc. Final Examination in Physics.

(2) Two new optional papers viz. (i) Demography and (ii) Advanced Operations Research at the M.Sc. Examination in Statistics.

3. Number of Students

The number of men and women students on roll in the various classes in the year 1969-70 was as under :

Class	Boys	Girls	Total
Diploma in Laboratory Techniques			
First year			
Second year	5	—	5
Pre-Medical	2	—	2
F.Y.B.Sc.	111	13	124
S.Y.B.Sc.	297	115	412
T.Y.B.Sc.	232	91	323
M.Sc. (Previous)	201	86	287
M.Sc. (Final)	112	44	156
M.Sc. (Applied Geology)	103	39	142
Ph.D.	4	—	4
	52	8	60
Total	1119	396	1515

4. Staff

(a) Present Position :

The staff of the Faculty consisted of 13 Professors (three of whom are in Senior Scale), 26 Readers, 63 Lecturers, 66 Assistant Lecturers, 89 Class III and 72 Class IV employees. The teachers of the Faculty carried out teaching assignments in other Faculties and Institutions of the University, where science subjects are included in their courses, e.g. Preparatory Unit for Science, Faculty of Arts, Faculty of Commerce, Faculty of Technology and Engineering, Faculty of Home Science, College of Indian Music, Dance and Dramatics and Polytechnic.

(b) New appointments :

Sr. No.	Name	Designation
(i)	Professor S. W. Dharmadhikari	Professor of Statistics
(ii)	Dr. P. J. Dave	Reader in Microbiology
(iii)	Dr. V. P. Bhatt	Reader in Physics
(iv)	Shri S. B. Desai	Lecturer in Microbiology
(v)	Dr. (Kum.) M. S. Shah	Lecturer in Physics
(vi)	Dr. C. M. Patel	Lecturer in Mathematics
(vii)	Shri B. C. Kundhawala	Lecturer in Statistics
(viii)	Dr. Bonny Pillo	Lecturer in Zoology

(c) Teachers who left the University :

Sr. No.	Name	Designation	Reason
(i)	Professor U. N. Singh	Professor of Mathematics	For better prospects
(ii)	Shri S. D. Manerikar	Reader in Mathematics	Retired
(iii)	Dr. M. D. Dumasia	Lecturer in Microbiology	To go abroad
(iv)	Dr. (Smt.) D. V. Shah	Lecturer in Microbiology	To go abroad
(v)	Dr. V. K. Shah	Lecturer in Microbiology	To go abroad
(vi)	Shri K. Laxminarayan	Lecturer in Microbiology	To go abroad
(vii)	Shri P. H. Dave	Lecturer in Statistics	For better prospects
(viii)	Dr. (Kum.) F. D. Bokdawala	Lecturer in Zoology	To go abroad
(ix)	Dr. K. S. S. Nair	Lecturer in Zoology	To go abroad

5. Professional Growth of the Staff

(a) Published Articles/Papers in Indian and/or Foreign Journals of merit.

(i) Articles :

Sr. No.	Name	Title	Name of the publisher
1	Patel A. J. and Ramakrishnan C. V.	Studies on avian and mammalian heart tissues	Comp. Biochemistry, Physiol. 28, 803 (1969)
2	Rajalakshmi R., Pillai K. R. and Ramakrishnan C. V.	Effect of different supplements to low protein and poor quality protein diets on performance and brain enzymes in the albino rats	J. Neurochem, 16, 599 (1969)
3	Rajalakshmi R. and Ramakrishnan C. V.	(i) Dietary and Nutrient allowances for Indians	Plant Foods for Human Nutrition, 3 (1969)
4	Srivastava S. K., Maini S. B. and Ramakrishnan C. V.	(i) Studies on N. D. glycohydrolase in Rumex acetose tumour tissue cultivated in Vitro	Phytochemistry, 8, 1147 (1969)
		(ii) Studies on Nicotinamide amidohydrolase in normal and tumour tissues	Phytochemistry 8, 1155 (1969)
		(iii) Regulation of phridine nucleotide level in normal and tumour tissues of Rumex acetose cultivated in Vitro	Indian J. Biochem., 6, 214 (1969)
5	Parekh L. J.	Studies on some of the enzymes of glycolysis and tricarboxylic acid cycle and glutamic acid metabolism in the excised roots of P. mungo L.	Enzymologia, 38, 9, (1970)
6	Parekh L. J. Sakariah K. K. and Shah V. J.	(i) Detection of the enzymes of glycolytic cycle in the fruit tissues of Citrus acid	Enzymologia, 38, 19, (1970)
		(ii) Studies on glycolytic enzymes and glycolytic intermediates in the fruit tissues of citrus acid during the development of the fruit	Enzymologia, 38, 29, (1970)

Sr. No.	Name	Title	Name of the publisher
		(iii) Ascorbic acid metabolism in fruit tissues of Citrus acid at different stages of the development of the fruit	Enzymologia, 38, 29, (1970)
7	Rao N. M. and Mehta A. R.	Callus tissue form the Pollen of Thuja orientalis L.	Ind. J. Exptl. Biol. 7 (2), 132, (1969)
8	Reddy M. V. and Bhattacharya P. K.	(i) A pH metric investigation bonding in some thiolactate complexes of Ni (ii) and Tl (i)	Indian Jour. of Chem. 7, (3) 282, 1969.
		(ii) A study of thiomalates complexes of Ni (ii), Mn (ii) and Tl (i)	Jour. of Ind. Chem Soc., 46, 11, 1058 (1969)
9	Patel D. C., Sharma R. C. and Bhattacharya P. K.	Disproportionation in some octahedral Nickal complexes	Indian Jour. of Chem. 7, (9) 927, (1969)
10	G. M. Hussain and Bhattacharya P. K.	Formation constants of some vanadyl chelates.	Jour. of Ind. Chem. Soc., 46, 10, 875 (1969)
11	R. J. Chudgar and K. N. Trivedi	Studies in the synthesis of quinoline derivatives Part I Synthesis of bromoquinolines	Jour. of Ind. Chem. Soc. 46, 537, (1969)
12	Y. A. Shaikh and K. N. Trivedi	Synthesis of 2 methy 9H-Furo (3-2-c) benzopyran-9 one, a furocoumarin from 3 hydroxy coumarin	Current Science, 38, 409, (1969)
13	N. G. Parekh and K. N. Trivedi	(i) Studies in the synthesis of cyclohexenocoumarins Part II	Jour. of Ind. Chem. Soc., 46, 815, (1969)
		(ii) Studies in the synthesis of coumarin dimers. Part I. Synthesis of Bicomarinoxy-methanes.	Jour. of Ind. Chem. Soc., 46, 1068, (1969)
		(iii) Studies in the synthesis of cyclohexene coumarins Part III. Some reactions of	Australian Jour. of Chem. 23, 407 (1970)

Sr. No.	Name	Title	Name of the publisher
		3-hydroxy-6-oxo-7, 8, 9, 10-tetrahydro-6-H-Dibenzo (b, d.) Pyran	
14	Kum. N. H. Pardanani, M. G. Parekh and K. N. Trivedi	(i) Studies in the synthesis of coumarins-pyrones and furo-coumarins Part IV. Synthesis of alkyl psoralenes. (ii) Studies in the synthesis of coumarins-2-pyrones and furo-coumarins Part V. Kostancki Robinson acylation of 7 hydroxy-6-acyl-8-methyl coumarin.	Jour. of Ind. Chem. 46, 1094 (1969) Jour. of Ind. Chem. Soc. 47, 36, (1970)
15	B. Kanaklakshmi & Suresh Sethna	Synthesis of some acetyl biphenyl derivatives and the Backmann rearrangement of their oximes.	Jour. of Ind. Chem. Soc. 46, 446 (1969).
16	S. S. Kanhere, A. H. Vyas, C. V. Bhat, B. R. Kamath, R. S. Shah and S. L. Bafna	Studies with ion exchange resins on conchona alkaloids. III. Exchange rates.	Jour. of Pharm. Sciences, 58, 1550 (1969);
17	V. S. Salvi	Synthesis of Mannich Bases from benzofuran derivatives.	Jour. of Ind. Chem. Soc., 46, 801 (1969).
18	J. S. Dave and R. A. Vora	Mesomorphic behaviour of the cholesteryl esters. I : p-n- alkoxy benzoates of cholesterol.	Ordered fluids and Liquid Crystals. Plenum Publication (New York), pp. 744 (1970)
19	Vashi N. M. and Merh S. S.	The Gneissic rocks of Ranikhet area, Dist. Almora, U.P.	J. of M. S. U. of Baroda, Vol. 17, 1969
20	M. M. Patel and K. C. Abraham	(i) Vibrational analysis of Ultra-violet bands of SbF ₅ .	Indian J. of Pure and Appl. Phy., Vol. 7, Sept. 1969, pp. 641-643

Sr. No.	Name	Title	Name of the publisher
		(ii) Rotational analysis of the (0, 0) bands of II system of MgBr.	J. Phys. B. (Atom. Molec. Phys.) Ser. 2, Vol. 2, 1969, p. 515
21	S. G. Shah	Ultra-violet emission spectrum of CaBr molecule.	Indian J. of Pure and Appl. Phy., Vol. 8, No. 2, 1970, pp. 118-119
22	K. Jacob Rajan and N. R. Shah	Band spectrum of zinc bromide in the near Ultra-violet region.	Indian J. of Pure and Appl. Phy., Vol. 7, No. 1, 1970, pp. 61-62
23	B. J. Mehta	Effect of concentration of etchant on the shape of etch pits, on the cleavage faces of Calcite.	Minerological Magazine, London, 37, 288, 525-7, Dec. 1969
24	V. M. Shah	On the absolute convergence of a series associated with a lacunary Fourier series.	Indian J. of Mathematics, Allahabad.
25	K. Laxminarayan, V. V. Modi and V. K. Shah	(i) Part I: Nutritional Requirements of <i>A.niger</i> cultivated in Gluconate medium (ii) Part II: Comparative studies on the enzyme make up of the adapted and parent strains of <i>A. niger</i> . (iii) Part III: Purification and properties of Phosphogluconate dehydrogenase	Arch. Mikrobiol (1969), 66 : 396 Arch. Mikrobiol (1969), 66 : 396 Arch. Mikrobiol (1969), 66 : 406
26	B. M. Desai, V. V. Modi and V. K. Shah	(i) Part I: Nutritional requirements of a strain of <i>A.niger</i> . cultivated on sorbitol as sole source of carbon (ii) Part II: Comparative studies on the enzyme make up of the adapted strain and parent strain (iii) Purification and Properties of Sorbitol dehydrogenase	Arch. Mikrobiol (1969), 67 : 6 Arch. Mikrobiol (1969), 67 : 12 Arch. Mikrobiol (1969), 67 : 16

Sr. No.	Name	Title	Name of the publisher
27	J. L. Raina and V. V. Modi	Genetic transformation in <i>Rhizobium</i>	J. General Microbiol (1969) 57, 125
28	Shah R. V. and T. V. Chakko	(i) Preliminary observation on the changes in the thyroid activity in the house lizard, <i>Hemidactylus Flaviviridis</i> during the different phases of tail regeneration (ii) Histochemical localization of succinate dehydrogenase (SDH) in the normal and regenerating tail of the house lizard <i>Hemidactylus Flaviviridis</i>	J. Biol. Soc., Vol. 11 Nos. 1-2, pp. 44 J. Anim. Morphol. and Physiol., Vol. 16, No. 1, pp. 89-96
29	Bonny Pillo	Histochemical observations on cholinesterase activity in the liver of a migratory starling (<i>Sturnus Rosseus</i>) and of some non-migratory birds.	J. Anim. Morphol. and Physiol., Vol. 16, No. 1, pp. 106-114
30	R. V. Shah and D. K. Magon	Histochemical demonstration of a glycerophosphate dihydrogenase (a-GPDH) in the normal and regenerating tail of house lizard <i>Hemidactylus Flaviviridis</i>	J. Anim. Morphol. and Physiol., Vol. 16, No. 1, pp 97-105
31	P. M. Ambadkar	In vivo effect testosterone and gonadotropin on the lipid content and the lipase and succinic dehydrogenase activities in the rat testis and epididymis	J. Anim. Morphol. and Physiol., Vol. 16, No. 1, pp. 115-126
32	R. V. Shah, Maina V. Asnani and B. Pillo	Development of lymphocytic nodules in the liver of Adult pigeon	J. Anim. Morphol. and Physiol., Vol. 16, No. 1, pp. 127-132
33	G. K. Karnawar and K. S. S. Nair	Some preliminary observations on the influence of faecal lipids on the induction of larval diapause in an insect	Life Science, Vol. 8, Part II, pp. 559-568

(ii) Book:

Sr. No.	Name	Title	Name of the publisher with month of publication
(1)	A. R. Chavan and C. H. Pathak	Vanaspati Vignyan	Oriental Institute, M. S. University, Baroda (December '69)
		(c) Papers presented at All India level Seminars, Conferences, etc. At the International Seminar on Nutrition held at Baroda.	
(1)	Ramakrishnan C. V.	Nutrition and brain function.	
(2)	Rajalakshmi R., Subbarao P. and Ramakrishnan C. V.	Effects of neonatal calorie restriction on neonatal development and brain enzymes.	
(3)	Rajalakshmi R., Elizabeth Jacob and Ramakrishnan C. V.	Comparative effects of calorie and protein deficiencies on psychological performance and brain enzymes.	
(4)	Rajalakshmi R., Parameshwaran M. and Ramakrishnan C. V.	Effects of different levels of dietary protein on brain enzymes.	
(5)	Rajalakshmi R., Latifa Khanam and Upadhyaya C. M.	Effects of maternal and post-weaning diets on psychological performance and brain enzymes.	
(6)	Rajalakshmi R., Subbarao P., Elizabeth Jacob and Ramakrishnan C. V.	Effects of vitamin deficiency on psychological performance and brain enzymes.	
(7)	Rajalakshmi R., Elizabeth Jacob and Ramakrishnan C. V.	Effects of dietary protein quality on psychological performance and brain enzymes.	
(8)	Rajalakshmi R., Joshi P. S. and Ramakrishnan C. V.	Effects of glutamic acid supplementation on brain enzymes.	
(9)	Rajalakshmi R., Ramachandran K. and Suresh Sail.	Effects of global improvement of the poor Gujarati diet.	
(10)	Rajalakshmi R. and Thirvikraman K. V.	Effects of protein deficiency on protein glutathione and ascorbic acid contents of different brain regions.	
(11)	Rajalakshmi R. and Thirvikraman K. V.	Effects of protein deficiency on oxygen consumption by brain tissue slices and homogenates in different brain regions.	

- (12) Rajalakshmi R. and Thirivikraman K. V.
Effects of protein deficiency on the activities of different enzymes.
- (13) Ramakrishnan C. V. and Subbarao P.
Studies on NAD glycohydrolase in the rat brain.
- (14) Ramakrishnan C. V., Charles A. K. and Telang S. D.
Studies on albino rats fed common salt fortified with calcium iron lysine and vitamin A.
- (15) Rajalakshmi R. and Subbarao P.
The nutritive value of modern bread as compared to that of a mixture of cereal, legume and greens.
- (16) Rajalakshmi R. and Parameshwaran M.
Studies on undernutrition during the post-weaning period in rats.
- (17) Rajalakshmi R. and Subbulakshmi G.
Calorie intakes as compared to requirements during pregnancy and lactation.
- (18) Ramakrishnan C. V.
Revised dietary allowances and food production to meet these allowances.
- (19) Rajalakshmi R. and Suresh Sail.
Comparative studies on school boys consuming wheat, rice and maize.
- (20) Rajalakshmi R., Dileepan K. N. and Gajjar K. D.
Effects of different amount of groundnut oil and hydrogenated fat on growth, liver Vitamins and serum cholesterol.
- (21) Rajalakshmi R. and Kamala Chari.
Comparative data on the availability of carotene in different leafy vegetables.
- (22) Rajalakshmi R., Peramma D. and Kamala Chari.
Availability of carotene in yellow maize.
- (23) Rajalakshmi R. and Suresh Sail.
Availability of carotene in leafy vegetables to adult men.
- (24) Rajalakshmi R. and Subbulakshmi G.
Vitamin C status during pregnancy and lactation.
- (25) Rajalakshmi R., Kasargod S. V. and Taman G. A.
Mutual effects of thiamine and riboflavine supplementation on urinary excretion and liver concentration.
- (26) Rajalakshmi R., Joseph K. V. and Sakariah K. K.
Effects of sprouting and fermentation on nutritive value.
- (27) Ramakrishnan C. V., Joseph K. V. and Nadkarni S. R.
Studies on micro-organisms involved in dhokla fermentation.

- (28) Subbulakshmi G.
Chemical composition and Bio-Chemical make up of placenta in poor and upper class women.
- (29) Parekh L. J.
Studies on Vitamin C synthesis in placenta.
- (30) Rajalakshmi R. and Subbulakshmi G.
Gestation and lactation performance of poor Indian women.
- (31) Rajalakshmi R. and Upadhyaya C. M.
Effect of dietary protein content and quality on bone calcium.
- (32) Rajalakshmi R., Ramachandran K., Vijayaraghavan and Shah.
Calcium incorporation in acid foods.
- (33) Rajalakshmi R. and Subbulakshmi G.
Calcium status during pregnancy and lactation.
- (34) Rajalakshmi R. and Suresh Sail.
Skeletal development of children in different age groups.
- (35) Ramakrishnan C. V.
Formulation and evaluation of low cost meal for pre-school children.
- (36) Rajalakshmi R. and Subbulakshmi G.
Longitudinal studies on children from birth to five years.
- (37) Rajalakshmi R. and Suresh Patel.
Psychological status of moderately undernourished children as compared to those suffering from kwashiorkor and severe marasmus.
At the Indian Science Congress, 1970, Kharagpur
- (38) B. B. Jambusaria and S. S. Merh.
Contact metamorphism of the regionally metamorphosed rocks of Champaner Series around Shivarajpur, Dist. Panchamahals.
- (39) S. K. Munshi.
Stromatolites from the Someshwar area, Dist. Almora, U.P.
- (40) S. S. Merh and Y. V. Deshpande.
Metamorphism and granitisation in relation to fold episodes in Ankola Gokarn area, N. Kanara, Mysore State.
- (41) M. G. Hardas and S. S. Merh.
Significance of CM diagrams of Jurassic and Cretaceous sediments of Kutch, Gujarat.
- (42) P. J. Desai, D. S. Patel and S. D. Desai
Fluorite mineralization at Ambadoongar, Baroda Dist., Gujarat State.

At Symposium on the Himalayan Geology at Chandigarh, 1969

- (43) Merh S. S., Vashi N. M. and Desai S. J.
On the nature of the granites and gneisses of Almora Nappe in Kumaon Himalayas.
At the Indian Mathematical Society Conference held at Nagpur in 1969
- (44) Shri V. M. Shah.
On the partial sums of a lacunary Fourier Series.
- (45) Dr. O. P. Goyal.
On the absolute convergence of a lacunary Fourier Series.
At the Nuclear Physics Symposium arranged by Atomic Energy Commission at Roorkee
- (46) Shri J. L. Dhar.
On the Generalized Hamiltonian and Resonance Structure.
At the Indian Science Congress, 1970, Kharagpur
- (47) Shri R. C. Shah.
Heat transfer in electrolytic solution.

14 teachers of the Faculty were deputed to attend various Conferences, Symposia and Summer Schools organised in India.

Professor V. V. Modi attended the Conference on Sub-Tropical and Tropical Fruits held at London and also visited various research institutions at London, Edinburgh and Liverpool.

Professor S. M. Sethna was elected as Vice-President of the Institution of Chemists (India) for the year 1970 and also as Honorary Editor, Journal of Indian Chemical Society.

(d) Research work done by teachers of their own without any financial assistance from the University or any outside agencies.

(i) Research work completed:

Name of the Department and Teacher	Subject of Research
<i>Mathematics</i>	
(1) Dr. O. P. Goyal	On the absolute convergence of a Fourier series.
(2) V. M. Shah	Convergence and Summability problems of lacunary Fourier series.
<i>Statistics</i>	
(3) Dr. A. G. Phatak	Some contributions to Acceptance Sampling and Simulation.

(ii) Research work in progress :

Name of the Department and Teacher	Subject of Research
<i>Bio-Chemistry</i>	
(1) Professor C. V. Ramakrishnan	(a) Studies on the use of gamma rays for purification of sewage. (b) Studies on high protein biscuits. (c) Studies on nutrition and brain function.
(2) Dr. (Smt.) R. Rajalakshmi	Studies on ageing.
(3) Dr. S. K. Srivastava	Biochemical studies during development and ripening of banana fruit.
(4) Dr. L. J. Parekh	Biochemical studies on citrus vesicle callus tissues cultivated <i>in vitro</i> .
<i>Physics</i>	
(5) Professor N. S. Pandya	Optical study of mineral and single crystal of metals.
(6) Dr. M. M. Patel	Study of spectra diatomic molecules.
(7) Dr. S. K. Shah	Theoretical work on calculation of the lower bound of the ebetun in the dipole field having finite dipole moment by partitioning technique.
<i>Mathematics</i>	
(8) Shri V. M. Shah	Fourier Analysis.
(9) Dr. O. P. Goyal	Fourier Analysis.
(10) Dr. C. M. Patel	Convergence and summability of orthogonal series.

6. Activities of newly established and special types of Centres/Units in the Faculty

(1) Statistical Service Unit :

The Unit published the Statistical Summary of the Medical Examination Reports for the years 1966-67 and 1967-68. It conducted Punch Operators' Training Course of a duration of six weeks and trained six persons.

(2) Demographic Research Centre :

The Centre initiated research projects in the fields of (i) Fertility, (ii) Evaluation and Family Planning and (iii) Birth and Death Rates. Five research papers have been presented at Bombay, Lucknow and Delhi.

7. Museum, Laboratory, Studios, Workshops etc.

The museums in the Botany, Geography, Geology, and Zoology Departments were enriched by the addition of specimen and other articles.

The following additions of scientific apparatus and equipment were made during the year to the laboratories of the Faculty.

Laboratory	Cost of equipment as on 1-4-1969	Cost of equipment written off during the year	Cost of equipment etc. added during the year	Cost of equipment as on 31-3-1970
1	2	3	4	5
	Rs.	Rs.	Rs.	Rs.
Biochemistry	5,69,338-10	—	1,974-75	5,71,312-85
Botany	4,39,175-52	1,575-28	4,600-32	4,42,200-56
Chemistry	6,16,315-16	—	26,428-78	6,42,743-94
Geography	2,22,141-93	—	5,697-31	2,27,839-24
Geology	5,36,511-36	—	4,878-49	5,41,389-85
Microbiology	1,66,000-00	—	68,300-00	2,34,300-00
Physics	7,03,566-81	—	35,717-88	7,39,284-69
Workshop	67,829-57	—	—	67,829-57
Statistics	1,10,340-00	—	16,902-00	1,27,242-00
Zoology	3,81,838-07	—	18,022-09	3,99,860-16
Total	38,13,056-52	1,575-28	1,82,521-62	39,94,002-86

8. Faculty Publications

Name of the Journal	Month of Publication
Journal of Animal Morphology and Physiology	June and December
'PAVO' (The Indian Journal of Ornithology)	March and September

9. Important Events

(1) An exhibition of selected herbarium specimen of medicinal plants collected under the Am PL 480 research scheme 'Survey of Gujarat Forest for sources of alkaloids and tannins, etc.' was arranged in the Botany Department on 12th November, 1969.

(2) A field training camp was arranged during Christmas vacation at Ambaji by the Geology Department in which all the students and the members of the staff participated.

(3) On the occasion of the inauguration of the new building of the Microbiology Department, a symposium on "Microbe and Molecule" was

organised on 19th and 20th January, 1970. Dr. M. S. Swaminathan, Director, Indian Agricultural Research Institute, Delhi gave the inaugural address. A large number of scientists from various industries and research laboratories outside Gujarat, in addition to local ones participated.

(4) A Nutrition Seminar was organised by the Department of Biochemistry under the auspices of the University Grant Commission from 15th to 22nd February, 1970. The Seminar was attended by distinguished scientists from India and abroad.

CHAPTER X—FACULTY OF EDUCATION AND PSYCHOLOGY

1. Review of Progress of the Reforms

Semesterwise organisation of courses in Education and the internal assessment of students' sessional work in all the courses were continued.

Taking into account the experience of the staff and the students, the number of sessional tests in each course was reduced from three to two. Thus there was only one periodical and one comprehensive test in each course; other types of sessional work such as written assignments, seminar papers were introduced.

2. New Experiments

In B.Ed. course No. 501 entitled "Principles of class room teaching", it was decided to give only five core lectures to the class and to have rest the of the topics covered in tutorials. Each tutorial group consisted of about ten to twelve students.

3. Courses of Studies

(a) There is provision for the following courses :

(i) B.A., M.A., Ph.D.	Psychology.
(ii) B.Ed., M.Ed., Ph.D.	Education and Educational Administration.
(iii) Post-graduate Diploma	(1) Educational Administration. (2) Guidance and Counselling
(iv) Under-graduate Diploma	(1) Education. (2) Early Childhood Education.

4. Number of Students

The number of students enrolled in various courses at the commencement of the year was as follows :

(a) Under-graduate Diplomas :	Men	Women	Total
(i) Diploma in Education	6	24	30
(ii) Diploma in Early Childhood Education	—	20	20
Total	6	44	50

(b) Degrees :

	Men	Women	Total
(i) B.Ed.	106	87	193
(ii) S.Y.B.A. (Psy.)	5	46	51
(iii) T.Y.B.A. (Psy.)	3	44	47

Total 114 177 291

(c) Post-graduate Degrees :

(i) Jr. M.Ed. (by Papers and Dissertations)	34	2	36
(ii) Sr. M.Ed.	20	2	22
(iii) M.Ed. (Full time)	8	14	22
(iv) Jr. M.A. (Psy.)	3	6	9
(v) Sr. M.A. (Psy.)	1	8	9

Total 66 32 98

(d) Ph.D.

8 5 13

Grand Total 194 258 452

5. Staff

During the year, the staff of the Faculty consisted of 4 Professors, 6 Readers, 13 Lecturers, 9 Assistant Lecturers, 3 Senior Research Fellows, 7 Junior Research Fellows, 1 Technical Assistant, 16 Class III and 10 Class IV employees. In addition to this, there is a Co-ordinator in charge of the Department of Extension Services.

The following new appointments were made during the year :

(1) Professor M. B. Buch	Professor and Head, CASE (Loan Services from the NCERT).
(2) Dr. S. M. Divekar	Reader in Educational Administration.
(3) Dr. N. S. Pathak	Reader in Psychology.
(4) Dr. G. B. Shah	Reader in Education (CASE).
(5) Dr. (Kum.) S. Garudacharya	Reader in Education (CASE).
(6) Shri D. R. Darji	Lecturer in Education.

6 Professional Growth of the Staff

(A) Published Articles or Papers :

Author	Title	Where published
Professor D. M. Desai	(i) Amendment of the Baroda University Act, Baroda	' Education and Psychology Review ', Vol. IX, No. 2, April, 1969.

Author	Title	Where published
	(ii) Science and Higher Education in India	'Education and Psychology Review', Vol. X, No. 1, January, 1970.
	(iii) Student participation in the decision-making process of University	NIE Journal, Delhi, March, 1970.
Professor A. S. Patel	(i) A case for Reforming Examination Procedure. An Experimental Study	M. S. University Journal, Vol. 17, No. 1, April, 1969
	(ii) Need to Revitalize Teaching and Evaluation	Education and Psychology Review, Vol. IX, No. 4, October, 1969.
Professor M. B. Buch	(i) Visiting Inservice Education	Bulletin of the State Institute of Education, Udaipur, 1969.
	(ii) Educational Innovations	The Rajasthan Board Journal of Education, October, 1969.
	(iii) Institutional Planning	State Institute of Education, Dharwar, June, 1969.
Dr. B. P. Lulla	(i) General Principles of Curriculum Planning	Rajasthan Board Journal of Education, Vol. V, No. 3, July, 1969.
	(ii) Better Curriculum Administration in India	Journal of Regional College of Education, Bhopal, Vol. 3, No. 2, August, 1969.
Dr. S. M. Divekar	(i) New Values in Modern Indian Education	Education and Psychology Review, Vol. X, No. 1, January, 1970.
Dr. G. B. Shah	(i) Colleges of Education as Service Centres	NIE Journal, Delhi, November, 1969
	(ii) Standardization of a Non-verbal Group Test of Intelligence for the Gujarat State	Journal of Maharaja Sayajirao University of Baroda, Vol. XVII, No. 1.

Author	Title	Where published
	(iii) Cultural bias in Testing and Exploration	Journal of Social Psychology, Province-town, Massachussets, U. S. A. April, 1969.
(B) Books Published :		
Professor D. M. Desai	(i) Arvachin Bharatiya Kelavani-no Vikas, (1785-1967)	Oriental Institute, M. S. University, 1969.
	(ii) Tales of Glory of Gujarat	Navnit Prakashan, 1969.
(C) Papers : Presented at Conferences, etc.		
Professor D. M. Desai	(i) Examination Reform in Indian Universities-An Action Programme	Meeting of the Inter-University Board of India and Ceylon, Madurai February, 1970.
	(ii) Research Needs in Primary Education-Vitalising Elementary Teacher Education	All India Association of Teacher Educators, Delhi, October, 1969.
Professor A. S. Patel	(i) Family Adjustment of Adolescents in Relation to their Birth order and Family size.	Indian Science Congress, January, 1970.
	(ii) Another Experimental Study of some sources of Bias in assessment of subjective and objective forms of tests	Indian Science Congress, January, 1970.
	(iii) Characteristics of Desirable in School Teachers-A Study in Methodology	Indian Akademy of Applied Psychology, December, 1969
Professor M. B. Buch	(i) Some Aspects of Nutrition Education	All India Nutrition Seminar, Baroda, January 1970.

D. Participation in Inservice Programme as a Resource Personnel :

Staff Member	Name of the Seminar/Workshop/Course	Place
Professor M. B. Buch	(1) A Workshop for screening School Textbooks of Class V of Gujarat State	Vallabhvidyanagar

Staff member	Name of the Seminar/Workshop Course	Place
	(2) All India Seminar on Wastage and Stagnation (Chairman)	Delhi
	(3) Seminar on Education and Manpower Development (Chairman)	Vallabhvidyanagar
	(4) Education Planning (Resource Person)	Ahmedabad
	(5) Member of the All India Study Group on Inspection and Supervision	Delhi and Bangalore
	(6) Member of the Committee appointed by Saurashtra University on developing and maintaining record cards for University students	Delhi and Bangalore
	(7) Chairman, Academic Committee of Gujarat State Board School Text-Books	-do-
Dr. B. P. Lulla	(1) Seminar on History Text-books	Delhi

(E) Research :

Name of the Teacher	Subject of Research
Dr. M. B. Buch	A National Survey of Text-books Preparation, Production and Distribution.
Dr. B. P. Lulla	1. Survey of curriculum administration in India. 2. Analysis of High School Syllabus and Identification of the Areas of Population Education.
Dr. G. B. Shah	1. An Inquiry into the efficiency of Four Response modes of Programmed Learning. 2. Standardization of Science Aptitude Test.
Shri D. R. Darji	A critical study of the curriculum responsibility of the State Departments of Education in India since 1943.
Shri A. J. Desai	Sociograph study of the growth of leadership at the adolescent stage.

7. Centre of Advanced Study in Education

A number of research projects have been initiated in the Centre, some of which have already been completed. This report highlights the changes made in the organisation of the Centre and a number of new projects started during the year 1969-70.

Research Activities :

The research projects initiated during the year 1969-70 fall under four major areas mentioned earlier.

(a) *Interaction Process Analysis and Teacher Behaviour :*

A study of the class-room behaviour of teachers and the communication process in the class-room.

(b) *The following studies have been undertaken in this area in the Centre :*

- (i) Patterns of teacher influence in selected schools and its relation to sex, age, levels of training of teachers and the subjects taught.
- (ii) Teacher behaviour and pupils' achievements.
- (iii) Teachers' attitudes, organizational climate in Schools and teacher influence in the class-room.
- (iv) Modifying teacher behaviour through feedback from different sources.
- (v) Survey of teacher behaviour in selected regions in India.
- (vi) Teacher influence and pupils' attitudes.

Teacher Education :

In the area of Teacher Education, the following projects have been undertaken :

- (i) Innovations and change in Teacher Education in India since 1947.
- (ii) Principals' perception of Teacher Education Programmes as they exist today.
- (iii) Consumers' expectations of Teacher Education Institutions.
- (iv) Professional Equipment of the personnel in Colleges of Education.
- (v) Utilization of Resources in four selected colleges of Teacher Education.

Programmed Learning :

A Seminar on Research in Programmed Learning was organised at the Centre during November, 1969.

Research Projects :

- The following Research Projects are going on hand in Programmed Learning.
- (i) An investigation into the relative effectiveness of different forms of Programmed Learning Material.

- (ii) A study of the effectiveness of Programmed Learning Material with reference to some personality variables.
- (iii) An investigation into the effectiveness of Programmed Learning Material in English for developing Reading Ability.
- (iv) A study of the effect of Programmed Learning Material on the scholastic achievement of pupils in Secondary Schools.
- (v) Effects of four response-modes in Programmed Learning—An exploration.

The Centre is developing Programmed Learning Material on selected units of school curriculum in association with a group of co-operating schools. In this project the Centre is helping the Department of Extension Services of the Faculty of Education and Psychology, Baroda.

Educational Change Process :

In this area, the following research projects have been started :

- (i) A study of factors affecting diffusion of innovations in secondary schools.
- (ii) Factors promoting adaptability in Indian schools.

Other Research Studies :

In addition CASE staff has undertaken the following research projects:

- (i) Construction of six Attitude Scales.
- (ii) A study of the Organisational Climate in Secondary Schools.
- (iii) A test of Science Aptitude.

Two studies in the area of Creativity going on since 1968 are now nearing completion. They are :

- (i) A study of Creativity evolving a test to identify children with creative ability at the school leaving age.
- (ii) Creativity, Intelligence and Personality.

The project 'A study of correlates of success in Science and Arts courses at the university level' is nearing completion.

Publications

<i>Author</i>	<i>Title</i>	<i>Where published</i>
Kum. G. G. Kapadia	Angrejina Shikshan man Abhi-kramit Adhyayan	Nootan Shikshan, October, 1969
Dr. G. B. Shah	Programmed Learning and the Class-room Teachers	Annual Conference of Indian Association of Programmed

Papers presented at Conferences etc.

<i>Name</i>	<i>Title</i>	<i>Conference</i>
		Learning, Baroda, October, 1969.
Shri V. Krishna-murthy	Some peculiar experiences with Programmed Learning materials	-do-
Shri M. R. Santhanam	1 Bibliography on Teacher-Pupil interaction	All India Seminar on Interaction Process Analysis, January, 1970
	2 Some preliminary thoughts on class-room Interaction Analysis	-do-
Prof. M. B. Buch and Shri M. R. Santhanam	Class-room Verbal behaviour of selected teachers in Baroda Secondary Schools	-do-
Prof. M. B. Buch and Shri Z. M. Quraishi	The influence patterns of Male Social Studies Teachers as determined by Flander's Interaction Analysis System	-do-

8. The Centre for Research and Training in Secondary Education for Rural Areas (Baroda-Michigan Project)

This programme of leadership training for teachers of rural schools started from 1st July, 1968, offering the M.Ed. degree courses with specialization in Rural Community Education. Until now 19 students—16 full time and 3 part-time have passed the examination and 14 full time and 8 part-time students enrolled for this year.

The emphasis in the programme continued to be placed on practical training. The skill in public speaking, seminar and group discussion, curriculum planning, and in the use of audio visual aids, are imparted on the campus. Students also visit the villages twice a week and put in 10 hours of work per week. Four nearby villages, Itola, Por, Vernama and Chhani were selected for the purpose. The trainees visited the school and the community and studied social, economic, educational and political aspects of village life and its problems. The experiences were then discussed in a supervisory conference every week where students were guided for the leadership role to be played by teachers in making education life-centred and community oriented. At the beginning of the term, students went to Ghodasar for village camp for a week and carried out all activities on self-help basis.

The inauguration of the building was done on 2nd January, 1970 by Dr. Claude A. Eggertson, Professor of Education, Ann Arbor, University of Michigan, U.S.A.

Mr. Bennet and Mr. Sebaly, the two visiting consultants from the University of Michigan, helped the Centre from December 1968 to August 1969 and carried out research on the impact of training on students. They conducted research on the Perception of Family Life Style and Attitude toward Population Education of the Eleventh Standard High School youth in a village of the Baroda District.

Mr. Robert S. Fox of Michigan University also visited the Centre from 17th June to 22nd July and guided in building up curriculum through the devices of the Resource Unit and the Master Teaching Unit. Four students had chosen the Master Teaching Units for their dissertation work.

Mr. Harold Howe, the Programme Advisor in Education of the Ford-Foundation, New Delhi, visited the Centre and the village alongwith his colleagues Mr. Dennis Gallaliger and Mr. Eugene Stanely, to explore the possibility of setting up studies and a training programme for Population Education.

9. Foreign Students and Inservice Teacher Education Services

(i) Service to Foreign Students :

Students come from Thailand, Nepal, Ceylon, Afghanistan, Japan, U.K., U.S.A., Ethiopia etc. An Honorary Foreign Students' Adviser arranges receptions, orientation programmes, introduction course, home visits and other recreational programmes such as picnics, social evenings, film-shows and short outings where they are helped to adjust, to know one another, as well as Indian people, their customs and culture. The Adviser occasionally visits them and students also go to him wherever they encounter any difficulty.

(ii) The Department of Extension Services :

Summer School of Education :

The Summer School of Education was organised by this Department from 11th to 16th May 1969 at Daman. About 40 Principals from the Districts of Baroda, Panchmahals, Surat and Bulsar participated in this programme. The Extension Unit of Surat also collaborated in this programme. The following topics were discussed and the group work was organised.

- (1) Programmed Learning
- (2) Institutional Planning
- (3) Achievement Motivation.

Seminar Workshops :

The following Seminars/Workshops/Demonstrations were organised :

<i>Seminar/Workshop/Demonstration</i>	<i>Month and Place</i>	<i>Members participating</i>
(i) New Concept of Mathematics	April, 1969 Baroda	35 teachers from various Schools
(ii) Science Fair of Baroda District Schools	January, 1970 Waghodia	56 Schools
(iii) Effective School Supervision and Guidance	March, 1970 Baroda	30 Principals of Secondary Schools
(iv) Bird Stuffing, Clay Modelling, Preservation of Leaves	February, 1970 Billimora	60 Science Teachers
(v) Population Education, Group Dynamics, Classroom Innovations, Effective teaching of English and Hindi	February, 1970 Santrampur	100 School Teachers
(vi) Revitalise the Science Clubs	February, 1970 Baroda	30 Science Teachers

10. Post-graduate Library

For the benefit of the master's and doctoral students in Education, a separate post-graduate library attached to the CASE is maintained in a separate spacious well equipped library hall. On an average about 50 students and staff members visit the library per day. The total volumes in this library increased from 6,000 to 7,200 approximately. It has utilised Rs. 9,998-87 of the recurring grant and Rs. 24,038-49 of the non-recurring grant during the year. The library has continued to subscribe to 31 foreign journals of high educational standards. Thirteen Indian journals in education are also subscribed.

11. Publications

The Faculty continued to publish the following Journals :

- (i) Education and Psychology Review (Quarterly).
- (ii) Social Studies Teacher (Quarterly).

12. Distinguished Visitors during the year

	<i>Month of Visit</i>
(1) Hon'ble Shri Gordhandas Chokhawala, Education Minister, Gujarat State, Gandhinagar	October, 1969
(2) Dr. R. H. Dave, Head of Text-Books Department, N.C.E.R.T.	October, 1969

- (3) Professor H. Moehle, December, 1969
Pro-Vice-Chancellor, Lip-Zig University (G.D.R.)
- (4) Dr. Uday Pareekh, January, 1970
Professor of Social Sciences, N.C.E.R.T.,
New Delhi
- (5) Dr. Prayag Mehta, January, 1970
Professor (Research), Indian Education of Mass
Communication, New Delhi
- (6) Dr. Pat Sloan, January, 1970
University of Utah, U.S.A.
- (7) Mr. M. Stanton, January-March,
University of Birmingham 1970
- (8) Shri Harbhai Trivedi, February, 1970
Pro-Vice-Chancellor, Saurashtra University,
Bhavnagar

CHAPTER X (A)—UNIVERSITY EXPERIMENTAL SCHOOL

1. Courses of Study

The school continues to follow the syllabus and courses of study prescribed by the Department of Education, Gujarat State Government and the S.S.C. Examination Board of the Gujarat State. This year three new options at the S.S.C. level were introduced viz. Type writing, Art and Civics and Indian Administration. The school provides for craft in paper-work in Classes III and IV; wood-work and needle-work in Classes V, VI and VII and gradening in Class VIII. The pupils of classes IX and X get the option from science, wood-work, Art, Best from waste, cooking and Music. Study of Bengali literature is the new option included in the Hobby Groups during the year.

2. Number of Students

Classes	Boys	Girls	Total
Primary I to IV	83	73	156
Middle: V to VII	76	64	140
Secondary: VIII to XI	112	84	196
Total	271	221	492

3. Staff

	Graduate	Under-graduate	Others	Total
(1) Primary Section	4	4	—	8
(2) Secondary Section	6	—	—	6
(3) Specialised Teachers	3	2	—	5
(4) Office	—	—	4	4
(5) Class IV employees	—	—	7	7

4. Professional Growth of the Staff

(a) Seminars:

(1) The Principal and four teachers attended the Seminars on various topics conducted by the Extension Unit of the Faculty of Education and Psychology, United Schools' Organization and District HeadMasters' Association.

5. Library

Twenty-six Journals and 80 new books were purchased during the year.

6. Laboratory

Sr. No.	Item	Cost of equipments as on 1-4-1969	Cost of equipment written off during the year	Cost of equipment added during the year	Cost of equipment as on 31-3-1970
		Rs.	Rs.	Rs.	Rs.
1.	Equipments	13,807-90	—	299-85	14,107-75

7. Results of Examinations and Awards

(A) Examinations:

	No. appeared	No. passed	Remarks
(1) S.S.C.	44	41	93%
(2) Elementary Drawing Grade	11	9	81.8%
(3) Intermediate Drawing Grade	7	4	57%
(4) Scholarship Examination	8	3	One student was first in the Board.
(5) Hindi Balpothi	56	56	6 Merits
(6) Hindi Paheli	100	90	10 Merits
(7) Hindi Dusari	6	6	
(8) Sanskrit Balbodh	48	48	
(9) Aswad Examination	49	47	
(10) Shishtha Vachan	46	44	

(B) Awards:

	Number participated	Awards/ Prizes
(1) Shanker's Childrens Competitions	5	One Prize
(2) Soviet Land Nehru Award	8	One Award
(3) International Art Contest	1	Nil
(4) Sports (N.P.E.D. Star Contest)	70	1 Star 38 2 Star 21 3 Star 2
(5) Social Studies Fair (HeadMaster Association), 1970	—	1 Cup for best Home-work Project
(6) Canning Centre, Model Farm, Baroda	27	First Grade 9 Second Grade 17 Third Grade 1

CHAPTER XI—FACULTY OF COMMERCE

1. Courses of Studies

There is provision for the following courses :

- (1) Ph.D. Banking, Business Finance, Business Administration, Commerce, Co-operation and Economics.
- (2) M.Com. Principles of Management, Human Relations in Management, Production Management, Marketing, Financial Management, Management Accounting, Managerial Economics, Statistical Methods, International Trade, Industry and Labour with special reference to India, Advanced Accountancy and Accounting Theory, Taxation, Organised Markets, Co-operation, Transport, Economics of Agriculture with special reference to India, International Banking and Foreign Exchange Problems.
- (3) B.Com. Accounting and Auditing, Banking, Cotton Industry, Co-operation, Public Finance, Advanced Statistics, Transport, Business Management.
- (4) Post-graduate Diploma in Co-operation Co-operation.
- (5) Post-graduate Diploma in Banking Banking.
- (6) Under-graduate Diploma in Co-operation Co-operation.

2. Number of Students

The classwise distribution of students during the year 1969-70 was as under:

Class	Men	Women	Total
(1) Diploma in Co-operation	*12	—	12
(2) F.Y.B.Com.	544	90	634
(3) S.Y.B.Com.	501	116	617
(4) T.Y.B.Com.	404	81	485
(5) Junior M.Com.	26	5	31
(6) Senior M.Com.	16	1	17
(7) Post-graduate Diploma in Banking	28	4	32
(8) Post-graduate Diploma in Co-operation	4	—	4
Total	1,535	297	1,832

* 6 men students permitted to join the under-graduate Diploma in Co-operation and S.Y.B.Com. Course simultaneously.

3. Staff

The staff of the Faculty consisted of 8 Readers, 13 Lecturers, 4 Part-time Professors, 6 Class III and 11 Class IV employees, as on 31st March, 1970. The Departments of English, Law, Mathematics, Statistics and General Education made arrangements for the teaching of the subjects of English, Mercantile Law, Mathematics, Statistics and General Education. Members of the staff of this Faculty gave lectures in the Faculty of Technology and Engineering, Faculty of Arts, Faculty of Law, and General Education Programme.

4. Professional Growth of the Staff

(a) Articles published:

Author	Title	Where published
Shri C. S. Rathod	(i) Urban-Co-operative Banks in Maharashtra	<i>The Economic Times</i> November 22, 1969.

5. Library

The University Library provides library and reading-room facilities to all the Faculty students and teachers.

6. Co-curricular Activities

Besides Students' Association the students of this Faculty organised the following associations:

(1) Economics Students' Association, (2) Banking Students' Association, (3) Accountancy Students' Association, (4) Business Management Students' Association and (5) Co-operation Students' Association. These Associations arranged talks, debates and competitions.

9. Other Important Events

(1) The Faculty collaborated with the Baroda Management Association in conducting the certificate course in Production Management, started during the year.

(2) On 29th November, 1969 the Faculty organised on behalf of the Committee for Co-operative Training of the National Co-operative Union of India, New Delhi, an Inter-Faculty Prize Debate on Co-operation. The subject of the debate was "Co-operativization alone can lead to socialism in India". Professor V. N. Kothari, Head, Department of Economics, Faculty of Arts, Baroda presided over the function. The scroll was won by the Faculty of Arts.

(3) The Dena Bank Trophy Debate was held on 12th December, 1969 under the Chairmanship of Shri R. B. Amin, Chairman, Alembic Chemical Works,

Baroda. The subject of the debate was "In the opinion of this house nationalisation of Commercial Banks will hamper Economic Development in India". The Trophy was won by the H. L. College of Commerce, Surat.

CHAPTER XII—FACULTY OF MEDICINE

(A) MEDICAL COLLEGE

1. Courses of Studies

The College provides instruction in courses leading to the M.B.B.S. degree as well as in the following post-graduate degrees and diplomas :

(1) *Post-graduate Degrees :*

	Subjects
(a) M.D.	Anaesthesia, Medicine, Paediatrics, Pathology, Pharmacology, Physiology, Preventive and Social Medicine, Obstetrics and Gynaecology and Radiology.
(b) M.S.	Anatomy, E.N.T., Orthopaedic and Surgery
(c) Ph.D.	Anatomy, Bio-chemistry, Parasitology, Pathology, Bacteriology, Pharmacology and Physiology.
(d) M.Sc.	Anatomy, Bio-chemistry, Pathology/Bacteriology, Pharmacology and Physiology.

(2) *Post-graduate Diplomas :*

D.A.	Diploma in Anaesthesia
D.C.P.	Diploma in Pathology
D.G.O.	Diploma in obstetrics and Gynaecology
D.L. & O.	Diploma in Laryngology and Otology
D.M.R.E.	Diploma in Medical Radiology and Electrology
D.O.	Diploma in Ophthalmology
D.C.H.	Diploma in Paediatrics
D.V. & D.	Diploma in Veneral Diseases
T.D.D.	Diploma in Tuberculosis Diseases

(b) New Courses introduced during the Year :

- (i) Condensed M.B.B.S. course of 2 years' duration.
- (ii) Bachelor of Physiotherapy of 3 years' duration.

2 Number of Students

(1) Degree	Men	Women	Total
M.B.B.S.			
1st Year			129
2nd Year	115	14	122
3rd Year	112	10	123
4th Year	99	24	116
5th Year	92	24	114
	123	24	147
Total	541	6	637

(2) *Post-graduate Degrees :*

M.D.	13	7	20
M.S.	4	—	4
M.Sc.	7	3	10
Ph.D.	4	1	5
	28	11	39
Total			

(3) *Post-graduate Diplomas :*

D.A.	1	1	2
D.C.P.	1	3	4
D.G.O.	2	2	4
D.L. & O.	—	—	—
D.M.R.E.	—	—	—
D.O.	1	1	2
D.C.H.	1	1	2
T.D.D.	—	—	—
D.V.D.	—	—	—
	6	8	14
Total			
Grand Total	575	115	690

3. Staff

The staff of the Medical College consisted of a Dean, 14 Professors, 2 Associate Professors, 30 Lecturers, 35 Junior Lecturers and other gazetted staff, 4 part-time lecturers, 3 Part-time Junior Lecturers and 97 class III and 72 class IV employees. The S.S.G. Hospital has on its staff, a Superintendent, an Assistant Superintendent, 4 Honorary Professors, 6 Honorary Medical Officers, 13 Honorary Assistant Medical Officers, 4 Full time Specialists, 4 Full time Medical Officers, 2 G.M.S. class III and a Matron.

(1) *New Appointments:*

Professors:

Dr. D. S. Shah (Pharmacology), Dr. B. R. Joglekar (Bacteriology).

Assistant/Associate Professors:

Dr. M. N. Shah (Physiology), Dr. V. V. Kollali (Pathology), Dr. M. T. Sheth (Pathology), Dr. B. J. Kikani (Medicine), Dr. R. M. Golwala (Surgery), Dr. S. Srinivasan (Biochemistry), Dr. S. K. Narang (Ophthalmology) and Dr. H. H. Adenwala (E.N.T.).

Junior Lecturers:

Dr. (Kum.) S. K. Trivedi, Dr. (Smt.) N. M. Karelia, Dr. A. A. Sanghavi (Anatomy), Shri P. B. Shah (Psychology), Dr. (Smt.) C. P. Dandekar, Dr. M.R. Manchandia (Pharmacology), Dr. (Kum.) L. K. Kothawala, Dr. U. L. R15

Deoskar, Dr. D. D. Dharkar, Dr. (Smt.) J. Indumathi, Dr. J. B. Cupala (Pathology), Dr. D. B. Vyas, Dr. V. T. Sanchela (Preventive and Social Medicine), Dr. (Kum.) A. M. Mehta, Dr. (Kum.) M. N. Shah (Obstetrics and Gynaecology), Dr. (Smt.) K. R. Desai, Dr. S. S. Kabade, Dr. (Smt.) A. R. Golwala, Dr. (Kum.) A. V. Shinde, Dr. (Kum.) J. P. Patel (Anaesthesia), Dr. K. C. Nasa (Dentistry), Dr. J. D. Patel (Radiology).

(2) *Teachers who left the Faculty:*

Dr. S. M. Sen (Dean)	Transferred to Surat
Dr. S. K. Joshi (Obs. and Gyn.)	Transferred to Surat
Dr. R. M. Khendwala (Pathology)	Transferred to Surat
Dr. A. D. Patel (Anatomy)	Relieved
Dr. V. H. Patel (Anatomy)	Resigned
Dr. (Smt.) N. M. Karelia (Anatomy)	Resigned
Dr. N. P. Bhatnagar (Pathology)	Resigned
Dr. S. F. Hussain (Pathology)	Resigned
Dr. J. K. Desai (Pathology)	Resigned
Dr. A. C. Shah (Pre. and Social Medicine)	Resigned
Dr. (Kum.) A. M. Mehta (Obst. and Gyn.)	Resigned
Dr. N. B. Joshi (Anaesthesia)	Resigned
Dr. Y. K. Desai (Dentistry)	Transferred to Ahmedabad
Dr. (Kum.) K. V. Patel (Radiology)	Resigned

4. **Professional Growth of the Staff**

(a) *Publication of Articles/Papers*

Dr. Vaishnav V. P., Shah B. R., Sanghavi N. G. and Dave J. M.	Visceral Leishmaniasis (Kalaazar) in Gujarat.	J. Indian M.A., 54, 66, 1970
N. R. Mehta and P. T. Acharya	Study of an outbreak of infective hepatitis in the Hospital Staff Quarters, Baroda (Parts I and II)	Indian Journal of Medical Research, August 1969, pp. 1437-1447
Prof. A. K. Niyogi, Dr. D. H. Trivedi and Dr. Y. I. Patel	Longitudinal survey of morbidity and needs of a primary Health Centre.	Indian Journal of Preventive Medicine, Vol. I, No. 2
O. D. Gulati, S. D. Gokhale, H. M. Parikh, B. P. Udawadia and V. S. R. Krishnamurty	Evidence for a sympathetic alpha receptor blocking action of beta receptor blocking agents.	Journal of Pharmacology and Experimental Therapeutics, 166, 35-43, 1969

O. D. Gulati, S. H. Shah, V. P. Vaishnav and K. R. Ranadive	Loncomycin in the treatment of Grompositive coccal infections in children.	Clinical Medicine, 76, 34-37, 1969
G. P. Saxena, S. R. Nishith, K. G. Amin, M. N. Saha and A. R. Biswas	Sino-aortic reflex in dogs at normal temperature and during hypothermia.	Indian Journal of Physiol. & Pharmacol, Vol. 13, 1969
S. D. Nishith, J. P. Saxena, M. G. Amin, P. Gopinath, K. P. Skandhan and K. K. Jarnathan	Role of sympathetic nerves in Cardio-accelerator mechanism of angiotensin.	Indian Journal of Physiol. & Pharmacol., Vol. 13, 1969
S. D. Nishith, A. K. Ganguli, S. K. Lal and Sripathirao	The influence of blood sugar level on the Quantitative assessment of ulcers produced by restraint method in the stomach of the albino rats.	I.J.M.R. Vol 57, 1969
Dr. R. M. Bhatt and G. L. Purohit	Plasma red cell & Blood volume measured by Evan's blue (T-1824) dye in healthy Gujarati Indians of high socio-economic group.	1. J. of Medical Science, February 1970

(b) *Papers read at Conferences:*

(i) A paper titled 'A review of a few cases of Hodking Disease' was read by Dr. A. K. Niyogi at the 19th Annual meeting of the Indian Association of Pathology held at Jamnagar in December, 1969.

(ii) Three papers 'A study of electrolyte changes in plasma during hypothermia', 'Action of angiotensin on skelated muscles and on neuromuscular junction' and 'Study of E.C.G. findings in automonised dogs with mitral valves' were read by Dr. H. C. Srivastava at the All India Conference of the Physiologists and Pharmacologists held at Kanpur, 1969.

(c) *Participation in other programmes:*

(i) Dr. V. P. Vaishnav, Head of the Pathology Department was a member of the National Organisation Committee for the Third Congress Global Impacts of Applied Microbiology held at Bombay under the auspices of UNESCO and WHO.

(ii) Dr. J. P. Saxena was offered a W.H.O. fellowship of six months' duration, on Medical Education and he visited various physiology research Centres in U.K. and Sweden.

(d) *Research Work :*

Research Projects completed.

(1) *Pathology Department :*

- (i) Dermatomycozosis in Baroda in the hospital class of patients.
- (ii) Bone tumours.
- (iii) Tumours of the testes.
- (iv) Epidemiological and histological study of cervical cancer.
- (v) Study of Lymphomas with special reference to Hodgkin's disease.
- (vi) Epidemiological and histological study of tumours of breast.
- (vii) Experimental production of visceral Leishmaniasis in hamsters.

(2) *Anatomy Department :*

- (i) Mucoïd cells of Hypophysis cereberi.
- (ii) Segments of the human spinal cord and the root attachments.
- (iii) Anomalies of Circle of Willis.
- (iv) Sympathetic Innervation of Heart.

(3) *Department of Preventive and Social Medicine :*

- (i) Seasonal variations in birth and its relation to atmospheric warmth.
- (ii) ABO Blood groups genes in Schizophrenia and Manic depressive Psychosis.
- (iii) Endemic Goitre in Narmada Valley in Broach District.

(4) *Pharmacology Department :*

- (i) Clinical trial of guanaxan alone and in combination with polytheazide in hypertension.
- (ii) Postural hypotension with antihypertensive drugs.
- (iii) Hypotensive activity of debrisoquin (Declinax).

Research Projects in Progress :

(1) *Pathology Department :*

- (i) Diphtheria in an infectious Disease Hospital in Baroda.
- (ii) Some aspects of experimental infection of mice with *Salmonella typhimurium*.
- (iii) Environmental, histopathological and cytological study of buco-pharynged malignant tumours.
- (iv) Socio-economic conditions and blood group distribution in a indogamous community in Baroda.

(2) *Physiology Department :*

- (i) Cardio respiratory adjustment in acute anaemia.
- (ii) Mechanoreceptor of the stomach.
- (iii) Mechanoreceptor of the urinary bladder.

(3) *Pharmacology Department :*

- (i) Effect of digoxin on postural hypotension produced by guanethidine.
- (ii) Clinical trial of Berberine sulphate in Kala-azar.

(4) *Department of Preventive and Social Medicine :*

- (i) Survey of vectors of 'Kala-azar'.
- (ii) Lunar phase on health.

5. **Library**

Figures about stock and expenditure on the Library are as under :

(1) Books (including back numbers of Journals as on 1-4-1969)	13,901
(2) Books written off during the year	—
(3) Books added during the year	755
(4) Books as on 31-3-1970	14,656
(5) Journals subscribed during the year	133
(6) Amount spent on binding during the year	Rs. 2,400
(7) Total amount spent for Library and/or Reading-room during the year	Rs. 35,000

6. **Museum, Laboratories, Studios, Workshop etc.**

Sr. No.	Item	Cost of equip-ment as on 1-4-1969	Cost of equip-ment etc. written off during the year	Cost of equip-ment etc. added during the year	Cost of equip-ment as on 31-3-1970
		Rs.	Rs.	Rs.	Rs.
(1)	Museum	3,79,647	23,433	27,195	3,83,409
(2)	Laboratory	9,51,824	3,29,361	11,704	6,34,167
(3)	Studio	13,480	—	—	13,480
	Total	13,44,954	3,52,797	38,899	10,31,056

CHAPTER XII (B)—SHETH UJAMSHI PITAMBERDAS
AYURVEDIC RESEARCH UNIT, BARODA

1. Staff

The staff of the Unit consists of a Head (Honorary), two Junior Research Vaidyas, (till 22-11-1969), One Research Assistant in Pharmacology, one Research Assistant in Chemistry, Four Class III and Six class IV employees. Dr. O. D. Gulati, Professor of Pharmacology and Dean, Medical College, Baroda worked as Honorary Head of the Unit during the year under report.

2. Functions of the Unit

Research in Ayurveda is the sole object of this Unit. The Unit has a Library, a Museum of Indian Medicinal Herbs and Minerals, a Clinical Laboratory, a Rasa-Shala and an Out-patient Department.

3. Library

The total number of books is 2,631. Eight Ayurvedic Journals were subscribed to during the year.

4. Museum

Fifty groups of available medicinal herbs, each group consisting of 10 drugs according to the Pharmacological Classification of Charak are arranged and maintained in the Museum. Specimens of minerals and other useful medicines have also been kept. A section on Ayurvedic Pharmacological medicines is also maintained. There are 1,000 Ayurvedic specimens, 54 herbarium frames, 75 specimen jars of fresh herbs preserved in solution, 16 charts and maps. 300 specimens have been collected for the herbarium and are classified. A relief map of India showing the distribution of important medicinal plants in India is exhibited in the Museum.

5. Research

(a) The Out-patient Department has been discontinued and 2 posts of Junior Research Vaidyas and one of Female Attendant were abolished from 22nd November, 1969.

(b) The Unit carried out pharmacological research work in the following fields :

- (1) Anti-inflammatory activity of Guggul
- (2) Cholinomimetic action of Berberine.

6. Garden

50 Ayurvedic herbs are maintained in the garden for fresh juices and quaths that are used in Pharmacy preparations and clinical trials.

CHAPTER XIII—FACULTY OF TECHNOLOGY AND ENGINEERING—

1. Review of Faculty Activities

(1) The different Boards of Studies, deliberated and recast the syllabi of different subjects to be studied, especially in Pre-final and final degree and post-graduate courses. This was deemed necessary, so as to be in tune with changing pattern of technology.

(2) Three Periodical Tests were held during the year for courses conducted on yearly basis or during each semester for courses conducted on semester basis for evaluation of credit marks in each subject for each of the classes under all the degree and diploma courses conducted at this Faculty.

(3) Third and last year of the Sequential Summer School supported by the U.G.C. and USAID and in collaboration with the I.S.T.E. formerly known as A.P.T.I. (India) was conducted during the Summer of 1969 by the Electrical Engineering Department of the Faculty. In all 23 participants from Institutions all over India were actively engaged in the programme.

(4) The first phase of the programme entitled Co-operative Course (Sandwich Course) has been successfully completed. The participants have been oriented towards the working of an industry. Improvement in their understanding of the industrial complex was observed. Participants, besides gathering large measure of information, developed an attitude of inquiring and obtaining critical appraisal of problems. It is of interest to note that some of the industry personnel could carry out teaching work in an excellent manner. The working and achievements of the first phase of the Pilot Project indicates that such schemes, if well nurtured, with different industries can be fruitful in achieving the goals set forth.

2. Courses of Study

The Faculty provides the following courses :

(i) Master's degree :

M.E.
M.Text.Engg.
M.U.D.

(ii) Post-Graduate Diploma
(iii) B.E.

(iv) B.Text.Engg.
(v) B.Text.Tech.

(vi) B.Arch.
(vii) Post-Diploma Diploma
(viii) Diplomas :

D.T.C. and D.T.T.

Civil, Mechanical, Electrical Engineering
Textile Engineering
Architecture (Urban Design)
Refrigeration and Air-Conditioning
Civil, Mechanical, Electrical, Chemical,
Metallurgical and Electronics Engineering.
Textile Engineering
Textile Technology
Architecture
Refrigeration and Air-Conditioning
Textile Chemistry and Textile Technology

3. Number of Students

The number of students enrolled in various classes at the commencement of the year under report was as under:

	Men Students	Women Students	Total No. of Students
(a) Diplomas			
Textile Chemistry			
I Year	20	—	20
II Year	21	—	21
III Year (Final Year)	129	—	129
Textile Technology			
Pre. T.T.	29	—	29
1st Year T.T.	30	—	30
2nd Year T.T.	31	—	31
3rd Year T.T. (Final Year)	38	—	38
Total	298	—	298
(b) Post-Diploma			
Diploma in Refrigeration and Air-Conditioning	7	—	7
Total	7	—	7
(c) Degree			
B.E. I (CME, Ch, Met.)	357	1	358
B. E. II (Civil)	87	—	87
B.E. II (Mech.)	112	1	113
B.E. II (Elec.)	86	—	86
B.E. II (Chem.)	41	—	41
B.E. II (Met.)	51	—	51
B.E. III (Civil)	85	3	88
B.E. III (Mech.)	105	—	105
B.E. III (Elect.)	99	1	100
B.E. III (Chem.)	37	—	37
B.E. III (Met.)	51	—	51
B.E. IV (Civil)	97	—	97
B.E. IV (Mech.)	116	—	116
B.E. IV (Elect.)	91	—	91
B.E. IV (Chem.)	35	—	35
B.E. IV (Met.)	32	—	32
B.E. V (Civil)	109	1	110
B.E. V (Mech.)	138	1	139

	Men Students	Women Students	Total No. of Students
B.E. V (Elect.)	74	—	74
B.E. V (Chem.)	40	—	40
B.E. I (Electronics)	21	—	21
B.E. II (Electronics)	22	—	22
B.E. III (Electronics)	20	—	20
Textile Engineering and Technology:			
F. Text. Engg. and Tech.	31	1	32
S. Text. Engg.	13	—	13
S. Text. Tech.	26	—	26
T. Text. Engg.	19	—	19
T. Text. Tech.	35	—	35
B. Text. Engg.	30	—	30
B. Text. Tech.	34	—	34
Architecture :			
B. Arch. I Yr.	31	7	38
B. Arch. II Yr.	28	8	36
B. Arch. III Yr.	38	14	52
B. Arch. IV Yr.	41	16	57
B. Arch. V (Final Year)	37	3	40
	2251	57	2308
Pre. Engineering Civil	3	—	3
Pre. Engineering Mech.	3	—	3
Pre. Engineering Elec.	1	—	1
	7	—	7
	8	—	8
(d) Post-graduate Diploma in Refrigeration and Air-Con- ditioning			
	8	—	8
(e) Post-Graduate Degree Civil Engineering			
Public Health Engineering:			
Jr. Year	5	—	5
Sr. Year	5	—	5

	Men Students	Women Students	Total No. of Students
Soil Mechanics:			
Jr. Year	7	—	7
Sr. Year	2	—	2
Highway Engineering:			
Jr. Year	8	—	8
Sr. Year	3	—	3
Hydraulics:			
Jr. Year	7	—	7
Sr. Yeas	2	—	2
Structural Engineering:			
Jr. Year	5	1	6
Sr. Year	6	—	6
Mechanical Engineering:			
Internal Combustion Engg.:			
Jr. Year	9	1	10
Sr. Year	4	—	4
Production Engineering			
Jr. Year	10	—	10
Sr. Year	3	—	3
Electrical Engineering:			
Automatic Control Engg.:			
Jr. Year	10	—	10
Sr. Year	6	—	6
Power Engineering:			
Jr. Year	3	—	3
Sr. Year	4	—	4
M. Text. Engineering:			
Jr. Year	3	—	3
Sr. Year	1	—	1
	<hr/>	<hr/>	<hr/>
	103	2	105
(f) Ph.D.	—	—	—
(g) Government of India Technical Teachers Trainee :			
Second Year :			
Civil Engg.	—	—	—
Mechanical	—	—	—
Electrical	—	—	—

	Men Students	Women Students	Total No. of Students
Third Year :			
Civil	—	—	—
Mechanical	1	—	1
Electrical	2	—	2
	<hr/>	<hr/>	<hr/>
	3	—	3
Summary			
(a) Diploma	298	—	298
(b) Post-Diploma Diploma	7	—	7
(c) Degree	2251	57	2308
(d) Pre. Engineering	7	—	7
(e) Post-Graduate Diploma	8	—	8
(f) Post-Graduate Degree	103	2	105
(g) Ph.D.	—	—	—
(h) Government of India Technical Teacher Trainees	3	—	3
	<hr/>	<hr/>	<hr/>
Grand Total	2677	59	2736

4. Staff

(a) During the year the staff of the Faculty consisted of 15 Professors (Three of whom were in the senior scale), 32 Readers, 60 Lecturers, 4 Visiting Lecturers including retired teachers, 51 Senior Instructors, 2 Junior Instructors, 29 Assistant Lecturers, 1 UNESCO Expert, 158 Class III and 88 Class IV employees.

(b) New appointments:

- (1) Shri K. J. Mody, Reader in Mechanical Engineering
- (2) Shri A. M. Shirgaonker, Lecturer in Architecture
- (3) Shri S. I. Patel, Lecturer in Electrical Engineering

(c) Teachers who left during the year under report:

- (1) Shri N. R. Parikh, Lecturer in Applied Mechanics—Resigned from U.S.A.
- (2) Shri R. N. Chokshi, Lecturer in Civil Engineering—Resigned from U.S.A.
- (3) Shri S. P. Shah, Lecturer in Civil Engineering—Resigned to go to U.S.A.
- (4) Shri M. A. Mehta, Lecturer in Civil Engineering—Resigned from U.S.A.
- (5) Shri R. L. Gandhi, Reader in Civil Engineering—Resigned from U.S.A.

- (6) Shri C. D. Desai, Reader in Civil Engineering—Resigned from U.S.A.
 (7) Shri V. C. Shah, Reader in Civil Engineering—Resigned to go to U.S.A.
 (8) Shri V. S. Shah, Reader in Applied Mechanics—Resigned from U.S.A.
 (9) Shri S. N. Pandya, Lecturer in Applied Mechanics—Resigned from U.S.A.

Sr. No.	Name	Title	Where published
5. Professional Growth of the Staff			
(a) Articles or Papers:			
1	Dr. S. K. Damle and Mr. L. J. Feeser	Response of Rectangular Plates to Moving Loads by a Finite Element Procedure	Shock and Vibration Bulletin No. 40 January 1970, Naval Research Laboratory Washington, D. C.
2	Shri A. V. Shroff and Professor N. Y. Hiriyur	Density characteristics of Calcium Chloride with Kaolinitic Clay	Journal of Technology and Engineering January 1970, No. 2
3	Dr. R. M. Dave	Laminar Oscillating Couette Flow	Research Journal, Faculty of Technology and Engineering January, 1970, Vol. 2
4	Shri H. V. Bhavnani and Shri K. V. Jaradi	Characteristic and treatment of Dye wastes	Institution of Engineers; Journal, Golden Jubilee No. Baroda Centre
5	Shri K. V. Gautam	(i) Forecasting of future vehicle journal distribution (ii) Use of critical path method in highway construction (iii) Different methods of timing of fixed time traffic signals	Research Journal, Faculty of Technology and Engineering do do
6	Dr. R. C. Desai and C. S. Lalwani	Anatomy of System Engineering	Journal of the Baroda Sub Centre of the Institution of Engineers (India), 1970

Sr. No.	Name	Title	Where published
7	Dr. R. C. Desai and Shri M. M. Pathan	Modified describing function analysis for a Type-1 control system with a symmetrical saturation nonlinearity	Journal of Technology and Engineering Kalabhavan, June 1969, Vol. I.
8	Shri K. J. K. Thakkar	Selection of Input signals for Sine comparators	do
9	Professor J. M. Shah	Thermal Fly Wheel	Golden Jubilee Number, Institution of Engineers, Gujarat Centre
10	Professor R. C. Patel	Application of Simplex Technique for problems of subcontraction	Journal of Institution of Engineering (India), Vol. VIII, No. 9 Pt MES.
11	Professor K. H. Patel	Parameters of Spinning Ring Design and Manufacture	Textile Digest, October-December, 1969
12	Professor M. B. Achwal	Contemporary Marathi Poetry	'Indian Writing Today in January, 1970
13	Dr. A. P. Verma	(i) Imbibition in a cracked porous medium (ii) Perturbation solution of imbibition in a cracked porous medium of small inclination (iii) Fingero-Imbition in artificial replenishment of ground water through cracked porous medium	Cam. J. Phys. 47 22, 1969 2519 2524 Bull International Assoc. scient. Hydrology, XV. 1. 1970 Water Resources Research Amer. Geophys. Union, 6th March, 1970
14	Professor R. V. Joshi	Thermoluminescence of strontium-doped sodium chloride	Proc. Phys. Soc. (London), October 1969
15	Dr. J. R. Pandya and Shri B. J. Mehta	Effect of concentration on the shape of Etch pits on cleavage faces of calate	Minerology Magazine, London, December, 1969 Vol. 37, No. 288, 526

Sr. No.	Name	Title	Where published
16	Dr. Padmini Agarwal and Shri C. G. Kartha	Viscous behaviour of Cholesteric liquid crystals	Jour. Phys. Soc. Japan Vol. 28, No. 2470, 73 February 1970.
17	Professor J. S. Dave and Shri R. A. Vora	Mesomorphic behaviour of the cholesteryl esters-1; p-n-alkoxy benzoates of cholesterol	Liquid crystals and ordered fluid, Plenum Press, New York, pp. 477-488, 1970

(b) Participation in Conferences, Seminars, Symposiums etc.

(1) 10 teachers of the Faculty were deputed to attend Conferences, Seminars, Symposiums etc. held in India.

(2) Dr. R. C. Desai, Reader in Electrical Engineering was deputed to attend the Third Hawaii International Conference on System Sciences held at Honolulu, Hawaii, U.S.A. in January 1970.

6. Activity of Centre

Cooperative Sores:

The working of the store was satisfactory. The total sale during the year amounted to Rs. 13387/-.

7. Library

The Reading-room of the library has a sitting accommodation for 130 readers. Books for reference are issued on all working days and also on Sundays and holidays.

The details regarding the average daily attendance of students and teachers in the library and/or the Reading-room and the number of books issued to them is given below :

Particulars	Number
(1) Average number of students making use of the library and/or reading-room daily	856
(2) Average number of teachers making use of the library and/or reading-room daily	70
(3) Total number of books issued to students during the year	37000
(4) Total number of books issued to teachers during the year	6500

The stock and the expenditure on the library and/or the Reading-room are given below :

Particulars	Number		Cost in Rs.
	Books	Bound Periodicals	
(1) Books (including back numbers of journals as on 1-4-1969)	33,061	3,947	6,14,643-57
(2) Books written off during the year	116	—	963-70
(3) Books added during the year	2,064	308	87,299-63
(4) Books as on 1-4-1970	35,009	4,255	7,00,979-50
(5) Journals subscribed during the year	198	—	26,985-39
(6) Amount spent on binding during the year	—	—	3,331-15
(7) Total amount spent for library and/or Reading-room at the end of the year	—	—	7,31,296-04

8. Museum, Laboratories, Studios, Workshop etc.

Sr. No.	Item	Cost of equip-ment etc. as on 1-4-1969 Rs.	Cost of equip-ment written off during the year Rs.	Cost of equip-ment added during the year Rs.	Cost of equip-ment etc. as on 31-3-1970 Rs.
(1)	Laboratories, Workshop, Studios etc.	43,58,248-36	10,969-09	3,82,881-86	47,30,161-13

9. Faculty Publications

Name of the Journal	Editor	Month of Publication
(1) Journal of Technology and Engineering	Editorial Board of the Faculty	Half-yearly since January, 1969
(2) Experimental News	Staff and Research students of various departments of Faculty of Technology and Engineering	May, 1969
(3) Synopsis of Research and Development Projects in collaboration with Industries	Faculty of Technology and Engineering,	June, 1969

10. Distinguished Visitors during the year:

Name	Date of Visit
(1) Prof. TOM HANCOCK	2-12-1969 to
FRIBA, An Internationally recognised Town Planner and Architect from U. K.	24-12-1969

- (2) Visit of two Russian Experts
 (i) Mr. Aleksandr D. Lihanov and
 (ii) Mr. Dmitriji F. Bruhavets and
 (iii) Mr. R. H. Bhojwani, Officer from the Ministry of Education and Youth Services, Government of India, New Delhi visited the Faculty in connection with the establishment of the school for Model Diploma Course in Technology of Petro-Chemicals to be started at the University Polytechnic at Baroda under the INDO-USSR Credit Agreement of December, 1966
- 15-12-1969 to
17-12-1969
- (3) Visit of IV Five Year Plan Committee consisting of :
 (i) Brig. S. K. Bose, (ii) Prof. Y. N. Bapat and
 (iii) Prof. S. M. Sen—for consideration of proposals for development of undergraduate and [post-graduate studies and research in Engineering
- 18-2-1970 to
19-2-1970
- (4) Mr. H. E. HOELSCHER
 Dean, School of Engineering, University of Pittsburg, Pittsburgh, Pennsylvania
- 5-3-1970

CHAPTER XIV—FACULTY OF FINE ARTS

1. Courses of Studies

The Faculty offers the following courses:

- (1) Ph.D. Art Criticism and Painting.
 (2) M.A. (Fine) Applied Arts, Art Criticism, Art Education, Graphic Arts, Painting and Sculpture.
 (3) Post-graduate Diploma Museology.
 (4) B.A. (Fine) Applied Arts, Printing and Sculpture.
 (5) Post-diplomas and Diplomas Applied Arts, Graphic Arts, Painting and Sculpture.
 (6) Diploma Textile Design.
 (7) Certificate Bronze-casting, Lithography, Pottery and Ceramics, Photography, Printing Process and Block-Making and Woodcrafts.

It has been decided to replace the existing four year degree and diploma courses by five year Degree and Diploma courses with two years of Preparatory and three years of specialization.

2. Number of Students

The number of students enrolled in various classes during the year was as under:

Year/Class	Men	Women	Total
<i>(a) Certificate:</i>			
1st year	3	1	4
2nd year	7	2	9
Total	10	3	13
<i>(b) Diploma:</i>			
1st year	20	1	21
2nd year	16	2	18
3rd year	12	1	13
4th year	10	3	13
Total	58	7	65

Year/Class	Men	Women	Total
(c) Post-Diploma Diploma:			
Junior	2	—	2
Senior	6	1	7
Total	8	1	9
(d) Degree:			
1st year	21	16	37
2nd year	13	6	19
3rd year	12	5	17
4th year	11	5	16
Total	57	32	89
(e) Post-graduate Diploma:			
Junior	5	1	6
Senior	5	—	5
Total	10	1	11
(f) Post-graduate Degree:			
Junior	2	2	4
Senior	6	—	6
Total	8	2	10
(g) Ph.D.			
	4	—	4
Grand Total	155	46	201

In addition to the above there are 24 non-collegiate students, Government Scholars, Commonwealth Students and Ful-bright scholars and students specialising in Bronze-casting, Mural Decoration and Graphics.

3. Staff

The staff of the Faculty including the Museology Department consisted of 3 Professors (One of whom was in the Senior Scale), 5 Readers, 19 Lecturers, 2 Assistant Lecturers, One Part-time Instructor, 14 class III and 17 class IV employees.

4. Professional Growth of the Staff

(a) Publication of Articles/Papers:

Name of the Teacher	Articles/papers	Name of the Journal wherein published with month of Publication
(1) Professor K. G. Subramanyan	(i) Folk Arts and the modern Indian Artist	Lalit Kala Contemporary, September, 1969, No. 10.
	(ii) Paintings of Binode Bihari Mukherji	Catalogues of the retrospective exhibition of the Paintings of Binode Bihari Mukherji, New Delhi, April, 1969 (Also reprinted in L.K.C. No. 10).
	(iii) Wrote and illustrated a children's book on communal disturbances	It was printed by the Faculty for the Fine Arts Fair.
(2) Ratan Parimoo	Notes on young Baroda Sculptors	Lalit Kala Contemporary, No. 10, September, 1969.
(3) Shri V. H. Bedekar	Extrinsic motivation in Museum Presentation	Studies in Museology, Vol. V, 1969.
(4) Shri S. M. Nair	Educational activities of Natural History Museum in the United States	—do—
(5) Shri R. T. Parikh	The Pot belled sculptures from North Gujarat	Journal of Oriental Art, Calcutta.

(b) Papers presented at Conferences, etc.:

(1) Professor K. G. Subramanyan and Sarvashri Ratan Parimoo and G. M. Sheikh read papers on 'Image in Contemporary Art' at the Annual Art Seminar organised by the Lalit Kala Akademy, New Delhi in February, 1970.

(2) Shri S. M. Nair presented a paper on 'Bio-deterioration' at the seminar on Conservation organised in Delhi by the Indian Association for the Study of Conservation of Cultural Property.

(c) *Participation in Inservice and other Programmes :*

(1) Professor N. Chaudhuri was appointed convener of the Exhibition of Folk Art sponsored by the Lalit Kala Akademy, New Delhi. He has been also deputed on the All India Board of Technical Education by the Inter-University Board of India.

(2) Shri K. B. Kapadia was invited to attend the meeting of the G.O.I. Commission for Scientific and Technical Terminology in Fine Arts, at New Delhi and Ahmedabad.

(3) Shri V. H. Bedekar was invited to attend meetings of the International Committee for Museum of Science and Technology at Delhi, Calcutta, Jamshedpur and Bangalore in November, 1969.

(4) Six teachers and two students were commissioned for various stalls (Murals and Sculptures) of the Gandhi Darshan Exhibition held in New Delhi.

(5) Six teachers of the Faculty participated in the Artists Camp at Pava-gadh from 24th December, 1969 to 4th January, 1970, sponsored by the Lalit Kala Akademi of the Gujarat State.

(6) Sarvashri R.T. Parikh and V. H. Bedekar continued to work as Hon. General Secretary and Vice-President respectively of the Museum Association of Gujarat. Shri Bedekar also worked as Chairman of the National Committee for Museum Education.

(7) The staff and students of the Museology Department gave full co-operation in organising successfully the 7th All India Museum Camp of the Ministry of Education, Government of India in Baroda between 16th and 30th January, 1970 on the subject of Pre-History, Anthropology and Natural History. Sarvashri S. M. Nair and W. F. Casmero arranged special exhibitions on 'Museum Publication and Natural History Exhibits' at this occasion.

(8) Professor K. G. Subramanyam, Sarvashri Jeram Patel and Mahendra Pandya held one-man shows at Delhi and Bombay in November-December, 1969 and February, 1970.

(9) Paintings of Shri Jyoti Bhatt and Shri Vinodray Patel were selected to represent India at the Sao Paolo Biennale, 1969-70.

(10) Paintings of Shri Vinodray Patel and Shri Bhushan Kaul (a post-graduate student) were included in a group show of Indian Paintings at Atlanta, Texas, U.S.A. in January, 1970.

(11) The following teachers won prizes:

- | | |
|-----------------------|--|
| (i) Shri Jyoti Bhatt | For an Etching at the All India Exhibition of Graphic Prints, New Delhi. |
| (ii) Shri V. S. Patel | For a Lithograph at the Railway Exhibition, New Delhi. |
| (iii) Shri R. Panchal | For a Sculpture at the Annual Exhibition, Gujarat State Lalit Kala Akademi, Ahmedabad. |

5. Exhibition Activities

The Faculty arranged the following exhibitions :

- (i) Master Drawings from World Art, (ii) The Popular Image, (iii) Paintings and Frescoes of Binode Bihari Mukherji which included the recently acquired photographs of his Frescoes at Shantiniketan by the Art History Department, (iv) Photographs of Sculptures at Angkor by Professor K. G. Subramanyam, (v) Photographs by Shri Padhiyar, Sadiq, Nasreen Mohmedelli, (vi) Photographs illustrating the technique of Batik as practised in Java by Shri Bihari Barbhaiya, (vii) Exhibition of the works of Preparatory and Post-graduate students, (viii) Drawings by Shri Nagji Patel, (ix) Works of Shri Richard Quarrell, (x) Poen Yantra by Shri Malcolm Pillar, (xi) Paintings of Chaitanyadeva Chhattopadyaya.

The following exhibitions were received from outside :

- (i) Contemporary Korean Paintings, (ii) Contemporary Indian Graphics, (iii) Contemporary American Prints (including-Film shows on Art by USIS), (iv) Christian Icons, (v) German Paintings of 15th and 16th Centuries (Reproductions), (vi) Sculptures, Photographs and Drawings of Barbara Hepworth (including Film shows on Art by British Council), (vii) Photographs of Rodin's Sculptures (including Film shows on Art by French Embassy).

6. Library

(1) *Acquisition :*

(a) *Books :*

The library received a grant of Rs. 3,000/- from the University, which has been fully utilised.

Noteworthy acquisitions during the year are (1) Early Netherlandish Painting in two volumes by Erwin Panofsky, (2) Italian Pictures of the Renaissance, in three volumes by Benard Berenson.

The following statement gives the details of the acquisitions of library during the year :

	<i>Books (including back number of journals)</i>	<i>Pamphlets</i>	<i>Total value in Rs.</i>
Number at the beginning of the year	5,080	94	80,615-34
Number added during the year	77	—	2,995-22
Number withdrawn from the record	—	—	—
Number remaining at the end of the year	5,157	94	83,610-56

(b) *Periodicals :*

The total number of periodicals and Journals subscribed to now stands at 17. The total amount spent for the subscription of the periodicals is Rs. 1,463-92. The amount spent for binding is Rs. 815-75.

(2) *Circulation of Books :*

The statistics of the use of the library are given below :

- (i) Average number of students making use of the library 40
 (ii) Average number of teachers making use of the library 10
 (iii) Average number of books issued per day for home-reading (issued only to the staff members and post-graduate students) 9
 (iv) Total average number of books issued per day for reading on the premises 35

A small Departmental Library containing books on Museums and subjects covered by usual museum collections belonging to Smt. Hansa Mehta University Library is maintained by the Department of Museology for reference purposes.

7. **Museum, Laboratory, Studio, Workshop etc.**

<i>Sr. No.</i>	<i>Item</i>	<i>Cost of equipment as on 1-4-1969</i>	<i>Cost of equipment etc. written off during the year</i>	<i>Cost of equipment etc. added during the year</i>	<i>Cost of equipment etc. as on 31-3-1970</i>
		<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>
(1)	Studios, Workshops (Painting, Sculpture and Applied Arts)	3,59,772-44	—	5,947-10	3,65,719-54
(2)	Museology Department	70,320-62	—	892-50	71,213-12
	Total	4,30,093-06	—	6,839-60	4,36,932-66

8. **Faculty Publications**

(1) Under the Museology Department Publication Series, a book 'Botany in Indian Museum' written by Shri M. S. Chandrashekhar was published.

(2) The fifth volume of 'Studies in Museology' was published under the editorship of Shri S. M. Nair, Lecturer in Museology.

9. **Distinguished Visitors**

- | | |
|--|--------------------------|
| (1) Shri Sivaramamurti,
Director, National Museum, New Delhi | 13-10-1969
14-10-1969 |
| (2) Dr. Still,
Psychologist, Manchester University, U.K. | 19-12-1969 |
| (3) Professor S. B. Palsikar,
Dean, J. J. School of Art, Bombay | 12- 1-1970
13- 1-1970 |

CHAPTER XV—FACULTY OF HOME SCIENCE

1. New Experiments

(1) A new programme was initiated this year when a small group of children in need of special care were admitted. The children came in the afternoons, three times a week. The work involved close collaboration of the parents.

(2) In the area of Parent Education, also a new experiment was initiated under which a group of some 20 mothers met regularly in a group to discuss problems of their children in relation to the problems faced by the mothers in their families.

(3) It has been decided to reorganise the undergraduate programme and adopt it with effect from June, 1970. According to this, credits for graduation will be increased from 129 to 148 and all areas of Home Science will be evenly represented in the Common Curriculum. The new courses are divided into two categories viz. (a) Compulsory Courses for all students and (b) Electives.

2. Courses of Studies

There is provision for the following courses :

- (1) B.Sc. (Home), (i) Child Development
M.Sc. (Home) and (ii) Foods and Nutrition
Ph.D. (iii) Clothing and Textiles
- (2) B.Sc. (Home) and (i) Home Management
M.Sc. (Home) (ii) Home Science Education and Extension
- (3) Post-graduate (i) Nursery School Education
Diplomas (ii) Dietetics
- (4) B.Sc. (Home) General Home Science.

3. Number of Students

Class	Women	Men	Total
(1) B.Sc. (Home)			
(i) First Year	159	—	159
(ii) Second Year	157	—	157
(iii) Third Year	110	—	110
(iv) Fourth Year	136	—	136
(a) Child Development 10			
(b) Clothing and Textiles 14			
(c) Foods and Nutrition 29			
(d) Home Management 10			

Class	Women	Men	Total
(e) Home Science Education and Extension 4			
(f) General Home Science 69			
Total	562	—	562
(2) Post-graduate Diploma in Nursery School Education	5	—	5
(3) Post-graduate Diploma in Dietetics	6	—	6
Total	11	—	11
(4) Jr. M.Sc. (Home)	38	—	38
(a) Child Development 10			
(b) Clothing and Textiles 13			
(c) Foods and Nutrition 5			
(d) Home Management 5			
(e) Home Science Education and Extension 5			
(5) Sr. B.Sc. (Home)	30	—	30
(a) Child Development 5			
(b) Clothing and Textiles 10			
(c) Foods and Nutrition 6			
(d) Home Management 3			
(e) Home Science Education and Extension 6			
Total	68	—	68
(6) Ph.D.			
(a) Clothing and Textiles	1	1	2
(b) Child Development	1	—	1
Total	2	1	3
Grand Total	643	1	644

4. Staff

(a) Present Position:

The staff of the Faculty consisted of 3 Professors (One of whom was in the Senior Scale), 6 Readers, 19 Lecturers, 14 Assistant Lecturers, 11 Research Associates, 14 Class III and 25 Class IV employees.

(b) *New appointments:*

Name	Designation	Department
(i) Dr. (Kum.) P. S. Chari	Professor	Education and Extension.
(ii) Dr. B. N. Chaukar	Reader	Clothing and Textiles.
(iii) Dr. (Miss) M. Mathew	Reader	Home Management.
(iv) Dr. (Kum.) V. Taneja	Reader	Home Management.
(v) Dr. (Miss) Ella Harrison	Lecturer	Clothing and Textiles.
(vi) Smt. Saroj Patel	Lecturer	Clothing and Textiles.
(vii) Kum. Sunita Patel	Lecturer	Foods and Nutrition.
(viii) Shri K. V. Trivikram	Lecturer	Foods and Nutrition.
(ix) Dr. (Kum.) B. S. Saraswathi	Lecturer	Education and Extension.

(c) *Teachers who left:*

Name	Designation	Reason
(i) Dr. (Kum.) S. Kotechari	Reader in Foods and Nutrition	Marriage.
(ii) Kum. Sara Kurian	Lecturer in Foods and Nutrition	Marriage.

5. **Professional Growth of the Staff**(a) *Publications:*

Name	Title	Where published
Dr. Mary Lyle and Dhruvi Chhaya	Teaching Home Management, Time and Energy Management	Faculty of Home Science, March, 1970.
Dr. (Smt.) P. Phatak	Interim Reports No. II and No. III, Motor and Mental Abilities of Indian Babies	Faculty of Home Science.

(b) *Papers presented at Conferences:*

- (i) Dr. (Kum.) P. S. Chari presented a review paper at the All India Seminar on Research in Extension Education at Bangalore in May, 1969 and a paper at the All India Seminar and Conference of the Adult Education Association of India at Gauhati, Assam in December, 1969.
- (ii) Smt. A. Derasari presented a paper on 'Patterns of Primary Dentition in 1400 Children' at the All India Paediatrics Conference at Bhopal.

(iii) Smt. Parul Dave participated in a Conference-Cum-Workshop on 'Pre-School Teacher Education' at New Delhi.

(c) *Participation in Inservice Training and other Programmes:*

(i) Dr. (Smt.) A. Chandra conducted a Seminar on 'Curriculum Development for Secondary School Teachers of Home Science' in the city of Baroda in November, 1969.

(ii) The staff of Clothing and Textiles Department conducted a Seminar on 'Modern Trends in Clothing and Textiles'.

(iii) The Child Development Department organised a staff Seminar on 'Rediscovery of Early Childhood Education'.

(iv) The Clothing and Textiles Department organised two exhibitions on Family Clothing and Childrens' Clothing and a public education show on Costumes and Sarees of India.

(v) Smt. Jayprabha B. Patel was invited to be one of the authors for writing a text book on Foods and Nutrition for Home Science Students, sponsored by the University Grants Commission.

(vi) Eight teachers of the Faculty gave extension lectures under the University Grants Commission Scheme of Extension Work by University teachers.

(d) *Research Works in Progress:*

Name	Subject of research
Kum. M. Chakravarthy and others	A Socio Economic Survey of Village Asoj, Baroda District.
Smt. K. Parlikar	Developing a model constitution for rural Mahila Mandals.
Prof. (Smt.) Amita Verma	Preparing Kindergarten Children for 1st grade—an experimental study.
Dr. (Smt.) P. Phatak	A study of the Motor and Mental Abilities of Indian Babies—Interim Reports No. II and III.
Kum. Vidya Dave	A study of Child rearing practices in village Rajpur.
Smt. J. B. Patel and her Research Associate	Organization and Management of the Dietary Department in the University Residence Halls.
Smt. J. B. Patel	(i) Assessment of Nutritional Status of Adolescent Girls. (ii) Research of Nutritional Status and requirements of adolescent girls and Young Women in village Asoj.

Shri K. V. Trivikram and Inter-relationship among nutrients.
Research Associates

6. Library

The Faculty Library is amalgamated with Smt. Hansa Mehta Library and the students are making use of that Library.

All the five departments of the Faculty maintain a small reference library for the use of the staff, post-graduate students and the research scholars

7. Faculty Publication

The Child Development Department published a Souvenir on the eve of the 20th anniversary of the Chetan Balwadi.

8 Distinguished Visitors

- (1) Dr. S. R. Baruah, Vice-Chancellor of Assam Agricultural University.
- (2) Shri Harabhai Trivedi, Pro-Vice-Chancellor of Saurashtra University.
- (3) Mr. Harold Howe, Program Adviser, Ford Foundation.
- (4) Dean Lebaron of the Iowa State University, Iowa, U.S.A.
- (5) Mr. Geithner, Assistant Representative, Ford Foundation, New Delhi.
- (6) Professor Claude A. Eggertsen, Michigan University, Ann Arbor, U.S.A.
- (7) Japanese Young Farmers' Delegation Sponsored jointly by the Nippon Kensai Kai and Sienen-dou Council of Japan.
- (8) Dr. G. S. Hammond, Chief Education Adviser, and Dr. James Clinton, Assistant Program Officer, U.S. Agency for International Development, U.S.A.
- (9) Francille Maloch, Consultant, Home Management, Ohio University.
- (10) Mr. R. A. Hunt, Country Director, Wheat Associates, New Delhi.

CHAPTER XVI—FACULTY OF SOCIAL WORK

1. Courses of Studies

The Faculty offers a two year Post-graduate Degree Course (M.S.W.) for a career in Social Work. The training programme consists of three major components :

(1) Class Room Work :

The courses of study aim at preparing competent practitioners for professional jobs in the field of Social Welfare, Family and Child Welfare, Hospitals for Medical and Psychiatric Services, Rural and Urban Community Welfare, Institutions for Women and Children in the State Department of Social Defence and Industrial Relations and Personnel Management etc. The training provides for a broad base of knowledge to all the students in more than four fields of social welfare. The system of electives was continued in certain field courses.

(2) Field Work (Practical Training) :

The professional training necessitates suitable field work experience to integrate the theoretical courses and gain competence in application of it to reality situations. There are fifty-two agencies in and around Baroda City which share in partnership, the training programme of the Faculty. On an average the students put in 15 hours of work per week in the field work agency. Besides participating in the day-to-day service programme of the agencies, the staff and students organize seminars, staff-meetings, discussions and such other activities to equip themselves with up-to-date information on and insight into the problems of the field.

The Faculty continued its community welfare activities at the rural as well as urban community centres. In each community centre 5 to 7 students were placed for field work training. The students carried out social education programmes for Youth, Women and Children.

The Faculty continued to get good co-operation from agencies in labour setting. The students carried out useful projects like "Supervisory practices in selected Industries" and "A study of Managements attitude towards Trade Union". The Faculty is also associated with Workers' Education Centre, Baroda Region, and looks upon it as a prospective field work agency.

In Medical and Psychiatric setting the Faculty succeeded in developing school social work services. The importance of school social work is now being increasingly recognised and it is hoped to get greater co-operation from many more schools in future.

Incorrectional Setting Agencies continued to give co-operation in the field work programme.

2. Number of Students

The number of students enrolled in Junior and Senior classes at the commencement of the year 1969-70 was as under. There has been a gradual increase in the number of candidates, deputed by Department of Social Welfare, Assam and other organizations for two years training at the Faculty.

	Men	Women	Total
Junior Class	25	14	39
Senior Class	21	15	36
Total	46	29	75

3. Staff

The staff of the Faculty consisted of 1 Professor (upto July 1969), 2 Readers, 5 Lecturers, 3 Assistant Lecturers, 9 Class III and 7 Class IV employees.

(a) Staff Members who left the Faculty:

Professor G. G. Dadlani	Professor	Resigned from 9-8-1969 for better prospects in U.S.A.
Shri J. K. Motwani	Lecturer	For better prospects in U.S.A.

4. Professional Activities and Participation of the Staff Members

(1) Faculty Programs: Social Work Education:

Participant Leaders

- (i) Faculty Agency Day-August, 1969, Symposium, on "Urbanization"
1. Vice-Chancellor, Dr. C. S. Patel
 2. Mayor, Dr. T. V. Patel
 3. Chairman, Gujarat State Transport, Shri B. Contractor
 4. Executive Director (B.C.D.S.), Mr. Lowel Wright
- (ii) Family & Child Welfare, March 1973, Symposium on Family Life Education
1. Organising Leader : Kum. Joyti Barot.
 2. Chairman, Dr. Smt. Jyotsna Shah
 3. Experts: Dr. Miss A. S. Desai
Shri J. N. Kaul
Prof. Smt. A. B. Verma
Dr. R. D. Parikh
Shri S. K. Majmudar
Shri J. K. Motwani
- (iii) Workshop-cum-Demonstration Lectures, February-
- Experts:
1. Shri D. D. Mahulkar, M. S. University.
 2. Dr. T. V. Shrinivasan, Alembic Chemicals

March 1970 "Communication"

3. Mr. Ross Pollock, Ford Foundation
4. Shri Tarun Sheth, Ahmedabad Institution of Management

(2) Special Lecture Series :

- (i) Urban Situation Today and Role of Municipal Corporation in UCD, December 1969
- Dr. J. F. Bulsara
- (ii) Gandhian Approach to Social Work in Modern Context, March 1970
- Padmavibhushan Shri Kaka Saheb Kalelkar

(3) Special Training and Orientation Courses :

(A) Ministry of Education and Youth Services, Government of India :

- (i) National Service Scheme Orientation Courses: September-October 1969
- Director of Training. Teacher and Student Dean and 2 staff Leaders of M. S. members (Assisted) University of Baroda
- (ii) National Service Scheme Orientation courses - 13th-23rd November, 1969
- Director of Training. University Teachers Shri I. P. Shelat, deputed from Gujarat Smt. Varsha Anjaria University (Assisted)

(B) Ministry of Health and Family Planning, Government of India :

- (i) Short Term Training Course for 8 weeks (November 1969 to January 1970)
- Director of Training UCD Project Officers and Community Workers from 5 States of India were deputed for the training
- Shri S.K. Majmudar
Dr. V. B. Shah
(Assisted)

(4) Social Welfare Field Programmes : Participation & Organisation :

- (i) Shri I. P. Shelat and 6 students of Sr. Class participated Somanath. May 1969
- Antar Bharati Shram Sanskar Chavani-organized by Maharogi Seva Samiti
- (ii) Kum. I. M. Patel attended First Meeting of the Committee of University with Workers' Education Programme at New Delhi, November, 1969
- Central Board for Workers' Education sponsored by Ministry of Labour and Rehabilitation, Government of India

- (iii) Shri J. K. Motwani, participated at Delhi—December, 1969 National Conference on Population Policy
- (iv) Kum. I. M. Patel, Hon. General Secretary ICSW Baroda District Branch
Shri I. P. Shelat
Executive Member
Shri J. K. Motwani
Co-opted Member
Shri S. K. Majmudar
Co-opted Member XVth National Conference of Indian Council of Social Welfare
- (v) Kum. I. M. Patel
Shri I. P. Shelat
Participated at Bombay February, 1970 IInd Regional Seminar on National Service Scheme
- (vi) Dr. V. B. Shah, Participated at Varanasi, December, 1969 Seminar on Curriculum Development for Mentally Retarded Children in India
- (vii) Shri S. R. Yardi, directed a Research Project Research Report on "Socio-Economic conditions and Activity pattern of Retired Employees of Messrs Alembic Chemical Works Co. Ltd., Baroda"

(5) *Publication by the members of the Staff :*

Author	Title	Publishing Agency
(i) Kum. I. M. Patel	Professional Social Work in India	XV National Conference of ICSW Souvenir
(ii) Dr. V. B. Shah	(i) Objectives of curriculum for mentally retarded	Paper read and published in the Souvenir of the Workshop on curriculum development for mentally retarded in India, Varanasi
	(ii) Problems in communication	10th Anniversary Magazine of the Social Sciences, Bangalore

5. **Library**

(1) *Acquisition Notes :*

(A) *Books :*

The Faculty has a separate library of its own. This year a grant of Rs. 4,500 was received from the University for books and Rs. 1,300/- for periodicals.

The following statement gives details of the acquisitions by the library of the Faculty during the year under report :

	Books (including bound periodicals)	Pamphlets	Total values in Rupees
Number at the beginning of the year	7,251	2,300	67,302-79
Number added during the year	172	250	4,499-01
Number written off			
Number remaining at the end of the year	7,423	2,550	71,801-80

(B) *Periodicals :*

The total number of periodicals and scholarly journals subscribed to by the Library during the year stands at 40. About 120 volumes of bound periodicals were added to the stock during the year. Amount spent on subscription etc. is Rs. 1,299-10.

(2) *Circulation of Books :*

The statistics of the use of the library are as under :

(i) Daily average number of readers visiting the library	50
(ii) Daily average number of teachers visiting the library	7
(iii) Average number of books issued per day for home-reading	50
(iv) Average number of books issued per day for reference	60

6. **Distinguished Visitors**

The following are some of the distinguished visitors to the Faculty :

Name of the Visitor	Date of visit
(1) Dr. (Smt.) Jyotsna H. Shah, Director, Central Bureau of Correctional Services, New Delhi	18- 3-1970
(2) Shri J. N. Kaul, Director, SOS Children's Village of India, New Delhi	18- 3-1970
(3) Padmavibhushan Kakasaheb Kalelkar	24- 3-1970
(4) Shri Umashanker J. Joshi, Vice-Chancellor, Gujarat University	23-11-1969
(5) Swami Atmasthanananda, President, Ramkrishna Ashram, Rajkot	16- 1-1970
(6) Mr. Pollock, Ford Foundation, New Delhi	10- 3-1970

7. Shri V. T. K. Institute of Rural Development

The Institute has a staff of 9 teachers, 8 class III and 10 class IV employees. It carried out the following programmes during the year :

(1) *Social Welfare Training :*

(i) Job training for the Chief Organizers of Family and Child Welfare Projects—39 trainees from 12 States completed the courses.

(ii) Two Advanced Orientation courses in Family and Child Welfare each of six weeks' duration—75 trainees completed the courses.

(2) *Panchayati Raj Training :*

The programme entered the sixth year of its implementation.

The following training courses were organised.

(i) Fourth Basic Training Course for Village Panchayat Secretaries. Out of thirty-nine trainees from Baroda, Kaira and Panchmahal District that appeared for the qualifying examination thirty-four passed:

(ii) Two Refresher Courses for Village Panchayat Secretaries—72 trainees from the above three Districts underwent training.

(iii) Six Perapatetic Training classes for office-bearers of the Panchayats—288 office-bearers were trained.

(iv) 39 Panchayat Secretaries were given Gram Rakshak Dal and Rifle Shooting Training in August-September, 1969.

CHAPTER XVII—FACULTY OF LAW

1. Courses of Studies

The Faculty of Law imparts instructions for the following courses:

- (1) (a) Bachelor of Laws (LL.B.)
- (b) Bachelor of Laws (General)
- (c) Bachelor of Laws (Special)
- (2) Master of Laws (LL.M.)
- (3) Ph.D. in Law
- (4) Post-graduate Diploma in Taxation Laws and Practice (D.T.P.)
- (5) Post-graduate Diploma in Labour Laws and Practice (D.L.P.)

Optional Courses at the LL.B.(General)

The new course for the degree of LL.B. (General) has been introduced since the year 1967-68. In the second year of this degree course, a specialized study of Taxation Laws and Labour Laws has been introduced as an optional (Two papers each).

Professional Course

The professional course for the degree of LL.B. (Special) was introduced this year, as prescribed by the Bar Council of India.

Number of Students

Class	Men Students	Women Students	Total
1st year LL.B. (General)	227	20	247
2nd year LL.B. (General)	88	15	103
2nd year LL.B. (Old)	17	—	17
LL.B. (Special)	16	2	18
Total	348	37	385
D.T.P.	57	3	60
D.L.P.	55	5	60
Total	112	8	120
Jr. LL.M.	20	2	22
Sr. LL.M.	21	—	21
Total	41	2	43
Ph.D.	1	—	1
Grand Total	502	47	549

3. Staff

During the year the staff of the Faculty consisted of one Professor, one Reader, two Lecturers, nine part-time Professors, two Visiting Professors, four Class III and three Class IV employees.

4. Post-graduate Studies

The Faculty continued to get distinguished Judges of the Gujarat High Court as Visiting Professors as part of its regular teaching programme. Under this, Justice Shri D. A. Desai lectured to LL.M. classes.

The Post-graduate Diploma Courses for specialized study of Taxation Laws and Labour Laws continued to flourish.

5. Lectures

The following eminent speakers addressed the students and the teachers of the Faculty during the year:

<i>Speaker</i>	<i>Subject</i>
(1) Hon'ble Justice Shri D. A. Desai	(1) Constitutional Law
(2) Shri A. R. Bakshi, Retired Judge, Gujarat High Court	(2) Fundamental Rights (4 lectures), Jurisprudence (6 lectures)

6. Important Events

(1) A symposium on "Obscenity: In Law and Literature" was arranged on 11th October, 1969.

(2) Professor H. C. Dholakia presided over a seminar on "Teaching of International Law" at the Department of Law of the Poona University, organised in collaboration with the University Grants Commission. He also participated in a seminar on "Comparative Law" organized by the Indian Law Institute, New Delhi.

(3) Shri N. N. Buch, Lecturer in Law, attended a seminar on "Law of Torts" organised at Mount Abu by the Indian Law Institute, New Delhi.

CHAPTER XVIII—ORIENTAL INSTITUTE

1. The main work of the Institute is research and publication of unpublished important works carried on with the help of a collection of manuscripts and the collection of printed books on all subjects related to Indology. When the Institute was taken over by the University in 1949, it had a good record of publications—109 Volumes in the Gaekwad Oriental Series and 516 other books. At the end of the year March, 1970 the number of publications in the Institute stood at 153 in the Gaekwad Oriental Series and 594 other books.

The publications are under the following series :

(1) Gaekwad Oriental Series, (2) M. S. University Research Series, (3) Journal of the Oriental Institute (Quarterly), (4) Gujarati Journal 'Svadhya' (Quarterly), (5) M. S. University Oriental Series (published in the Journal of the Oriental Institute), (6) Critical and Illustrated Edition of the Valmiki Ramayana, (7) M. S. Memorial Lectures Series, (8) Shri Sayaji Sahityamala, (9) Shri Sayaji Balajnanamala, (10) Shri Sayaji Gramvikasamala and (11) Shri Shishujnanamala.

2. Post-graduate Teaching

Besides the above, as part of the scheme of co-ordination of the teaching of 14 Shastras of Sanskrit in the University, 6 members of the Institute are recognised as post-graduate teachers in Sanskrit and Gujarati for guiding M.A. and Ph.D. students.

During the year, the Director and two other recognised teachers of the staff of the Institute guided in all 3 Ph.D. students in Sanskrit, Gujarati and Ancient Indian Culture and 66 M.A. students (Junior and Senior) in Sanskrit and Gujarati. The teaching of Prakrit as a subordinate subject at B.A. and M.A. level was introduced six years back by the University and Shri J. P. Thaker of this Institute taught 1 Jr. M.A. student in the subject. The Director also worked as the Head of the Gujarati Department of the Faculty of Arts.

3. Staff

During the year, the staff consisted of 1 Director (in the senior scale of Professor), 1 Deputy Director (Reader's Grade), 4 Research Officers (Lecturer's Grade), 9 Class III and 6 Class IV employees. The staff of the Ramayana Department consisted of 1 Honorary General Editor and Head of the Department, 1 Assistant Editor, 2 Proof Readers, 12 Critical Apparatus, Writers and 2 Class III employees.

4. Professional Growth of the Staff :

(a) Publications by the members of the staff :

Sr.No.	Name	Title	Where Published
1	Professor B. J. Sandesara	(i) प्राचीन अने मध्यकालीन गुजरातमां धार्मिक जीवन (ii) कंबोज अने भारतीय संस्कृति (iii) मंडनमिश्र (iv) गंगादास प्रतापविलास नाटकमां चांपा-नेरना किल्लानुं वर्णन (v) प्राचीन गुजराती भाषासाहित्यमां प्रो. ठाकोरनुं कार्य (vi) Anandapura in Jaina Canonical Literature (vii) संस्कृत साहित्यमां न्याय, कहेवत अने उखाणां (viii) गुजरातनां ऐतिहासिक संशोधन सांस्कृतिक इतिहासना केटलाक प्रश्नो (ix) कान्दहरे-प्रबन्ध - सांस्कृतिक दृष्टि (x) कंबोजिया—हमारा सांस्कृतिक बन्धु	Buddhiprakash, July, 1969 'Akhand Anand', August, 1969 'Navnit'—Hindi Digest, August, 1969 'Svadhyaaya', Vol. VI, No. 4, September, 1969 'Professor B. K. Thakore Adhyayana Grantha', November, 1969 Journal of the Oriental Institute, Vol. XIX, Nos. 1-2, September-December, 1969 'Akhand Anand', October, 1969 'Abhyas', 100th issue, November, 1969 'Buddhiprakash' February, 1969 'Navnit'—Hind Digest, February, 1970
2	Dr. U. P. Shah	(i) Inscriptions of Ramgupta—A further note (ii) Some Aspects of the Ramgupta Problem—A Reply to Mm. Mirashi (iii) सत्यनो महिमा (iv) कुमारपालनो सिक्को	'Journal of the Oriental Institute, Vol. 18 No. 3,' March, 1969 Journal of the Oriental Institute, Vol. 19, no. 1-2', September-December, 1969 'Jain', Bhavnagar, August, 1969 'Svadhyaaya', Vol. VI, No. 4

Sr. No.	Name	Title	Where published
		(v) Two New Documents of Jain Paintings'	Bharat Kala-Bhavan, Banaras, Golden Jubilee Volume, February, 1970
		(vi) A Few Jain Bronzes in the Bharat Kala Bhavan, Banaras	'Bharat Kala Bhavan, Banaras, Golden Jubilee Volume, February, 1970
		(vii) सोलमा सैकानी गुजराती चित्रकला	'Svadhyaaya', Vol. VII, No. 1
3	Shri J. P. Thaker	(i) भारतीय संस्कृति अने मयूर. (ii) Female Costumes in Bharavi (iii) कालिदास मनतिका (iv) Costumes and Decoration in Bharavi	'Svadhyaaya' Vol. VI, No. 3 'Vikram', Ujjain, May, 1969 'Professor B. K. Thakore Adhyayana Grantha', November, 1969 'Journal of the Oriental Institute,' Vol. XIX, Nos. 1-2, September-December, 1969
4	Dr. S. D. Parekh	जूनी गुजरातीनां प्रो. ब. क. ठाकोरनां वे अप्रसिद्ध संपादनो	'Professor B. K. Thakore Adhyayana Grantha,' November, 1969
5	Dr. B. N. Bhatt	Shankaracharya's Advaita and Pratyabhijna System - A comparison	'Journal of the Oriental Institute', Vol. XIX, Nos. 1-2, September-December, 1969
6	Shri P. H. Joshi	Select Contents of Oriental Journals	'Journal of the Oriental Institute', Vol. XIX, Nos. 1-2, September-December, 1969

(b) Papers presented at Conferences :

Name	Title of the paper	Conference
1 Prof. B. J. Sandesara	Anandpura in Jain Canonical Literature	25th session of the All India Oriental Conference, Jadavpur, October, 1969.
2 Dr. U. P. Shah	(i) Fundamentals of the technique of Ahimsa	Seminar on Ahimsa and Prakrit Studies at the Bombay University
	(ii) Cultural Data from early Jain Literature	"
	(iii) Date of Haribhadrasuri	25th session of the All India Oriental Conference, Jadavpur, October, 1969.
(3) Sri J. P. Thakar	मालविकाग्निमित्रिकी समीक्षा के बारेमें कुछ विचार	Kalidas Samaroh, Ujjain, November, 1969.

(c) Participation in Inservice or other Programmes :

(1) Professor B. J. Sandesara was appointed member of the Board of University Publications for the State of Gujarat for production of literature in Gujarati for use at University stage. He was re-appointed as a member of the General Council of the Sahitya Akademi (National Academy of Letters), New Delhi.

(2) Dr. U. P. Shah continued to work as Honorary Editor of the Journal of the Indian Society of Oriental Art. The third Volume is under print and the fourth one under preparation.

5. Library

(1) Manuscripts Section :

This Section has a collection of 25063 manuscripts in Sanskrit, Prakrit, Pali, Apabhramsha and other Classical Indian languages and in several modern India Apabhramsha languages including a few in Persian and Arabic. Of these 172 were added during the year, out of which 136 were purchased (most of these being rare palm leaf MSS, from Kerala) and 36 were received as gift from (i) Vaidya Dhirajlal Maneklal Shah, Pratap Ganj, Baroda, (ii) Shri Narayana Nambiyar, Vadlan, Lakkidi (Kerala), (iii) Shri A. Vasudevan Namboodiri,

Kerala Para Shora nune (Kerala), (iv) Shri T. Vasudevan Namboodiripad, Teneghi (Kerala), and (v) Shri Chirngath Damodaran Moassead, Irinjala Kuta (Kerala).

During the year, 32 manuscripts were lent out to other Institutions, 13 to local scholars and 174 were issued for work on the premises of the Institute, while 1 manuscript was borrowed from outside.

(2) Printed Books Section :

The Institute has a Library having a collection of 32,791 books.

(A) Books :

This year the Library received a grant of Rs. 8,000 for Printed Section and Rs. 700 for Ramayana Department from the University which were fully utilised.

Note worthy additions during the year viz. :

- (i) Grierson, G. A. ed. Linguistic Survey of India, Vols. VI to XI, 1968, (ii) Cunningham, A. Archaeological Survey of India, report of tours in the Gangetic provinces from Badaon to Bihar, in 1875-76 and 1877-78, 1968, (iii) Lokesh Chandra, ed. The collected works of Buxton, 1969. Pt. 14-17, (iv) Encyclopaedia of World Art. 1968, (v) Arts Asiaticques. Vol. 12 to 16, (vi) Vishva Bandhu ed. A Vedic World Concordance. Shantakuti Vedic Series. Vol. 6 to 15. 1955-65, (vii) Krishnamachariar, M. History of Classical Sanskrit Literature. 1937, (viii) Baines, A. Ethnography, (Castes and Tribes) 1912, (ix) Vyas. (Maharshi, Ved) Shrimad Bhagvat Mahapuram, ed. by Shri Krishnashankar Shastri. Skandas 1 to 9. 1965-1968. and (x) Krader, L. Peoples of Central Asia, 1966.

The following statement gives the details of acquisition during the year :

	Books including bound periodicals	Total value in Rs. P.
Total number of volumes as on 1-4-1969	31,936	3,09,487-65
Number added during the year	(Purchased) 525 (Gift/Exchange basis) 330	8,695-86
Total number at the end of March, 1970	32,791	3,18,183-51

(B) Periodicals :

The total number of periodicals and Journals subscribed for and received on an exchange basis now stand at 245.

6. Publications

(1) Gaekwad Oriental Series :

Editing and publication of the Series is one of the main activities of this series. The University Grants Commission and the Government of Gujarat have sanctioned a sum of Rs. 90,000/- for G.O.S. Publications during the IVth Plan.

The following works are under print :

- | | |
|--|-----------------------|
| (i) Krtiyakalpatarū (Pratisthakanda) edited by
Shri K. V. Rangaswami Aiyangar | (pp. 1-96 printed) |
| (ii) Pancharatra Bibliography | (pp. 1-96 printed) |
| (iii) Satyasiddhi | (pp. 1-40 printed) |
| (iv) Agamapramanya | (pp. 1-16 printed) |
| (v) Kīranavali | (pp. 1-216 printed) |
| (vi) An Arabic History of Gujarat | (pp. 1-432 printed) |
| (vii) Chhakkamuvaeso | (pp. 1-272 printed) |

(2) The Union Ministry of Education had sanctioned a sum of Rs. 43,300/- for reprinting ten out-of-print Sanskrit books. All the following ten works have been reprinted by the photo-offset method.

- (i) Ganakarika (GOS. No. 15), (ii) Bhavisayattakaha (GOS. No. 20),
(iii) Apabhramsa-Kavyatrayi (GOS. No. 37), (iv) Jayakhyasamhita (GOS. No. 54), (v) Manasollasa Vol. I (GOS. No. 28), (vi) Guhyasamaja Tantra (GOS. No. 53), (vii) Bhavaprakasana (GOS. No. 45), (viii) Sadhanamala Vol. I (GOS. No. 26), (ix) Sadhanamala Vol. II (GOS. No. 41) and
(x) Nyayapravesa Vol. I (GOS. No. 38).

(3) M. S. University Oriental Series :

Vidvajjanavallabha Bhoja—edited by Dr. David Pingree

(4) M. S. University of Baroda Research Series :

Laghu Prabandhasamgraha—edited by Shri J. P. Thakar

(Published in book-form)

7. Translation Branch

The following works were published during the year :

(1) Shri Sayaji Sahityamala :

- (i) महागुजरातना मुसलमानो —by Late Shri Karim Mahammad Master
भाग १-२
- (ii) गुजरात : एक दर्शन —by Shri Shivprasad Rajgor
- (iii) ओखा मंडलना वाघेरो —by Shri Kalyanray. N. Joshi

(2) Test-Books in Regional Languages :

- (i) वनस्पति शास्त्र —by Late Professor A. R. Chavan and
Professor C. H. Pathak
- (ii) अर्वाचीन भारतीय केळव-णीनो विकास —by Professor D. M. Desai

The following works are in progress :

(1) Shri Sayaji Sahityamala :

- (i) पेट्रोलियम —by Shri Padamkant R. Shah
- (ii) चरकनो स्वाध्याय —by Shri Bapalal G. Vaidya

(2) Shri Sayaji Balajnanamala :

पंचतंत्रनी वार्ताओ —Shri Chandrashanker Bhatt

8. Ramayana Department

(1) Editorial Section :

- (i) Yuddhakanda—edited by Dr. P. L. Vaidya, pp. 625-968 printed upto App. I, No. 27.
- (ii) Final Press-copy—App. I, No. 28 to App. I, No. 50 sent to the Press.
- (iii) Press-copy of App. I, No. 51 to 77 prepared.

(2) Collation Work :

The following MSS were procured recently—S'3 as loan from Kashmir and M 9 bought by the Oriental Institute.

- (i) S'3 Uttarakanda Sargas 1-111 (complete).
- (ii) M 9 Uttarakanda Sargas 1-111 (complete).

(3) Indexing Work :

Indexing of quarter verses of the Critical Edition of the Valmiki Ramayana was continued and nearly 74,430 cards were prepared during this year thus making a total of 94,430 cards prepared till 31-3-1970. The work is under progress.

(4) Editing Work :

Editing of Uttarakanda is continued.

9. Journal of the Oriental Institute

The Institute has regularly published a quarterly Journal. Vol. XVIII Nos. 3 and 4 and Vol. XIX Nos. 1 and 2 were published during the year. 131 subscribers were registered during the year for Vol. XVIII and 203 copies were sent on exchange basis. The Journal is specially devoted to research studies in Indology and also includes papers on Ramayana and allied topics concerning the Epics and Puranas.

10. Gujarati Quarterly Journal 'Svadhaya'

The Institute has started a new Gujarati Quarterly 'Svadhaya'. Nos. 3 and 4 of Vol. VI and Nos. 1 and 2 of Vol. VII were published. 124 subscribers were registered during the year for Vol. VI.

The Journal is devoted to research papers in Humanities and Sciences useful in evolving a proper terminology so as to facilitate higher teaching through medium of regional language.

11. Distinguished Visitors

<i>Name of the Visitor</i>	<i>Date of Visit</i>
(1) Dr. Pitkin, President of Goddard College, Palinfield, Vermont, U.S.A.	5- 4-1969
(2) Shri M. S. Doraiswami, (Retd.) Member UPSC, Begumpeti, Hyderabad	26- 6-1969
(3) Hon. Shri Bhaktadarshan, Minister of State for Education, Government of India, New Delhi	12- 7-1969
(4) Shri V. R. Mehta, I.A.S., Secretary, Education Department, Government of Gujarat, Ahmedabad	14-10-1969
(5) Mr. B. Letic, Department of Classical Philology, University of Belgrade, Yugoslavia	3-12-1969
(6) Shri P. Viswamoorthy, Member of the Syndicate, Karnatak University, Dharwar	22-12-1969
(7) Mr. Ichiro Ishii, Senior Research Officer, Institute of Developing Economics, Tokyo, Japan	21- 1-1970
(8) Madame Karpova, Museum Expert from Russia	23- 1-1970
(9) Professor Kalus Ebbeling, Department of Art and Art History, Jefferson Community College, Watertown, New York	7- 2-1970

<i>Name of the Visitor</i>	<i>Date of Visit</i>
(10) Dr. Jan Philipsky, Scientific Worker and Indologist, Oriental Institute, Czech Academy of Science, Prague	6- 3-1970

**CHAPTER XIX—COLLEGE OF INDIAN MUSIC,
DANCE AND DRAMATICS**

1. Courses of Studies

The College offers the following courses:

- (1) M. Mus. Music, Dance and Dramatics.
 (2) B.Mus. Music (Vocal and Instrumental—Sarangī, Sitar, Violin, Tabla), Dance (Bharat Natyam, Kathak) and Dramatics.
 (3) Diploma Music (Vocal and Instrumental—Sitar, Violin, Tabla), Dance (Bharat Natyam, Kathak) and Dramatics.

2. Number of Students

Year/Class	Boys	Girls	Total
(1) Diploma Courses:			
1st Year	97	92	189
2nd Year	46	70	116
3rd Year	34	39	73
4th Year	23	23	46
5th Year	17	20	37
Total	217	244	461
(2) Degree Courses:			
1st Year	6	14	20
2nd Year	5	9	14
3rd Year	7	9	16
4th Year	2	7	9
Total	20	39	59
(3) Post-Graduate Degree Courses:			
Junior M.Mus.	2	2	4
Senior M.Mus.	3	3	6
Non-Collegiate	2	2	4
Total	7	7	14
Grand Total	244	290	534

3. Staff

The Staff consisted of 1 Professor, 3 Readers, 10 Lecturers, 6 Assistant Lecturers, 1 Honorary Professor, 1 Honorary Lecturer, 16 Ustads including Part-

time Ustads, 5 Tabla Accompanists, 9 Class III and 10 Class IV employees. The teachers of this College also carried out assignments in other Faculties in General Education in Fine Arts.

(2) *New Appointments:*

(i) Kumari P. M. Patel, Assistant Lecturer was appointed as Lecturer in Dance from 1st July, 1969.

4. Library

The following statement shows the acquisition of Books and Periodicals in the Library during the year:

	Books	Bound periodicals	Total value Rs.
(1) Number at the beginning of the year	5862	612	45,428-15
(2) Number added during the year	247	—	3,294-80
(3) Number withdrawn from the record	—	—	—
Total	6109	612	Rs. 48,722-95

The College continued to subscribe to 42 periodicals.

5. Museum, Laboratory, Studios, Workshop etc.

	Cost of equipment as on 1-4-1969	Cost of equipment written off during the year	Cost of equipment added during the year	Cost of equipment as on 31-3-1970
	Rs.	Rs.	Rs.	Rs.
Equipment	1,34,962-40	—	10,610-75	1,45,573-15

6. College Publication

'Agra-Gharana ki Chizen' compiled by Professor R. C. Mehta was published during the year.

7. Distinguished Visitors

- | | Date of Visit |
|---|---------------|
| (1) Students from U.K. | 26-8-1969 |
| (2) Shri S. K. Bose, Director
(Transcription and Program Exchange Service)
All-India Radio, New Delhi | 7-3-1970 |

CHAPTER XX—BARODA SANSKRIT MAHAVIDYALAYA

1. Courses of Studies

The institution offers the following courses of studies :

- | | |
|--|--|
| (i) Vachaspati | By research |
| (ii) Acharya and Shastri
(Special Pandit Courses) | (i) Dharma Shastra,
(ii) Jyotish Shastra,
(iii) Nyaya and Vaisheshik Darshan,
(iv) Purva Mimansa Shastra,
(v) Sahitya Shastra,
(vi) Sankhya Yoga and Vedant Darshan.
(vii) Shuddhadwaita Vedant and
(viii) Vyakaran Shastra |
| (iii) Visharad (Madhyama
Kaksha) | (i) Astrology and Astronomy
(ii) Grammar and Literature (with
English upto the S.S.C. Standard
compulsory for both the branches) |
| (iv) Certificate (Pratham
Kaksha) | (i) Puran,
(ii) Rigved Yajniki
(iii) Shukla Yajurved
(iv) Yajurved Yajniki (with grammar and
Literature compulsory for all
branches) |

2 Number of Students

Number of students enrolled in various classes during the year 1969-70 was as under :

(1) Pratham Kaksha Certificate

	Men	Women	Total
1st Year	30	4	34
2nd Year	11	3	14
3rd Year	8	—	8
	—	—	—
Total :	49	7	56

(2) Madhyam Kaksha (Visharad)

(i) Vyakaran Shastra :

	Men	Women	Total
1st year	4	10	14
2nd year	2	—	2

3rd year	3	—	3
4th year	1	2	3
5th year	1	—	1
	—	—	—
Total:	11	12	23

(ii) Jyotish Shastra:

1st year	5	1	6
2nd year	1	—	1
3rd year	1	—	1
4th year	2	—	2
5th year	—	—	—
	—	—	—
Total:	9	1	10

(2) Uttam Kaksha Shastra:

(i) Vyakaran Shastra:

1st year	—	—	—
2nd year	2	1	3

(ii) Jyotish Shastra

1st year	—	—	—
2nd year	1	—	1

(iii) Dharma Shastra:

1st year	1	—	1
2nd year	—	1	1

(iv) Sahitya Shastra:

1st year	1	—	1
2nd year	2	—	2

(v) Suddhadwaita Vedant:

1st year	—	—	—
2nd year	2	—	2
	—	—	—
Total:	9	2	11

(4) Uttam Kaksha Acharya :

(i) Vyakaran Shastra : Class

	Men	Women	Total
1st year	—	—	—
2nd year	1	—	1

(ii) <i>Jyotish shastra :</i>			
1st year	—	—	—
2nd year	—	—	—
(iii) <i>Dharma Shastra :</i>			
1st year	1	—	1
2nd year	—	—	—
(iv) <i>Sahitya Shastra:</i>			
1st year	—	—	—
2nd year	1	—	1
(v) <i>Suddhadwaita Vedant :</i>			
1st year	1	—	1
2nd year	1	—	1
Total:	5	—	5
(5) <i>Vachaspati :</i>	2	—	2
Grand Total:	85	22	107

3. Staff

During the year under report the staff of the Institution consisted of the Principal, 13 Adhyapakas, one honorary Adhyapak, 2 class III and 4 class IV employees.

4. Professional Growth of the Staff

(a) Publication

Sr. No.	Name of the Contributor	Title	Where published
1	Shri H. C. Mehta	महाकविकालिदासकाव्येषु भारतियसंस्कृति	Surbharati 1969-70
2	Shri J. R. Pathak	अर्थापत्तिः	"
3	Shri L. J. Zha	श्रीकृष्णकुण्डल्यां विचिकित्सा	"
4	Shri S. Y. Mishra	अविद्यास्वरूपनिरूपणम्	"
5	Shri L. G. Shukla	पुष्पितः फलितो वाक्समास्नायः	"
6	Shri J. B. Shukla	गीतोक्तानि ज्ञानसाधनानि	"
7	Shri S. V. Bhatt- bhatt	देवतात्वविमर्शः	"
8	Shri P. S. Shukla	' इन्हनपूषार्थिगणां शौ ', ' सौ च '	"
		इत्यनयोर्नियमार्थत्व विचारः	"
9	Shri B. K. Shastri	मुक्तिः	"

(b) Research Work :

The following teachers continued to do their research work as given below :

(i) Shri H. C. Mehta	Rasagangadhar
(ii) Shri S. V. Bhattbhatt	Dharmashastra Mimamsa Paddhati

5. Library

The institution has a small library and a reading room. The following are the figures showing average daily attendance in the reading room and the circulation of books.

Sr. No.	Particulars	Number
(1)	Average number of students making use of the reading room	52
(2)	Average number of teachers making use of the library and the reading room daily	15
(3)	Total number of books issued to the teachers during the year	450

The following figures show the stock and the expenditure of the maintenance of the library and the reading room during the year :

Sr. No.	Particulars	Number	Cost in Rs.
(1)	Books (including back numbers of Journals) as on 1-4-1969	4831	18,149-47
(2)	Books written off during the year	—	—
(3)	Books added during the year	90	496-74
(4)	Books as on 31-3-1970	4921	18,646-21
(5)	Journals subscribed during the year	5	46-30
(6)	Amount spent on binding during the year	—	—
(7)	Total amount spent for Library and Reading Room upto 31-3-1970	—	18,692-51

6. Faculty Publication

The seventh issue of ' Surabharati ', an annual publication of the Institution in Sanskrit was published during the year in which the staff and students contributed their articles in Sanskrit.

7. Other Important Events

(1) The following donations were received during the year:

(a) Rs. 5000/- from the Nathdwara Temple Board for the teaching of Shuddhadwait Vedant Darshan.

(b) Rs. 5000/- from Shri Manilal Chhotalal Thakar for the teaching of Shukla Yajurved Yajniki branch.

(c) Rs. 500/- from Sheth Shri Hansraj Pragji Thakersey Education Trust for the purpose of giving additional stipends to the successful students in the terminal examinations of the Institution.

(d) Rs. 1200/- from Goswamiji Shri Vrajraj Ranchhodlalji Maharaj of Ahmedabad for awarding two scholarships of Rs. 50/- each p.m.

(2) Shri Laxminarayana R. Purohit, a research student for the Vachaspati degree has been selected and awarded scholarship of Rs. 250/- p.m. for a period of two years under the Government of India Scheme of Research Scholarship for the Products of Traditional Sanskrit Pathashalas.

CHAPTER XXI—PREPARATORY UNIT : ARTS AND COMMERCE

1. Courses of Studies

The Unit provides Preparatory courses of one year's duration in Arts and Commerce.

2. Number of Students

The number of students enrolled in different classes at the commencement of the year 1969-70 was as under :

Class	Men	Women	Total
(1) Preparatory Arts	518	449	967
(2) Preparatory Commerce	706	168	874
Total	1,224	617	1,841

3. Staff

There are on the staff of the Unit a Head, 5 class III and 6 class IV employees. The teaching work is shared by the teachers of the Faculties of Arts, Commerce, Science and the Department of General Education. About 50 teachers from various departments participated in the teaching work in the Preparatory Arts and Commerce Courses.

4. Library

The library of this Unit was amalgamated with the main University Library. New books are being added every year at the cost of about Rs. 1,000/-. Books are selected particularly suited to the capacity of the Preparatory students in English, Indian Languages, Social Studies and Science etc. Reading Room facilities are available in the Central Hall of the Baroda College.

CHAPTER XXII—PREPARATORY UNIT : SCIENCE

1. Courses of Study

The Preparatory Unit for Science provides instructions in Preparatory Science Course of one year's duration.

2. Number of Students

During the year there were 863 men students and 179 women students. The total number of students was 1042.

3. Staff

There are on the staff of the Unit a Head, 5 Class III and 6 Class IV employees.

No separate teaching staff is appointed for this Unit but members from different departments in the Faculties of Arts and Science and the General Education Department teach in the Unit.

4. Library

Special arrangements are made in the Central Hall in the Faculty of Arts for the Preparatory Students to read during their free time.

CHAPTER XXIII—SHRI M. K. AMIN ARTS AND SCIENCE COLLEGE AND COLLEGE OF COMMERCE, PADRA

1. Courses of Studies

There is provision for the following courses :

- (1) Preparatory Courses in Arts, Science and Commerce.
- (2) First Year B.A. and B.Com.
- (3) Second Year B.Com.
- (4) Second Year B.A. (Major) —Economics, History, Gujarati and Political Science.
Second Year B.A. (Minor) —History, Hindi, Gujarati, Political Science, Psychology, Mathematics, Statistics.
- (5) Third Year B.A. and B.Com.

2. Number of Students

The number of students enrolled in different classes during the year was as under :

Year/Class	Men	Women	Total
(1) <i>Preparatory Classes :</i>			
(a) Arts	74	18	92
(b) Commerce	130	5	135
(c) Science	83	7	90
Total	287	30	317
(2) <i>Degree Classes :</i>			
(a) F.Y.B.A.	22	12	34
(b) S.Y.B.A.	21	7	28
(c) T.Y.B.A.	15	3	18
(d) F.Y.B.Com.	129	7	136
(e) S.Y.B.Com.	58	1	59
(f) T.Y.B.Com.	21	1	22
Total	266	31	297
Grand Total	553	61	614

3. Staff

(a) *Present Position :*

During the year the staff of the College consisted of one Principal, 7 Lecturers, 12 Assistant Lecturers, One Physical Instructor, 10 Class III and

11 Class IV employees. Over and above the teaching staff attached to this institution, teachers—one from Faculty of Science and two from Faculty of Arts were invited for teaching the subjects of Statistics and Political Science and History respectively as part-time teachers. One part-time Lecturer was appointed for 'Mercantile Law'.

(b) *New appointments :*

Shri R. R. Shah was appointed as Lecturer in Geography with effect from 1-8-1969.

4. **Professional Growth of the Staff**

Dr. Y. M. Naik and Dr. L. M. Desai, Assistant Lecturer in Zoology and Gujarati respectively were declared qualified for their Ph.D. degree.

5. **Library**

The College Library received from the University a grant of Rs. 13,000/- for books and Rs. 1,500/- for periodicals. During the year a grant of Rs. 3,000/- from the University Grants Commission was also received for books.

(a) *Acquisition:*

	<i>Books</i>	<i>Periodicals</i>	<i>Total Value in Rs.</i>
(1) Number at the beginning of the year	3029	65	30,791-72
(2) Number added during the year	1257	Uni. Grant U.G.C. Grant	12,999-15 2,998-59
(3) Total books and periodicals as on 31-3-1970	4286	66	1,494-62 48,284-08

(b) *Other particulars:*

(1) Average number of the students making use of the Library and reading room daily	160
(2) Average number of teachers making use of the Library and reading room daily	20
(3) Total number of books issued to students during the year	12000
(4) Total Number of books issued to teachers during the year	1500

6. **Museum, Laboratory, Studio, Workshop etc:**

The following is the statement of the cost of equipment. :

<i>Sr. No.</i>	<i>Items</i>	<i>Cost of equip-ments as on 1-4-1969</i>	<i>Cost of equip-ments etc. written off during the year</i>	<i>Cost of equip-ment etc. added during the year</i>	<i>Cost of equip-ment as on 31-3-1970</i>
		<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>
(1)	Physics	9,035-22	—	1,280-00	10,315-22
(2)	Chemistry	10,493-66	—	125-00	10,618-66
(3)	Biology	2,284-94	—	119-46	2,404-40
	Total	21,813-82	—	1,524-46	23,338-28

CHAPTER XXIV—POLYTECHNIC

1. Courses of Studies :

The Polytechnic offers the following Diploma Courses in Engineering :

Name of Courses	Duration of Courses	Sanctioned number of admission
(1) Diploma in Civil Engineering	3 Years	120
(2) Diploma in Mechanical Engineering	3 Years	150
(3) Diploma in Electrical Engineering	3 Years	90

It also conducts State (Extended) Diploma Courses of four years duration on part-time basis :

Name of Courses	Duration of Courses	Sanctioned number of admission
(1) Diploma in Civil Engineering	4 Years	20
(2) Diploma in Mechanical Engineering	4 Years	40
(3) Diploma in Electrical Engineering	4 Years	40

2. Number of Students :

The number of students enrolled in various courses at the commencement of the year was as under :

Diploma Courses	Men	Women	Total
(1) First Year	315	—	315
(2) Second Year	232	2	234
(3) Final Year (including supplementary)	404	2	406
TOTAL	951	4	955
<i>Extended Diploma Courses</i>			
(1) First Year	—	—	—
(2) Second Year	—	—	103
(3) Third Year	103	—	59
(4) Final Year	59	—	162
TOTAL	162	—	1117
GRAND TOTAL	1113	4	

3. Staff

Present Position : During the year under report the staff of the Polytechnic as on 31-3-70 consisted of 1 Principal, 4 Readers, 24 Lecturers, 27 Senior Instructors and 26 Junior Instructors, 7 Assistant Lecturers, 63 Class III and 47 Class IV employees.

4. Library

Acquisition Notes :

(1) Books

Books were purchased from the recurring grants of Rs. 10,000/- and Rs. 5,000/-. The following statement gives the details of acquisition of the Polytechnic Library during the year :

	Books and Bound Periodicals	Total Value in Rupees
Number at the beginning of the year	12,012	1,73,421-87
Number added during the year	852	14,994-28
Number withdrawn from the record	45	449-00
Number remaining at the end	12,819	1,87,967-15

(2) Periodicals

During the year the Institution subscribed to 69 periodicals. The total amount spent for the subscription of periodicals was Rs. 2,963-71 and the amount spent for binding was Rs. 596-40.

The statistics for the use of the library are given below:

(1) Daily average number of readers making use of the library	317
(2) Daily average number of books issued to the readers for home-reading	120

5. Museum Laboratory, Studios, Workshops etc.

The institution is fully equipped with nine laboratories and nine Workshops for imparting practical training to the students in the relative subjects:

Sr. No.	Item	Cost of equipments/ Machinery as on 1-4-1969 Rs.	Cost of equipments/ Machinery etc. written off during the year Rs.	Cost of equipments/ Machinery etc. added during the year Rs.	Cost of equipments/ Machinery as on 31-3-1970 Rs.
(1)	Laboratories	6,51,232-86	—	3,636-30	6,54,869-16
(2)	Workshops	3,51,903-78	—	46,848-41	3,98,752-19

CHAPTER XXV—SHRIMATI HANSA MEHTA LIBRARY

1. Acquisition Notes

(1) Books :

The University Grants Commission very recently sanctioned a grant of Rs. 2,50,000/- (Rs. 1,00,000/- for Humanities and Social Sciences and a sum of Rs. 1,50,000/- for Sciences) for purchase of books and journals over and above the Fourth Five Year Plan allocation. Fifty percent of this amount has been provided during the year under report and the balance during the next year. With this additional amount the total grant so far sanctioned for the Fourth Five Year Plan period comes to Rs. 6.5 lakhs. The Commission has also recently sanctioned the Second Priority grants of Rs. 2,92,000/- for the purchase of books and journals for various Departments in Humanities, Social Sciences and Sciences for the Fourth Five Year Plan period.

The Library also received as usual a grant of Rs. 30,000/- from the University for the purchase of books and periodicals and the same has been fully utilized.

There have been some noteworthy additions during the year viz., The Collected Works of Mahatma Gandhi, 1915/17-1926, Vols. 13-30; Hindu World, an Encyclopedic Survey of Hinduism, 1968, 2 Vols.; Economy and Society, an outline of Interpretive Sociology, 1968, 3 Vols.; India (Republic) Planning Commission. Fourth Five Year Plan, 1969-1974, Draft, 1969; India, Who's Who, 1969; Indian Books in Print, 1955-1967, a Select Bibliography of English Books Published in India. 1969; Better Living Encyclopedia, 1966, 6 Vols., The Flora of Malay Peninsula by H. N. Ridley, 1967, Vols. 1-5; Economic Development and Cultural Change, 1952/53-1959-60, Vols. 1-8; Chemistry of Acetylenes, ed. by H. G. Viehe; Gujarat Local Acts, 1927-1970, by M. L. Jindal Vols. 1968-69; Institute of Physics and the Physical Society; Reports on Progress in Physics, ed. by A. C. Stickland, 1963-1969, Vols. 26-32; Annual Review of Phytopathology ed. by J. G. Horsfall and K. F. Baker, 1963-68, Vols. 1-6; Indian periodicals, ed. by N. N. Gidwani and K. Navlani, 1969.

The number of acquisitions in various institutions of the University are as follows :

Institution	Number of Books
Smt. Hansa Mehta Library (which includes the books for the Faculties of Arts, Science, Education and Psychology, Commerce, Law, Home Science and the Department of	4,670

Institution	Number of Books
Museology)	
General Education Centre and Preparatory Unit	70
Faculty of Technology and Engineering	2,064
Faculty of Fine Arts	77
Chetan Balwadi	43
Faculty of Social Work	172
College of Indian Music, Dance and Dramatics	247
Oriental Institute (Printed Section)	855
Polytechnic	852
Sanskrit Mahavidyalaya	90
Centre of Advanced Study in Education	737
Baroda Michigan Project	100
Shri M. K. Amin Arts and Science College and College of Commerce, Padra	1,258
Total	11,235

Out of these books 1,835 were received as gift.

The following statement gives the details of the book stock of Shrimati Hansa Mehta Library during the year :

	Books	Bound Vols. of periodicals	Pamphlets	Manuscripts	Maps, Charts, etc.	Total Value in Rs.
(i) Number at the beginning of the year	2,33,054	27,032	13,785	248	755	37,93,793-30
(ii) Number added during the year	4,670	1,585	918	—	8	2,61,495-81
(iii) Number withdrawn from the records	—	—	188	—	—	—
(iv) Number remaining at the end of the year	2,37,724	28,617	14,515	248	763	40,55,289-11

(2) Periodicals :

The total number of periodicals and scholarly journals subscribed to during the year was 940. 1,584 volumes of bound periodicals were added to the stock.

2. Cataloguing

The activity of the Cataloguing Section is reflected in the following statistics during the year :

- (a) Books Classified and Catalogued :
- | | |
|---|--------|
| (1) New accessions to University Library | 4,670 |
| (2) New accessions to the Faculty Libraries | 6,565 |
| Total | 11,235 |
- (3) Bound periodicals catalogued 1,585
- (b) The other-details of the work of the section incidental to the above are as follows :

	For University Library	For Faculty Libraries	Total
(1) Cards typed	11,675	32,825	44,500
(2) Cards filed in the catalogue	11,675	32,825	44,500

3. Circulation of books, etc.

As usual the working hours of the library for the whole academic year *i.e.* from April, 1969 to March, 1970 (except in the months of May and June) were from 8-00 A.M. to 10-00 P.M. It also remained open on Sundays and Holidays during the academic year.

From September, 1969 the Central Hall Reading Room of the Baroda College building was kept open for the use of Preparatory and First Year students in Arts, Commerce, Science, etc., accommodating 225 readers. In the months of January, February and March, 1970 it remained open on Sundays and Holidays.

The number of registered readers in the various categories was as follows :

(1) Post-graduate students	1,226
(2) Undergraduate students	6,286
(3) Research Scholars, Assistants and Fellows	97
(4) University Teachers	700
(5) Others	472
Total	8,781

The statistics of the use of library are given below :

(1) Daily average number of readers visiting the library	2100
(2) Daily average number of readers visiting the Reading Room of the Central Hall of the Baroda College Building	450

- | | |
|---|-----|
| (3) Total number of books issued per day for reading | 962 |
| (i) Average number of books issued per day for home-reading from general collection | 320 |
| (ii) Average number of books issued per day from Curricular Section | 275 |
| (iii) Average number of books issued per day from Central Hall | 90 |
| (iv) Average number of books issued per day for reference | 277 |
| (4) Average number of books issued per reader | 30 |

Reference Section

- (1) *Exhibitions:*
- (i) An exhibition of books, pamphlets and photographs was arranged on the U.N. Day.
 - (ii) M. K. Gandhi Display Set was exhibited in the University Library.
 - (iii) An exhibition of books, pamphlets and articles was arranged on Better Reading Habits.

Besides these, selected new books were displayed every week in the University Library.

(2) *Bibliographical Activities:*

The following bibliographies were compiled during the year:

- (i) Books by and on V. I. Lenin.
- (ii) Books on Children's Drawings.
- (iii) Books on Social Reform Movement in India from 1880 to 1950.
- (iv) Books by and on Sri Aurobindo.
- (v) Books on Agricultural Marketing.
- (vi) Books, pamphlets, etc. on National and Emotional Integration.
- (vii) Books in Gujarati on Child Development and Child Psychology.

- (3) List of Ph.D. Theses received in the Library from January, 1969 to December, 1969 was published.

5. Teaching of Library Science

Eighteen students including one ex-student appeared at the Bachelor of Library Science examination. Sixteen came out successful—one in first class, ten in second class and five in pass class.

CHAPTER XXVI—THE MAHARAJA SAYAJIRAO UNIVERSITY
OF BARODA PRESS

1. Staff

During the year, the staff of the Press consisted of a Manager, a Deputy Manager, a Senior Clerk Accounts-cum-Store-keeper, one Head Proof-Reader, one Senior Proof-Reader, one Junior Proof-Reader and a Clerk. There are 32 permanent workers in the Press.

2. Machinery

The press has machinery worth about Rs. 3,21,099 including machines worth Rs. 1,19,350 purchased from the grant of the University Grants Commission. Second Monotype machine (1) Keyboard and (2) Caster worth Rs. 1,22,192 was imported and installed early this year.

3. Printing Activities

During the year 1180 plus 256 examination papers were printed under conditions of secrecy for the University Examinations. The Press also printed Syndicate and Senate Proceedings, Details of Establishment, Annual Accounts, Budget Estimates, Pamphlets, Certificates, General Forms, Lists, Prospectus, Questionnaires, Magazines, Souvenirs etc. of the Faculties and Institutions. The University Press works for the University publications, magazines, stationery, printed forms etc. purely as a Service Department from April, 1967.

(1) The following is the list of books printed by the Press and published during the year:

Name of the Book	Publishers
(1) Professor B. K. Thakore—A Diary Part I, Year 1888	Faculty of Arts
(2) The Influence of English on Gujarati Poetry	Faculty of Arts
(3) Professor B. K. Thakore Adhyayana Granth	Faculty of Arts
(4) Persian Literature during the time of Jahangir and Shah Jahana	Faculty of Arts
(5) Qessa-e-ghamagin (In progress)	Faculty of Arts

Name of the Book	Publishers
(6) Geography Research Paper Series 4	Faculty of Science
(7) Statistical Examination Reports, Statistical Survey of 1966-67 and 1967-68	Faculty of Science
(8) Nutrition Seminar, February 1970 Literature	Faculty of Science
(9) The School Principal and Curriculum Improvement Publication No.1	CRTSE—Faculty of Education and Psychology
(10) Problems of Curriculum Administration and Text Books Selection	CASE—Faculty of Education and Psychology
(11) Some Aspects of Muslim Education	CASE—Faculty of Education and Psychology
(12) Agragharana-Parampara Gayaki aur Chize	College of Indian Music, Dance and Dramatics
(13) Arvachin Bharatiya Kelavani no Itihasa	Oriental Institute
(14) Mahagujarat na Musalmano—Part I and II	Oriental Institute
(15) Vanaspatishastra	Oriental Institute
(16) Kirnavali (In progress)	Oriental Institute
(17) Chhakkammuveso (in progress)	Oriental Institute
(18) Arabic History of Gujarat (In progress)	Oriental Institute
(19) A Descriptive Bibliography of Pancharatra-agama (In progress)	Oriental Institute
(20) Laghooprabandha Sangraha (In progress)	Oriental Institute
(21) Simhasana Batrisi (In progress)	Ramayana Department
(22) Ramayana Critical Edition (Yuddhakanda) (In progress)	Department of Museology
(23) Botany in Indian Museums	Department of Physical Education
(24) Thirtieth All India Inter-University Athletic Meet 1969—Souvenir	Department of Physical Education
(25) Organizing Secretary's Report of Inter-University Athletic Meet	NCC Gr. H.Q.
(26) N.C.C. Day Celebration Brochure	M. S. University of Baroda
(27) Handbook Part III 1969 Faculty of Law	M. S. University of Baroda
(28) Three Sanskrit Lighter Delights	M. S. University of Baroda
(29) Twentieth Annual Report, 1968-69	

(2) The following Journals were printed during the year:

- (i) Journal of M. S. University of Baroda, (ii) Journal of Oriental Institute, (iii) Journal of Animal Morphology and Physiology (Half-yearly), (iv) Education and Psychology Review (Quarterly), (v) Swadhyaya (Quarterly), (vi) Advances in Education (Quarterly), (vii) Studies in Museology (Yearly).

4. University Stationery Unit

This Unit is a Service Department of the University and is under the supervision and control of the University Press Manager. It purchases and distributes stationery every quarter to all the Faculties, Institutions and the University Office. It has a staff of one senior clerk, one stationery clerk, one riksha driver-cum-stationery distributor and one helper. During the year, stationery worth Rs. 1,65,646 was purchased and stationery worth Rs. 1,80,092 was distributed.

5. University Publications Sales Unit

This Unit is also under the control and supervision of the University Press Manager. The establishment consists of a senior clerk, a clerk and one outdoor work assistant/attendant. It is working as the book-shop for University Publications. Total sale of books during the year was Rs. 54,132.

CHAPTER XXVII—THE MAHARAJA SAYAJIRAO UNIVERSITY UNION

1. Executive Committee

During the academic year 1969-70, Shri R. D. Pandya continued to be President of the Union. Dr. R. C. Desai was appointed Treasurer Vice-Professor R. C. Patel.

Elections for the Vice-President, General Secretary and Faculty Representatives were held on 12th July, 1969. Shri Anil Patel was elected as Vice-President and Shri Narendra G. Tiwari as General Secretary. There were 30 representatives of various Faculties and Institutions. The following members were nominated by the Syndicate on the Executive Committee :

- | | | |
|-----|---------------------------|----------|
| (1) | Shri H. P. Mehta | Advocate |
| (2) | Shri Chandrakant C. Mehta | Advocate |

The first meeting of the Executive Committee was scheduled to be held on 21st July, 1969 but was postponed, as the University was closed on account of the disturbances arising out of the University land transaction agreement with the Municipal Corporation. The meeting was held on 30th July, 1969 for appointment of Sectional Secretaries and allocation of various port-folios.

The following members were nominated by the Executive Committee on the boards of the University as shown below :

- | | | | |
|-----|--|-------|------------------------|
| (1) | University Board of Sports | (i) | Shri Amul C. Munshi |
| | | (ii) | Shri Niranjan Dodia |
| (2) | University Students Welfare Board | (i) | Shri Girish N. Shah |
| | | (ii) | Shri Manhar Vyas |
| | | (iii) | Shri Girish N. Chokshi |
| (3) | University Students Aid Fund Committee | (i) | Shri Narendra Tiwari |
| | | (ii) | Shri Pradip Karnik |
| | | (iii) | Shri Harish Pandya |

All members of the Executive Committee were recommended for the National Integration Committee of the University.

2. During the year the Sectional Secretaries conducted activities in their charge with enthusiasm and interest.

(1) *Debating Society :*

The following debates were arranged during the year :

<i>Debate</i>	<i>Subject</i>
(i) The Baroda College Silver Jubilee and Science Debating Club Fund Debate.	Modern Science is not inconsistent with Ancient Indian thought.
(ii) The Pro-Vice-Chancellor Trophy Debate in Gujarati	આ સભા માને છે કે નૂતન સમાજરચના હિંસક માર્ગે જ થઈ શકે.
(iii) The Vice-Chancellor Trophy Debate in English	Nationalisation of any business is inconsistent with Democracy.
(iv) Shri N. B. Bhatt Trophy Extempore Debate in Gujarati	—
(v) Shri B. N. Majmudar Trophy Debate in Hindi	इस सदन की राय में मताधिकार की आयु २१ साल न होकर १८ साल होना चाहिये.
(vi) Shri M. N. Wadia Trophy Debate in English (Team Trophy)	Socialism in India is possible only through the practice of Gandhian principles.
(vii) Professor D. Subbarao Memorial Trophy Extempore Elocution in English	—
(viii) Shri S. A. Sudhalkar Trophy Debate in Marathi	या सभेचे असें मत आहे की, जातीवाद राष्ट्रीय एकतेला विघातक आहे.

(2) *Indoor Games (Badminton and Table Tennis) :*

Badminton is a major Indoor Game for our students. The court was repaired and maintained in good condition. It was evident that there is need for another court. The Committee sent teams to represent the University in the Open Gujarat Championship at Ahmedabad, National Championship Tournament at Calcutta, and Inter-University Badminton Tournament in Marathawada.

The ever pressing rush on the Table Tennis Hall was a problem of magnitude for the Secretaries to face efficiently. An Open University Table Tennis Tournament was conducted in February, 1970. Shri P. B. Patel was the winner of Gents Singles, Shri S. B. Arte and Shri Y. R. Desai were winners in Gents Doubles. Miss Sulbha Gokhle was the winner in Ladies Singles. Miss Katty Kapadia and Miss Rita Shah were the winners in Ladies Doubles. Shri Praful Patel and Miss Katty Kapadia were the winners in Mixed Doubles. In Inter-Faculty Table Tennis Tournaments, the Faculty of Science was the winner and Faculty of Commerce was the runners up. Our Team also participated in Inter-University Table Tennis Tournaments held at Bombay.

(3) *Hiking Club :*

This year the Club sent a batch of 30 students for Basic Rock Climbing Course at Mount Abu and undertook a tracking trip to Pavagarh. 23 students participated in the first course in Ice and Snow of climbing at Manali sponsored by the Youth Hostel Association.

(4) *Entertainment Committee :*

The Entertainment Committee put up a show in aid of Poor Boys Library Fund.

(5) *Emester :*

The Emester, a fortnightly publication brought out its issues regularly this year. It played an important role in focussing the problems of the students and drew attention of the authorities. The Editorial Board organised 'EMESTER WEEK' and as a part of its programme, organised a Symposium and a Debate.

(6) *Inter-Faculty Youth Festival :*

The 19th Inter-Faculty Youth Festival Programme was held for three days in the General Education Auditorium in the month of January, 1970. The students' shows of Entertainment Programme representing the winning items were organised for 3 days. The collection of the students' shows was donated to Poor Boys' Library of the Union. The Programmes were well conducted due to the co-operation of the students and members of the staff.

(7) *National Integration Committee :*

The National Integration Committee of the University conducted Inter-Faculty and Inter-Hostel debates in Hindi on subjects pertaining to National Integration. Essay competition was also conducted in the month of October, 1969. Lectures by Shri Pandurang Athavale, Shri Indulal Yajnik, Smt. Sirin Fozdar were organised and were well attended by the Students and Staff. Tamil and Bengali Language teaching classes were run and a number of students attended the classes. Sarvashri J. R. Shah, V. K. Shah, D. R. Shah, R. R. Parikh and L. N. Shah, staff members of the University participated in the Gandhi Centenary Youth Camp near Poona. Shri Arun Gandhi, a student of the Faculty of Science was deputed to participate at the Gandhi Seminar held at Wardha.

3. The M. S. University Union deputed following students to participate in the Seminar, Discussions and Conferences :

- (1) Shri Narendra Tiwari, General Secretary and Shri Kishor Parikh participated in the National Integration Debate held at Nainital.
- (2) Shri Anil Patel, Vice-President and Kum. Anne Sharma participated in the National Integration Seminar held at New Delhi.

- (3) Shri Jamshed Elavia and Shri Parimal Sheth participated in Model Parliament conducted by the Ministry of Education and Youth Services at New Delhi.
- (4) Shri Narendra Tiwari, General Secretary participated in All India Seminar on Students' Participation in University Bodies sponsored by the Christian Institute for the Study of Religion and Society, New Delhi.

4. Visitors

- (1) A team of six farmers from U.K. visited the University under the International Friendship League, New Delhi in the month of September 1969.
- (2) Shri Acharya Rajnish gave a lecture to the students and staff of the University.
- (3) Shri Nath Pai, Leader of the P.S.P. gave lecture to the students and staff of the University.
- (4) Students of the Sambalpur University visited our University under the University Grants Commission Scheme of Visiting Studentship.

5. Important Event

The University Expedition Team of students and advisers successfully scaled the Gangotri III Peak at a height of 21,700 feet on 10th June, 1969 at 12-00 noon.

CHAPTER XXVIII—GENERAL EDUCATION CENTRE

During the formative years of the University when new Faculties were being established and old ones consolidated, considerable thinking was done on the place general education should have in the total academic programme of the University. It was felt that while a University should make provision for specialised studies in various fields of knowledge, it should also provide for the basic requirement, that every student, no matter what his speciality, has some understanding of the physical world in which he lives, an appreciation of the complex social relationships by which he is surrounded and a grasp of human values which can be developed through contact with Art, Literature and the Humanities. In other words, it was necessary to find a place for the elements of liberal education alongside highly specialised studies.

To fulfil this need, the University accepted the principle that General Education should be an important complement to specialisation. Accordingly a beginning was made as early as 1953 when a programme of General Education lectures and discussions was arranged for the Final Year students of the Arts, Science and Commerce degree classes. The results of this exploratory work were encouraging. Members of the staff gained a better understanding of the aims and techniques of General Education through experience of working the pilot project, as well as through visits to foreign Universities and contacts and discussions with experts in the field. As a result, a comprehensive scheme was undertaken from June, 1957 embracing the Preparatory classes and the First and Second Year Degree classes in Arts, Science, Commerce, Fine Arts and Home Science as well as the Pre-Medical year and the First Year of the Engineering. The Preparatory Course was reorganised making General Education an integral part of its curriculum.

2. Organisation

The General Education Advisory Committee consisting Vice-Chancellor, Pro-Vice-Chancellor, Deans and other members advises the University authorities on all matters pertaining to the General Education Programme for the various Faculties of the University, matters regarding selection of General Education courses, preparation of reading material, system of Tests and Grade, etc.

3. Building and Equipment

Classes meet in the General Education Centre. The General Education Centre constructed and equipped with the Ford Foundation Grant of \$ 4,30,000 has come into operation from June, 1963. The Auditorium has also been completed and put to use. The Language Laboratory and the Music Rooms are equipped with furniture and instruments.

4. Students under the programme

The General Education Programme was organised this year for the Faculties of Arts, Commerce, Science (including Pre-Medical), Home Science, Fine Arts and Technology and Engineering. The Programme in each of these Faculties was offered to the first and second year of the Three Year Degree Course, the final year of the degree course being entirely devoted to the optional or special studies.

The total number of students under the General Education Programme from various faculties is as follows:

Sr. No.	Faculty and Class	Total number of students
(1)	Faculty of Arts	
	F.Y.B.A.	713
	S.Y.B.A.	402
(2)	Faculty of Science	
	Pre-medical	124
	F.Y.B.Sc.	428
	S.Y.B.Sc.	332
(3)	Faculty of Commerce	
	F.Y.B.Com.	633
	S.Y.B.Com.	617
(4)	Faculty of Technology and Engineering	
	B.E. I	376
	F.Text.	37
(5)	Faculty of Fine Arts (including College of Indian Music, Dance and Dramatics)	
	Second Year	32
	Third Year	31
(6)	Faculty of Home Science	
	Second year	164
	Third Year	128
	Total	4,017

This does not include about 2800 students of the PUC level who took compulsory core courses in English Language, Indian Literature, Social Studies and Science.

5. Distribution of Course

Every student at the undergraduate level has offered five General Education courses out of which *three* were for University Examination. In case of *two* there was no examination at all, but attendance was compulsory. These courses are:

- | | |
|--|----------------------------|
| (1) Human Civilization..... | for University Examination |
| (2) Social, Political and Economic Problems of India | „ „ „ |
| (3) Science and Its Impact on Society | „ „ „ |
| (4) Readings from Literature and Art Appreciation | No Examination |
| (5) On Values of Life | „ „ |

These General Education Courses are distributed over two years of the Degree study. Actual distribution of courses differed from Faculty to Faculty and from class to class.

6. Teaching staff

The General Education Centre has a nucleus staff of nine teachers who not only teach in General Education and the Pre-University classes, but serve as liaison and help in the preparation of reading material and organization of the programme. In addition to the above staff, 16 teachers from 10 departments and institutions of the University participated in the teaching assignment of the General Education programme of this year.

CHAPTER XXIX—STUDENTS' WELFARE ACTIVITIES

1. Halls of Residence

The University being residential makes constant efforts to increase and improve residential accommodation for its students. At its start in 1949 the University had accommodation for 200 men students in rented buildings and another 200 men students in University owned buildings. There was no hostel accommodation for women students. At the end of year 1969-70 there were ten Halls for Men and four Halls for Women students. The additional two halls for men are under construction. The general policy of the University is to distribute students from various faculties in different Halls so that every hall has students from various faculties. The University looks upon this as an important step towards promotion of emotional integration amongst students and towards awakening their awareness and interests in areas other than their own.

There is a good demand from students for residential accommodation in the University Halls of Residence. In order that the students may not be put to difficulties for searching accommodation in private houses in the city where rents are high and facilities comparatively poor, the University had to continue admitting 3 students in most of the rooms this year also. Even then the demand for Hostel accommodation is so great that the construction of new Hostels for boys is most necessary.

At the end of the year under report 2078 men students and 788 women students were in residence in the different Halls as against 2089 men students and 755 women students at the end of previous year. A statement giving the break up of these students by Hallwise and Institution-wise is annexed as Appendix XI.

Administration of the Halls was carried on with advice of the Advisory Committee of the Halls of Residence and of the Wardens' Committee. All the Halls have been provided with Common Rooms, generally used as Library-cum-Reading room also. There are facilities for Indoor Games in all the Halls.

The Central Committee was formed and the following Sub-Committees were also formed to work under it during the year under report. The Secretary, Wardens' Committee is the president of the Central Committee. The following Sub-Committees were formed:—

- (1) Food-Committee, (2) Sports Committee, (3) Cultural Committee

The Sports Committee arranged the Inter-hostel competitions in different games.

The Entertainment Committee organised the Inter-hostel variety entertainment programme and made a net profit of Rs. 401.

2. University Health Centre

The Health Centre provides preventive and curative services for students, members of the staff and their families. During the year the staff of the Health Centre consisted of one Medical Officer, one Part time Lady Doctor, one Nurse, one Compounder-cum-Clerk, one Sanitary Inspector, one Laboratory-cum-X-ray Technician, three H.Mal-cum-Sweepers, two Honorary Physicians, one Honorary Surgeon and one Honorary Lady Gynaecologist.

Hostels were visited twice every month, once pre-informed and once for surprise checking of sanitation and hygiene in living rooms, kitchens, lavatories, etc.

The new entrants were given a Medical Check up by the Medical Inspection Board in S.S.G. Hospital. Out of the total number of 3845 students scheduled for Medical Check up, 3199 (83.18%) students reported and were examined. 877 (27.41%) were recommended follow-up-treatment to be taken either from the Health Centre, specialists of the S.S.G. Hospital or the family doctors, for various disorders viz. skin, eye, ear, nose, throat, heart, etc. The information regarding the follow-up-treatment has been available in case of 430 students. On miniature chest X-ray examination of the students during the Medical Check up, no student was found to be suffering from Pulmonary Tuberculosis.

219 mess servants of the University Hostels were examined and 3 of them were found to be suffering from Tuberculosis. These three cases were referred to Superintendent, T. B. Hospital, Baroda. Out of 65 mess servants who brought their stools in the Health Centre for examination, 25 servants showed evidence of intestinal infection with parasites and were advised treatment.

During the year, the total attendance of the patients at the Health Centre Clinic was 29266 of which 16941 (57.88%) were students and 12325 (42.12%) members of the staff and their families. The average daily attendance has been 80.2 cases during the year. The Health Centre remains open at all hours for emergency. The doctor on duty also attends in cases of emergency in the Halls of residence and the residence of the staff members. The total number of emergency cases attended was 871, the average being 2.4 per day.

The total number of laboratory investigations were 1508. The total number of fluoroscopy examination was 506 and X-ray films 104.

3. Physical Education Department

(1) Staff:

The staff of the Department consisted of one Offg. Director, two Physical Instructors, two Lady Physical Instructors, three Swimming Trainers and one Boating Trainer.

(2) *Physical Training:*

Physical Training was imparted to 1283 men students and 1448 women students during the year.

(3) *Major Games:*

Cricket, Tennis, Hockey, Football, Volleyball, Basketball, Kho-Kho, Kabaddi, Throwball and Netball were organised and conducted by the Physical Instructors, Lady Physical Instructors and the Officer-in-charge of respective games.

(4) *Swimming and Boating:*

In swimming 647 members and in Boating 81 members were imparted training by the Swimming Trainers and the Boating Trainers respectively; many paid guests also took advantage of the Swimming Pool.

(5) *Tournaments and Competitions:*

Cricket, Badminton, Basketball teams participated in league and knock-out tournaments held at Baroda; Badminton and Basketball teams also participated in the Open Gujarat State Championship held at Ahmedabad and Vallabh Vidyanagar.

(6) *Training of University Teams:*

Training of various University teams was organised and conducted by the Physical Instructors and the Officer-in-charge of respective games. Coaches, were also appointed to give special training in Cricket, Hockey, Football, Athletic Kho-Kho and Tennis.

(7) *Inter-University Tournaments:*

The University teams were sent to participate in the Inter-University tournaments in Cricket, Hockey (Men and Women), Football, Kho-Kho (Men and Women), Tennis, Badminton (Men and Women), Table-Tennis (Men and Women), Shooting, Basketball (Men and Women) and Athletics (Men and Women). The Cricket team lost in semi-finals, the Kho-Kho (Men and Women) team lost in finals and the Tennis team reached quarter final.

Under the auspices of the University, the 30th All India Inter-University Athletic Meet (Men and Women) was organised and conducted on the University Sports Pavilion Ground at Baroda in December, 1969. 732 competitors including 187 Women from 59 Universities participated in the meet. Four new records were created in the Meet as under:

(i) 400 meters Run Women 59.6 seconds by Kum. P. Bhamodkar from the Indore University.

(ii) High Jump Women 1.52 meters by Kum. Jessey Pais from the Mysore University,

(iii) Long Jump Women 5.29 meters by Kum. Harpal Brar from the Kurukshetra University,

(iv) 400 meters Run Men 48.2 seconds by Shri Ranjitpalsingh from the Delhi University.

(8) *Inter-Faculty Tournaments:*

Inter-Faculty Cricket, Tennis, Hockey, Basketball Tournaments were organised and conducted by the Officers-in-charge and Physical Instructors.

<i>Tournaments</i>	<i>Winners</i>	<i>Runners up</i>
(i) Cricket	Preparatory Unit Arts/ Commerce	Faculty of Commerce
(ii) Hockey	Faculty of Medicine	Faculty of Technology and Engineering
(iii) Basketball (Men)	Faculty of Arts	Faculty of Science
(iv) Basketball (Women)	Faculty of Science	Faculty of Arts
(v) Tennis	Faculty of Science	Faculty of Commerce
(vi) Table-Tennis	Faculty of Science	Faculty of Commerce

(9) *Winners of Individual Championship:*

<i>Games/Sports</i>	<i>Winners</i>	<i>Faculty/Institution</i>
(i) Tennis	Shri Anandrao Patel	Faculty of Medicine
(i) Athletic (Men)	Shri R. Patel	Faculty of Medicine
Athletic (Women)	Kum. N. Tiwari	Preparatory Unit Science
(iii) Boating (Men)	Shri B. R. Bhavsar	Music College
Boating (Women)	Kum. M. A. Rajeshirke Kum. D. B. Bhavsar	Home Science Home Science

(10) *University Annual Sports:*

As a part of the 19th University Youth Festival, Annual sports were held on the University Union Pavilion Ground in December, 1969. Students from various Faculties and Institutions participated in the track and field competitions.

(11) *Participation in National Championship:*

(i) Five members of the University Cricket team played from the Baroda Cricket Association in the Ranji Trophy Cricket Tournament.

(ii) Six members of the University Kho-Kho team played from the Gujarat State Kho-Kho Association in the All-India Kho-Kho Tournament.

(iii) Two members of the University Badminton team played from the Gujarat State Badminton Association in the National Championship held at Calcutta.

4. National Cadet Corps

During the year under report the following NCC Units carried out their multifarious activities :

- (1) 3 Gujarat Battalion NCC
- (2) 12 Gujarat Battalion NCC
- (3) 5 Gujarat Girls Battalion NCC
- (4) 1 Gujarat Comp Tech. Regt. NCC
- (5) 2 Gujarat Naval Unit NCC
- (6) 2 Gujarat Air Sqn. NCC
- (7) 3 Gujarat Tech. Air Sqn. NCC

Strength:

The allotment of NCC Officers' and Cadets' enrolled strength is given below:

NCC Unit	NCC Officers	NCC Cadets
(1) 3 Gujarat Bn. NCC	7	951
(2) 12 Gujarat Bn. NCC	4	659
(3) 5 Gujarat Girls Bn. NCC	5	461
(4) 1 Gujarat Comp. Tech. Regt. NCC	4	446
(5) 2 Gujarat Naval Unit NCC	2	162
(6) 1 Gujarat Air Sqn. NCC	2	181
(7) 3 Gujarat Tech. Air Sqn. NCC	2	177

Training of all the Units started in June/July, 1969 and terminated in February, 1970.

The following Annual Training Camps were arranged during the year:

Unit	Camp	NCC Officers	NCC Cadets
(1) 3 Gujarat Bn. NCC	Combined Annual Training Camp, Gora Colony, Rajpipla from 22-12-1969 to 31-12-1969	5	276
(2) 12 Gujarat Bn. NCC	—do—	3	226
(3) 5 Gujarat Girls Bn. NCC	Combined Annual Training Camp, Kevadia Colony, Rajpipla from 25-12-1969 to 3-1-1970	2	60
(4) 1 Gujarat Comp. Tech. Regt. NCC	Combined Annual Training Camp, Ahmedabad from 22-12-1969 to 31-12-1969	4	141
(5) 2 Gujarat Naval Unit NCC	Combined Annual Training Camp Udaipur from 26-10-1969 to 5-11-1969	2	71

Unit	Camp Officers	NCC Cadets
(6) 1 Gujarat Air Sqn. NCC	Combined Annual Training Camp, Dabhoi from 22-12-1969 to 31-12-1969	2 57
(7) 3 Gujarat Tech. Air Sqn. NCC	—do—	1 136

Competitions in Line-Dressing, Platoon Drill, Best Turn Out and Guard Mounting were also organised at the Camps.

Camps/Courses:

The number of Cadets and Officers who attended various Camps/Courses is given below:

(1) 3 Gujarat Bn. NCC	1 Cadet attended All India Summer Training Camp at Turbanhally. 1 Cadet attended Advance Leadership course at Mahabaleshwar. 1 Cadet attended Advance Leadership course at Manali. 1 Cadet attended Advance Leadership course at Gulmarg. 1 Cadet was attached to Regular Army Unit.
(2) 12 Gujarat Bn. NCC	1 Cadet attended Advance Leadership course at Kurseong. 1 Officer and 20 Cadets attended Neighbouring State Camp at Devlali. 19 Cadets were attached to Regular Army Unit. 2 Cadets attended All-India Summer Training Camp at Dehu Road.
(3) 5 Gujarat Girls Bn. NCC	1 Cadet attended 66 Basic Course HMI at Darjeeling. 3 Cadets attended Advance Leadership Course at Munnar. 10 Cadets attended All-India Summer Training Camp at Kalimpong. 4 Cadets attended All India Summer Training Camp at Kanchan. 1 Officer and 5 Cadets attended Annual Training Camp Shooting at Mahuwa.

- (4) 2 Gujarat Naval Unit 1 Officer and 1 Cadet attended Sea Training Camp on INS Vikrant.
2 Cadets were attached to INS Sutlej.
3 Cadets attended Advance Leadership course with Naval bias at Visakhapatnam.
8 Cadets attended combined Annual Training Camp on INS Nausainik at Cochin.
- (5) 1 Gujarat Air Sqn. NCC 2 Cadets were attached to Regiment Air Force Camp at Begmpet.
1 Cadet was attached to Regiment Air Force Camp at Bangalore.
2 Cadets attended INS Nausainik at Cochin.
2 Cadets attended Advance Leadership course at Kurseong.
1 Cadet attended Air Wing Commonwealth Rally at Singapore.

Certificate Examinations:

The Certificate Examinations were held in February/March, 1970 and results are as under:

Unit	'B' Certificate		'C' Certificate	
	Appeared	Passed	Appeared	Passed
(1) 3 Gujarat Bn. NCC	85	69	14	11
(2) 12 Gujarat Bn. NCC	71	57	5	5
(3) 1 Gujarat Comp. Tech. Regt. NCC	39	25	3	3
(4) 3 Gujarat Tech. Air Sqn. NCC	70	62	2	2
	'G-I' Certificate		'G-II' Certificate	
	Appeared	Passed	Appeared	Passed
(1) 5 Gujarat Girls Bn. NCC	16	16	5	5

Annual Day Function:

NCC Units held their Annual Day functions as under:

Unit	Date	Chief Guest
(1) 3 Gujarat Bn. NCC	11-2-1970	Dean, Faculty of Arts
(2) 12 Gujarat Bn. NCC	16-2-1970	Dean, Faculty of Commerce
(3) 1 Gujarat Comp. Tech. Regt. NCC	23-2-1970	Principal, Polytechnic
(4) 5 Gujarat Girls Bn. NCC	6-2-1970	Principal, SNDT Women's College
(5) 2 Gujarat Naval Unit NCC	12-2-1970	Vice-Chancellor, M. S. University, Baroda

NCC Day Celebration

NCC Day was celebrated on 30th November, 1969. Parents were invited to witness the performance of the cadets. The programme consisted of drill, bayonet fighting, demonstration of sports by various NCC Units, flag communication, bridge construction, casualties evacuation, platoon attack, mock battles etc.

5. National Service Scheme

The National Service Scheme is a new scheme sponsored jointly by the Ministry of Education and Youth Services, Government of India and the State Government, to be implemented at the selected universities in the first instance, to develop national consciousness and a sense of social responsibility amongst the students community. Every boy studying in the first two years of the degree course can choose to take either NCC/Physical Education or NSS.

(2) The National Service Scheme was started in the University from 1st November, 1969. An Advisory Committee for the NSS is also constituted under the Chairmanship of the Pro-Vice-Chancellor.

(3) The Central Government and State Government paid Rs. 70,000/- and Rs. 50,000/- respectively to run this scheme at the first instance.

(4) The staff of the N.S.S. Office consisted of One Honorary Administrative Officer, One Fieldwork-Co-ordinator, One Office Assistant, One Peon and One part-time sweeper.

(5) Six teachers and sixteen student leaders of the University successfully completed the NCC Training Programme conducted by the Faculty of Social Work, Baroda from 8th September to 10th October, 1969. Out of these trainees, 5 teachers and 13 student leaders were absorbed in the NSS Programme.

(6) During the months of December and January, talks and lectures were arranged in various Faculties and Institutions of the University to brief the students about the NSS programme; simultaneously the enrolment of volunteers was also carried out. 5 groups of the volunteers were formed to work under each NSS part-time Officer assisted by the student leaders.

(7) The staff, student leaders and NSS volunteers rendered assistance in the establishment of reception centres, receiving various University teams at the Railway Station, escorting the athletes to their respective hostels, management on the ground etc. during the 30th All India Inter-University Athletic Meet at Baroda.

(8) About 100 NSS Volunteers participated in 'Shram Yagna' (Labour Camp) organised on 25th January, 1970 by the Baroda Citizens' Council, in raising a bund around the land at the Beggars Home, Baroda.

(9) Plans are under way to undertake some section oriented surveys, organize summer camps at various places in Gujarat, depute volunteers to the All India Inter-University camps for NSS Programme, initiate social work projects, etc.

6. Students' Common Rooms

There are three Common Rooms for University Students. Two rooms are on the campus—one for men students and the other for women students. The third room generally known as Non-Resident Students' Centre is very near the Faculty of Technology and Engineering. The women students' common room and the Non-Resident Students' Centre were built with financial assistance from the University Grants Commission and the Government of Gujarat.

A cafeteria is attached to each of the three Common Rooms. There are facilities for indoor games such as carrom, draughts, chess, table tennis, etc. and reading material like daily newspapers, periodicals and a small collection of books. Committees consisting of the members of the teaching staff look after the upkeep and arrangements of the rooms. The rooms are also used for meetings of the Students' Association, socials, indoor games and tournaments.

7. Hobby Workshop

Instructions and training were imparted to the students in the hobbies of (i) carpentry, (ii) assembling electrical and electronic appliances, (iii) music, (iv) clay-modelling and (v) photography. 141 students from various Faculties and Institution availed of the facilities in the year 1969-70 as shown below:

<i>Hobby</i>	<i>No. of students</i>
(i) Carpentry	17
(ii) Assembling electrical and electronic appliances	23
(iii) Music (Instrumental and Vocal)	51
(iv) Clay-modelling	6
(v) Photography	44
	44
Total	141

8. University Employment Information and Guidance Bureau

The Bureau functions under the joint auspices of the Government of Gujarat and the M. S. University of Baroda. Its main functions are to provide employment information to alumni; to register post-graduates of all subjects and graduates of professional and technical branches of employment; to recommend candidates to employers and to provide vocational and educational guidance to the students of the University. The Bureau also maintains a Career Information Room where information regarding courses open to students at various stages in their studies, as also information regarding careers open to them on completion of their studies is displayed.

The following figures show the use of the facilities provided by the Bureau:

<i>Nature of Activity</i>	<i>No. of students</i>
(i) Registration	612
(ii) Submission	1613
(iii) Placement	100
(iv) Individual information	693
(v) Individual guidance	1
(vi) Guidance at the time of registration	326
(vii) Group talks	63
(viii) Visitors	2308

Statement showing the number of students at the commencement of academic year 1969-70 Appendix I

Sr. No.	Institutions	*Post-graduate Courses		Degree Courses		Diploma Courses		Total		Grand Total 1969-70	Grand Total 1968-69	Grand Total 1967-68
		Men	Women	Men	Women	Men	Women	Men	Women			
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Faculty of Arts	184	109	679	861	53	6	916	976	1892	1675	1747
2	Faculty of Science	271	91	841	305	7	—	1119	396	1515	1376	1220
3	Faculty of Education and Psychology	74	37	114	177	6	44	194	258	452	421	380
4	Faculty of Commerce	74	10	1449	287	+12	—	1535	297	1832	1675	1510
5	Faculty of Medicine	34	19	541	96	—	—	575	115	690	682	821
6	Faculty of Technology and Engineering	114	2	2258	57	305	—	2677	59	2736	2665	2746
7	Faculty of Fine Arts	22	3	57	32	@66	@8	145	43	£188	188	209
8	Faculty of Home Science	1	81	—	562	—	—	1	643	644	599	599
9	Faculty of Social Work	46	29	—	—	—	—	46	29	75	82	81
10	Faculty of Law	154	10	348	37	—	—	502	47	549	508	491
11	Preparatory Unit—Arts and Commerce	—	—	1224	617	—	—	1224	617	1841	1693	1434
12	Preparatory Unit—Science	—	—	863	179	—	—	863	179	1042	1072	1132
13	Shri M. K. Amin Arts and Science College and College of Commerce, Padra	—	—	553	61	—	—	553	61	614	419	874
14	College of Indian Music, Dance and Dramatics	7	7	20	39	—	—	27	46	73	80	55
15	Baroda Sanskrit Mahavidyalaya	7	—	9	2	20	13	36	15	51	43	43
16	Polytechnic	—	—	—	—	1113	4	1113	4	1117	1218	1729
Total :		988	398	8956	3312	1582	75	11526	3785	15311	14396	14571

* Includes Ph.D. and Master's Degree and Post-graduate Diploma students.
 + Excludes 6 men students of S. Y. B. Com. permitted to join the undergraduate Diploma Course in Co-operation, simultaneously
 @ Includes 8 Post-diploma men students and 1 woman student.
 £ Does not include 24 students who are non-collegiate and Government Scholars, Full-bright Scholars and Commonwealth Students.
 % Includes 3 Government of India Technical Teachers Trainees. § Includes 162 men students of Extended Diploma Course.

Statement showing Non-University Students at the commencement of the year 1969-70

Institutions	Men	Women	Total 1969-70	Total 1968-69	Total 1967-68
(A) Diploma Courses :					
(1) College of Indian Music, Dance and Dramatics	217	244	461	602	518
(B) Certificate Courses :					
(1) Faculty of Arts	79	16	95	459	440
(2) Faculty of Fine Arts	10	3	13	14	11
(3) Baroda Sanskrit Mahavidyalaya	49	7	56	35	53
(C) S.S.C. Course :					
(1) University Experimental School	271	221	492	474	444
(D) Nursery Courses :					
(1) Chetan Balwadi	36	22	58	64	89
(2) Kindergarten	16	11	27	28	26
Total :	678	524	1,202	1,676	1,581

Appendix III

**List of Degrees and Diplomas conferred at the Annual and Supplementary
Convocations during the year 1969-70**

Sr. No.	Degree/Diploma	Annual Convocation November 1969	Supplementary Convocation March 1970	Total
1	Ph.D. (Arts)	3	3	6
2	Ph.D. (Science)	10	9	19
3	Ph.D. (Education and Psychology)	3	2	5
4	Ph.D. (Medicine)	—	1	1
5	Ph.D. (Home Science)	—	1	1
6	M.D.	3	9	12
7	M.S.	3	4	7
8	M.A.	96	—	96
9	Acharya	2	—	2
10	B.A.	349	65	414
11	Shastri	1	—	1
12	Bachelor of Library Science	17	—	17
13	M.Sc.	135	—	135
14	B.Sc.	211	30	241
15	M.Ed.	32	—	32
16	B.Ed.	157	—	157
17	M.Com.	14	—	14
18	B.Com.	317	53	370
19	Diploma in Banking	31	—	31
20	Diploma in Co-operation	2	—	2
21	M.Sc. (in Medical Subjects)	4	4	8
22	M.B.B.S.	56	74	130
23	D.O.	—	1	1
24	D.A.	1	—	1
25	D.L. & O.	1	1	2
26	D.C.H.	2	—	2
27	D.C.P.	2	2	4
28	D.V. & D.	1	1	2
29	T.D.D.	3	—	3
30	D.G.O.	3	2	5
31	M.E.	18	30	48
32	B.E. (Electronics)	9	2	11

33	B.E. (CME Chem.)	291	6	297
34	B.Text. (Engineering)	15	3	18
35	B.Text. (Technology)	32	5	37
36	B.Arch.	25	16	41
37	Dip. in Refrigeration and Air Conditioning	—	5	5
38	LL.M.	5	—	5
39	LL.B.	89	30	119
40	D.T.P.	20	—	20
41	D.L.P.	32	—	32
42	B.A. (Fine)	16	—	16
43	M.Mus.	6	—	6
44	B. Mus.	13	—	13
45	Diploma in Museology	2	—	2
46	M. Sc. (Home)	18	7	25
47	B.Sc. (Home)	82	27	109
48	Diploma in Nursery School Education	5	—	5
49	Diploma in Dietetics	3	—	3
50	M.S.W.	24	6	30
		2164	399	2563

A statement showing the number of teaching staff of various faculties and institutions as on 31st March, 1970

Faculty/Institution	Professors	Readers	Lecturers	Asst. Lecturers, Tutors, Demonstrators, Instructors.	Honorary Part time Research & Others	Total
Arts	9	14	41	21	4	89
Science	13	26	63	66	—	168
Education and Psychology	4	6	13	9	10	42
Commerce	—	8	13	—	4	25
Technology & Engineering	15	32	60	82	4	193
Fine Arts	3	5	19	2	1	30
Home Science	3	6	19	14	11	53
Social Work	1	2	5	3	—	11
Law	1	1	2	—	11	15
Oriental Institute	1	1	4	—	—	6
College of Indian Music, Dance and Dramatics	1	3	10	6	2	22
Baroda Sanskrit Mahavidyalaya	—	1	4	8	1	14
Polytechnic	—	5	24	60	—	89
Shri M. K. Amin Arts and Science College and College of Commerce, Padra	—	—	8	12	1	21
	51	110	285	283	49	778

List of students qualifying for the Ph.D. Degree in the year 1969-70

Sr. No.	Name	Subjects	Title of the Thesis
1.	Shri L. M. Desai	Gujarati	Contribution of Shri Shreyasadhakar Adhikari Varga to Literature and Culture of Gujarat
2.	Shri K. R. Shah	Economics	Outlay on Education and its Financing in India—1950-51 to 1960-61
3.	Shri D. M. Nandedkar	Economics	Evaluation of Labour Management in the Bombay Film Industry
4.	Shri R. S. Mehta	Economics	Finance, Farm Resources and Organisation—An Analytical Study of decade of the impact of reorganised credit on agriculture with reference to a District in Gujarat
5.	Shri K. N. Reddy	Economics	The Growth of Public Expenditure in India—1872 to 1966
6.	Shri R. N. Sharma	Sanskrit	The System of Suddhadwaita Vedanta
7.	Shri S. K. Murty	Education	A critical study of Reforms in Educational Administration introduced in Andhra Pradesh during 1956-1966
8.	Shri P. K. Dongre	Education	Functions of some Auxiliary Verbs in Modern Marathi
9.	Shri C. Z. Shah	Education	A study of the superior children in the State of Gujarat
10.	Shri C. Venkatraman	Education	Construction and Standardisation of an Aptitude Test in Science
11.	Kum. S. B. Trivedi	Psychology	A study in the assessment of interest of the undergraduate students in relation to environment
12.	Kum. V. M. Mehta	Psychology	Problems of Women in Gujarat—A Psychological study of the nature and factors of stress and conflicts
13.	Shri P. M. Amin	Biochemistry	Studies on certain aspects of Sewage Purification
14.	Shri R. S. Hegde	Chemistry	Studies with Ion Exchangers

15.	Shri G. D. Bhat	Chemistry	Potassium Chemical from Sea-water
16.	Shri M. G. Parekh	Chemistry	Studies in coumarins
17.	Shri M. G. Hardas	Geology	Geology of the area to the South and Southwest of Bhuj (Kutch) with special reference to its stratigraphy, sedimentation and structures
18.	Shri V. M. Kulkarni	Geology	Limestones of Gujarat
19.	Shri S. J. Desai	Geology	Stratigraphy, structure and Metamorphism of the area around Majkhali (District Almora)
20.	Shri Y. V. Deshpande	Geology	Geology of the area around Ankola and Gokarna—District N. Kanara (Mysore State) with special reference to its structure and metamorphism.
21.	Shri Omprakash Goyal	Mathematics	On the absolute convergence of a Fourier series
22.	Shri A. K. Matoo	Microbiology	Some aspects of metabolic changes in the ripening mangoes
23.	Shri B. M. Desai	Microbiology	Polyhydric alcohol metabolism in <i>Aspergillus Niger</i>
24.	Shri L. N. Karri	Microbiology	Gluconic metabolism in <i>Aspergillus Niger</i>
25.	Shri P. D. Patel	Physics	Study of spectra of Diatomic Molecules (Chloride and Bromide of Magnesium)
26.	Shri P. H. Dave	Statistics	Transformations of Variates
27.	Shri A. G. Phatak	Statistics	Some contributions to acceptance sampling and simulation
28.	Shri D. C. Mehta	Statistics	Sample Registration scheme
29.	Shri Y. M. Naik	Zoology	A Histophysiological study of the Mammalian Diaphragm
30.	Kum. V. N. Shymulakuttyammu	Zoology	A Histophysiological study of certain organs and tissues of the fresh water crab, <i>Paratelphusa Jacquemontii</i> with special reference to reproduction and fat metabolism.
31.	Shri S. D. Nisith	Physiology	Cardioaccelerator Mechanism of Angiotension
32.	Shri K. N. Chandrashekharan	Foods & Nutrition	Nutritional studies on children of the school-going age

Results of the University Examinations March/April and June, 1969

Appendix VI

Sr. No.	Examination	No. Appeared		Number Passed										Percentage of pass				
		Men	Women	Men					Women									
		No. Regd.	No. Absent	Total	I Class Dist.	I Class	II Class	Pass Class	Total	I Class Dist.	I Class	II Class	Pass Class	Total				
1		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	Prep. Arts	1141	12	600	529	1129	—	2	38	95	135	—	7	75	114	196	331	29.31%
2	F.Y.B.A.	618	13	281	324	605	—	2	31	76	109	—	8	69	100	177	286	47.27%
3	*S.Y.B.A.	550	5	231	314	545	—	—	—	163	163	—	—	—	246	246	409	75.04%
4	T.Y.B.A.	499	17	209	273	482	—	6	48	79	133	—	19	95	111	225	358	74.27%
5	M.A.	130	10	74	46	120	1	4	26	24	55	—	5	29	7	41	96	80.00%
6	Acharya	2	—	2	—	2	—	1	1	1	2	—	—	—	—	—	2	100.00%
7	Shastri	1	—	1	—	1	—	—	—	—	1	—	—	—	—	—	1	100.00%
8	Visharad	1	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	00.00%
9	B.Lib. Sc.	23	—	7	16	23	—	—	3	2	5	—	2	6	4	12	17	73.91%
10	Dip. in Lib. Sc.	1	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	00.00%
11	Dip. in German Lang. (U.G.)	26	7	15	4	19	—	10	3	1	14	—	2	1	—	3	17	89.47%
12	Diploma in Russian Lang. (U.G.)	9	3	5	1	6	—	1	2	—	3	—	37	70	22	129	917	66.66%
13	Prep. Science	1387	14	1167	206	1373	—	235	430	123	788	—	—	—	22	129	917	66.05%
14	Pre-Medical	139	—	125	14	139	—	37	65	17	119	—	5	8	1	14	133	95.68%
15	F.Y.B.Sc.	391	4	288	99	387	—	29	83	36	148	—	23	39	9	71	219	56.58%
16	*S.Y.B.Sc.	356	13	251	92	343	—	—	—	146	146	—	—	—	76	76	222	64.72%
17	B.Sc.	288	5	209	74	283	11	20	66	52	149	—	14	35	17	68	217	76.67%
18	M.Sc. (Previous)	177	7	125	45	170	—	—	—	108	108	—	—	—	41	41	149	87.64%

* No Class is awarded.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
19			146	2	115	29	144	3	15	68	19	105		7	14	5	26	131	90.89%
20	M.Sc. (Final)		4	—	4	—	4	—	2	2	—	4		—	—	—	—	4	100.00%
21	M.Sc. (Appl. Geology)		158	—	78	80	158	—	7	66	4	77	1	8	70	1	80	157	99.36%
22	B.Ed.		5	1	4	—	4	—	—	1	3	4		—	—	—	—	4	100.00%
23	M.Ed. (O.C.)		26	—	18	10	28	—	2	14	2	18		5	5	—	10	28	100.00%
24	M.Ed. (N.C.)		53	—	12	41	53	—	—	9	2	11		1	38	2	41	52	98.11%
25	Dip. in Education		22	—	—	22	22	—	—	—	—	—		4	15	3	22	22	100.00%
26	Dip. in Early Childhood Edu.		1312	11	1145	156	1301	—	22	172	223	417		7	15	47	69	486	37.35%
27	Prep. Commerce		901	118	759	124	883	—	12	108	255	375		—	21	48	69	444	50.28%
28	F.Y.B.Com.		617	32	512	73	585	—	—	316	316	—		—	58	58	374	63.93%	
29	S.Y.B.Com.		461	13	410	38	448	—	20	105	137	262		2	23	11	36	298	66.51%
30	B.Com.		30	1	15	14	29	—	—	—	11	11		—	—	13	13	24	82.75%
31	*B.Com. Under (O.Com. 27)		5	1	4	—	4	—	—	—	3	3		—	—	—	1	4	75.00%
32	*B.Com. Under (O.Com. 25)		7	—	6	1	7	—	—	—	3	3		—	—	—	1	1	57.14%
33	Dip. Co-operation (U.G.)		4	—	3	1	4	—	—	—	1	1		—	—	—	1	1	50.00%
34	Dip. Co-operation (P.G.)		20	4	15	1	16	—	8	—	5	13		—	—	—	1	14	87.50%
35	*Dip. in Banking		41	1	36	4	40	—	—	—	27	27		—	—	4	4	31	77.50%
36	*I.M.B.B.S. (September)		105	1	94	10	104	—	—	—	67	67		—	—	7	7	74	71.15%
37	*II M.B.B.S. (April, 1969)		132	—	108	24	132	—	—	—	62	62		—	—	18	18	80	60.60%
38	*II M.B.B.S. (July, 1969)		51	—	45	6	51	—	—	—	35	35		—	—	5	5	40	78.43%
39	*III M.B.B.S.		71	—	56	15	71	—	—	—	40	40		—	—	11	11	51	71.83%
40	*M.D. Br. I (Medicine)		10	3	7	—	7	—	—	—	1	1		—	—	—	—	1	14.28%
41	*M.D. (Br. III)—Pharmacology		1	—	1	—	1	—	—	—	—	—		—	—	—	—	0	00.00%
42	*M.D. (Br. V) Obst. & Gyn.		7	—	2	5	7	—	—	—	—	—		—	—	—	—	1	16.66%
43	*M.D. (Br. VI)—Pediatrics		4	—	3	1	4	—	—	—	—	—		—	—	—	—	1	25.00%
44	*M.S. (Br. I)—Surgery		12	2	10	—	10	—	—	—	2	2		—	—	—	—	2	20.00%
45	*M.S. (Br. III)—Orthopaedics		1	—	1	—	1	—	—	—	—	—		—	—	—	—	0	00.00%
46	*M.S. (Br. IV)—Oto-Rhino-Laryngology		2	—	2	—	2	—	—	—	—	—		—	—	—	—	0	00.00%
47	*Dip. in Anaesthesiology		1	—	1	—	1	—	—	—	1	1		—	—	—	—	1	100.00%
48	*Dip. in Laryngology & Otology		1	—	1	—	1	—	—	—	1	1		—	—	—	—	1	100.00%
49	*Dip. in Medical Radiology—Part I		1	—	1	—	1	—	—	—	1	1		—	—	—	—	1	100.00%

50	*Dip. in Child Health	1	—	1	—	1	—	1	—	—	—	—	1	—	—	—	—	—	1	100.00%
51	*Dip. in Pediatrics	1	—	1	—	1	—	1	—	—	—	—	1	—	—	—	—	—	1	100.00%
52	*Dip. in Venereology & Dermatology	1	—	1	—	1	—	1	—	—	—	—	1	—	—	—	—	—	1	100.00%
53	*Dip. in Clinical Pathology	3	—	3	—	3	—	3	—	—	—	—	2	—	—	—	—	—	2	66.66%
54	*Dip. in Tuberculous Diseases	3	—	3	—	3	—	3	—	—	—	—	3	—	—	—	—	—	3	100.00%
55	*Dip. in Gynaecology & Obstetrics	4	1	1	2	3	—	3	—	—	—	—	1	—	—	2	2	3	100.00%	
56	M.Sc. (Medical Subjects)	6	—	6	—	6	—	6	—	—	—	—	4	—	—	—	—	—	4	66.66%
57	F.Y. Diploma (CME)	439	8	428	3	431	—	—	2	43	116	161		—	—	—	—	161	37.35%	
58	S.Y. Diploma (CME)	419	8	408	3	411	—	—	35	89	80	204		—	—	1	1	2	206	50.12%
59	*I Sem. of S.Y. Dip. (CME)—Extd. Course	116	12	104	—	104	—	—	—	—	34	34		—	—	—	—	34	32.69%	
60	II Sem. of S.Y. Dip. (CME)—Extd. Course	53	5	48	—	48	—	—	—	—	16	16		—	—	—	—	16	33.33%	
61	*I Sem. of Final Year D.C.E. Extd. Course	10	—	10	—	10	—	—	—	—	10	10		—	—	—	—	10	100.00%	
62	*I Sem. of Final Year D.M.E. Extd. Course	22	3	19	—	19	—	—	—	—	7	7		—	—	—	—	7	36.84%	
63	*I Sem. of Final Year D.E.E. Extd. Course	27	4	23	—	23	—	—	—	—	6	6		—	—	—	—	6	26.08%	
64	II Sem. of Final Year D.C.E. Extd. Course	1	—	1	—	1	—	—	—	—	—	—		—	—	—	—	0	00.00%	
65	II Sem. of Final Year D.M.E. Extd. Course	4	1	3	—	3	—	—	—	—	2	2		—	—	—	—	2	66.66%	
66	II Sem. of Final Year D.E.E. Extd. Course	4	1	3	—	3	—	—	—	—	—	—		—	—	—	—	0	00.00%	
67	D.C.E.	84	2	80	2	82	—	—	13	22	14	49		—	—	2	—	2	51	62.19%
68	D.M.E.	207	4	201	2	203	—	—	9	26	47	82		—	—	—	—	—	82	40.39%
69	*D.M.E. (under O.T.E: 155)	52	4	47	1	48	—	—	—	—	—	32		—	—	—	1	1	33	68.75%
70	D.E.E.	118	4	112	2	114	—	—	2	18	26	46		—	—	—	—	1	47	41.22%
71	*D.E.E. (under O.T.E: 162)	74	3	71	—	71	—	—	—	—	—	57		—	—	—	—	—	57	80.28%

* No Class is awarded.

£ From 1968 Examination Grades are awarded to the candidates but the results are declared in classes. (i. e. I Class Dist., I Class, II Class and Pass Class).

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
72	D.T.C.	44	2	42	—	42	—	2	5	5	12	—	—	—	—	—	12	28.57%
73	D.T.C. (under O.T.E. 184)	83	3	80	—	80	—	—	7	33	40	—	—	—	—	—	40	50.00%
74	D.T.T.	34	—	34	—	34	—	4	10	13	27	—	—	—	—	—	27	79.41%
75	F.Text (Engg. & Tech.)	62	3	59	—	59	—	—	10	15	25	—	—	—	—	—	25	42.37%
76	S.Text (Engg. & Tech.)	86	—	86	—	86	—	1	3	19	30	—	—	—	—	—	30	34.88%
77	T.E. (Mechanical (Old course))	1	—	1	—	1	—	—	—	1	1	—	—	—	—	—	1	100%
78	T.Text (Engineering)	32	—	32	—	32	—	5	19	4	28	—	—	—	—	—	28	87.50%
79	T.Text (Technology)	36	—	36	—	36	—	1	4	20	29	—	—	—	—	—	29	80.55%
80	B.Text (Engineering)	18	—	18	—	18	—	2	4	9	15	—	—	—	—	—	15	83.33%
81	B.Text (Technology)	40	—	40	—	40	—	8	21	3	32	—	—	—	—	—	32	80.00%
82	B.E. (Civil) - (Old Course)	1	—	1	—	1	—	—	—	1	1	—	—	—	—	—	1	100%
83	B.E. (Mechanical) - (Old Course)	3	—	3	—	3	—	—	—	3	3	—	—	—	—	—	3	100%
84	B.E. (Electrical) - (Old Course)	5	2	3	—	3	—	—	—	2	2	—	—	—	—	—	2	66.66%
85	* I Sem. of B.E. I (CME Chem. Met.)	95	3	92	—	92	—	—	—	54	54	—	—	—	—	—	54	58.69%
86	II Sem. of B.E. I (CME Chem. Met.)	405	3	399	3	402	19	49	120	43	231	—	—	1	1	2	233	57.96%
87	I Sem. of B.E. II (CME Chem. Met.)	144	4	139	1	140	—	—	—	94	94	—	—	—	—	1	95	66.42%
88	II Sem. of B.E. II (CME Chem. Met.)	379	5	372	2	374	12	43	130	59	253	—	—	1	1	2	255	68.12%
89	* I Sem. of B.E. III (CME Chem. Met.)	111	1	110	—	110	—	—	—	61	61	—	—	—	—	—	61	55.55%
90	II Sem. of B.E. III (CME Chem. Met.)	382	—	382	—	382	14	48	173	67	302	—	—	—	—	—	302	78.08%
91	* I Sem. of B.E. IV (CME Chem.)	56	2	54	—	54	—	—	—	41	41	—	—	—	—	—	41	75.09%
92	II Sem. of B.E. IV (CME Chem.)	374	—	371	3	374	44	96	157	47	344	—	—	3	—	3	347	92.78%
93	* I Sem. of B.E. V (Civil)	9	—	9	—	9	—	—	—	6	6	—	—	—	—	—	6	66.66%
94	* I Sem. of B.E. V (Mechanical)	1	—	1	—	1	—	—	—	1	1	—	—	—	—	—	1	100%
95	* I Sem. of B.E. V (Electrical)	10	—	10	—	10	—	—	—	8	8	—	—	—	—	—	8	80.00%
96	* I Sem. of B.E. V (Chemical)	8	—	8	—	8	—	—	—	7	7	—	—	—	—	—	7	87.50%
97	II Sem. of B.E. V (Civil)	86	—	85	1	86	10	39	33	—	82	1	—	—	1	83	97.64%	
98	II Sem. of B.E. V (Mechanical)	115	—	115	—	115	70	40	4	—	114	—	—	—	—	114	99.10%	
99	II Sem. of B.E. V (Electrical)	53	1	52	—	52	7	21	22	1	51	—	—	—	—	51	98.07%	
100	II Sem. of B.E. V (Chemical)	38	1	37	—	37	12	14	10	—	36	—	—	—	—	—	36	97.29%
101	* I Sem. of B.E. I (Electronics)	7	—	7	—	7	—	—	—	7	7	—	—	—	—	—	7	100%
102	II Sem. of B.E. I (Electronics)	24	—	24	—	24	—	—	2	10	5	17	—	—	—	—	17	70.83%
103	* I Sem. of B.E. II (Electronics)	3	—	3	—	3	—	—	—	3	3	—	—	—	—	—	3	100%

104	II Sem. of B.E. II (Electronics)	18	—	18	—	18	—	—	6	9	2	17	—	—	—	—	17	94.44%	
105	* I Sem. of B.E. III (Electronics)	3	—	3	—	3	—	—	—	2	2	—	—	—	—	—	2	66.66%	
106	II Sem. of B.E. III (Electronics)	12	1	11	—	11	1	3	5	—	9	—	—	—	—	—	9	81.81%	
107	* M.E. (Civil) Part I	22	7	15	—	15	—	—	—	9	9	—	—	—	—	—	9	60.00%	
108	* M.E. (Mechanical) Part I	10	3	7	—	7	—	—	—	3	3	—	—	—	—	—	3	42.85%	
109	* M.E. (Electrical) Part I	11	—	11	—	11	—	—	—	9	9	—	—	—	—	—	9	81.81%	
110	* M.E. (Civil) Part II	3	—	3	—	3	—	—	—	3	3	—	—	—	—	—	3	100%	
111	* M.E. (Mechanical) Part II	3	—	3	—	3	—	—	—	2	2	—	—	—	—	—	2	66.66%	
112	* M.E. (Electrical) Part II	7	3	4	—	4	—	—	—	2	2	—	—	—	—	—	2	50.00%	
113	* M.E. (Civil) Part III	22	—	22	—	22	—	—	—	18	18	—	—	—	—	—	18	81.81%	
114	* M.E. (Mechanical) Part III	12	—	12	—	12	—	—	—	10	10	—	—	—	—	—	10	83.33%	
115	* M.E. (Electrical) Part III	9	—	9	—	9	—	—	—	5	5	—	—	—	—	—	5	55.55%	
116	M.E. (Civil) Part IV	10	1	9	—	9	—	—	5	4	—	9	—	—	—	—	9	100%	
117	M.E. (Mechanical) Part IV	9	1	8	—	8	—	—	5	3	—	3	—	—	—	—	8	100%	
118	M.E. (Electrical) Part IV	1	—	1	—	1	—	—	1	—	1	—	—	—	—	—	1	100%	
119	* P.G. Diploma in Refrigeration & Air-Conditioning Part I	6	2	4	—	4	—	—	—	3	3	—	—	—	—	—	3	75%	
120	Post-Diploma Dip. in Refrigeration & Air-Conditioning Part II	6	—	6	—	6	—	1	2	3	—	6	—	—	—	—	6	100%	
121	Prep. Course Examination in Engg. (CME) for Dip. passed Students.	12	1	11	—	11	—	—	1	3	2	6	—	—	—	—	6	54.54%	
122	Third Year B. Arch.	70	—	54	16	70	2	2	15	6	25	—	—	1	2	4	7	32	45.71%
123	B.Arch.	57	6	45	6	51	3	3	8	8	8	22	—	2	1	3	25	49.01%	
124	I LL.B. (New Course)	170	38	118	14	132	—	—	51	17	68	—	—	11	—	11	79	59.84%	
125	I LL.B. (Old Course)	21	9	12	—	12	—	—	2	3	5	—	—	—	—	—	5	41.66%	
126	II LL.B. (New Course)	42	3	33	6	39	—	—	22	1	23	—	—	6	—	6	29	74.35%	
127	II LL.B. (Old Course)	132	22	101	9	110	—	—	25	30	55	—	—	4	1	5	60	54.54%	
128	* D.T.P.	69	19	48	2	50	—	—	—	19	19	—	—	—	—	1	20	40.00%	
129	* D.L.P.	53	11	40	2	42	—	—	—	—	31	—	—	—	—	1	32	79.19%	
130	LL.M.	11	—	9	2	11	—	—	4	—	4	—	—	—	—	—	5	45.45%	
131	M.A. Fine (Painting)	1	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	00.00%	
132	B.A. Fine (Painting)	8	—	5	3	8	—	—	4	1	—	5	—	2	1	—	3	100%	

* No Class is awarded.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
133	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100%
134	7	4	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	100%
135	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	100%
136	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100%
137	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	50.00%
138	6	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	100%
139	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	100%
140	14	1	12	1	13	1	1	1	7	4	2	12	2	1	1	1	3	6	13	100%
141	6	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	100%
142	13	4	9	13	9	11	20	2	1	2	4	6	2	4	1	9	13	15	15	75%
143	23	3	9	11	3	4	7	1	4	2	6	3	3	3	3	3	3	3	3	75%
144	6	2	1	7	1	7	7	1	1	1	3	3	3	3	3	3	3	3	3	42.85%
145	8	1	7	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	100%
146	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	100%
147	106	2	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104	78.84%
148	20	1	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	84.73%
149	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	100%
150	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	83.33%
151	28	17	11	28	17	11	28	17	11	28	17	14	14	14	14	14	14	14	14	95.71%
152	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	100%
153	13	12	1	13	12	1	13	12	12	12	12	12	12	12	12	12	12	12	12	100%
154	4	2	2	2	2	2	4	4	4	4	2	2	2	2	2	2	2	2	2	100%

* No Class is awarded.
 + Passed in 'A' Grade.
 % Passed in 'B' Grade.
 £ Passed in 'C' Grade.

Results of University Examinations October/November, 1969 Appendix VII

Sr. No.	Examination	Number appeared																			Grand total	Percentage of Pass
		Number passes																				
		Men									Women											
No. Regd.	No. Absent	Men	Women	Total	I Class Dist.	I Class	II Class	Pass Class	Total	I Class Dist.	I Class	II Class	Pass Class	Total	I Class Dist.	I Class	II Class	Pass Class	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21		
598	28	316	254	570	1	167	168	1	3	66	69	3	155	158	326	57.19%						
1	Prep. Arts	270	20	128	122	250	1	3	66	69	3	155	158	326	57.19%							
2	F.Y.B.A.	136	6	63	67	130	1	4	46	46	4	51	51	97	74.61%							
3	*S.Y.B.A.	101	8	54	39	93	1	4	30	34	3	22	25	59	63.44%							
4	T.Y.B.A.	201	17	141	43	184	5	26	68	99	3	10	21	34	133	72.28%						
5	Prep. Science	167	10	137	21	158	1	2	91	94	1	13	13	85	62.50%							
6	F.Y.B.Sc.	147	11	118	18	136	1	10	13	23	1	10	41	52	446	69.47%						
7	*S.Y.B.Sc.	60	8	49	3	52	1	43	350	394	1	10	39	39	204	56.01%						
8	T.Y.B.Sc.	676	34	570	72	642	1	165	165	82	41	41	7	89	44.50%							
9	Prep. Commerce	402	37	315	50	365	1	41	41	4	4	5	5	46	42.20%							
10	F.Y.B.Com.	227	27	185	15	200	1	4	4	4	1	1	1	5	85.33%							
11	*S.Y.B.Com.	122	13	104	5	109	1	6	6	6	4	4	4	4	66.66%							
12	B.Com.	7	1	5	1	6	1	6	6	6	4	4	4	4	71.15%							
13	*B.Com. under O.Com. 27	8	2	6	1	6	1	6	6	6	4	4	4	4	66.66%							
14	*B.Com. under O.Com. 25	105	1	94	10	104	1	28	28	28	2	2	2	30	63.83%							
15	*First M.B.B.S. (Sept.)	47	—	44	3	47	—	60	60	60	2	2	2	72	63.71%							
16	*First M.B.B.S. (Dec.)	113	—	92	21	113	—	2	2	2	2	2	2	2	40.00%							
17	*Final M.B.B.S.	6	1	5	—	5	—	—	—	—	—	—	—	—	—	—						
18	*M.D. (Br. I-Medicine)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						

*No Class is awarded.

	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
74 I Sem. of B.E. I (Electro.)	20	3	17	—	17	—	—	—	12	12	—	—	—	—	—	12	70.58%
75 II Sem. of B.E. I (Electro.)	7	—	7	—	7	—	—	—	4	4	—	—	—	—	—	4	57.14%
76 *I Sem. of B.E. II (Electro.)	22	—	22	—	22	—	—	—	21	21	—	—	—	—	—	21	95.45%
77 II Sem. of B.E. II (Electro.)	1	—	1	—	1	—	—	—	1	1	—	—	—	—	—	1	100.00%
78 *I Sem. of Final B.E. (Electro.)	20	—	20	—	20	—	—	—	20	20	—	—	—	—	—	20	100.00%
79 II Sem. of Final B.E. (Electro.)	2	—	2	—	2	—	—	2	—	—	—	—	—	—	—	2	100.00%
80 B.E. IV (Civil)-Special	1	—	1	—	1	—	—	—	1	1	—	—	—	—	—	1	100.00%
81 *M.E. (Civil)-Part I	10	1	9	—	9	—	—	—	6	6	—	—	—	—	—	6	100.00%
82 *M.E. (Mech.)-Part I	4	1	3	—	3	—	—	—	2	2	—	—	—	—	—	2	100.00%
83 *M.E. (Elect.)-Part I	2	—	2	—	2	—	—	—	1	1	—	—	—	—	—	1	100.00%
84 *M.E. (Civil)-Part II	16	1	15	—	15	—	—	—	10	10	—	—	—	—	—	10	66.66%
85 *M.E. (Mech.)-Part II	6	—	6	—	6	—	—	—	5	5	—	—	—	—	—	5	50.00%
86 *M.E. (Elect.)-Part II	14	1	13	—	13	—	—	—	10	10	—	—	—	—	—	10	66.66%
87 *M.E. (Civil)-Part III	5	—	5	—	5	—	—	—	5	5	—	—	—	—	—	5	83.33%
88 *M.E. (Mech.)-Part III	2	—	2	—	2	—	—	—	2	2	—	—	—	—	—	2	100.00%
89 *M.E. (Elect.)-Part III	6	—	6	—	6	—	—	—	5	5	—	—	—	—	—	5	76.92%
90 M.E. (Civil)-Part IV (Oct. 1969)	13	—	12	1	13	1	2	9	—	—	—	—	—	—	—	5	100.00%
91 M.E. (Mech.)-Part IV (Oct. 1969)	8	5	3	—	3	—	2	1	—	—	—	—	—	—	—	3	100.00%
92 M.E. (Elect.)-Part IV (Oct. 1969)	5	—	5	—	5	—	3	1	—	—	—	—	—	—	—	4	80.00%
93 M.E. (Civil)-Part IV (Aug. 1969)	8	—	8	—	8	—	3	5	—	—	—	—	—	—	—	8	100.00%
94 M.E. (Mech.)-Part IV (Aug. 1969)	4	—	4	—	4	—	3	—	—	—	—	—	—	—	—	3	75%
95 *M.Text. (Engg.)-Part II	1	—	1	—	1	—	—	—	1	1	—	—	—	—	—	1	100.00%
96 *P.G. Dip. in Ref. & Air-Cond. Part I	2	—	2	—	2	—	—	—	2	2	—	—	—	—	—	2	100.00%
97 P.G. Dip. in Ref. & Air-Cond. Part II	5	—	5	—	5	—	3	2	—	—	—	—	—	—	—	5	100%
98 Prep. Course Examination in Engg. (CME)-for Dip. passed students	5	—	5	—	5	—	—	—	4	4	—	—	—	—	—	4	80.00%
99 *I Sem. of P.D.D. in Ref. & Air-Cond.	6	—	6	—	6	—	—	—	5	5	—	—	—	—	—	5	83.33%
100 Third Year B.Arch.	36	—	28	8	36	—	—	1	12	13	—	—	—	6	6	19	52.77%
101 B.Arch.	31	2	26	3	29	—	1	4	9	14	—	—	1	1	2	16	55.17%

- 102 First LL.B (N.C.)
- 103 First LL.B. (O.C.)
- 104 Second LL.B (N.C.)
- 105 Second LL.B (N.C.)
- 106 B.Sc. (Home)
- 107 M.Sc. (Home)
- 108 M.S.W.
- 109 *Ph.D. (Science)

	45	12	30	3	33	—	—	—	1	11	12	—	—	2	2	14	42.42%
11	6	4	1	5	—	—	—	—	—	—	—	—	—	—	—	—	00.00%
9	2	7	—	7	—	—	—	—	—	—	—	—	—	—	—	5	71.42%
66	15	46	5	51	—	—	—	7	16	23	—	—	—	2	2	25	49.01%
35	—	—	35	35	—	—	—	—	—	—	—	—	—	—	—	25	71.42%
10	—	—	10	10	—	—	—	—	—	—	—	—	—	—	—	9	90%
7	—	6	1	7	—	—	—	—	—	—	—	—	—	—	—	5	71.42%
3	—	3	—	3	—	—	—	—	—	—	—	—	—	—	—	3	100.00%

*No Class is awarded
 +Passed in A Grade
 %Passed in B Grade
 £Passed in C Grade
 †Result of one candidate is not yet declared.

CAPITAL ACCOUNTS

I—University General Fund
(Subject to Audit)
1969-70

<i>Receipts</i>	<i>Rs.</i>	<i>P.</i>	<i>Payments</i>	<i>Rs.</i>	<i>P.</i>
Opening Balance as on 1-4-1969			Building Works	7,83,805-24	
Interest			Purchase of Machinery for the Press	1,07,086-25	
Loan for Construction of Hostels for Engineering Students			Purchase of Furniture	25,328-14	
Grant from Sir Sayajirao Diamond Jubilee and Memorial Trust			Transfer to Deficit Account (Revenue) towards deficit upto 31-3-1964	3,27,500-06	
Donation from Padra Taluka Uchha Shikshana Samiti for College at Padra			Closing Balance	9,69,547-22	
Grant from the State Government towards the construction of the additional building of the Faculty of Home Science					
(Post-graduate Departments of Child Development and Foods & Nutrition)					
Total	22,13,266-91			22,13,266-91	

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II—Ayurvedic Research Fund
(Subject to Audit)
1969-70

<i>Receipts</i>	<i>Rs.</i>	<i>P.</i>	<i>Payments</i>	<i>Rs.</i>	<i>P.</i>
Opening Balance as on 1-4-1969	11,66,646-67		Amount to be transferred for the Excess recurring expenditure of the Sheth U. P. Ayurvedic Research Unit over and above State Government Grant	14,030-05	
Interest	41,999-74		Closing Balance	11,94,616-36	
Total	12,08,646-41			12,08,646-41	

III—Post-graduate Instruction and Research Fund
(Subject to Audit)
1969-70

<i>Receipts</i>	<i>Rs.</i>	<i>P.</i>	<i>Payments</i>	<i>Rs.</i>	<i>P.</i>
Opening Balance as on 1-4-1969	45,58,217-47		Expenditure on Research etc.:		
Less: Loss on sale of securities	395-20		(i) Research Grant	39,701-94	
	45,57,822-27		(ii) Research Assistants	40,320-36	
Interest	1,45,032-50		(iii) Scholarships	3,877-26	
	47,02,854-77		Closing Balance	45,18,955-21	
Total	47,02,854-77			47,02,854-77	

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REVENUE ACCOUNTS
(Subject to Audit)
1969-70

Appendix IX

Sr. No.	Particulars	Receipts		Sr. No.	Particulars	Disbursements	
		Rs.	P.			Rs.	P.
1	2	3		1	2	3	
I	Grants (A + B)	74,33,558-83		I	Administration	5,97,935-78	
(A)	Grants from the University Grants Commission	40,000-00		II	Examination Charges	7,06,776-27	
(i)	100% Grant from the University Grants Commission for Revision of Salary Scales of University Teachers in Technology and Engineering subjects as per A.I.C.T.E. Scales upto 7 years (i.e. upto 31-3-1969)			III	Publications	36,720-72	
				IV	Remuneration to Lecturers	—	
				V	Travelling Allowance	44,095-87	
				VI	Printing, Stationery and Postages	59,317-73	
				VII	Interest on Bank Overdraft and Loans and Repayment of Loans	3,35,496-41	
				VIII	Maintenance of Buildings and Roads (including Residential Quarters and N.C.C. Buildings)	1,18,438-59	
(B)	Grants from the State Government (1 to 4)	40,000-00		IX	Maintenance of Gardens	36,701-28	
(1)	Block Grant from the State Government	73,93,558-83		X	Games, Sports and Students' Welfare and other Activities	4,11,213-72	
(2)	Additional Block Grants from the State Government	40,76,000-00		XI	Miscellaneous (A, B and C)	1,27,803-64	
				(A)	Memberships and Contributions	6,725-00	
				(B)	Office Equipment	5,053-03	

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1	2	3	1	2	3
(b)	80% Grants towards the increase in the rates of Dearness Allowance (from 1-3-1967 and onwards)	5,16,644-00	XII	Faculties and Institutions	99,28,899-94
(c)	3½% Grant on the Wage Bill of the preceding year towards Annual increments etc.	11,42,215-83	(a)	Faculty of Arts	11,89,679-53
(d)	Towards payment of House Rent at increased rates from 1-1-1969 (not yet approved by Government)	2,75,000-00	(b)	Faculty of Science	23,92,831-52
(3)	Towards the Fourth Plan Revision of salary scales of the University Teachers in		(c)	Faculty of Education and Psychology	6,42,538-14
			(d)	Faculty of Commerce	3,48,235-87
			(e)	Faculty of Technology and Engineering	19,48,638-11
			(f)	Faculty of Law	1,13,670-21
			(g)	Faculty of Fine Arts	5,45,727-74
			(h)	Faculty of Home Science	6,75,932-09
			(i)	Faculty of Social Work	2,37,131-40
			(j)	Oriental Institute	1,83,693-66
			(k)	College of Indian Music, Dance and Dramatics	4,01,574-59
			(l)	Preparatory Unit: Arts and Commerce	48,301-65
			(m)	Preparatory Unit: Science	43,959-40
			(n)	Sanskrit Mahavidyalaya	1,03,780-20
			(o)	Shri M. K. Amin Arts and Science College and College of Commerce, Padra	2,58,750-64

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1	2	3	1	2	3
	Humanities, Sciences and Social Sciences excluding Teachers in Technical and Engineering subjects			(p) Polytechnic (Diploma Courses in Civil, Mechanical and Electrical Engineering)	7,94,455-19
	(4) Grant from the State Government towards Maintenance of M. K. Amin Arts and Science College and College of Commerce, Padra	5,00,000-00	XIII	University Library	3,47,324-87
	II Fees from Students (A + B) Academic	1,10,641-00	XIV	University Guest House	15,475-75
	(i) Tuition Fees and Miscellaneous Income from Faculties and Institutions	47,53,043-08	XV	University Auxiliary Services	5,30,016-62
	(a) Faculty of Arts	35,36,089-13		(a) M. S. University of Baroda Press (Sadhana Press)	3,37,216-61
	(b) Faculty of Science	5,44,856-13	XVI	(b) M. S. University Stationery Unit	1,77,153-18
	(c) Faculty of Education and Psychology	8,29,575-89	XVII	(c) M. S. University Publication Sales Unit	15,646-83
	(d) Faculty of Commerce	1,91,996-00	XVIII	Hostels—Halls of Residence for Students	7,19,828-94
	(e) Faculty of Technology and Engineering	5,46,963-84		Sheth U. P. Ayurvedic Research Unit	45,051-00
	(f) Faculty of Law	6,44,420-36		Net expenditure on Development Schemes which have completed Five Years (Chargeable to 100% State Government Grant from 1-4-1967 and onwards excluding expenditure on revision of salary scales).	7,73,939-36
	(g) Faculty of Fine Arts	1,03,474-00			
	(h) Faculty of Home Science	41,221-34			
	(i) Faculty of Social Work	2,27,064-69			
		42,873-00			

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1	2	3	1	2	3
	Institutions:				
	(j) College of Indian Music, Dance and Dramatics	46,174-09			
	(k) Preparatory Unit: Arts and Commerce	203-10			
	(l) Preparatory Unit: Science	3,176-20			
	(m) Sanskrit Mahavidyalaya	21-00			
	(n) Shri M. K. Amin Arts and Science College and College of Commerce, Padra	1,36,550-90			
	(o) Polytechnic: (Diploma Courses in Civil, Mechanical and Electrical Engineering)	1,32,300-59			
	(ii) Fees for Enrolment etc.				
	(a) For Enrolment Certificate	34,388-00			
	(b) For Post-graduate Registration	10,830-00			
	B Examination Fees	9,12,304-15			
	C Other Fees	3,04,649-80			
	III Hostels—Income from Halls of Residence for Students	4,73,745-00			

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1	2	3	1	2	3
IV	Income from Buildings, Lands and other Properties				
V	Income from Publications	3,10,712-58			
VI	Health Services—University Health Centre	41,662-46			
VII	University Auxiliary Service	12,334-96			
(a)	Income from M. S. University of Baroda Press (Sadhana Press)	4,96,830-67			
(b)	Income from M. S. University Stationery Unit	3,16,738-27			
VIII	Miscellaneous Receipts	1,80,092-40			
IX	Sheth U. P. Ayurvedic Research Unit	2,33,531-39			
X	Excess of Disbursements over Receipts i.e. Deficit	45,051-00			
		10,34,566-52			
					Grand Total 1,48,35,036-49

Grants on Development and Research Schemes 1969-70

Sr. No.	Name of the Agency	Amount of Grant	
		RS.	P.
1.	University Grants Commission	34,98,262-98	
2.	Ministry of Education, Government of India	3,64,202-12	
3.	Ministry of Health, Government of India	1,25,569-00	
4.	Ministry of Defence, Research and Development Organisation, Government of India.	10,660-00	
5.	Central Social Welfare Board	1,25,000-00	
6.	Planning Commission, Government of India	—	
7.	Council of Scientific and Industrial Research, New Delhi	38,567-57	
8.	Department of Science Education, National Council of Educational Research and Training	8,000-00	
9.	National Institute of Education	5,485-39	
10.	Department of Atomic Energy	5,175-00	
11.	Institute of Himalayan Geology	4,210-00	
12.	Government of Gujarat (Matching Grant)	10,80,596-00	
13.	Government of Gujarat (Research and Other Schemes)	88,769-17	
14.	UNICEF—Nutrition Programme	15,762-10	
15.	United States Department of Agriculture and Health, New Delhi (Am PL-480 Programme)	4,96,647-00	
16.	Director, Wheat Associate Project	2,211-70	
17.	Ford Foundation	2,32,000-00	
18.	University of Michigan (Baroda Michigan Project)	39,759-69	
19.	Unichem Laboratories	3,200-00	
	Total	61,44,077-72	

THE MAHARAJA SAYAJIRAO
Statement of Students

FACULTY	Shri K. M. Mumshi Hall	Shri Manubhai Mehta Hall	Shri Maharshi Arvind Hall	Shri Sardar Patel Hall	Professor T. K. Gajjar Hall	Dr. Jivraj Mehta Hall
Preparatory Science	54	23	22	17	14	19
Preparatory Arts and Commerce ..	7	3	—	—	4	3
Arts	2	4	2	5	6	2
Commerce	7	15	6	9	29	22
Science	34	19	18	44	21	39
Education and Psychology.. ..	—	2	—	—	—	3
Technology and Engineering ..	63	98	121	76	114	65
Polytechnic	1	4	3	1	3	2
Medicine	10	20	16	33	45	41
Social Work	—	—	—	—	—	—
Fine Arts	2	4	4	6	1	5
Music	—	—	2	—	—	—
Law	—	—	2	1	1	1
Home Science	—	—	—	—	—	—
TOTAL	180	192	196	192	238	202

UNIVERSITY HALLS OF RESIDENCE, BARODA
during 1969-70

Shri Dadabhai Nao-roji Hall	Shri Rabindranath Tagore Hall	Shri M. Vishvesariya Hall	Shri Siddhraj Jaisinh Hall	Total Man Students	Smt. Sarojini Devi Hall	Smt. Hansa Mehta Hall	Pandita Gargi Hall	Kasturba Gandhi Hall	Total Woman Students	Grand Total
5	25	21	33	233	9	3	4	10	26	259
1	10	9	6	43	18	5	8	4	35	78
5	8	16	12	62	54	47	25	28	154	216
10	39	28	35	200	15	8	10	7	40	240
16	17	25	29	262	28	17	29	16	90	352
3	—	5	3	16	14	5	12	1	32	48
17	70	131	84	839	7	14	3	3	27	866
1	37	27	32	111	—	—	—	—	—	111
9	14	17	25	230	12	11	11	4	38	268
3	—	7	13	23	3	1	11	—	15	38
1	2	10	2	37	18	14	3	1	36	73
—	—	3	1	6	5	—	15	2	22	28
2	3	1	5	16	2	—	1	—	3	19
—	—	—	—	—	89	80	70	31	270	270
73	225	300	280	2078	274	205	202	107	788	2866