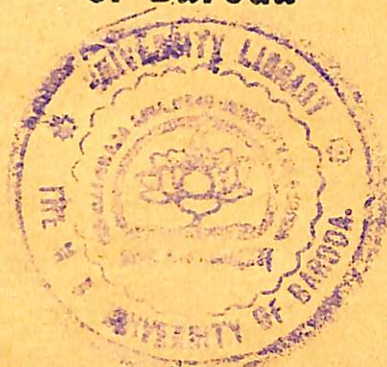


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M.S. University of Baroda  
Twenty Second  
Annual Report  
1970-71

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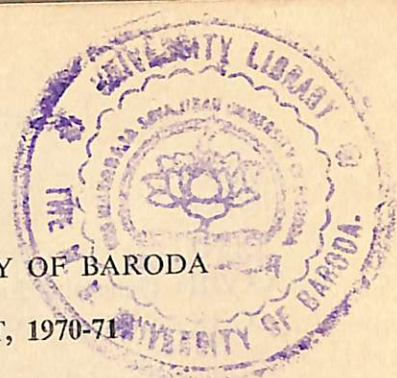
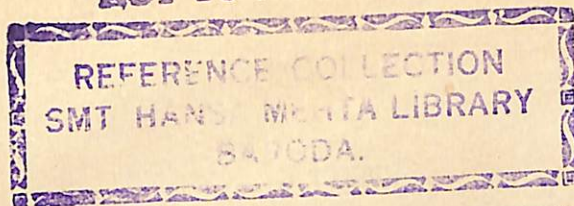


**TWENTY-SECOND ANNUAL REPORT**  
**1970-71**



**BARODA**

NOT TO BE ISSUED



THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA

TWENTY-SECOND ANNUAL REPORT, 1970-71

(1st April, 1970 to 31st March, 1971)

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His Highness the Maharaja Sir Sayajirao Gaekwad of Baroda

# THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA



## TWENTYSECOND ANNUAL REPORT, 1970-71

### 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 an Institute for Oriental Studies, an Institute for Gujarati Studies, a School of Fine Arts, and a School of Nursing and a 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. The following institutions for higher education were established in Baroda during the two decades that followed:

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 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 situated in the State of Baroda. With the subsequent merger of the Baroda State with the State of Bombay, the jurisdiction of the University came to be restricted to the area within 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 standards of admissions, examinations, etc. The first examinations of the University were held in March-April, 1951.

#### Growth of Student Enrolment

*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 undergraduate diploma or certificate courses. In the following twenty-one years, the total enrolment of students in the University has gone up from 2,962 to 15,930 registering an increase of 12,968 or about a five-fold increase. The average yearly increase in the student enrolment since 1949 has been nearly 618.

In 1950, the total number of male students was 3,503. This number has increased to 12,034 in 1970-71 registering a rise of about three times. The rise in the enrolment of women students has been more remarkable. Between 1950 and 1970-71 the enrolment of women students in the University has increased from 484 to 3,896—almost an eight times rise. On an average, the annual increase in the enrolment of women students in the University between 1950 and 1971 was about 162.

The enrolment trends over the last twenty-one years in the University are indicated in the following tables:

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	6853	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
1970-71	15930	619	3.9

**Sex-Ratio in different Faculties:** The development picture of the sex-ratio in case of students in different Faculties and Institutions of the University for the years 1950-51, 1960-61 and 1970-71 are given below:

	1950-51		1960-61		1970-71	
	Men %	Women %	Men %	Women %	Men %	Women %
1	2	3	4	5	6	7
Arts	71.1	27.9	65.7	34.3	47.5	52.5
Science	—	—	87.5	12.5	72.2	27.8
Education and Psychology	87.2	12.7	63.0	37.0	39.7	60.3
Commerce	—	—	82.6	17.4	82.6	17.4
Medicine	89.8	10.2	82.6	17.4	84.0	16.0
Technology and Engineering	99.6	0.4	99.0	1.0	97.7	2.3
Fine Arts	—	—	83.6	16.4	73.0	27.0
Home Science	—	100.0	—	100.0	0.1	99.9
Social Work	85.8	14.2	75.0	25.0	56.0	44.0
Law	—	—	—	—	89.3	10.7
College of Indian Music, Dance and Dramatics	80.0	20.0	63.3	36.7	44.1	55.9
Baroda Sanskrit Mahavidyalay	—	—	85.7	14.3	80.0	20.0
Preparatory Units	—	—	80.7	19.3	75.2	24.8
Polytechnic	—	—	99.6	0.4	99.4	0.6
Shri K. M. Amin Arts and Science College and College of Commerce, Padra	—	—	—	—	90.8	9.2

**Student-Enrolment in Post-graduate Courses:** There has been a steady rise in the enrolment of students in various post-graduate courses provided in different Faculties and Institutions of the University right from 1950. In 1950-51, the enrolment in the post-graduate courses was 304, which has gone on increasing year by year and has become 1476 in 1970-71, registering an over-all increase of 1172. The average annual increase in the past twenty-one years has been about 56 students. Between 1950-51 and 1970-71, the number of post-graduate men students increased by 760, while that of women students by 412.

**Growth of Enrolment in Degree Courses:** In 1950-51 there were 2161 students reading in the under-graduate classes of different faculties and institutions of the University. The figure for 1970-71 is 12659. Thus, the under-graduate student population of the University increased by 10498 showing a five times increase between 1950-51 and 1970-71. Of these 7417 were men and 3081 women.

### Percentages

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

Faculty	1966-67	1967-68	1968-69	1969-70	1970-71
Arts	12.8	12.3	11.6	12.4	12.2
Science	8.9	8.0	9.6	9.9	9.9
Education and Psychology	2.9	2.7	2.9	2.4	2.8
Commerce	9.8	10.6	11.6	11.9	11.9
Medicine	5.8	5.7	4.7	4.6	4.7
Technology and Engineering	18.8	19.3	18.5	17.9	17.1
Fine Arts	1.7	1.5	1.5	1.3	1.3
Home Science	4.4	4.2	4.2	4.3	4.3
Social Work	0.6	0.5	0.5	0.5	0.5
Law	4.1	3.5	3.5	3.6	3.9
Preparatory Unit	10.1	10.1	11.7	12.0	9.3
( Arts and Commerce )					
Preparatory Unit ( Science )	7.8	7.9	7.5	6.9	6.8
M. K. Amin Arts and Science College and College of Commerce, Padra	1.5	2.6	2.9	4.1	4.1
College of Indian Music, Dance and Dramatics	0.3	0.4	0.6	0.5	0.4
Sanskrit Mahavidyalaya	0.4	0.3	0.3	0.3	0.3
Polytechnic	10.1	9.6	8.5	7.4	7.7
	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 was 887 ( including 100 teachers of Medical College ) as against the total student enrolment of 15,930. This gives an over-all teacher-student ratio of 1:17.9. The number of University teachers and the staff-student ratio over the last five years is given below:

Year	No. of University Teachers	Student Enrolment	Staff Student Ratio
1966-67	856	13,223	1:15.4
1967-68	887	14,235	1:16.2
1968-69	856	14,396	1:16.8
1969-70	867	15,311	1:17.6
1970-71	887	15,930	1:17.9

## Hostel and Health Services

**Halls of Residence:** With the rapid increase in student enrolment, the demand for residential accommodation in the University Halls of Residence has been on the increase. The University has been taking all possible steps to increase hostel facilities for the students. At its start 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. There were 2,225 men students and 818 women students in different halls. The percentage of students residing in the University hostels work out to be 19.10. The corresponding figures for the five years are as under:

Year	Students residing in Hostels			Percentage of Resident Students to the Total Enrolment
	Men	Women	Total	
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
1970-71	2225	818	3043	19.1

**Health Service:** As can be seen from the table given below, the health service facilities and medical treatment provided at the University Health Centre Clinic have continued to be largely availed of by the members of the University staff and their families and the students.

Year	No. of Cases Treated					Daily Average Attendance
	Staff and their families	%	Students	%	Total Cases	
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
1970-71	11866	37.7	19543	62.3	31409	86.0

## Other Developments

In the twenty-one 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 developments and advances in the various fields. 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 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 the 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 out 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 purpose, 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 Sandwich pattern has been also introduced for a limited number of students in Chemical, Electrical, Mechanical and Metallurgical Engineering degree courses. 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 intake 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. During the year under report Model Diploma Courses in Petro-chemical Technology were started from 16th November, 1970 under the INDO-USSR Credit Agreement of December 1966. The specialisations are (a) Technology of Processing of Oil and Gas, (b) Technology of Production of Synthetic Resins and Plastics and (c) Technology of Fertilizers and Acids. These courses are of 3 years and 10 months duration and have a strong industry-orientation.

The development activities during the preceding years are described in the twenty-one Annual Reports that have been published so far. This twenty-second Annual Report covers the period from the 1st April, 1970 to the 31st March, 1971 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 Section 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) 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 15,930 (12,034 men students and 3,896 women students) and that of non-University students was 1,537 (930 men students and 607 women students). The details of the students are given in Appendices I and II.

### 3. Special Features of the year

#### (1) Vice-Chancellor:

Shri N. K. Vakil, B.A., LL.B., Retired Judge of the Gujarat High Court took over the charge as Vice-Chancellor on 21st May, 1970.

#### (2) Convocations:

- (i) The Twentieth Annual Convocation was held in a Shamiana in the University Gardens on 5th December, 1970. Shri Fatehsinhrao P. Gaekwad, Chancellor presided over the Convocation. Dr. Karan Singh, Minister for Tourism and Civil Aviation, Government of India delivered the Convocation Address. 2494 degrees and diplomas were conferred.
- (ii) The Eleventh Supplementary Convocation was held in the Auditorium of the General Education Building on 28th March, 1971. The Vice-Chancellor presided over the Convocation. 376 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) M. S. in Ophthalmology at the Medical College, Baroda.

- (4) *Buildings:*

- ( i ) Building for the Metallurgy Department,
- ( ii ) Building for Post-graduate Courses in Civil Engineering and Applied Mechanics Departments,
- ( iii ) Hostel for 150 men students under the scheme of Introduction of Five Year Degree Course in Metallurgical Engineering.

- ( i ) Building for Shri M. K. Amin Arts and Science College and College of Commerce at Padra,
- ( ii ) Building for Post-graduate Courses in Mechanical Engineering Department,
- ( iii ) Building for Post-graduate Course in Textile Engineering,
- ( iv ) Extension to the University Polytechnic building,
- ( v ) Building for the Faculty of Law,
- ( vi ) Hostel to accomodate 178 men students under the Architecture and Post B.Sc. Electronics Schemes.

( i ) The University Grants Commission gave an additional sanction of a non-recurring grant of Rs. 10,85,000/- for equipment, books and journals and additional accommodation and a recurring grant of Rs. 72,000/- p.a. for staff and books and journals, for the 9 Post-graduate Courses in Civil, Mechanical and Electrical Engineering,

( ii ) A sanction for a total grant of Rs. 23,30,000/- was received for the scheme of starting Diploma Courses in Oil Refining, Fertilizers and Acids and Petro-Chemicals and Polymers under the Indo-USSR Credit Agreement of December, 1966. The University Grants Commission and the Government of Gujarat agreed to bear their shares in the ratio of 50:50,

- (6) *Summer Institutes, Schools, Seminar and Conferences:*

- ( i ) Summer Institute in Mathematics.
- ( ii ) International Convention of Biochemists.
- ( iii ) All India Seminar on Modern British and American Fiction.
- ( iv ) 2nd Gujarat Economic Conference.
- ( v ) Annual Conference of the Indian Association for Pre-School Education.
- ( vi ) The Artists' Conference.

<i>Name</i>	<i>Date of Visit</i>
( i ) Mr. R. L. S. Tong, Assistant Representative, British Council, Bombay.	10-4-1970
( ii ) Mr. F. Nissen, Regional Representative, Western and Central India, British Council, Bombay.	10-4-1970
( iii ) Mossiur M. Kebaili, Consul General of France.	11-4-1970
( iv ) Shri Gordhandas R. Chokhawala, Minister for Education, Gujarat State, Ahmedabad.	15-9-1970
( v ) Shri N. J. Nanporia, Editor-in-Chief Statesman, Calcutta.	3-11-1970

- (vi) Mr. C. D. Roberts,  
H. M. Inspectors of School,  
U.K. 12-11-1970
- (vii) Smt. Renuka Devi Barataki,  
Ex M. P. L., Member of the  
Board of Management,  
Assam Agriculture University. 18-11-1970
- (viii) Dr. Morries Lieberman,  
Research Plant Physiologist,  
U.S.A. 21-12-1970
- (ix) Dr. J. Topping and Mrs. Topping,  
Vice-Chancellor,  
Brunel University,  
U.K. 16-2-1971
- (x) Professor P. T. Petrov,  
Head, Department of Civil Engineering,  
Bulgaria. 18-2-1971
- (xi) Professor N. P. Ivantchev,  
Professor of Physical Sciences,  
Higher Civil Engineering Institute, Sofia,  
Bulgaria. 18-2-1971
- (xii) Professor C. V. Jordanov,  
Head, Department of Metallurgy,  
Higher Institute of Chemical  
Technology and Metallurgy,  
Department of N.F. Metals, Sofia  
Bulgaria. 18-2-1971
- (xiii) Professor L. V. Nikitin,  
Expert in Applied Mechanics from the  
Institute of Earth Sciences,  
Academy of Sciences of the  
U.S.S.R. 1-3-1971

A Visiting Committee of the University Grants Commission, consisting of Professor R. K. Bachhawat, Professor T. A. V. Subramanian and Dr. D. Shanker Narayan visited the Biochemistry Department on 12th January, 1971 and scrutinized the development proposals for financial assistance under the scheme of Centres of Advanced Studies.

(7) Under the auspices of the Indian National Commission for Co-operation with UNESCO, the International Education Year 1970 was celebrated by

the University in the month of July, 1970. The inauguration function was arranged on 18th July, 1970 under the Presidentship of the Vice-Chancellor. Hon'ble Justice Shri P. J. Reddy, Judge Supreme Court of India was the Chief Guest at the Celebration. Seven seminars were also held on various aspects of Education during July-December, 1970.

(8) A special programme was arranged on 27th January, 1971 to felicitate 1,417 students of the University as 'Young citizens of Free India', attaining the age of 21 years. Copies of the brochure 'Young Citizens of India—Rights and Duties' were distributed. The 'National Pledge' was also administered to the students by the Vice-Chancellor.

(9) Under the Scheme of University Grants Commission Visiting Studentship, our teams consisting of 25 and 10 students visited the Shivaji University, Kolhapur and the Poona University, Poona for about two weeks in October, 1971. On a reciprocal basis we played hosts to the two teams of students of the Shivaji and Poona Universities in January 1971 and arranged excursion, entertainment, debate and other programmes.

#### 4. Teaching Staff

The total number of teaching staff (excluding 100 in Medical College) consisted of 56 Professors, 116 Readers, 305 Lecturers, 106 Instructors, 167 Assistant Lecturers, 37 Honorary, Part-time and others, the total being 787 (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)	Dr. M. M. Shah, Lecturer in Education	Experience at Frankfurt University, Germany.
(2)	Shri N. C. Shah, Reader in Civil Engineering	Training in Hydrology at the Research Institute for Water Research Development, Budapest.

(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 R. S. Thakar, Lecturer in Education	To teach at the Frankfurt University, Germany.

Sr. No.	Name and Designation	Purpose
(2)	Shri J. K. Vyas, Lecturer in Applied Mechanics	To go to West Germany for research in Structural Engineering under German Academic Exchange Service Programme.
(3)	Shri R. M. Sheth, Lecturer in Mechanical Engineering	For M. S. at the University of Illinois, U.S.A.

#### 6. University Examination Results

Thirty two candidates were declared qualified for the award of the Ph.D. degree of this University during the year 1970-71. 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, 1970 and (ii) October-November, 1970 are given in Appendices VI and VII.

#### 7. Endowments and Donations

The Syndicate accepted the following donations:

##### (i) Smt. Laxmibai Jadhav Fund:

Donation of Rs. 1,500/- in form of 3% conversion loan, 1946 transferred by the State Government (Ex-Baroda State Fund) for awarding a prize in cash to a student either boy or girl who stands first in the Examination of Diploma in Music, Vocal Section of the College of Indian Music, Dance and Dramatics, irrespective of whether the student is resident of Baroda or outside Baroda.

##### (ii) Dr. C. S. Patel Gold Medals Fund:

Donation of Rs. 16,301/- collected from the past and present students and the staff of the Bio-Chemistry Department for instituting the following three Gold Medals in the name of Dr. C. S. Patel the Ex-Vice-Chancellor of the University.

- (A) A gold medal to be awarded at the Annual Convocation to the student who passes M.Sc. (Bio-chemistry) Examination in First class with Distinction and stands first in the aggregate at the first attempt.
- (B) Two gold medals each for the best paper published by the staff or student (past or present) of the departments of Nutrition and Bio-chemistry of this University (a) in the field of Nutrition and (b) in the field of Bio-chemistry other than Nutrition.

##### (iii) Dr. C. S. Patel Prize Fund:

Donation of Rs. 5,000/- from the Medical Examination Board of the M. S. University of Baroda for awarding annually a prize in cash to the student who

has passed the Final Year Diploma Textile Chemistry Examination of the M. S. University of Baroda held in April/May, in First Class at first attempt, obtaining the highest number of marks thereat.

##### (iv) Dr. C. S. Patel Gold Medal in Chemistry Fund:

Donation of Rs. 5,000/- from the Medical Examination Board of the M. S. University of Baroda for awarding a gold medal at the Annual Convocation to the student who has passed the M.Sc. Examination of the M. S. University of Baroda held in March/April in First Class at first attempt, obtaining the highest number of marks in the entire examination in the following subjects in rotation:

- (a) Organic Chemistry,
- (b) Inorganic Chemistry,
- (c) Physical Chemistry.

##### (v) Medical Examination Board Gold Medal Fund:

Donation of Rs. 5,000/- from the Medical Examination Board of the M. S. University of Baroda for awarding a gold medal at the Annual Convocation to the student of the regular batch, who stands first at the M.D. (Medicine) examination of the M. S. University of Baroda, at the first attempt provided, however, the student has passed all his examinations of M.B.B.S. Course of the M. S. University of Baroda at the first attempt.

In case of the absence of a student satisfying the above condition, the medal shall be awarded to the student of the regular batch who stands first at the M.D. (Obstetrics and Gynaecology) examination of the M. S. University of Baroda at the first attempt provided, however, he/she has passed has/her all examinations of M.B.B.S. Course of the M. S. University of Baroda at the first attempt.

In case Dr. Tapidas Memorial Gold Medal is awarded to the student of the M.D. (Medicine) examination, then this medal shall be awarded to the student for the M.D. (Obstetrics and Gynaecology) examination who satisfies the other conditions stated above.

##### (vi) Needy and Deserving Students of the Medical College, Baroda Fund:

Donation of Rs. 5,000/- from the Medical Examination Board of the M. S. University of Baroda for giving help to the needy and deserving students of the Medical College, Baroda for their studies, etc.

##### (vii) Shri Lalitaprasad Shreeprasad Dave Memorial Prize Fund:

Donation of Rs. 1,500/- from Smt. Vikaswara H. Dholakia and Shri H. L. Dholakia for awarding a prize in cash to the student who passes the B.A. (Special) Final Year degree examination with Economics as his Major subject of the M. S. University of Baroda held in March/April in first class, at first attempt obtaining the highest number of marks in the subject of Economics (Major).

(viii) *Shri Dinesh Shantilal Chokshi Memorial Prize Fund:*

Donation of Rs. 1,500/- from Shri Sailesh S. Chokshi and Shri Kishor S. Chokshi for awarding two prizes of the value of Rs. 40/- and Rs. 60/- in cash to the students who pass B.Sc. and M.Sc. final year degree examination respectively with Geology as a principal subject of the M. S. University of Baroda held in March/April in first class, at first attempt obtaining the highest number of marks.

(ix) *Professor A. R. Chavan Memorial Lectures and Prizes Fund:*

Donation of Rs. 21,229-80 from the Executive Committee of 'Professor A. R. Chavan Memorial Fund' for the Institution of 'Professor A. R. Chavan Memorial Lectures and Prizes' in the Faculty of Science as under:

- (1) Professor A. R. Chavan Memorial lectures shall be delivered by an eminent scholar selected by the Vice-Chancellor from the panel of three names prepared by the Board of Studies in Botany for the particular year in any branch of Biological Sciences. The lectures shall be delivered at Baroda either in Gujarati, Hindi or English on a date/dates at a time fixed by the University during the academic sessions of the year. For this purpose, the lecturer shall be paid an honorarium of Rs. 500/- out of the interest and also first class return Railway fare (or Air fare at the discretion of the Vice-Chancellor) for himself between any place in India and Baroda by the shortest route he travels (or the route permitted by the Vice-Chancellor).
- (2) Two cash prizes each of Rs. 100/- shall be awarded (i) to a student who passes the Preparatory Science examination of the M. S. University of Baroda held in March/April at first attempt, obtaining the highest number of marks and (ii) to a student who stands first in First Class at the M.Sc. (Botany) Final year degree examination of the M. S. University of Baroda held in March/April at first attempt.

(x) *Shri M. C. Patel Study Scholarship Fund:*

Donation of Rs. 5,000/- from Shri M. C. Patel for awarding one scholarship of Rs. 300/- per year out of the interest of the fund, to a needy student of the Faculty of Social Work (or needy students) and who has worked in Social Welfare Field for at least one or two years, prior to joining the Faculty.

The student should be a promising one in the academic matters, and he must have secured at least second class in the beccalaureate examination or the equivalent examination.

The student should not have been a grantee of any Foundation or Trust or any scholarship holder or he should not have been sponsored by any organ-

ization or he should not have been on deputation for studies and receiving financial benefits.

The continuation of the scholarship will be subject to the performance of the student in each term. He must maintain the average of "B" grade or higher grades in all the courses.

(xi) *Shri Chandulal Sampatram Acharya Memorial Gold Medal Fund:*

Donation of Rs. 5,000/- from Smt. Shantaben Chandulal Acharya for awarding a gold medal at the Annual Convocation to the student of the Baroda Sanskrit Mahavidyalaya, Baroda who has passed the Final Year Acharya examination of the M. S. University of Baroda held in March/April at the first attempt with First Class, obtaining the highest number of marks thereat.

(xii) *Shri Natwarlal H. Bhagwati Memorial Scholarship Fund:*

Donation of Rs. 5,000/- from Chief Justice Shri P. N. Bhagwati for awarding a scholarship to the student who stands first in the LL.B. (General) examination of the M. S. University of Baroda held in March/April, at first attempt and prosecutes his studies further for LL.B. (Special) at the same University.

The scholarship shall be awarded to the student in two equal half yearly instalments.

(xiii) *Hari Om Ashram Prerit Maharaja Sayajirao Gaekwad Smarak Trust Fund:*

Donation of Rs. 1,00,000/- sponsored by the Trustees, Hari Om Ashram, Nadiad for the encouragement of Instrumental Music, Vocal Music, Dance and Painting in Gujarat by awarding gold medals in the above four Fine Arts concerned as follows:

- (i) Hari Om Ashram Sponsored Pandit Narayan Moreshwar Khare Memorial Gold Medal for Vocal Music.
- (ii) Hari Om Ashram sponsored Pandit Ravishankar (Sitarist) Gold Medal for Instrumental Music.
- (iii) Hari Om Ashram sponsored Smt. Mrunalini Sarabhai Gold Medal for Dance.
- (iv) Hari Om Ashram sponsored Shri Ravishankar Raval Gold Medal for Painting.

## 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 1970-71 are given in Appendix VIII.

(2) *Revenue Accounts:*

The receipts and disbursements during the financial year 1970-71 are Rs. 1,36,33,053-80 and Rs. 1,59,08,816-26 respectively leaving a deficit of Rs. 22,75,762-46. Details of the accounts are given in Appendix IX.

(3) *Grants:*

The University received grants totalling Rs. 45,61,115-50 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 works of various buildings, extensions, additions and alterations and an amount of Rs. 7,54,667-55 was spent during the year on capital works.

(2) *Ordinary and Special Repairs:*

The total expenditure on repair works during the year was Rs. 2,25,448-23 and Rs. 1,57,278-52 on Ordinary and Special Repairs respectively. Also an expenditure amounting to Rs. 7,096-96 was incurred on immediate petty repairs to buildings.

**CHAPTER II—OFFICERS OF THE UNIVERSITY****1. Officers**(1) *The Chancellor:*

Shri Fatehsinhrao Pratapsinhrao Gaekwad is the Chancellor of this University under Statute 110A passed by the Senate at their meeting held on 15th November, 1970.

(2) *The Vice-Chancellor:*

Dr. C. S. Patel, B.A., M.Sc. (Bom.), Ph.D. (Leeds) continued to work as Honorary Vice-Chancellor under Statute 115 during the period from 1st April to 29th April, 1970.

Shri N. K. Vakil, B.A., LL.B. (Bom.), Retired Judge, Gujarat High Court who was elected as the Vice-Chancellor, assumed office on 21st May, 1970 and continued to work as Honorary Vice-Chancellor under Statute 115 during the year.

He served as a member of the 'Inquiry Commission into the Riots in Gujarat in September, 1969', till October, 1970 when the Commission work was over. He attended the following meetings during the year under report:

- (i) Conference on Continuing Education and Universities in Asian and South Pacific Region from 26th to 30th December, 1970 at Madras,
- (ii) 46th Annual Meeting of the Inter-University Board of India and Ceylon held at Patna from 14th to 16th February, 1971,
- (iii) Regional Conference of Vice-Chancellors on Continuing Education jointly organised by Seva Mandir and the University of Udaipur at Udaipur from 7th to 10th March, 1971

(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) Norms Committee of the Institution of Engineers (India) at Delhi on 1st and 2nd April, 1970,

- (ii) Meeting on Sandwich Courses for Engineering Degrees at Delhi on 3rd April, 1970,
- (iii) Meeting of the N.C.C. Advisory Committee (Gujarat State) at Ahmedabad on 16th May, 1970,
- (iv) 464th Council Meeting of the Institution of Engineers (India) at New Delhi on 5th and 6th September, 1970,
- (v) 465th Council Meeting of the Institution of Engineers (India) at Baroda on 1st December, 1970.

(4) *Deans:*

The following officers worked as Deans of the various Faculties:

<i>Faculty</i>	<i>Deans</i>
(i) Arts	Professor R. N. Mehta
(ii) Science	Professor N. S. Pandya
(iii) Education and Psychology	Professor D. M. Desai
(iv) Commerce	Professor K. N. Naik
(v) Medicine	Dr. T. V. Patel
(vi) Technology & 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 (Kumari) Indira M. Patel

(5) *Registrar:*

Shri B. K. Zutshi continued to work as the Registrar till 26-1-1971 and proceeded on leave prior to retirement.

Shri K. A. Amin was appointed Officiating Registrar from 1-2-1971 and continued to work during the year.

(6) *Librarian:*

Dr. L. M. Padhya continued to work as the Deputy Librarian.

(7) *Other Officers:*

<i>Name</i>	<i>Designation</i>
(i) Dr. O. D. Gulati	Dean, Medical College,
(ii) Professor B. J. Sandesara	Director, Oriental Institute,
(iii) Shri S. O. Shukla	Principal, College of Indian Music,
(iv) Shri H. C. Mehta	Dance and Dramatics,
	Principal, Sanskrit Mahavidyalaya,

<i>Name</i>	<i>Designation</i>
(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) Dr. B. G. Desai	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

#### 1. The Syndicate

The Syndicate consisted of 15 members. The following persons were members of the Syndicate:

1. Dr. C. S. Patel, Vice-Chancellor +  
Shri N. K. Vakil, 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
6. Shri P. C. Hathi
7. Shri C. C. Mehta
8. Professor N. S. Pandya
9. Shri C. M. Parikh
10. Shri J. S. Parikh
11. Dr. C. B. Patel
12. Dr. T. V. Patel
13. Professor B. J. Sandesara
14. Professor L. B. Shah
15. Dr. (Shrimati) Leela C. Shah

During the year the Syndicate held 12 meetings in which they considered and passed resolutions on 800 items. The following statement shows the attendance of the members at the Ordinary and Special meetings of the Syndicate during the year:

Name	No. of meetings held	Class of meetings:		Present	Absent
		O. Ordinary	S. Special		
1	2	3		4	5
Dr. C. S. Patel, + Vice-Chancellor	1	O.1		O.1	—
Shri N. K. Vakil,* Vice-Chancellor	11	O.3		O.3	—
Professor P. J. Madan, Pro-Vice-Chancellor	12	S.8		S.7	S.1
Director of Education or his nominee	12	O.4		O.4	—
		S.8		S.8	—
		O.4		O.2	O.2
		S.8		S.4	S.4

1	2	3	4	5
Shri N. B. Amin	12	O.4 S.8	O.4 S.6	— S.2
Professor D. M. Desai	12	O.4 S.8	O.4 S.7	— S.1
Shri P. C. Hathi	12	O.4 S.8	O.4 S.7	— S.1
Shri C. C. Mehta	12	O.4 S.8	O.4 S.6	— S.2
Professor N. S. Pandya	12	O.4 S.8	O.4 S.8	—
Shri C. M. Parikh	12	O.4 S.8	O.4 S.8	—
Shri J. S. Parikh	12	O.4 S.8	O.4 S.7	— S.1
Dr. C. B. Patel	12	O.4 S.8	O.3 S.7	O.1 S.1
Dr. T. V. Patel	12	O.4 S.8	O.2 S.6	O.2 S.2
Professor B. J. Sandesara	12	O.4 S.8	O.3 S.6	O.1 S.2
Professor L. B. Shah	12	O.4 S.8	O.4 S.8	—
Dr. (Shrimati) Leela C. Shah	12	O.4 S.8	O.3 S.6	O.1 S.2

+ Ceased to be a member from 30-4-1970.

\* Became a member from 21-5-1970.

#### 2. The Senate

The Senate consisted of 96 members. The changes in the membership during the year were as under:

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

Shri I. J. Patel, Shri K. S. Yajnik, Shri D. R. Mankad, Shri S. P. Shah, Shri R. D. Pandya and Shrimati Mrinalini Sarabhai.

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

Shri N. K. Vakil, Shri R. S. Mehta, Shri A. R. Baxi, Dr. B. G. Desai, Professor M. A. Quraishi, Shri S. K. Majmudar, Shri A. M. Pandya, and Shri V. R. Mathrubhuteswaram.

The Senate met twice during the year, on 15th November, 1970 and 28th March, 1971. 66 members attended the meeting on 15th November, 1970 and 57 on 28th March, 1971.

*First meeting (15th November, 1970):*

The following business was transacted:

The elections of the Pro-Vice-Chancellor, of two Fellows on the Board of Extra Mural Studies and of three members on the Board of Accounts were held. Five Fellows were assigned to the Faculty. Supplementary grants amounting to Rs. 7,55,997/- in the Revised Budget were sanctioned. The proposals for amendment of Statute 91, 139 and 140 and addition of Statute 110 A were considered and passed. Ordinances and Rules mentioned in Pamphlet No. 5 of Handbook Part II—1967 and Ordinances relating to the examinations, syllabi, standard of passing, text-books for the various courses of the Faculties of Medicine, Arts, Science, Commerce, Technology and Engineering, Fine Arts and Home Science were passed. The Twenty-First Annual Report and the Twenty-First Annual Accounts of the University for the year 1969-70 were passed and the excess of expenditure over the revised estimates for the year 1969-70 was also approved. The Report of the Board of Accounts for the year 1969-70 was considered and passed. The proposal for the institution of posts in the Faculty of Education and Psychology and the Polytechnic were passed.

*Second meeting (28th March, 1971):*

The following business was transacted:

Three Fellows were assigned to the Faculty. The Annual Financial Statement comprising of the revised estimates for the year 1970-71 and the estimates for the year 1971-72 were considered and passed. The proposal for the amendment of Statute 91 was considered and passed. Ordinances and Rules mentioned in Pamphlet No. 6 of Handbook Part II—1967 were passed. The proposal for the institution of posts in the Faculty of Arts and Faculty of Commerce were considered and 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 4th August, 1970 and on 11th January, 1971 and considered in all 58 items referred to it. The following are some of the main items considered and recommended by the Council and approved subsequently by the Syndicate.

(1) Progress reports of various schemes previously approved and recommendations for their continuation where necessary. Consideration and recommendation of new research schemes for implementation during the year 1971-72.

(2) Panels of names of referees to examine the theses of 31 students for the award of Ph. D. degree in different subjects.

(3) Recognition of 13 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) 39th half-yearly Progress Report of the Critical Editions of Old Gujarati Texts (Prachin Gurjar Granthmala).

(5) A new project for preparing the descriptive catalogue of the MSS for preparation and publication of the Critical Editions of Old Gujarati Texts (Prachin Gurjar Granthamala) was sanctioned for one year.

### 2. Faculties

There are ten Faculties in the University. Their meetings were held during the year as shown below.

<i>Sr. No.</i>	<i>Name of the Faculty</i>	<i>Date of the meeting</i>
(1)	Arts	20-12-1970
(2)	Science	20-12-1970
(3)	Education and Psychology	20-12-1970
(4)	Commerce	19-12-1970
(5)	Medicine	17-12-1970
(6)	Technology and Engineering	19-12-1970
(7)	Fine Arts	8-2-1971
(8)	Home Science	19-12-1970
(9)	Social work	30-9-1970
(10)	Law	22-8-1970

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

(1) *Faculty of Arts :*

(i) Recommended the assignment of papers for various subjects of the M. A. Course to constitute M. A. Part I and M. A. Part II.

(ii) Recommended that German be allowed to be offered as a minor subject along with Literature and Language or with Psychology or Philosophy or Linguistics as a major.

(iii) Recommended that German be introduced as one of the optionals at S. Y. B. A. with effect from June, 1971 and modified and approved the details of syllabi, scheme of examinations etc. in the matter.

(iv) Recommended that the subject of Ancient Indian Culture be included in the list of Allied subjects that can be offered as a minor subject with Political Science as major subject.

(v) Modified the existing O.A. 22 in order to consider students who have passed B.Sc. with Geology or Geography or Chemistry or Botany or Zoology or Physics as principal or subsidiary subject eligible for admission to the M.A. course in Archaeology.

(vi) Recommended that existing O.A. 23a be amended and Rule No. 9c be deleted with a view to allow the students who have (1) studied for M.A. course with certain subjects, (2) failed at M.A. Examination or (3) passed the M.A. examination with certain subjects or set of subjects to appear again at the M.A. examination with new subjects or set of subjects after keeping four terms afresh.

(vii) Recommended that a student who has appeared with exemption in subject/s at F.Y.B.A. examination be also considered eligible for the benefit of A.T.K.T. provision as per rules of this University.

(viii) Recommended the following provision replacing the existing Rule No. 6 (a) of the rules regarding Post-graduate Studies :

“Notwithstanding the provision contained in Rule No. 5 above, candidates who have registered for M.A. Course in certain specified subjects, may be permitted to change the subject either Principal or Subsidiary or optional or an entire subjects, by the Dean of the Faculty of Arts upto 1st September every year, subject to the approval of the Head of the Department concerned. No change will be permitted in any case thereafter”.

(ix) Recommended deletion of Rules No. 9 (a) and 9 (b) of the rules relating to Post-graduate studies in view of the above new provision.

(x) Recommended that the study of Sanskrit should not be made compulsory for the two years *i.e.* Preparatory and F.Y.B.A. level.

(2) *Faculty of Science :*

(i) Recommended that tutorial/class record marks be taken into account only at the first appearance at the examinations concerned under the Faculty of Science and this be made effective from examination of March, 1971.

(ii) Recommended that a student who has appeared with exemption in a subject/s at F.Y.B.Sc. examination be considered eligible for the benefit of A.T.K.T.

(iii) 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 subject of Geology and at the M.Sc. (Applied Geology) examination.

(3) *Faculty of Education and Psychology :*

(i) Approved amendments for the existing Ordinances for B.Ed., and Dip. E.C.Ed. courses of the Faculty of Education and Psychology.

(ii) Recommended that Status quo be maintained as far as introduction of the optional courses *viz.* “529 Population Education” and “530 Programmed Learning” at the B.Ed. course is concerned.

(iii) Approved the assignment of papers for M.A. (Psychology) Part I and Part II.

(iv) Recommended that the B.Ed. degree awarded under correspondence courses by the Universities of Delhi, Rajasthan, Mysore, Utkal and Vikram be recognised as equivalent to our B.Ed. degree examination subject to provision of 0.173A.

(4) *Faculty of Commerce :*

(i) Approved the revised syllabi in the subject of Accountancy for the Post-graduate Diploma in Banking.

(ii) Approved the revised syllabi in the subjects of Statistics for F.Y. B.Com., S.Y.B. Com. and T.Y.B. Com. courses.

(iii) Recommended that the Faculty of Commerce is not in favour of introducing the Semester System.

(iv) Recommended that the M.Com. degree examination be conducted in two parts *viz.* M.Com. Part I and M.Com. Part II with effect from June, 1971.

(v) Recommended that a student who has appeared with exemption in a subject/s at the F.Y.B.Com. examination be considered eligible for the benefit of A.T.K.T. provision as per existing rules.

(5) *Faculty of Medicine*

(i) Modified and approved the existing Ordinance relating to admission requirements for M.Sc. courses in Anatomy, Physiology, Bio-chemistry, Pharmacology, Pathology and Microbiology of the Faculty of Medicine.

(ii) Recommended that the existing nomenclature of the Board of Studies viz. "Pharmacology and Pathology" be renamed as "Board of Studies in Pathological Sciences, Pharmacology and Forensic Medicine."

(iii) Recommended that the Chairman, Board of Examiner at M.D/M.S. examinations should arrange the first three students in order of merit in the results they submit to the University.

(iv) Recommended that students who intend to seek admission to the I. M.B.B.S. course in the first term at the Medical College, Baroda after passing the F.Y.B.Sc. examination from other universities in the State of Gujarat on the basis of their having granted mutual transfers by the Director of Health and Medical Services (Medical), Gujarat State, Ahmedabad be considered eligible for admission to the said class provided they are otherwise eligible for admission to the said course as per existing rules.

(v) Approved the revised draft rules, syllabi, scheme of examinations, Ordinances regarding admission requirements, standard of passing, exemptions etc. for the three year degree course for the Bachelor of Physiotherapy.

(vi) (a) The existing O.M. 57 (iv), O.M. 58, O.M. 59, O.M. 60 and present scheme of examination for the M.Sc. (Medical) Part II courses be amended and approved:

(b) Recommended that the details of syllabi for the M.Sc. (Medical) Part II courses be approved.

(c) Recommended that the change in the subject of the registration as a post-graduate student for the degree of M.Sc. (Medical) be permitted subject to the consent of Heads of both departments and Dean, Medical College, Baroda.

(6) *Faculty of Technology and Engineering :*

(i) Recommended that there should be only one compulsory test of 30 marks instead of three periodical tests in all subjects for all degree and diploma students.

(ii) Recommended that a candidate appearing either at the M.E. (C.M.E.) M.Text. (Engg.) Part I, Part II or Part III examinations shall not be permitted to avail of more than two attempts after becoming eligible for appearing in the examination.

(iii) The Semester System be introduced in the Department of Architecture to fall in line with the other Departments of the Faculty. The complete courses of B.Arch. degree shall consist of 10 semesters and will be made effective from the year 1971-72.

(7) *Faculty of Fine Arts :*

(i) Recommended that 10 working days be allotted, instead of 6 days as at present for Life Study and composition at the B.A. (Fine) examination.

(ii) Recommended that students who secure a minimum of 35% marks in each theory subject and a minimum of 50% marks in each practical subject be declared to have passed the examination.

(8) *Faculty of Home Science :*

(i) Recommended that the present scheme of M.Sc. (Home) - Child Development Examination be modified and approved with effect from 1971-72.

(ii) Recommended that the proposed course in "Journalism" be modified and approved and be offered as a related course in B.Sc. (Home) programme.

(iii) (a) Approved the details regarding syllabi, scheme of examination, admission requirements etc. for the Post-graduate Diploma in Clothing and Textiles course and recommended that the same be implemented after it is approved by the Board of Visitors for the Faculty of Home Science and the Syndicate.

(b) Recommended that the provision relating to the standard of passing, award of classes and granting exemptions for the above course be the same as laid down for the other Diploma courses of the Faculty of Home Science.

(iv) Recommended that students be disallowed from appearing at the University examinations of B.Sc. (Home), M.Sc. (Home), Dip. N.Ed. and Dip. Diet. till they clear all the class grades of their respective courses.

(v) Recommended to introduce supplementary October examinations for the Post-graduate Diploma courses in (i) Nursery School Education and (ii) Dietetics.

(9) *Faculty of Social Work :*

Recommended the list of curriculum and reading list for the Academic Years 1971-73.

(10) *Faculty of Law*

(i) Recommended a scheme to implement practical training as prescribed by the Bar Council of India.

(ii) Recommended that the introduction of semester system for legal studies be approved in principle.

### 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>
1	2	3
(1)	Sanskrit, Pali and Prakrit Language and Literature	31-8-1970
(2)	Persian, Urdu and other Asian Language and Literature	31-8-1970
(3)	Hindi Language and Literature	8-8-1970
(4)	Gujarati Language and Literature	18-9-1970
(5)	Marathi Language and Literature	31-9-1970
(6)	English Language and Literature	10-9-1970
(7)	Modern and Ancient European Language and Literature	10-9-1970
(8)	Sociology	2-9-1970
(9)	History, Archaeology and Ancient Indian Culture	9-9-1970
(10)	Philosophy	23-9-1970
(11)	Linguistics	7-9-1970
(12)	Library Science	26-9-1970
(13)	Political Science	17-9-1970
(14)	Economics	30-9-1970
(15)	Physics and Meteorology	14-9-1970
(16)	Chemistry	16-9-1970
(17)	Botany	15-9-1970
(18)	Zoology	25-9-1970
(19)	Bio-chemistry	11-8-1970
(20)	Microbiology	14-8-1970
(21)	Geology	16-9-1970
(22)	Mathematics	16-9-1970
(23)	Geography	17-9-1970
(24)	Statistics and Actuarial Science	28-9-1970
(25)	Education and Educational Administration	26-9-1970
(26)	Psychology	18-9-1970
(27)	Banking and Business Finance	19-9-1970
(28)	Accounts	21-9-1970
(29)	Commerce including Business Administration	21-9-1970
(30)	Co-operation	21-9-1970
(31)	Anatomy and Physiology	22-9-1970
(32)	Pathological Science, Pharmacology and Forensic Medicine	22-9-1970
(33)	Medicine, Surgery, Midwifery etc.	24-9-1970
(34)	Technology ( Textile )	24-9-1970

<i>Sr. No.</i>	<i>Name of the Board</i>	<i>Date of the meeting</i>
1	2	3
(35)	Civil Engineering and Applied Mechanics	23-9-1970
(36)	Mechanical Engineering and Metallurgical Engineering	23-9-1970
(37)	Electrical Engineering and Electronics	25-9-1970
(38)	Chemical Engineering	25-9-1970
(39)	Architecture	5-10-1970
(40)	Law	22-8-1970
(41)	Painting, Sculpture, Applied Arts and Art History	28-9-1970
(42)	Music, Dance and Dramatics	6-10-1970
(43)	Museology	28-9-1970
(44)	Child Development	24-9-1970
(45)	Foods and Nutrition	12-9-1970
(46)	Home Science Education and Extension	22-9-1970
(47)	Clothing and Textiles and Home Management	22-9-1970
(48)	Social Work	30-9-1970

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

### 1. 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

Four meetings of the Board of Sports were held during the year. The Board appointed (i) a Committee to select teams to represent the University in Inter-University tournaments, (ii) a Committee to consider various matters relating to actual working of the various sports, games etc., (iii) a Committee to organise and conduct the South Zone Inter-University Tennis Tournament at Baroda, (iv) a Committee to finalise the location, plan, equipment etc. for construction of Gymnasium in the University, (v) a Committee to frame (a) rules relating to dead-stock register, (b) rules for giving exemption from Physical Training, (c) rules for procurement of Stores and Kit for sports, games and for the Department as a whole and (d) rules for disposal of unserviceable items in the stores. The Board approved the purchase of one more Suction Sweeper Pump for cleaning the Swimming Pool. The Board recommended to amend the Ordinance 260N(1) regarding payment of halting allowance to students who participate in the tournaments. It approved the rules regarding award of Blazers/Colours to the University teams/players.

#### 2. Publication Board

The Board met twice during the year. It considered and recommended the Publication of the Research Paper Series No. 2 of the Department of Geography "Vandha Chalamli", and "New Directions in the Education of Indian Teachers" by Professor D. M. Desai. It also recommended reprinting of "Case Work Records" and "Case Records for Teaching Purpose" for the Faculty of Social Work, and "આપણી કવિતા સમૃદ્ધિ" by late Professor B. K. Thakore.

#### 3. Board of Extra-Mural Studies

The Board met on 11th August 1970 and recommended a programme of extension lectures by University teachers and outside experts. An amount of Rs. 7,500/- was sanctioned for the purpose. It also recommended that each Faculty/Institution may arrange activities/programmes of general interest to the institution as a whole and not departmentwise.

#### 4. Library Committee

Three meetings of the Library Committee were held during the year. It recommended as under:

- (i) Steps be taken to check misuse of the Library Tickets.
- (ii) The machinery for recovering books be tightened.
- (iii) The sites for Students' Home were approved for providing reading facilities to non-resident students of the University.

#### 5. University Buildings and Planning Committee

The Committee met twice in the year on 15th December, 1970 and 8th January, 1971. It considered the interim report of the Sub-committee and recommended to the Syndicate, the works under Water Supply Scheme (Rs. 3,50,000), Works of Special repairs and additions and alternations and works under Depreciation Fund (Rs. 1,80,410) for execution in the year 1971-72.

#### 6. Standing Committee on Equivalence of Examinations

The Committee met once during the year on 4th August, 1970. It considered a number of items regarding equivalence of various examinations and special 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:

(1) The I.A.F. Educational Test conducted by the Directorate of Education, Air Headquarters, New Delhi be recognised as equivalent to the corresponding Preparatory examinations in Arts, Science and Commerce of this University for purpose of admission to available higher courses of studies in this University, provided it is passed with the required subjects as laid down in the relevant Ordinances of this University.

(2) The Higher School Certificate examination of the University of Cambridge Local Examinations Syndicate conducted in collaboration with the University of Singapore and the University of Malaysia be recognised as equivalent to the corresponding Preparatory examinations in Arts, Science and Commerce of this University for purpose of admission to available higher courses of studies in this University, provided it is passed with the required subjects as laid down in the relevant ordinance of this University.

(3) The Malaysia Certificate of Education examination of the University of Cambridge Local Examinations Syndicate conducted in collaboration with the Ministry of Education, Malaysia be recognised as equivalent to the S.S.C. Examination of the Gujarat State for purposes of admission to the available higher courses of studies in this University, provided it is passed with the required subjects as laid down in the relevant ordinance of this University.

(4) Non-University Diplomas cannot ordinarily be recognised as equivalent to University degree.

(5) The school level examinations conducted in U.S.S.R. be recognised as equivalent to the S.S.C. Examination of the Gujarat State for purpose of admission to available higher courses of studies in this University, provided it is passed with the required subjects as laid down in the relevant Ordinance of this University.

#### 7. Preparatory Courses Committee

The Committee met twice during the year on 14th April, 1970 and 28th January, 1971. It recommended revised syllabi in the subjects of Chemistry and Mathematics and Text books in the subjects of Hindi, Gujarati and Geography for the respective Preparatory courses. In its second meeting it recommended that the annual examinations of the Preparatory Science students be held as usual and weightage be continued to be given to 30% credit marks for internal assessment. It also recommended that the reserved seats in Pre-Medical and Engineering Degree courses be filled up through the Competitive Selection Test and on the basis of the actual results of the Preparatory Science Examination held by the University and that all who pass the Preparatory Science University Examination may be held eligible to take the Competitive Selection Test for admission to the Pre-Medical and Engineering Degree courses of the University without one being required to secure 50% marks in the aggregate in either case as at present. All other conditions of eligibility may remain unchanged. The seats reserved for the students of this University should be filled up first out of the students of this University who have taken the test examination on the basis of the results of the test and the open seats may be filled up thereafter from the remaining students, including students of other Universities in order of merit.

#### 8. Deans' Meeting

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

(i) The following para be added as a new para between the first and the second para of the present Ordinance 274:

"Notwithstanding anything stated hereinabove if a student undergoes studies in a particular single subject which is the sole subject for one particular course of examination/year, he shall pay full tuition fees."

(ii) The constitution as per the model received from the Ministry of Education and Youth Services, Government of India was approved for the purpose of organising National Integration Samiti in the University. The Samiti was established on 24-11-1970.

(iii) The present system of collecting the tuition fees and examination fees through Bank of Baroda be discontinued from the next academic session and the said fees be collected in the respective offices of the Faculties/Institutions. The Ordinance 261 was amended.

#### 9. Board of Visitors

A meeting of the Board of Visitors for the Faculty of Medicine was held on 16th January, 1971. The Board recommended that (i) (a) the Research Scheme taken up by the Medical College with the assistance of the State Government's Research Board may be sent to the Council of Post-graduate Studies and Research for information, (b) a summary of research work going on in the College and of similar work done in the College since the Board last met should be henceforth put up before this Board, (c) the teachers in the Medical College be encouraged to undertake research work in collaboration with the teachers of the relevant Departments of the Faculty of Science; (ii) the Post-graduate Departments in the College be recognised and steps be taken for appointment of a full-time Head/Director in order to develop a strong research programme in course of time, (iii) the present amount of grants for the College Library should be raised progressively to Rs. 1 lakh per year in order to strengthen the facilities, (iv) the proposal for starting Diploma course in Pharmacy at Medical College, Baroda be approved and the matter be pursued with the State Government by the Dean, (v) since post-graduate Doctorate course in Preventive and Social Medicine has started, steps be taken to obtain the services of specialists in Mathematical Epidemiology and Medical Entomology, which would involve an additional expenditure of Rs. 2,000/- per year for the College.

#### 10. Finance and Establishment Standing Committee

Ten meetings of the Committee were held during the year. The Committee considered several items concerning requests for additional establishment grants, purchase of equipments, approval of plans, estimates and tenders for construction work, contract for supply of petrol, services of vehicles, cleaning and adjustment of typewriters, and requests from staff members regarding study leave, etc. The recommendations of the committee were placed before the Syndicate.

The Committee met as the Budget Committee on 28th January, 1971. It submitted to the Syndicate, the revised estimates for the year 1970-71 and the estimates for the year 1971-72 after scrutinising various proposals received from the Faculties, Institutions and Office of the University.

#### 11. Investment Committee

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

#### 12. Press Supervisory Committee

Seven 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 Publication Sales Unit and also the Printing Programme

and made recommendations regarding purchase of paper, stationery, equipment etc.

### 13. Shri Sayaji Sahityamala Publication Committee

The Committee met on 2nd March, 1971 and recommended the following works for publication:

- ( i ) ગુજરાતનો પોટરી ઉદ્યોગ—by Shri Shantilal P. Purohit

It also recommended the second revised editions of the following Gujarati works:

- ( i ) કહેવત કથાનકો—by Swami Shri Pranavtirthaji  
( ii ) શ્રીવૃક્ષભાષ્યાર્થ મહાપ્રભુજી—by Shri K. K. Shastri  
( iii ) મીરાંબાઈ—એક મનન—by Shri M. R. Majmundar

The Committee granted permission to Shri Shirish D. Mankand, Aliabada to reprint the work ‘કર્ણ’ by late Shri D. R. Mankand, published in Shri Sayaji Balajnanamala as No. III in 1934.

### 14. Sir Sayajirao III Memorial Research Prize Fund Committee

The Committee met on 2nd March, 1971 for scrutinising the essays on “કૃષિ ક્ષેત્રે વિજ્ઞાનની સિદ્ધિઓ”. 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 “ગુજરાતમાં ડેરી ઉદ્યોગ” for the year 1970-71.

### 15. Advisory Committee for the Halls of Residence

The Committee met on 5th October, 1970 and made recommendations for improving the existing machinery for purchase and collection of dues and for eliminating health hazards.

### 16. Wardens' Committee

Four meetings of the Committee were held during the year.

### 17. Advisory Committee for the University Health Centre

The Committee met on 30th March, 1971.

### 18. Advisory Board of University Journal

The Board met on 11th April, 1970.

### 19. Sheth U. P. A. R. Unit Committee

Three meetings of the Committee were held during the year. The Committee recommended the following:

- ( i ) To start work regarding “Arjuna in heart failure” under Dr. C. P. Shah and Shri R. N. Vaidya.  
( ii ) To start work on leucorrhoea with “Ashok” (decoction) under Dr. R. V. Bhatt.

- ( iii ) To continue two posts of Registrars for research work in the Ayurvedic system of Medicine.

### 20. Selection Committee

During the period from 1-4-1970 to 31-3-1971 there were 31 meetings of the Selection Committees appointed under section 48 (2) of the Act and they recommended 31 candidates for appointment to the posts of Professors and Readers in various Faculties and Institutions in the University. There were 58 meetings of the Standing Selection Committees for Junior posts and 23 meetings of the Standing Selection Committees for Class III posts and 103 and 30 candidates respectively were recommended by these Committees for appointment to different posts in the University.

### 21. Committee to select Wardens

The Committee met on 25th May, 1970.

### 22. M. S. University Students' Aid Fund

The Committee met twice during the year, on 20th October, 1970 and on 3rd February, 1971. The total amount of help given to the students by way of tuition fees, examination fees, books, educational materials, loan etc. during the year 1970-71 was Rs. 34,883/-.

### 23. Baroda Sanskrit Mahavidyalaya Committee

The Committee met on 12th January, 1971 and recommended measures for encouraging research by giving stipend to suitable students and for increasing the present stipend amounts for various courses.

### 24. Central Advisory Committee

In order to ensure prompt attention to the problems of students, Faculty/Institution Advisory Committees and a Central Advisory Committee were established and constituted in July-August, 1970.

The Central Advisory Committee consisted of 7 senior members of the teaching staff nominated by the Vice-Chancellor, 6 students elected from amongst by the Executive Committee of the Union, 2 Syndics and the President of the Union as Member-Secretary. The Central Advisory Committee met five times—18th and 26th August, 3rd and 10th September and 3rd October, 1970 and considered a memorandum of 49 items submitted by the Vice-President and Secretary of the M. S. University Union. It also considered the demands of the M. S. University Students submitted through the Akhil Bharatiya Vidyarthi Parishad and forwarded to the University by His Excellency, the Governor of Gujarat. The recommendations of the Central Advisory Committee were submitted to the Vice-Chancellor and further action in some of the items was taken by the University Office as per directions of the Vice-Chancellor.

# CHAPTER VI - RESEARCH WORK IN THE UNIVERSITY

Six hundred and one students, who were registered for the Ph. D. degree in previous years, continued work on their research dissertations. 76 new students ( 14 in Faculty of Arts, 32 in Faculty of Science, 26 in Faculty of Education and Psychology, 1 in Faculty of Fine Arts, 2 in Faculty of Technology and Engineering and 1 in Faculty of Law ) were registered for the Ph. D. degree during the period under report. Their details are as under :

<i>Name of the Scholar</i>	<i>Name of the Guiding Teacher</i>	<i>Title of the Thesis</i>
<b>Faculty of Arts</b>		
<i>Hindi</i>		
Kumari Dalal Anuradha Manmohan	Dr. M. G. Gupta	Hindi Ke Bhaktikal Kal Ka Punha
Mistry Dineshchandra Hiralal	Dr. D. S. Shukla	Hindi Samikshapar Marksvadi chintanka Prabhav
Kumari Parekh Kamla Ashakaran	Dr. M. G. Gupta	Vrandavanlal Verma aur Shri K. M. Munshi Ke aitihasik Upanyasoka tulnamatmaka adhyayan
<i>Archaeology</i>		
Rana Virendrasingh Bahadursingh	Dr. B. S. Suryavanshi	Life and Culture depicted in Kuvalayamala and contemporary sources
Sonawane Vishwasrao Hanamantrao	Prof. R. N. Mehta	Archaeology of the Panchamahals
<i>Sanskrit</i>		
Pandya Bhagwatprasad Panalal	Dr. S. G. Kantawala	Nandi Purana: Text and study
Prapandvidya Chirapat Ovi	Dr. S. G. Kantawala	Dharmaranya Purana : A Cultural Study
Kumari Chawla Omkumari Jaidayal	Dr. ( Kum. ) S. A. Nachane	Contribution to Advaita Vedanta by Narsimhasrama
Purohit Amritlal Manaji	Shri S. V. Bhattbhatt	Dharmashastra Mimansa Paddhati

<i>Name of the Scholar</i>	<i>Name of the guiding teacher</i>	<i>Title of the Thesis</i>
<i>Gujarati</i>		
Panchal Shrish Jagjivandas	Dr. R. M. Patel	Diction of Gujarati Poetry after 1930
<i>History</i>		
Smt. Mazumdar Tarini Satyen	Dr. V. K. Chavda	Shri Manubhai Nandshanker Mehta—A decade of his Dewanship in Baroda ( 1916-1927 )
Purohit Hariyadan Balkrishna	Professor S. C. Misra	History of Panchmahals including the adjoining States in the 19th and 20th Century
Kum. Chakravarty Shikha	Professor S. C. Misra	Educational Growth and Social Consciousness in 19th Century Gujarat with special reference to the Muslims
<i>Philosophy</i>		
Gupta Sisirkumar	Professor A. G. Javadekar	Dr. R. D. Ranade's Philosophy of Religion
<b>Faculty of Science</b>		
<i>Biochemistry</i>		
Parameswaran M.	Professor C. V. Ramkrishnan	Effects of restriction of protein and calories on Brain and liver enzymes
Thimmappaya M. S.	Dr. P. M. Bhargava	Metabolism of Kidney Cell suspensions
K. C. Alexander	Dr. A. Srinivasan	Bio-chemical studies on Radiation induced alterations in energy Metabolism
Kachwala Nargis Ibrahim	Dr. S. V. Ganpati	Bio-chemical studies on algal-bacterial symbiosis in Laboratory model high-rate Oxidation ponds using chlorella vulgaris and Baroda Sewage
<i>Chemistry</i>		
Panchal Bapulal Ranchhodbhai	Dr. P. K. Bhattacharya	Study of Metallic Complexes containing VIth Group atoms

<i>Name of the Scholar</i>	<i>Name of the guiding teacher</i>	<i>Title of the Thesis</i>
Gaekwad Yeshwantrao Ganpatrao	Professor Suresh Sethna	Studies in some Oxygen heterocyclic Compounds
Mavani Isherlal Popatlal	Dr. P. K. Bhattacharya	Studies in some metallic com- plexes in mixed ligand systems
Jejurkar Chandrashekhar Rangnath	Dr. P. K. Bhattacharya	Studies in Tetero Chelates of some transition metal ions
<i>Mathematics</i>		
Desai Khandubhai Lallubhai	Dr. A. P. Verma	An analytical study of Multi- phase Fluid flow through Porous Media.
<i>Geology</i>		
Misra Kiran Shanker	Prof S. S. Merh	Geology of the area around Dwarahat with special re- ference to structure and metamorphism.
Deshpande Shreekrishna Vinayak	Professor S. S. Merh	Geology of Wagad Hills, Eastern Kutch, with special reference to stratigraphy.
Shah Ochhavlal Krishnalal	Professor S. S. Merh	Geology of the area around Bhimtal ( Dist : Nainital ) with special reference to its structure and stratigraphy.
Devendra Pal	Professor S. S. Merh	Geology of the around Naini- tal, Dist : Nainital ( U.P. ).
Roy Bhaskar	Professor S. S. Merh	Pattern and causes of Inunda- tion of Rann of Kutch.
Chansarkar Ramchandra Anant	Professor S. S. Merh	Geomorphic studies in parts of Ramganga and Kasi basins ( U.P. ).
Laghate Suresh Kant	Dr. N. M. Vashi	Stratigraphy structure and Meta-morphism of the area around Sinwalbari, Dist : Nainital and Almora ( U. P. ).

<i>Name of the Scholar</i>	<i>Name of the Guiding Teacher</i>	<i>Title of the Thesis</i>
<i>Microbiology</i>		
M. L. M. Sastry	Dr. M. R. S. Iyengar	Study on interactions among Antibiotics producing actino- mycetes.
Ganjeeo P. L.	Dr. M. R. S. Iyengar	Studies on some Chainia species and thesis antibiotics.
Mehta Smriti Upendrarai	Professor V. V. Modi	Flavinogenesis in Eremo- thecium Ashbyll
Patel Dharmdasi Chinubhai	Professor V. V. Modi	Studies on Metabolic Role of Rhizobium cowpeu in the host plant nodules.
Kachhy Ashutosh Nilkanthrai	Professor V. V. Modi	Metabolic changes in Pseudo- monas Grown on Napthalene as the Carbon Source.
Desai Jitendrakumar Dhirubhai	Professor V. V. Modi	Metabolic properties of Biotin deficient Aspergillus Nidulans.
<i>Botany</i>		
Sirkar Sheela Charu	Professor C. H. Pathak	Investigations of respirational processes in situations where cotton plants are injured, infected or otherwise abnormal.
Padate Satyendra Narayanrao	Dr. S. D. Sabnis	Floristic study of Savli Taluka.
Joseph Peter	Kum. A. M. Mani	Meterology.
<i>Physics</i>		
Pandya Girishbabu Revashanker	Dr. V. P. Bhatt	Study of Metal Crystals
Bavaji Ishvargir Revagir	Dr. J. R. Pandya	Optical study of Micro-iden- tation Hardness of Crystals
Gohel Vinodrai Bhavanbhai	Dr. M. M. Patel	Study of the Potential energy functions of some diatomic molecules
K. Chandrasekharan	Professor R. V. Joshi	Low temperature luminescent study of NaCl : Tl phospor.

<i>Name of the Scholar</i>	<i>Name of the Guiding Teacher</i>	<i>Title of the Thesis</i>
<b>Zoology</b>		
Chauhan Balvantsinh Chandrasinh	Dr. P. M. Ambadkar	Morphology and Physiology of Certain Vertebrates
Desai Janakkumar Haribhai	Prof. R. V. Shah	Studies on Ecology., Reproductive biology and behaviour of the painted stork (Ibis leucocephalus)
Varma Veena Devt	Dr. P. M. Ambadkar	Morphology and Physiology of Certain Vertebrates
<b>Faculty of Education and Psychology</b>		
Anupura Nagabhushana Rao	Dr. B. P. Lulla	A critical evaluation of the nationalised * text-book in Telugee Language ( Mother-Tongue ) in Andhra Pradesh in view of the need for national integration
Gajjar Jagadish- chandra Joitaram	Professor D. M. Desai	A critical study of perceptions of the University Community in Gujarat relating to student personal services (with special reference to the M. S. University of Baroda).
Sheth Kaushikkumar Vrajlal	Professor D. M. Desai	A critical study of organisation programming and Finances of Colleges of Education for Secondary School Teachers in Gujarat.
Shah Mukundlal Chandulal	Dr. B. P. Lulla	The scope, utility and limitations of Educational Television in India.
Gupta Shantilal Chiddalal	Professor D. M. Desai	Evaluation of the Training programmes and facilities available in India for Educational Administrators at different levels in the post-independent period.

<i>Name of the Scholar</i>	<i>Name of the Guiding Teacher</i>	<i>Title of the Thesis</i>
Dasari Damodar Rajanna	Dr. B. P. Lulla	A critical investigation into the practice of "Student Teaching and Evaluation" programme in the Training Colleges of Andhra Pradesh.
Jangira Nandkishor Sl. Dewale Ram	Professor M. B. Buch	Effect of different patterns of feedback on the class-room behaviour of student teachers.
Narendra Narendar Nath Pangotra Sh. Tarachand	Professor M. B. Buch	A study of the effect of feedback from different sources using Interaction Analysis Technique on the Class-room behaviour of Student-Teachers'.
G. Raghava G, Ganapathi Rao	Professor M. B. Buch	An examination of the Response to Training Programme in Motivation with respect to Psychological and Sociological Factors in the Student-Population. ( Std. IX students of High Schools. )
Sharma Motilal Sharma	Dr. G. B. Shah	An investigation into Organizational Climate of Secondary Schools of Rajasthan.
Sh. Ramlalji Sharma Sharma Sudesh Shriram	Dr. G. B. Shah	Evaluation of Elementary Teacher Education Programme in India.
Singh Kishun Shrishiva Badan Sing	Professor M. A. Qurashi	Mrs. Annie Besant's contribution to Indian Education.
Kalavakolani Vivekanadam Venkate Ramich	Professor M. A. Qurashi	A study of linguistic differences in speech, writing in samples of groups of working, class and middle-class boys aged 12 to 15 in some schools of Hyderabad.
Mehare Krishna Tukaram	Dr. B. P. Lulla	A critical evaluation of administration of Secondary Teachers' Training Colleges in India.

<i>Name of the Scholar</i>	<i>Name of the Guiding Teacher</i>	<i>Title of the Thesis</i>
Dewal Omkar Singh Shri Chandidan	Dr. G. B. Shah	A study of difficulties in teaching English as a Foreign Language by structural approach and analysis of effects of introduction of Educational Technology and systems Design.
Bhagia Sushma	Professor D. M. Desai	Innovations and change in Schools of Rajasthan.
Bhargava Surinder Mohan Shri Jagan Nath	Dr. B. P. Lulla	A critical study of the development and growth of Teacher-Education Programme for Secondary Education in the States of Rajasthan and Madhya Pradesh.
Kohli Vijay Kumar Kohli Shri Madanlal Kohli	Dr. B. P. Lulla	A critical evaluation of the teacher education at the Secondary-level in the States of Jammu and Kashmir, Punjab, Haryana and Himachal Pradesh, the Union Territory to Chandigarh.
Goyal Jagdishchandra Shri Netram	Dr. S. M. Divekar	A study of contribution made by the UNESCO to the development of School Education in India.
<i>Psychology</i>		
Jawa Sarla Balraj	Professor A. S. Patel	Intellectual and non-intellectual correlates of teacher effectiveness.
Shah Chandrakant Kantilal	Dr. N. S. Pathak	A study of personality conflicts in selection to Socio-Cultural Metrix.
Patel Sumitra Lallubhai	Dr. N. S. Pathak	An investigation to study self-esteem change as a function of Counselling therapy.

<i>Name of the Scholar</i>	<i>Name of the Guiding Teacher</i>	<i>Title of the Thesis</i>
Persing Pauline Kathryan Dan. H. Persing	Professor A. S. Patel	The Revalidation of the Iowa Test of Basic Skills on Indian children ( English Medium Schools ) and the study of the Results in relationship to some Environmental Factors.
Desai Vinayakrao Shantilal	Dr. N. S. Pathak	Interrelationship of risk-taking, conflict resolution and individual out-put.—An experimental study.
Qurashi Zahiruddin Mansooruddin	Prof. M. B. Buch	' Teachers ' attitudes organizational climate in Schools and Teachers' influence in the class-room.
Kuldipkumar Girdharilal Suri	Dr. G. B. Shah	Social Climate in Schools, Teachers Values and Pupils Attitudes.
	<b>Medical College</b>	
<i>Physiology</i>		
Somasundaram K.	Dr. J. P. Saxena	Physiology of mitral valve with reference to its neuromuscular basis of activity.
K. P. Skandhan	Dr. J. P. Saxena	Effect of various antibiotics on Productive behavior of laboratory animals and human subjects.
<i>Medical Microbiology</i>		
Nayak Hasvinkumar	Dr. V. P. Vaisnav	Some aspect of experimental infection of mice with salmonella typhimurium.
<i>Pharmacology</i>		
Shah Dilip Shantilal	Dr. O. D. Gulati	Influence of age and temperature on the responses of alpha beta adrenoreceptors to drugs.
<i>Medical Entomology</i>		
Pandya Arvindkumar Prabhulal	Dr. A. K. Niyogi	Survey of Genus Phlebotomus and its ecology in Gujarat. Its breeding in captivity and efficiency as vector of Katazar.

Name of the Scholar	Name of the Guiding Teacher	Title of the Thesis
<b>Clinical Biochemistry</b>		
Mehta Anil Ranchhodji	Dr. P. T. Acharya	Studies on the effect of material protein malnutrition on the growth and nutritional status of the Fetus & the neonatal infant.

#### Faculty of Fine Arts

<b>Dance</b>		
Vaishampayan Jayanti Vishwanath	Smt. Anjali S. Merh	Contribution of Rukmini Devi Arundale in Revival of Bharat Natyam.

#### Faculty of Technology and Engineering

<b>Electrical Engineering</b>		
Lalwani Chunnilal Sunderdas	Dr. R. C. Desai	Estimation and Optimal control of Adaptive control systems.
<b>Civil Engineering</b>		
Patel Suryakant Narsinhbhai	Professor N. Y. Hiriyur	Study of V.C. Single span and continuous deep beams under the action of Axial and Lateral Loads.

#### Faculty of Law

Doshi Nalinkant Motichand	Professor H. C. Dholakia	Constitutional Law.
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#### 2. Research Schemes financed by the University

Department	Research Scheme
<b>Faculty of Arts</b>	
Gujarati	( i ) Publication of Late Shri B. K. Thakore Series. ( ii ) Publication of Prachin Gurjar Granthamala.
History	( i ) History of Gujarat under Muslims.
Sanskrit	( i ) Preparing a critical edition of the Sahitya Vidya-dhara, the earliest commentary on Shri Harsha's Naishadhiya Charitam.

#### Department

#### Research Scheme

##### Faculty of Science

Geology	( i ) Geological Investigations of Territory Rocks of Broach District with special reference to stratigraphy and Sedimentology by Shri D. R. Gadekar, Reader in Petroleum Geology.
	( ii ) Geological Investigations of the Graphite Deposits of Gujarat State by Dr. S. D. Desai, Reader in Geology.
	( iii ) A detailed Structure and Metamorphic Study of the Central Kumaon Himalayas by Professor S. S. Merh.
	( iv ) Tectonic Studies of the Lower Narmada Valley by Professor S. S. Merh
	( v ) Mineralization and Genetic problems of the fluo-rite deposits at Amba-Doonger ( Baroda District ) by Dr. S. D. Desai and Dr. P. J. Desai.
Chemistry	( i ) Studies in the Synthesis of furochromoles and furo-flavones by Dr. K. N. Trivedi.
	( ii ) Synthesis of Phenanthroindolizidines as possible Antileukamia compounds by Dr. K. N. Trivedi.
Botany	( i ) Studies on the changes in Respiration rate and Nitrogen content Associate with the growth of Plant Tissucs Culture by Dr. A. R. Mehta.
	( ii ) Histochemical studies of the Short Apex during Transition to flowering by Dr. A. R. Mehta.
Zoology	( i ) Fecundity mortality and population, dynamics of the House Swift Apus Affinis by Dr. R. M. Naik.
	( ii ) Gonadal cycles of the House-Sparrow, Passer Domesticus in Baroda by Dr. R. M. Naik.
Bio-chemistry	( i ) Aminoacid Metabolism in Plant Tumour Tissues cultivated in Vitro by Dr. S. K. Srivastava.
	( ii ) Effect of irradiation on the Microbial decomposition of Sewage by Professor C. V. Ramkrishnan.
<b>Faculty of Education and Psychology</b>	
Psychology	( i ) The M. S. University and Community—a Psycho-logical study of their perceptions and expectations by Professor A. S. Patel.

Department	Research Scheme
<b>Faculty of Medicine</b>	
Pathology	(i) Distribution of Blood Group in an Indigenous Community-Bohras of Baroda City by Dr. V.P. Vaishnav.
Medicine	(i) Abdominal Tuberculosis by Dr. P. M. Luhar.
<b>Faculty of Technology and Engineering</b>	
Mathematics	(i) Special phenomena in Polyphase Media Theoretical study by Dr. A. P. Varma.
Chemistry	(i) Studies in mixed Mesomorphism by Dr. J. M. Lohar. (ii) Intermediates and Dyes Part I synthesis of Anthracene Derivatives.
Applied Mechanics	(i) Shearing behaviour of Soil by Professor P. V. Parikh and Shri A. K. Shah.

**College of Indian Music, Dance and Dramatics**

- Drama (i) Bibliography of Plays by Professor C. C. Mehta.

**3 Research Schemes sponsored by the Outside Agencies.**

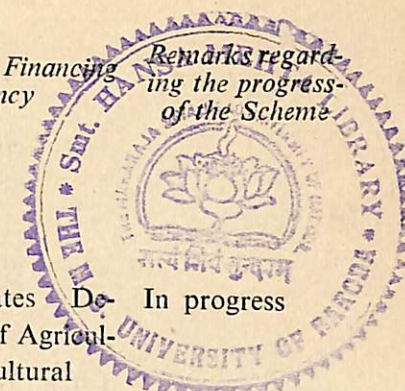
The following schemes have been sponsored by the University Grants Commission, Ministries of Central Government, Departments of the Government of Gujarat and other agencies.

Department	Title	Name of the Financing Agency	Remarks regarding the progress of the Scheme
<b>Faculty of Arts</b>			
Agricultural Economics	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	United States Department of Agriculture, Agricultural Research Services, American Embassy, New Delhi under Am PL 480 grants	In progress
<b>Faculty of Sciences</b>			
Biochemistry	(i) FG-In-258 Studies of	United States Department of Agriculture,	Completed on 28-4-1970

Department	Title	Name of the Financing Agency	Remarks regarding the progress of the Scheme
	Organic acid Metabolism in fruit tissues, leading to development of processing methods yielding fruit products of improved flavour and texture	Agricultural Research Service, American Embassy, New Delhi under Am PL 480 grants	
	(ii) FG-In-402! Formulation of low cost meals for post weaning children in the age group 2-5 years and their chemical and biological evaluation	-do-	In progress
	(iii) Amino acid metabolism in plant tumour tissues cultivated in Vitro.	C.S.I.R.	In progress
Botany	(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, American Embassy, New Delhi under Am PL 480 grants	Completed on 5-7-1970
	(ii) FG-In-379, Survey of Gujarat Forests for	do	In progress

Department	Title	Name of the Financing Agency	Remarks regarding the progress of the Scheme
	(a) Sources of gallotannic acid, (b) Medicinal Alkaloids and (c) Tribe uses of plants for medicine food etc. and (d) Academic Studies (Florestic work)		
Chemistry	(i) Studies in Liquid Crystalline state.	C.S.I.R. New Delhi.	In progress
	(ii) Recovery and separation of alkaloids using ion exchange compounds.	S.I.R.C. Government of Gujarat.	In progress
	(iii) Co-ordination Polymers.	do	In progress
	(iv) Studies of Liquid Crystals.	do	In progress
	(v) Studies in Mesomorphic State.	do	In progress
Geology	(i) Study of the Cases and Pattern of Innundation of Rann of Kutch.	Ministry of Defence	In progress
	(ii) A Geomorphic analysis of drainage characteristics and development in	do	In progress

Department	Title	Name of the Financing Agency	Remarks regarding the progress of the Scheme
	Kasi and Ramganga basins in Kumaon Himalaya.		
Micro-biology	(i) FG-In-276 Metabolic changes involved in ripening of mangoes.	United States Department of Agriculture, Agricultural Research Service, American Embassy, New Delhi under Am PL 480 grants.	In progress
	(ii) FG-In-394 Genetic transformation in Rhizobia.	do	In progress
Physics	(i) Study of metal crystals	S.I.R.C., 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	Histophysiological studies on the wound healing and repair in certain peripheral and visceral organs of diabetic animals.	S.I.R.C., Government of Gujarat.	In progress
	Faculty of Technology and Engineering		
Physics	(i) Study of Ultra-sonic Velo-	Department of Atomic Energy,	In progress



Department	Title	Name of the Financing Agency	Remarks regarding the progress of the Scheme
	city and Bombay. absorption in single metals and metal organic cry- stals		
	(ii) Visco elastic properties of liquids	University Grants Commission, New Delhi	In progress
	(iii) Ultrasonic and Viscosity studies in Liquids and Liquid crystals	C. S. I. R., New Delhi	In progress
	<b>Faculty of Home Science</b>		
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 graduate of Baroda District	Indian Council of Social Science Research, New Delhi	In progress
	(ii) Values of urban home makers and the accept- ance of Home Science Extension Programme	Ford Foundation	In progress
	(iii) Survey of knowledge	Ford Foundation	In progress

Department	Title	Name of the Financing Agency	Remarks regarding the progress of the Scheme
	shown by village mothers of Asoj regard- ing Child Health as a basis for plan- ning an Exten- sion Edu- cational Programme in the area of health and sanitation		
	(iv) Study of the feasibility of a selected constitution for organiza- tion of rural mahila mandals	Ford Foundation	In progress.
Foods and Nutrition	(i) Assessment of nutritional status of pre-adolescent girls	Ford Foundation	In progress
	(ii) Research on nutritional status and requirements of pre-adolescent girls in village Asoj	Ford Foundation	In progress
	(iii) Organization and management of the dietary department in the University Halls of Residence	Ford Foundation	In progress

<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	In progress
Child Development	Longitudinal Study of Indian Babies	PL 480 through I.C.M.R. and Ford Foundation	Terminated on 31-12-1970.
Clothing and Textiles	(i) Anthropometric study of 200 pre-adolescent girls and adoption of the basic block of this size to various dresses	Ford Foundation	In progress
	(ii) A comparative study of the effect of light on strength characteristics on silks from different part of India	Ford Foundation	In progress
Home Management	(i) A study of the attitudes and existing practices of selected sample of Patidar Patels on some issues related to dowery and marriage	Ford Foundation	Project I B work in progress
	(ii) Guides for standards on the Kitchen for Urban and Rural families	Ford Foundation	Project No. II Phase I-dealing with identification of existing practices and facilities in Kitchen is complete. Phase II dealing

<i>Department</i>	<i>Title</i>	<i>Name of the Financing Agency</i>	<i>Remarks regarding the progress of the Scheme</i>
			with body measurements of Urban women is continued.
	(iii) Housing values and housing satisfactions of families	Ford Foundation	Project No. III Phase I dealing with seven housing values is complete
	(iv) Performance characteristics of house-hold appliances used by urban families for meal preparing	Ford Foundation	Project No. IV Preliminary experience to standardize the procedure and formulate the problem is complete.
<b>Polytechnic</b>			
Physics	Study of Cermets	S.I.R.C. Gujarat State,	In progress

## 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. :

#### (A) Lectures under the Maharaja Sayajirao Memorial Lecture Series

Name of the Lecturer	Date	Subject
Shri V. V. John, Vice-Chancellor, Jodhpur University, Jodhpur.	23-2-1971 & 24-2-1971	"Towards a definition of National Goals"

#### (B) Lectures under the Extra Mural Grant, U.G.C. Unassigned Grant :

##### Faculty of Arts

Professor I. S. Gulati, U. N. Economic Commission for Latin America, Trinidad	13-7-1970	The changed roll of Gold in International monetary system.
Principal Y. P. Shukla, H. K. Arts College, Ahmedabad	8-1-1971	आधुनिक जगतमा साहित्यकारनु कर्तव्य.
Dr. P. N. Kawthekar Principal, Government Sanskrit College, Indore	21-1-1971 22-1-1971 23-1-1971	Definition of the Kavya in Sanskrit Poet. Vaidikamiti Katha Kalidasa
Professor (Kum.) K. R. Randive Professor of Economics, Bombay University.	6-2-1971	Income Distribution
Dr. Leoyd I. Rudolph Visiting Professor, Jaipur University.	8-2-1971	"Conceptual Problems of Modernity, Tradition and Development.
Acharya Vishvnath Prasad Mishra, Professor avem Adhyakshy	23-2-1971	तुलसी का काव्यदर्श
Dr. S. S. Barlingam, Professor and Head, Department of Philosophy, Poona University	27-1-1971	(i) Theories of meaning (ii) Medieval Indian Philosophy.

##### Name of the Lecturer

##### Date

##### Subject

##### Faculty of Science

Professor G. V. Bakore, Head, Chemistry Department, University of Udaipur, Udaipur	4-7-1970	Kinetics in the elucidation mechanisms.
Dr. S. S. Jogdeo, Associate Professor of Mathematics, University of Illinois, U. S. A.	22-7-1970 23-7-1970 24-7-1970	Non-Parametric Inference.
Dr. G. C. Mitra, National Botanical Garden, Lucknow.	9-8-1970	Plant tissue culture.
Dr. S. C. Pillai, Indian Institute of Science, Bengalore	10-8-1970	Sewage Purification.
Dr. P. N. Rangachari, Biochemistry Department, N.C.L., Poona	16-9-1970	Metabolism of terpenes in molds.
Dr. N. Appajirao, Indian Institute of Science, Bangalore	8-8-1970 9-8-1970	Enzymes; their structure and function.
Dr. K. Das, Banaras Hindu University, Banaras	26-9-1970 26-9-1970 28-9-1970	Triosomic from interchange heterozygots of Barley. Studies on some Barley Mutations. Studies on variability in irradiated and Colchicine treated Brasica capestris.
Dr. S. K. Bhattacharya, Senior Professor and Head, Chemistry Department, I. I. T., Kharagpur	16-10-1970	(i) Recent development in the heterogeneous gaseous reactions  (ii) Catalysis and High Pressure : valuable tools in chemical & petro-chemical industries of the present and future

<i>Name of the Lecturer</i>	<i>Date</i>	<i>Subject</i>
Professor J. J. Ghosh, Head, Biochemistry Department, Calcutta University, Calcutta	17-10-1970	Mechanism of drug action on brain.
Dr. J. C. George,	19-10-1970	Avian Physiology.
Professor of Zoology, University of Guelph, Guelph, Ontario, Canada	20-10-1970	Avian Physiology.
Professor K. A. Thakar, Head, Chemistry Department, Saurashtra University	15-12-1970	Some aspects of Stereo-Chemistry.
Dr. G. K. Mehta, I. I. T., Kanpur	22-12-1970 to 24-12-1970	Experimental Nuclear Physics.
Dr. J. B. Bapat, Chemistry Department, Caulfield Institute of Technology, Australia	12-1-1971	( i ) Some aspects of the Chemistry of cyclic nitrones : cycloaddition and rearrangements. ( ii ) Some aspects of the Chemistry of Nitrones Photochemistry.
Mr. Stewart Cameron, University of Otago, Newzealand	1-2-1971 2-2-1971 3-2-1971 4-2-1971 5-2-1971 6-2-1971	1. Agriculture of Pacific Islands 2. Village Life, Urbanisation and Land use in Somoa and Naw Guinea. 3. Village Life, Urbanisation and Land use in Fiji and Hawaii. 4. New-Zealand Vegetation and Agriculture. 5. Future of South Pacific Area, Economic and Political, 6. Air Photo interpretation and Mapping.
Professor S. P. Mistry, University of Illinois, U.S.A.	2-2-1971	Effect of food restriction on systematic oscillation and metabolic alliations in control animal used in studies on biotin-deficient rates.

<i>Name of the Lecturer</i>	<i>Date</i>	<i>Subject</i>
	2-2-1971	Control of gluconeogenesis in biotin deficiency.
	3-2-1971	Synthesis of pyruvate holocarboxylase in vivo and in vitro.
	3-2-1971	Reducing equivalents and gluconeogenesis Part I
	4-2-1971	-do- Part II
	5-2-1971	-do- Part III
	5-2-1971	-do- Part IV
Dr. M. S. Dubale, Gujarat University	13-2-1971	( i ) Bill architecture of birds. ( ii ) Myology of the feeding apparatus of Birds.
	14-2-1971	Is DNA a master molecule ?
Professor V. C. Shah Avian Zoology Department, Gujarat University	19-2-1971	Macro molecular synthesis and ohloroplast autonomy.
	20-2-1971	Radiation and man.

#### Faculty of Education and Psychology

Dr. M. D. Devadasan, Reader in Education, Regional College of Education, Bhopal	19-11-1970	Education
Rani Jagtani, Superintendent, Mental Hospital. Baroda.	25-2-1971 4-3-1971	Psychology
Professor C. C. Shah, Ex-Vice-Chancellor, South Gujarat University, Surat.	8-3-1971	Education

#### Faculty of Technology and Engineering

Professor R. M. Advani, Principal, Regional Engineering College, Jaipur	6-7-1970 & 7-7-1970	Non-dimensional approach to the solution of Hydraulic problems.
Professor R. Chaterjee, Department of Electrical Engineering, I.I.T., Bombay.	20-8-1970 21-8-1970	Switchgear and Protection.
Professor B. V. Ramarao, Railway Staff Callege, Baroda	9-10-1970	( i ) Advances in Railway Engineering. ( ii ) High Speed Track.

<i>Name of the Lecturer</i>	<i>Date</i>	<i>Subject</i>
Dr. J. Das, Deputy Director, Central Elec- tronic Engineering Research Institute, Pillani	18-3-1971 and 19-3-1971	Pulse communication systems.

**Faculty of Fine Arts**

Shri Kirti Khatri, Baroda.	8-12-1970	Traditional paper art technique.
Kum. Gita Kapoor, New Delhi.	7-2-1971	Indiganasm on Art.

**Faculty of Home Science**

Smt. Tarabai, President, All India Women Conference, Delhi.	7-1-1971	Employment potential of Home Science—at present and in future
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**Faculty of Social Work**

Dr. T. B. Naik, Head, Department of Anthro- pology, University of Raipur	17-2-1971	(i) Tribal Communities of Gujarat and Madhyapradesh. (ii) Welfare needs and services in Tribal areas.
Smt. Tarabai Shastri, Karve Institute of Social Work, Poona	19-2-1971	Correctional Services in Maha- rashtra State.
Shri Narayan Desai, President, Shanti Seva Samiti, Varanasi	9-2-1971	"Communal Disharmony and Shanti Seva" for students and staff of the Faculty.
Dr. Dandapani, Director of Co-operatives, Railways	18-3-1971	Research in Social Sciences.

**Faculty of Law**

Dr. S. N. Jain, Director, Indian Law Institute, New Delhi.	29-1-1971 30-1-1971	Administrative Law
Dr. S. P. Sathe, Reader in Law, Bombay University.	6-2-1971 7-2-1971	Judicial Powar under the con- stitution.
Dr. G. C. Kashliwal, Dean, Faculty of Law, Indore University.	13-3-1971 14-3-1971	Federalism.

**(C) Other Visiting Lecturers :**

<i>Name of the Lecturer</i>	<i>Date</i>	<i>Subject</i>
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**Faculty of Arts**

Dr. M. K. Dhavalikar, Deccan College, Poona.	3-2-1971	Art of Ajanta
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**Faculty of Science**

Shri R. C. Sharma, Chemistry Department, Faculty of Science, Baroda.	30-5-1971	Study of M-N-A-interactions in some teritiary base complexes.
Dr. P. M. Amin, Regional Research Laboratory, Jorhat. ( Assam )	15-7-1970	Work being done at R.R.L.
Shri M. V. Reddy, Chemistry Department, Faculty of Science, Baroda.	29-7-1970	Relative stabilities of M-O and M-S bonds in some metal complexes.
Dr. Madhukar Shah, M. D. Research Worker, Lemuel Shattuck Hospital, Boston.	3-8-1970	Metabolism of medium chain triglycerides in man.
Dr. C. J. Mohan Rao Assistant Director, C.P.H.R.I., Nagpur.	20-8-1970	Some aspects of sewage purifica- tion.
Shri V. N. Mistry, Chemistry Department, Faculty of Science, Baroda.	26-8-1970	Semiconducting Chelate polymers
Dr. D. Subramanian, Post-graduate Institute of Medi- cal Research, Chandigarh.	15-9-1970	Phospholipids in mycobacterium tuberculosis.
Dr. P. N. Raina, Biochemistry Department, Medi- cal College, Srinagar.	15-9-1970	Hormonel regulation of enzymes.
Dr. Ramaswamy, All India Institute of Medical Sciences, New Delhi.	15-9-1970	"Prostaglandins", their Chemi- stry & Biology.
Dr. N. A. N. Rao, Defence Research Institute, Delhi.	16-9-1970	Food problems concerned with military.

<i>Name of the Lecturer</i>	<i>Date</i>	<i>Subject</i>
Prof. A. M. Trivedi, Head, Chemistry Department, Gujarat University, Ahmedabad.	16-9-1970	Temperatures: High and Low.
Dr. R. D. Desai, Former Principal, M. G. Science Institute, Ahmedabad.	16-9-1970	Some recent advance in the field of Dyestuffs.
Dr M. S. Kanungo, Zoology Department, Banaras Hindu University, Varanasi	17-9-1970	Biochemistry of ageing.
Dr. G. G. Sanwal, Reader, Biochemistry Depart- ment, Lucknow University, Lucknow.	17-9-1970	Enzymes involved in sucrose in biosynthesis
Mr. V. J. Amin, Alembic Chemical Works, Baroda.	16-11-1970 19-11-1970 23-11-1970 26-11-1970 30-11-1970	Biochemical Engineering.
Mr. K. J. Divetia, Chief Executive, Sarabhai Che- micals, Baroda.	28-11-1970	The value of figures to a Business Executive.
Mr. Narayan, Officer-In-Charge Statistical Quality Control, Baroda Branch, I.S.I., Calcutta.	9-12-1970 11-12-1970	Operations Research in Public Systems.
Dr. Mooris Lieberman, U. S. Department of Agriculture	22-12-1970	Biosynthesis, mode of action and physiological significance of ethl- ene in post harvest physiology.
Professor D. K. Banerjee, Head, Organic Chemistry De- partment, Indian Institute of Science, Bangalore.	6-2-1971 8-2-1971	Synthesis of Steroids Part I. Synthesis of Steroids Part II.
Dr. T. V. Subbaiah, Alembic Chemical Works, Baroda	5-2-1971 12-2-1971 19-2-1971	Chemistry of Genetics I. Chemistry of Genetics II. Models of genetic exchanges and mapping of chromosome in micro- organisms.

<i>Name of the Lecturer</i>	<i>Date</i>	<i>Subject</i>
	26-2-1971	Recent advances in the mechani- sms of translation and regulation.
Shri R. A. Balani, Chemistry Department, Faculty of Science, Baroda.	18-2-1971	Studies in Benzophenone deri- vatives.
Shri R. N. Kapadia, Chemistry Department, Faculty of Science, Baroda.	22-2-1970	Coordination polymers.
Professor F. Ahmad, Professor & Head of the Department, Aligarh Muslim University.	7-3-1971	A case of continental drift.
	8-3-1971	The classical view on continental drift.
	9-3-1971	The new shape of continental drift.
<b>Faculty of Education and Psychology.</b>		
Shri D. N. Patel, Principal, Sharda Mandir, Baroda.	16-6-1970	Experiences as a teacher.
Shri S. A. Sabnis, Principal, Baroda High School, Baroda.	17-6-1970	-do-
Dr. (Smt.) Jayaben M. Patel, Principal, Alembic Vidyalaya, Baroda.	18-6-1970	-do-
Shri M. M. Chokshi, Principal, University Experi- mental School, Baroda.	19-6-1970	-do-
Shri Navanit H. Dave, Principal, Jeevan Sadhna, Baroda.	20-6-1970	-do-
Shri R. S. Trivedi, Principal, M. B. Patel College of Education, Vallabh Vidyanagar.	30-6-1970	Problems of Rural Teachers.
Shri Vajubhai Patel, Director, Mahatma Gandhi Shikshan Mahavidyalaya, Ville- Parle, Bombay.	6-8-1970	Work Experience in Education.

Name of the Lecturer	Date	Subject
Dr. S. P. Desai, Civil Surgeon, Baroda.	17-12-1970	Blood Bank.
<b>Faculty of Commerce</b>		
Dr. H. B. Desai, Institute of Foreign Trade, New Delhi.	11-12-1970	Recent Trends in India's Trade and Export strategy. Carriage of International Trade.
Shri I. J. Desai, Chartered Accountant, Surat.	29-1-1971	Tax Planning with particular reference to Income Tax.
Shri Robin Shah, Production Manager, Alcmibic Chemical Works Co. Ltd., Baroda	4-3-1971	Marketing Management.
<b>Faculty of Technology and Engineering</b>		
Professos R. Mallikarjunan, I. I. T., Bombay.	2-12-1970	The Process of Sintering.
	3-12-1970	The Structure of Slags.
Shri B. V. Doshi, Architect, Ahmedabad.	15-2-1970 and 16-2-1971	Architectural Education
<b>Faculty of Fine Arts</b>		
Shri Adi Davierwalla, Bombay.	18-11-1970 19-11-1970	Lecture Demonstration in Sculpture.
Shri Raghubir Singh, New Delhi.	29-11-1970 30-11-1970	Slides of Life along the Ganges
Dr. (Smt.) Kapila Vatsyayan, New Delhi.	12-2-1971 13-2-1971	Geet Govind in Indian Literature and Arts.
Smt. Nibha Joshi, New Delhi.	17-2-1971	Indian Textiles.
Shri Kanchanlal Kharadi, Baroda.	21-3-1971	Technique of Sankheda Lacquer work.
<b>Faculty of Home Science</b>		
Shri V. L. Devekar, Director, Baroda Museum	Oct., 1970	Collection, Preservation and display of fabrics and costumes in Museums.
Shri A. C. Shrivastava, Occupational Therapist, Ahmedabad.	February, 1971	A handicapped child as viewed by the occupational Therapist. & Training of Mentally Retarded children (Discussion).

Name of the Lecturer	Date	Subject
<b>Faculty of Social Work</b>		
Shri A. S. Majmudar, Public Relation Officer, Sarabhai Chemicals, Baroda.	6-10-1970	Concept of Public Relation and help them appreciate the ways and means.
Shri Sagirkhan, Director, Workers Education Centre, Baroda.	11-12-1970	Workers Education Scheme.
Shri N. M. Barot Factory Manager, Suhrid Geigy Limited, Baroda.	14-12-1970	Collective agreement.
Shri V. C. Shah, Factory Manager, Sarabhai Chemicals, Baroda.	18-12-1970	Workshop on Labour Legislation relating to working condition.
Miss Majari Siet, Associate of Gandhian Work.	19-1-1971	Associate of Gandhian Work.
Shri Taiyabjee, Assistant General Manager, Gujarat Refinery, Baroda.	12-2-1971	Administration in Public Sector.
<b>Faculty Of Law</b>		
Hon'ble Justice Shri B. K. Mehta	7 Lectures during the year.	Company Law.
<b>Baroda Sanskrit Mahavidyalaya</b>		
Pandit Vishnudev Sankaleshwar, Ahmedabad.	11-1-1971	वैदिक साहित्ये स्त्रीणां स्थानम्
Pandit Chhaganlal Shastri, Pradhanacharya, Shri Jambu Brahman Kanav Sanskrit Pathashala, Chandod.	18-1-1971	रघुवंशे कालिदासस्य मौलिकत्वम्
Pandit Dani Datt Zha, Amliran Sanskrit Pathashala, Surat.	23-1-1971	व्याकरणे भट्टोजिदीक्षितस्य प्रदानम्

## 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  
Conference, Seminars etc.*

**Faculty of Arts**

Dr. S. C. Malik, (Anthropology)	1st meeting of the Indian Association of Physical Anthropologists at Chandigarh from 27th to 29th April, 1970.
Dr. K. N. Reddy, (Economics)	1st Conference of Gujarat Economics Association at Ahmedabad from 11th to 12th April, 1970.
Shri N. M. Pandya (Economics)	—do—
Shri M. M. Dadi (Economics)	—do—
Shri B. B. Patel (Economics)	—do—
Smt. N. M. Shah (Economics)	—do—
Kum. S. S. Kanetker (Economics)	—do—
Kum. S. H. Divetia (Philosophy)	Indian Philosophical Congress at Poona, from 5th to 8th November, 1970.
Dr. V. K. Chavada (History)	8th Annual Conference of Institute of Historical Study at Jodhpur from 20th to 23rd October, 1970.
Professor R. N. Mehta (Archeaology)	Conference of Indian Archaeological Society at Nagpur from 10th to 12th November, 1970.
Dr. K. T. M. Hegde (Archeaology)	—do—
Shri S. M. Dave (Sanskrit)	Kalidas Jayanti Samaroha at Ujjain from 10th to 15th November, 1970.
Shri M. G. Gupta (Hindi)	Bharatiya Hindi Parishad at Poona from 23rd to 25th October, 1970.
Shri S. K. Rana (English)	Seminar on the Presentation of Technical Information in English from 12th to 31st December, 1970 at Bangalore.
Dr. J. Birje Patil (English)	USEFI Seminnr on American Fiction from 25th to 27th December, 1970 at Bhubaneshwar.
Dr. Y. J. Tripathi (Gujarati)	Conference of Collegiate Teacher in Gujarati at Surendranagar from 26th to 27th December, 1970.
Shri M. M. Desai (Gujarati)	—do—

*Name of the members  
of the Staff*

*Name, place and date of the  
Conferences, seminars etc.*

**Faculty of Science**

Dr. K. K. Rao (Microbiology)	Symposium on microbiological spoilage of Foods at Mysore from 19th to 21st October, 1971.
Dr. A. K. Matto (Microbiology)	Symposium on microbiological spoilage of Foods at Mysore from 19th to 22nd October, 1971.
Dr. R. K. Bhattacharya (Chemistry)	Annual Conference of Indian Chemical Society at Madras from 30th November to 4th December, 1970.
Dr. A. R. Mehta (Botany)	Growth, development and differatation of Golden Jubilee Session of Indian Botanical Society at Delhi from 24th to 26th December, 1970.
Shri D. R. Gadekar (Petroleum Geology)	8th Session of the Indian Science Congress at Bangalore from 3rd to 9th January, 1971.
Dr. A. G. Phatak (Statistics)	All India Conference on quality control at New Delhi from 17th to 19th March, 1971.
Shri S. R. Agarwal	} Seventh Annual Conference of Gujarat Ganit Mandal at Surat from 6th to 8th November, 1970.
Shri V. M. Shah	
Dr. O. P. Goyal	
Shri Ranchhodbhai C. Patel	
Shri K. P. Joshi	
Shri G. B. Patel	
Shri R. R. Joshi (Padra College)	
Shri D. H. Parmar	

**Faculty of Education and Psychology**

Professor A. S. Patel (Psychology)	All India Educational and Vocational Conference at Bombay from 3rd to 6th June, 1970.
	58th Indian Science Congress from 3rd to 9th January, 1971 at Bangalore.
Dr. G. B. Shah (CASE)	Conference on Continuing Education and Universities in Asian and South Pacific region at Madras from 26th to 30th December, 1970.

<i>Name of the members of the staff</i>	<i>Name, place and dates of the Conferences, Seminars etc</i>
<b>Faculty of Technology and Engineering</b>	
Professor J. S. Dave. (Chemistry)	3rd International Liquid Crystal Conference at Fritz-Haber Institute der Max-Planck Gesellschaft-Berlin Germany from 24th to 28th August, 1970.
Dr. D. C. Kantawala (Civil Engineering)	Pollution and Human environment at Bhabha Atomic Research Centre, Trombay-Bombay from 26th to 28th August, 1970.
Shri R. A. Vora (Chemistry)	58th Indian Science Congress from 3rd to 9th January, 1971 at Bangalore.
Dr. M. H. Vasavoda (Mathematics)	36th Conference of Indian Mathematical Society at Gorakhpur from 28th to 30th December, 1970.
Dr. M. H. Vasavada (Mathematics)	Seventh Annual Conference of Gujarat Ganit Mandal at Surat from 6th to 8th November, 1970.
Shri V. D. Pathak (Mathematics)	do
Shri C. C. Shah (Mathematics)	do
Shri N. M. Patel (Mathematics)	do
Shri K. J. Jaiswal (Mathematics)	do
Shri S. H. Soni (Mathematics)	do
Shri N. F. Patwa (Mathematics)	do
Shri S. A. Itwala (Mathematics)	do
Shri C. S. Lalwani (Electrical Engineering)	Symposium on 'Net work system and control' at I. I. T. Kanpur from 3rd to 5th December, 1970.
Prof. S. K. Damle (Applied Mechanics)	23rd Annual General Meeting of the Aeronautical Society of India—I. I. T. Kanpur from 26th to 28th February, 1971.
Shri H. V. Bhavanani (Civil Engineering)	Seminar on Metropolitan Planning at Ahmedabad from 9th to 10th January, 1971.
<b>Faculty of Medicine</b>	
Dr. P. M. Luhar and Dr. C. P. Shah	The XI International Congress of Internal Medicine at New Delhi from 25th to 30th October, 1970.

<i>Name of the members of the staff</i>	<i>Name, place and dates of the Conferences Seminars etc.</i>
Professor O. D. Gulati,	16th Annual Conference of the Association of Physiologist and Pharmacologist at Bangalore from 28th to 30th December, 1970.
<b>Faculty of Home Science</b>	
Professor (Kum.) Justina A. Singh	10th Biennial Conference of the Home Science Association of India at Nagpur from 23rd to 27th October, 1971.
Kum. Shakti Chhaya	do
Kum. Kiran Parekh	do
<b>Faculty of Social Work</b>	
Professor (Kum.) Indira Patel	All India Seminar on impact of communal disharmony on law and order situation in the country at Agra from 20th to 21st March, 1971.
<b>Faculty of Law</b>	
Shri N. N. Buch	10th Conference of All India Law teacher at Jaipur from 29th to 30th December, 1970.
Professor H. C. Dholakia	The Fourth Commonwealth and Empire Law Conference at New Delhi from 6th to 13th January, 1971.
<b>Oriental Institute</b>	
Shri J. P. Thakar	Kalidas Samaroha at Ujjain from 9th to 15th November, 1970.
<b>Shrimati Hansa Mehta Library</b>	
Shri K. J. Majmudar	6th I.A.S.L.T.C. Seminar at Bangalore from 2nd to 5th November, 1970.
<b>Halls of Residence</b>	
Kum. S. M. Parekh,	USEFI Intensive Course on Student Services at Bangalore from 2nd to 26th June, 1970.

## CHAPTER VIII — FACULTY OF ARTS

### 1. Some New Experiments

#### (1) Philosophy Department :

The Department has taken over the teaching of a Section of a paper in Indian Philosophy introduced by the Department of Archaeology in S.Y.B.A. course.

### 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         | French, German and Russian Languages.  |

At the post-graduate level, the Faculty accepted the holding of the M.A. examination in two parts and students took examination accordingly.

#### (1) English Department :

Chiefly to help those whose background of English is rather poor but who would still like to specialize in English, the Department has drafted a new two-paper optional course within the existing six-paper English Major scheme. The course seeks to emphasize writing practice alongwith the ability to recognize different kinds of English prose intended for various specific purposes. Teaching of the Course is expected to start from June, 1971.

#### (2) German Department :

Instruction in German at F.Y.B.A. level was started from June. for the evening batches open to outsiders also; a third year course called Post Diploma in German was introduced from June, 1970.

#### (3) Political Science Department :

- (a) Starting from this year, a new course on "Modern Indian Political Thought" is being taught as section I of M.A. Part I, Paper I : "Modern Political Thought—Western and Indian".

- (b) A new M.A. (Jr.) Paper on "India in International Politics." was introduced and taught during the year.

### 3. Number of Students :

The number of students enrolled in the various classes at the commencement of the year 1970-71 was as under :

Class	Men	Women	Total
(1) Certificate Course in German	227	32	259
(2) Certificate Course in Russian	25	05	30
(3) Certificate Course in French	88	31	119
	<u>340</u>	<u>68</u>	<u>480</u>
(4) Diploma Course in Russian	06	03	09
(5) Advanced Course in Russian	03	01	04
(6) Diploma Course in German	27	7	34
	<u>36</u>	<u>11</u>	<u>47</u>
(7) F. Y. B. A.	357	383	740
(8) S. Y. B. A.	204	309	513
(9) T. Y. B. A.	163	194	357
	<u>724</u>	<u>886</u>	<u>1610</u>
(10) Library Science Degree	4	15	19
	<u>4</u>	<u>15</u>	<u>19</u>
(11) Jr. M. A.	71	51	122
(12) Sr. M. A.	84	54	138
	<u>155</u>	<u>105</u>	<u>260</u>
(13) Ph. D.	6	3	9
	<u>6</u>	<u>3</u>	<u>9</u>
<b>Grand Total</b>	<b>1265</b>	<b>1088</b>	<b>2353</b>

### 4 Staff.

(a) During the year, the staff of the Faculty consisted of 9 professors (three of whom are in the senior scale), 19 Readers, 43 Lecturers, 12 Assistant Lecturers, 3 Part-time Lecturers, One Hon. Lecturer, 19 Class III other staff including technicians and 22 class IV employees. 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*

(1) Dr. S. R. Hashim, Reader in Economics

Three Lecturers (two in Sanskrit and one in Economics) were upgraded and appointed as Readers. Seven Assistant Lecturers (three in Political Science and one each in English, German, History and Sociology) were upgraded and appointed as Lecturers in the respective departments.

(c) *Teachers who left the University**Name**Designation*

- (1) Shri R. Krishnamurti, Lecturer in History  
 (2) Dr. S. C. Malik, Reader in Anthropology  
 (3) Kum. Neela Gandhi, Lecturer in English

5. *Professional Growth of the Staff*

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

<i>Sr. No.</i>	<i>Name</i>	<i>Title of Articles or Papers</i>	<i>Name of the Journals where in published with month of Publication</i>
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**Archaeology Department**

- (1) Professor R. N. Mehta Two Earth Works from Gujarat. Bull. of the Arch. Soc. of India, No. 3, 1970.  
 (2) Dr. K. T. M. Hegde Laboratory Studies in Jokha Midden Soil Samples. Bull. of the Arch. Soc. of India, No. 3, 1970.

**Agricultural Economics Department**

- (3) Prof. M. B. Desai On Urbanization Paper at the Surat Seminar.

**English Department**

- (4) Prof. V. Y. Kantak The Modern Relevance of Sanskrit Drama India and Foreign Review, November and December, 1970  
 (5) Shri R. N. Mehta The Voice of America Forum Lectures—Review article Indian Journal of American Studies, July, 1970  
 (6) Dr. J. Birje Patil (i) Marriage Contracts in Measure for Measure Shakespeare Studies No. V. December, 1970 (Washington, D. C. U. S. A.)

*Sr. No.**Name**Title of Articles or Papers**Name of the Journal wherein published with month of Publication*

- (ii) 'The Novel in India' Review article. Quest, March-April, 1970.

**Economics Department**

(7) Professor V. N. Kothari

- (i) The likely supply of Graduates from the M. S. University of Baroda during 1969-70 to 1973-74. Artha-Vikas July, 1970  
 (ii) Political economy of Mahatma Gandhi Journal of the Maharaja Sayajirao University of Baroda—Gandhi centenary Number, April and July, 1969, Vol. XVIII No. 1 and 2  
 (iii) Growth Potential Baroda City Published in 'Profiles of a Growing city' Souvenir brought out on the occasion of 2nd Gujarat Economic Conference January, 1971  
 (iv) Disparities in Relative Earnings among Different Countries. The Economic Journal, September, 1970.  
 (i) "Growth of Government Expenditure and National Income in India 1872-1966" Public Finance/Finance Publiques. Netherlands Vol. XXV. No. 1 1970  
 (ii) "A Century of Growth of Defence Expenditure in India." Indian Economic and Social History Review, Delhi School of Economics December, 1970  
 (iii) "The Finances of Baroda Municipal Corporation." Profiles of a Growing city-Souvenir brought out on the occasion of

(8) Dr. K. N. Reddy

Sr. No.	Name	Title of Articles or Papers	Name of the Journal wherein published with month of Publication
			2nd Gujarat Economic Conference, January 1971.
		(iv) "Land Reforms in India—A Plea for Fresh Thinking."	The Journal of the M. S. University of Baroda Vol. XVII No. 2
(9) Shri M. M. Dadi		(i) "Productivity, wage rate and relative share of workers"	Economic and Political Weekly, April 1970.
		(ii) "A Note on Keynesian Muthiphier Theory"	Journal of the M. S. University of Baroda Social Science Number Vol. 17, No. 2, August 1970.
		(iii) "Employment Structure of Baroda city."	'Profiles of a Growing city' Souvenir brought out on the occasion of the 2nd Gujarat Economic Conference, January 1971.
(10) Dr. S. R. Hashim		"A city in a system of cities"	'Profiles of a growing city' Souvenir brought out on the occasion of the 2nd Gujarat Economic conference, January 1971.
(11) Shri N. M. Pandya		Baroda City as shown in "A Socio Economic Survey of Baroda City".	'Profiles of a Growing city' Souvenir brought out on the occasion of the 2nd Gujarat Economic Conference, January 1971.
(12) Shri B. B. Patel		"The Evolution and pattern of Factory Employment in the District of Baroda".	'Profiles of a Growing city' Souvenir brought out on the occasion of the 2nd Gujarat Economic Conference, January 1971.

Sr. No.	Name	Title of Articles or Papers	Name of the Journal wherein published with month of Publication
(13) (Smt.) M. N. Shah		"Organised Manufacturing Sector of Baroda District".	'Profiles of a Growing city' Souvenir brought out on the occasion of the 2nd Gujarat Economic Conference, January 1971.
(14) Kum. S. S. Kanitkr		"Migration to Baroda city."	'Profiles of a Growing City' Souvenir brought out on the occasion of the 2nd Gujarat Economic Conference, January 1971.
<b>Hindi Department</b>			
(15) Dr. M. G. Gupta		(i) Premchand Upanyato me Samajik Samasya hee.	Journal of Gujarat Vidyapith, May-June 1970.
		(ii) Alam Krut Madhavanal Damandala Bhasha Bandhme Saustrik Mulynk	Sammelan Patrika, 1892
		(iii) Saustrik Kavya	Mohanlal Dwivedi Abhinandan Samiti Dwara Prakashit 'Akdeshi akavi' Granth me prakashit Sodh Lekh, July, 1970.
		(iv) Vinaypatrika me Pratibimbit Jatiya Sanskriti avam Samaj ka avap	Radhakrushan Prakashan, Delhi Dwara Prakashit Vinaypatrikama-Navmulyakan granth me Prakashit Lekh
		(v) Gujarat me Prapta 16 Hindi grantho me Khoj Report.	Vimarsh, February 1971.
		(vi) Kutch me Kabir Merujdada	do

Sr. No.	Name	Title of Articles or Papers	Name of the Journal wherein published with month of Publication
(16)	Dr. D. S. Shukla	Hindi Ka ak Prachin Vishmrut patra 'Kavaya-Sudhagarh'	Sammelan Patri Ka, Chaitra Bhadra San. 1892
		Hindi Sahityame Am Ashat Kavi Datt Jinendra	Sammelan Patrika Poush-Falgun San. 1891
(17)	Dr. (Kum.) P. R. Bafna	Maharaja Ka Mahatva	Youghchetam Prashd-vishesham July-November 1970
<b>Sanskrit Department</b>			
(18)	Dr. A. N. Jani	(i) Sanskrit Poets on Gandhiji	Journal of the M. S. University, Baroda. Vol, XVIII I and II April and July 1966.
		(ii) Sadgunoni Upasana	Janakalyana, February 1971.
		(iii) Sharda Stuti in Sanskrit	Surbharati, 1971
(19)	Dr. S. G. Kantawala	(i) Sangmaniyamani Prasang vimarsh in Sanskrit	Surabharati, 1971
		(ii) Mahakavibharsh in Sanskrit	Samvid, Bharatiya Vidyabhavan, Bombay, Vol. VI (August 1969 May 1970)
		(iii) The Hymn to Aranyani-A Study	Journal of the Oriental Institute Vol XX No. 1 September 1970.
		(iv) The Saigamaniya Gem Ephisele in the Vikramor-Vastyam	M. M. Umesh Misra Commemoration Volume, Allahabad.
<b>Department of Gujarati</b>			
(20)	Dr. R. M. Patel	(i) Kelavni no Adarsh	Suvarnjayanti, November 1970
		(ii) Rashtriyatana Jyoti Grah (Arvind Ghosh)	Suharnjayanti, December 1970

Sr. No.	Name	Title of Articles or Papers	Name of the Journal wherein published with month of Publication
		(iii) Gandhiji Samprat Sandharbhma	Suvarnjayanti, January 1971
		(iv) Sikshan Paddhati and Jiyan Gadatar	Suvarnjayanti, February 1971,
(21)	Dr. S. H. Joshi	Kakvandhya-Ek Charcha	Madiyanu Manoranjan January 1971
<b>Political Science Department</b>			
(22)	Shri Thomas Pantham	"The Fear of Power; An essay on the Nature of Gandhi's Political Thought"	Journal of the M. S. University, Baroda Vol. XVIII No. 1 and 2 April-July 1969
<b>Philosophy Department</b>			
(23)	Dr. A. G. Javadekar	(i) Gandhiji and Human Nature	M. S. University Journal, Gaudhi Centenary Number, October 1970
		(ii) Gnya ke sambandhue kuch vichar	Vaidkdharma, July 1970
		(iii) The concept of liberation and its relevance to Philosophy	India Philosophical Vol. V, 1970
(24)	Kum. S. H. Divatia	Gandhiji-The Pragmatic Idealist	M. S. University Journal, Gandhi Centenary Number, October 1970
<b>(b) Published Books and Brochures :</b>			
(1)	Professor R. N. Mehta	(i) "Excavation at Nagara"	Archaeological Series No. 10 January 1970
		(ii) "Excavation at Jokha"	Archaeological Series No. 11 March 1971
		(iii) "Excavation at Somanath"	Archaeological Series No. 12 March 1971
<b>Gujarati Department</b>			
Two research projects, conducted by this Department and financed by the University are as under :—			
1. Prachin Gurjara Granthmala : Volume X of this series viz. 'Shihasan Batrishi' of 'Malaychandra' edited by Dr. R. M. Patel, Reader in Gujarati, was published during the academic year of 1970-71.			

Sr. No.	Name	Title of Articles or Papers	Name of the Journal wherein published with month of Publication
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2. Professor B. K. Thakore Publication Series. Publication of the literary material of late Professor B. K. Thakore,

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

Sr. No.	Name	Title of the Paper	Name of the Seminar or Conference
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#### Archaeology Department

- (1) Professor R. N. Mehta (i) Technique of the study of a Single Period Sides. Indian Archaeological Society, Annual Congress at Nagpur in November 1970

- (ii) Material life as depicted in the plastic Arts works, conditions of terracotta Artists at Devnimori

- (2) Dr. K. T. M. Hegde (i) Physics and Chemistry in Indian Archaeology -do-

- (ii) The Pleistocene Stratigraphy in India

#### Economics Department

- (3) Professor V. N. Kothari "Process of Urban Expansion" 2nd Gujarat Economic Conference, 2 January 1971

- (4) Dr. K. N. Reddy (i) "How far Federal Finance operations in India result in reduction of regional disparities" First Gujarat Economic Conference, April, 1970 Ahmedabad.

- (ii) "Implications of urbanisation to local bodies in Gujarat" 2nd Gujarat Economics Conference at Baroda January, 1971.

- (5) Dr. M. M. Dadi and Shri B. B. Patel (i) "Structure of Industrial wages in Gujarat" 1st Gujarat Economics Conference at Ahmedabad, April, 1970.

- (ii) Occupational Structure & Productivity

Sr. No.	Name	Title of the paper	Name of the Seminar or Conference
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levels in the Districts of Gujarat.

- (6) Dr. M. M. Dadi and Dr. S. R. Hasim (i) Population Pressure, size distribution of land holdings and land productivity—Analysis of Inuertu-gional variations in Gujarat 1st Gujarat Economics Conference April, 1970 at Ahmedabad.

- (ii) "Does urbanisation influence female work form in Gujarat?" 2nd Gujarat Economics Conference January, 1971 at Baroda.

- (7) Dr. M. M. Dadi "Valuations in labour force Participation—An interregional analysis" Census Centenary Seminar, March 1971.

- (8) Dr. S. R. Hashim "Proximity to urban influence for the district of Gujarat" do

- (9) Shri N. M. Pandya (i) Industrial Structure of Gujarat 1st Gujarat Economics Conference, April 1970 at Ahmedabad.

- (ii) Problems of urbanisation in Gujarat 2nd Gujarat Economics Conference, January 1971 at Baroda.

- (iii) Declinity Towns of South Gujarat Seminar on Urbanisation organised by the South Gujarat University, January 1971.

- (10) Smt. M. N. Shah and Kum. S. S. Kanetkar (i) Changes in the location Pattern of Industries in Gujarat 1st Gujarat Economics Conference, April 1970 at Ahmedabad.

- (ii) Is urbanisation in Gujarat proverty induced? 2nd Gujarat Economics Conference, January 1971 at Baroda.

- (11) Kum. S. S. Kanetkar Some Estimates of immigration and out-migration 2nd Gujarat Economics Conference, January 1971 at Baroda.

Sr. No.	Name	Title of the paper	Name of the Seminar or Conference
<b>English Department</b>			
(12)	Prof. V. Y. Kantak	"Faulkner's Styles"	Baroda—USEFI Seminar, Baroda, November, 1970.
(13)	Shri R. N. Mehta	"Cable and James : Political Novelists"	do
(14)	Dr. J. Birje Patil	'Herzog and the Fantasy of Rationalism'	do
(15)	Shri R. K. Raval	Robbe Grillet's 'The Labyrinth and Phenomenology'	do
<b>History Department</b>			
(16)	Dr. V. K. Chavda	Literary Sources in Gujarat in the 18 and 19 and 20 Cent. for the modern History of Gujarat.	VIII Annual Conference of the Institute of Historical Studies, Jodhpur.
<b>Political Science Department</b>			
(17)	Professor K. S. Desai	"Panchayati Raj in Gujarat—Problems and Prospects."	All India seminar on Local Government, (April 1970) sponsored by the National Academy of Administration, Mussoorie.
<b>Sociology Department</b>			
(18)	Dr. R. D. Parikh	(i) Problems of team research in India.	Seminar on Research Methods in Sociology, South Gujarat University, Surat, December 1970.
		(ii) Urbanization and Mass Media	Seminar on Urbanization, South Gujarat University, Surat, January 1971.
(19)	Kum. B. S. Desai	Family Planning Preception of people and Socio Cultural Factors affecting	All India Seminar on Family Planning in India, Demographic

Sr. No.	Name	Title of the paper	Name of the Seminar or Conference
		its acceptance	Research Centre, M. S. University of Baroda, January 1971.
(20)	Shri S. D. Joshi	Contribution to Social Research in India.	Seminar on Research Methods in Sociology, South Gujarat University, Surat, December 1970.

(d) Talks given at important meetings :

#### Archaeology Department

(1) Dr. R. N. Mehta	(i) Literature and History reappraisal of the interpretation of Ancient literature as a source of History.	Gujarat University School of Social Sciences, Ahmedabad-9.
	(ii) Archaeology and its role in historical interpretation.	Gujarat University School of Social Sciences, Ahmedabad-9.
	(iii) Stupa of Devanmori.	University of Nagpur.

#### English Department

(2) Professor V. Y. Kantak	A. G. Stock Memorial lecture. Delivered lectures under the UGC visiting Professors' Scheme at the University of Gujarat and South Gujarat.	Rajasthan University, Jaipur, February 1971.
(3) Shri R. N. Mehta	(i) The Naturalistic Strain in Hemingway	Jodhpur University, Jodhpur (Regional) Seminar on Modern
	(ii) Wit in James's Early Novels.	British and American Fiction, December, 1970.

Sr. No.	Name	Title of the paper	Name of the Seminar or Conference
<b>Hindi Department</b>			
(4)	Shri R. M. Pancholi	English Grammar and Usage	Summer Institute in English, South Gujarat University, Surat, May-June, 1970.
(5)	Dr. M. G. Gupta	(i) Hindi me Bhakti Kavya Ki Aithihasyik Prasthbumi ka Vishlesan. (ii) Prasad Kavya Ki Sanskrutik Prasthbumi (iii) Hindi ke Premagyan Kavya	Vikram Viashvavidyalaya, November, 1970. Magadh University February, 1971. Banaras University February, 1971.
<b>Gujarati Department</b>			
(6)	Dr. S. H. Joshi	Samsamyak Sahityana Adyatan Pravaho.	South Gujarat University, Surat.
<b>Department of Linguistics</b>			
(7)	Shri D. D. Mahulkar	Six lectures at the University of Bombay under the Wilson Philological Lectureship in February, 1971.	
<b>Philosophy Department</b>			
(8)	Dr. A. G. Javadekar	(i) Three lectures on Vedanta under UGC scheme of exchange of Visiting Professors at the Gujarat University, Ahmedabad. (ii) Two lectures on AXIONOETICS at the Poona University.	
<b>Sociology Department</b>			
(9)	Dr. K. C. Panchanandikar	'Modernization and Structural changes—the Indian Situation; at the Marathwada University under U.G.C. Scheme.	
<b>(c) Participation in Inservice Programme</b>			
<b>History Department</b>			
(1)	Dr. S. C. Mishra	(i) Attended Seminar on Medieval Inscription at Muslim University, Aligarh. (ii) Presided over Gujarat Itihas Parishad Session at Rajkot.	

- (2) Kum. U. R. Patel (i) Attended I. C. S. S. R. Conference, Ahmedabad.  
(ii) Participated in the intensive Study Course on the 20th Cent. American History at the American Studies Research Centre, Hyderabad,

**English Department**

- (3) Dr. J. Birje-Patil Participated in the All India Seminar on Modern British and American Fiction at Bhubaneswar, December, 1970.

**Political Science Department**

- (4) Professor K. S. Desai Worked as Chairman, Session IV of the seminar of the Local Government Supervision Control and Guidance and Session VI Leadership and Peoples Participation.

**Sociology Department**

- (5) Dr. K. C. Panchanandikar Participated in the Seminar organized by the Indian Council of Social Science Research at Ahmedabad on the Role of the I.C.S.S.R., February 1971.

(f) Research work done by teachers

(i) Research work completed :

**Archaeology Department**

- (1) Professor R. N. Mehta and Dr. S. C. Kantawala  
(2) Professor R. N. Mehta (i) Explorations at Champaner  
(ii) Explorations around Undrel

**History Department**

- (3) Dr. S. G. Mishra History of Gujarat under the Muslims, a Research Project ; its one work Quissa-i. Ghamghin in Press.

**Linguistics Department**

- (4) Shri D. D. Mahulkar (i) Introduction to Mathematical Linguistics. (The work is under publication by Deccan College, Poona.)  
(ii) Part of research on concordance to Panini's Astadhayai.

**Political Science**

- (5) Shri D. H. Mohite An Election study of the Baroda Municipal Corporation.

(ii) *Research work in progress*

**Archaeology Department**

- (1) Dr. R. N. Mehta
- (i) Explorations in the Panchamahals.
  - (ii) Preliminary Explorations around Patan, Chandravati and Jalod.
  - (iii) The obliterated oxbow lake in the Tapi estuary.
  - (iv) Evidence of recently formed Black Cotton Soil in Gujarat.
  - (v) Analytical study of Jokha copper area.
  - (vi) Analytical study of copper Artifacts excavated from Mithathal.
  - (vii) Studies in Fossil Soils.

**History Department**

- (2) Dr. S. C. Misra
- A two volume study of the Sur period; Editing in a three Volume history of India the volume on Medieval India. Working on a work Pre-Moghul India in collaboration with Dr. S. K. Desai; work on Sur Dynesty in the Comprehensive history of India, a project of the Indian History Congress.

- (3) Dr. V. K. Chavda
- (i) Gujarat, its history and culture—A select bibliography 1600 to 1857.
  - (ii) Sir Sayaji Rao Gaekwad III
  - (iii) Col. Alexander Walker—a mission of peace in Gujarat 1801-1810.
  - (iv) Sawasantrayotar Bharatno Ethihis 1947 to 1970.

- (4) Dr. S. K. Desai
- (i) Bharat no 'Ethihas, 1206 to 1526 (working with Dr. S. C. Mishra)
  - (ii) Purva Asia no Ethihis, 1850 to 1950 for University Growth Nirman Board, Gujarat State, Ahmedabad.

**Sanskrit Department**

Text and Gujarati Translation of the Kalika-puran

**German Department**

Work on Thomas Mann

- (5) Dr. A. N. Jani

- (6) Shri D. Srinivasan

**Political Science**

- (7) Shri A. P. Rana A frame work for the Analysis of India's foreign policy.
- (8) Shri D. H. Mohite The post-election study of the Sayajigunj constituency.

**6. Activities of special Centres/Units in the Faculty.****Archaeology Department**

- (1) Imparting training in Field Archaeology to students from South Gujarat and Bombay Universities.

- (2) Co-operation offered at the camp to the Department of Linguistics.

**7. Faculty Union Activities.**

- (1) The Economic Society brought out the second number of its magazine 'Amateur Economist'. The Department arranged talks of the following distinguished Visitors :

- (i) Prof. R. Evanson, Yale University (July, 1970)
- (ii) Prof. J. B. Bhatt, Georgia University (August, 1970)
- (iii) Prof. George B. Simmons, University of Michigan (September, 1970)
- (iv) Prof. I.M.D. Little, Nuffield College, Oxford (October, 1970)

- (2) The Shakespeare Society in a major drive to collect funds for the Society mounted five plays in February 1971 :

- |                   |                                    |
|-------------------|------------------------------------|
| (i) Willis Hall's | 'The Long, the Short and the Tall' |
| (ii) Arrabal's    | 'Picnic on the Battlefield'        |
| (iii) Ionesco's   | 'The Lesson'                       |
| (iv) Maugham's    | 'Home and Beauty' and              |
| (v) King's        | 'See How They Run'                 |

**8. 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 Smt. Hansa Mehta Library which is on the premises. The Faculty Central Hall is currently being used as an annexe of the University Library.

### 9. Museum Laboratory, Studies, Workshops etc.

Sr. No.	Item	Cost of equipment as on 1-4-70	Cost of equipment etc. written of during the year	Cost of equipment etc. added during the year	Cost of equipment as on 31-3-1971.
		Rs.	Rs.	Rs.	Rs.
(1)	Museum	4,533-98	—	—	4,533-98
(2)	Studio	15,320-40	—	—	15,320-40
(3)	Drawing Equipment	1,806-75	—	—	1,806-75
(4)	Deadstock	63,138-17	—	—	63,138-17
(5)	Excavation Equipment	1,622-05	—	—	1,622-05
		86,421-35	—	—	86,421-35

### 10. Faculty Publication

(1) Dr. M. G. Gupta edited and published 'Vimarsh'—a literary and research Journal of the Hindi Department.

(2) The M. S. University Journal (Humanities) was published under the editorship of Professor A. G. Javadekar, Head of the Philosophy Department.

### 11 Distinguished Visitors.

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

Name	Date of the visit.
(1) Shri Gordhandas Chokhawala, Ex-Minister for Education, Gujarat State.	15-9-1970
(2) Dr. Margaret Clapp, Cultural Attache of the United States to India.	17-12-1970
(3) Lloyd I-Rudolph and Dr. Susanne Hoeber Rudolph, Chicago University, U. S. A.	8-2-1971
(4) Mr. James Topping, Vice-Chancellor, Brunel University, London.	16-2-1971
(5) Shri V. V. John, Vice-Chancellor, Jodhpur University, Jodhpur.	24-2-1971
(6) Dr. A. H. Somjee Vancouver University, U. S. A.	6-3-1971

## CHAPTER IX—FACULTY OF SCIENCE

### 1. Some New Experiments

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

(ii) In the subject of Statistics, in addition to the two optionals so far available, viz. Advanced Operations Research, and Demography, one more optional subject of Stochastic Processes and their applications, was introduced at the M.Sc. (Final). The teaching of Advanced Operations Research was organised this year by the Department itself but Statistical Quality Control was taught in collaboration with the staff of the Statistical Quality Control Unit, Baroda Branch of Indian Statistical Institute, Calcutta.

### 2. Courses of Studies

(a) At Certificate, Diploma, Under-graduate, Graduate and Post-graduate level.

There is a 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 year course after S.S.C.

#### (b) New Courses:

The following courses were revised and introduced from June 1970 :

- (i) M.Sc. (Previous) in Biochemistry.
- (ii) F.Y.B.Sc. (Sub.), B.Sc. (Prin.) and M.Sc. (Senior) in Mathematics.
- (iii) F.Y.B.Sc. (Sub.), S.Y.B.Sc. (Sub.) in Physics.
- (iv) M.Sc. (Previous) in Physics (in the light of the new Berkely Course introduced at the B.Sc. Class).

### 3. Number of Students

The number of men and women students on roll in the various classes in the year 1970-71 was as under:

Class	Boys	Girls	Total
(1) Diploma in Laboratory Techniques:			
(a) First Year	3	1	4
(b) Second Year	2	—	2
Total	5	1	6
(2) Pre-Medical	132	21	153
(3) F.Y.B.Sc.	261	132	393
(4) S.Y.B.Sc.	231	105	336
(5) T.Y.B.Sc.	232	89	321
Total	856	347	1,203
(6) M.Sc. (Previous)	117	39	156
(7) M.Sc. (Final)	98	39	137
(8) M.Sc. (Applied Geology)	4	—	4
Total	219	78	297
(9) Ph.D.	55	10	65
Grand Total	1,135	436	1,571

#### 4. Staff

##### (a) Present Position:

The staff of the Faculty consisted of 13 Professors (three of whom are in the Senior Scale), 26 Readers, 63 Lecturers, 68 Assistant Lecturers, 94 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)	Dr. A. G. Phatak	Reader in Statistics
(ii)	Shri O. K. Shah	Lecturer in Applied Geology
(iii)	Shri S. M. H. Rizvi	Lecturer in Geography
(iv)	Shri H. C. Patel	Lecturer in Statistics

5 Assistant Lecturers in Chemistry, 1 in Physics, 2 in Statistics and 2 in Zoology were also appointed during the year.

Shri C. M. Patel, Lecturer in Mathematics in Faculty of Science was appointed as Reader in Mathematics in the Faculty of Technology and Engineering.

#### (c) Teachers who left the University:

Sr. No.	Name	Designation
(i)	Shri S. N. Shah	Lecturer in Mathematics
(ii)	Shri S. C. Jaiswal	Lecturer in Statistics
(iii)	Shri H. I. Patel	Lecturer in Statistics

#### 5. Professional Growth of the Staff

##### (a) Published Articles/Papers in India and/or Foreign Journals.

##### (i) Articles:

Sr. No.	Author	Title	Journal
1	2	3	4
(1)	L. J. Parekh and D. A. Mehta	Studies on callus tissues of lemon fruit vesicle ( <i>Citrus acida</i> ) cultivated <i>in vitro</i>	Current Science, 39, 573-575 (1970).
(2)	A. R. Mehta	Presence of Diosgenin in Tissue Cultures of <i>Dioscorea Composita</i> Hemsl. and related species	J. Pharm. Sc. (U.S.A.) No. 6, June, 1970.
(3)	D. N. Thaker,	A note on the occurrence of <i>Mecardonia dianthera</i> (Sw.) Pennell (Schrophulariaceae) in Gujarat State	Indian Forester 97 (1) —1971.
(4)	D. N. Thaker, S. D. Sabnis and S. J. Bedi	A Contribution to the flora and vegetation of Chhota-udepur range, Gujarat State, India	Jour. M. S. Univ. Baroda 17-18 (3) 83-100 (1968-69).
(5)	S. N. Padate	A contribution to the Flora of Savli Taluka, Gujarat State, India	Jour. M. S. Univ., Baroda 17-18 (3) 101-112 (1968-69).
(6)	D. Kamalavalli, G. Prathapasenan and C. H. Pathak	Effect of Temperature and fixative on the Localization of the activity of acid Phosphatase in the roots of Sorghum	Jour. M. S. Univ. Baroda 17-18 (3) 55-57 (1968-69).

1	2	3	4
(7) D. Leela and C. H. Pathak	Suitability of different sugars and sources of carbon and the effect of different concentrations of sucrose on growth and enzyme activity of the excised roots of <i>Trigonella foenum-graecum</i> L.	Jour. M. S. Univ. Baroda 17-18 (63-71) (1968-69).	
(8) D. Kamalavalli, G. R. Rao and C. H. Pathak	Effect of pre-sowing soaking of seeds of sorghum in water or gibberellic acid on rate of germination and growth of seedlings	Indian Agriculturist 13 (77-83) 1969.	
(9) M. V. Chidambaran and P. K. Bhattacharya	(i) Studies in Aminoacid mixed ligand Chelates I	Jour. of Inorg. and Nuclear Chemistry 1970, 10, 3271.	
	(ii) Studies in some Aminoacid Chelates Part I.	Jour. of Indian Chem. Soc., 1970, 47, 881.	
	(iii) Studies in some Aminoacid Chelates Part II	Indian Jour. of Chem. 1970, 8, 835.	
(10) D. C. Patel and P. K. Bhattacharya	Studies in some metalphenolic acid Chelates	Indian Jour. of Chem. 1970, 8, 941.	
(11) A. H. Vyas, R. S. Shah, B. R. Kamath, C. V. Bhat, S. S. Kanhere and S. L. Bafna	Studies with ion exchange resins. Cinchona Alkaloid IV	Jour. of Pharm., Sciences, U.S.A., 1971, 60, 319.	
(12) R. J. Chudgar and K. N. Trivedi	Studies in the Synthesis of quinoline derivatives Part II. Synthesis of 2-hydroxy cinchoninic acids	Indian Jour. of App. Chem. 1970, 33, 17.	
(13) N. H. Pardanani and K. N. Trivedi	Studies in the synthesis of coumarino-pyrones and Furocoumarins Part VI	Jour. of Institution of Chemists (India) 1970, 42, 153.	

1	2	3	4
(14) V. N. Dholakia and K. N. Trivedi	Studies in the synthesis of coumarino-pyrones and Furocoumarins Part VII	Jour. of Ind. Chem. Soc., 1970, 47, 1058.	
(15) M. G. Parekh and K. N. Trivedi	A modifial synthesis of 4, 5, 8-trimethyl pasoralene	Current Science 1970, 39, 1058.	
(16) M. K. Chudgar, N. V. Mani and Suresh Sethna	Studies in Isoflavones Part II. Iodination, Bromination and Nitration of 6-hydroxy isoflavone and its methyl ether	Jour. of Institution of Chemists (India) 1970, 42, 194.	
(17) S. S. Merh, N. M. Vashi and J. P. Patel	A note on the nature of Ramgarh Thrust	Jour. of Geol. Bangalore, Sept., 1970 (In press),	
(18) P. P. Patel & S. S. Merh	On the usual occurrence of corundum in wallastonite and grossularite bearing calc-silicate hornfels in Aravalli Rocks of North Gujarat	Abstract Ind. Sc. Cong. 58 Session, 1971.	
(19) S. D. Desai	(i) Industrial Clays	Western Region Mineral Convocation, Oct. 1970.	
	(ii) Benification of Graphite	Mineral Wealth Publication of Directorate of Geology and Mining Guj. State, Dec. 1970.	
(20) D. R. Gadekar	(i) Search for Petroleum in Gujarat (Marathi)	'Srutidnyan', Vol. 43, No. 6, p. 164 to 168, June 1970.	
	(ii) Social outlook behind industrial progress and science (Marathi)	Marathi Vidnyan Parishad Patrika, Vol. 1:2, No. 12, March, 1970.	
(21) V. M. Shah	(i) On the convergence of a lacunary Fourier Series and its conjugate series	Publications De L' Institute Mathematique Nouvelle serie, Tome 10 (24), 1970, pp. 5-7.	

1	2	3	4
	(ii)	On the absolute convergence of Fourier series	Jour. of the M. S. Univ. of Baroda, Vol. 17, 18 No. 3, 1968.
(22) O. P. Goyal	(i)	On the absolute convergence of a Fourier series	Jour. of the M. S. Univ. of Baroda, Vol. 17, 18 No. 3, 1968.
	(ii)	On the absolute convergence of a series associated with a Fourier series	Jour. of the M. S. Univ. of Baroda, Vol. 17, 18 No. 3, 1968.
	(iii)	On the absolute convergence of Fourier series of functions of bounded 4th variation	Mathematica Japonicae, Japan. Under Printing (to appear in Vol. 15 No. 1).
	(iv)	On the absolute convergence of a lacunary Fourier series	Mathematica Japonicae, Japan. Under Printing (to appear in Vol. 15 No. 1).
(23) R. V. Joshi and T. R. Joshi		Thermoluminescence of Na (1:T) around 340°K	J. Luminescence 3, 389, (1971).
(24) M. S. Shah and Mitra		Fadeev Treatment of Li6 with a separable potential	Phys. Rev., Jan. 1970.
(25) B. S. Shah and N. S. Pandya		Effects of some parameters on facet formation in Bismuth	Journal of Pure and Applied Physics. Vol. 8, No. 12, pp. 852-853.
(26) D. J. Vaghari		Development of unusual etch pits in Bismuth	Journal of Pure and Applied Physics, 1970. Vol. 8, No. 10, pp. 672-673.
(27) K. C. Abraham and M. M. Patel	(i)	Rotational analysis of C <sub>3</sub> system of SbF molecule	J. Phy. B. Atom. Mole. Phy. 1970, Vol. 3, pp. 1183-85.
	(ii)	A new band system of SbF molecule in the -4050 -5450 Å° region	J. Phy. B. Atom. Mole. Phy. 1970, Vol. pp. 882.

1	2	3	4
(28) M. M. Patel and N. R. Shah		Emission Spectrum of BaI Molecule	Indian Journal of Pure and Applied Phys.
(29) K. K. Rao and V. V. Modi		Effect of ammonium ions on the growth of <i>Aspergillus nidulans</i>	Experientia 26, 590, 1970.
(30) A. K. Mattoo and V. V. Modi	(i)	Biochemical aspects of ripening and chilling injury in mango fruit	Proc. Conference Trop. Sub. Trop. Fruit (London). 111, 1970.
	(ii)	Citrate cleaving enzyme from mango fruit	Biochem. Biophys. Research, Commun. 39, 895, 1970.
	(iii)	Partial purification and properties of enzyme inhibitors from unripe mangoes	Enzymologia 39, 237, 1970.
(31) N. C. Khan and V. V. Modi		Transfer of Nitrite and nitrate reductase markers in Rhizobium	Proc. of the Dept. of Atomic Energy. Symposium on "Macromolecules in storage and transfer of biological information", 75, 1970.
(32) J. L. Raina and V. V. Modi		Native and Denatured DNA specific nucleases of a transformable Rhizobial species	Proc. of the dept. of Atomic Energy symposium on "macromolecules in storage and transfer of biological information", 87, 1970.
(33) H. S. Chhatpar, P. C. Vasavada and V. V. Modi		Bacterial Production of spongy tissues in mangoes	M. S. U. Journal, XVII and XVIII, 49, 1968 and 1969.
(34) Geetha Ghai and V. V. Modi		Some aspects of carbohydrate metabolism in ripening mangoes	Biochem. Biophys. Research Commu. 41, 1088, 1970.
(35) Meena Naik, V. V. Modi and N. C. Patel		Studies on a flatoxin synthesis in <i>Aspergillus flavus</i>	Ind. J. of Expt. Biology, 1970. 8, 385.

1	2	3	4
(36) Bonny Pilo and George J. C.	(i) Erythropoiesis in the migratory starling, <i>sturnus roseus</i> (Linn)	J. Anim. Morphol. Physiol. 17: 1-2, pp. 19-25, Dec. 1970.	
	(ii) Serum tyrosine level as an index of thyroidal activity in a migratory starling	J. Anim. Morphol. Physiol. 17: 1-2, pp. 26-36, Dec. 1970.	
(37) Shah R. V., Asnani M. V. and Bonny Pilo	Wound healing and repair in the pigeon liver. I. The role of lymphocytes in the wound healing and the initiation of hepatic cell proliferation at the wound site	J. Anim. Morphol. Physiol. 17: 1-2, pp. 75-84, Dec. 1970.	
(38) Bonny Pilo	Studies on the lymphocytopoiesis in the liver and spleen of certain migratory and non-migratory birds	J. Anim. Morphol. Physiol. 17: 1-2, pp. 88-95, Dec. 1970.	
(39) Shah R. V. and Ramachandran A. V.	Lactate and malate dehydrogenases (LDH & MDH) in the regenerating tail of the lizard, <i>Mabuva Carinata</i>	Acta Histo. Cyto. 3:3, pp. 152-159, Sept. 1970.	

## (ii) Books (Including Reports):

Sr. No.	Name	Title	Name of the publisher with month of publication
1	2	3	4
(1) C. V. Ramkrishnan	FG-In-240	"Laboratory studies on the fermentative production of microbial lipases that are useful in converting vegetable oils to products of higher value, as a basis for increasing the utilization of soyabean and linseed oils"	Terminal Report submitted to PL 480 Office, New Delhi, 1970.

1	2	3	4
(2) C. V. Ramkrishnan and L. J. Parekh	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"	Terminal Report submitted to PL 480 Office, New Delhi, 1970.
(3) Dr. C. H. Pathak	(i) Plant Physiology by Meyer and Anderson	Gujarat University, Translation of the book in Gujarati.	
	(ii) Vegetables by B. Chaudhary	National Book Trust, Translation of the book in Gujarati.	
	(iii) Common Trees by H. Santapan	National Book Trust, Translation of the book in Gujarati.	
(4) V. A. Janaki	Vanadha-Chalamli	Geography Research Paper—Series No. 5, March, 1971.	

## (b) Visits to Foreign Countries:

Sr. No.	Name of the Teacher	Country and Purpose
1	2	3
(1)	Prof. C. V. Ramkrishnan	To attend the International Atomic Energy Commission's Research Co-ordination Committee Meeting at Salzburg, Austria during 26th to 30th October, 1970.
(2)	Prof. C. H. Pathak	To visit Yugoslavia during April-May, 1970 under the Cultural Exchange Programme. Visited also U.K., West Germany, Austria and Switzerland.
(3)	Dr. R. M. Naik	To attend the XVth International Ornithological Congress at Hague from 30th August to 5th September, 1970 and the General Meeting of the Granivorous Birds from 6th to 9th September, 1970.

## (c) Papers presented at All India Level Seminars, Conferences, etc.:

Sr. No.	Name	Seminar/Conference	Title
1	2	3	4
(1)	A. R. Mehta	Golden Jubilee Session of the Indian Botanical Society at Delhi in December, 1970	Growth in culture of part cells and tissues—Physiology of the Lag Phase.
(2)	D. R. Gadekar	58th Sec. Indian Science Congress at Bangalore, January, 1971	Geological evaluation of Cambay Basin and its relation position in the Sindhu Ganga Geosyncline.
(3)	N. M. Vashi	58th Sec. Indian Science Congress at Bangalore, January, 1971	Some structural and metamorphic aspects of the area around Sinwalbari District—Almora—Nainital (U.P.).
(4)	S. J. Desai and S. S. Merh	58th Sec. Indian Science Congress at Bangalore, January, 1971	A Chemical study of the rocks of Magkhali area, District Almora.
(5)	A. K. Mattoo	2nd International Convention of Biochemists of India, Baroda, 14-17 Sept., 1970	Biochemistry of ripening of mangoes.
(6)	J. L. Raina	2nd International Convention of Biochemists of India, Baroda, 14-17 Sept., 1970	Studies on genetic transformation in <i>Rhizobium</i> .
(7)	K. K. Rao	Symposium on "Microbial Spoilage of foods", Mysore, 19-21, October, 1970	Increased utilisation of ammonium ions in biotin deficient <i>A. nidulans</i> .
(8)	A. K. Mattoo	Symposium on "Microbial Spoilage of foods", Mysore, 1921, October, 1970	Microbial spoilage of mangoes.
(9)	S. W. Dharmadhikari	Advanced Seminar on the Theory of Probability and Statistics, Dharwar	Functions of Finite

## (d) Talks given at important meetings:

1	2	3
(1) Prof. S. M. Sethna	(i) Three lectures at the Saurashtra University, Bhavnagar.	(ii) One lecture at the St. X'avier College, Gujarat University, Ahmedabad.
	(iii) One lecture at the Allahabad University, Allahabad.	(iv) One lecture at the Sardar Patel University, Vallabh Vidyanagar.
(2) Dr. V. M. Shah	One lecture at the Mathematics Seminar at Bhavnagar in October, 1970.	
(3) Prof. V. V. Modi	(i) Two lectures on 'Genetics in Soil Microbiology' at the Summer School held at the University of Agricultural Science, Bangalore in June, 1970.	(ii) Six lectures on 'Advances in Microbiology and its impact on the growth of biological sciences' at the University of Mysore in February, 1971.
(4) Dr. S. W. Dharmadhikari	One lecture on 'Some Interesting Problems in Probability' to the members of the Mathematical Association at Baroda in January, 1971.	
(5) Dr. M. H. Vasavda, Shri S. R. Agrawal, Shri V. D. Pathak and Kum. P. P. Parikh	Symposium on 'Cardinality of Sets' at the 7th Annual Conference of the Gujarat Ganit Mandal at Surat in November, 1970.	

## (e) Research work done by teachers:

## (i) Research work completed:

Name of the Department and Teacher	Subject of Research
(1) Shri V. M. Shah, Reader in Mathematics	Convergence and summability problems of lacunary Fourier series.

## (ii) Research work in progress:

Sr.No.	Name of the Teacher	Research work
1	2	3
(1)	Professor C. V. Ramkrishnan	(i) Studies on the use of Gamma rays for purification of sewage. (ii) Studies on high protein in biscuits.
(2)	Dr. (Smt.) R. Rajalakshmi	(i) Studies on Nutrition and Brain Function. (ii) 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> .
(5)	Dr. K. K. Sakariah	Studies on fruit tissues of <i>Citrus acids</i> .
(6)	Dr. Suresh S. Sail	Studies on Human Nutrition.
(7)	Shri R. P. Bhatt	Studies on the flora and vegetation of Khedbrahma Region in North Gujarat with a note on the chromosome number and Karyotypes of some taxa therein.
(8)	Shri S. N. Padate	Flora of Savli Taluka.
(9)	Shri G. Prathapasanen	Effect of $GA_3$ on growth of Cotton.
(10)	Kum. D. Kamalavalli	Role of Cyanide on germination of sorghum.
(11)	Dr. A. R. Mehta	(i) Changes in Nucleic acids and Phosphorus fractions associated with growth of tissues in sterile culture. (ii) Initiation of tissues from free cell of higher plants.
(12)	Dr. V. M. Shah	Fourier Analysis.
(13)	Dr. O. P. Goyal	Fourier Analysis
(14)	Dr. C. M. Patel	Convergence and summability of orthogonal series.
(15)	Dr. S. H. Desai	Theoretical work on calculation for the lower Bound of the electron in the dipole field having finite dipole moment by partitioning technique.

1	2	3
(16)	Dr. N. S. Pandya, Dr. V. P. Bhatt and Dr. J. R. Pandya	Work-optical study of mineral and single crystal of metals. Techniques of growing single crystals.
(17)	Dr. M. M. Patel and Dr. A. B. Darji	Study of spectra of diatomic molecules.

## 6. Activities of Special Centres/Units in the Faculty

## (1) Statistical Service Unit:

The Statistical Service Unit extended help in the form of Statistical advice to several post-graduate students and research workers of various departments of the University. It also undertook data processing work of other research departments of the University. It conducted a Punch Operators' Training Course of six weeks' duration.

## (2) Demographic Research Centre:

Professor (Shrimati) Indira V. Bhanot, Head, Department of Statistics, in her capacity as Hon. Director of the Centre, initiated and guided the research work of the Centre in the fields of (i) Fertility, (ii) Evaluation and Family Planning Projects and (iii) Birth and Death rates.

An All India Seminar on Family Planning was organised on 4th and 5th January, 1971. About 20 papers in different fields of research in Demography were presented.

## 7. Faculty Students' Association

(1) A three act Gujarati play "પ્રાણી જીવ" was staged by the students on 19th and 25th September, 1970. Collections of the play and further contributions from the students amounting to Rs. 2,419/- were donated to the Chief Minister's Flood Relief Fund. A programme of blood donation was organised on 30th November, 1970 and 50 students and staff donated the blood.

(2) Shri V. C. Kotak of T.Y.B.Sc. Class was selected as best cadet of Air Wing N.C.C. to represent India at the Civil Air Patrol Scheme at U.S.A. in July/August, 1970.

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

The museums in the Botany, Geography, Geology and Zoology Departments were enriched by addition of specimens and other articles. Considerable progress has been made in the work of preparing a herbarium in the Botany Department.

Addition of scientific apparatus and equipment were made during the year to the laboratories of the Faculty are shown in the following table:

Laboratory	Cost of equip- ment as on 1-4-1970 Rs.	Cost of equip- ment written off during the year Rs.	Cost of equip- ment etc. added during the year Rs.	Cost of equip- ment as on 31-3-1971 Rs.
1	2	3	4	5
Biochemistry	5,71,312-85	—	75,256-12	6,46,568-97
Botany	4,42,200-56	—	11,880-00	4,54,080-56
Chemistry	6,42,743-94	—	12,399-38	6,55,143-32
Geography	2,26,839-24	—	11,264-63	2,30,103-87
Geology	5,41,390-25	—	4,993-00	5,46,383-25
Microbiology	2,34,300-00	—	1,25,100-00	3,59,400-00
Physics	7,39,284-69	—	13,998-31	7,53,283-00
Workshop	67,829-57	—	—	67,829-57
Statistics	1,27,242-00	—	4,718-13	1,31,960-13
Zoology	3,99,860-16	—	29,537-10	4,29,397-26
Total	39,93,003-26	—	2,89,146-67	42,82,149-93

#### 9. Faculty Publications

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

#### 10. Distinguished Visitors during the year

Name	Date of Visit
(1) Mr. Jhonson, Chairman, O.N.G.C.	29-6-1970
(2) Prof. M. S. Sadashivaiah, Professor and Head of Geology Department, Karnatak University, Dharwar.	5-12-1970
(3) Mr. Steward Cameron, University of Otago, New Zealand.	5-2-1971

#### 11. Important Events

(1) The unveiling ceremony of the portrait of Dr. C. S. Patel, Ex-Vice-Chancellor (done by Shri S. M. Waghela of the Zoology Department) was performed by Shri N. K. Vakil, Vice-Chancellor on 26th February, 1971.

(2) A Conference of teachers and research workers of the Gujarat Branch of Physical Society was held in October, 1970.

(3) The Second International Convention of Biochemists was held in Baroda during 14th to 18th September, 1970 under the auspices of the Society of Biological Chemists of India. All the staff members and students of the department actively participated in the convention.

(4) A Summer Institute in Mathematics for Secondary School Teachers was organised in the Mathematics Department from 27th April, 1970 to 6th June, 1970; the Institute was sponsored by the U.G.C., N.C.E.R.T., N.C.S.E. and U.S.A.I.D.

## CHAPTER X (A)—FACULTY OF EDUCATION AND PSYCHOLOGY

### 1. New Experiments

A Seven-day Orientation Course in Population Education was organised for the B.Ed. students of the year 1970-71.

### 2. 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 Diplomas | (1) Educational Administration.           |  |
|                              | (2) Guidance and Counselling.             |  |
| (iv) Under-graduate Diplomas | (1) Education.                            |  |
|                              | (2) Early Childhood Education.            |  |

### 3. Number of Students

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

		Men	Women	Total
(a) Under-graduate Diplomas:				
(i) Diploma in Education		10	30	40
(ii) Diploma in Early Childhood Education		—	19	19
(b) Degrees:				
(i) B.Ed.	Total	10	49	59
(ii) S.Y.B.A. (Psy.)		77	82	159
(iii) T.Y.B.A. (Psy.)		10	54	64
		5	47	52
(c) Post-graduate Degrees:				
(i) Jr. M.Ed. (by Papers and Dissertation)	Total	92	183	275
(ii) Sr. M.Ed.		22	5	27
(iii) M.Ed. (Full-time)		29	3	32
(iv) Jr. M.A. (Psy.)		12	11	23
(v) Sr. M.A. (Psy.)		4	9	13
		3	6	9
(d) Ph.D.				
	Total	70	34	104
		5	2	7
Grand Total		177	268	445

### 4. Staff

During the year, the staff of the Faculty consisted of 4 Professors, 4 Readers, 16 Lecturers, 6 Assistant Lecturers, 3 Senior Research Fellows, 11 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 Faculty had also a Unit on Population Education with one Programme Director and two Senior Research Fellows.

The following new appointments were made during the year:

- |                              |   |
|------------------------------|---|
| (1) Professor M. A. Quraishi | Professor of Education.                 |
| (2) Kum. S. S. Pandit        | Lecturer in Educational Administration. |
| (3) Shri R. K. Parlikar      | Lecturer in Psychology.                 |

### 5. Professional Growth of the Staff

(A) *Publication of books, monographs, etc.:*

Author	Title	Where published
1	2	3
(1) Prof. D. M. Desai	(i) Some Critical Issues of Higher Education in India	A. R. Sheth & Co., Ahmedabad, 1971.
	(ii) New Direction in the Education of the Indian Teacher	M. S. University of Baroda, 1971.
(2) Prof. M. B. Buch and Mr. M. R. Santhanam	Review of Research in Educational Psychology	I.C.S.S.R., New Delhi.
(3) Prof. M. B. Buch and R. S. Trivedi	Reading in Inspection and Supervision	S. P. University, 1971.
(4) Dr. B. P. Lulla	Know about Population Education	P.E.C., 1970.
(5) Dr. G. B. Shah (and Shri O. S. Dewal)	Handbook of Programmed Learning	Indian Association of Programmed Learning, 1971.

(B) *Publication of articles or papers:*

- |                       |   |   |
|-----------------------|---|---|
| (1) Prof. D. M. Desai | (i) Essay type tests Vs. Objective Test in Gujarat S. S. C. Examination Board | Decennial Commemoration Volume. December, 1970. |
|-----------------------|---|---|

1	2	3	4
		(ii) Optional Questions at the S. S. C. Boards' Examinations	"Naya Shikshak" Bikaner, Rajasthan, March, 1971.
		(iii) Professional Growth of University Teachers	Rajasthan University and College Teachers' Association, March, 1971.
(2) Prof. M. B. Buch and M. R. Santhanam	Introducing some Literature on Class-rooms Interaction Analysis	Education and Psychology Review, Baroda, No. 4, October, 1970.	
(3) Prof. M. B. Buch	Achievement Motivation	Nootan Shikshan.	
(4) Dr. B. P. Lulla	(i) Vital Need to Evolve Population Education Programme	University News, New Delhi, Vol. IX, No. 3, March, 1971.	
	(ii) Population Education and School Curriculum	N.I.E. Journal, Delhi, January, 1971.	
(5) Dr. B. P. Lulla and B. J. Williams	Developing Instructional Aids for Population Education in Secondary School	Social Studies Teacher, Vol. II, No. 2, June, 1970.	
(6) Dr. G. B. Shah	(i) Using Programmed Learning for Remedial Teaching in a Rural Area	Quest in Education Bombay, Vol. VII, No. 4, October, 1970.	
	(ii) Programmed Learning and the Classroom Teacher	Teaching, Bombay, Vol. XI, III, No. 2, December, 1970.	
	(iii) 'Micro-teaching' (A series of 4 articles)	Nootan Shikshan, August, September, October, December, 1970.	
(7) Dr. S. M. Divekar	(i) Teacher Education in India.—Its past and future	The Education Quarterly, Ministry of Education.	
	(ii) Swami Vivekananda—A great Universal Teacher	'Jan-Shikshan (Hindi)' Udaipur, Vol. 1-2, Year 36th January-February, 1971.	

## (C) Papers presented at Conferences etc.:

1	2	3	4
(1) Prof. M. B. Buch	(i) Organisation of Educational Surveys	Regional Seminar on Educational Statistics—Asian Institute of Educational Administration, New Delhi.	
	(ii) A fresh look at teacher education	Symposium to celebrate the International Educational Year, Ahmedabad.	
(2) Prof. M. A. Quraishi	Higher Education in India	Teachers' College, Udaipur.	
(3) Dr. B. P. Lulla	(i) Teacher Education in Population Education	Population Education for Elementary Teachers, Gwalior.	
	(ii) Needed Educational Research for Effective F.P. Programme in India	All India Seminar on Family Planning, Baroda.	
	(iii) Operational Implications for promoting population education	Operational Implications of Population in Secondary Schools, Baroda.	
(4) Dr. G. B. Shah	(i) Continuing Education Programmes in the M. S. University of Baroda	The Conference on Continuing Education and Universities in Asian and South Pacific Region, Madras.	
	(ii) Mass Media in Education	National Seminar on Mass Media in Education, N.C.E.R.T., Delhi.	
	(iii) Micro-teaching for improving Teacher Behaviour	National Seminar on Teacher Behaviour, C.A.S.E., Baroda.	
(5) Dr. I. D. Bhatt	Adolescents Orientations Towards Adult Culture	All India Seminar on Problems of Adolescence, N.I.E., Delhi.	

## (D) Participation in Inservice Programme as a Resource Personnel:

Staff Member	Name of the Seminar/Workshop	Place
1	2	3
(1) Prof. M. B. Buch	(i) Regional Seminar on Educational Statistics on the auspices of UNESCO	New Delhi.
	(ii) A Symposium to celebrate the International Educational Year	Ahmedabad.
	(iii) Summer Institute on Learning Motivation and Group Processes	Baroda.
	(iv) All India Seminar of South East Asian Countries, organised by UNESCO at the Asian Institute of Educational Administration and Planning	New Delhi.
	(v) Seminar on 'Teaching Methods for University Teachers' organised by Department of Chemical Technology, University of Bombay	Bombay.
	(vi) Summer School on the Supervising Role of the School Principals	Baroda.
	(vii) Regional Seminar on Teacher Education	Vallabh-Vidyanagar.
(2) Prof. M. A. Quraishi	Seminar on University Education	Delhi.
(3) Dr. B. P. Lulla	(i) Population Education for School Teachers' Occupation	Gwalior.
	(ii) Operational Implication	Baroda.
(4) Dr. G. B. Shah	(i) Courses on Programmed Learning for Industries	Baroda.
	(ii) Course on Experimental Projects for coordinating of Extension Services Department	N.C.E.R.T., Delhi.
	(iii) Seminar on Inspection and Supervision	Baroda.
	(iv) Sequential course on programmed learning	Mysore.

## (E) Research:

Name of the Teacher	Subject of Research
1	2
( Completed )	
(1) Prof. M. B. Buch	( i ) Review of Research in Psychology. ( ii ) A Study of the Internal Assessment in Pre-University Science Classes. ( iii ) Classroom Influence of Social Studies Teachers. ( iv ) The Relative effects of English and Science on Classroom Communication. ( v ) Teacher Behaviour and Pupil's Achievement. ( Under way ) ( i ) Studies in Diffusion of Innovations. ( ii ) Patterns of Teacher Behaviour in India. ( iii ) Evaluation of Science and Mathematics text-books of class V in Gujarat State. ( iv ) The Vocabulary used in the text-book of Class V in Gujarati language.
(2) Dr. B. P. Lulla and B. J. Williams	Scope for Operational Programme in Population Education at School level.
(3) Dr. B. P. Lulla and Smt. P. B. Dekhtawala	Developing Instructional Aids for Population Education in Secondary Schools.
(4) Dr. B. P. Lulla	Population Education and School Curriculum.
(5) Dr. G. B. Shah	Standardization of Science Aptitude Test.

## 6. Centre of Advanced Study in Education

## Research Activities:

The research projects initiated during the year 1970-71 fall under major areas as follows:

- (A) Teaching and Teacher Behaviour.
- (B) Educational Technology—Programmed Instruction.
- (C) Educational Change Process.
- (A) Teaching and Teacher Behaviour:

The major aim of the Centre is to investigate those aspects of teaching and teacher behaviour which may provide adequate guidance on which to build theories of teaching. With this end in view a series of inter-connected research

projects have been initiated during the course of last two years. These projects are:

- (i) A study of the patterns of teacher classroom behaviour in Indian Schools.
- (ii) Inquiry into the variables affecting teacher behaviour.
- (iii) Teacher Behaviour and Pupils' Achievement.
- (iv) Teacher Behaviour and Pupils' Attitudes.
- (v) Modifying teacher behaviour through feedback from different sources.

The projects in the area of teacher education have been modified and two studies are going on at present. They are:

- (i) Evaluation of teacher education programmes in some of the universities.
- (ii) Improving student teaching programme using interaction analysis approach.

(B) *Educational Technology and Programmed Learning:*

- (i) Effectiveness of Four Response Modes in Programmed Learning—An Exploration.
- (ii) An investigation into the Relative Effectiveness of different types of Programmed Learning Material.
- (iii) To develop Programmed Learning Material and study Pupils' Achievement on Programmed Learning Material in Relation to Some Personality Variables.
- (iv) An investigation into the Effectiveness of Programmed Material in English for Developing Reading Ability.

(C) *Educational Change Process:*

The process of adoption of innovation by principals and teachers in secondary schools is being studied through the following four projects:

- (i) Factors affecting adaptability of schools.
- (ii) Factors affecting adoption of innovations by teachers.
- (iii) An inquiry into the educational innovations in Rajasthan.
- (iv) Characteristics of innovative schools.

*Publications—1970-71:*

Author	Title	Where published
1	2	3
1	2	3
(1) Quraishi M. A.	Some Aspects of Muslim Education	CASE
(2) Lulla B. P.	Problems of Curriculum Administration and Text-book Selection in India	CASE.

1	2	3	4
(3) Buch M. B. and Santhanam M. R.	Communication in classroom		CASE.
(4) Shah G. B. and Deval O. S.	Technology knocks at the door of Education		CASE.
(5) Buch M. B.	MSU in Seventies (Mimeographed)		CASE.
(6) Buch M. B. and Quraishi Z. M.	Classroom Influence of Social Studies Teachers	Education and Psychology Review Vol. 10 (4), October, 1970.	
(7) Buch M. B. and Santhanam M. R.	(i) The Relative Effects of English and Science on the classroom Communication Phenomena (ii) Sex as a variable in Teacher Behaviour	Education and Psychology Review Vol. 10 (4), October, 1970.	Indian Educational Review, Vol. 6 (2), July, 1970.
(8) Buch M. B. and Sharma S.	A Survey of Pre-primary Education in various States of India	All India Conference for Pre-primary Education, December, 1970.	
(9) Shah G. B.	Effectiveness of Four Response Modes in Programmed Learning—An Exploration	Indian Educational Review, Vol. 6 (1), January, 1971.	
(10) Shah G. B. and Krishnamurthy V.	Programmed Learning vis-a-vis Traditional Teaching—A Study	NIE Journal Vol. 5 (1), September, 1970.	
(11) Sharma M. L.	Organizational Climate—An overview	Indian Educational Review, Vol. 6 (2), July, 1971.	
(12) Shah G. B.	Mass Media for Education	The Rajasthan Board, Journal of Education, Vol. VII (1), January, March, 1971.	
(13) Krishnamurthy, V.	Styles in Programming—An Article	Handbook of Programmed Learning, IAPL, 1971.	
(14) Kapadia G. G.	Task Analysis and specification of behaviour	Handbook of Programmed Learning, IAPL, 1971.	

1	2	3	4
(15)	Sharma M. L.	Organisational Climate and its Measurement. Paper presented in Summer Institute on Research Methodology in Education, June, 1971. (Mimeographed)	Handbook of Programmed Learning, IAPL, 1971.

#### 7. Centre for Research and Training in Secondary Education for Rural Areas and Population Education Project

##### (1) C. R. T. S. E.

This programme of leadership training for teachers of rural schools was started in July, 1968. Uptil now, 57 students—46 full time and 11 part-time have been trained and have passed the examination. The emphasis in the programme continued to be placed on the practical training.

Dr. Thomas Poffenberger, Mr. Donald Myers and Mr. Homer Hogle visited the Rural Centre. The latter two also measured the impact of training on students, rural school staff and community.

##### (2) Population Education Centre (P. E. C.)

Population Education Project started with its planning phase from June 1970.

- (a) Visits to Some Selected Rural Schools.
- (b) Visits to Institutions engaged in Population programmes at Lucknow, Delhi, Bombay and in Baroda.
- (c) Dissertation Programme of M. Ed. (Rural) Students:
- (d) Articles, Papers and Publications.

Population Education Library has been developed. Apart from books, magazines etc. from outside, the library also contains different studies and articles both published and unpublished prepared by Population Education Centre Staff.

##### (e) Orientation Course:

A seven-day Orientation Course was conducted during 15th to 22nd March, 1971. 30 Participants received certificates on successful completion of the prescribed course.

#### 8. Foreign Students and Inservice Teacher Education Service:

##### (1) Services to Foreign Students:

Number of foreign students at this University is constantly on an increase. The number is now nearing 150. Students come from different coun-

tries like Nepal, Ceylon, Thailand, Afghanistan, Iran, Britain, Japan, U.S.A., and other African countries. About two-thirds of them are on their own, while the remaining are under various scholarships.

To help them in their overall adjustment, the Foreign Students' Adviser receives them on arrival and arranges individual as well as group orientation programmes, social evenings, short outings, visits to homes, etc. Occasionally, the Adviser visits the students at their residence and helps them individually whenever necessary. With the cooperation of university administrators, Indian Council for Cultural Relations, New Delhi and other agencies, increased efforts are being made to help the students in making their stay here comfortable and rewarding.

##### (2) The Department of Extension Services:

The Department continued to cater to the needs of more than 350 schools of Baroda, Panchmahal, Surat and Bulsar Districts.

##### (i) Summer School of Education:

A seven day Summer School of Education on "Administration and Supervision in Schools with Special Emphasis on the New Emerging Role of the School Principals" was organised at Baroda from 24th to 30th May, 1970. 45 Principals and Supervisors from all over Gujarat attended.

##### (ii) Workshops and Seminars:

	Date/s	Place	Topic	Number of participants
1	2	3	4	
(a)	23-9-1970	Baroda	Seminar on 'Experimental Project'	8
(b)	13-10-1970 to 15-10-1970	Baroda	Seminar on 'Supervision and Lesson Planning'	18
(c)	22-1-1971	Baroda	Workshop on 'Preparation of designs for the new projects'	45
(d)	29-1-1971 and 30-1-1971	Baroda	Seminar on 'Vocational guidance for secondary school teachers and headmasters'	35
(e)	8-2-1971	Baroda	Seminar on 'Revitalizing the Science Club'	16
(f)	18-2-1971 and 19-2-1971	Baroda	Seminar on 'Programmed Learning and Achievement Motivation'	36

1	2	3	4
(g)	26-2-1971 to 27-2-1971	Baroda Seminar on 'Syllabus and Content of Text-books ( Gujarati Language )'	41
(h)	8-3-1971 to 10-3-1971	Bajuvu Seminar on 'How to prepare better question papers, blue prints, designs, etc.'	31
(i)	13-3-1971 and 14-3-1971	Baroda Seminar on 'Population Education'	37

(iii) *Experimental Projects:*

18 Experimental Project designs were prepared under the guidance of this department and were submitted to NCERT for financial help. Six schools completed their projects of the last year.

(iv) *Seminar Reading Programme:*

Out of the ten papers sent to the Department of Education, Ahmedabad four are selected for National Competition. One teacher from this jurisdiction, Shri J. S. Chokshi received the National Award for Seminar Reading Programme.

(v) *Preparing Units on Programmed Learning:*

The department has received an incentive grant of Rs. 3,000 to prepare five units of Programmed Learning. All these five units were prepared and tried out in the local schools of Baroda. The department also published a booklet on 'Study Circles' for secondary schools. A booklet on 'Practical work in Science' was also published.

## 9. CASE Library

For the benefit of the master's and doctoral students in Education, a separate post-graduate library is maintained in the CASE building. On an average about 60 students and members of the staff visit the library every day. The number of volumes in this library increased from 7200 to 8200 approximately. It has utilised Rs. 27,792-35 of the non-recurring grant and Rs. 7,381-62 of the recurring grant during the year. The library continued to subscribe to 31 foreign journals of high educational standards. Thirteen Indian journals in education are also subscribed to.

## 10. Publications

The Faculty continued to publish the following journals:

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

## 11. Distinguished Visitors

- (1) Mr. Harold Howe } Ford Foundation Experts
- (2) Dr. John Cool }
- (3) Mr. Patterson }
- (4) Dr. L. Kinton West  
U.S. Office of Education,  
Washington, D.C.
- (5) Dr. A. B. L. Srivastava,  
Indian Institute of Educational Administration and Planning,  
New Delhi.
- (6) Professor N. V. Tirth,  
Head, Department of Education, Bangalore University,  
Bangalore.
- (7) Mr. C. D. Roberts,  
H. M. Inspector of Schools,  
U.K.
- (8) Miss M. K. Hargreaves,  
Teacher in charge of Immigrant Children Nursery and Infant Educa-  
tion, U.K.
- (9) Miss E. M. Brittan,  
Research Worker, Educational Arrangements for Schools with  
Immigrant Pupils, London, U.K.
- (10) Mr. M. R. Teebey,  
Liasion Officer, School Council Project, Institute of Education,  
Leeds, U.K.
- (11) Mr. J. A. Cromack,  
West Riding Counting Supply Staff, Teacher of Physical Education  
and English, London, U.K.
- (12) Mr. D. J. Figures,  
Inspector of Schools, Leeds, U.K.
- (13) Mr. H. K. Jones,  
Lecturer, Bingley College of Education and Sociology,
- (14) Mrs. M. Mashedar,  
Lecturer in Education, London, N.W.

## CHAPTER X (B)—UNIVERSITY EXPERIMENTAL SCHOOL

### 1. Courses of Study

The school continued 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.

Learning by doing and channelising inner abilities and aptitudes of the children have been the guidelines of education imparted at the school.

The salient features of the school are its activities like Hobby, Art Craft and Gardening. The school provides crafts like "Paper Work" to the pupils of Std. III and IV, Wood Work and Needle Work to the pupils of Std. V, VI and VII and Gardening to the pupils of Std. VIII. The pupils of Std. IX and X have any one of the option in Science, Wood Work, Art, Best from Waste, Cooking, Music and Bengali Language.

### 2. Number of students

Class	Boys	Girls	Total
(1) Primary: I to VII	164	136	300
(2) Secondary: VIII to XI	102	84	186
	266	220	486

### 3. Staff

	Graduate Trained Teachers	Under- graduate Trained Teachers	Others	Total
(1) Primary Section	2	2	1	5
(2) Secondary Section	7	—	—	7
(3) Specialised Teachers	—	3	2	5
(4) Office Staff	—	—	4	4
(5) Class IV employees	—	—	7	7
	9	5	14	28

### 4. Professional Growth of the Staff

(1) Shri M. M. Chokshi, Kum. Induben Chokshi and Smt. Bhaktiben Pandya attended the Seminar on 'Planning the Text Books in Gujarati for Standards VIII, IX and X' organised by the Extension Department of the Faculty of Education and Psychology.

(2) Sarvashri M. M. Amin and S. R. Patel were deputed to attend the Teacher-Student Conference held at Baroda by the Central Education Department.

(3) Shri Mahesh M. Amin attended the Gujarat State Science Fair at Dohad.

### 5. Library

244 books costing Rs. 496-50 were added to the School Library this year.

### 6. School Laboratory

Item	Cost as on 31-3-1970	Written off during the year	Additions during the year	Cost as on 31-3-1970
	Rs.	Rs.	Rs.	Rs.
Equipment	14,105-75	511-75	357-58	13,953-58

### 7. Results of Examinations and Awards

#### (A) Examinations:

	Number appeared	Number passed	Remarks
(1) S.S.C. Examination	49	38	77.5%
(2) Elementary Drawing Grade Examination	5	4	80.0%
(3) Intermediate Drawing Grade Examination	18	11	61.0%
(4) Shista Vachan Examination	84	72	85.7%
(5) Asvad Examination	47	47	100.0%
(6) Sanskar Examination	3	1	33.0%
(7) Various Sanskrit Examinations	47	47	100.0%
(8) Various Hindi Examinations	164	147	89.6%

#### (B) Awards:

(1) Chi. Kandarpa Shah and Chi. Khorshed Sabawala of Standard IX secured prizes at the Shista Vachan examination.

(2) Chi. Kalyan Sandesara of Standard X stood first at the Asvad examination in the whole of Gujarat.

(3) Chi. Uma T. Patel of Standard VII won the first prize of Rs. 50/- at the 11th Gujarat State Art Exhibition.

(4) Chi. Mamta Desai of Standard X won Shri Mohanlal Dhobiwala Shield for Swimming.

(5) Chi. Nandini Salvi received a prize in Shanker's International Competition of Children Painting.

### 8. Other Activities

- (1) The students of Standard VII participated in the programme of hiking at Saputara.
- (2) The students staged two plays—'Alakh Bavo' and 'Kallu Ballu'.
- (3) The children's project 'Charitra Granthavali' was published and was distributed to the students of the school.

## CHAPTER XI—FACULTY OF COMMERCE

### 1. New Experiments

A separate department to be named the Department of Business Economics was created this year under the Faculty of Commerce with the responsibility of taking over all the teaching work on Economics done in the Faculty of Commerce, Faculty of Technology and Engineering, Polytechnic and in the Commerce College at Padra.

### 2. 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 Diplomas: (i) Co-operation, (ii) Banking.
- (5) Under-graduate Diploma: Co-operation.

### 3. Number of Students

The classwise distribution of students during the year 1970-71 was as under:

	Class	Men	Women	Total
(1)	Diploma in Co-operation ( Under-graduate )	21	5	26*
(2)	F.Y.B.Com.	800	184	984
(3)	S.Y.B.Com.	518	88	606

Class	Men	Women	Total
(4) T.Y.B.Com.	497	112	609
(5) Junior M.Com.	40	6	46
(6) Senior M.Com.	25	3	28
(7) Post-graduate Diploma in Banking	33	10	43
(8) Post-graduate Diploma in Co-operation	10	3	13
Total	1944	411	2355

\* 14 Men students and 1 woman student of the Under-graduate Diploma in Co-operation were permitted to join the S.Y.B.Com. Course.

#### 4. Staff

The staff of the Faculty consisted of one Professor, 7 Readers, 14 Lecturers, 4 Part-time Professors, 7 Class III and 12 Class IV employees, as on 31st March, 1971. The Departments of English, Law, Mathematics, Statistics made arrangements for teaching of the subjects of English, Mercantile Law, Mathematics, Statistics. Some members of the staff of this Faculty gave lectures in the Faculty of Technology and Engineering and the Faculty of Law.

##### (a) New Appointments:

Name	Designation
(1) Dr. K. N. Naik	Professor of Co-operation
(2) Shri R. D. Pandya	Professor of Banking
(3) Dr. K. R. Shah	Reader in Economics
(4) Shri J. K. Shah	Lecturer in Economics

Appointments were made on posts of one Assistant Lecturer in Accountancy and one Assistant Lecturer in Business Economics.

##### (b) Teachers who left the University:

Name	Designation
(1) Professor R. D. Pandya	Professor of Banking.

#### 5. Professional Growth of the Staff

##### (a) Published Articles:

Name of the staff members	Title	Name of the Journal wherein published with month of publication
Shri C. S. Rathod	(i) A model of Bloom	Co-operative Information Bulletin, published by the Vaikunth Mehta National Institute of Co-operative Management, Poona, April, 1970.
	(ii) Consumers' Co-operative Stores in Universities of India	Madras Journal of Co-operation August, 1970.

#### 6. Library

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

#### 7. Co-curricular Activities

Besides the Faculty Students' Association, the students of the Faculty organised the (1) Economic Students' Association, (2) Banking Students' Association, (3) Accountancy Students' Association, and (4) Business Management Students' Association. The Associations arranged talks, debates and essay competitions.

#### 8. Other Important Events

On October 8, 1970, 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 "In the opinion of this House Co-operative Movement alone can check the growth of concentration of economic power in India". The Faculty team was declared best and was awarded the scroll.

## 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 Clinical Pathology.
D.G.O.	Diploma in Obstetrics and Gynaecology.
D.L. & O.	Diploma in Laryngology and Otology.
D.M.R.	Diploma in Medical Radiology and Electrolgy.
D.O.	Diploma in Ophthalmology.
D.C.H.	Diploma in Child Health
D.V. & D.	Diploma in Venereal Diseases.
T.D.D.	Diploma in Tuberculosis Diseases.

## (b) New Courses:

M. S. in Ophthalmology was started during the year.

## 2. Number of Students

## (1) Degree:

M.B.B.S.	Men	Women	Total
1st year			119
2nd year	103	16	146
3rd year	131	15	104
4th year	95	9	123
5th year	99	24	158
	129	29	
Total	557	93	650

## (2) Post-graduate Diplomas:

D.A.	—	2	2
D.C.P.	3	1	4
D.G.O.	2	8	10
D.L. & O.	—	—	—
D.M.R.E.	—	—	—
D.O.	2	1	3
D.C.H. (D. Ped.)	5	—	5
T.D.D.	2	—	2
D.V.D.	6	—	6
Total	20	12	32

## (3) Post-graduate Degrees:

M.D.	21	11	32
M.S.	13	1	14
M.Sc.	13	2	15
Ph.D.	3	—	3
Total	50	14	64
Grand Total	627	119	746

## 3. Staff

## (a) Present Position:

The staff of the College consisted of a Dean, 19 Professors, One Associate Professor, 31 Assistant Professors, 40 Junior Lecturers, 10 Other Gazetted Officers, 4 Part-time Assistant Professors, 4 Part-time Junior Lecturers, 98 Class III and 80 Class IV employees. In addition there were 27 Honorary Professors and Assistant Professors from the City who participated in the teaching programme of the College.

## (b) New appointments:

## Professors:

Dr. J. D. Pathak (Physiology) and Dr. P. B. Roy (Pathology).

## Assistant Professors:

Dr. A. R. Pradhan (Bacteriology), Dr. V. C. Joshi (Surgery).

## Junior Lecturers:

Dr. (Smt.) K. V. Bondre (Anatomy), Dr. (Smt.) Geeta Hathi (Physiology), Dr. (Smt.) U. R. Vasa (Pathology), Dr. D. J. Shah (Pathology) and Dr. (Smt.) N. B. Kikani (Pathology).

## (c) Teachers who left:

Professors:

Dr. S. D. Nisith (Physiology).

Assistant Professors:

Dr. H. M. Parikh (Pharmacology), Dr. N. R. Mehta (Preventive and Social Medicine), Dr. (Kum.) R. R. Dixit (Pathology), Dr. R. M. Golwala (Surgery), Dr. U. N. Betkerur (Paediatrics) and Dr. S. K. Narang (Ophthalmology).

Junior Lecturers:

Dr. (Smt.) S. Jaykar (Pharmacology), Dr. (Kum.) L. K. Kothawala (Pathology), Dr. V. T. Sanchalu (Preventive and Social Medicine), Dr. S. M. Trivedi (Anaesthesia), Dr. (Smt.) K. R. Desai (Anaesthesia), Dr. (Smt.) A. R. Golwala (Anaesthesia) and Dr. K. C. Nasa (Dentistry).

## 4. Professional Growth of the Staff

## (a) Publications:

Authors	Title	Journal
1	2	3
<i>Anatomy Department</i>		
Dr. H. C. Srivastava	(i) Extroversion of Cleaca with multiple anomalies	Journal of Anatomy Society of India, Vol. XVIII, No. 2, pp. 58-61.
	(ii) Insertions of Piri formis Obturator internus and gluteus medius muscles on femur	Journal of Anatomy Society of India, Vol. XVIII, No. J., pp. 91-93.
<i>Physiology Department</i>		
Dr. J. P. Saxena, Dr. Somasundaram K., Dr. P. B. Shah, Dr. N. C. Sebastian and Dr. R. M. Bhatt	A study of electrolyte changes in Plasma during hypothermia	Indian Journal of Physiology and Pharmacology, July, 1970.
Dr. P. Gopinath, Dr. P. B. Shah, Dr. S. B. Tillu, Dr. S. D. Nisith and Dr. C. P. Shah	Circulatory and Respiratory adjustment during severe chronic anaemia	Indian Journal of Medical Research, March, 1971.

1	2	3
Dr. J. N. Patel and Dr. K. J. Patel	Urethral obstruction in females	Medical Bulletin, Gujarat State, Medical Association, May, 1970.
Dr. U. N. Betkerur, Dr. V. N. Chhaga and Dr. S. N. Shah	Myotonic Syndrome	Indian Pediatrics, November, 1970.
<i>Pharmacology Department</i>		
Dr. L. V. Kelkar, Dr. V. V. Kelkar, Dr. T. V. Patel and Dr. O. D. Gulati	Serum Histamines in Pregnancy	J. Obstet. Gynace. Ind., 20, 14-22, 1970.
Dr. I. K. Parikh, Dr. B. T. Shah, Dr. D. G. Patel, Dr. H. M. Parikh and Dr. O. D. Gulati	Plasma free insulin like activity in normal and diabetic subjects	J. Ass. Phy. Ind., 18, 835-842, 1970.
Dr. A. R. Wakde, Dr. R. S. Kanwar and Dr. O. D. Gulati	Supersensitivity of the nictitating membrane to 5-hydroxyptamine and norepine-phrine following various procedures	J. Pharmac. Exp. Ther., 175, 189-196, 1970.
Dr. O. D. Gulati, Dr. H. M. Parikh, Dr. S. Y. Ringe and Dr. M. L. Sherlekar	Anmethlamino acids and their derivatives on isolated tissue preparations	Br. J. Pharmac., 40, 689-701, 1970.
Dr. B. T. Dave, Dr. C. P. Munshi, Dr. R. D. Bhakta, Dr. H. M. Parikh and Dr. O. D. Gulati	A Clinical trial of guanoxan alone and in combination with polythiazide in hypertension	Ind. Heart. J., April, 1970.
<i>Pathology Department</i>		
Dr. U. A. Vaidya, Dr. V. P. Vaishnav, Dr. H. K. Nayak and Dr. N. R. Mehta	Study of an out-break of Staphylococcal food poisoning	Indian Journal of Preventive and Social Medicine, Vol. I (No. 3), 129-132, 1970.

1	2	3
Dr. B. S. Verma, Dr. V. P. Vaishnav and Dr. R. P. Bhatt	A Study of Dermatomycosis	Indian Journal of Dermatology and Venereology, 36 (No. 5), 182-184, September-October, 1970.
Dr. V. P. Vaishnav, Dr. G. V. Merchant and Dr. S. F. Hussein	A Study of primary bone tumours	Indian Journal of Post-graduate Medicine, 16 (No. 4), 193-196, October, 1970.
Dr. J. S. Kirtane, Dr. B. A. Sayed and Dr. V. P. Vaishnav	Pattern of Malignancy in Baroda	British Journal of Cancer, 24, 670-672, December, 1970.
Dr. R. E. Vakil and Dr. V. P. Vaishnav	Olfactory neuroblastoma	Journal of Laryngology Otology, (No. 4), 407-410, 1971.

(b) *Presentation of Papers at Conferences, Seminars etc.:*

Name	Title of the Paper	Name of the Conference
1	2	3
Dr. N. R. Prabhakar	Effect of distension of urinary bladder on blood pressure, respiration, heart rate and electrocardiogram	XVIth Annual Conference of Physiologists and Pharmacologists of India at Bangalore.
Dr. P. Gopinath	Circulation and respiratory adjustment during severe chronic anaemia	XVth Annual Conference of Physiologists and Pharmacologists of India at Bangalore and also at the Association of Biological Chemists of India at Baroda.
Dr. T. V. Joshi	Studies of some aspect of gastric secretion, effect of phenylbutazone	Local Branch of Association of Physiologists and Pharmacologists of India.
Dr. V. P. Vaishnav	Immunological aspects of family planning	All India Convention of Teachers of Preventive and Social Medicine at Baroda.

Dr. A. K. Niyogi and Dr. R. R. Chokshi read their papers at All India Seminar on Industrial Health held at Ahmedabad on 8th to 11th November, 1970 and at a symposium on Family Planning organised by the Indian Association of Preventive and Social Medicine at Bombay on 7th July, 1970 respectively.

(c) *Research work in progress:*

Name of the Teacher	Topic
<i>Anatomy Department:</i>	
Dr. H. C. Srivastava	Mucoid Cells of Hypophysis cerebri.
Dr. P. S. Gupte	Study the developmental stages in the optic vesicle of rat from the time its early promordium is laid down to birth; study under light microscope after embedding the tissue in paraffin, sectioning and staining by special stain if needed. Also plan to apply the Golgi staining technique and silver-stating to the developing optic nerve fibres and study the fibres in detail.
Dr. S. K. Dube	(1) Connections of cervical sympathetic stain. (2) Innervation of Bones. (3) Innervation of Fibrocartilagenous discs.
Dr. D. C. Vyas	Anomalies of circle of whillis.
Dr. A. A. Sanghvi	(1) A comparative study of the histology of the gastric mucosa. (2) Cardiac and sympathetic innervation of heart.
Dr. (Smt.) K. V. Bondre	Tissue culture Fibroblast and its Morphology.
<i>Physiology Department:</i>	
Dr. J. P. Saxena and Dr. N. R. Prabhakar	Mechano receptor of the Urinary bladder affecting the cardio-respiratory reflexes.
Dr. J. P. Saxena and Dr. M. N. Shah	Mechano receptor of the stomach affecting the Blood Pressure.
Dr. J. P. Saxena, Dr. S. Srinivasan, Dr. C. P. Shah and Dr. T. V. Joshi	Iron transport in sub-clinical nutritional anamias.
Dr. J. P. Saxena, Dr. Somasundaram K. and Dr. Gopinath P.	Cardio respiratory adjustments during severe anaemia.

1	2
Dr. J. D. Pathak, Dr. Gopinath P., Dr. Somasundaram K. and Dr. T. V. Joshi	Reaction time of Human subject during various stresses.
Dr. J. P. Saxena and Dr. Mohan Rao	'EKG changes after autonomic deervation in dogs.'

*Preventive and Social Medicine Department:*

Professor A. K. Niyogi	Respiratory disease in the aged and its correlates.
Dr. D. N. Shah	Epidemiology of goetal loss.
Dr. D. B. Vyas	Epidemiology of Syphilis.
Dr. R. S. Gaekwar	In search of Byssinosis.
Dr. Y. I. Patel	A measurement of Sanitation in village houses.
Dr. A. P. Pandya	(a) Ecology of Phebotominae. (b) Feeding habits of Phebotominae. (c) Ectoparasites of Phebotominae. (d) Study of Taxonomy of Phebotominae.

### 5. Library

	Number
Average number of students making use of the Library and/or the Reading Room daily.	210
Average number of teachers making use of the Library and/or the Reading Room daily.	55
Total number of books issued to students during the year	45000
Total number of books issued to teachers during the year	4800

The details regarding the stock and expenditure on the Library are as under:

(1) Books (including back numbers of Journals) as on 1-4-1970	14623
(2) Books added during the year	881
(a) New Books	— 221
(b) Back Volumes	— 660
(3) Books written off during the year	Nil
(4) Books as on 31-3-1971	15504
(5) Journals subscribed during the year	177
(6) Amount spend on binding during the year	Rs. 1,100
(7) Total amount spent for Library and Reading Room during the year	Rs. 42,000

### 6. Museum, Laboratory, Studios, Workshops etc.

Sr. No.	Item	Cost of equip-ment as on 1-4-1970	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 31-3-1971
		Rs.	Rs.	Rs.	Rs.
1.	Museum	3,83,409	259	1,504	3,84,654
2.	Laboratory	6,34,167	7,588	12,164	6,38,743
3.	Studios	13,480	—	—	13,480
	Total	10,31,056	7,847	13,668	10,36,877

### 7. Distinguished Visitors

The following W.H.O. Professors were assigned to the Medical College during 9th January to 10th February, 1971.

(1) Dr. E. B. French	Visiting Professor of Internal Medicine
(2) Dr. W. P. Small	Visiting Professor of Surgery
(3) Dr. A. P. Kenny	Visiting Professor of Clinical Chemistry
(4) Dr. P. Robinson	Consultant on Obstetrics and Gynaecology and Pediatrics

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

### 1. Staff

The staff of the Unit consists of a Head (Honorary), one organic Chemist, two Honorary Clinicians (Medicine and Obst. and Gynaecology), two Registrars in Modern System of Medicine and two Registrars in Ayurvedic System of Medicine, one Research Assistant in Chemistry, two class III and five Class IV employees. Dr. O. D. Gulati, Professor of Pharmacology, 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.

### 3. Library

The total number of books is 2,631. Eight Ayurved 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 of Ayurvedic Pharmacological medicines is also maintained. There are about 1,000 Ayurvedic specimens, 54 herbarium frames, 7 Origin of Ayurved Photo frames, 75 specimen jars of fresh herbs preserved in solution, 16 charts and maps. About 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. Garden

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

### 6. Research

The following Ayurvedic Research projects have been undertaken by the staff of the Unit and the Medical College.

- |                               |  |
|-------------------------------|--|
| (1) 'Arjuna' in Heart Failure | —Dr. C. P. Shah,<br>Professor of Medicine.     |
| (2) 'Trifala Douche'          | —Dr. R. V. Bhatt,<br>Professor of Gynaecology. |
| (3) 'Ashok'                   | —Dr. R. V. Bhatt,<br>Professor of Gynaecology. |

## CHAPTER XIII—FACULTY OF TECHNOLOGY AND ENGINEERING

### 1. Review of Faculty Activities

(1) The first phase of the programme entitled Co-operative Course (Sandwich Course) was successfully completed in summer 1969. In the light of the encouraging results of the first phase of Co-operative training programme, it was extended to Chemical Engineering branch in summer 1970. Selected students of the Chemical Engineering branch received practical training (1st phase) at the Gujarat Refinery during summer 1970. The second phase of training of the Mechanical and Electrical Engineering students continued at M/s Jyoti Limited, Baroda (summer 1970). This training was essentially directed towards acquainting students with basic skills, techniques, processes and practices involved in manufacturing processes. Case studies and tackling of practical problems was duly emphasised.

The third phase of the training which is of about 32 weeks will be carried out in the year 1971-72. It was felt that the scheme be expanded to encompass about 10% of the graduating class, so as to make the sample of the Pilot project more representative.

It is felt that the scheme, if successfully completed, can be fruitful in making students for their future careers.

### 2. Courses of Study

The Faculty provides the following courses:

- |                            |   |
|----------------------------|---|
| (i) Master's degree        |   |
| M.E.                       | Civil, Mechanical, Electrical Engineering.  |
| M.Text. Engg.              | Textile Engineering.  |
| (ii) Post-Graduate Diploma | Refrigeration and Air-Conditioning.   |
| (iii) B.E.                 | Civil, Mechanical, Electrical, Chemical, Metallurgical and Electronics Engineering. |
| (iv) B.Text. Engg.         | Textile Engineering.  |
| (v) B.Text. Tech.          | Textile Technology.   |
| (vi) B.Arch.               | Architecture.   |
| (vii) Post-Diploma Diploma | Refrigeration and Air-Conditioning.   |
| (viii) Diplomas:           |   |
| D.T.C. and D.T.T.          | Textile Chemistry and Textile Technology.   |

### 3. Number of Students

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

	Men Students	Women Students	Total Number
(a) <i>Diplomas:</i>			
Textile Chemistry:			
I Year	22	—	22
II Year	18	—	18
III Year (Final Year)	138	—	138
S.S.C. 20			
B.Sc. 118			
Textile Technology:			
Pre. T.T.	20	—	20
1st Year T.T.	24	—	24
2nd Year T.T.	26	—	26
3rd Year T.T. (Final Year)	30	—	30
Total	278	—	278
(b) <i>Post-Diploma:</i>			
Diploma in Refrigeration and Air-conditioning	9	—	9
Total	9	—	9
(c) <i>Degree:</i>			
B.E.I. (CME, Ch, Met.)	344	1	345
B.E. II (Civil)	71	—	71
B.E. II (Mech.)	93	—	93
B.E. II (Elec.)	84	2	86
B.E. II (Chem.)	36	—	36
B.E. II (Met.)	48	—	48
B.E. III (Civil)	94	—	94
B.E. III (Mech.)	107	1	108
B.E. III (Elec.)	99	—	99
B.E. III (Chem.)	42	1	43
B.E. III (Met.)	45	—	45
B.E. IV (Civil)	87	3	90
B.E. IV (Mech.)	115	—	115
B.E. IV (Elect.)	98	1	99
B.E. IV (Electronics)	17	—	17
B.E. IV (Chem.)	44	—	44
B.E. IV (Met.)	56	—	56
B.E. V (Civil)	78	—	78
B.E. V (Mech.)	116	—	116

	Men Students	Women Students	Total Number
B.E. V ( Elect. )	84	—	84
B.E. V ( Chem. )	35	—	35
B.E. V ( Met. )	32	—	32
B.E. I ( Electronics )	22	1	23
B.E. II ( Electronics	18	—	18
B.E. III ( Electronics )	21	—	21
Textile Engineering and Technology:			
F.Text. Engg. and Tech.	46	—	46
S.Text. Engg.	14	—	14
S.Text. Tech.	22	1	23
T.Text. Engg.	17	—	17
T.Text. Tech.	39	—	39
B.Text. Engg.	21	—	21
B.Text. Tech.	33	—	33
B.Arch. I Year	24	10	34
B.Arch. II Year	33	6	39
B.Arch. III Year	29	7	36
B.Arch. IV Year	43	13	56
B.Arch. V Year	44	15	59
Total	2,251	62	2,313
( d ) Post-Graduate Diploma in Re- frigeration and Air-Conditioning	10	—	10
Total	10	—	10
( a ) Post-Graduate Degree:			
Civil Engineering			
Public Health Engineering:			
Jr. Year	3	—	3
Sr. Year	3	—	3
Soil Mechanics:			
Jr. Year	4	—	4
Sr. Year	4	—	4
Highway Engineering:			
Jr. Year	3	—	3

	Men Students	Women Students	Total Number
Sr. Year	3	—	3
Hydraulics:			
Jr. Year	5	—	5
Sr. Year	4	—	4
Structural Engineering:			
Jr. Year	6	1	7
Sr. Year	3	—	3
Mechanical Engineering			
Internal Combustion Engg.:			
Jr. Year	10	—	10
Sr. Year	5	1	6
Production Engineering:			
Jr. Year	8	—	8
Sr. Year	10	—	10
Electrical Engineering:			
Automatic Control Engg.:			
Jr. Year	8	—	8
Sr. Year	12	—	12
Power Engineering:			
Jr. Year	5	—	5
Sr. Year	3	—	3
M.Text. Engineering:			
Jr. Year	8	—	8
Sr. Year	—	—	—
Total	107	2	109
( f ) Ph.D.	2	—	2
( g ) Government of India Technical Teachers Trainee	—	—	—
Summary			
( a ) Diploma	278	—	278
( b ) Post-Diploma Diploma in Ref. and Air-Cond.	9	—	9
( c ) Degree	2,251	62	2,313
( d ) Post-Graduate Diploma	10	—	10
( e ) Post-Graduate Degree	107	2	109
( f ) Ph.D.	2	—	2
( g ) Government of India Technical Teachers Trainee	—	—	—
Grand Total	2,657	64	2,721

#### 4. Staff

##### (a) Present Position:

During the year, the staff of the Faculty consisted of 19 Professors (three of whom were in the senior scale), 35 Readers, 65 Lecturers, 52 Senior Instructors, 2 Junior Instructors, 27 Assistant Lecturers, 1 UNESCO Expert, 162 Class III and 88 Class IV employees.

##### (b) New appointments:

- (1) Shri S. K. Agarwal, Lecturer in Metallurgical Engineering.
- (2) Shri U. P. Sinha, Lecturer in Metallurgical Engineering.
- (3) Shri P. J. Roychowdhury, Lecturer in Metallurgical Engineering.
- (4) Shri N. S. Sundar Murti, Lecturer in Metallurgical Engineering.
- (5) Shri H. Y. Geethanath, Lecturer in Civil Engineering.
- (6) Shri G. S. Parthasarathy, Lecturer in Civil Engineering.

##### (c) Promotions:

4 Readers, 7 Lecturers, 1 Senior Instructor and 1 Assistant Lecturer were selected and promoted as Professors, Readers and Lecturers in various departments of the Faculty. One Head of the Department of Applied Mechanics of the University Polytechnic and one Lecturer in Mathematics of the Faculty of Science were also selected and promoted as Readers in their respective departments.

##### (d) Teachers who left during the year under report:

- (1) Dr. S. J. Shah, Reader in Textile Engineering
- (2) Dr. A. P. Verma, Reader in Mathematics
- (3) Shri S. S. Warty, Lecturer in Textile Chemistry
- (4) Shri G. V. Shah, Lecturer in Mathematics

#### 5. Professional Growth of the Staff

##### (a) Publication of Articles or Papers:

Sr.No.	Name	Title	Where published
1	2	3	4
1.	Dr. Piyush Parikh	Electrical Analogy applied to study economical combination of upstream blanket and vertical cut off for an earthen dam founded in pervious media	Journal of the Faculty of Technology and Engineering, Baroda, 1970.

1	2	3	4
2.	Shri A. V. Shroff	Physico-Chemical reaction of Phosphate with Clay	Journal of the Indian National Society of Soil Mechanics and Foundation Engineering Vol. 9, July, 1970.
3.	Prof. S. K. Damle and L. J. Feeser	Vibration of Four point-supported plates by finite element method	23rd Annual General Meeting Aeronautical Society of India, Indian Institute of Technology, Kanpur February, 1971.
4.	Prof. R. M. Dave	(i) Circular Board crested weirs  (ii) Diffraction of Water Waves  (iii) Economic Aspects of River Basin Planning	Research Journal of Faculty of Technology and Engineering No. 4.  Research Journal of Faculty of Technology and Engineering No. 4.  Research Journal of Faculty of Technology and Engineering No. 4.
5.	Shri P. M. Modi	Estimation of Silt Load of Rivers	Research Journal of Faculty of Technology and Engineering No. 4.
6.	Shri P. M. Modi and Shri J. J. Prajapati	Discussion on Influence of Soil Permeability on Stability of Earthen Dam	Journal of the Institution of Engineers (India), November, 1970.
7.	Dr. D. C. Kantawala	(i) Water-borne Diseases of Baroda District and their Engineering control  (ii) Planning for Pollution Control	Journal of the Indian Water Works Association, January-March, 1970. Vol. II, No. 1.  Proceedings of the Seminar on Pollution and Human Environment held at Bhabha

1	2	3	4
			Atomic Research Centre, Bombay, August, 1970.
	(iii) Low cost waste treatment—Needs, Methods and Trends	Proceedings of the Seminar on Sewage Treatment and Disposal for small Communities, Vallabh Vidyanagar, March, 1971.	
	(iv) Treatment and Disposal of Industrial Wastes	Proceedings of the workshop on Industrial waste treatment held by Association of Microbiology of India, Baroda Unit, November, 1970.	
8.	Shri H. V. Bhavnani and Dr. D. C. Kantawala	Planning for Pollution Control	Presented at the Seminar on Ahmedabad Metropolitan Planning at Ahmedabad, January, 1971.
9.	Shri H. V. Bhavnani	(i) Aerated Lagoons—A solution to waste treatment problems for small communities	Proceedings of the Seminar on Sewage treatment and disposal for small communities, Vallabh Vidyanagar, March, 1971.
		(ii) Comparison of the three conventional sewage treatment plants	Proceedings of the workshop on Industrial waste treatment held by Association of Microbiology of India, Baroda Unit, November, 1970.
10.	Shri H. V. Bhavnani and Others	Performance of some Filter-aid materials	Journal of Indian Water Works Association, January 1971, Vol. 3, No. 1.

1	2	3	4
11.	Shri A. N. Shah and Dr. D. C. Kantawala	Characterization and Treatment of Wastes from a Chemicals Manufacturing Industry	Proceedings of the National Conference on Environmental Pollution and All India Annual Conference of Indian Association of Occupational Health, Bombay, February, 1971.
12.	Prof. J. M. Shah	Elimination and Absorption of Vibration	Annual Number Institution of Engineers, Gujarat Centre.
13.	Dr. R. C. Desai and Shri P. C. Shah	Linear System Stability with Transport and Distributed Time Lag Using Parameter Plane Method	Journal of the Faculty of Technology and Engineering, Baroda, 1970.
14.	Dr. R. C. Desai and Shri R. A. Yadav	Determination of Parameters of Alternator voltage Regulator for Steady State Stability using Siljak's extension to Mitrovic's Method	International Journal of Control, Vol. 13, No. 1, pp. 27-32, 1971.
15.	Dr. R. C. Desai and Shri C. S. Lalwani	Estimation of System Parameters with unknown Inputs using steepest Descent Technique	International Journal of Control, U.K., 1971
16.	Shri K. S. Sastri and Shri M. M. Pathan	Use of Rotating Vectors for Identification of self oscillators in sampled data systems	Journal of the Faculty of Technology and Engineering, Baroda 1970.
17.	Shri K. K. Thakkar	Nomograph Constructions for Sine Comparators in Distance Ralaying	Journal of the Faculty of Technology and Engineering, Baroda 1970.
18.	Shri K. K. Thakkar and Shri K. Parthasarathy	A General Approach to Sine Comparators	International Journal of Electronics U.K., December, 1970.

1	2	3	4
19.	Prof. M. B. Achwal	An Examination of two recent trends in Urban Development of India	Seminar conducted by Organisation Committee for Seminars on Urbanisation Department of Public Administration, South Gujarat University, Surat, January, 1971.
20.	Prof. J. S. Dave and Shri R. A. Vora	Mesomorphic behaviour of Cholesterylesters II Trans p-n-alkoxy Cinnamates of Cholesterol	Molecular crystals and liquid crystals 1971.
21.	Prof. J. S. Dave, Shri R. A. Vora and Shri A. P. Prajapati	Mesomorphic behaviour of Schiff's base compounds I: N. N-DI (4-n-Alkoxy-I-Naphthylidene) Benzidines	Molecular crystals and liquid crystals, 1971.
22.	Dr. R. V. Joshi	Thermoluminescence of NaCl: TI at 340 K	Journal of Luminescence, Vol. 3: 1971.
23.	Dr. (Smt.) Padmini Agarwal	(i) Elastic Properties of Bismuth-Antimony alloys (ii) Ultrasonic parameters and Hydration numbers in Aqueous Solutions of electrolytes (iii) Ultrasonic Velocity studies in Aqueous Solutions of electrolytes	Journal of Phy. Soc. Japan 29, 1970, 243 (July). Ind. Jour. of Pure and Applied Physics, June 1970, Vol. 8, 311-15.
24.	Shri R. P. Gupta	Stripping of colours and removal of stains from Textile Fabrics	Research Journal of the Faculty of Technology and Engineering. Digest, December, 1970.

(b) *Participation in Study Team:*

Dr. S. M. Sen, Vice-Dean, Professor and Head of Electrical Engineering Department was deputed for a three-month visit to U.S.A. as a member of the Study Team sponsored by the Government of India under US-AID support for improvement of Science and Technical Education.

The team visited 24 different institutions and organisations and 8 different industries. The members attended International Solid State Conference and

the Annual Meeting of the Engineering Council for Professional Development. They also visited schools and junior technical colleges and discussed with the respective authorities their courses, studied the Science Curriculum Improvement Study conducted at Berekley, Physics Curriculum Development Projects at MIT, Harvard and other places, and also various other projects in Engineering Education and Research at MIT, University of Illinois and other centres.

6. *Activity of Centre*

Co-operative Stores:

The working of the store was satisfactory. Total sale during the year amounted to Rs. 11,175-35.

7. *Library*

The reading-room of the library has a sitting accommodation for 130 readers. Books for reference are issued between 8-00 a.m. and 10-00 p.m. on all working days and also on Sundays and holidays. Books are issued for reading at home between 11-00 a.m. and 5-15 p.m. on all working days and between 11-00 a.m. and 2-45 p.m. on Saturdays.

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 are given below:

Particulars	Number
(1) Average number of students making use of the library and/or reading-room daily	870
(2) Average number of teachers making use of the library and/or the reading-room daily	75
(3) Total number of books issued to students during the year	38205
(4) Total number of books issued to teachers during the year	6795

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

Particulars	Number		Cost in Rs.
	Books	Boud Periodicals	
Books (including back numbers of journals as on 1-4-1970)	35009	4255	7,00,979-50
Books written off during the year	65	—	812-07
Books added during the year	4677	450	3,07,286-08
Books as on 1-4-1971	39621	4705	10,07,453-51
Journals subscribed during the year	198	—	27,815-83
Amount spent on binding during the year	—	—	3,285-90
Total amount spent for library and/or Reading-room	—	—	10,38,555-24

## 8. Museum, Laboratories, Studios, Work-shop etc.

Item	Cost of equipment etc. as on 1-4-1970	Cost of equipment written off during the year	Cost of equipment added during the year	Cost of equipment etc. as on 31-3-1971
	Rs.	Rs.	Rs.	Rs.
Equipments in various Laboratories, Workshops, Studios etc.	47,30,161-13	3,000-00	5,00,591-56	52,27,752-69

## 9. Faculty Publications

Name of the Journal	Editor	Month of Publication
Journal of Technology and Engineering	Editorial Board, Faculty of Technology and Engineering	July 1970

## 10. Distinguished Visitors

(1) Professor A. D. Nikiforov, UNESCO expert visited this Faculty on 1st April, 1970 in connection with our requirements of Experts and Fellowships with the job descriptions, equipments, books, journals and miscellaneous grant in aid from the United Nations Special Fund.

(2) Dr. J. Topping, Vice-Chancellor, Brunel University, U.K. and Mrs. Topping visited on 16th February, 1971 and advised the Faculty in the matter of Sandwich Courses.

(3) Professor P. T. Petrov, Professor C. V. Jordanov and Professor N. P. Ivantchev of the Higher Civil Engineering Institute, Sofia, Bulgaria visited the Faculty on 18th and 19th February, 1971 under the Indo-Bulgarian Cultural Exchange Programme.

(4) Professor L. V. NIKITIN, Expert in Applied Mechanics from the Institute of Earth Science, Academy of Sciences of the USSR visited the Faculty from 1st to 28th March, 1971, delivered lectures and held discussions in the fields of Elasticity, Plasticity and Applied Mechanics.

## 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, Painting 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. |

This year the Faculty introduced the Five Year Degree and Diploma courses (replacing the existing four year courses) with two years of preparatory and three years of specialisation.

## 2. Number of Students

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

Year/Class	Men	Women	Total
(a) Certificate			
1st year	2	1	3
2nd year	1	1	2
Total :	3	2	5
(b) Diploma :			
1st Year	35	5	40
2nd Year	13	—	13
3rd Year	13	—	13
4th Year	10	2	12
5th Year	13	1	14
Total :	84	8	92

Year/Class	Men	Women	Total
( c ) <i>Post Diploma:</i>			
Junior	1	2	3
Senior	2	—	2
Total :	3	2	5
( d ) <i>Degree :</i>			
1st Year	14	12	26
2nd Year	5	8	13
3rd Year	4	2	6
4th Year	13	10	23
5th Year	6	4	10
Total :	42	36	78
( e ) <i>Post-Graduate Diploma :</i>			
Junior	6	—	6
Senior	4	1	5
Total :	10	1	11
( f ) <i>Post-Graduate Degree :</i>			
Junior	1	4	5
Senior	4	3	7
Total :	5	7	12
( g ) <i>Ph. D. :</i>			
Junior	—	—	—
Senior	2	—	2
Total :	2	—	2
Grand Total :	149	56	205

In addition to the above there were 29 non-collegiate students, Government scholars, Commonwealth students and Fulbright 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, 1 Part-time Instructor, 14 Class III and 17 Class IV employees.

Professor N. N. Chaudhari, Professor and Head of the Department of Sculpture resigned and left the University from 2nd August, 1970.

### 4. Professional Growth of the Staff

#### ( a ) *Publication :*

Name of the Teacher	Article/Paper	Name of the Journal
Prof. K. G. Subramanyan	The struggle for Image in Contemporary Art	Alumni Get-together Souvenir, Faculty of Fine Arts, February, 1971
Shri Ratan Parimoo	Graphic Arts in Western India	Lalit Kala Contemporary No. II, April, 1970
Shri S. M. Nair	( i ) Dermestid Beetles —A threat to Museum collections in India	IASC Seminar Volume No. IV, 1970
	( ii ) Certain observations on the Bio-deterioration of museum materials	Journal of Indian Museums Vol. No. XXV-XXVI, 1969-70
	( iii ) A pioneer museum training programme in India	Curator Vol. XIII, No. 2, 1970
Shri R. T. Parikh	( i ) Salarjung Museum of Hyderabad	'Kumar', Vol. 557, May, 1970
	( ii ) Unique Sculpture of Vinayaka found at Patan	Swadhyaya, Journal of the Oriental Institute, Vol. VIII, No. 1, Diwali Issue.

#### ( b ) *Participation in Conferences, Seminars, Workshops :*

( 1 ) Sarvashri Jyoti Bhatt, Ratan Parimoo, G.M. Sheikh and Mahendra Pandya participated in the Artists Conference organised by the Lalit Kala Akademy at New Delhi on 28th and 29th March, 1971.

( 2 ) Professor K. G. Subramanyan participated in an Artists Camp at Srinagar in the Summer Vacation of 1970.

( 3 ) Sarvashri Jyoti Bhatt, G. M. Sheikh and P. D. Dimal ( Post-graduate student ) attended the All India Print Making Workshop organised by the U.S.I.S. and the Smithsonian Foundation at Delhi during May-June, 1970. Their works were also included in the Print Making Exhibition which was circulated throughout the country.

(4) Sarvashri V. H. Bedekar and S. M. Nair were invited by the Ministry of Education and Youth Services, as Guest-Speakers at the All India Museum Camp held at Jaipur.

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

(1) Sarvashri Ramesh Pandya, N. K. Sant and G. C. Bhatt participated in the All India Sequential School for Art Teachers, held at Bombay during October-November, 1970. The School was organised by the Directorate of Art of the Maharashtra State and the Ministry of Education and Youth Services.

(2) Sarvashri Jyoti Bhatt and G. M. Sheikh held their One-man-Shows in Delhi. Shri Ramesh Pandya held One-man-Show at Bombay.

(3) Shri G. M. Sheikh participated in the All India Exhibition of Prints held at Delhi and won a prize in Graphics.

(d) *Lectures, Talks, Demonstrations, etc.*

- |                             |  |  |
|-----------------------------|--|--|
| (1) Shri V. K. Bhatt        | (i) Inaugural Address  | Seminar on Art and Art Education for Drawing Teachers at Ganadevi. |
|                             | (ii) Art Appreciation and Problems of Art History and Aesthetics | Annual Conference of Drawing Teachers at Bulsar.                   |
| (2) Prof. K. G. Subramanyam | (i) Art and Change   | Viswabharati University, Shantiniketan.                            |
|                             | (ii) Modern Art in India and the West                            | "  |
| (3) Shri N. B. Joglekar     | Lecture and Demonstration on 'Modern Graphic Techniques'         | Davangera School of Arts and Crafts, Mysore State.                 |

(e) *Research*

(1) Sarvashri Ratan Parimoo and S. M. Nair completed their Ph.D. theses and submitted the same to the University.

(2) Shri V. H. Bedekar completed the survey of the Museum education activities, in his capacity as the Chairman of the National Committee for Museum Education.

(3) Shri R. T. Parikh started his field work in the Banas Kantha District for his research project 'Archaeology of the Banas Kantha District' and collected antiquities for the departmental museum.

5. *Exhibitions and Talks*

(1) The following exhibitions were arranged by the Faculty :

- (i) Discovered forms exercises in Sculpture by the Preparatory/Second year students.
- (ii) Paintings of Shri Ramesh Pandya.
- (iii) Reproductions of Paintings of Abanindranath and his Followers.
- (iv) Objects and designs from previous Fine Arts Fair.
- (v) Paintings, Sculptures, Prints, Photographs and Posters by the Alumni of the Faculty.

(2) The following exhibitions were arranged from outside :

Title	Source
(i) Eglau (etchings)	German Language Society
(ii) City of Stuttgart (Photographs)	—
(iii) Reproductions of Printings and Drawings of Leonardo da Vinci	Calcutta Art Society
(iv) Japanese Flowers Arrangement	—
(v) Etchings of Raksha Mehta	—
(vi) Contemporary Indian Prints	U. S. I. S.
(vii) Psychedelic Posters	U. S. I. S.
(viii) Photographs of Jantar Mantar by Louis Callaghan	—
(ix) Paintings of Bani Prosonno	—

(3) The following talks were arranged in the Faculty :

Name	Subject
(i) Natwar Bhavsar	Slide Show of Paintings and Graphics
(ii) Dr. B. Goswami (Nehru Fellow)	Problems of Research in Pahari Paintings.
(iii) Jaimini Mehta	Slide lecture on ancient archaeological sites in North and Latin America.
(iv) R. K. Joshi	Probe into Devanagari Letter Forms.
(v) Team of Bronze Casting Craftsmen from All India Handicrafts Board, Bangalore	Demonstration in Traditional Metal Casting technique.

6 *Faculty Union Activities*

(1) *Alumni Get-together :*

About 120 old students attended the Alumni Get-together function held on 6th and 7th February, 1971. 70 old students participated in the Alumni Art Exhibition held during the function. Talks, seminars and entertainment programmes were arranged. An illustrated Souvenir containing articles on Art and

Photography of the Faculty activities and an illustrated catalogue of the Alumni Art Exhibition were published for the occasion.

(2) A team of students was sent to assess the damage by floods in Gujarat in September, 1970. It prepared a report in the form of an exhibition of Photographs and Press cuttings and suggested a programme of direct help to the sufferers. A party of students was sent and it distributed items of immediate necessity like utensils, ruge, clothes, etc. worth Rs. 1,867. The students collected a further sum of Rs. 2,500/- through sale of cards and voluntary contributions and credited the amount to the University Relief Fund.

(3) The students collected an amount of Rs. 10,360.65 through the Fine Arts Fun Fair for Students' Welfare Fund.

(4) Two post-graduate students (Sarvashri P. D. Dhumal and S. N. Belekar) won prizes in artists' category for their paintings, sculptures and prints. Six under-graduate students (Sarvashri Dushyant Singh, Bharat Singh, Rohit Zaveri, Sushma Smikhada, Devdatta Haldenkar and Dipak Kannal) won prizes for their paintings, sculptures and prints in various art exhibitions. One post-graduate student of painting (Kum. Nilima Dhanda) participated in the Art exhibition 'Art To-day No. 2' held at Delhi.

## 7. Library

### (1) Faculty Library :

#### (a) Books.

The library received a grant of Rs. 4000/- from the University and it has been fully utilised. The following statement gives the details of the acquisitions of the library during the year.

	Books (including back number of Journals)	Pamphlets	Total value in Rs.
Number at the beginning of the year	5157	94	83,610=56
Number added during the year	324	—	3,996=31
Number withdrawn from the record	—	—	—
Number remaining at the end of the year	5481	94	87,606=87

### (b) Periodicals

The total number of periodicals and journals subscribed to now stands at 15. The total amount spent for the subscription of the periodicals is Rs. 1400=77. The amount spent for binding is Rs. 461=50.

### (c) Circulation of Books:

The working hours of the library are from 11-00 a.m. to 5-00 p.m. 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)	10
(iv) Total average number of books issued per day for reading on the premises	35

### (2) Museology Department Library :

A small Departmental Library containing books pertaining to Museum and subjects covered by usual Museum collections belonging to Smt. Hansa Mehta University Library, is maintained for reference purposes.

A collection of 45 books including books in Arts and Crafts was received from the United States Information Services, Bombay under the Inter Library Collection Scheme. This collection was utilised by the students and the staff of the Faculty from December 1970 to March 1971.

A generous gift of art books and back issues of several American Art Magazines was received from the Museum of Modern Art, New York. This included almost complete files of Art Bulletin in America, Art News and the Arts Magazine. Noteworthy acquisition this year are (i) New Documents in Indian Painting by Dr. Motichandra and Karl Khandalwala; (ii) Duchamp and (iii) Dali.

(1) A small Art Museum has been functioning containing plaster casts of sculptures and original Rajasthani Paintings. This year have been acquired a number of folk and several pieces of Old Gujarat Wood Carving at a cost of about Rs. 1,000.

(2) Archive of slides : Over 700 slides of Indian and European Paintings and Sculptures were purchased bringing the total to about 5500 slides.

(3) Archive of Photos and Reproductions : About 1000 small size colour reproductions were added this year bringing the total to nearly 8000.

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

Sr. No.	Item	Cost of equipment as on 1-4 1970	Cost of equipment etc., written off during the year	Cost of equipment etc. added during the year	Cost of equipment as on 31-3-1971
		Rs.	Rs.	Rs.	Rs.
(1)	Studios; Workshops in the Faculty	3,65,719-54	—	8,713-66	3,74,433-20
(2)	Museology Department	71,213-12	—	—	71,213-12

## 9. Faculty Publications :

- (1) Souvenir of the Get together Alumni February, 1971
- (2) Catalogue of the Alumni Art Exhibition February, 1971

## 10. Distinguished Visitors

- (1) Dr. Lubor Hajeck,  
Professor of Indology,  
Prague
- (2) Dr. Grace Morely,  
Icom Expert for South East  
Asia,  
New Delhi.
- (3) Mr. John Irwin,  
Curator,  
Indian Section,  
Victoria and Albert Museum,  
London

## CHAPTER XV—FACULTY OF HOME SCIENCE

## 1. Courses of Studies

(A) There is provision for the following courses in the Faculty :

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

(B) New Course and Modifications in the present courses :

(1) The present scheme of M.Sc. (Home)—Child Development Examination was modified and is made effective from 1971-72. This year, the department offered only group I in B.Sc. (Home). In M.Sc. (Home), fresh students were admitted only for group I. Several minor changes were made in the Post-graduate Diploma Courses of Nursery School Education.

(2) In the Home Science Education and Extension Education Department, the course 'Orientation to College Life' was introduced under the revised programme of B.Sc. (Home) Courses. The courses "Teaching Aids," "Introduction to Home Science", "Organization of Educational Programmes" and "Methods of Teaching Home Sciences" were modified.

(3) The Home Management Department introduced the courses "Introduction to Household Equipment" and "Management Problems" and modified H.M. 170 and H.M. 478 courses.

## 2. Number of Students :

Class	Women	Men	Total
(1) B. Sc. (Home)			
(i) First Year	170	—	170
(ii) Second Year	147	—	147
(iii) Third Year	157	—	157
(iv) Fourth Year	114	—	114

Class	Women	Men	Total
(a) Child Development	6		
(b) Foods and Nutrition	43		
(c) Home Management	16		
(d) Clothing and Textiles	14		
(e) Education and Extension	3		
(f) General Home Science	32		
Total	588	—	588
(2) Post-graduate Diplomas :			
(i) Nursery School Education	8	—	8
(ii) Dietetics	10	—	10
Total	18	—	18
(3) Jr. M. Sc. (Home)			
(e) Foods and Nutrition	6		
(b) Child Development	6		
(c) Home Management	7		
(d) Clothing and Textiles	3		
(e) Education and Extension	2		
(4) Sr. M. Sc. (Home)	41	—	41
(a) Foods and Nutrition	5		
(b) Child Development	9		
(c) Home Management	6		
(d) Clothing and Textiles	15		
(e) Education and Extension	6		
Total	65	—	65
(5) Ph. D.			
(a) Clothing and Textiles	1	1	2
(b) Child Development	2	—	2
Total	3	1	4
Grand Total	674	1	675

30 students were recipient of fellowships and scholarships from various agencies like Ford Foundation, State Government, Government of India under Colombo Plan and General Cultural Schemes, I. C. A. R., USAID and the University.

### 3. Staff

#### (a) Present Position :

The staff of the Faculty consisted of 3 Professors (One of whom is in the senior scale), 7 Readers, 20 Lecturers, 14 Assistant Lecturers, One Research

Associate, 15 Class III and 25 Class IV employees. The Faculty also continued to receive help of the teaching staff of other Faculties for teaching various courses in the Faculty.

#### (b) New appointments :

The posts of one Assistant Lecturer in Clothing and Textiles, two in Child Development and two in Foods and Nutrition were filled up during the year.

#### (c) Teachers who left the University :

Name	Designation
(i) Dr. (Mrs.) M. Varghese	Reader in Home Management
(ii) Kum. N. Bhavnagari	Lecturer in Child Development

### 4. Professional Growth of the Staff

#### (a) Publications :

Name	Title	Where published
(1) Prof. (Smt.) Amita Verma	The Role of a Laboratory Nursery School	Journal of the N. I. E. November, 1970.
(2) Smt. Meena Pathak	Sensitization Scale on a sample of Nagpur University students	Journal of Education and Psychology, October, 1970.
(3) Dr. (Smt.) A Chandra and (Kum.) Kamal Khanwal	(i) Reasons for attending Adult Education classes (ii) A research study among women in Baroda	Journal of Adult Education Association, Vol. XXXII No. 2, February, 1971.

#### (b) Papers presented at Conferences :

Name	Title	Conference
(1) Prof. (Smt.) Amita Verma	Contributions of Madame Montasori to Pre-School Education	6th Annual conference of the Indian Association for Pre-School Education at Baroda. December, 1970.
(2) Kum. Shakti Chhaya	Attitudes of mothers towards learning experience for Children in the Management of money	All India Home Science Conference at Nagpur, October, 1970.

## (c) Participation in Inservice Training and other programmes.

- (1) The staff of the Child Development Department worked as Resource Personnel at the Bal Sevika Shibir organized by the State Social Welfare Board and the Jilla Congress Education Committee in May, 1970.
  - (2) The staff of the Faculty organized a symposium on the theme 'Employment Potential of Home Science at present and in Future' on 8th and 9th January, 1971. The Symposium was inaugurated by Smt. Hansa Mehta, former Vice-Chancellor of this University. Several members of the Faculty participated in this symposium.
  - (3) Prof. (Smt.) Amita Verma was elected Vice-President of the Indian Association for Pre-School Education.
  - (4) The Child Development Department organized the 6th Annual Conference of the Indian Association for Pre-School Education at Baroda in January, 1971. The Conference was attended by about 250 delegates. Madame Paul Pant and Miss P. Rezuses of the Internal Children Centre, Paris also attended the Conference.
- (d) Research by staff:

Name	Subject of Research
1. Smt. Anjali Mehta, Kum. Nila Bhatt and Smt. Parul Dave	Adolescent Adjustment.
2. Kum. Kiran Parekh	Preparing Kindergarten Children for grade I.

## 5. Library

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

## 6. Museum, Laboratory, Studio, Workshop etc.

	Cost of equipment as on 1-4-1970 Rs.	Cost of equipment added during the year Rs.	Cost of equipment as on 31-3-71 Rs.
Museum, Laboratories etc.	4,39,706=09	23,944=29	4,63,650=38

## 7. Faculty Publication

The Department of Home Science Education and Extension published booklets 'Teaching of Home Management' and 'Time and Energy Management.'

## 8. Distinguished Visitors

- (1) Miss Winnifred Hickson,  
Inspector of Schools, U.K.
- (2) Dr. (Kum.) Yasmin Morenas,  
Joint Director, Directorate of Extension, Ministry of Food,  
Agricultural Community Development and Co-operation,  
New Delhi.
- (3) Mr. Wolf Harranth,  
Secretary General of Kindergarten and in charge of International  
Department, Austria.
- (4) Smt. B. Tarabai,  
President, All India Womens' Conference, Delhi.
- (5) Dr. (Mrs.) Ruth Ayers,  
Pennsylvania State University, U.S.A.
- (6) Dr. Saflois Rothaschild and Dr. Emny Weques,  
Unicef Consultants
- (7) Mr. M. Feeley and Miss E. Britts,  
Schools Council Project—English  
for Immigrant Children.

## CHAPTER XVI—FACULTY OF SOCIAL WORK

### 1. New Experiments—Study-cum-Service Projects

#### (1) *Flood Relief Camps:*

The Faculty for the first time, actively participated in organizing Flood Relief Camps at Malsar, Diva, Kansia, New Chhapaa and Bore Bhatta villages of Baroda and Ankleshwar Talukas. 80 students, 8 teachers and 15 NSS Volunteers camped in the flood affected areas, for one week (September 21-26th), soon after the flood waters had receded.

#### (2) *Seminar on Court and Probation:*

To celebrate the Probation Year 1971, a State-level Seminar was organized at the Faculty on 8th and 9th March, 1971, under the joint auspices of (i) Central Bureau of Correctional Services, New Delhi, (ii) Social Defence Department, Gujarat State and (iii) the Faculty. For the first time the Probation, the Judiciary, the Police and the Social Workers in Gujarat State met together and deliberated on the role of each service and problems as well as ways and means of strengthening probation services.

#### (3) *Adopt a Family Friend Projects:*

Under the guidance of one member of the staff and in co-operation with the volunteers of Friends Society of National Service Scheme of M. S. University—a new experiment in field programme has been undertaken this year. In order to provide home and parental figures, for orphan and neglected children charged to the Government Certified School, this programme was initiated. Some families of Baroda city have volunteered to adopt a family friend (a child of the Certified School). About fifteen children who were adopted as friends have now a place and 'Home' where they can go on week ends or vacations and holidays and experience family life for positive development.

#### (4) *School Social Work Service Project:*

Six students of the Faculty have been working with various schools of Baroda City as part of their field work and two staff members undertook to develop literature on School Social Work. A project to collect and edit articles on various aspects of School Social Work from last 20 years of journals and magazines is nearing completion.

#### (5) *National Service Scheme 'Cell':*

The Ministry of Education and Youth Services has recognised that in organization of the program of NSS, the Schools of Social Work have an important role to play. In order to assist the Faculty of Social Work at Baroda, the

University Grants Commission has given special grants of Rs. 20,000 per annum to establish a Cell in 1970-71 to organise Orientation Courses for University Teachers of the Gujarat State. The Cell carried out the following activities:

#### (a) *Special Training and Orientation Courses*

The III Orientation Course for University Teachers deputed from various Universities in Gujarat State took place in April, 1970.

#### (b) *Consultation Services*

The Co-ordinator of the Cell visited 7 Universities and Institutions of the Gujarat State and explored ways and means of promoting the NSS Programme.

#### (c) *Participation in All India Camps of NSS*

Shri J. P. Shelat, Co-ordinator of the Cell was deputed to participate in All India Camp of N.S.S. held at Palaymkottai (Kerala) and Shri S. R. Yardi, Lecturer in Social Work at the Camp held at Dehradun in December-January, 1971.

### 2. 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.

#### (2) *Field Work (Practical Training):*

There are fifty-two agencies in and around Baroda City which share in partnership the training programme of the Faculty. On an average the student puts in 15 hours of work per week in the field work agency every term. The staff and students organized seminars, staff-meetings, discussions and such other activities to further promote the work of the service agency and 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 Industrial settings. The students carried out useful project 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.

### 3. Number of Students

The number of students enrolled in Junior and Senior classes at the commencement of the year 1970-71 was as under:

	Men	Women	Total
Junior Class	23	19	42
Senior Class	19	14	33
Total	42	33	75

### 4. Staff

The staff of the Faculty consisted of 1 Professor, 3 Readers, 7 Lecturers, 1 Agency Supervisor, 9 Class III and 7 Class IV employees. Dr. G. B. Thaker was invited to teach a course on 'Juvenile Delinquency and Correctional Administration' to the student of the Faculty.

#### (a) New Appointments:

Name	Designation	Remarks
Kum. Indira Patel	Professor-Director, NSS Cell and Programme of M. S. University of Baroda	Promotion.
Shri K. M. Sharma	Reader	Promotion.
Dr. V. B. Shah	Reader	Promotion.
Shri I. P. Shelat	Co-ordinator, NSS.	Promotion.
Kum. Pushpa Gandhi	Lecturer	

(b) Shri S. H. Shah returned to the Faculty from the Centre of Research and Training in Secondary Education in Rural Areas. Shri S. R. Yardi was deputed to work as Chief Instructor at the V.T.K. Institute of Rural Development at Samiala.

#### (c) Teachers who left the University:

Shri J. K. Motwani, Lecturer in Social Work

### 5. Professional Growth of the Staff

#### (a) Publication:

Dr. V. B. Shah	(i) Objectives of Curriculum for mentally retarded children	Souvenir, Kashi Peeth, Varanasi.
	(ii) Child Rearing Practices in different Cultural Groups	M. S. University, Journal, 1971.

- (iii) Children can grow by Social Welfare praise too Journal.
- (iv) Group dynamics in School Social Welfare Teaching Journal.

#### (b) Participation in In-service Programme. etc.

(1) Prof. (Kum.) Indira Patel and Shri S. K. Majmudar were invited to teach 'Group Social Work Method and Practice in Psychiatric Setting' and 'Case Work Techniques' at the Hospital for Mental Diseases, Kanke, Ranchi.

(2) Shri I. P. Shelat under invitation from the Youth Board of the Government gave talks on 'Youth Activities, Poverty and Unemployment'.

#### (c) Participation in Seminars, Conferences, Workshops etc.

Staff member	Seminar/Conference/Workshop	Organising body
1	2	3
1. Prof. (Kum.) I. M. Patel	(i) 3rd Zonal Conference of Education Ministers and Vice-Chancellors of Maharashtra, Gujarat and Punjab States	Sachivalaya, Government of Maharashtra, Bombay on 21st September, 1970.
	(ii) Seminar on: 'Teaching of Community Organization'	Tata Institute of Social Sciences, Bombay on 29th and 30th November, 1970.
	(iii) Role Functions Programmes and Organization of the ICSSR.	Gujarat University, Ahmedabad, 13th to 15th February, 1971.
	(iv) Seminar on: "Communal Disharmony and its impact on Law and Order situations in the Country"	Agra University, Agra 20th and 21st March, 1971.
2. Shri S. K. Majmudar	Seminar on: Social Work Curriculum and its relevance to the field practice	Karve Institute of Social Sciences, Poona, 6th and 7th February, 1971.
3. Shri S. R. Yardi	(i) Workshop on Famine Relief	Institute of Public Co-operation, New Delhi.

1	2	3	4
	(ii) Seminar on: Contents of Personnel Management	Bajaj Institute of Management, Bombay, January, 1971.	
4. Dr. V. B. Shah	(i) Seminar on: All India Curriculum Planning for Mentally Retarded Children (ii) Seminar on: Non-violence and Social Change (iii) Seminar on: Research in Family Planning	Kashi Vidya peeth, Varanasi, December 1970. Allahabad, 27th to 30th January, 1970. Regional Family Planning Training Centre, Ahmedabad, 18th to 20th February, 1971.	
5. Shri I. P. Shelat	Seminar on: Training and Consultancy needs in N.S.S.	Tata Institute of Social Sciences, Bombay, November, 1970.	
6. Kum. R. Mukherjee	Workshop on Supervision organized by Association of Schools of Social Work in India	Tata Institute of Social Sciences, Bombay, 13th to 24th April, 1970.	
7. Shri B. J. Pandya	(i) Workshop on Supervision organized by Association of Schools of Social Work in India (ii) Seminar on: 'Teaching of Community Organization'	Tata Institute of Social Sciences, Bombay, 24th April, 1970. Tata Institute of Social Sciences, Bombay, 28th and 29th November, 1970.	
8. Kum. Jyoti Barot	All India Seminar on: 'Spotlight on Children organised under Joint auspices of Indian Council of Social Welfare and the National Kerala State Branch	School of Social Work, Kalamssary, Trivendram, 4th to 7th January, 1971.	

1	2	3	4
9. Smt. V. N. Anjaria	Workshop on Supervision organised by the Association of Schools of Social Work in India	Tata Institute of Social Sciences, Bombay, 13th to 24th April, 1970.	

## 6. Library

### (a) Acquisition:

#### (i) Books:

The Faculty has a separate library. This year a grant of Rs. 4,500-00 was received for books and Rs. 1,300-00 for periodicals:

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

	Books (including periodicals)	Pamphlets	Total values in Rs.
Number at the beginning of the year	7423	2550	71,801-80
Number added during the year	186	—	4,498-06
Total	7609	2550	76,299-86

#### (ii) Periodicals:

The total number of periodicals subscribed for by the library during the year stood at 40. An amount of Rs. 1,299-10 was spent on subscription.

#### (b) Circulation of books:

The Library remained open from 8-00 a.m. to 6-00 p.m. on week days and 8-00 a.m. to 2-00 p.m. on Saturdays.

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

(i) Daily average number of readers visiting the library	55
(ii) Daily average number of teachers visiting the library	7
(iii) Average number of books issued per day for home-reading	75
(iv) Average number of books issued per day for reference	50

## 7. Distinguished Visitors

The following distinguished persons visited the Faculty:

Name of the Visitors	Date of Visit
(1) Miss Winnifred Hickson, An Educationist, U.K.	23-11-1970

1	2
(2) Miss Majari Siet, Associate of Gandhiji	19-1-1971
(3) Dr. T. B. Naik, Head, Department of Anthropology, University of Raipur	17-2-1971
(4) Smt. Tarabai Shastri, Karve Institute of Social Services, Poona	19-2-1971
(5) Shri Narayan Desai, President, Shanti Sena Samiti, Varanasi	9-2-1971
(6) Dr. Dandapani, Director of Cooperatives, Railways	18-3-1971

#### 8. Shri V. T. Krishnamachari Institute of Rural Development, Samiala

The staff of the Institute consisted of One Reader, three Lecturers, five Assistant Lecturers, one Part-time Lecturer and five Class III and ten Class IV employees.

The following training courses were organised during the year:

Course	Duration	Number of persons trained
(1) Job Training for Chief Organizers F. & C.W. Project	10 months	34
(2) Orientation in F. & C. Welfare for Project Teams	3 months	
(3) Pre-service Basic Training for V.P. Secretaries	6 months	39
(4) Two Refreshers' Courses for V.P. Secretaries	3 days	67
(5) Three Paripatatic courses for V.P. Secretaries	3 days	106

The Institute hosted and gave technical services in the following Community activities:

- (a) Family and Child Welfare Seminar—eleven projects in Gujarat State,  
(b) Urban Youth Camp Junior Chamber and B.C.D.S. and (c) Village  
Young Women's Training at Padra.

## CHAPTER XVII—FACULTY OF LAW

### 1. Courses of Studies

The Faculty of Law imparts instruction for the following courses:

#### (1) Degree Courses:

- (a) Bachelor of Laws (General)
- (b) Bachelor of Laws (Special)

#### (2) Post-graduate Diploma Courses:

- (a) Diploma in Taxation Laws and Practice (D.T.P.)
- (b) Diploma in Labour Laws and Practice (D.L.P.)

#### (3) Post-Graduate Degree Courses:

- (a) Master of Laws (LL.M.)
- (b) Ph.D. in Law

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 the degree course, a specialized study of Taxation Laws and Labour Laws has been introduced as an optional group (Two papers each).

Professional Course:

The Professional course for the degree of LL.B. (Special) was introduced last year, as prescribed by the Bar Council of India. A detailed practical training in the Lawyers' Chambers and the Courts has been introduced.

### 2. Number of Students

Class	Men students	Women students	Total
1st LL.B. (Gen.)	296	28	324
2nd LL.B. (Gen.)	88	14	102
LL.B. (Special)	35	6	41
Total	419	48	467
Post-graduate Diploma in Taxation Laws and Practice (D.T.P.)	52	5	57
Post-graduate Diploma in Labour Laws and Practice (D.L.P.)	49	9	58
Total	101	14	115

<i>Class</i>		<i>Men students</i>	<i>Women students</i>	<i>Total</i>
Jr. LL.M.		18	3	21
Sr. LL.M.		19	2	21
Ph.D.	Total	37	5	42
		2	—	2
	Total	2	—	2
Grand Total		559	67	626

### 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. Professional Growth of the Staff

#### (a) Conference, Seminars etc.:

<i>Name of the Teacher</i>	<i>Conference/Seminar attended</i>	<i>Subject of the paper read or contributed</i>
1	2	3
1. Prof. H. C. Dholakia	(i) Gujarat State Law Teachers' Seminar at Rajkot	(i) Fundamental Rights
	(ii) All India Seminar on United Nations at Patna	(ii) Legal Education.
	(iii) All India Law Teachers' Conference at Jaipur	Human Rights.
	(iv) Commonwealth Law Conference at New Delhi	Curriculum Report.
	(v) All India International Law Conference at New Delhi	Participated in Committees on Human Rights, Legal Education, Professional Standards.
2. Shri N. N. Buch	(i) Gujarat State Law Teachers' Seminar at Rajkot	Jurisdiction of the International Courts of Justice.
	(ii) All India Law Teachers' Conference at Jaipur	Legal Education.
	(iii) Commonwealth Law Conference at New Delhi	Role of Law Teachers.
		Participated in Committee on Legal Education.

(b) Professor H. C. Dholakia was elected Vice-President of the All India Law Teachers' Conference for the year 1971-72.

### 5. Lectures, Symposia, Debates etc.

#### (1) Lectures:

The Faculty continued to get distinguished Judges of the Gujarat High Court as Visiting Professors to participate in the regular teaching programme. Hon'ble Justice Shri B. K. Mehta, Judge of the Gujarat High Court engaged the LL.M. Classes regularly throughout the academic year.

#### (2) Symposium:

A symposium on the United Nations was held at the Faculty on 12th December, 1970 on the following subjects:

(i) Philosophy underlying the U.N.O.

(ii) Decolonisation

(iii) Human Rights.

#### (3) Debate:

The Faculty has instituted a Trophy to be awarded to the best debating team at a contest to be held at Baroda, amongst the debating teams of all Law Colleges in the Gujarat State.

This year the contest was held on 23rd January, 1971 on the subject "In the opinion of this House, the Parliamentary form of Government is not suited to Indian Political Conditions". The Trophy was won by the Faculty of Law, Baroda.

## 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 large collection of manuscripts and the collection of printed books on all subjects related to Indology. In the year 1949 when the Institution was taken over by the University, it had a good record of publications—109 volumes in the Gaekwad Oriental Series and 510 other books. The number of publications at the end of March, 1971 stood at 153 in the Gaekwad Oriental Series and 600 other books.

The publications are under the following series :

(1) Gaekwad's 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) Maharaja Sayajirao Memorial Lectures Series, (8) Shri Sayaji Sahityamala, (9) Shri Sayaji Balajnana-mala, (10) Shri Sayaji Gramavikasamala and (11) Shri Shishujnanamala.

### 2. Post-Graduate Teaching

Besides the above, as a 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 they guided in all 3 Ph. D. students in Sanskrit, Gujarati and Ancient Indian Culture and 70 M.A. students (Junior and Senior) in Sanskrit and Gujarati and 1 Sr. M.A. and 2 Jr. M.A. students in Prakrit. The Director continued to work as the Head of the Gujarati Department of the Faculty of Arts.

### 3. Staff

During the year, the staff consisted of 1 Director (Senior Scale of Professors), 1 Deputy Director (Reader's grade), 4 Research Officers (Lecturer's grade), 9 Class III and 6 Class IV employees. The Ramayana Department had a staff of one Honorary General Editor and Head, one Assistant Editor, 12 Critical Apparatus Writers, 1 Proof Reader and 2 Class III employees.

### 4. Professional Growth of the Staff

#### (a) Publications :

Name	Title	Where published or read
Prof. B. J. Sandesara	(i) ગુજરાત મહામાત્ય વસ્તુપાલની કાવ્યમય જીવન કથા	ગુજરાત દીપોત્સવી અંક, સં. ૨૦૨૬
	(ii) કીર્તિ-કીર્તન (શબ્દ ચર્ચા)	બુદ્ધિપ્રકાશ, એપ્રિલ ૧૯૭૦
	(iii) ઉત્તર ગુજરાતનું ઐતિહાસિક ગામ —સંડેર	પ્રવાસી દશાબ્દી અંક, સં. ૧૯૭૦
	(iv) વિવેક અને ધર્મ	અખંડ આનંદ, ઑક્ટોબર, ૧૯૭૦
	(v) ગુજરી તલાવની પ્રાચીનતા	મહાગુજરાત દીપોત્સવી અંક, સં. ૨૦૨૬
Dr. U. P. Shah	(i) અદારમા સૈકાના ગુજરાતના પંડિત આશાધર ભટ્ટ	ગુજરાત દીપોત્સવી અંક, સં. ૨૦૨૬
	(ii) Jain Bronzes and Sculptures in the Salar Jung Museum	Salar Jung Museum (SJM) Bi-Annual Research Journal, Vols. 1-2 (1970-71)
	(iii) સાચા સંસ્કાર	જનકદયાણુ, ફેબ્રુઆરી ૭૧
	(iv) Iconography of Cakresvari—The Yaksi of Rsabhanath	Journal of the Oriental Institute, Vol. 20, No. 3, March, 1971
	(v) A Parshvanath Sculpture in Cleveland	Bulletin of the Cleveland Museum of Art, December 1970
	(vi) નટરાજ શિવ	પ્રવાસી ઑક્ટો-નવે. ૭૦ દીપોત્સવી અંક
Shri J. P. Thaker	શ્રી કૃષ્ણની રાસલીલા	Svadhya, Vol. VIII, No. 2, February, 1971
Dr. S. D. Parekh	(i) મહાભારતનો પ્રધાન કથાધટક ધૂત	'Gujarat' Dipotsavi Issue, November, 1970
	(ii) મહાભારતમાંથી ભારતીય સાંસ્કૃતિક ઇતિહાસની સામગ્રી	'Pravasi' December, 1970

Name	Title	Where published or read
Dr. B. N. Bhatt	Some noteworthy Peculiarities of Mankhas Srikanthacaritam	Journal of the Oriental Institute, Vol. XX No. 2, December 1970
Shri P. H. Joshi	Select Contents of Oriental Journals	Journal of the Oriental Institute, Vol. XIX, Nos. 3-4 and Vol. XX, Nos. 1-2

(b) *Participation in various Programmes :*

(i) Professor B. J. Sandesara was appointed by the Government of Gujarat as a member of the Committee to report on the form, etc. and to draft the Act of the Residential University to be established at Bhavnagar. He delivered a series of 9 lectures on Linguistics and Evaluation of Gujarati Language at the Saurashtra University at Rajkot during February, 1971.

(ii) Dr. U. P. Shah continued to work as Honorary Editor of the Journal of the Indian Society of Oriental Arts of which the third issue—a special issue on 'Glimpses of Nepalese Wood-work' was published during the year. He attended a seminar on Indian Art held at Los Angeles, U.S.A. from 1st to 4th October, 1970 and read a paper on 'Early Western Indian Sculpture'. He gave lectures on Buddhism in Japan and on various aspects of Indian Paintings and Sculpture in various Universities and Museums in U.S.A. and U.K. He started guiding Dr. Michael Miester of Fogg Art Museum, U.S.A. in his research work on Art and Architecture of India, especially of Rajasthan.

### 5. Manuscripts Section

This section has already a collection of 25156 manuscripts in Sanskrit, Prakrit, Pali, Apabhramsa and other classical Indian languages and in several modern Indian languages including a few in Persian and Arabic. Of these 93 were added during the year under report; out of which 7 were purchased and 86 were received as gift from (i) Vaidya Shri Dhirajlal Maneklal Shah, (ii) Dr. S. K. Mehta, (iii) Dr. B. J. Sandesara, (iv) Pt. Ratnachandra J. Joshi and (v) Shri Sirish Dave.

During the year, 23 manuscripts were lent out to other Institutions, 33 to local scholars and 305 were issued for work on the premises of the Institute, while 8 manuscripts were borrowed from outside.

### 6. Printed Books Section

(1) *Books :*

This year the Library received grants of Rs. 9,000/- for Printed Section and Rs. 700/- for Ramayana Department from the University, which were fully utilised.

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

	Books including bound periodicals	Total Value in Rs. P.
Total number of volumes at the beginning of the year	32,791	3,18,183-51
Number added during the year	641	8,999-04
Total :	33,432	3,27,182-55

Out of the total number of books added during the year, 388 books were purchased at the cost of Rs. 8,999=04 p. and 253 books were received as gift and on exchange basis.

(2) *Periodicals :*

The total number of periodicals and scholarly Journals subscribed for and received on an exchange basis now stands at 245 (237 Exchange Basis and 8 subscribed).

### 7. Publications

(1) The following work is printed during the year :

(i) An Arabic History of Gujarat, Vol. I (GOS No. 152)—Shri M. F. Lokhandwala.

The following works are under print :

- (i) Krtiyakalpataru (Pratisthakanda) (pp. 1-24) printed.
- (ii) Pancharatra Bibliography (pp. 1-208) printed.
- (iii) Satyasiddhi (pp. 1-144) printed.
- (iv) Agamapramanya (pp. 1-64) printed.
- (v) Kiranavali (pp. 1-305) printed.
- (vi) Chhakkamuvaeso (pp. 1-344) printed.

The University Grants Commission has sanctioned a sum of Rs. 90,000/- for Gaekwad's Oriental Series Publications on a sharing basis (50% U.G.C. and 50% State Government) during the IVth Plan period.

### 8. Translation Branch

The following works were published during the year in this series :

*Shri Sayaji Sahityamala :*

- (i) “पेट्रोलियम” Shri Padmakant R. Shah
- (ii) “पद्मेश्वरी-तात्पर्य” Swami Shri Pranavtirthaji

- (iii) “ પ્રો. ત્રિ. કે. ગજજરની  
જીવનકથા ” Prof. A. M. Trivedi and Others

(Revised Second edition)

*Shri Sayaji Gramavikasamala :*

- “ ખેતી સુધારણાની થોડીક વાતો ” Shri Yogesh I. Pandya

*Shri Sayaji Balajnanamala :*

- (i) “ હિતોપદેશની વાર્તાઓ ” Shri Chandrashanker Bhatt  
ભાગ ૧-૨

- (ii) “ પંચતંત્રની વાર્તાઓ ” Shri Chandrashanker Bhatt  
ભાગ ૧-૨

The following works are under print :

*Shri Sayaji Sahityamala :*

- (i) “ ચરકનો સ્વાધ્યાય ” Shri Bapalal G. Vaidya

- (ii) “ અખો અને મધ્યકાલીન  
સંત-પરંપરા ” Dr. Y. J. Tripathi

#### 9. Ramayana Department

(a) Editorial Section :

- (1) Yuddhakanda—(Ed. by Dr. P. L. Vaidya)

During the year the third and the last fascicle of the Yuddhakanda was printed and thus the Critical Edition of the whole Yuddhakanda was published.

- (2) Uttarakhanda—(Ed. by Dr. U. P. Shah)

(i) Sargas 6 to 27 are constituted

(ii) Press—copy Sargas 1-5 and 11-20 is prepared.

(iii) Rough copy of the Critical Apparatus of Sargas 6-10 and 21-26 is prepared.

(b) Collation work :

M10 Uttarakhanda Sargas 1-5.

Sample collation of some Sargas was done in MSS T4, M11 & M12.

Indexing of quarter verses of the Critical Edition of the Ramayana was continued and nearly 37,744 cards were prepared during this year thus making a total of 1,32,174 cards prepared till 31st March, 1971. The work is under progress.

#### 10. Journal of the Oriental Institute

During the year Vol. 19 nos. 3 and 4 and Vol. 20 nos. 1 and 2 were published. 115 subscribers were registered during the year for Vol. 19 and 195

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.

#### 11. Gujarati Quarterly Journal ‘Svadyaya’

‘Svadyaya’ nos. 3 and 4 of Vol. VII and nos. 1 and 2 of Vol. VIII were published. 124 subscribers were registered during the year for Vol. VII and 30 copies were sent on exchange basis.

#### 12. Distinguished Visitors

Name of the Visitor	Date of visit
(1) Monseieur M. Kebaili, Consul-General, France	11-4-1970
(2) Prof. George F. Baumann, Sudasian Institut Der Universitat, Heidelberg	3-8-1970
(3) Dr. Anncharlott Eschmann, University Teacher, Heidelberg University, Heidelberg (W. Germany)	3-9-1970
(4) Dr. Ernest Bender, Editor, Journal of the American Oriental Society, and Professor of Indo Aryan Language and Literature, University of Pennsylvania, Philadelphia, U.S.A.	25-1-1971
(5) Dr. J. Topping, Vice-Chancellor, Brunel University, Brunel	16-2-1971
(6) Prof. Walter Spink, Professor of Art History, Ann Arbor, U.S.A.	17-2-1971
(7) Mr. Thomas Donaldon, Graduate Student, Cleveland Museum, Cleveland (OHIO), U.S.A.	2-3-1971

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

### 1. Courses of Studies

The College offers the following courses:

- (i) Two-year Post-graduate Course leading to the Degree of Master of Music (M.Mus.) in Music, Dance and Drama.
- (ii) Four-year Course leading to the Degree of Bachelor of Music (B. Mus.) in Music (Vocal and Instrumental—Sitar, Violin and Tabla), Dance (Kathak and Bharat Natyam) and Dramatics.
- (iii) Five-year Course in Music—Vocal, Instrumental—Sitar, Violin and Tabla—leading to Diploma in Music, Diploma in Dancing—Kathak and Bharat Natyam
- (iv) Two year Post-S.S.C. Course leading to Diploma in Dramatics

### 2. Number of Students

Year/Class	Boys	Girls	Total
(1) <i>Diploma Courses:</i>			
1st Year	104	112	216
2nd Year	53	67	120
3rd Year	24	50	74
4th Year	23	23	46
5th Year	19	23	42
Total	223	275	498
(2) <i>Degree Courses:</i>			
1st Year B.Mus.	5	4	9
2nd Year B.Mus.	7	9	16
3rd Year B.Mus.	6	10	16
4th Year B.Mus.	7	5	12
Non-Collegiate	1	3	4
Total	26	31	57
(3) <i>Post-graduate Degree Course:</i>			
Jr. M.Mus.	1	4	5
Sr. M.Mus.	1	2	3
Ph.D.	2	1	3
Total	4	7	11
Grand Total	253	313	566

### 3. Staff

#### (a) Present Position:

The Staff consisted of 1 Professor, 1 Hon. Professor and Visiting Lecturer, 3 Readers, 10 Lecturers, 21 Assistant Lecturers, 5 Tabla Accompanists, 1 P.T. Ustad and 9 Class III and 10 Class IV employees. The teachers of this College carried out assignments in other Faculties in General Education in Fine Arts.

#### (b) Teachers who left:

- (1) Shri N. B. Kikani—Lecturer in Sitar

### 4. Professional Growth of the Staff

Sarvashri S. O. Shukla, Principal of the College and K. A. Taniorkar, Lecturer in Dance (Bharat Natyam) each were awarded a 'Tambra Patra' and an 'Honour Shawl' by the Gujarat Sangeet Nritya Natya Academy, as a mark of acknowledgement of their services in the fields of Music and Dance respectively.

### 5. Faculty Union Activities

(1) The Students' Association of the College arranged an entertainment programme on 5th October, 1970 and collected an amount of Rs. 1,198/- for the Gujarat Flood Relief Fund. The staff members also contributed a day's basic salary by which an amount of Rs. 594/- was also donated to the Fund.

(2) A two-day study programme was organised by the Department of Dramatics as a tribute to late Shri Jayanti Dalal and his contribution to the Gujarat Theatre on 31st January, 1971 and 1st February, 1971.

### 6. 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	6,109	612	48,722—95
(2) Number added during the year	138	—	2,416—50
(3) Number withdrawn from the record	—	—	—
Total	[6,247	612	51,139—45

Thirty-two periodicals were subscribed to during the year.

The College Library remains open from 9-00 a.m. to 12-00 p.m. and from 5-00 p.m. to 8-00 p.m. and average number of readers in the library was 159 during the year under report.

## 7. Museums, Laboratory, Studios, Workshops etc.

Sr. No.	Item	Cost of equipment as on 1-4-1970 Rs.	Cost of equipment written off during the year Rs.	Cost of equipment added during the year Rs.	Cost of equipment as on 31-3-1971 Rs.
(1)	Museum	1,45,572—55	—	9,256—14	1,54,828—69
(2)	Laboratory				
(3)	Studios				
(4)	Workshops				
	Total	1,45,572—55	—	9,256—14	1,54,828—69

## 8. Distinguished Visitors

(1) Dr. Mary Joy Curtis,  
Associate Professor of Music Education,  
Syracuse University, N.Y. U.S.A.

21-9-1970

## 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<br>(Special Pandit Courses) | (i) Dharma Shastra,<br>(ii) Jyotish Shastra,<br>(iii) Nyaya and Vaisheshik Darshan,<br>(iv) Purva Mimansa Shastra,<br>(v) Sahitya Shastra,<br>(vi) Sankhya Yoga and Vedant Darshan,<br>(vii) Shuddhadwaita Vedant and<br>(viii) Vyakaran Shastra. |
| (iii) Visharad<br>(Madhyama Kaksha)                  | (i) Astrology and Astronomy,<br>(ii) Grammar and Literature (with English upto the S.S.C. Standard compulsory for both the branches).   |
| (iv) Certificate<br>(Pratham Kaksha)                 | (i) Puran,<br>(ii) Rigved Yajniki,<br>(iii) Shukla Yajurved,<br>(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 1970-71 was as under:

(1) Pratham Kaksha Certificate:			
	Men	Women	Total
1st Year	32	2	34
2nd Year	9	5	14
3rd Year	6	1	7
Total	47	8	55
(2) Madhyam Kaksha (Visharad)			
(i) Vyakaran Shastra:			
1st Year	11	4	15
2nd Year	1	2	3
3rd Year	1	—	1
4th Year	3	—	3
5th Year	1	2	3
Total	17	8	25

I	(ii) <i>Jyotish Shastra:</i>			
	1st Year	9	—	9
	2nd Year	1	1	2
	3rd Year	—	—	—
	4th Year	2	—	2
	5th Year	1	—	1
	Total	13	1	14
	(3) <i>Uttam Kaksha Shastra:</i>			
	(i) <i>Dharma Shastra:</i>			
	1st Year	1	—	1
	2nd Year	2	—	2
	(ii) <i>Sahitya Shastra:</i>			
	1st Year	1	—	1
	2nd Year	2	—	2
	(iii) <i>Suddhadwaita Vedant:</i>			
	1st Year	2	1	3
	2nd Year	—	—	—
	Total	8	1	9
	(4) <i>Shastri Voluntary:</i>			
	(English)	1	—	1
	(5) <i>Uttam Kaksha Acharya:</i>			
	(i) <i>Vyakaran Shastra:</i>			
	1st Year	2	1	3
	2nd Year	—	—	—
	(ii) <i>Dharma Shastra:</i>			
	1st Year	—	1	1
	2nd Year	1	—	1
	(iii) <i>Sahitya Shastra:</i>			
	1st Year	1	—	1
	2nd Year	—	—	—
	(iv) <i>Shuddhadwaita Vendant:</i>			
	1st Year	3	—	3
	2nd Year	—	—	—
	Total	7	2	9
	(6) <i>Vachaspati</i>	2	—	2
	Grand Total	95	20	115

### 3. Staff

During the year under report the staff of the Institution consisted of a Principal, 13 Adhyapakas, 1 Honorary Adhyapak, 2 Class III and 4 Class IV employees.

### 4. 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	55
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	260

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

Sr. No.	Particulars	Number	Cost in Rs.
1.	Books (including back numbers of Journals) as on 1-4-1970	4,921	18,646-21
2.	Books written off during the year	—	—
3.	Books added during the year	79	348-87
4.	Books as on 31-3-1971	5,000	18,995-08
5.	Journals subscribed during the year	5	45-30
6.	Amount spent on binding during the year	—	—
7.	Total amount spent for Library and Reading Room during the year	—	394-17

### 5. Publications by the Members of the Staff

The following research articles by the members of the staff were published in the annual issue of "Surabharati" 1970-71.

Sr.No.	Name of the Contributor	Title	Where Published
1	2	3	4
1.	Shri H. C. Mehta, Principal, Sanskrit Mahavidyalaya, Baroda	पण्डित ईश्वरचन्द्र विद्यासागरः	Surabharati.

1	2	3	4
2.	Shri S. Y. Mishra, Pradhyapak in Vyakaran Shastra	प्रामाण्यतत्त्वविमर्शः	Surabharati.
3.	Shri J. R. Pathak, Adhyapak in Vyakaran Shastra	अथातो धर्मजिज्ञासा	Surabharati.
4.	Shri L. G. Shukla, Adhyapak in Vyakaran Shastra	तत्समो ज्योतिर्गमय	Surabharati
5.	Shri S. V. Bhattbhatt, Hon. Pradhyapak in Dharmashastra	ज्ञानकर्मसमुच्चयस्य मोक्षहेतुत्वविमर्शः	Surabharati.
6.	Shri H. K. Shastri Hon. Adhyapak in Shuddhadwaita Vedant	अनुभाष्यप्रकाशकाशः श्रीपुरुषोत्तमचरणाः	Surabharati.

#### 6. Literary, Cultural and Other Activities

( i ) Extension lectures under auspices of Sharadopasak Mandal.

Sr.No.	Subject	Date	Lecturer
1.	कण्ठि महस्य वैशिष्ट्यम्	25-7-1970	Shri S. Y. Mishra.
2.	ज्यौ भारकराचार्यस्य वैशिष्ट्यम्	24-12-1970	Shri L. J. Zha.

( ii ) Extension Lectures:

Sr.No.	Subject	Date	Lecturer	Place
1.	Gurukrupa hi kevalam	11-8-1970	Shri H. C. Mehta	Shivananda Society, Baroda.
2.	Yajna Bhavana	25-9-1970	Shri H. C. Mehta	Udaynarayan Mandir, Baroda.
3.	Sanskrit and its importance	17-11-1970	Shri H. C. Mehta	Sanskrit Samaroha organised by the Director of Education of Gujarat, Ahmedabad.
4.	Position of Sanskrit	1-1-1971	Shri H. C. Mehta	Shankaracharya Math, Dakor.
5.	Vivekanand	16-1-1971	Shri H. C. Mehta	Vivekanand School, Kareli High Bag, Baroda.
6.	Vedaman Vishwakalyan ni Bahvana	3-2-1971	Shri H. C. Mehta	Santram Nadiad. Mandir,

#### 7. Extra Curricular Activities

( i ) Elocution Competition:

Elocution competition in Sanskrit was arranged on 4-2-1971 for the award of the Medal of Sharda Peeth Jagadguru Shankaracharya Shri Abhinav Sacchidanand Tirthaji Maharaj.

#### 8. Important Events

( i ) The eighth issue of 'Surabharati' an annual publication of the Baroda Sanskrit Mahavidyalaya in Sanskrit was published.

( ii ) Increase in the Value of Stipends:

The value of stipends in various courses of the Institution was raised from Rs. 10 to Rs. 15 in the Pratham Kaksha, from Rs. 12 to Rs. 20 in the Madhyama Kaksha or Visharad course and from Rs. 20 to 25 in the Uttamkaksha Shastri and Acharya courses, with a view to give incentive to students of the Institute.

( iii ) The institution of a monthly stipend for the Higher Post-graduate Research Degree course for Vachaspati:

A stipend of Rs. 25/- p.m. in the name of Late Shrimati Bachibai from the interest of the donation of Rs. 5,000/- received from Late Shrimati Bachibai, a daughter of Narsidas Gordhandas as recorded in her Will has been instituted for being awarded to a deserving candidate undertaking research for the Vachaspati degree.

( iv ) Donations:

( a ) A donation of Rs. 5,000/- was received for the institution of a Gold Medal to be awarded at the annual Convocation to the student of the Baroda Sanskrit Mahavidyalaya who has passed the final year Acharya examination held by the M. S. University of Baroda in March/April at the first attempt with First Class obtaining the highest number of marks thereat.

( b ) A donation of Rs. 5,000/- was received from the Nathdwara Temple Board, Nathdwara for the First Year of the third round of three years for the teaching of Shuddhadwaita Vedant Darshan for Shastri and Acharya Classes in the Uttam Kaksha of the Institution.

( c ) A donation of Rs. 500/- was received in two instalments from Sheth Hansraj Pragji Thakersey Education Trust, Bombay-1 for the purpose of giving additional stipends to the successful students in the terminal examination of the Institution.

( d ) An amount of Rs. 600/- was received from Vallabha Shodh Sansthan, Jatipura, for the institution of a scholarship of Rs. 50/- p.m. for one year for encouragement and promotion of the study of Shuddhadwaita Darshan in the Institute.

## CHAPTER XXI—PREPARATORY UNIT—ARTS AND COMMERCE

### 1. Courses of Studies

The Unit provides Preparatory courses of one-year duration in Arts and Commerce as shown below:

- (1) English Language and Literature
- (2) Indian Literature: ( i ) Hindi—Higher level/Hindi—Lower Level,  
( ii ) Gujarati/Marathi/Sindhi/Urdu/Add. English.
- (3) Social Studies,
- (4) General Science,
- (5) General English/Mathematics,
- (6) Indian History and Culture ( for Arts ) Book-keeping (for Commerce)
- (7) Second Language: Sanskrit/Pali/Persian/German/Geography/Commercial Geography, ( for Commerce ).

### 2. Number of Students

The number of students enrolled in different classes during the year 1970-71 was as under:

Class	Men	Women	Total
(1) Preparatory Arts	423	273	696
(2) Preparatory Commerce	603	189	792
Total	1,026	462	1,488

### 3. Staff

The Unit has a Head but no teaching staff of its own; but about 50 teachers of the Faculties of Arts, Commerce and Science and of the General Education Department undertook as in the past the work of teaching. The Unit has 5 Class III and 6 Class IV employees.

### 4. Library

Under the University scheme of amalgamation of libraries of Institutions, the Library of this Unit was amalgamated with the main University Library. New books are being added every year to the total 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.

## 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 902 men students and 171 women students. The total number of students was 1,073.

### 3. Staff

The Unit has a Head but no teaching staff of its own; but about 40 teachers of the Faculties of Arts and Science and of the General Education Department undertook as in the past the work of teaching. The Unit has 5 Class III and 6 Class IV employees.

### 4. Library

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

### Other Activities

(1) At the commencement of the first term of the academic year 1970-71, an Orientation Programme of 9 lectures by senior members of the teaching staff was arranged.

(2) The following lectures were arranged under the scheme of the Extra Mural grant of the Preparatory Unit for Science:

- ( i ) Dr. Chhotubhai Suthar of S. P. University, Vallabh Vidyanagar, gave a lecture on “અનંત જીવન” on 8th October, 1970.
- ( ii ) Professor D. M. Munshi of St. Xavier's College, Bombay gave a lecture on “Flies as Transmitters of Diseases” on 11th December, 1970.

(3) 14 students of the Unit took the National Science Talent Search Examination held in January, 1971.

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

## 1. Courses of Studies

There was provision for the following courses during the year:

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

## 2. Number of Students

Year/Class	Men	Women	Total No. of students
(1) Preparatory Arts	53	15	68
(2) Preparatory Commerce	123	4	127
(3) Preparatory Science	76	1	77
Total	252	20	272
(1) F.Y.B.A.	41	10	51
(2) S.Y.B.A.	15	9	24
(3) T.Y.B.A.	21	7	28
Total	77	26	103
(1) F.Y.B.Com.	116	6	122
(2) S.Y.B.Com.	83	4	87
(3) T.Y.B.Com. (with Banking)	60	4	64
Total	259	14	273
Grand Total	588	60	648

## 3. Staff

### (a) Present Position:

During the year, the staff of the College consisted of one Principal, 17 Lecturers, 2 Assistant Lecturers, one Physical Instructor, 10 Class III and 12 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 teaching the 'Mercantile Law'. Two teachers from Faculty of Commerce were invited for the subject of Banking.

## 4. Professional Growth of the Staff

### (a) Publication:

Name	Title	Name of the Journal where- in published with month of Publication
Shri K. H. Patel, Lecturer in Ancient Indian Culture	"Bone Objects"	Contributed this Chapter in the book. 'Excavations at Nagara' by Professor R. N. Mehta

## 5. Library

The college has a separate Library. It received from the University a grant of Rs. 12,500 for books, Rs. 2,000 for periodicals and Rs. 500 for binding. The working hours of Library were from 11-00 a.m. to 5-30 p.m. on all working days and from 11-00 a.m. to 3-30 p.m. on Saturdays.

### Particulars:

(1) Average number of students making use of the Library and/or the Reading Room daily	200
(2) Average number of teachers making use of the library and/or the Reading Room daily	22
(3) Total number of books issued to the students during the year	18,000
(4) Total number of books issued to the teachers during the year	1,700

Following figures show the stock and expenditure on the Library and/or the Reading Room:

	No.	Cost in Rs.
(1) Books (including back numbers of Journals) as on 1-4-1970	4,286	48,284-08
(2) Books written off during the year	797	12,499-90
(3) Books added during the year	5,083	60,783-98
(4) Books as on 31-3-1971	67	1,947-73
(5) Journals subscribed during the year		

(6)	Amount spent on binding during the year	—	499-60
(7)	Total amount spent for library and/or Reading Room during the year	—	14,947-23

#### 6. Museum, Laboratory, Studios, Workshop etc.

The following is the statement of the cost of equipments:

Sr. No.	Items	Cost of equipment as on 1-4-1970	Cost of equipment etc. written off during the year	Cost of equipment added during the year	Cost of equipment as on 31-3-1971
		Rs.	Rs.	Rs.	Rs.
(1)	Physics	10,315-22	—	1,815-25	12,130-47
(2)	Chemistry	10,618-66	—	270-00	10,888-66
(3)	Biology	2,404-40	—	564-50	2,968-90
		23,338-28	—	2,649-75	25,988-03

## CHAPTER XXIV—POLYTECHNIC

### 1. Courses of Studies

The Polytechnic offers the following courses :

- (1) Three Year Diploma Courses in Civil, Mechanical and Electrical Engineering.
- (2) Four Year State ( Extended ) Diploma Courses in Civil, Mechanical and Electrical Engineering.
- (3) Three Year and Ten Month Model Diploma Courses in ( a ) Technology of Processing of Oil and Gas, ( b ) Technology of Production of Synthetic Resins and Plastics and ( c ) Technology of Production of Fertilizers and Acids. These three new courses were started from 16th November, 1970 under the Indo-USSR Credit Agreement of December 1966. The Ministry of Education and Social Welfare and the Government of Gujarat have agreed to bear their shares ( 50 : 50% ) on the approved total Rupee expenditure of Rs. 12,80,000 for building, equipment and staff and Rupee equivalent of the Soviet Credit of Rs. 10,50,000 for Expert Cost, Fellowships and import of equipment and instructional aids from USSR.

### 2. Number of Students

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

( A ) Regular Diploma Course		Men	Women	Total
(1)	Civil Engineering	212	1	213
(2)	Mechanical Engineering	415	—	415
(3)	Electrical Engineering	312	2	314
Total		939	3	942
( B ) State ( Extended ) Diploma Courses				
(1)	Civil Engineering	34	—	34
(2)	Mechanical Engineering	86	—	86
(3)	Electrical Engineering	73	—	73
Total		193	—	193
( C ) Model Diploma Courses				
(1)	Technology of Processing of Oil and Gas	32	1	33

(2)	Technology of Production of Synthetic Resins and Plastics	31	2	33
(3)	Technology of Production of Fertilizers and Acids	32	1	33
	Total	95	4	99
	Grand Total	1,227	7	1,234

### 3. Staff

#### (a) Present Position :

The staff of the Polytechnic consisted of 1 Principal, 2 Heads of Departments, 20 Lecturers, 28 Senior Instructors, 24 Junior Instructors, 7 Assistant Lecturers, 64 Class III and 47 Class IV employees.

#### (b) New Appointments :

Appointments were made on two posts of Senior Instructors in Chemical Engineering.

#### (c) Teachers who left the University :

Name	Designation
(1) Shri C. K. Shah	Head, Civil Engineering Department
(2) Shri R. K. Kharod	Lecturer in Civil Engineering
(3) Shri S. C. Sheth	Lecturer and Workshop Superintendent

### 4. Professional Growth of the Staff

#### (a) Participation in Inservice Programme :

The following staff members participated in the short-term seminars and training courses for Indian Teachers under INDO-USSR Agreement of December 1966 during the months January to March 1971, organised by the M. S. University Polytechnic at Baroda with the help of Russian Experts, as a required part for the introduction of Model Diploma Courses in Petro-Chemical Technology.

Sr. No.	Name of the Teacher	Designation	Subject
(1)	Shri R. C. Mehta	Assistant Lecturer in Mathematics	Mathematics
(2)	Shri A. O. Shah	Assistant Lecturer in Mathematics	Mathematics
(3)	Shri N. N. Kakde	Assistant Lecturer in Physics	Physics
(4)	Shri S. H. Desai	Assistant Lecturer in Chemistry	Chemistry
(5)	Shri B. K. Dave	Assistant Lecturer in Chemistry	Chemistry
(6)	Shri D. C. Patel	Assistant Lecturer in Chemistry	Chemistry

Teachers of the Polytechnic participated in short-term seminars and training courses conducted at Hyderabad and Durg under the same programme :

Sr. No.	Name of the Teacher	Designation and Department	Subject	Place
(1)	Shri V. Y. Sane	Senior Instructor in Electrical Engineering	Principle of Electrical Engineering & Industrial Electronics	Hyderabad
(2)	Shri C. D. Panchal	Senior Instructor in Electrical Engineering	Principle of Electrical Engineering & Industrial Electronics	Hyderabad
(3)	Shri V. K. Dasgupta	Senior Instructor in Applied Mechanics	Technical Mechanics	Hyderabad
(4)	Shri R. H. Dave	Senior Instructor in Applied Mechanics	Technical Mechanics	Hyderabad
(5)	Shri J. C. Patel	Senior Instructor in Mechanical Engineering	Drawing	Durg
(6)	Shri M. N. Champaneria	Junior Instructor in Mechanical Engineering	Drawing	Durg

### 5. Library

#### (A) Acquisition Notes :

##### (1) Books :

Books were purchased from the recurring grant of Rs. 9,000/-. 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	12,819	1,87,967-15
Number added during the year	628	8,999-60
Number withdrawn from the record	13	237-00
Number remaining at the end of the year	13,434	1,96,729-75

##### (2) Periodicals :

During this year, the library subscribed to 73 periodicals. The total amount spent for the subscription of periodicals was Rs. 2,949-74 P, and the amount spent for binding was Rs. 610-40 P.

## (B) Circulation of Books etc. :

## (1) Registration :

The number of readers registered are as under :

(a) Students :	965
(b) Teachers :	158

## (2) Statistics :

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

(a) Daily average number of readers making use of the library	221
(b) Daily average number of books issued to the readers for home reading	44

## 6. Museum Laboratory, Studios, Workshops etc.

The institution is fully equipped with nine laboratories and nine workshops for imparting practical instruction to students.

Sr. No.	Item	Cost of equipments/Machinery as on 1-4-1970 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 31-3-1971 Rs.
(1)	Laboratories	6,54,869=16	—	1,293=42	6,56,162=58
(2)	Workshops	3,98,752=19	—	9,148=31	4,07,900=50

## 7. Distinguished Visitors

Name	Dates of Visit
(1) Professor Y. A. Gusakov, Professor of Mathematics, U.S.S.R.	27-12-1970 to 15-3-1971
(2) Professor N. H. Nikitenko, Professor of Physics, U.S.S.R.	27-12-1970 to 15-3-1971
(3) Professor N. F. Korotkikh, Professor of Chemistry, U.S.S.R.	27-12-1970 to 15-3-1971
(4) Professor E. V. Zelenin, Professor in Descriptive Geometry and Technical Drawing and Head of Soviet Delegation, U.S.S.R.	12-3-1971 to 14-3-1971

## CHAPTER XXV—SHRIMATI HANSA MEHTA LIBRARY

## 1. Acquisition Notes

## (1) Books :

The University Grants Commission sanctioned a grant of Rs. 2,50,000/- (Rs. 1,00,000/- for the Arts and Social Sciences Faculty and a sum of Rs. 1,50,000/- for the Science Faculty) for purchase of books and journals over and above the Fourth Five Year Plan allocation. Fifty percent of this amount was provided during the financial 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 also sanctioned the second priority grants of Rs. 2,92,000/- for purchase of books and journals for various departments in Humanities, Social Sciences and Sciences for the Fourth Five Year Plan period.

The Library received as usual a grant of Rs. 40,000/- from the University for purchase of books and periodicals and the same has been fully utilized.

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 Museology )	8,423
General Education Centre and Preparatory Unit	67
Faculty of Technology and Engineering	4,677
Faculty of Fine Arts	270
Chetan Balwadi	26
Faculty of Social Work	186
College of Indian Music, Dance and Dramatics	138
Oriental Institute ( Printed Section )	641
Polytechnic	628
Sanskrit Mahavidyalaya	91
Centre of Advanced Study in Education	728
Baroda Michigan Project	366
Shri M. K. Amin Arts and Science College and College of Commerce, Padra	797
Total	17,038

Out of these books, 1,209 were received as gift.

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

	Books	Bound Vols. of Periodicals	Pamphlets	Manus- cripts	Maps, Charts etc.	Total Value in Rs.
Number at the beginning of the year	2,37,724	28,617	14,515	248	763	40,55,289.11
Number added during the year	8,423	2,120	1,326	—	26	4,05,775.77
Number with drawn from the records	2,195	—	204	—	—	14,434.97
Number remaining at the end of the year	2,43,952	30,737	15,637	248	789	44,46,629.91

*Periodicals :*

975 periodicals and scholarly journals were subscribed to during the year.  
2,120 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	8,423
(2) New Accessions to the Faculty Libraries	8,615

Total	17,038
(3) Bound Periodicals catalogued	2,120

(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	21,058	43,075	64,133
(2) Cards filed in the catalogue	21,058	43,075	64,133

**3. Circulation of Books**

As usual, the working hours of the Library for the whole academic year i.e. from April 1970 to March 1971 (except in the months of May and June) were from 8-00 A.M. to 10-00 P.M. It also remained open on almost all Sundays and Holidays during the academic year. In the months of May and June, the Library remained open, except Sundays and Holidays, from 11-00 A.M. to 5-30 P.M. (on week days) and 11-00 A.M. to 3-00 P.M. on Saturdays.

This year from January 1971 the Central Hall Reading Room of the Baroda College Building was kept open from 8-00 A.M. to 10-00 P.M. for use by Preparatory and First Year students in Arts, Commerce, Science, etc. This reading room accommodates 225 readers and contains all the prescribed and recommended books for the Preparatory and First Year students. It remained open even on Sundays and Holidays.

The number of registered readers in various categories was as below :

(1) Post-graduate students	1,274
(2) Under-graduate students	6,401
(3) Research Scholars, Assistants, Fellows	75
(4) University Teachers	652
(5) Others	565
Total	8,967

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

(1) Daily average number of readers visiting the library	2,100
(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	1,078
(i) Average number of books issued per day for home-reading from general collection	322
(ii) Average number of books issued per day from Curricular Section	389
(iii) Average number of books issued per day from Central Hall	72
(iv) Average number of books issued per day for reference	295
(4) Average number of books issued per reader	35

#### 4. Reference Section

##### (1) Readers' Reference Service :

The Reference Section conducted a host of activities such as answering queries of readers personally, by correspondence and by phone, guiding students and teachers in the better use of our library resources.

##### (2) Orientation Programme :

In the beginning of the academic session, the Reference Section conducted an orientation programme intended to acquaint with and familiarise the new entrants to the working of the various sections of the library. The various practices and procedures followed by the library, the arrangement of books on the shelves and the technical devices were explained to them, so that they may be able to make the maximum use of the library and help themselves in finding out their requisite materials.

##### (3) Exhibitions

The Reference Section arranged exhibitions of books, pamphlets and photographs on five topics viz. (i) U.N. Day, (ii) Space Travel, (iii) Higher Education, (iv) Amir Khushraw. Besides these, selected new books were also displayed every week in the University Library.

##### (4) Bibliographical Activity

Bibliographies on the following topics were compiled during the year :

(i) Community Development, (ii) Urban Development, (iii) Town Planning, (iv) Panchayati Raj, (v) Books by Russian Authors on Mathematics, Physics and Chemistry and (vi) Books by and on Amir Khushraw.

##### (5) UNESCO Information Centre

To popularise the activities of the UNO and UNESCO, a separate UNESCO Information Centre has been kept in the Reference Section.

##### (6) The National Library Week :

In response to the appeal of Indian Library Association regarding the celebration of Third National Library Week, the Reference Section arranged special exhibition of books on the great role that the books and libraries can play in the development of the nation. It also arranged a seminar of School Librarians wherein many problems of school libraries were discussed and solutions were sought in the discussion.

(7) The Section published the descriptive list of Ph.D. Theses received in the library from January 1970 to December 1970.

#### 5. Teaching of Library Science :

Nineteen students including one ex-student appeared at the Bachelor of Library Science Examination. Eighteen came out successful—three in first class, fourteen in second class and one 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 were 31 permanent workers in the Press.

#### 2. Machinery

The Press has machinery worth Rs. 3,21,099 including machines worth Rs. 1,19,350 purchased from the grants of the University Grants Commission and the State Government.

#### 3. Printing Activities

During the year, 1,255 plus 252 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, Questionnaires, Magazines, Pamphlets, Certificates, General Forms, Prospectus, Souvenirs, etc. of the Faculties and Institutions. The University Press works purely as a service Department from April 1967.

(A) The following books were printed by the Press and published during the year :

Name of the Book	Publishers
1 Shravana Akhyana	Hindi Department.
2 Simhasan Batrishi	Gujarati Department.
3 Excavation at Nagara	Department of Archaeology and Ancient History.
4 Excavation at Jokha ( Arch. Series No. 11 )	Department of Archaeology and Ancient History.
5 Somanath—1956 Monograph No. 1	Department of Archaeology and Ancient History.
6 Terminal Report of PL 480 Project, FG-In-240, Laboratories Studies	Biochemistry Department
7 Studies of Organic Acid Metabolism in Fruit Tissue, Terminal Report of PL 480 Project, FG-IN-258	Biochemistry Department
8 Vandha Chalamali, Geography- Research Paper Series 5	Department of Geography

<i>Name of the Book</i>	<i>Publisher</i>
9 New Direction in Education of Indian Teachers	Faculty of Education and Psychology
10 Technology knocks at the door of Education	CASE
11 Some Aspects of Muslim Education	CASE
12 Communication in Classroom	CASE
13 Profiles of a Growing City—Souvenir	Faculty of Arts, Economic Conference
14 A study of Mobilization of Resources for Village Panchayata in Baroda District (1951-1965)	Department of Business Economics, Faculty of Commerce
15 Engineering Education—The Way Ahead	Structural Engineering Research, Faculty of Technology and Engineering
16 Social Change and Perception of Change in Child Rearing Practices in Suburban Indian Village	Research Scheme C. D. Department, Faculty of Home Science
17 Record of Group Work Practice in India	Faculty of Social Work
18 Case Records for Teaching Purposes	Faculty of Social Work
19 Laghu Prabandh Sangraha	Oriental Institute
20 Gujarat ek Darshana	Oriental Institute
21 Okha Mandal na Vaghero	Oriental Institute
22 Zafar Ul Walih Bi Mazaffar wa Alihi—An Arabic History of Gujarat Part I (GOS 152)	Oriental Institute
23 Hitopadesh ni Vartao Part 1-2	Oriental Institute
24 Panchatantra ni Vartao Part 1	Oriental Institute
25 Panchatantra ni Vartao Part 2	Oriental Institute
26 Petroleum	Oriental Institute
27 Kheti ni Sudharna ni Thodi Vartao	Oriental Institute
28 Ramayana Critical Edition Yuddhakanda	Ramayana Department
29 N. C. C. Brochure	N.C.C. H.Q.
30 Handbook Part I, 1969 and 1970	M. S. University of Baroda
31 Handbook Part IV (1967),	M. S. University of Baroda

<i>Name of the Book</i>	<i>Publishers</i>
32 Handbook Part III (M), 1969	M. S. University of Baroda
33 Twenty-first Annual Report 1969-70	M. S. University of Baroda
34 Ethics of Shikshapatri	M. S. University of Baroda
35 Prof. Tribhuwandas Gajjar ni Jeevan Katha	M. S. University of Baroda

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

- (1) The Journal of M. S. University of Baroda, (2) The Journal of Oriental Institute, (3) The Journal of Animal Morphology (Half yearly), (4) The Education and Psychology Review (Quarterly), (5) Swadhyaya (Quarterly).

#### 4. University Stationery Unit

This Unit is a service department of the University and is under the supervision and control of the 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. 1,64,797 was purchased and stationery worth Rs. 1,82,313 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. The total sale of books during the year was Rs. 62,309.

## CHAPTER XXVII—THE MAHARAJA SAYAJIRAO UNIVERSITY UNION

### 1. Executive Committee

For the academic year 1970-71 Professor V. V. Modi and Professor R. M. Dave were appointed as President and Treasurer of the M. S. University Union respectively.

Elections for the Vice-President, General Secretary and Faculty Representatives were held on 11th July, 1970. Shri Narendra Tiwari was elected as Vice-President, Shri Jaykishor Chaturvedi as General Secretary. There were 30 Representatives of various Faculties and Institutions. The following members were nominated by the Syndicate.

- (1) Rev. Father De'Souza, Principal, Rosary High School.
- (2) Shri H. P. Mehta, Advocate.

The first meeting of the Executive Committee was scheduled to be held on 23rd July, 1970 but was postponed on account of unavoidable circumstances. The meeting then was held on 1st August, 1970 for election of Sectional Secretaries and allocation of various portfolios.

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 Narendra G. Tiwari       |
|   | (ii) Shri Sudhir V. Athavale      |
| (2) University Students' Welfare Board      | (i) Shri Jayanti J. Patel         |
|   | (ii) Shri Bipin R. Shah           |
|   | (iii) Shri Narendra G. Tiwari     |
| (3) University Students' Aid Fund Committee | (i) Shri Jaykishor C. Chaturvedi  |
|   | (ii) Shri Narendra G. Tiwari      |
|   | (iii) Shri Prakash K. Brahmabhatt |

### 2. A brief account of the work of the various Committees is given below:

#### (1) Entertainment Committee:

On 29th September, 1970 a cultural programme was arranged at the General Education Auditorium.

#### (2) Indoor Games (Badminton and Table-Tennis):

Teams were sent to represent the University in Open Gujarat Badminton Tournament sponsored by State Board of Electricity at Ahmedabad and Open Gujarat Tournament at Vidyanagar. Kumari Pratima Godbole won the triple crown,

In Table-Tennis, our team participated in Inter-University Tournament held at Kolhapur. In Inter-Faculty Table-Tennis Tournaments, the Faculty of Technology and Engineering was the winner and the Preparatory Unit Science was the runner up.

#### (3) Hiking Club:

During the year the club sent a batch of 30 students for Basic Rock Climbing Course at Mount Abu and undertook a tracking trip to Pavagarh.

#### (4) Reading Room and Library:

The Reading Room-cum-Library Room was provided with new furniture and additional magazines were included in the Library.

The Poor Boys' Library was reorganised; assessment and cataloguing of books was done as per the suggestions of the University Librarian.

#### (5) U.N.O. Society:

Shri Nilesh Shah, the Secretary represented the University at the Conference at Bangalore conducted by the National School of United Nations.

#### (6) Emester Editorial Board:

The Emester, the fortnightly publication brought out 3 numbers during the year.

#### (7) Debating Society:

The following debates were arranged during the year:

Debate	Subject
(i) Symposium	"What has happened to today's youth".
(ii) Professor D. Subbarao Memorial Trophy extempore elocution in English	—
(iii) N. B. Bhatt Trophy Debate in Gujarati (Extempore)	—
(iv) Sudhalkar Trophy Debate in Marathi (Extempore)	—
(v) M. N. Wadia Trophy in English	"Dictatorship or Democracy".
(vi) Pro-Vice-Chancellor Trophy Debate in Gujarati	"આ સભા માને છે કે ફેલોમાં ચુ'બનું દ્રશ્ય હોવું જરૂરી છે."
(vii) Vice-Chancellor's Trophy Debate in English	"Coalition Government based on minimum and time bound programme at the centre is the only solution to bring stability in India".
(viii) B. N. Majmundar Trophy Debate in Hindi	भारत में लोगों का एवं समाजवाद कायम करने के लिये 'इन्दिरा हटावो' ही एकमात्र ध्येय होना चाहिये.

### 3. University Youth Festival

The 20th University Youth Festival was held from 18th to 22nd January, 1971. The Chancellor of the University Shri Fatehsinhrao Gaekwad was the Chief Guest at the inauguration. A festival cricket match was played on the occasion.

Entertainment programme including the winning items of the inter-faculty competition was presented for the students.

Also a Fancy Dress Competition, Kavi Sammelan, Brain Trust, Sports competition, symposium and debates were organised by the Youth Festival Committee.

### 4. Student Visiting Programme Sponsored by U.G.C.

This year, during the month of October a team of 11 members visited the Poona University and 30 members visited the Shivaji University, Kolhapur, under the above programme. On the reciprocal basis, teams from Poona and Kolhapur Universities visited our University.

## CHAPTER XXVIII—GENERAL EDUCATION CENTRE

During the formative years of the University considerable thinking was done on the place of General Education in the academic programme of the University. It was felt that while making provision for specialized studies, a University should also ensure that every student, no matter what his speciality, has some understanding of the physical world in which he lives, has an appreciation of the complex social relationships by which he is surrounded and has 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 this end, the University accepted the principle that General Education should be an important complement to specialisation, and from 1953 a programme of General Education lectures and discussions was arranged for the students of the Arts, Science and Commerce degree classes. From June, 1957 this was extended to 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. Till 1969-70 General Education was a required subject for students of the University but since then it has been made optional.

### 2. Organisation

The General Education Advisory Committee consisting of Vice-Chancellor, Pro-Vice-Chancellor, Deans and other members advises on all matters pertaining to the General Education Programme for various Faculties.

### 3. Building and Equipment

Classes meet in the General Education Centre. The Centre constructed and equipped with the Ford Foundation grant of \$ 4,30,000 has been in existence from June, 1963.

### 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 total number of students to whom the General Education Programme is offered in the various Faculties is as follows:

<i>Sr. No.</i>	<i>Faculty and Class</i>	<i>Total number of students</i>
(1)	Faculty of Arts	
	F.Y.B.A.	737
	S.Y.B.A.	512
(2)	Faculty of Science	
	Pre-Medical	150
	F.Y.B.Sc.	422
	S.Y.B.Sc.	354
(3)	Faculty of Commerce	
	F.Y.B.Com.	960
	S.Y.B.Com.	584
(4)	Faculty of Technology and Engineering	
	B.E. I	351
	F.Text	44
(5)	Faculty of Fine Arts	
	(including College of Indian Music, Dance and Dramatics)	
	Second Year	22
	Third Year	38
(6)	Faculty of Home Science	
	Second	167
	Third Year	152
	<b>Total</b>	<b>4493</b>

\*(Note: Now the General Education is no longer a required subject for a student before graduation, the number of students who actually availed of the programme is much smaller than these figures suggest)

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 Courses

The following Courses were offered:

- (1) Human Civilization,
- (2) Social, Political and Economic Problems of India,
- (3) Science and its Impact on Society,
- (4) Readings from Literature and Art Appreciation,
- (5) On Values of Life.

These General Education Courses are distributed over two years of the Degree Course. 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 organisation of the programme. In addition to the above staff, 12 teachers from 6 departments and institutions of the University participated in the teaching work of the General Education programme of this year.

## 7. Library

The Centre has a separate library of its own. At the end of the year, the stock was 2156 books of the value of Rs. 14,221-92. The Library continued to subscribe to 20 periodicals during the 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 1970-71 there are ten Halls for men and four Halls for women students. Two more Halls for men are under construction. Out of these, one is likely to be ready for occupation by June, 1971. The general policy of the University is to distribute students from various faculties in different Halls so that every Hall has students from different Faculties. The University looks upon this as an important step towards promotion of emotional integration among the students and towards awakening their awareness and interests in areas other than their own.

The demand for residential accommodation in the University Halls of Residence is so considerable that much against its wish the University has to continue putting three students in each room in hostels. Even then the demand outstrips existing accommodation. More Hostels for boys and girls are an urgent necessity. At the end of the year under report 2225 men students and 818 women students were in residence in different Halls as against 2072 men students and 722 women students at end of previous year. A statement showing the break up of these students by Halls and Institutions is given in Appendix XI.

The 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. Facilities for Indoor games are also provided in all the Halls.

The University Health Centre dispenses medicines and provides treatment to the students of the Halls free of charge. In urgent cases the Medical Officer attends the students in their rooms, free of charge. The Medical Officer also visits each Hall once a month to inspect the sanitation of the rooms and the mess.

### 2. University Health Centre

During the year the staff of the Health Centre consisted of one Medical Officer, two Honorary Physicians, one Surgeon, one Lady Gynaecologist, one Part-Time Lady Doctor, one Nurse, one Compounder-cum-Clerk, one Sanitary Inspector, one Laboratory-cum-X-ray Technician and three Class IV employees.

Hostels are visited every month twice, once after prior intimation and once for surprise inspection of sanitation and hygiene in both hostels and kitchens.

The Health Centre provides preventive and curative services for the students, members of the staff and their families.

The new entrants were given a medical check-up by the Medical Inspection Board in S.S.G. Hospital. Out of the total 4037 scheduled for medical check-up 3205 (79.39%) reported and examined. 1186 (37.06%) 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 for 819 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.

90 students and 227 staff members were inoculated against Cholera. 17 students and 61 staff members were vaccinated against small pox.

During the year, the total attendance of the patients at the Health Centre Clinic was 31,409 (19,543 were students and 11,866 were the members of the staff and their families). The average daily attendance has been 86 during the year. The total number of cases attended was 1862. The average per day for emergency cases during the year has been more than 5.

The total number of laboratory investigations were 1648. The total number of fluoroscopy examination was 688 and X-ray film 98.

A Family Planning Centre was started in the Health Centre in August, 1970. One part-time Surgeon, one part-time Lady Doctor and 2 Family Planning Field Workers (One male and One female) are working in the Family Planning Centre.

### 3. Physical Education Department

#### (1) Staff:

The staff of the Department consisted of one Director, four Physical Instructors, three Swimming Trainers, one Boating Trainer and one Clerk.

#### (2) Physical Training:

Physical Training was imparted to 1910 men students and 1238 women students (total being 3148) during the year.

#### (3) Major Games:

Cricket, Tennis, Hockey, Foot-ball, Volley-ball, Throw-ball, Net-ball, Basket-ball, Kho-Kho, Kabaddi etc. were organised and conducted by the Officer-in-Charge of the respective games and the Physical Instructors.

(4) *Swimming and Boating:*

In Swimming 564 + 1240 (Guests) members and in Boating 90 + 35 (Guests) members were imparted training by the Swimming trainers and the Boating trainer respectively.

(5) *Tournaments and Competitions:*

Cricket, Badminton, Basket-ball, Athletic, Throw-ball, Hockey (Women), Foot-ball teams participated in league as well as knock out Tournaments held at Baroda. Basket-ball and Badminton teams also participated in the Open Gujarat State Championship held at Ahmedabad and Bhavnagar respectively.

(6) *Training of University Teams:*

The training for various University teams was organised and conducted by the Officer-in-Charge for various games and the Physical Instructors. Coaches were also appointed to give special training in Cricket, Hockey, Basket-ball, Kho-Kho, and Tennis.

(7) *Inter-University Tournaments:*

University (1) Cricket, (2) Hockey (Men), (3) Hockey (Women), (4) Foot-ball, (5) Kho-Kho (Men), (6) Kho-Kho (Women), (7) Tennis, (8) Badminton (Men), (9) Badminton (Women), (10) Table-Tennis (Men), (11) Table-Tennis (Women), (12) Shooting (Men), (13) Basket-ball (Men), (14) Basket-ball (Women), (15) Volley-ball (Men), (16) Swimming (Men) teams were sent to participate in the Inter-University Tournaments.

- (a) Shooting team won the All India Championship.
- (b) Foot-ball team lost in semi-finals in W.Z. Tournament held at Ahmedabad.
- (c) Cricket team lost in semifinals at Poona in W.Z. Cricket Tournament.
- (d) Kho-Kho (Men) team reached upto the finals held at Agra.
- (e) One member of our Swimming team was qualified for the finals at Indore.

Under the auspices of this University, the South Zone Inter-University Tennis Tournament was organised and conducted on the University Tennis Courts at Baroda from 4th to 11th December, 1970. 16 Universities participated in the Tournaments.

*Results:* Winners—Madras University.

Runners up—Bangalore University.

(8) *Inter-Faculty Tournaments:*

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

<i>Tournaments</i>	<i>Winners</i>	<i>Runner up</i>
Foot-ball	Faculty of Commerce	Faculty of Technology and Engineering
Cricket	Faculty of Arts	Faculty of Medicine

(9) *Winners of Individual Championship:*

<i>Game/Sports</i>	<i>Winners</i>	<i>Faculty/Institution</i>
Athletic	Shri Rajanikant Patel	Medicine
	Kum. Agashe Y. Mangala	Arts.

(10) *University Annual Sports:*

As a part of the 20th University Youth Festival, Annual Sports were held on the University Ground, in January 1971. Students from various Faculties and Institutions participated in the track and field events.

(11) *Participation in State Championships:*

- (a) Basket-ball Men and Women teams participated in Gujarat State Basket-ball Championship held at Bhavnagar.
- (b) Badminton team participated in Ranking Tournament held at Ahmedabad.
- (c) Two of our Athlets participated in State Athletic Championship.

(12) *Participation in National Championships:*

- (a) 5 members of the University Cricket team played for the Baroda Cricket Association in the Ranji Trophy Cricket Tournament.
- (b) 5 members of the University Kho-Kho team played from Gujarat State Kho-Kho Association in the All India Kho-Kho Tournament held at Rohtak in January 1971.
- (c) Two members of the University Badminton team played from Gujarat State Badminton Association in National Championship held at Calcutta.
- (d) Two members of the Swimming Pool were selected to represent Gujarat Swimming Association in National Championship held at Bangalore.
- (e) Two men and two women players of the University Basket-ball teams were selected to represent the Gujarat State Basket-ball Association in National Championship held at Agra in December, 1970.

- (f) Our University Shooting team won the championship in the All India University Shooting Championship held at Aligarh.

Blazers given to the University players as under:—

- (i) 13 Blazers given to the University Kho-Kho team which was runners up in the University Kho-Kho tournament.
- (ii) Blazers given to 3 players of the University Cricket team who represented the Baroda Cricket Association in the Ranji Trophy Tournament.
- (iii) 2 Blazers given to the University Badminton team that represented in Gujarat State Badminton team in the National Championship.

#### 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) 1 Gujarat Air Sqdn. NCC
- (7) 3 Gujarat Tech. Air Sqdn. NCC

*Strength:*

The allotment of NCC Officers and the number of Cadets enrolled are given below:

NCC Unit	NCC Officers	NCC Cadets
(1) 3 Gujarat Bn. N.C.C.	8	832
(2) 12 Gujarat Bn. NCC	5	827
(3) 5 Gujarat Girls Bn. NCC	4	465
(4) 1 Gujarat Comp. Tech. Regt. NCC	3	400
(5) 2 Gujarat Naval Unit NCC	2	140
(6) 1 Gujarat Air Sqdn. NCC	2	191
(7) 3 Gujarat Tech. Air Sqdn. NCC	2	110

Training of all the Units started in June/July 1970 and terminated in February, 1971.

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 at Junagadh from 24-12-1970 to 4-1-1971	3	123
(2) 12 Gujarat Bn. NCC	Combined Annual Training Camp at Junagadh from 24-12-1970 to 4-1-1971	2	125
(3) 1 Gujarat Comp. Tech. Regt. NCC	Combined Annual Training Camp at Dabhoi from 24-12-1970 to 4-1-1971	3	195
(4) 2 Gujarat Naval Unit NCC	Combined Annual Training Camp at Udaipur from 18-10-1970 to 29-10-1970	2	64
(5) 1 Gujarat Air Sqdn. NCC	Combined Annual Training Camp at Jamnagar in 1970	2	70
(6) 3 Gujarat Tech. Air Sqdn. NCC	Combined Annual Training Camp at Dabhoi from 24-12-1970 to 4-1-1971	2	76

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

*Camps/Courses:*

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

- (1) 3 Gujarat Bn. NCC
- 2 Cadets attended All India Advance Leadership course at Mahabaleshwar and Manali.
- 1 Cadet attended Advance Leadership course at Gulmarg.
- 1 Cadet attended All India Summer Training Camp at Turbanhalli.
- 10 Cadets were attached to Regular Army Unit at Jaipur.
- 4 Cadets attended Neighbouring State Camp at Panchmari.
- (2) 12 Gujarat Bn. NCC
- 1 Cadet attended Advance Leadership course at Kurseong.

1 Cadet attended Advance Leadership course at Neyyadam.  
 1 Cadet attended Advance Leadership course at Manali.  
 1 Cadet attended All India Summer Training Camp at Amarkantak.  
 3 Cadets attended Adventure course at Nim, Uttarkashi.  
 14 Cadets were attached to Regular Army Unit.

(3) 5 Gujarat Girls Bn. NCC 10 Cadets attended All India Summer Training Camp at Kalimpong.  
 1 Officer and 10 Cadets attended Advance Leadership course at Sauni.  
 10 Cadets attended Neighbouring State Camp at Bhopal.  
 1 Officer and 10 Cadets attended Shooting Competition Camp at Surat.

(4) 2 Gujarat Naval Unit NCC 2 Officers attended Refresher Course for Senior Division Officers at INS Vendurthy, Cochin.  
 1 Officer and 3 Cadets attended Advance Leadership course at Vishakhapatnam.  
 7 Cadets attended INS Nau Sainik Camp VII at Cochin.  
 4 Cadets attended All India Summer Training Camp at Turbanhalli.

1 Cadet attended Sea Training at INS Khukri.  
 2 Cadets attended Attachment Camp at INS Vendurthy, Cochin.

1 Cadet attended 26 Basic Mountaineering Course at Uttarkashi.

1 Cadet attended 72 Basic Mountaineering course at Darjeeling.

(5) 1 Gujarat Air Sqdn. NCC 1 Cadet attended All India Summer Training Camp at Ootacamund.

1 Cadet attended INS Nau Sainik Camp at Cochin.

9 Cadets attended Vayu Sainik Camp at Tambram.

2 Cadets were attached to Air Force at Bangalore.

(6) 3 Gujarat Tech. Air Sqdn. NCC 1 Cadet attended All India Summer Training Camp at Ootacamund.

1 Cadet attended All India Summer Training Camp at Amarkantak.

1 Cadet attended Advance Leadership course at Mahabaleshwar.

7 Cadets attended Vayu Sainik Camp at Tambram.

1 Cadet attended Republic Day Contingent Camp.

#### Certificate Examinations:

The Certificate Examinations were held in December 1970 and February 1971 and results are as under:

Unit	'B' Certificate		'C' Certificate	
	Appeared	Passed	Appeared	Passed
(1) 3 Gujarat Bn. NCC	83	64	7	6
(2) 12 Gujarat Bn. NCC	165	143	4	2
(3) 1 Gujarat Comp. Tech. Regt. NCC	74	60	2	2
(4) 3 Gujarat Tech. Air Sqdn. NCC	64	62	2	2
(5) 2 Gujarat Naval Unit NCC	36	24	3	3

	'G-I' Certificate		'G-II' Certificate	
	Appeared	Passed	Appeared	Passed
(1) 5 Gujarat Girls Bn. NCC	178	144	5	5
(2) 1 Air Sqdn. NCC	38	33	5	4

#### Annual Day Functions:

NCC Units held their Annual Day functions as under:

Unit	Date	Chief Guest
(1) 3 Gujarat Bn. NCC	3-2-1971	Dean, Faculty of Science
(2) 12 Gujarat Bn. NCC	16-2-1971	Head, Preparatory Unit (Arts and Commerce)
(3) 1 Gujarat Comp. Tech. Regt. NCC	24-2-1971	Vice-Dean, Faculty of Technology & Engineering
(4) 5 Gujarat Girls Bn. NCC	12-2-1971	Dean, Faculty of Home Science
(5) 2 Gujarat Naval Unit NCC	20-2-1971	Dean, Faculty of Commerce
(6) 3 Gujarat Tech. Air Sqdn. NCC	28-2-1971	Dean, Faculty of Science
(7) 1 Air Sqdn. NCC	28-2-1971	Dean, Faculty of Science

### *NCC Day Celebration:*

NCC day was celebrated on 27th November, 1970. Parents were invited to witness the performance of the Cadets. The programme consisted of drill, bayonet fighting, demonstration of sports by various NCC Unit, flag-communication, bridge construction, casualties evacuation, platoon attack, mock battles etc.

### **5. National Service Scheme**

(1) In a fresh bid to mobilize the University students who have aptitude for constructive work, the National Service Scheme was launched in November 1969. This Scheme is sponsored jointly by the Ministry of Education and Youth Services, Government of India and the State Government and introduced in all Universities of India. The Scheme is intended to develop national consciousness and a sense of social responsibility amongst the student community.

(2) An Advisory Committee for the N.S.S. is also constituted under the Chairmanship of the Pro-Vice-Chancellor, Professor P. J. Madan.

(3) The staff of the scheme consisted of one Hon. Director, one Hon. Deputy Director, one Programme Co-ordinator, eight N.S.C. Officers, one Programme Specialist, three Class III and two Class IV employees.

(4) The total enrolment of the volunteers was 1,250 students during the year 1970-71.

(5) The N.S.S. Training Programme was conducted by the Faculty of Social Work, M. S. University of Baroda in two batches from 8th September, 1969 to 10th October, 1969 and 20th April, 1970 to 30th April, 1970. Twelve teachers and sixteen students of this University were trained to take up N.S.S. Programme. Out of these trainees, nine teachers and two students were absorbed in the N.S.S. Programme as Honorary N.S.C. Officers and student leaders.

(6) For the N.S.S. student volunteers who have enrolled so far at this University, five two-hour orientation sessions were organised.

The following groups were formed on the basis of the students' choices:

- (i) The Literacy Group conducted classes at—(a) Labour Welfare Centre, (b) Ramwadi Slum area, (c) University Campus, (d) Nava Yard Youth Club, and (e) Chunarwad Slum Area.
- (ii) The Survey Work Group gave training for carrying out social surveys including health, socio-economic conditions, nutrition at Salatwada Area of Baroda City and some villages of Baroda District.
- (iii) The Mobile Library Group opened Libraries and provided books and Magazines at (a) S.S.G. Hospital, (b) T.B. Hospital, and (c) Railway Hospital.

- (iv) The Construction Group worked for (a) clearance of posters on the Campus, (b) plantation of trees and garden in Polytechnic, (c) road repairs around Polytechnic, and (d) raising N.S.S. Campus.
  - (v) The Sports Group taught sports at (a) Labour Welfare Centre, (b) Certificate School, (c) Alembic School, (d) Remand Home for Boys and (e) Navapura.
  - (vi) The Recreation and Cultural Group gave performances at Labour Welfare Centre, Mental Hospital and staged two programmes at University level for Flood Relief Fund.
  - (vii) The Co-operative Society Group worked for Book Bank and gave assistance to increase membership and sales of Consumers Co-operative Stores in University Campus.
  - (viii) The Audio-Visual Group prepared story books for imparting Education and prepared the required Audio-Visual material for NSS programmes.
  - (ix) The Traffic Education Group of NSS volunteers is being trained for Traffic Education. The group started showing films on traffic control in the Secondary Schools of Baroda.
  - (x) The NSS Bulletin Group published the first NSS News in December 1970 with photographs of various activities.
  - (xi) The Hobby Group has started a Clay Centre and prepared artistic wall pieces and decorative materials.
  - (xii) The Films Group showed films on different subjects at Central Jail, Remand Home for Boys, Certified School and Slums of Baroda City.
  - (xiii) The Reading and Writing Group gave assistance to blind students in reading, blind school children in Braille and teaching Braille to NSS volunteers.
  - (xiv) The Blood Bank Group (Fiends Society) made campaign in collecting blood from the hostel residents and reached the target of collecting 500 bottles. This group has also undertaken different projects at Social Welfare agencies of Baroda City.
- (7) The N.S.S. Volunteers participated in various camps as shown below:
- (i) A group of 40 students and 3 teachers developed University Sports Ground near Drug Laboratory from 3rd to 10th May, 1970.
  - (ii) At Chhota-Udepur, a Camp consisting of 20 students and 2 teachers was organised from 11th to 20th May, 1970 in which the student

volunteers carried out a Socio-economic Survey of a few tribal villages.

- (iii) 355 NSS student volunteers and 10 teachers participated in Flood Relief Programme at different places of Baroda, Broach and Malsar during August-September, 1970. 7 student volunteers and one teacher joined the rescuing work for families in Fatehgunj Camp area of Baroda during rising waters of River Vishwamitri.
- (iv) A batch of 50 students and 7 teachers NSC Officers participated in 6 Relief Camps established by Baroda Municipal Corporation and gave assistance in food distribution.
- (v) A batch of 140 students and 10 teachers organised one-day Mud Removal Camp in Fatehgunj area of Baroda City on 13th September, 1970.
- (vi) A one week Flood Relief Camp was organised at Malsar for giving Medical Relief and prevention towards epidemic during the period from 21st to 27th September, 1970. In this camp, 20 student volunteers and one teacher participated.
- (vii) Rehabilitation Camp was organised in two phases—Phase—I from 22-10-1970 to 27-10-1970 and Phase II—from 3-11-1970 to 8-11-1970 at Tithor in Padra Taluka. The NSS volunteers helped the villagers in clearing the debris of collapsed houses and constructing new houses on the basis of self-help. Alongwith rehabilitation work a health survey was also conducted for Prophylactic Camp. On the basis of this survey, medical services were provided to the villagers.
- (viii) During the Christmas Vacation (1970-71), 25 NSS student volunteers, who were likely to assume leadership positions, participated in a leadership training-cum-prophylactic Camp at Raipura village, 10 Kms. from Baroda. The trainees were involved in the planning and execution of the total Camp. The objectives of this camp were:
  - (a) to expose the students to rural settings through group living,
  - (b) provide them insight into the dynamics of leadership and (c) carry out a prophylactic camp at the village.
- (ix) NSS volunteers put up different entertainment items and handed over their Flood Relief collection of Rs. 800/- to the Vice-Chancellor, Shri N. K. Vakil.
- (x) A one-day Orientation Camp was arranged at Dabhoi on 28th February, 1971 for newly enrolled volunteers i.e. the students of

Preparatory and First Year Home Science and Diploma Classes. 100 NSS volunteers and 10 teachers participated in the Orientation Programme.

- (xi) The University Fun Fair for the year 1970-71 was held on 20th and 21st February, 1971. 150 stalls were put up by the students. The NSS volunteers had decorated "NSS Stall" exhibiting NSS activities and secured "The Best Decoration" prize.
- (8) The NSS Staff and Student Volunteers participated in various Conferences, Seminars etc. at State and National level as under:
  - (i) Professor (Kum.) Indira Patel, Director, NSS, attended the meetings of State Advisory Committee for NSS.
    - (a) Regional Seminar on Training and Consultancy needs in NSS at Bombay.
    - (b) Second Meeting of the Advisory Committee, NSS, Gujarat State.
    - (c) 3rd Zonal Conference of Education Minister and Vice-Chancellors of the Universities of Maharashtra, Gujarat and Punjab States at Bombay on 21-9-1970.
  - (ii) Shri B. M. Shah, NSC Officer was deputed for Youth Leaders Training Course at Central Institute of Research and Training in Public Co-operation, New Delhi.
  - (iii) Thirty-two student volunteers and three NSS Officers attended the All India Inter-University Camps under NSS Programme held at Ramnagar, Chandigarh, Kumaon Hills, Palayamkottai (Tamil Nadu), and Tungabhadra Dam Site, Hospet (Mysore).
  - (iv) Two student volunteers were deputed to Literacy House, Lucknow for Audio-Visual training.
  - (v) Shri Anil S. Navale, Programme Co-ordinator attended the workshop on "Famine Relief and Reconstruction" at New Delhi from 12th to 16th January 1971. He also attended All India Seminar on "Role of Programme Co-ordinator at University Level" sponsored by the Delhi School of Social Work, University of Delhi and Vishva Yuvak Kendra, New Delhi from 11th to 13th February, 1971.

#### 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 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

The M. S. University Hobby Workshop provided instructions to 203 students in various hobbies as shown below:

Hobby	Number of Students
( i ) Carpentry	20
( ii ) Assembling electrical and electronic appliances	53
( iii ) Music	64
( iv ) Clay Modelling	13
( v ) Photography	53
Total	203

### 8. University Employment Information and Guidance Bureau

The Bureau gave individual guidance and supplied individual information to 636 students and guided 301 at the time of their registration. It organised 46 group guidance talks on careers in Arts, Science, industries, etc.

Information about various courses and their employment potentiality was given to 2167 students. The Bureau also conducted a course of Stenography (English) under the scheme of 'Relief to Education Unemployed.'

Statement showing the number of students at the commencement of academic year 1970-71

Appendix I

Sr. No.	Institutions	*Post-graduate Courses		Degree Courses		Diploma Courses		Total		Grand Total 1970-71	Grand Total 1969-70	Grand Total 1968-69
		Men	Women	Men	Women	Men	Women	Men	Women			
1	Faculty of Arts ..	165	123	724	886	36	11	925	1020	1945	1892	1675
2	Faculty of Science ..	274	88	856	347	5	1	1135	436	1571	1515	1376
3	Faculty of Education and Psychology..	75	36	92	183	10	49	177	268	445	452	421
4	Faculty of Commerce ..	108	22	1815	384	†21	5	1944	411	2355	1832	1675
5	Faculty of Medicine ..	70	26	537	93	—	—	627	119	745	690	682
6	Faculty of Technology and Engineering	119	2	2251	62	287	—	2657	64	2721	2736	2665
7	Faculty of Fine Arts ..	17	8	42	36	†87	†10	146	54	\$200	188	188
8	Faculty of Home Science ..	1	86	—	588	—	—	1	674	675	644	599
9	Faculty of Social work ..	42	33	—	—	—	—	42	33	75	75	82
10	Faculty of Law ..	140	19	419	48	—	—	539	67	626	549	508
11	Preparatory Unit—Arts and Commerce	—	—	1026	462	—	—	1026	462	1488	1841	1693
12	Preparatory Unit—Science ..	—	—	902	171	—	—	902	171	1073	1042	1072
13	Shri M. K. Amin Arts and Science College and College Commerce, Padra	—	—	588	60	—	—	588	60	648	614	419
14	College of Indian Music, Dance and Dramatics	4	7	26	31	—	—	30	38	68	73	80
15	Baroda Sanskrit Mahavidyalaya ..	9	2	9	1	30	9	48	12	60	51	43
16	Polytechnic ..	—	—	—	—	1227	7	1227	7	1234\$	1117	1218
	TOTAL	1024	452	9307	3352	1703	92	12034	3896	15930	15311	14396

\* Includes Ph.D. and Masters Degree and Post-graduate Diploma students.

† Excludes 14 men students and 1 Woman Student of S.Y.B. Com. permitted to join the under-graduate Diploma Course in Co-operation simultaneously.

‡ Includes 3 Post-Diploma men students and 2 women students.

\$ Does not include 29 students who are non-collegiate and Government Scholars, Full-bright Scholars and Commonwealth students.

§ Includes 193 men students of Extended Diploma Courses and 95 men and 4 women students of Model Diploma Courses.

## Appendix II

Statement showing Non-University Students at the commencement of the year 1970-71

<i>Institution</i>	<i>Men</i>	<i>Women</i>	<i>Total 1970-71</i>	<i>Total 1969-70</i>	<i>Total 1968-69</i>
<b>(A) Diploma Courses :</b>					
(1) College of Indian Music, Dance and Dramatics	223	275	498	461	602
<b>(B) Certificate Course :</b>					
(1) Faculty of Arts	340	68	408	95	459
(2) Faculty of Fine Arts	3	2	5	13	14
(3) Baroda Sanskrit Mahavidhaylay	47	8	55	56	35
<b>(C) S. S. C. Course :</b>					
(1) University Experimental School	266	220	486	492	474
<b>(D) Nursery Course :</b>					
(1) Chetan Balwadi	34	22	56	58	64
(2) Kindergarten	17	12	29	27	28
<b>Total :</b>	<b>930</b>	<b>607</b>	<b>1,537</b>	<b>1,202</b>	<b>1,676</b>

## Appendix III

List of Degrees and Diplomas conferred at the Annual and Supplementary Convocations during the year 1970-71

<i>Sr. No.</i>	<i>Degree/Diploma</i>	<i>Annual Convocation December 1970</i>	<i>Supplementary Convocation March 1971</i>	<i>Total</i>
1	2	3	4	5
1	Ph.D. ( Arts )	1	1	1
2	Ph.D. ( Science )	14	5	19
3	Ph.D. ( Edu. & Psy. )	2	1	3
4	Ph.D. ( Medicine )	1	—	1
5	Ph.D. ( Tech. & Engg. )	—	1	1
6	Ph.D. ( Home Science )	1	—	1
7	M.D.	11	12	23
8	M.S.	5	5	10
9	M.A.	100	—	100
10	Acharya	2	—	2
11	B.A.	421	64	485
12	Shastri	7	—	7
13	B.Lib. Science	16	—	16
14	M.Sc.	141	—	141
15	B.Sc.	226	43	269
16	M.Ed.	41	1	42
17	B.Ed.	183	6	189
18	M.Com.	15	—	15
19	B.Com.	392	62	454
20	Dip. in Banking	22	—	22
21	Dip. in Cooperation	3	—	3
22	M.Sc. ( Medical )	4	—	4
23	M.B.B.S.	52	72	124
24	D.O.	—	1	1
25	D.A.	2	2	4

Sr. No.	Degree/Diploma	Annual Convocation December 1970	Supplementary Convocation March 1971	Total
26	D.L. & O.	—	1	1
27	D.M.R.	1	1	2
28	D.C.H.	1	2	3
29	D.C.P.	1	—	1
30	D.G.O.	—	4	4
31	M.E.	12	17	29
32	M.Text. ( Engg. )	—	1	1
33	B.E. ( Electronics )	20	—	20
34	B.E. ( CME )	359	7	366
35	B.Text. ( Engineering )	29	1	30
36	B.Text. ( Technology )	33	2	35
37	B.Arch.	24	15	39
38	P.G.Dip. Ref. & Air-Cond.	—	3	3
39	LL.M.	5	—	5
40	LL.B. ( Special )	12	1	13
41	LL.B.	109	15	124
42	D.T.P.	12	—	12
43	D.L.P.	31	—	31
44	M.A. ( Fine )	1	—	1
45	M.Mus.	6	—	6
46	B.A. ( Fine )	16	—	16
47	B.Mus.	9	—	9
48	Dip. in Museology	5	—	5
49	M.Sc. ( Home )	20	8	28
50	B.Sc. ( Home )	92	9	101
51	Dip. in N.S. Education	4	—	4
52	Dip. in Dietetics	6	—	6
53	M.S.W.	24	13	37
Total		2,494	376	2,870

A statemnt showing the number of teaching staff of various faculties and institutions as on 31st March, 1971

Faculty/Institution	Prof-essors	Readers	Lecturers	Asstt. Lecturers, Tutors, De-monstrators, Instructors	Honoary Part-time Research, and Others	Total
Arts	9	19	43	12	4	87
Science	13	26	63	68	—	170
Education and Psychology	4	4	16	6	11	41
Commerce	1	7	14	—	4	26
Technology & Engineering	19	35	65	81	1	201
Fine Arts	3	5	19	2	1	30
Home Science	3	7	20	14	1	45
Social Work	1	3	8	—	—	12
Law	1	1	2	—	11	15
Oriental Institute	1	1	4	—	—	6
College of Indian Music, Dance and Dramatics	1	3	10	21	2	37
Baroda Sanskrit Mahavidyalaya	—	1	4	8	1	14
Polytechnic	—	3	20	59	—	82
Shri M. K. Amin Arts and Science College and College of Commerce, Padra.	—	1	17	2	1	21
						37
						787
						55
						116
						305
						273

## List of Students qualifying for the Ph.D. degree in the year 1970-71

Sr. No.	Name	Subject	Title of the Thesis
1	2	3	4
1	Shri K. G. Kantawala	Gujarati	A critical edition and a comparative study of Poetical Works of Jivandas (18th Century A.D.) in the light of Akha's literary and philosophical tradition
2	Shri Shruti Sheel	Philosophy	Metaphysical Conceptions in Rigveda
3	Shri R. S. Godbole	Philosophy	Jnanesvara and Kabir : A study in the Comparative Philosophy
4	Shri A. J. Raval	Sanskrit	Ancient Indian Society, religion and mythology as depicted in the Brahma-vaiivarta Purana
5	Shri S. R. Nadkarni	Bio-chemistry	Studies on Sewage Organisms—Microbial Lipase
6	Shri D. J. Parikh	Bio-chemistry	Studies on Sewage in oxidation ponds working in series
7	Kumari B. I. Naik	Bio-chemistry	Amino Acid Metabolism in the normal and Tumour Tissues of Plants Cultivated in Vitro
8	Shri K. K. Sakariah	Bio-chemistry	Carbohydrate Metabolism in Citrus Fruits
9	Kumari V. J. Shah	Bio-chemistry	Studies in Citrus Fruits
10	Shri K. V. Thrivikraman	Bio-chemistry	Studies on Brain Metabolism
11	Kumari T. V. Joshi	Bio-chemistry	Studies on some aspects of Gastric Secretion
12	Shti P. I. Chaudari	Botany	Studies on the effects of light and gibberellic acid on trigo nella-Foenum-Graecum L. and Gossypium herbaceum L

1	2	3	4
13	Shri S. N. Vajranabhaiah	Botany	The changes nucleic acid in relation to Auxins Kinetin and Sugars during growth in cultures of cacumis melo L and Datura Metal I
14	Kumari D. Kamala Valli	Botany	Studies on the Effect of Gibberellic Acid on Sorghum (Sorghum Valgace Ped)
15	Kumari I. G. Lalchandani	Botany	Studies on the growth in culture of plant cells
16	Shri M. V. Reddy	Chemistry	Study on the chelates of some oky and Thio Compounds with Transition Metal Ions
17	Shri V. N. Dholakia	Chemistry	Studies in Coymarins
18	Shri R. C. Sharma	Chemistry	Formulation and Stability of amin complexes of some transition and non-transition metal Ions
19	Shri V. N. Mistry	Chemistry	Semiconducting Chelate Polymers and Charge—Transfer Complexes
20	Shri R. J. Chudgar	Chemistry	Studies in the Synthesis of Quinoline Derivatives
21	Shri R. A. Balani	Chemistry	Studies in Benzophenone Derivatives
22	Shri B. B. Jambusaria	Geology	Geology of the area around Shivrajpur (Dist. Panchamahals, Gujarat) with special reference to the Stratigraphy, Structure and Metamorphism
23	Shri V. M. Shah	Mathematics	Convergence and Summability Problems of Lacunary Fourier Series
24	Shri K. K. Rao	Microbiology	Metabolic changes in Biotin—deficient aspergillus nidulans
25	Shri P. P. Mathews	Physics	Optical absorption and aluminiscence Studies in Thallium Doped Potassium Chloride
26	Shri R. K. Shukla	Physics	Studies of Crystle Surfaces—Tin and Tellicium
27	Shri T. R. Joshi	Psysics	Tharmoluminescent and related properties of Thallium

1	2	3	3
28	Shri D. K. Mainigi	Zoology	Studies on the normal and regenerating tail of the common House Lizard
29	Shri N. L. Naik	Zoology	Studies on the Pterylosis, moults plumages and leg myology of some Starting (Avian Family Sturnidae)
30	Shri C. Venkataraman	Education	Construction and Standardisation of an aptitude test in Science
31	Shri B. S. R Anjaneyala	Education	A study of Job Satisfaction in Secondary School teachers and its impact on the Education of Pupils with special reference to the State of Andhra Pradesh
32	Shri I. D. Bhatt	Psychology	An investigation to study adolescent boys and girls in Baroda District (with reference to behaviour, interests and group life)
33	Shri N. T. Mehta	Psychology	Growth of psychological thought in India down the Age
35	Shri V. S. Thattey	Civil Engineering	The effect of thrust on the flexural rigidity of reinforced concrete and some implications in plane frame structures
35	Kumari G. Subbhalakshmi	Foods and Nutrition	Studies on pregnancy and lactation

## Appendix VI

## Results of the University Examinations—March/April/May and June, 1970.

Sr. No.	Examination	Number appeared										Number Passed										Percentage of Pass
		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	Grand Total					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19				
1	Prep. Arts	1113	31	637	445	1082	—	4	67	263	334	—	19	74	204	297	631	58.31%				
2	F.Y.B.A.	799	9	338	452	790	—	—	33	107	140	—	13	117	160	290	430	54.43%				
3	*S.Y.B.A.	477	8	205	264	469	—	—	—	112	112	—	—	—	211	211	323	68.86%				
4	T.Y.B.A.	547	10	223	314	537	—	9	54	98	161	1	15	114	129	259	620	78.50%				
5	M.A.	122	10	58	54	112	—	—	24	28	52	—	7	33	8	48	100	89.28%				
6	Acharya	2	—	2	—	2	—	—	2	—	2	—	—	—	—	—	2	100%				
7	Shastri	8	—	6	2	8	—	1	3	1	5	—	—	1	1	2	7	67.5%				
8	Visharad	1	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	00.00%				
9	B. Lib. Science	18	—	5	13	18	—	—	2	3	5	—	1	8	2	11	16	88.88%				
10	Dip. in German Lang. (U. G.)	24	4	20	—	20	—	—	9	3	4	16	—	—	—	—	16	80.00%				
11	Dip. in Russian Lang. (U. G.)	10	1	7	2	9	—	—	1	3	1	5	—	2	—	2	7	77.77%				
12	Adv. Russian and Technical Translation	2	—	2	—	2	—	—	1	1	—	2	—	—	—	—	2	100%				
13	Prep. Science	1238	25	1017	196	1213	—	230	324	135	689	—	48	67	35	150	839	60.92%				
14	Pre-Medical	128	1	113	14	127	—	32	55	14	101	—	7	6	1	14	115	90.55%				
15	*Dip. in Lab. Technique	5	—	5	—	5	—	—	—	—	5	5	—	—	—	—	5	100%				
16	F.Y.B.Sc.	469	6	338	125	463	—	17	67	53	137	—	24	43	19	86	223	48.16%				

\* No Class is awarded.

\* No Class is awarded.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
17	*S.Y.B.Sc.	375	13	265	97	362	—	—	—	149	149	—	—	—	77	77	226	62.43%
18	T.Y.B.Sc.	322	10	224	88	312	6	28	71	44	149	5	24	39	13	81	230	73.72%
19	*M.Sc. (Previous)	169	5	117	47	164	—	—	—	96	96	—	—	—	38	38	134	81.70%
20	M.Sc. (Final)	155	3	111	41	152	2	17	53	31	103	—	8	17	9	34	137	90.13%
21	M.Sc. (Appl. Geology)	4	—	4	—	4	—	4	—	—	4	—	—	—	—	—	4	100%
22	B.Ed.	189	—	104	85	189	—	7	63	29	99	—	2	70	12	84	183	96.82%
23	M.Ed. (O.C.)	2	—	1	1	2	—	—	1	—	—	—	—	—	—	1	2	100%
24	M.Ed. (N.C.)	41	—	28	13	41	—	2	21	4	27	—	1	8	3	12	39	95.12%
25	Dip. in Education	26	—	3	23	26	—	—	1	2	3	—	1	17	4	22	25	96.15%
26	Dip. in Early Childhood Edu.	20	—	—	20	20	—	—	—	—	—	—	1	9	10	20	20	100%
27	Prep. Commerce	1179	20	966	193	1159	—	28	246	385	659	—	6	64	83	153	812	70.06%
28	F.Y.B.Com.	955	29	825	101	926	—	20	136	242	398	—	3	17	40	60	458	49.46%
29	*S.Y.B.Com.	782	34	634	114	748	—	—	—	349	349	—	—	—	85	85	434	61.65%
30	T.Y.B.Com.	540	8	464	68	532	—	14	93	230	337	—	3	22	37	62	399	75.00%
31	*B.Com. (under O.Com. 27)	34	2	20	12	32	—	—	—	15	15	—	—	—	10	10	25	78.12%
32	*B.Com. (under O.Com. 25)	12	2	10	—	10	—	—	—	6	6	—	—	—	—	—	6	60%
33	*B.Com. (under O.Com. 26)	1	—	1	—	1	—	—	—	1	1	—	—	—	—	—	1	100%
34	*Dip. in Co-operation (U.G.)	14	—	14	—	14	—	—	—	14	14	—	—	—	—	—	14	100%
35	*Dip. in Co-operation (P.G.)	5	—	5	—	5	—	—	—	3	3	—	—	—	—	—	3	60%
36	M.Com.	20	2	17	1	18	—	1	6	6	13	—	—	1	—	1	14	77.77%
37	*Dip. in Banking	32	3	25	4	29	—	—	—	18	18	—	—	4	4	4	22	75.86%
38	*First M.B.B.S. (Condensed)	15	—	11	4	@15	—	—	—	3	3	—	—	—	1	1	4	26.66%
39	*Second M.B.B.S. (April)	133	—	108	25	133	—	—	—	48	48	—	—	—	19	19	67	50.37%
40	*Second M.B.B.S. (Suppl.)—July	67	2	59	6	65	—	—	—	48	48	—	—	—	6	6	54	83.07%
41	*Third M.B.B.S.	68	—	56	12	68	—	—	—	28	28	—	—	—	6	6	34	50%
42	*M.D. (Br. I—Medicine)	8	—	7	1	8	—	—	—	4	4	—	—	—	—	—	4	50%
43	*M.D. (Br. II—Pathology)	3	2	2	2	4	—	—	—	1	1	—	—	—	2	2	3	75%
44	*M.D. (Br. V—Obstetrics & Gynaecology)	5	—	1	4	5	—	—	—	1	1	—	—	—	3	3	4	80%

\* 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). @ The result of one candidate is not yet declared.

45	*M.D. (Br. VI—Pediatrics)	2	—	2	—	2	—	—	—	—	—	—	—	—	—	—	—	00.00%
46	*M.S. (Br. I—Surgery)	11	—	11	—	11	—	—	—	4	4	—	—	—	—	4	36.36%	
47	*M.S. (Br. III—Orthopaedics)	2	—	2	—	2	—	—	—	1	1	—	—	—	—	1	50%	
48	*F.Y.B. Physiotherapy	10	—	6	4	10	—	—	—	4	4	—	—	2	2	6	60%	
49	*Dip. in Anaesthesiology	2	—	2	—	2	—	—	—	2	2	—	—	—	—	2	100%	
50	*Dip. in Medical Radiology— Part II	1	—	1	—	1	—	—	—	1	1	—	—	—	—	1	100%	
51	*Dip. in Child Health	2	—	1	1	2	—	—	—	1	1	—	—	—	—	1	50%	
52	*Dip. in Clinical Pathology	2	—	2	—	2	—	—	—	1	1	—	—	—	—	1	50%	
53	*Dip. in Gynaecology & Obstetrics	2	—	—	2	2	—	—	—	—	—	—	—	—	—	—	00.00%	
54	M.Sc. ( Medical subjects)	5	—	4	1	5	—	—	—	2	2	4	—	—	—	4	80%	
55	F.Y. Dip. ( CME)	391	11	379	1	380	—	10	47	123	180	—	—	—	1	181	47.63%	
56	S.Y. Dip. (CME)	324	4	319	1	320	—	20	74	85	179	—	—	—	1	180	56.45%	
57	*I Sem. of S.Y. Dip. ( CME)— EDC.	37	3	34	—	34	—	—	—	16	16	—	—	—	—	16	47.05%	
58	II Sem. of S.Y. Dip. ( CME)— EDC.	61	3	58	—	58	—	—	—	33	33	—	—	—	—	33	56.89%	
59	*I Sem. of Final Year D.C.E.—EDC.	8	1	7	—	7	—	—	—	4	4	—	—	—	—	4	57.14%	
60	*I Sem. of Final Year D.M.E.—EDC.	46	9	37	—	37	—	—	—	17	17	—	—	—	—	17	45.94%	
61	*I Sem. of Final Year D.E.E.—EDC.	32	10	22	—	22	—	—	—	7	7	—	—	—	—	7	31.81%	
62	II Sem. of Final Year D.C.E.—EDC.	6	1	5	—	5	—	—	1	3	4	—	—	—	—	4	80%	
63	II Sem. of Final Year D.M.E.—EDC.	6	3	3	—	3	—	—	—	1	1	—	—	—	—	1	33.33%	
64	II Sem. of Final Year D.E.E.—E.D.C.	14	8	6	—	6	—	—	—	—	—	—	—	—	—	—	1	16.66%
65	D.C.E.	89	9	79	1	80	—	—	14	22	23	59	—	—	1	60	75%	
66	D.M.E.	184	4	178	2	180	—	—	34	53	41	128	—	—	1	129	71.66%	
67	*D.M.E. ( Under O.T.E. 155)	53	5	48	—	48	—	—	—	—	39	39	—	—	—	39	81.25%	
68	D.E.E.	110	12	98	—	98	—	98	—	6	26	25	57	—	—	57	58.16%	

\* No Class is awarded.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
69	*D.E.E. ( Under O.T.E. 162)	54	2	52	—	52	—	—	50	50	—	—	—	—	—	50	96.15%	
70	D.T.C.	46	1	45	—	45	—	—	5	14	19	—	—	—	—	19	42.22%	
71	D.T.C. ( under O.T.E. 184 )	104	10	94	—	94	—	—	2	22	39	63	—	—	—	63	67.02%	
72	D.T.T.	44	1	43	—	43	—	—	4	19	15	38	—	—	—	38	88.37%	
73	F.Text ( Engg. & Tech. )	48	1	46	1	47	—	—	4	10	13	27	—	—	—	27	57.44%	
74	S.Text. ( Engg. & Tech. )	74	4	70	—	70	—	—	1	17	16	34	—	—	—	34	48.57%	
75	T.Text. ( Engg. )	22	—	22	—	22	—	—	2	15	2	19	—	—	—	19	86.36%	
76	T.Text. ( Tech. )	39	2	37	—	37	—	—	4	21	6	33	—	—	—	33	89.18%	
77	B.Text. ( Engg. )	30	1	29	—	29	—	—	16	13	—	29	—	—	—	29	100%	
78	B.Text. ( Tech. )	37	1	36	—	36	—	—	8	24	3	35	—	—	—	35	97.22%	
79	*I Sem. of B.E. I ( CME., Chem., Met. )	72	2	70	—	70	—	—	—	34	34	—	—	—	—	34	48.57%	
80	II Sem. of B.E. I ( CME., Chem., Met. )	383	2	379	2	381	6	55	95	37	253	1	1	—	2	255	66.92%	
81	*I Sem. of B.E. II ( CME., Chem., Met. )	100	1	99	—	99	—	—	—	67	67	—	—	—	—	67	67.67%	
82	II Sem. of B.E. II ( CME., Chem., Met. )	405	2	402	1	403	15	55	170	67	307	—	—	1	1	308	76.42%	
83	*I Sem. of B.E. III ( CME., Chem., Met. )	84	—	84	—	84	—	—	—	37	37	—	—	—	—	37	44.04%	
84	II Sem. of B.E. III ( CME., Chem., Met. )	385	—	381	4	385	31	70	172	47	320	—	—	4	4	324	84.15%	
85	*I Sem. of B.E. IV ( CME., Chem., Met. )	37	—	37	—	37	—	—	—	26	26	—	—	—	—	26	70.27%	
86	II Sem. of B.E. IV ( CME., Chem., Met. )	357	—	357	—	357	52	89	157	27	325	—	—	—	—	325	91.03%	
87	*I Sem. of B.E. V ( Civil )	5	—	5	—	5	—	—	—	2	2	—	—	—	—	2	40%	
88	*I Sem. of B.E. V ( Mech. )	1	—	1	—	1	—	—	—	1	1	—	—	—	—	1	100%	
89	*I Sem. of B.E. V ( Elect. )	2	—	2	—	2	—	—	—	1	1	—	—	—	—	1	50%	
90	*I Sem. of B.E. V ( Chem. )	2	—	2	—	2	—	—	—	2	2	—	—	—	—	2	100%	

\* No. Class is awarded.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
91	II Sem. of B.E. V ( Civil )	113	—	111	2	113	23	45	39	1	108	—	2	—	—	2	110	97.34%
92	II Sem. of B.E. V ( Mech. )	138	—	137	1	138	73	58	5	—	136	1	—	—	—	1	137	99.27%
93	II Sem. of B.E. V ( Elect. )	75	—	75	—	75	16	26	31	—	73	—	—	—	—	—	73	97.33%
94	II Sem. of B.E. V ( Chem. )	40	—	40	—	40	30	6	4	—	40	—	—	—	—	—	40	100%
95	*I Sem. of B.E. I ( Electro. )	6	—	6	—	6	—	—	—	3	3	—	—	—	—	—	3	50%
96	II Sem. of B.E. I ( Electro. )	21	—	21	—	21	2	—	4	8	14	—	—	—	—	—	14	66.66%
97	II Sem. of B.E. II ( Electro. )	21	—	21	—	21	—	3	15	—	18	—	—	—	—	—	18	85.71%
98	II Sem. of B.E. III ( Electro. )	20	—	20	—	20	3	7	9	1	20	—	—	—	—	—	20	100%
99	*M.E. ( Civil )—Part I	18	4	13	1	14	—	—	—	6	6	—	—	—	1	1	7	50%
100	*M.E. ( Mech. )—Part I	18	1	17	—	17	—	—	—	14	14	—	—	—	—	—	14	82.35%
101	*M.E. ( Elect. )—Part I	11	—	11	—	11	—	—	—	6	6	—	—	—	—	—	6	54.54%
102	*M.E. ( Civil )—Part II	5	1	4	—	4	—	—	—	3	3	—	—	—	—	—	3	75%
103	*M.E. ( Mech. )—Part II	2	—	2	—	2	—	—	—	2	2	—	—	—	—	—	2	100%
104	*M.E. ( Elect. )—Part II	4	1	3	—	3	—	—	—	3	3	—	—	—	—	—	3	100%
105	*M.E. ( Civil )—Part III	14	1	13	—	13	—	—	—	9	9	—	—	—	—	—	9	69.23%
106	*M.E. ( Mech. )—Part III	5	—	5	—	5	—	—	—	4	4	—	—	—	—	—	4	80%
107	*M.E. ( Elect. )—Part III	11	1	10	—	10	—	—	—	6	6	—	—	—	—	—	6	60%
108	M.E. ( Civil )—Part IV	4	—	4	—	4	—	—	1	3	—	—	—	—	—	—	4	100%
109	M.E. ( Mech. )—Part IV	6	—	5	1	6	—	—	4	1	—	—	—	1	—	—	6	100%
110	M.E. ( Elect. )—Part IV	4	1	3	—	3	—	—	1	2	—	—	—	—	—	—	3	100%
111	*M.Text. ( Engg. )—Part II	1	—	1	—	1	—	—	—	—	1	—	—	—	—	—	1	100%
112	*P.G.Dip. in Ref. & Air Cond.—Part I	4	—	4	—	4	—	—	—	—	3	—	—	—	—	—	3	75%
113	*P.D.D. Ref. & Air Cond.—Part I	1	—	1	—	1	—	—	—	—	1	—	—	—	—	—	1	100%
114	*P.D.D. Ref. & Air Cond.—Part II	5	—	5	—	5	—	2	3	—	—	—	—	—	—	—	5	100%
115	Prep. course Exam. in Engg. (CME)—for Dip. passed students	8	—	8	—	8	—	8	—	2	4	1	7	—	—	—	7	87.5%

\*No Class is awarded.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
116	Third Year B.Areh.	67	1	50	16	66	—	1	17	6	24	—	2	9	—	11	35	53.03%
117	B.Arch.	54	3	47	4	51	1	3	14	3	21	—	1	2	—	3	24	47.05%
118	First LL.B. (N.C.)	192	47	128	17	145	—	3	39	24	66	—	1	4	5	10	76	52.41%
119	First LL.B. (O.C.)	15	6	8	1	9	—	—	—	2	2	—	—	—	1	1	3	33.33%
120	Second LL.B. (N.C.)	96	5	77	14	91	—	1	45	15	61	—	1	11	1	13	74	81.31%
121	Second LL.B. (O.C.)	66	14	47	5	52	—	—	12	20	32	—	—	—	3	3	35	67.30%
122	LL.B. (Special)	14	1	12	1	13	—	—	11	—	11	—	—	1	—	1	12	92.30%
123	*D.L.P.	67	9	54	4	58	—	—	—	@30	30	—	—	—	1	1	31	53.44%
124	*D.T.P.	52	8	43	1	44	—	—	—	12	12	—	—	—	—	—	12	27.27%
125	LL.M.	17	2	14	1	15	—	—	5	—	5	—	—	—	—	—	5	33.33%
126	M.A. (Fine)-Painting	2	1	1	—	1	—	—	—	1	1	—	—	—	—	—	1	100%
127	M.A. (Fine)-Sculpture	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	00.00%
128	B.A. (Fine)-Painting	9	—	4	5	9	—	1	1	2	4	—	1	3	1	5	9	100%
129	B.A. (Fine)-Sculpture	2	—	2	—	2	—	—	1	1	2	—	—	—	—	—	2	100%
130	B.A. (Fine)-Appl. Arts	5	—	5	—	5	—	1	4	—	5	—	—	—	—	—	5	100%
131	Post Dip. in Painting	4	—	3	1	4	—	1	2	—	3	—	—	1	—	1	4	100%
132	Post Dip. in Sculpture	2	—	2	—	2	1	—	—	—	1	—	—	—	—	—	1	50%
133	Post Dip. in Appl. Arts	3	—	3	—	3	—	1	—	—	1	—	—	—	—	—	2	66.66%
134	Dip. in Fine Arts (Painting)	6	—	4	2	6	—	1	1	1	3	—	—	1	—	1	4	66.66%
135	Dip. in Fine Arts (Appl. Arts)	7	—	6	1	7	—	1	1	2	6	—	—	1	—	1	7	100%
136	M.Mus.	6	—	3	3	6	1	1	1	—	3	—	—	2	—	3	6	100%
137	B.Mus.	9	—	2	7	9	1	—	1	—	2	—	1	3	—	7	9	100%
138	Dip. in Music	25	3	13	9	22	1	3	6	2	12	1	2	1	1	5	17	77.27%
139	Dip. in Dance	11	1	1	9	10	—	—	—	1	1	—	—	5	3	8	9	90%
140	Dip. in Dramatics	12	3	8	1	9	—	1	7	—	8	—	—	—	—	1	9	100%
141	*Dip. in Museology (P.G.)	5	—	5	—	5	—	—	—	—	5	—	—	—	—	—	5	100%
142	B.Sc. (Home)	103	—	—	103	103	—	—	—	—	—	—	†26	‡53	§11	90	90	87.37%
143	M.Sc. (Home)	18	—	—	18	18	—	—	—	—	—	—	†15	‡3	§—	18	18	100%
144	P.G.Dip. in Nursery School Education	5	—	—	5	5	—	—	—	—	—	—	†—	‡3	§1	4	4	80%
145	P.G.Dip. in Dietetics	6	—	—	6	6	—	—	—	—	—	—	†2	‡3	§1	6	6	100%
146	M.S.N.	26	—	14	12	26	—	†2	‡5	§6	13	—	†5	‡4	§2	11	24	92.30%

147	*Ph.D. (Science)	2	—	2	—	2	—	—	—	—	2	2	—	—	—	—	2	100%
148	*Ph.D. (Edu. & Psy.)	1	—	1	—	1	—	—	—	—	1	1	—	—	—	—	1	100%
149	*Ph.D. (Medicine)	1	—	1	—	1	—	—	—	—	1	1	—	—	—	—	1	100%
150	*Ph.D. (Home Science)	1	—	1	—	1	—	—	—	—	1	1	—	—	—	—	1	100%

@ One candidate passed with Distinction.

\* No Class is awarded.

† Passed in 'A' Grade

% Passed in 'B' Grade

§ Passed in 'C' Grade

# Results of the University Examinations October/November, 1970

Appendix VII

Sr. No.	Examination	Number appeared																			Grant Total	Percentage of Pass
		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						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19				
1	Prep. Arts	296	22	181	93	274	—	—	—	4	68	72	—	—	4	43	47	119	43.38%			
2	F.Y.B.A.	309	22	153	134	287	—	—	—	1	96	97	—	—	1	80	81	178	62.02%			
3	*S.Y.B.A.	128	15	73	40	113	—	—	—	—	33	33	—	—	—	24	24	57	50.44%			
4	B.A.	95	10	41	44	85	—	—	—	3	19	22	—	—	6	32	38	60	70.58%			
5	Prep. Science	167	8	134	25	159	—	2	38	36	76	—	—	7	9	16	92	57.86%				
6	F.Y.B.Sc.	195	7	157	31	188	—	—	5	74	79	—	—	—	19	19	98	52.12%				
7	*S.Y.B.Sc.	134	6	110	18	128	—	—	—	9	24	35	—	—	—	13	13	70	54.68%			
8	T.Y.B.Sc.	76	8	62	6	68	—	2	9	24	35	—	—	—	—	6	6	41	60.29%			
9	Prep. Commerce	273	21	222	30	252	—	—	—	13	100	113	—	—	—	17	17	130	51.58%			
10	F.Y.B.Com.	395	37	323	35	358	—	—	—	5	163	168	—	—	—	26	26	194	54.19%			
11	*S.Y.B.Com.	306	38	241	27	268	—	—	—	—	112	112	—	—	—	12	12	124	46.26%			
12	B.Com.	115	9	101	5	106	—	—	—	—	43	43	—	—	—	1	1	44	41.50%			
13	*B.Com. (Under O. Com. 27)	23	2	15	6	21	—	—	—	—	7	7	—	—	—	4	4	11	52.38%			
14	*B.Com. (Under O. Com. 25)	18	9	6	3	9	—	—	—	—	4	4	—	—	—	3	3	7	77.77%			
15	*B.Com. (Under O. Com. 26)	1	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	00.00%			
16	*I.M.B.B.S. (Cond.) (Sept.)	8	—	6	2	8	—	—	—	—	1	1	—	—	—	—	—	1	12.5%			
17	*I.M.B.B.S. (Sept.)	136	—	123	13	136	—	—	—	—	67	67	—	—	—	5	5	72	52.94%			
18	*I.M.B.B.S. (Supp.) (Dec.)	71	1	63	7	70	—	—	—	—	44	44	—	—	—	7	7	51	72.86%			

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19	*I.M.B.B.S. (Cond.) (Dec.)	7	—	5	2	7	—	—	—	—	4	4	—	—	2	2	6	85.71%
20	*II M.B.B.S. (Cond.)	4	—	3	1	4	—	—	—	—	3	3	—	—	1	1	4	100%
21	*Final M.B.B.S.	148	—	120	28	148	—	—	—	63	63	—	—	—	18	18	81	54.72%
22	*F.Y.B. Physiotherapy	4	—	2	2	4	—	—	—	1	1	—	—	—	2	2	3	75.00%
23	*M.D. (Br. I)—Medicine	7	—	6	1	7	—	—	—	4	4	—	—	—	1	1	5	71.42%
24	*M.D. (Br. II)—Pathology	2	—	2	—	2	—	—	—	—	1	1	—	—	—	—	1	50.00%
25	*M.D. (Br. III)—Pharmacology	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
26	*M.D. (Br. V)—Obstetrics & Gynaecology	4	—	—	4	4	—	—	—	—	—	—	—	—	3	3	3	75.00%
27	*M.D. (Br. VI)—Pediatrics	2	—	2	—	2	—	—	—	—	2	2	—	—	—	—	2	100%
28	*M.D. (Br. IX)—Radiology	1	—	—	1	1	—	—	—	—	1	1	—	—	—	—	1	100%
29	*M.S. (Br. I)—Surgery	11	—	10	1	11	—	—	—	—	3	3	—	—	—	—	3	27.27%
30	*M.S. (Br. III)—Orthopaedics	1	—	—	1	1	—	—	—	—	1	1	—	—	—	—	1	100%
31	*M.S. (Br. IV)—Oto. Rhino-Laryngology	1	—	1	—	1	—	—	—	—	1	1	—	—	—	—	1	100%
32	*M.Sc. (Medical)—Part I—N.C. (for Non-Medical Students)	8	—	6	2	8	—	—	—	—	3	3	—	—	2	2	5	62.6%
33	M.Sc. (Medical)—O.C.	3	—	3	—	3	—	—	—	—	—	—	—	—	—	—	—	00.00%
34	*D.O.	1	—	—	1	1	—	—	—	—	—	—	—	—	1	1	1	100%
35	*D.A.	2	—	—	2	2	—	—	—	—	—	—	—	—	2	2	2	100%
36	*D.L. & O.	1	—	1	—	1	—	—	—	—	1	1	—	—	—	—	1	100%
37	*D.M.R.—Part I	4	—	4	—	4	—	—	—	—	4	4	—	—	—	—	4	100%
38	*D.M.R.—Part II	1	—	1	—	1	—	—	—	—	1	1	—	—	—	—	1	100%
39	*D.C.H.	2	—	2	—	2	—	—	—	—	—	—	—	—	2	2	2	100%
40	*D.C.P.	1	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	00.00%
41	*D.G.O.	5	—	—	5	5	—	—	—	—	—	—	—	—	4	4	4	80.00%
42	F.Y. Diploma (C.M.E.)	166	5	161	—	161	—	—	—	—	60	60	—	—	—	—	60	37.26%
43	S.Y. Diploma (C.M.E.)	139	5	134	—	134	—	—	—	1	68	69	—	—	—	—	69	51.50%
44	*F.S. of S.Y. Dip. (CME)—(EDC)	19	—	19	—	19	—	—	—	—	5	5	—	—	—	—	5	26.31%
45	*S.S. of S.Y. Dip. (CME)—(EDC)	15	—	15	—	15	—	—	—	—	10	10	—	—	—	—	10	66.66%

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\* No Class is awarded

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
46	*F.S. of Final D.C.E.-(EDC)	3	—	3	—	3	—	—	—	—	2	—	—	—	—	—	2	66.66%
47	*F.S. of Final D.M.E.-(EDC)	25	5	20	—	20	—	—	—	—	15	15	—	—	—	—	15	75.00%
48	*F.S. of Final D.E.E.-(EDC)	18	2	16	—	16	—	—	—	—	8	8	—	—	—	—	8	50.00%
49	S.S. of Final D.C.E.-(EDC)	9	1	8	—	8	—	1	1	4	6	6	—	—	—	—	6	75.00%
50	S.S. of Final D.M.E.-(EDC)	41	9	32	—	32	—	2	11	6	19	19	—	—	—	—	19	59.37%
51	S.S. of Final D.E.E.-(EDC)	24	2	22	—	22	—	3	5	4	12	12	—	—	—	—	12	54.54%
52	Diploma in Civil Engg.	23	3	20	—	20	—	2	2	1	5	5	—	—	—	—	5	25.00%
53	Diploma in Mechanical Engg.	51	3	48	—	48	—	—	5	16	21	21	—	—	—	—	21	43.75%
54	*Diploma in Mechanical Engg. (Under O.T.E. 155)	6	2	4	—	4	—	—	—	—	3	3	—	—	—	—	3	75.00%
55	Diploma in Electrical Engg.	44	1	43	—	43	—	—	3	14	17	17	—	—	—	—	17	39.53%
56	*Diploma in Electrical Engg. (Under O.T.E. 162)	1	—	1	—	1	—	—	—	—	1	1	—	—	—	—	1	100%
57	Diploma in Textile Chemistry	22	3	19	—	19	—	—	—	7	7	7	—	—	—	—	7	36.84%
58	Diploma in Textile Chemistry (Under O.T.E. 184)	23	3	20	—	20	—	—	—	15	15	15	—	—	—	—	15	75.00%
59	Diploma in Textile Technology	4	—	4	—	4	—	1	1	—	2	2	—	—	—	—	2	50.00%
60	F. Text. (Engg. & Tech.)	19	—	18	1	19	—	—	—	6	6	6	—	—	—	—	6	31.57%
61	S.Text. (Engg. & Tech.)	37	—	37	—	37	—	—	—	19	19	19	—	—	—	—	19	51.35%
62	T.Text. (Tech.)	4	—	4	—	4	—	—	—	3	3	3	—	—	—	—	3	75.00%
63	T.Text. (Engg.)	3	1	2	—	2	—	—	—	1	1	1	—	—	—	—	1	50.00%
64	B.Text. (Engg.)	1	—	1	—	1	—	1	—	—	1	1	—	—	—	—	1	100%
65	B.Text. (Tech.)	1	—	1	—	1	—	—	—	1	1	1	—	—	—	—	1	100%
66	*I Sem. of B.E. I (CME Chem. Met.)	357	3	353	1	354	—	—	—	252	252	—	—	—	1	1	253	71.46%
67	II Sem. of B.E. I (CME Chem. Met.)	170	3	167	—	167	—	—	—	107	107	—	—	—	—	—	107	64.07%
68	*I Sem. of B.E. II (CME Chem. Chem. Met.)	348	4	342	2	344	—	—	—	253	253	—	—	—	2	2	255	74.07%
69	II Sem. of B.E. II (CME Chem. Met.)	80	2	78	—	78	—	—	—	49	49	—	—	—	—	—	49	62.82%

70	* I Sem. of B.E. III (CME Chem. Met.)	406	3	401	2	403	—	—	—	—	286	286	—	—	2	2	288	71.21%
71	II Sem. of B.E. III (CME Chem. Met.)	41	—	41	—	41	—	—	—	20	20	—	—	—	—	—	20	48.78%
72	* I Sem. of B.E. IV (CME Chem. Met. Electro.)	399	4	392	3	395	—	—	—	—	332	332	—	—	3	3	335	84.81%
73	II Sem. of B.E. IV (CME Chem. Met.)	30	3	27	—	27	—	—	—	—	19	19	—	—	—	—	19	70.37%
74	* I Sem. of B.E. V (Civil)	79	1	78	—	78	—	—	—	—	76	76	—	—	—	—	76	97.43%
75	* I Sem. of B.E. V (Mech.)	117	1	116	—	116	—	—	—	—	114	114	—	—	—	—	114	98.27%
76	* I Sem. of B.E. V (Elect.)	85	1	84	—	84	—	—	—	—	73	73	—	—	—	—	73	86.90%
77	* I Sem. of B.E. V (Chem.)	34	—	34	—	34	—	—	—	—	30	30	—	—	—	—	30	88.23%
78	* I Sem. of B.E. V (Met.)	32	1	31	—	31	—	—	—	—	31	31	—	—	—	—	31	100%
79	II Sem. of B.E. V (Civil)	3	—	3	—	3	—	—	—	—	1	1	—	—	—	—	1	33.33%
80	II Sem. of B.E. V (Mech.)	1	—	1	—	1	—	—	—	—	1	1	—	—	—	—	1	100%
81	II Sem. of B.E. V (Elect.)	2	—	2	—	2	—	—	—	—	1	1	—	—	—	—	2	100%
82	* I Sem. of B.E. I (Electro.)	25	1	*23	1	24	—	—	—	—	16	16	—	—	1	1	17	70.83%
83	II Sem. of B.E. I (Electro.)	5	—	5	—	5	—	—	—	—	3	3	—	—	—	—	—	60.00%
84	* I Sem. of B.E. II (Electro.)	16	—	16	—	16	—	—	—	—	11	11	—	—	—	—	11	68.75%
85	II Sem. of B.E. II (Electro.)	3	—	3	—	3	—	—	—	—	2	2	—	—	—	—	2	66.66%
86	* I Sem. of Final B.E. (Electronics)	21	—	21	—	21	—	—	—	—	16	16	—	—	—	—	16	76.19%
87	*M.E. (Civil)—Part I	8	1	7	—	7	—	—	—	—	4	4	—	—	—	—	4	57.14%
88	*M.E. (Mech.)—Part I	2	1	2	—	2	—	—	—	—	1	1	—	—	—	—	1	100%
89	*M.E. (Elect.)—Part I	4	—	4	—	4	—	—	—	—	4	4	—	—	—	—	4	100%
90	*M.E. (Civil)—Part II	14	1	12	1	13	—	—	—	—	9	9	—	—	1	1	10	76.92%
91	*M.E. (Mech.)—Part II	15	—	15	—	15	—	—	—	—	15	15	—	—	—	—	15	100%
92	*M.E. (Elect.)—Part II	10	1	9	—	9	—	—	—	—	5	5	—	—	—	—	5	55.55%
93	*M.E. (Civil)—Part III	5	—	5	—	5	—	—	—	—	3	3	—	—	—	—	3	60.00%
94	*M.E. (Mech.)—Part III	1	1	1	—	1	—	—	—	—	—	—	—	—	—	—	—	100%
95	*M.E. (Elect.)—Part III	5	—	5	—	5	—	—	—	—	5	5	—	—	—	—	5	100%
96	M.E. (Civil)—Part IV August 1970	3	—	3	—	3	—	—	—	3	—	—	—	—	—	—	—	100%
97	M.E. (Mech.)—Part IV	3	—	3	—	3	—	—	—	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
98	M.E. (Elect.)—Part IV	2	—	2	—	2	—	1	1	—	2	—	—	—	—	—	2	100%
99	M.E. (Civil.)—Part IV Nove. 1970	5	2	3	—	3	—	3	—	—	3	—	—	—	—	3	60.00%	
100	M.E. (mech.)—Part IV	1	—	1	—	1	—	—	1	—	1	—	—	—	—	1	100%	
101	M.E. (Elect.)—Part IV	8	1	7	—	7	—	4	3	—	7	—	—	—	—	7	100%	
102	M.Text. (Engg.)—Part III	1	—	1	—	1	—	—	1	—	1	—	—	—	—	1	100%	
103	P.G.Dip. in Ref. & Air Cond.	3	—	3	—	3	—	2	1	—	3	—	—	—	—	3	100%	
104	—Part II																	
105	P.C.C.	1	—	1	—	1	—	—	—	1	1	—	—	—	—	1	100%	
106	I Sem. of P.D.D. in Ref. & Air Con.	9	2	7	—	7	—	—	—	7	7	—	—	—	—	7	100%	
107	Third Year B.Arch.																	
108	B.Arch.	30	—	24	6	30	—	—	—	12	12	—	—	—	2	2	14	46.66
109	I LL.B. (N.C.)	29	1	27	1	28	—	1	2	11	14	—	—	1	1	—	15	17.85%
110	I LL.B. (O.C.)	42	15	26	1	27	—	—	—	8	8	—	—	—	1	1	9	33.33%
111	II LL.B. (N.C.)	5	2	3	—	3	—	—	—	1	1	—	—	—	—	1	1	33.33%
112	II LL.B. (O.C.)	13	2	10	1	11	—	—	1	5	6	—	—	—	1	1	7	63.64%
113	LL. B. (Special)	14	—	13	1	14	—	—	1	7	8	—	—	—	—	8	57.14%	
114	B.Sc. (Home)	16	4	—	12	12	—	—	—	1	1	—	—	—	—	1	1	100%
115	M.Sc. (Home)	7	—	—	7	7	—	—	—	—	—	+1 %	+3 %	£4	8	8	66.66	
116	*M.S.W.	13	—	10	3	13	—	—	—	—	—	+2 %	£5	—	7	7	100%	
117	*Ph.D. (Arts)	1	—	1	—	1	—	—	—	—	—	—	—	—	2	2	12	92.30%
118	*Ph.D. (Science)	20	—	18	2	20	—	—	—	18	18	—	—	—	2	2	20	100%
119	*Ph.D. (Edu. & Psy.)	3	—	3	—	3	—	—	—	3	3	—	—	—	—	3	100%	
120	*Ph.D. (Medicine)	1	—	—	1	1	—	—	—	—	—	—	—	—	1	1	1	100%
	*Ph.D. (Home Science)	1	—	—	1	1	—	—	—	—	—	—	—	—	1	1	1	100%

\* No Class is awarded.

+ Passed in A Grade.

% Passed in B Grade.

£ Passed in C Grade.

## Appendix VIII

## CAPITAL ACCOUNTS

I—University General Fund  
(Subject to Audit)

Receipts		Payments	
	Rs.	P.	Rs. P.
Opening Balance as on 1-4-1970	9,69,547-22	Building Works	5,04,841-11
Interest	1,959-00	Purchase of Furniture	17,308-53
Loan for construction of Hostels for Engineering Students	1,00,000-00	Closing Balance	8,93,356-58
Grant from Sir Sayajirao Diamond Jubilee and Memorial Trust	3,00,000-00		
60% of the income from additional seats in the Faculty of Commerce transferred to this Fund towards the construction of additional class rooms, staff rooms etc.			
	44,000-00		
<b>Total</b>	<b>14,15,506-22</b>		<b>Total</b>
			<b>14,15,506-22</b>

*Receipts*  
Opening Balance as on 1-4-1970  
Interest

**II—Ayurvedic Research Fund**  
(Subject to Audit)  
1970-71

Rs.	P.	Payments	Rs.	P.
11,94,616-36		Amount to be transferred for the Excess re-		
48,439-74		curing expenditure of the Sheth U. P. Ayur-		
		vedic Research Unit over and above State		
		Government grant		
		Closing Balance		
<b>Total</b>	<b>12,43,056-10</b>		<b>Total</b>	<b>12,43,056-10</b>
				10,844-02
				12,32,212-08

**III—Post-graduate Instruction and Research Fund**  
(Subject to Audit)  
1970-71

Rs.	P.	Payments	Rs.	P.
46,18,955-21		Expenditure on Research etc:		
1,45,032-50		(i) Research grant		34,488-18
		(ii) Research Assistants		48,530-32
		(iii) Scholarships		2,612-90
		Closing Balance		46,78,356-31
<b>Total</b>	<b>47,63,987-71</b>		<b>Total</b>	<b>47,63,987-71</b>

*Receipts*  
Opening Balance as on 1-4-1970  
Interest

**REVENUE ACCOUNTS**  
(Subject to Audit)  
1970-71

Sr. No.	Particulars	Receipts Rs.	Sr. No.	Particulars	Disbursements Rs.
1	2	3	1	2	3
I	Grants from the State Government (1 to 4)	68,35,160-00	I	Administration	4,52,375-72
(1)	Block Grant from the State Government		II	Examination Charges	7,91,357-65
(2)	Additional Block Grants from the State Government:	41,86,000-00	III	Publications	21,734-71
(a)	Towards the expenditure on Development Plans, Schemes which have completed five years or stipulated period and hence become 100 % liability of the State Government		IV	Remuneration to Lecturers	1,000-00
(b)	80 % Grant towards the increase in the rates of Dearness Allowance (from 1-3-1967 and onwards)	13,66,762-00	V	Travelling Allowance	43,678-38
(c)	3½ % Grant on the Wage Bill of the preceding year towards Annual increments etc.	4,51,704-00	VI	Printing, Stationery and Postages	69,663-36
		5,82,934-00	VII	Interest on Bank Overdraft and Loans and Repayment of Loans	5,59,701-29
			VIII	Maintenance of Buildings and Roads (including Residential Quarters and N.C.C. Buildings)	3,35,310-62
			IX	Maintenance of Gardens	41,120-65
			X	Games, Sports and Students' Welfare and Other Activities	4,19,657-78
			XI	Miscellaneous (A, B and C)	1,45,566-54
			(A)	Memberships and Contributions	6,575-00
			(B)	Office Equipment	4,618-85
			(C)	Other Items	1,34,372-69

Appendix IX

1	2	3	1	2	3
	(d) Towards payment of House Rent at increased rates from 1-1-1969	—	<b>XII</b>	<b>Faculties and Institutions</b>	<b>1,12,01,070-04</b>
(3)	Towards the Fourth Plan Revision of salary scales of the University Teachers in Humanities, Sciences and Social Sciences excluding Teachers in Technical and Engineering subjects	2,00,000-00		<i>Faculties:</i>	
	(4) Grant from State Government towards maintenance of M. K. Amin Arts and Science College and College of Commerce, Padra	47,760-00		(a) Faculty of Arts	11,82,536-85
				(b) Faculty of Science	24,73,419-97
				(c) Faculty of Education and Psychology	6,30,690-75
				(d) Faculty of Commerce	3,89,658-01
				(e) Faculty of Technology and Engineering	27,56,536-37
				(f) Faculty of Law	1,11,995-46
				(g) Faculty of Fine Arts	5,30,328-23
				(h) Faculty of Home Science	6,38,264-77
				(i) Faculty of Social Work	2,44,530-71
				<i>Institutions:</i>	
				(j) Oriental Institute	1,74,621-71
				(k) College of Indian Music, Dance and Dramatics	4,03,663-72
				(l) Preparatory Unit: Arts and Commerce	53,414-94
				(m) Preparatory Unit: Science	48,050-94
				(n) Sanskrit Mahavidyalaya	1,05,169-82
				(o) Shri M. K. Amin Arts and Science College and College of Commerce, Padra	2,72,630-48
<b>II</b>	<b>Fees from Students (A + B + C)</b>	<b>51,69,029-49</b>			
<b>(A)</b>	<b>Academic:</b>				
	(i) Tuition Fees and Miscellaneous Income from Faculties and Institutions	<b>39,13,054-04</b>			
	<i>Faculties:</i>				
	(a) Faculty of Arts	5,29,274-50			
	(b) Faculty of Science	8,45,797-17			
	(c) Faculty of Education and Psychology	1,99,575-31			
	(d) Faculty of Commerce	6,32,837-15			

1	2	3	1	2	3
	(e) Faculty of Technology and Engineering	8,17,450-24		(p) Polytechnic (Diploma Courses in Civil, Mechanical and Electrical Engineering)	11,16,091-11
	(f) Faculty of Law	1,22,162-00		(q) Extended Diploma Courses in Civil, Mechanical and Electrical Engineering	69,466-20
	(g) Faculty of Fine Arts	40,000-77		<b>XIII</b> University Library	<b>3,83,666-74</b>
	(h) Faculty of Home Science	2,38,961-70		<b>XIV</b> University Guest House	<b>16,151-72</b>
	(i) Faculty of Social Work	42,668-00		<b>XV</b> University Auxiliary Services	<b>5,89,042-19</b>
	<i>Institutions:</i>			(a) M. S. University of Baroda Press (Sadhana Press)	3,90,201-28
	(j) College of Indian Music, Dance and Dramatics	44,616-70		(b) M. S. University Stationery Unit	1,81,225-91
	(k) Preparatory Unit: Arts and Commerce	288-00		(c) M. S. University Publication Sales Unit	17,615-00
	(l) Preparatory Unit: Science	2,439-80		<b>XVI</b> Halls of Residence for Students	<b>7,96,974-85</b>
	(m) Sanskrit Mahavidyalaya	43-00		<b>XVII</b> Sheth U.P. Ayurvedic Research Unit	<b>40,844-02</b>
	(n) Shri M. K. Amin Arts and Science College and College of Commerce, Padra	1,48,678-85		<b>XVIII</b> 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)	—
	(o) Polytechnic: (Diploma Courses in Civil, Mechanical and Electrical Engineering)	1,81,686-85			
	(p) Extended Diploma Courses in Civil, Mechanical and Electrical Engineering	22,964-00			
	<b>(ii) Fees for Enrolment etc. :</b>	<b>33,440-00</b>			
	(a) For Enrolment Certificate				

1	2	3	1	2	3
	(b) For Post-graduate Registration	10,170-00			
	(B) Examination Fees	9,28,181-25			
	(C) Other Fees	3,27,794-20			
III	Hostels—Income from Halls of Residence for Students	5,04,488-00			
IV	Income from Buildings, Lands and other Properties	2,79,606-56			
V	Income from Publications	40,820-01			
VI	Health Services—University Health Centre	13,861-32			
VII	University Auxiliary Services	5,28,663-10			
	(a) Income from M. S. University of Baroda Press (Sadhana Press)	3,46,350-49			
	(b) Income from M. S. University Stationary Unit	1,82,312-61			
VIII	Miscellaneous Receipts	2,20,581-30			
IX	Sheth U. P. Ayurvedic Research Unit	40,844-02			
	Excess of Disbursement over Receipts i.e. Deficit	22,75,762-46			
	Grand Total	1,59,08,816-26			Grand Total 1,59,08,816-26

## Grants on Development and Research Schemes 1970-71

Sr. No.	Name of the Agency	Amount of Grant Rs. P.	
1.	University Grants Commission	28,95,198-57	
2.	Ministry of Education, Government of India	4,09,966-34	
3.	Ministry of Health, Government of India	1,06,172-43	
4.	Ministry of Defence, Research and Development Organisation, Government of India	13,846-37	
5.	Central Social Welfare Board	1,66,000-00	
6.	Planning Commission, Government of India	2,820-00i	
7.	Council of Scientific and Industrial Research, New Delhi	20,070-65	
8.	Department of Atomic Energy	7,245-00	
9.	Institute of Himalayan Geology	8,023-87	
10.	Government of Gujarat ( Matching Grant )	4,17,595-00	
11.	Government of Gujarat ( Research and other Schemes )	1,07,017-57	
12.	United States Department of Agriculture, New Delhi ( Am PL-480 Programme )	2,48,637-90	
13.	Director, Wheat Associate Project	5,082-42	
14.	Ford Foundation	42,980-00	
15.	Unichem Laboratories	11,471-19	
16.	Grant from International Development USAID Mission to India	60,000-00	
17.	University of Michigan ( Baroda Michigan Project )	38,988-19	
	Total	45,61,115-50	

## THE MAHARAJA SAYAJIRAO

## Statement of student-

Faculty/Institution	Shri K. M. Munshi Hall	Shri Manubhai Mehta Hall	Shri Maharshi Arvind Hall	Shri Sardār Patel Hall	Professor T. K. Gajjar Hall
Preparatory Science.. ..	46	31	23	22	36
Preparatory Arts and Commerce ..	2	2	2	3	2
Arts .. .. .	3	4	4	6	4
Commerce .. .. .	13	15	1	11	21
Science .. .. .	26	19	20	39	27
Education and Psychology ..	—	—	—	—	—
Technology and Engineering ..	72	93	124	71	108
Polytechnic .. .. .	—	1	4	1	4
Medicine .. .. .	15	18	11	34	31
Social Work .. .. .	—	—	—	—	1
Fine Arts .. .. .	1	2	3	5	2
Music.. .. .	—	1	2	—	—
Law .. .. .	—	—	1	—	—
Home Science .. .. .	—	—	—	—	—
TOTAL ..	178	186	195	192	236

## UNIVERSITY OF BARODA

## residents during 1970-71

## Appendix XI

Dr. Jivraj Mehta Hall	Shri Dadabhai Naoroji Hall	Shri Rabindra- nath Tagore Hall	Shri M. Vishve- sriya Hall	Shri Siddharaj Jaisinh Hall	Total Men Stu- dents	Smt. Sarojini Devi Hall	Smt. Hansa Mehta Hall	Pandita Gargi Hall	Kasturba Gandhi Hall	Total Women Stu- dents	Grand Total
30	1	35	24	23	271	14	13	2	12	41	312
—	—	14	7	13	45	6	8	4	6	24	69
3	5	15	17	22	83	50	45	25	15	135	218
17	11	39	25	50	203	14	19	13	11	57	260
23	16	37	21	28	256	24	14	30	14	82	338
2	10	—	8	2	22	9	4	12	2	27	49
76	25	118	117	87	891	9	15	7	3	34	925
3	—	40	31	55	139	—	—	—	—	—	139
47	6	20	20	28	230	11	7	15	4	37	267
1	2	5	9	10	28	4	4	9	—	17	45
1	1	5	12	2	34	18	10	7	4	39	73
—	—	—	2	—	5	5	—	13	3	21	26
—	—	—	2	—	18	1	—	3	3	7	25
1	—	8	2	6	—	114	87	68	28	297	297
—	—	—	—	—	—	—	—	—	—	—	—
204	77	336	295	326	2225	279	226	208	105	818	3043