annual report

1982-83

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JADAVPUR UNIVERSITY
CALCUTTA 700 032
INDIA

ANNUAL REPORT
1982-83

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JADAVPUR UNIVERSITY
CALCUTTA 700 032

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Representative of Govt. of India, in the Ministry dealing with Technical Education	:	Sri S. N. Chakraborty, Asstt. Educational Adviser (Tech.) Ministry of Education and Social Welfare, Eastern Regional Office 5, Esplanade East, Calcutta-700 069.

Not less than 6 *and not more than* 9 *persons nominated by the Chancellor in consultation with the Minister from amongst Heads of Deptt. and Teachers of the University.*

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   5, Satyen Dutta Road,
   Calcutta-700 029.

2. Prof. Sukumar Dutta,
   Deptt. of Mechanical Engg.
   J. U. Staff Quarters,
   Calcutta-700 032.

3. Prof. Amalendu De,
   Deptt. of History, J.U.
   2, Ajanta Park,
   Calcutta-700 086.

4. Prof. Nakul Das,
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   50/1, School Road, Birati,
   Calcutta-700 051.

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   77, Santoshpur Avenue,
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   N-1, Vidyasagar Niketan,
   Salt Lake, Calcutta-700 064.

7. Smt. Malabika Sarkar,
   Deptt. of English, J.U.
   31, Broad Street,
   Calcutta-700 019.

5 *Persons interested in University Education nominated by the Chancellor*

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   Calcutta-700 027.

2. Dr. R. N. Chakravarti,
   Formerly Director of Indian Institute of Chemical Biology,
   Block 'F', 111 New Alipore,
   Calcutta-700 053.

3. Dr. D. P. Antia,
   Industrial and Management Consultant,
   10, Judges Court Road,
   Calcutta-700 027 (upto April '82).

   and

   Prof. Dr. (Mrs.) Asima Chatterjee,
   Deptt. of Chemistry,
   University College of Science,
   92, Acharyya Prafulla Ch. Road,
   Calcutta-700 009. (from May, 1982).

4. Sri Hiten Bhaya,
   Director, Indian Institute of Management
   10, New Road, Calcutta-700 027 (upto April '82).

   and

   Prof. R. P. Aiyar,
   Director, Indian Institute of Management, JOKA, 24-Pargs.,
   496, Keyatala Road,
   Calcutta-700 029. (from May, 1982).

5. Prof. K. P. Basu,
   Formerly Adviser, Scientific Research
   Planning Commission,
   229, Jodhpur Park, Calcutta-700 031 (upto April '82).

   and

   Sri K. K. Roy,
   109, Jodhpur Park,
   Calcutta-700 068. (from May, 1982).

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The Dean, Faculty of Science	—Do—
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Prof. Durlav Kumar Ray, Professor Emeritus Jadavpur University	17, Lower Range, Calcutta-700 017.

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Prof. Madhusudan Bhattacharyya

Metallurgical Engineering Department

The Head of the Deptt. of Metallurgical Engineering
Sri Dinabandhu Ghosh
Sri Pradyut Kumar Mitra

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The Head of the Deptt. of Chemical Engineering
Prof. A. K. Mitra
Sri G. K. Biswas

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Dr. M. Chakraborty

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The Head of the Deptt. of Production Engineering
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Dr. Ranjan Dutta

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Dr. Debesh Chandra Chakraborty

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The Head of the Deptt. of Comparative Literature
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The Head of the Deptt. of Library and Information Science
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Dr. Shefali Moitra

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Prof. J. B. Dasgupta
Mr. R. L. Rodrigues

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Dr. (Mrs.) Bela Lahiri
Dr. Pranjal Kr. Bhattacharyya

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Registrar

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Registrar

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Sri S. K. Podder

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Prof. P. Som (from 4. 12. 82)

Dean, Faculty of Arts

Dr. Naresh Guha (upto 30. 9. 82)
Prof. J. Bandopadhyay (from 1. 10. 82)

Dean, Faculty of Science :

Dr. D. K. Sinha (upto 1. 1. 83)
Dr. A. Chatterjee (from 2. 1. 83)

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Govt. of West Bengal

Sri A. K. Bhattacharyya
Accounts Officer

Sri A. C. Chanda
Development Officer

Sri T. D. Bhattacharyya
Finance Officer — Secretary

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Finance Officer	:	Sri T. D. Bhattacharyya	
University Engineer	:	Sri B. C. Sinha	
Development Officer	:	Sri A. C. Chanda	Convenor

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	:	Sri K. N. Pathak Head of the Deptt. of Architecture
	:	Sri B. Chakraborty Metallurgical Engineering
	:	Sri A. K. Gupta Registrar
	:	Sri T. D. Bhattacharyya Finance Officer
	:	Sri B. C. Sinha University Engineer
Representative of the State P.W.D.	:	Sri D. D. Mukherjee Addl. Chief Engineer, P.W.D.
Development Officer (Convenor)	:	Sri A. C. Chanda

ADMINISTRATION

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Vice-Chancellor	:	Prof. M. M. Chakrabarty	
Deans of Faculties :			
Arts	:	Dr. Naresh Guha	(upto 30. 9. 82)
	:	Dr. J. Bandopadhyay	(from 1. 10. 82)
Science	:	Dr. D. K. Sinha	(upto 1. 1. 83)
	:	Dr. A. Chatterjee	(from 2. 1. 83)
Engg. and Tech.	:	Prof. P. Kundu	(upto 3. 12. 82)
	:	Prof. P. Som	(from 4. 12. 82)
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ANNUAL REPORT—1982-83

INTRODUCTION

The last printed report was for the period 1973-74 and this report will cover the year 1982-83. We would make a brief reference here to some of the important academic events in the life of the University during the past few years.

During the period mentioned above, there, was a structural change in the University Act, and administration. The State Govt. promulgated an ordinance on November, 7, 1979 superseding the University and its Councils and Committees as constituted under the Act. of 1955. The University Council as provided for by the Ordinance was constituted and later on Academic Board and other bodies were also constituted. The Jadavpur University Act. 1981, replacing the Act. of 1955 was enacted in 1981. Another enactment of the State Legislature that affected the administration of this as well as the other State Universities during this period was the Control of Expenditure Act. of 1976. Prof. M. M. Chakrabarty who assumed the office of Vice-Chancellor from 21. 11. 79 under the Ordinance continues to be the Vice-Chancellor under the Act. of 1981.

The period from 1974-75 to 1981-82 was marked by a growing optimism in all spheres of academic activities of Jadavpur University. The University Grants Commission reached a decision that while considering sanction of grants this University would be treated as a Grade I University in consideration of its academic programmes and their standards. The Departments of Geological Sciences and Philosophy had come to enjoy the pervileged status of Special Assistances from the University Grants Commission in 1980 (2nd phase) and 1977 respectively. In 1983, the Commission selected four more departments to enjoy that status and they are the Departments of Mathematics for Applied Mathematics, Chemistry, Electrical Engineering and Production Engineering. The Visiting Committee of the Commission came to the University in 1983 for assessing the needs for strengthening the existing facilities and their reports are awaited.

Of these Departments, that of Production Engineering is very new, it having been constituted only in 1980. Prior to that, those teachers who represent the Department now, all belonged to the Department of Mechanical Engineering. The 4-year Bachelor of Production Engineering was started two years earlier in 1978 with 20 students and the 1st batch graduated in 1982.

The 4-year Bachelor course in Computer Science and Engineering was instituted in the Department of Electronics and Tele-Communication Engineering in 1981-82 and 30 students were admitted. The Regional Computer Centre has been located in the campus of the University and

it started functioning early in 1977. A Computer Centre has been in existence in the department of Electronics and Tele-Communication Engineering for more than a decade now. The specialised courses on Computer Engineering are available in the Masters Degree programme in Electronics and Tele-Communication Engineering.

As in the past, many research schemes with grant support from different bodies were in operation and special mention may be made of some :

(*i*) Special grants for Rs. 10.00 lakhs have been received from the Ministry of Education and Culture, Govt. of India for Micro-processor Application and Technique in the Department of Electronics and Tele-communication Engineering and another Rs. 10 lakhs have been received from the same Ministry for Robotics in Production Engineering

(*ii*) Department of Environment, Govt. of India has sanctioned Rs. 14.50 lakhs for instrumentation and telemetering of pollution para-meters in Hooghly Estuary and Environmental Awareness Programme Workshop.

(*iii*) The 'Monex' project in the Hydraulics Section of the Department of Mechanical Engineering for the purpose of Geophysical Fluid Dynamics Studies with reference to the monsoon in the Bay of Bengal and the Arabian Sea, is being financed by the Meteorology Department of the Govt. of India.

(*iv*) The Department of Metallurgy is collaborating with the Regional Research Laboratory of Bhubaneswar in Extractive Metallurgy of Polymeric Sea-nodules.

(*v*) The University has been selected for multi-disciplinary Oceanographic Studies with various departments of the University.

(*vi*) A UNDP Programme on "Computer Aided Design" has been initiated in the Department of Electronics and Tele-Communication Engineering with grants from the Electronics Department of the Govt. of India.

A generous donation from the Kumar Pramatho Nath Roy Trust of Calcutta enabled the University to erect a seperate building for research in Radio-Chemistry few years back and the University was able to initiate research activities in that building in 1983.

The syllabus for the Bachelor's Degree in all the three faculties were revised after the 2-year Higher Secondary Courses came to be introduced. The Bachelor's Degree Course in the Faculty of Engineering and Technology are now four-year programmes instead of five years as previously, but the duration of the Bachelors degree course in the Faculties of Arts and Science continue to be three years. It may be added that only, Honours degree courses are offered in these two Faculties.

M.Phil. degree is now offered by the following five departments of the Faculty of Arts—English, Comparative Literature, Philosophy, International Relations and Sanskrit.

The M.Tech. course in Instrumentation came to be redesignated M.Tech. in Instrumentation and Electronics Engg.

The University hopes to start some Bachelor's degree courses in para-medical courses in the near future.

The department of Geological Sciences had been selected in 1977-78 for running for three years the "College Science Improvement programme" in Geology for north and eastern India and this was renewed for three more years in 1981. The Department has run programmes for the benefit of teachers of 54 colleges so far. A Committee came to review the work and it is expected that the programme will be continued in the Department for another term of three years.

A centre for Continuing Education was set up in 1977 and it ran many courses. In consideration of the quality of the programme, the University Grants Commission in December, 1982 sanctioned larger financial assistance under the scheme of Adult and Continuing Education and Extension Centre with the major thurst areas in technical training programmes for weaker sections, rural sanitation and health care and technology for rural development. The programmes are under process under the supervision of a Director.

Many important seminers were held in the past few years. Two all-India academic bodies had their annual sessions on the campus at the invitation of the University—one was the session of the Indian History Congress held in December, 1974 and other the session of the Science Congress held in February, 1980. The first ever degree courses in Chemical Engineering in this country was in this campus in 1922 and the Department of Chemical Engineering organised a 3-day international seminar in December, 1982 on Chemical Engineering Education, Research and Training in Developing Country as a part of their Diamond Jubilee celebration. The department of Philosophy also held a similar 3-day international seminar in January, 1983. The first National Convention of the Indian National Comparative Literature Association was held at the Department of Comparative Literature in January, 1983. Professor Jayant Vishnu Narlikar delivered the Gopal Chandra Sen Memorial Lecture in July 1982 and the topic chosen by him was "Inertia and Cosmology".

Prof. A. N. Bose was appointed as Vice-Chancellor for the 2nd term for four years from 29th November 1975 and he continued upto 20. 11. 79 and Prof. M. M. Chakrabarty assumed the office of Vice-Chancellor from 21. 11. 79. Prof. Ramaranjan Mukherjee of the Department of Sanskrit had been appointed Vice-Chancellor of the University of Burdwan and he continued to hold the office for subsequent terms. Prof. Amitabha Bhattacharyya, then of the Department of Mechanical Engineering and now of the Department of Production Engineering was the Director of I.I.T. Kanpur from 1975 to 5th Feb. 1980. Prof.

Devipada Bhattacharyya of the Department of Bengali was appointed Vice-Chancellor of Rabindra Bharati University from 2. 11. 79 which office be held for a term of three years. Dr. Nilay Chowdhury, Professor of the Deptt. of Civil Engineering was appointed Chairman, Central Board for Prevention and Control of Water Pollution from 1. 8. 76 and he is still continuing in the assignment. Dr. Biswajit Nag, Professor of Electronics and Tele-Communication Engineering was appointed as the Chairman of the Electronics Commission, Govt. of India for the period 1. 12. 78 to 14. 6. 81. Professor Subodh Ch. Sen Gupta, some times Head of the Department of English and now a Professor Emeritus has been awarded the "Padmasree".

On the recommendation of the 5th plan Visiting Committee, the University Grants Commission sanctioned an allocation of Rs. 97.86 lakhs for the Faculties of Arts and Science and Rs. 300.00 lakhs for the Faculty of Engineering and Technology. Necessary matching grants were also approved by the State Govt. The allocations made for books and equipment, have been utilised fully. The Visiting Committee appointed by the University Grants Commission for considering the needs of the Faculties of Arts and Science for 6th five year plan within a tentative allocation of Rs. 100 lakhs visited in the University in January 1983 but the actual sanction have not yet come. A seperate U.G.C. Assessment Committee for South-East Area Studies Centre for the 6th plan also visited the University on January 19, 1983 but decisions about grants have not been made yet.

We mourn the loss of some members of the academic community during the last few years. Teachers like Prof. Amarendra Nath Chakraborti of the Department of Mechanical Engineering, Prof. Kali Krishna Banerjee of the Department of Philosophy and who was also the Dean of the Faculty of Arts for two terms, Dr. Karun Chandra Mitra of the Department of Geological Sciences and also a member of the Council, Sri Ranajoy Karlekar of the Department of English, Prof. Anupam Sen Gupta of the Department of Pharmacy, Prof. Saradindu Roy of the Department of Metallurgy, died in harness and before due time. We also remember with reverence Prof. Sosobhan Chandra Sarkar, some time Head of ihe Department of History, Professor Panchanan Chakraborty, a former Head of the Department Economics and Professor Naresh Chandra Sen, formerly of the Department of Physics of the University, who passed away in the recent past.

The detailed activities of the University during the period under review have been shown in the subsequent chapters.

CONDOLENCE (1st April 82 to 31st March 1983)

(*i*) The University Council in its meeting held on 25th Sept. 1982 mourned the death of Prof. Sosobhan Sarkar, Professor Emeritus and an eminent educationist.

The Council on the same date also mourned the death of Shiekh Mohommad Abdullah, Chief Minister of Jammu and Kashmir.

(*ii*) The Council in its meeting held on 4th December, 1982 mourned the death of Sri Bishnu De, the renowned poet, Acharya Binoba Bhabe and Sri Promode Das Gupta.

(*iii*) The Council in its meeting held on 14th December 1982 mourned the death of Prof. Priyada Ranjan Ray, a pioneer in the field of Inorganic and Analytical Chemistry and a true disciple of Acharyya P. C. Ray.

(*iv*) The Council in its meeting held on 14th January 1983 mourned the death of Sri Sankar Gupta, who was an ex-student of the University and the Minister of Power, Govt. of West Bengal.

(*v*) The Council in its meeting held on 26th February 1983 mourned the death of Dr. Prafulla Chandra Ghosh, Ex-Chief Minister of West Bengal, Sri Asoke Kumar Sarkar, President of AIP and a renowned journalist, Prof. Panchanan Chakraborty, Ex-Head of the Deptt. of Economics and Prof. Naresh Ch. Sen, a former teacher of the Department of Physics of the University.

ENDOWMENTS (EXISTING) (MEDALS, BOOK PRIZES AND STIPEND)

Medals

Dr. B. C. Roy (Gold) Medal
Hirendranath Datta Memorial (Gold) Medal
S. N. Bando Memo (Gold) Medal
Alumni Association (Gold-centred Silver) Medal
Sarada (Gold-Centred Silver) Medal
Sibapriya Chatterjee Memo. (Gold-Centred Silver) Medal
Satish Chandra De (Gold) Medal
Puspa Roy (Gold) Medal
Jogendra Nath Das Memo. (Gold-Centred Silver) Medal
Benoy Sarkar Memo. (Gold) Medal
Jatindra Krishna (Silver) Medal
Asoke Memo. (Silver) Medal
Promotho Nath Bose Memo. (Silver) Medal
Arun Kumar Bando. Memo. (Silver) Medal
Sris Chandra Bir Pratap Memo. (Silver) Medal
M. N. Chakraborty Memo. (Silver) Medal
Barindra Memo. (Silver) Medal
Sudhakar Burman Smriti (Silver) Medal
Promotho Nath Bose (Bronze) Medal
Ganesh Janani Debi Memo. (Silver) Medal
Umarani Ghosh (Silver) Medal
Prof. Satyendra Nath Bose Memo. (Silver) Medal
Dr. D. M. Bose (Silver) Medal
Kali Prasanna Das Gupta Memo. (Silver) Medal
Subodh Kumar Bose (Silver) Medal
Premananda Das Memo. (Gold-Centred Silver) Medal
Manindra Memo. (Silver) Medal
Aloke Kumar Sarkar Memo. (Silver) Medal
Saraju Bhowmic Memo. (Silver) Medal
D. N. Datta of Southern Avenue Memo. (Gold) Medal
T. P. Saha Memo. (Gold) Medal
Jyotish Ch. Maitra Memo. (Silver) Medal
S. N. Bando. Memo. (Gold) Medal
Dr. Sudhangsu Kr. Banerjee Memo. (Gold) Medal
Sipra Burman Ray Memo. (Silver) Medal
S. M. Bose Memo. (Gold) Medal

Louis Pasteur (Gold) Medal
Hiralal Roy (Gold) Medal
Himani Ghosh Memo. (Gold-Centred Silver) Medal
Purna Chandra Laha Memo. (Silver) Medal
Prativamoyee Memo. (Gold) Medal
Dr. Prithwis Ch. Chakraborty Memo. (Gold-Centred Silver) Medal
Charu Chandra Memo. (Silver) Medal
Prafulla Kanta Banerjee Memo. (Silver) Medal
Swapan Chandra Memo. (Gold-Centred Silver) Medal
Sabita Bhattacharyya Memo. (Gold) Medal
Sushanta Kr. Mitra Memo. (Gold) Medal

Book Prize

Nripendra Ch. Bandopadhyaya Memo. Book Prize
Hemendra Kumar Rakshit Memo. Prize
Hara Bilash Memo. Book Prize
Annapurna Memo. Book Prize
Nityabrata Paul Memo. Book Prize
Satyadev Loghani Memo. Book Prize
Ashoke Kr. Sarma Memo. Book Prize
Sabita Bhattacharyya Memo. Book Prize
Dr. A. K. Majumder Felicitation Book Prize
Benoy Krishna Kumar Book Fund
Sumana Memo. Prize
Bishnu Charan Basu Memo. Book Prize
Mohesh Memo. Book Prize

Stipend/Scholarship/Others

Radhika Prasanna Mazumder Memo. Stipend
C. S. Neogy Memo. Stipend
Charu Chandra Basu Memo. Scholarship
Kamala Gupta Charitable Trust Scholarship
Poet Nabin Ch. Sen Memo. Lecture Fund
Sundardas Loghani Memo. Scholarship
Nirmal Ch. Law Memo. Scholarship
Surendra Nath Nandan Memo. Aid Fund
Ganguram Varma Memo. Stipend
B. C. Roy Memo. All-India Debating Fund
Anusilan Samity Commemoration Stipend
Dwijendra Memo. Scholarship

Charan Chandra Mitra Memo. Scholarship
Surendra Nath Ghosh Memo. Scholarship
Monilal Chatterjee Memo. Stipend
Nemai Chand Chatterjee Memo. Stipend
Nabanalini Debi Stipend
Gopi Kristo Bose Stipend
Kisto Mohan Bose Stipend
Upendra Ch. Ghosh Memo. Stipend
Hary Kuljian Scholarship
S. M. Bose Memo. Stipend
Karuna Kr. Acharjee Memo. Stipend
Dr. S. D. Chatterjee Travelling Fellowship
Satindra Bhaduri Memo. Lecture
Asoke Kr. Saha Memo. Scholarship
Nistarini Education Trust Scholarship
S. R. Mundra Memo. Scholarship
Jamini Kanta Mitra Memo. Scholarship
Kalidas Mallik Trust Research Scholarship
Subrata Paul Roy Memo. Scholarship
T. D. Stiftung (Berlin) Alumni Assoc. Scholarship and Prize
Olive I. Reddick Prize
Kunja Kusum Memo. Scholarship

PART I

FACULTY OF ARTS

1. **Undergraduate Honours Courses:**

   (*a*) Honours Courses of three years' duration leading to the Bachelor of Arts degree in Bengali, Comparative Literature, Economics, English, History, Philosophy, Political Science and Sanskrit. The University has no pass courses for the B.A. Degree.

2. **The Degree Course in Bachelor of Library and Information Science:**

   One year's duration leading to Bachelor of Library and Information Science degree.

3. **Post Graduate Courses:**

   Two years' courses leading to the Master of Arts degree in Bengali, Comparative Literature, Economics, English, History, International Relations, Philosophy and Sanskrit.

4. **Post Graduate Evening Courses:**

   Three years' duration in Bengali, Economics, English, History, Philosophy and Sanskrit. The Evening courses are open to School Teachers and those in employment.

5. **Master of Philosophy (M.Phil.) Courses:**

   Two years' duration in Comparative Literature, English, International Relations, Philosophy and Sanskrit.

6. **Doctoral Programme leading to Ph.D. (Arts) and D.Litt. degrees:**

7. **Language Courses:**

   (*a*) Certificate in German, French and Russian.

   (*b*) Diploma Courses in German, French and Russian.

   (*c*) Advanced Diploma Courses in German and Russian.

   These courses are of one years' duration and open only to the students of the University.

FACULTY OF SCIENCE

1. **Under-graduate Honours Courses:**

   Honours courses of three years' duration leading to the Bachelor of Science degree in Physics, Chemistry, Mathematics, and Geological Sciences. The University has no pass courses for the B.Sc. degree.

2. **Post-graduate Courses:**

   Two years' courses leading to the Master of Science degree in Physics, Chemistry, Mathematics (both Pure and Applied) and three years' courses leading to the Master of Science degree in Applied Geology.

3. **Post-graduate Evening Courses:**

   Three years' duration leading to M.Sc. degree in Physics, Chemistry and Mathematics.

4. **Doctoral Programme leading to Ph.D. (Science) and D.Sc. degree:**

FACULTY OF ENGINEERING AND TECHNOLOGY

1. **Under-graduate Courses:**

   (*a*) Architecture, Chemical Engineering, Civil Engineering, Computer Science and Engineering, Electrical Engineering, Electronics and Tele-Communication Engineering, Mechanical Engineering, Metallurgical Engineering and Production Engineering leading to the degree of Bachelor in Engineering in the respective subjects. Each of these sources are of 4 years duration excepting Architecture and Production Engineering, duration of which are $4\frac{1}{2}$ years.

   (*b*) Pharmacy of 4 years' duration leading to the degree of Bachelor of Pharmacy (B.Pharm.).

   (*c*) Food Technology and Bio-Chemical Engineering and Instrumentation and Electronics Engineering and 3 years' duration each leading to the degree of Bachelor of Technology (B.Tech).

   (*d*) Part-time (evening) Degree Courses in Civil Engineering, Electrical Engineering and Mechanical Engineering of 5 years duration. These courses are open to diploma holders in Engineering who are in service.

2. **Post-graduate Courses:**

   (*a*) Chemical Engineering, Civil Engineering, Electrical Engineering,

Electronics and Tele-Communication Engineering, Mechanical Engineering, Metallurgical Engineering, Food Tech. and Bio-Chemical Engineering and Pharmacy leading to degrees of Master in Engineering in the respective subjects. Minimum requirement of attendance for these courses is 2 years.

   (*b*) P.G. Diploma Courses in Engineering and Technology of one year's duration in Chemical Engineering, Electronics and Tele-Communication Engineering, Electrical Engineering, Mechanical Engineering, Food Technology and Bio-Chemical Engineering and Civil Engineering.

3. **Doctoral Programme leading to Ph.D. (Engineering) and Doctorate in Engineering degree.**

SUMMER, WINTER SCHOOLS/ WORKSHOP/SEMINAR AND SHORT TERMS COURSES

Civil Engineering

Seminar on Construction Materials and Equipment, April 1982 in collaboration with the Society of Civil Engineering, Jadavpur University.

Electrical Engineering:

National Seminar on Micro-processor based Instrumentation during November 22–26, 1983.

Mechanical Engineering

(*a*) Summer School on Surface Treat of Metals being participated by Dr. Subrata Pal, Sri K. N. Kundu, Dr. S. K. Ghosh and Dr. M. Bhattacharyya. (lectures delivered by Dr. M. Bhattacharyya).

(*b*) Courses on Preventive Maintenance and Failure Analysis of Earth Moving Machinery being participated by Dr. M. Bhattacharyya, Dr. S. K. Ghosh and Sri K. N. Kundu (lectures delivered by Dr. M. Bhattacharyya).

(*c*) Winter School on Welding Technology (lectures delivered by Dr. M. Bhattacharyya).

(*d*) Short term course in :

(*i*) 8-week course on Hydraulics and Water Resources (Course Director—Dr. B. N. Chanda and Dr. S. R. Bhattacharyya).

(*ii*) 16-week course on Business Management (Course Director—Dr. S. K. Poddar).

(*iii*) 8-week course on Management for Engineers (Course Director—Dr. M. Bhattacharyya).

(*iv*) 8-week course on Computer-Aided Structural Analysis (Course Director—Dr. R. K. Chakraborty).

(*v*) 3-week course on Computer Aided Design (Course Director—Dr. R. N. Banerjee).

(*vi*) 3-week course on Design of Gears and Industrial Drives (Course Director—Dr. M. Bhattacharyya).

(*vii*) Workshop on Water Resources Management (Course Director—Dr. B. Bose).

(*viii*) Seminar-Cum-Workshop on Orthopaedic Bio-Engineering (Course Director—R. K. Chakraborty).

Food Technology and Bio-Chem. Engineering

(*a*) Seminar on Fruits and Vegetable Processing Industry in Eastern and North Eastern Region, 3–4 March, 1983

(*b*) Seminar on "Emulsion, Colloid and Surfactants. 27–29 Oct. '83

(*c*) Workshop on "Rural Industries for Economic Development 26–27 November, 1983.

Electronics and Tele-Communication Engineering

A Five-Week training course sponsored by the Ministry of Education and Culture, Govt. of India on "Theory and Application of Microprocessor / Micro-Computers for the sponsored engineering/ technical teachers in disciplines other than Electronics" was held from 19. 12. 83 to 21. 1. 84.

Chemical Engineering

The Department celebrated its Diamond Jubilee by organising International Seminar on Chemical Engineering Education, Research and Training in Developing Countries from 27–31 December 1982. The Seminar was Co-sponsored by UNESCO, WFFO, APCCHE, IICHE, IE (I), ICMA, SISI (Calcutta) and was financially supported by UGC, CSIR, DST, Deptt. of Environment (Govt. of India), State Govt. and various industries. About 50 delegates from foreign countries like USA, UK, West Germany, Switzerland, China, Indonesia, Iraq, Singapore, Spain, Thailand and Ghana besides about 200 delegates from India participated in the deliberations. Two book-lets on (i) About Chemical Engineering Deptt. and (ii) Alumni Directory were published. A souvenir entitled "Chemical Engineering and Technology—Past, Present and Future" containing contribution of renowned personalities, all over the world was also published.

Architecture

A teacher–student convention was organised in June 1983 where teachers as well as students from local Engineering Institutions along with the students of Jadavpur University participated. On the occasion a week long public exhibition displaying students' work as well as the work of the Department was held in the Academy of Fine Arts located in the heart of the City.

Pharmacy

The following seminars were held in the department—

1. Indian Microbiological Conference in 1982.

2. Seminar on Development on Hospital Pharmacy in 1983.

3. Seminar on Development on Hospital Pharmacy on the occasion of celebration of National Pharmacy week, 1983.

Mathematics

(*a*) A seminar-cum-workshop on "Mathematical Concept and Technique for Applicable Solutions" was held on 22–27 March, 1982. This programme was organised by the Jadavpur University and S. N. Bose Institute of Physical Sciences and was sponsored by the UGC and the State Govt. Prof. R. K. Bullough, Department of Mathematics, U.M.I.S.T., Machchestor, U.K. delivered a course of lectures in the Seminar.

(*b*) An All-India Seminar on "Mathematics for Development" was organised on 24–25 July 1982 in collaboration with Mathematical Association, Jadavpur and it was funded by UGC.

(*c*) The 27th Congress of Indian Society for Theoretical and Applied Mechanics was organised mainly under the auspices of the Deptt. in December 1982. An important feature of the programme was active collaboration and participation from Indian Space Research Organisation, Indian Meteorological Department and Department of Environment, Govt. of India.

(*d*) An all-India Symposium on "Mathematical Aspects of Ocean Studies" was organised on 17–19 June 1983 in collaboration with Mathematical Association, Jadavpur. This programme was funded by the Department of Ocean Development, Govt. of India. Scientists from Indian Meteorological Department, Govt. of India and the National Institute of Oceanography, Goa, participated in the programme.

Chemistry

(*a*) Summer Schools on Theoretical Chemistry and National Symposium on Bio-inorganic Chemistry was held in 1982.

(*b*) J. C. Ghosh Memorial Conference on Strong Electrolytes was held on 6–7 March 1982.

(*c*) National Seminar on Concerted Reactions and Orbital Symmetry was held in January, 1983.

(*d*) National Seminar on Surfactants, Emulsion and Bio-Colloids was held in October, 1983.

Bengali

The department organised two exhibitions—one on the life and works of the late poet Bishnu Dey in which books (mostly of first

edition) of and about him were displayed including many manuscripts and letters. Another exhibition was held on the Midnapore POT paintings.

English

The department contibuted to the Silver Jubilee Celebration of the University by holding an all-India seminar on the "Romantic Tradition in Literature". A volume of the departmental journal on the theme of Romantic Tradition is now under process and it will include most of the essays presented at the Seminar. In February 1983, the department organised a one-day Seminar on Dickens to coincide with the visit of Sir Angus Wilson, the novelist and Dickens Scholar.

Library and Information Science

The department collaborated with the Indian Association of Special Libraries and Information Centre (IASLIC) and the Electronics Commission (Govt. of India) to organise a short course on Computer Application in Libraries.

Philosophy

The department conducted the following workshop:

(*a*) Workshop in Indian Philosophy (conducted by Pdt. V. Bhattacharyya).

(*b*) Workshop in Advanced Mathematical Logic (conducted by Sri T. K. Sarkar).

(*c*) Workshop in Philosophy of Language (conducted by Dr. K. Sen Gupta).

An International Seminar was organised on "Perspectives on Meaning" and "Sri Aurobindo and Perspective on Knowledge". Many distinguished Indian and foreign philosophers contributed papers to the seminar. Many other national and international scholars were present at both the seminars and actively participated in discussions on the floor.

Sanskrit

A two-day seminar on "Vyakarana O Alankar" was held in the department on 22–23 March 1983. Many distinguished scholars from different Universities and Institutions delivered lectures in the seminar.

Comparative Literature

The first national convention of Indian National Comparative Literature Association was held in the campus on 7–9 January, 1983, attended by some twenty outstation and a great many local delegates. There was a plenary session followed by seven seminars and a valadictory session. There was also a general assembly and a brief student workshop on the uses and misuses of Comparative Literature.

DEVELOPMENT AND ACADEMIC PROGRAMME

Architecture

(*a*) Inter-disciplinary programmes in Illumination Engineering as application to buildings and lay out in association with Electrical Engineering Department.

(*b*) Frame work for Rural development programme had been initiated for which Mr. B. De of the extension cell of CBRI had been consulted.

(*c*) The Eastern Zone Examination Centre for holding professional examination organised by the Indian Institute of Architect has been established in the department.

(*d*) The department has taken up several schemes to reorganise internal space so that materials gallery, audio-visual room, seminar room etc. be efficiently accommodated. Several steps have been taken to revitalize the activities of the departmental library.

Chemical Engineering

One of the rooms of the department has been converted to a Seminar Room with Air-cooling facilities. Another room has been converted to a Drawing Room for the students.

Civil Engineering

The course structure of the undergraduate teaching has been thoroughly modernised in keeping with the requirements of the engineering profession. Students are offered a wide range of diversification in the fields of Foundation Engineering, Advanced Structural Engineering, Environmental Engineering etc. at the final year level. In the Post graduate level, major changes have been worked out for the introduction of the new 3-Semester Masters' Degree Programme. In the new P. G. Course, specialisations are offered in Structural Engineering, Soil Mechanics, Foundation Engineering and Environmental Engineering. A number of courses in the emergine areas—as spelt out in the Nayudamme Committee Report have been included in the new curriculam.

Electrical Engineering

The department has been identified by the UGC under the Special Assistance Programme and the UGC Visiting Committee meant for the purpose already visited the department on 4–6 April 1983.

Recently the Control System Laboratory of the department has developed a Computer Controlled Photo Type Setting Instrument

through which Bengali instead of Roman can be used. This is the first working device for which support has been received from the Electronics Commission, Govt. of India.

Mechanical Engineering

(*a*) 3-Semester Post Graduate Course in Engineering were formulated.

(*b*) Bio-Mechanics Laboratory was nucleated in seperate building as an extension of the Machine Element Laboratory.

(*c*) New plants, equipment were added to the following Laboratories

(*i*) Applied Mechanics
(*ii*) Machine Elements Laboratory
(*iii*) Heat Power Laboratory
(*iv*) Hydraulics Laboratory
(*v*) Aerodynamics Laboratory
(*vi*) Machine Tools Laboratory
(*vii*) Metallography Laboratory
(*viii*) Metrology Laboratory

(*d*) Extensive maintenance work of the existing machines in the Workshop were undertaken.

(*e*) Courses in Computer Programme (Theoretical and Practical) have been introduced for undergraduate Mech. Engineering students.

Metallurgical Engineering

Proposal has been submitted to C.S.I.R. for grant for the research proposal "Recovery of Valuable metals from sea Nodules".

Electronics and Tele-Communication Engineering

Development of the following laboratories have been undertaken.

(*i*) Fibre-optics Laboratory
(*ii*) Microstrip Measurement Laboratory
(*iii*) Thin-film Laboratory
(*iv*) Xerography and Xeroradiography Laboratory
(*v*) Distributed Process Control Laboratory
(*vi*) Micro-processor Laboratory
(*vii*) Micro-process based patient monitoring Laboratory
(*viii*) Automatic Diagonistic system for Heart Diseases Laboratory
(*ix*) Micro-computer Laboratory

A novel development technique for xero-radiography has been developed. Few commercial prototype are in operation in a hospital and in laboratory. Talks for commercialisation of the technique are in progress.

Pharmacy

The department specialises in the development of medicaments, both of synthetics and natural origin, their Pharmacological, Biochemical, Microbiological and Bio-pharmaceutical evaluation and translation of the findings in Product Development, Dosage form, Drug delivery system and most important area, the Pharmaceutical Product Assurance. During the 6th plan, the major thrust would be directed towards consolidating and expanding the existing facilities and projecting developments in the area of Pharmaceutical Product Assurance, Product Development and Pharmaceutical Engineering.

Production Engineering

The department has been selected for the award of "Departmental Special Assistance" by the UGC for creating Research and Teaching programmes in the area of "Production Engineering". The UGC Visiting Committee already visited the Deptt. for financial assistance under the programme on 3rd May 1983.

The department has also approached the Ministry of Education and Culture, Govt. of India for supporting a research project in the area of "Micro-processor Application in Robotics".

The first batch of students completed their B.Prod. Engg. Course and all of them have secured employment in reputed industrial concerns all over India. The department has set up a modern drafting class and has acquired about 900 text and reference books.

Physics

The development programme of the department is oriented towards further improvement in the standard of teaching and research. In the post graduate syllabus in Physics a provision has been made for the introduction of a special paper "Atomic and Moleculor Physics" in view of the increasing demand for workers on the subject.

Mathematics

The department has been selected for the award of "Departmental Special Assistance" by the UGC for strengthening research and teaching programme in the area of "Applied Mathematics". The UGC Visiting Committee has already visited the department on 14th February, 1983.

Chemistry

The department has been identified for getting departmental support for Research by the UGC and a Visiting Committee will come very soon to assess the performance of the departmental research project on (i) Production, Storage and Utilisation of energy by Physico-chemical Methods and (ii) Monitoring of Environmental Pollution

and its control and also for developing different areas under Special Assistance Programme.

Geological Sciences

The department continued to maintain its teaching standard, progress in research and efforts for further development.

Activities under the programmes of Special Assistance, UNESCO, UNDP and COSSIP continued. The University Grants Commission selected the Department as a Centre of Excellance. The two new additions to its petro-mineralogical laboratories i.e., the Scanning Electronic Microscope and the X-Ray Diffractometer are in the final stage of installation.

Under the programme of COSSIP/ULP project, the department convened a meeting of College and University geology teachers of northern and north-eastern India to discuss ways and means to improve geology teaching in colleges. The department helped nearly 50 colleges under the above programme by providing standard geology books, rocks and mineral samples and various teaching aids to help in the upgrading of geology teaching in those colleges.

International Relations

A new post of Readership has been sanctioned by the UGC during 6th five year plan. Besides strengthening of the library with the assistance of UGC and State Govt. an attempt to open a departmental library has been started.

Philosophy

The development plan of the department has been chalked out with a view to setting up the following self-contained units:

(*a*) Unit of Indian Philosophical Studies
(*b*) Unit of Mathematical Logic
(*c*) Unit of Philosophy of Social Sciences/Natural Sciences.

The department thus wants to secure effective co-operation among scholars of different branches of Philosophy as well as of different disciplines so that significant research publications of international standard may be brought forth.

Sanskrit

The department has introduced M.Phil. Course in Sanskrit in the session 1982–83 being the pioneer in the State of West Bengal.

English

The M.A. syllabus offers courses on American Literature and on

authors of Special Choice with further options being introduced during the year.

Under the UGC scheme for making a Union Catalogue of titles in the new Cambridge Bibliography of English Literature to be found in selected older libraries in Calcutta, Bombay and Madras areas, work was begun in December 1982. The work is in progress.

Inter-Disciplinary

Jadavpur University has been selected for development of Oceanography jointly by the Department of Ocean Development, Govt. of India and the CSIR through the University Grants Commission. Various departments that may take part in the scheme are Engineering Departments like Civil, Mechanical, Electronics, Food Technology and Metallurgy and Science Departments like Physics, Chemistry, Mathematics and Geology. The University has already submitted proposal for Rs. 201 lakhs for the purpose.

A proposal on Aerospace Technology has also been submitted to the Indian Space Research Organisation at an estimated cost of Rs. 214 lakhs spread over for a period of 5 years.

Architecture

Research activities in the department aim at evolving "Low Cost Construction Techniques" for residential building, land use studies and investigating design methodology. The research and development work in the department is related to housing, comprehensive semi-urbanised development traffic pattern for Calcutta and urban development.

Chemical Engineering

(*a*) A R and D project on "Ashphaltenes as probable maturation and correlated Index of Petroleum" has been sponsored by ONGC under Prof. R. N. Mukherjee.

(*b*) Sri S. P. Saha, an ex-student of the department and Managing Director of Bharat Batteries (P) Ltd. donated a sum of Rs. 1.5 lakhs to organise a research project on "Energy Storage etc". under Prof. R. N. Mukherjee.

Civil Engineering

The major research projects of the department during 1982-83 were:

(*a*) Study of water resources of the Calcutta Metropolitan area in relation to the future growth of the Urban Complex (DST Project).

(*b*) Establishment of regional soil data bank for eastern India (DST Project).

(*c*) Open wave Composite Structure Project (DST Project).

(*d*) Investigation on the occurrance of heavy metals and other Pollution in the sewage fed fisheries around Calcutta (Govt. of West Bengal Project).

Electrical Engineering

(*a*) Novel methods of measurements of current and voltage on extra high tension system—J. K. Choudhury, S. K. Basu, P. K. Mukherjee, S. Chaudhury and S. R. Das (Project of Electronics Commission, Govt. of India).

(*b*) Studies in automatic monitoring of carbon monoxide and making of a portable monitor—J. K. Choudhury, D. Chatterjee (DST Project).

(*c*) Micro-Computer based remote control monitoring and Data

Logging system—T. K. Ghoshal, K. Dutta and G. Das (Project of Department of Atomic Energy, Govt. of India).

(*d*) Development of front end system for Computerised Text processing and photo composition for Bengali, Asamese and Manipur Languages—T. K. Ghoshal, K. Roy, K. Dutta and G. Das (Project of Electronics Commission, Govt. of India).

Electronics and Tele-Communication Engineering

Research programme in the following fields have been undertaken:

(*a*) Optical Fibre Communication
(*b*) Micro-wave propagation
(*c*) EM Wave interaction with Plasma
(*d*) Microstrip Circuits and Antennas
(*e*) Soil State Devices
(*f*) Solar Cell
(*g*) Optoelectronics
(*h*) Xerography and Xeroradiography
(*i*) Industrial Electronics
(*j*) Process Control
(*k*) Circuits and Systems
(*l*) Operating System
(*m*) Petrinet
(*n*) Fault Detection
(*o*) Systems Science
(*p*) Multi-micro Architecture
(*q*) Microprocessor Applications
(*r*) Bio-medical Engineering

The following sponsored research projects/centres have been undertaken in the department:

A. Centre sponsored by the Ministry of Education and Culture, Govt. of India.

—Centre for Microprocessor application for training education and research.

B. Project sponsored by the Department of Electronics, Govt. of India.

(*a*) Development of fibre-optic data link.

(*b*) Studies on Microstrip Components and Antennas.

(*c*) X-Ray pictures on plain paper.

(*d*) Micro Computer based distributed process. Control Laboratory.

(*e*) Automatic diagonistic system for heart diseases.

C. Project sponsored by the University Grants Commission:

—Preparation of electronic grade II—VI compound and studies on the properties and uses.

D. Project sponsored by the Tata Energy Research Institute:

—Fabrication of large size Cds Solar Cells.

E. Project sponsored by the D.S.T. Govt. of India:

—Central diagonistic and patient monitoring system.

Mechanical Engineering

Following research programmes were undertaken:

(*a*) Development of Skeletal Transfixation Pins and Measurement of Bone Drilling Torque, Thurst and Temperature.

(*b*) Stress Analysis of Human Joints and its Artificial Replacements.

(*c*) Mechanical vibration Analysis of Human Limbs for non-invasive Diagonistic Purposes.

(*d*) Effects of Pulse Electromagnetic Field on Bone Growth and Repair.

(*e*) Gear Analysis—for upper and lower limbs of human subject.

(*f*) Stress Analysis of spinal chord.

(*g*) Mechanics of Wrist Joints.

(*h*) Tidal Energy Harnessing.

(*i*) Flood management in urban basin.

(*j*) Homoeo—Medicine—Potentializing Machine Development.

(*k*) Optimum Power consumption analysis for belt conveyer.

(*l*) Development of Friction Welding Machine.

(*m*) Dimentional Stability of Welded Joints.

(*n*) Relation for cumulative Fatigue Damage of Reversed Bending.

(*o*) Effect of stress cycling on Mechanical properties of metals.

Metallurgical Engineering

(*a*) P. G. project on Mechanical Damage of Metals in Low Stress Cycle Loading—S. Sen under A. K. Ghosh.

(*b*) U. G. project on Study of Structure Formation and Mechanical properties in Carburised Iron Powder Compacts—M. C. Somani under A. K. Ghosh.

(*c*) Continuing Research programme on Evaluation of early fatigue damage by N.D.T. technique—A. K. Ghosh.

(*d*) P.G. project on Study on the effect of small addition of Nickel on the Cu-Sn Casting Alloys—P. K. Dutta under B. Chakraborty

(*e*) U.G. project on Study on the effect Cr and Mn on the ageing characteristics of 65—S. alloys—P. K. Das under B. Chakraborty

(*f*) Ph.D. thesis on Segregation roasting of Copper bearing materials—S. Mukherjee under B. Chakraborty.

(*g*) Ph.D. Thesis on Production of Sialun spl. refractory for Metallurgical fields—S. Bandopadhyay under B. Chakraborty.

(*h*) Ph.D. Thesis on Computer Optimisation of quality kinetics and economy of Foundry Production—P. K. Dutta under B. Chakraborty.

(*i*) Research project on Recovery of valuable materials from sea—nodules (CSIR)—B. Chakraborty.

(*j*) P. G. project on Mathematical Formulation on the elevated temperature flow properties of plain carbon steels under B. Chowdhury.

(*k*) P. G. project on Effect of few parameters on liquid melt of a Al, Si Chemical Alloys—I. N. Bhattacharyya under P. K. Mitra.

(*l*) P. G. Studies on Modification Characteristics of Al–Si alloy as a function of time, temperature and amount of Na-addition —K. Mukhopadhyaya under P. K. Mitra.

(*m*) P. G. project on Literature Review Corrosion Testing methods and Corrosion prevention of Stainless Steel—A Ghosh under P. K. Mitra.

(*n*) Ph.D. work on Active Passive Transition of some stainless steels by P. K. Mitra.

(*o*) U. G. project on Studies on Extraction of Copper from Copper Concentrate by Segregation Roasting by M. Basu under S. Mukherjee.

(*p*) U. G. project on Studies on Extraction of Copper Concentrate by Segregation Roasting under S. Mukherjee.

(*q*) U. G. project on Chlorination and Reduction Behaviour of Copper, Nickel and Cobalt Oxides system under S. Mukherjee.

(*r*) U. G. project on Tempering Characteristics of 9% Ni-Steel—P. K. Das under T. K. Pal.

(*s*) U. G. project on Pellatization of Sukinda Chromite Finls S. Sadhukhan under D. Ghosh.

Food Technology and Bio-Chem. Engineering

Sixteen Research projects have been undertaken in the field of fermentation Technology, Cereal Technology, Protein Technology, Bio-Chemical Engineering, Food Technology and Food Engineering financed mostly by CSIR, UGC, Department of Atomic Energy, ICAR, ICMR and DST. Twenty three research workers are actively associated with these programmes.

Pharmacy

The department conducted research activities on various aspects of Pharmaceutics, Pharmaceutical Chemistry, Pharmacology, Biochemistry, Microbiology, Pharmacognosy and Pharmaceutical Engineering. 25 Junior and Senior Research Fellows under UGC., CSIR, ICMR, Lady Tata Memorial Trust etc. are actively engaged in the research activities. Topics for research have been Bio-pharmaceutics, Bio-availability of drugs, Anti-biotic properties of some synthetic antihistamines, synergism of drugs, studies on certain antituber cular drugs, Fungal amylese and Anti-inflamatory drugs from indigenous plants, Newer derivatives of erythromycin, Physico–Chemical aspects of serum binding, Bio-pharmacology of mycotoxins, Toxicology of Pesticides, synthetic anti-cancer and anti-inflamatory drugs.

Production Engineering

The department has consolidated research activities in selected emerging areas and has started developing new laboratories as well as teaching modules in the area of:

(*i*) Automation and Robotics

(*ii*) Manufacturing System

(*iii*) Tero-Technology

(*iv*) Tribology

(*v*) Ergonomics and work design

(*vi*) Decision—support systems and Quantitative Management System

Physics

The department has conducted advanced research in different branches of Physics including the following major areas:

(*i*) High Energy Physics

(*ii*) Solid State and Liquid State Physics

(*iii*) Atomic and Molecular Physics

(*iv*) Nuclear Physics and Cosmic Rays

(*v*) General Relativity and Cosmology

(*vi*) Material Science

(*vii*) Bio-Physics

(*viii*) X-Ray Crystollography.

Apart from the general schemes of research, some specific schemes have been undertaken. These schemes are on:

(*i*) Atomic and Molecular Collisions (Prof. T. Roy).

(*ii*) Mechanical properties of solids (Dr. A. N. Basu).

(*iii*) Co-relation in Hadron-Nucleus Collisions (Dr. D. K. Bhattacharyya).

(*iv*) Fluroscence Studies of Biological Membranes (Dr. P. Nandy).

(*v*) Studies on High Energy Jets with Emulsion Telescope Technique (Dr. D. Ghosh) (in Collaboration with CRN (France) and the Universities of Lyon (France) and Santader (Spain).

Mathematics

(*i*) Intensity dependent processional rotation and other effects of strong waves in plasmas—Prof. B. Chakraborty.

(*ii*) Studies on Non-Linear effects in Wave Propagation—Dr. D. K. Sinha.

Geological Sciences

Ongoing research projects in the department under the UGC Special Assistance Programme (as per report submitted by the Dept. to UGC in December 1982).

(*i*) Physico-Chemical and petrological study of coal and associated sediments in the major Gondowana basins of India,

Radioactivity of coals and associated rocks in Raniganj Coalfield—Prof. B. C. Mukherjee, Dr. A. Ghosh, Dr. S. Chaudhury.

(*ii*) Geological, Minerological and Geo-Chemical Studies of the major manganese ore deposits of India with particular reference to their genetic and utilisation aspects—Prof. S. Roy, Dr. S. Das Gupta, Sri A. Bhattacharyya.

(*iii*) Genesis of the banded iron formation and associated iron ores of Orissa and Bihar—Prof. S. Roy, Prof. K. L. Chakraborty, Dr. S. Mitra.

(*iv*) Investigation on the chromite and nickel deposits associated with ultrabasic rocks of Eastern India—Prof. K. L. Chakraborty and Dr. S. Mitra.

(*v*) Structures and Ore mineralisation along with Singhbhum Mineral Belt—Dr. S. C. Sarkar, Sri A. Ganguly, Prof. P. S. Chakraborty, Prof. S. Ghosh and Dr. R. K. Majumder.

(*vi*) Study of the sulphide Ore mineralisation in Rajasthan with particular reference to Khetri, Saladipura, Dariba—Alwar areas—Dr. S. C. Sarkar, Dr. A. D. Mukherjee, Dr. P. K. Bhattacharyya and Dr. S. Das Gupta.

(*vii*) Ore mineralisation in parts of Eastern Himalayas—Dr. S. C, Sarkar, Prof. P. S. Chakraborty, Sri A. Ganguly, Dr. A. Ghosh. Dr. S. Das Gupta, Dr. P. K. Bhattacharyya and Dr. A. D. Mukherjee.

(*viii*) Structural Control, Mineralogy and genesis of the gold-tungsten concentration in Bihar and West Bengal—Dr. S. Das Gupta, Dr. P. K. Bhattacharyya and Dr. A. D. Mukherjee.

(*ix*) Investigations into the magnetization processes of rocks—Dr. S. Basu Mallik.

(*x*) Scale model experiments on geological structures with particular reference to mineral deposits—Dr. S. Ghosh.

(*xi*) Palaeontological study of the Mesozoic and Tertiary Sediments with particular reference to their economic possibility—Dr. K. C. Mitra and Dr. S. Bardhan.

(*xii*) Protorozoic Tidal deposits in parts of Madhyapradesh and Rajasthan and their palaeogeographic and economic implications—Dr. S. K. Chanda, Dr. A. K. Bhattacharyya and Dr. P. K. Bose.

(*xiii*) Exploration of some geothermal areas in the Himalayas and in the north-eastern peninsular India for their economic utilization—Dr. A. L. Mukherjee.

(*xiv*) Investigation on the geological conditions of ore formation—Dr. A. D. Mukherjee.

(*xv*) Sedimentation in the Epicontinental seas: Studies in some key areas in the Vindhyan basin in Central India—Dr. S. K. Chanda.

Chemistry

Ongoing sponsored research schemes in the department (as per report submitted by the Deptt. to UGC in December 1982).

(*i*) Production Storage and utilization of Energy by Physico-Chemical Methods (UGC).

(*ii*) Chemical Physics of Liquid Equilibrium and Non-equilibrium Statistics and Quantum Mechanical Studies (UGC).

(*iii*) Comprehensive study of Liquid State from Statistical, Mechanical and Molecular Accoustic point of view (DST).

(*iv*) Studies of Photoelectro Chemical Cells (CSIR—Dr. J. Dutta).

(*v*) Development of Iron Chelators and Iron Chelates of Clinical Interest (CSIR—Dr. M. K. Das).

(*vi*) Kinetics and Mechanism of Enzyme Catalysed Reaction of Alcohol and Aldehydes (CSIR—Dr. K. K. Sengupta).

(*vii*) Preparation of electronic grade II–VI Compounds (UGC—Dr. S. K. Bhowal—interdisciplinary).

(*viii*) Occurrence of heavy metals in Fish Bheries (Govt. of West Bengal—Dr. S. K. Bhowal, Dr. B. K. Pal, Prof. A. K. Chakraborty).

(*ix*) Analytical Chemistry relating to uranium (UGC—Dr. B. Sur).

(*x*) Thermodynamic Studies on Solute Solvent Interaction in Acqueous Electrolite Solution (UGC—Dr. K. K. Kundu).

(*xi*) Studies on the search for High Energy Non-acqueous Batteries and Fuel Cell (a) Rechargeable amalgamated Alkali Metal Halogen Cells and (b) Electro Catalysis by Nobel Metal Surface Anodic Oxidation (CSIR—Dr. K. K. Kundu).

(*xii*) Production of Metal ions to the sub-normal oxidation states isolation of low valent metal complexes with special reference to industrial and biological catalysis—Dr. R. G. Bhattacharyya.

Philosophy

The department has taken up three major research projects:

(*i*) (*a*) Publication of a Lexicon and an Enclyopedia of Indian Philosophy.

(*b*) Publication of critical editions of Indian Philosophical texts.

(*ii*) Individual and group research in Philosophical and Non-Standard Logic.

(*iii*) Individual and group research in Philosophy of Science Philosophy of mind, Philosophy of Language, Ethics, Social Philosophy and Sociology of knowledge.

Besides, some faculty members of the department are working on problems in some non-thurst areas like Aesthetics, Philosophy of law, Philosophy of Literature, Methodological implications of Para-Sciences etc.

Comparative Literature

Research work were done by the M.Phil. and Ph.D. candidates under the supervision of faculty members in the areas of East-West literary relations—both the Western impact on Indian Literature and the Indian impact on Western Literature, Indian Folk theatre, Narratology, Popular fiction and literature as an industry, the theatre of protest in India, the 'absurd' in the Western theatre, Medevial Indian Literature, Comparative epic, Childrens' theatre and Third World Literature.

International Relations

Nine research fellows—seven under South East Asia Programme and two under Pakistan/Bangladesh Programme are carrying on research work on various problems of the respective areas. Besides, a number of students, some with fellowship and some without fellowship, are carrying on research on various aspect of the current problems of International Relations. Six M.Phil. dissertations have been submitted in 1983.

English

Dr. Ramaprasad De has completed work on the District of Howrah in his project on the study of Indian place-names.

CONSULTANCY AND TESTING SERVICES BY FACULTY MEMBERS

Architecture

The department undertook several building projects through its Consultancy Cell of which the Extension of Girls' Hostel and Boys' Main Hostel for the students of the University may be mentioned.

Chemical Engineering

Prof. R. N. Mukherjee was nominated as a 'Competent Person' under the West Bengal Factories Act to enquire and give report on an explosion in a large Chemical industry near Calcutta.

Civil Engineering

(*i*) Investigation of the performance of Deep tubewells at the factory side of Incheck Tyres Ltd. Kankinara, 24 Parganas.

(*ii*) Soil investigation and design of foundation for Central Ware Houses at Behala, Calcutta and Burdwan for Central Warehousing Corporation Ltd.

(*iii*) Soil investigation and design of foundation for T. V. Relay Centre at Asansol for All-India Radio.

(*iv*) Investigation of failure of Water Reservoir at Raghunathpur, 24 Parganas for Calcutta Metropolitan Development Authority.

(*v*) Computer simulation and system optimisation of slag laddle movement in blast furnace operation at Villai Steel Plant.

(*vi*) Investigation of safety of Spinning Mill Building at Gauhati for National Textile Corporation.

(*vii*) Performance testing of automatic exhaust pollution control revised FUSEP for SRCD Ltd.

(*viii*) National Survey on Steel Mill effluents for Central Board for Prevention of Control and Water Pollution.

(*ix*) Soil investigation and design of foundation for HIM Container Factory at Haldia for Indian Carbon Ltd.

Electrical Engineering

Education of Transient Stability of CESC System due to commissioning of the Titagarh Generating Station.

Mechanical Engineering

(*i*) Design of Stress Analysis of Beaded Cans for battery cells.

(*ii*) Design and Development of Special Cans for Shoe Stitiching Machine.

Metallurgical Engineering

(*i*) Softening of Lead for M/S. Pieco Electronics and Electricals Ltd. Calcutta—Prof. B. Chakraborty and Prof. A. K. Ghosh.

(*ii*) Study of Chippings of Air Pre-heater to find out the nature of failure for M/S. Hindusthan Copper Ltd., Ghatsila—Sri S. Mukherjee and Prof. B. Chakraborty.

(*iii*) Suggesting heat Treatment Method for handling the Tooth Surface of a 320 kg. casting for M/S. Johnston India Ltd., Panihati, 24 Parganas—Prof. B. Choudhuri, Sri P. K. Mitra and Prof. B. Chakraborty.

(*iv*) Anihiline super-heater failure (Met. investigation) for M/S. Alkali Chemicals Corp. of India Ltd., Rishra, West Bengal—Prof. B. Chakraborty, Prof. A. K. Ghosh, Prof. B. Choudhuri and Prof. B. K. Mitra.

(*v*) Testing of Micro-structure in both etched and unetched condition with Photo Micrographs (cast iron sample) for M/S. Superintendence Co. of India (P) Ltd., Calcutta—Prof. B. Chakraborty.

(*vi*) Testing of hardness—either micro-hardness or V. P. N. (cast iron particles)—Prof. B. Chakraborty.

(*vii*) Resistance and Breaking load tests of wire samples for Shalimar Wires and Indus. Ltd., Calcutta—Sri P. Nandy and Prof. B. Choudhuri.

(*viii*) Chemical analysis of copper, lead and zinc in two brass samples for M/S. Swiss Writing Instruments (P) Ltd., Calcutta—Dr. B. Bhattacharyya.

(*ix*) Chemical analysis for copper in one non-ferrous sample for M/S. Bharat Heavy Electricals Ltd., Calcutta—Dr. B. Bhattacharyya.

RESEARCH PUBLICATIONS PUBLISHED BY FACULTY

Chemical Engineering

(*i*) T. K. Pal, F. Fetting and R. N. Mukherjee :
'Unterschung der Adsorption Eigen Schaften and Zeoith 5A Von n–Alkan und inheer Mischungen'.
(Chemie Ingineur Technik, Vol. 55, No. 2, 150–151 (1983).

(*ii*) T. K. Pal, F. Fetting and R. N. Mukherjee :
'Diffusion in Molecular Sieve 5A'
(Proceeding of 5th Conference on Applied Chemistry Unit Operations and Processes, Budapest, Hungary, Vol. 3, p. 5 (1983).

(*iii*) T. Ganguli, P. Bhattacharyya and R. N. Mukherjee :
'Kinetic behaviour of Heterogenous Sequential Multi-enzyme System with forward and Reverse Inhibitions'.
(Bio-Chimica Bio-Physica Acta, 742 (1983) 334–340).

(*iv*) C. Guha, S. C. Roy and R. N. Mukherjee :
'Utilisation of Waste Kendu Leaf in Paper Board Industry'
(Proceedings of International Seminar on Chemical Engineering Education, Research and Training in Developing Countries, December, 1982).

Civil Engineering

(*i*) P. Som and R. D. Purakayastha :
'Soil structure interaction analysis differential settlement of continuous foundation'.
(Journal of the Institution of Engineers (India), Civil Engineering Division, Vol. 63, part II, September, 1982).

(*ii*) A. K. Mukherjee :
'Rectangular and square hollow sections in structures'.
(Proceedings of the Seminar of the Institution of Engineers (India), Jamshedpur, Dec. 1982).

(*iii*) S. R. Bhattacharyya :
'Eigen solution using R. Q. and cable trust testing.
(Bulletin no. 74, I.A.S.S. Madrid, 1982).

(*iv*) N. Som :
'Calcutta Metro—the first of his kind in India.
(Pre-conference volume, Indian Geotechnical Society, May, 1983).

(*v*) S. Neogy :
(*a*) 'Environmental quality and management'.
(The Indian Science—proceedings of the Seminar on our

Environment and Society, The Science Association of Bengal, 1982).

(*b*) 'Shear Test of pre-stressed bridge slabs supported by bearings near the edges'.
(Engineering structural Research Group, Polytechnic of Central London, May, 1982).

Electrical Engineering

(*i*) J. K. Choudhury, S. N. Bhattacharyya, P. C. Kejariwal and R. Upadhyaya :
'Improved double ratio inductively coupled bridge for precision inductance measurement'.
(Journal of I.E. April, 1982).

(*ii*) J. K. Choudhury, S. N. Bhattacharyya, P. C. Kejariwal, R. Upadhyaya :
'Testing of Voltage Transformer by inductive voltage divider'.
(Journal of I.E. April, 1982).

(*iii*) S. N. Mukhopadhyay, S. Chaudhuri and R. Chakraborti :
'A digital phase difference indicator'.
(Journal of I.E. June, 1982).

(*iv*) J. K. Chaudhury :
'An analog multiplier divider with digital output'.
(Proc. IEE, Vol. 130, pt. 6, no. 3, June, 1982).

(*v*) J. K. Chaudhury :
'Technological aspects of Cardiac Monitoring Equipment'.
(Chapter in the book on Principles and Practice of acute cardia care—Medical publishers year Book, 1984, USA).

(*vi*) S. K. Basu, D. K. Mitra :
'A new IC Timer operated fail safe earth fault protection scheme for underground coal mines using restricted neutral system of power supply'.
(Mining Technology, May, 1982).

(*vii*) J. R. Biswas :
'Wet pollution behaviour of artificially contaninated insulators under non-standard switching surges of short duration'.
(Journal I.E., Vol. 62, October, 1982).

(*viii*) Das and Ghoshal and T. K. Ganit :
'On Linearly Independent Columns of a Matrix (in Bengali)'.
(Vol. 1, No. 2, July, 1982).

(*ix*) R. N. Dhar :
'A book written on 'Computer Aided Power system and Analysis'.
(Published by Tata–Mc. Graw Hill Publishing Co.).

Electronics and Tele-Communication Engineering

Chaudhuri N., Ghosh S. and Ghosh A. M. :
'Wide range precision speed measurement with adaptive optimization using microcomputer' (IEEE Trans. Industrial Electronics. pp. 369–373 November, 1983).

Chaudhury A. and Mukhopadhyay D. :

'Optimum second harmonic generation efficiency in II–VI compound semiconductors at 77°K' (Physica Status Solidi (b), B–113, pp. K49–53, 1982).

Chowdhury S. K. and Majumder A. K. :

'Frequency analysis of adventitious lang sounds'.
(Journal of Bio-medical Engineering (U.K.) pp-305–312, 1982).

Das A. K. :

'Disordered zones around splicing regions and its relationship with the loss of optical fibre,
(Proceedings of the International Summer School of Optoelectronics, The Chinese University of Hong Kong, July 26, 1982).

Das A. K. :

'Cost analysis of multiple—fiber and multi-wavelength optical transmission system.
(Proceedings of the International Summer School of Optoelectronics, The Chinese University of Hong Kong July 26, 1982).

Das A. K., Chakravorty A. and Roy M. N. :

'Some new results on disordered zones around splicing region of optical fiber'.
(Proceedings of the Canadian Communication and Energy Conference, Montreal, p-317, October 13, 1982).

Das A. K. and Bhattacharyya S. :

'A simple method for minimum cost of fiber link system'.
(Proceeding of the Canadian Communication and Energy Conference, Montreal, p-320, October 13, 1982).

Das N. and Chowdhury S. K. :

'Rectangular Microstrip antenna on ferrite substrate'.

(IEEE Trans. Antenna and Propagation. pp-499–502, March 1982).

Das N., Chatterjee J. S. and Chowdhury S. K. :

'Circular microstrip antenna on ferrimagnetic substrate'.
(IEEE Trans. Antenna and Propagation pp-188–190, Jan. 1983).

Das N. and Chatterjee J. S. :

'Conically depressed microwave patch Antenna'.
(IEE Proceedings—Part-H, April 1983).

Deb S. and Mukherjee M. K. :

'A cheaper technology for thin film Cu_2S-Cds soler cell'.
(Proceedings of the National Solar Energy Convention, Bangalore p. 8.029. January 22–24, 1982).

Deb S. and Mukherjee M. K. :

'The role of hydrogen glow discharge on the performance of Cu_2S-Cds solar cell'.
(Proceedings of the National Solar Energy Convention, Delhi, December 17–19, 1982).

Deb S. :

'Degradation of performance of Cu_2S-Cds solar cell'.
due to two-way solid state diffusion process'.
(Solar Cells (U.K.) p-215, 1983).

Deb S. :

'A note on the correct evaluation of the junction capacitance of a solar cell'.
(International Journal of Electronics (U.K.) p-449, 1983).

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'A simple laboratory method for the fabrication of inexpensive front contact for thin film Cu_2S-Cds solar cell'.
(Solar Energy Materials (U.S.A.) p-293, 1983).

Deb S. :

'A simplified method of fabrication of front contact for a thin-film Cu_2S-Cds solar cell'.
(Proceedings of the National Solar Energy Convention, Vadodare, December 16–17, 1983).

Ghosh S. and Datta A.

'Modified algorithm for deadlock avoidance'.
(Proceedings of the IEEE COMPCON FALL Conference, Washington D.C., September 1982).

Ghosh S. and Datta A. :

'Modular implementation of large control structures'.
(Proceedings of the IEEE COMPCON FALL Conference, Washington D.C. September, 1982).

Jana P. B. and Nandi R. :

'Novel dual-input tunable ideal integrator with enlarged time constant'.
(IEE Proceedings ECS Part (G), August 1983).

Mallik K. K., Sridharan M. and Roy S. K. :

'Some studies on the effect of the resonant cap on the oscillator performance of X-band GaAs and Si IMPATT oscillators'.
(Journal of IETE (I) pp-215–218, May 1983).

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'Electrographic process using a semipermanent dielectric Layer'.
(IEEE Trans. Industry applications pp. 652–654, July 1983).

Mukherjee M. K. :

'Electric fields in a charged tuber layer on a photoreceptor and X-ray imaging".
(Proceedings of the IEEE Conference on IAS, Mexico, October, 1983).

Nandi R. and Jana P. B. :

'Circuit implementation of current conveyer and some applications'.
(Proceedings of the 26th Midwest Symposium on Circuits and Systems, Mexico, August 1983).

Nasipuri M., Basu D. K., Duttagupta R. and Seth S. :

'A microprocessor, based real time arrythmia monitoring system'.
(Proceedings of the 2nd Symposium De Ingenieria Biomedica, Madrid, October 5–7, 1983).

Nasipuri M., Basu D. K., Duttagupta R. and Seth S. :

'A new microprocessor based data reduction for monitoring communication and storage of ECG signal'.
(Proceedings of the 7th Symposium on Computer Applications in Medicine, Bultimore, October 23–26, 1983).

Nath A. K. and Leo T. T. :

'Fault location in combinational logic networks by multistage binary free classifier'.
(Proceedings of the IEEE International Conference on Circuits and Computers, 1982).

Nath A. K. and Lee T. T. :

'On the multidimensional extension of blockpulse functions and their completeness'.
(International Journal of System Science pp. 201–208, February 1983).

Nath A. K. et-al. :

'On the design of a classifier with linguistic variables as inputs'.
(International Journal of Fuzzy-Sets and Systems, pp. 285–286, November 1983).

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'A low frequency band pass filter with independent tunability and selectivity'.
(Journal of IETE (1), pp. 1–5, January 1982).

Patranabis D., Paul A. N. and Dey A. N. :

'Ideal ground inductor with grounded capacitor and two operational amplifiers'.
(Journal of IETE (I), pp. 63–66, April 1982).

Patranabis D., Paul A. N. and Dey A. N. :

'Efficient enhancement/lowering of integrator and differentiator time constants with Fibonacci numbers helping their evaluation'.
(IEEE Trans. Circuits and Systems. pp. 409–411, June 1982).

Patranabis D. and Dey A. N. :

'Stability conditions of a boiler type process'.
(Journal of IETE (I), pp. 293–294, June 1982).

Patranabis D., Paul A. N. and Dey A. N. :

'A floating NIC without constraint and its applications'.
(IEEE Trans. Circuits and Systems, pp. 181–183, March 1983).

Patranabis D. and Ghosh D. K. :

'Active R-C integrators and differentiators'.
(Journal of IETE (I), pp. 239–250, June 1983).

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'Formulas for calculating time constant of RC integrators and differentiators using cascaded resistive L-sections'.
(IEE Proceedings. Electronics Circuits and Systems, Part-G, pp. 207–209, October 1983).

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'On some broad band microstrip resonators'.
(IEEE Trans. Antennas and Propagation pp. 193–194, January 1983).

Roy S. K. and Das Gupta K. :

'Recursive generation of sampled waveforms using microprocessor'.
(Proceedings of the International Conference on Advances in Information Science and Technology, I.S.I., Calcutta—35, January 11–14, 1982).

Ray S. K. and De T. K. :

'A low cost microprocessor based multichannel temperature indicator'.
(Journal of IE (I) ETCE Divn. pp. 100–103, April 1983).

Ray S. K. :

'Generation of serial CPMFSK signal'.
(Proc. IEEE, December 1983).

Roy M. N. Chakraborty B., Khan M. and Bhattacharyya B. :

'Some investigations on a strong EM wave in a magnetized plasma'.
(Proceedings of the XVI International Conference of Phenomena in ionized gases, Duesseldorf (FRG) August 29, September 2, 1983).

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'A digital phase locked loop for generating frequency discremenating digital words'.
(Proc. IEEE pp. 200–201, February 1982).

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'Realization, compensation and some applications of single element tunable differential voltage controlled current source'.
(IEEE Trans. Circuits and Systems. pp. 11–15, Sept. 1982).

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'Integrable tunable sinusoid oscillator using DVCCS'.
(Electronic letters. pp. 745–746, September 1983).

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'Joining a P and L and VCO forms fractional frequency multiplier'.
(Electronics (U.S.A.), p. 163, May 19, 1982).

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'A novel low distortion wide band generator'.
(IEEE Trans. Communication. pp. 1021–1024, August 1983).

Tewari R. K. and Roy M. N. :

'Path loss measurements in tropical wet evergreen forest and determination of electrical constants foliage'.
(Proceedings of the 1982 IEEE Region 5 Conference, Colorado, May 3–8, 1982).

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'Highest gain in forest medium on empirical analysis'.
(Proceedings of the IEEE International Symposium on Antennas and Propagation. Albuquerque, May 24–28, 1982).

Mechanical Engineering

(*i*) About 40 papers were published in National and International Journals.

(*ii*) A text book on 'Introduction to Mechanics for Engineers' was written by Dr. R. K. Chakraborty and Dr. K. N. Chakraborty.

(*iii*) Second edition of the book 'Fundamentals of Engineering Drawing' by Dr. M. Bhattacharyya and Dr. S. Pal was published.

Metallurgical Engineering

A. K. Ghosh :

'Structural damage in Low Stress Cycle Loading' presented

at the Annual Technical Meeting of Indian Institute of Metals at Rourkela, November 1982.
(Extended abstract of the paper published in the Proceeding of A.T.M.)

B. Chakraborty :

'Recovery of copper from copper bearing materials by Segregration Roasting'.
(Troma, I.I.M.)

B. Chakraborty :

'Scope of Computer Technique in Indian Foundry Conditions'.
(Published in the journal of Institution of Engineers India).

P. K. Mitra :

'Ductile Iron—a critical appraisal'.
(Published in December 1982).

Pharmacy

(Mrs.) M. Pal :

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(Proceedings of 69th session of Indian Science Congress in 1982).

'Metabolism of 1, 6. 8, trihydroxy-3-methyl anthraquinone isolated from cassia tora leaf in rats'.
(Proceedings of the 70th Session of Indian Science Congress in 1983).

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'Action of scorpion (H. bengalensis) venom on smooth muscle
(Indian Journal of Experimental Biology, 20 (7), 645–648, 1982).

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(Indian Drugs 20, (6), 216–221, 1983).

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'Preparation and Evaluation of a new water-soluble salt of Erythromycin—Erythromycin Panto-thenate'.
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'Antimicrobial property of a new mycotoxin (MT–81)'.
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'Influence of Ochratoxin A and Citrinin on Acetylcholine and acetylchloninestrase activity on mouse brain and whole blood'.
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'Hematological changes produced in mice by Nuvacron and Furadan'.
(Toxicology, 25 (1982) 255–260).

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(Toxicology 26 (1982) 55–62).

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Sri C. R. Ghosh :

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(a new edition on the life of the famous actor).

Dr. D. P. Bhattacharyya :

Two books on 'Bangla Jibancharit Sahitya' and 'Upanyaser Kotha'.
(enlarged 2nd Edition)

(*b*) *Research papers and articles*

Dr. S. K. Chatterjee :

'Bibhutibhusaner Aprakashita Dinalipi'.
(Autumnal *Jugantar* 1983)

Dr. P. Sarkar :

'Dvimattrikata, na Dvitiya Svaralop'.
(*Bhasa* (e.M. Nath), Nov.–April 1982-83, pp. 85–94).

'Chhajaner Prithibi'.
(*Turya* (ed. s, D. De and S. Ghosh) Vol. 2, No. 2, 1983).

'Rabindranather Chhotogalpa: Bhashariti'.
(Galpaguchha (ed. A. Chatterjee) Tagore Issue, 1983, 285-304).

'Iskuler Bangla Byakaran Kamon Hobe?'
(*Jugantar*, March 20, 27, April 3, 10, 1983).

'Bhasha Sikshar Nana Katha'.
(*Ananda Bazar Patrika*, April, 3, 1983).

'Trishankur Atmakathan O Navabarsha'.
(*Jugantar*, April 15, 1983).

'Uchcharon O Banan'.
(*Jugantar*, May, 1983).

'Sankha Ghosh, Samalochak, Gadyalekhak'.
(*La Posie* (ed. Barnik Roy) Vol. 16, 1–2, 4–16).

'Abhidhan Bishayak'.
Jugantar, July 3, 1983).

'Chhotagalpa, Upanyas: Ardha Sataker Dharabahikata'.
(*Desh*, Golden Jubilee Issue, 223–246)

'Anya Bhasa Sikhte Hole'.
(*Rabibashar* (ed. S. Talukder), Sept. 4, 1983, 4–8)

'Gopan Bhashar Gopan Katha'.
(Autumnal *Jugantar*, 1983–28–32).

'Bangla Kriyapader Banan'.
(*Proma* (ed. S. Ghosh), Vol. 5, No. 1 (1983) 133–158).

'Bangla Karok Bibhakti'.
(*Bibhav* (ed. S. Sengupta), Vol. 6, No. 4 (July '83) 114–123).

'Samskriti, Apasamskriti'.
(*Patabhumi* (ed. P. Mitra), Puja Issue, 1983, 39–43).

'Busu: a Kyogen'.
(Theatre Centre) ed. S. Guha Thakurta, Puja No. Vol. 1. 74–78).

'Lokabiswas O Kusamskar'.
(*Mahanagar* ed. Samaresh Basu), Vol. 2, No. 11, 61–66).

'Aloke Ranjan Das Gupta'.
(Aajkal, Oct. 4, 1983).

'Purono Kolkatai Pheriowalar Dak'.
(*Jugantar*, Oct. 23, 1983).

'Bangla Byakrane Bachan O Nirdeshak'.
(*Chenamukh* (ed. S. Basu), Puja Number 1983, 61–69).

Dr. Pinakesh Sarkar :

'Pratimuhurter Dhan'.
(*Aajkal*: May, 8, 1983).

'Bangla Hasir Gan Prasange Kichu Katha'.
(*Baromas*, December 1982).

'Suddha Sima Theke Jatra'.
(*Aajkal*, December 6, 1983).

Sri Chittaranjan Ghosh :

'Habib Tanvir'.
(*Desh*, July 1983).

Comparative Literature

Sri Sudhindra Nath Datta :

'Nij Basubhume Parabasi'.
(*Baromas*, Autum Special 1982).

'Comparative Indian Literature'.
(*Jadavpur Journal of Comparative Literature*, 20–21, (1982-83).

Sri Subir Roy Choudhury :

'In search of a Parallel Sonny Sahib and Kim'.
(*Jadavpur Journal of Comparative Literature*, 20-21 (1982-83).

'Rabindrashatabarshe Marxbadi Bitarka'.
(*Aajkal*, Marx Sankhya (1983)

'Sadrishyer Sandhane: Manik Bandopadhyayer "Ke Banche, Ke Banchay" ebang Jagadish Gupter "Rati O Birati'.
(*Jalarka*, (1983).

Sri Swapan Majumder :

'Bidyayatanik Shakespeare'.
Jadavpur Journal of Comparative Literature, 20–21, (1982–83).

'Rabindranath O Adhunik Bharatiya Sahitya'.
(*Aajkal*, Kabipaksha Sankhya, 1983).

'Je Path Sakal Desh Paraye'.
(*Desh*, Sahitya Sankhya, 1983).

English

Prof. K. Dutta :

'John Leyeden (1775–1811), Local Poet, International Linguist'.
(*Jadavpur Journal of Comp. Litt.* 20–21 (1982–83).

'Review of Paul Alpers—The Singer of the Eclogues: A Study of the Virgilian Pastoral'.
(*Renaiassance Quarterly*, New York, 1983).

Prof. J. Chakraborty :

'Shakespeare Existentialist Hero'.
(*Essays and Studies*, Vol. 3).

Prof. D. Mukherjee :

'Joshep Corad: Under Eastern Eyes'.
(*Essays and Studies*, Vol. 3)

Prof. V. Chatterjee :

'The Eternal Feminine: A Reconstruction of Desdemona and Sakuntala'.
(*Essays and Studies*, Vol. 3).

Dr. D. C. Biswas :

'Shakespeare's Scepticism'.
(*Journal* of Deptt. of English, Cal. Univ. 1982).

'Coleridge as a Shakespeare's Critic'.
(*Essays and Studies*, Vol. 3).

Prof. J. Bagchi :

'Pater and Hopkins'.
(*Essays and Studies*, Vol. 3).

'Dikens and Pater'.
(*Visvakosha*).

Sm. Sati Chatterjee :

'T. S. Eliot: Journey of a Quester'.
(*Essays and Studies*, Vol. 3).

Dr. Sheila Lahiri Choudhury :

'D. H. Lawrence and the Prophet—Artist Tradition'.
(*Essays and Studies*, Vol. 3).

Dr. Malini Bhattacharyya :

'Utilitarianism and the Concept of Authorial Autonomy in 19th Century England'.
(*Economics and Political Weekly* 1982).

'Hazlitt as a Man of Letters'.
(*Essays and Studies*, Vol. 3).

'IPTA in Bengal'.
(*J. of Arts and Ideas*, 1983).

Sri M. R. Bhattacharyya :

'Developing a Science of Literature'.
(J. School of Language, J. N. University, 1982).

'Semiotics' (Bengali)
(*Ekshan*, 1983).

'Marquez and the Realism of Wonder' (Bengali).
(*Aparajito*, 1983).

'Ghatak and the Limits of Naturalism' (Bengali).
(*Patabhumi*, 1983).

Sri Arup Rudra :

'The Waste Land and The Ancient Mariner: Two faces of Agony'.
(*Essays and Studies*, Vol. 3).

'Translation of 'Jean Anouilh's play 'L' Alouette'.
(*Bohurupee*, Autumn, 1983).

Sm. Malabika Sarkar :

'Voyaging on strange seas of Thought:
Donne's Poetry and the New Astronomy'.
(*Essays and Studies*, Vol. 3).

Dr. Indrani Halder :

'American and Continental Impressionalism: A Study in Aesthetic Differences'.
(Indian J. American Studies).

'The Harlequin Figure in Modern Art and Literature'.
(*Essays and Studies*, Vol. 3).

Sm. Sajani Mukherjee :

'Telescoping Philanthrophy: Dickens and the Empire'.
(Review of political Economy, Economic and Political Weekly).

'Dickens: Charity and Reform'.
(*Essays and Studies*, Vol. 3).

History

Prof. Amitava Mukherjee :

'Swami Vivekananda and Social Regeneration in India'.
(J.U. Journal of History Vol. III, 1982).

Dr. Sukla Das :

'Indian Fabric Art: Baluchari'.
(J.U. J. History Vol. III, 1982).

'Indian awakening and Sri Ramakrishna Samvit'.
(J. Sarada Math, March, 1983).

Dr. S. K. Maity :

Published a Monograph—Cultural Heritage of Ancient India'.

'My pilgrimage to Ajanta'.
(J.U. J. History, Vol. III, 1982).

Prof. C. Palit :

Book published on "Agrarian Bengal, Calcutta, 1982".

'Relevance of Applied History: Peasants and Patriots'.
(State and Society, Vol. 3, No. 1, 1982).

'Aspects of Agrarian Relations in Bengal, 1750–1850'.
(J. Inst. of Bangladesh Studies, Vol. IV, Dec. 1982).

'Young Bengal—the Quest for an Identity'.
(Qr. Review of Historical Studies, Vol. XXII, No. iv, January–March 1983).

'Land Reform in West Bengal in Research on Bengal'.
(Proc. 1981, Bengal Studies Conf. U.S.A. May, 1982).

Prof. N. S. Bose :

Book on 'India in the Eighties'—Firma K–L–M, Calcutta.

Book on 'India and the United States: Reflections on Relationship'—Firma K–L–M, Calcutta.

Dr. P. K. Bhattacharyya :

'Mountstuart Elphinstone and the Southern Jagirdar Issue'. (J.U. J. His. Vol. III, 1982).

Dr. Amalendu De :

Book on "Islam in Modern India" Calcutta, Nov. 1982.

'Indigo Plantation: Its expansion in different areas of Bengal'. (J.U. J. His. Vol. III, 1982).

'A note on Environmental Movement'. (Proc. of Seminar in June 1982).

'Bharater Biplabi Andolane Rash Behari Basur Bhumika'. (*Aunsilan Barta*, Calcutta, Feb. 1983).

International Relations

Dr. J. Bandopadhyaya :

'Two Books on 'North over South' and 'Climate and World Order'.

Dr. (Miss) K. Bandopadhyaya :

Book on 'Burma and Indonesia: Comparative Political Economy and Foreign Policy'.

Dr. (Mrs.) M. Banerjee :

Book on 'The Nonaligned Movement'.

'Institutionalization of the Non-Aligned Movement'. (J. International Studies, 1982).

Dr. (Mrs.) D. Chatterjee :

Book on 'The Colour Volcano'.

Philosophy

The fourth volume of the *Jadavpur Studies in Philosophy* has been published with contributions from national and international scholars of repute.

Faculty papers have contributed papers in different Philosophical journals in India and abroad.

Sanskrit

Dr. S. Goswami :

Book on 'An Introduction to Sanskrit Phonetics'. —Sanskrit Book Depot.

Book of on 'An introduction to Advaitavadasammatam Vakyarthajnanam—Sanskrit Pustak Bhander.

'Samskrita O Rabindranath'. (*Gramer Dak*, 9th May, 1983).

'Influence of Vedanta in Every day Life (in Bengali). (*Udbodhan*, 1389 B.S.)

Dr. Manabendra Banerjee :

'Inscriptional Evidences of Gupta Art'. (J. Oriental Institute, Baroda, Vol. XXXII, March–June 1983, No. 3 and 4, 293–299).

PAPERS PRESENTED/LECTURES DELIVERED AT SEMINARS CONFERENCES ETC.

Architecture

Prof. T. K. Chattopadhyaya, attended the 7th INTA Conference at Barcelona, Spain, and contributed a paper entitled "Regenerating Towns with Historical Past: Studies on Gour and Murshidabad, West Bengal, India" in the Plenary session. As a Workshop leader be also conducted a Workshop Session on "Cities and Development".

Chemical Engineering

(*i*) Prof. R. N. Mukherjee went to West Germany in June 1982 for the ACHEMA Congress at Frankfurt and presented a paper.

(*ii*) Sri G. K. Biswas presented a paper at the International Conference of the Pacific Region Meeting of the Fine Particle Society, USA held at Honlulu, Hawaii in August 1983.

Civil Engineering

(*i*) Photo-Interpretation: A tool to study Urban Dynamics by B. N. Ghosh and R. K. Das Gupta—Seminar on Re-development of Old cities with particular reference to Calcutta—Institution of Engineers (India)—Bengal Centre.

(*ii*) Fundamental of Soil Mechanics by N. Som—IGS/ISTE Workshop on Pile Foundation, I.I.T. Bombay.

(*iii*) Frictional Resistance on Piles by N. Som—IGS/ISTE Workshop on Pile Foundation, I.I.T. Bombay.

(*iv*) Appraisal of ground water resources potential by India by R. K. Das Gupta—All India Seminar on Drilling and Drilling Equipment for ground water extraction, Calcutta.

(*v*) Soil Plant System for treatment of refused of Waste Water by S. Neogy—proceedings of Seminar on Appropriate Waste Management and low water technology for developing countries—Bogazice University, Istambul, 1982.

Electrical Engineering

(*i*) Development of a Micro-processor based E.C.G. signal processing method—Prof. J. K. Choudhury, Prof. S. N. Bhattacharyya, Sri A. Rakshit, Dr. A. Chattopadhyay—IX Congress of IMEKO, Berlin, May, 1982.

(*ii*) Damages to matter and economy caused by air-pollutants—

J. K. Choudhury and D. K. Bose—Proceedings of All-India Seminar on Air Pollution Control organised by M.P. Pollution Control Board, Bhopal.

(*iii*) Investigation on the Corona discharge caused by superimposed A.C. and D.C. Voltages on a Xerographic paper—Prof. P. K. Mukherjee, A. Ghosh and M. K. Mukherjee—presented in I.E.E., IAS Conference on Electrostatics—Sanfrancisco—October, 1982.

(*iv*) Energy Scenario—Paper presented at the Institution of Engineers (India)—Seminar on "S. S. Disturbance Recorders and Energy Management System" at Calcutta on 21st Feb. 1983.

Electronics and Tele-Communication Engineering

(*i*) "Disordered Zones around splicing regions and its relationship with the loss of optical fibre" presented at the International Seminar School of Optoelectronics, The Chinese University of Hong Kong, July 26, 1982—A. K. Das.

(*ii*) "Cost Analysis of Multiple—fibre and Multi-wavelength Optical Transmission System" presented at the International Summer School of Optoelectronics, The Chinese University of Hong Kong, July 26, 1982—A. K. Das.

(*iii*) "Some new results on disordered zones around splicing regions of optical fibre" presented at the Canadian Communication and Energy Conference, Montreal, October, 13, 1982—A. K. Das, A. Chakraborty and M. N. Roy.

(*iv*) "A simple method for minimum cost of fibre-link system" presented at the Canadian Communication and Energy Conference, Montreal, October 13, 1982—A. K. Das and S. Bhattacharyya.

(*v*) "A Cheaper Technology for thin film CU_2S—Cds Solar Cell" presented at the National Solar Energy Convention, Bangalore, 22–24, January, 1982—S. Deb and M. K. Mukherjee.

(*vi*) "The role of hydrogen glow discharge on the performance of CU_2S—Cds Solar Cell" presented at the National Solar Energy Convention, Delhi. 17–19 December 1982—S. Deb and M. K. Mukherjee.

(*vii*) "A simplified method of fabrication of front contact for a thin film CU_2S—Cds Solar Cell"—presented at National Solar Energy Convention, Vadadora, 16–17 December, 1983—S. Deb.

(*viii*) "On the estimation of Myocardial Infraction Size"—presented at the 1st International Symposia-cum-Workshop on Bio-Engineering, Jadavpur University, Calcutta, 29–31 December, 1983—A. N. Dey, Mrs. M. Mondal and A. K. Mondal.

(*ix*) "Micro-processor based data logging for bio-medical signals" —presented at the 2nd International Symposium on Instrumentation, Calcutta, 16–18 December, 1983—P. Ganguly, Mrs. M. Mondal and A. K. Mondal.

(*x*) "Modified algorithm for dead lock avoidance"—presented at the IEEE COMPCON FALL Conference, Washington, DC—September 1982—S. Ghosh and A. Datta.

(*xi*) "Modular implementation of large control structures"—presented at the IEEE COMPCON FALL Conference, Washington, DC, September 1982—S. Ghosh and A. Datta.

(*xii*) "On Prediction of Myocardial infraction"—presented at the Seminar on Bio-Medical Engineering organised by IEEE, Calcutta Section, June 1982—A. K. Mondal.

(*xiii*) "Implementation of Chest Pain Classifier on 8-bit Microprocessor"—presented at the Seminar on Bio-Medical Engineering organised by IEEE, Calcutta Section, June 1982—A. K. Mondal.

(*xiv*) "Implementation of Chest Pain Classifier using Microprocessor" —presented at the Symposium on Microprocessor based system, CEERI, Pilani, 5–6 May, 1983—Mrs. M. Mondal, Mrs. I. Roy and A. K. Mondal.

(*xv*) "Multichamber Model for CKMB release in Myocardian infraction"—presented at the 2nd International Symposium on Instrumentation, Calcutta, 16–18 December, 1983—Mrs. M. Mondal and A. K. Mondal.

(*xvi*) "Electric fields in a charged tuner layer on a Photoreceptor and X-Ray imaging" presented at the IEEE Conference on IAS, Mexico, October 1983—M. K. Mukherjee.

(*xvii*) "Circuit implementation of current conveyor and some applications"—presented at the 26th Midwest Symposium on Circuits and Systems, Mexico, August 1983—R. Nandi and P. B. Jana.

(*xviii*) "A Microprocessor based real time arrythmia monitoring system"—presented at the 2nd Symposium De Ingenieria Bio-Medica, Madrid, 5–7 October, 1983—M. Nasipuri, D. K. Basu, R. Datta Gupta and S. Seth.

(*xix*) "A new microprocessor based data reduction for monitoring communication and storage of ECG Signal"—presented at the 7th Symposium on Computer Applications in Medicine, Bultimone, 23–26 October, 1983—M. Nasipuri, D. K. Basu, R. Datta Gupta and S. Seth.

(*xx*) "Fault Location in Combitional Logic networks by Multistage binary free classifier"—presented at the IEEE International Conference on Circuits and Computers 1982—A. K. Nath and T. T. Lee.

(*xxi*) "Recursive generation of sampled waveforms using Microprocessor"—presented at the International Conference on Advances in Information Science and Technology, ISI, Calcutta 11–14, January, 1983—S. K. Ray and K. Dasgupta.

(*xxii*) "Some investigations on a strong EM wave in a Magnetized Plasma"—presented at the XVI International Conference on Phenomena in Ionised Gases, Dusseldorf, 29 August—2nd September, 1983—M. N. Roy, B. Chakraborty, M. Khan, and B. Bhattacharyya.

(*xxiii*) "Path loss measurements in tropical wet evergreen forest and determination of electrical constants of foliage"—presented at the IEEE Region 5 Conference, Colorado, 3–8, May, 1982—R. K. Tewari and M. N. Roy.

(*xxiv*) "High gain in forest medium: An empirical analysis"—presented at the IEEE International Symposium on Antennas and Propagation, Albuquerque 24–28 May, 1982—R. K. Tewari and M. N. Roy.

Mechanical Engineering

About 60 papers presented by the teachers of the department in different National and International Seminar Conferences.

Metallurgical Engineering

(*i*) Presented a Technical talk on "Phase Transformation in Magnetic Field" at the Annual Technical Meeting of the Magnetic Society of India held at Poona in September, 1982—A. K. Ghosh.

(*ii*) Presented a Technical paper on "Structural Damage in Low Stress Cycle Loading" at the Annual Technical Meeting of the Indian Institute of Metals held in Rourkela in November, 1982—A. K. Ghosh.

(*iii*) Presented an invited talk on "Magnetic Materials" at the Metallurgical Engineering Department of B.E. College, Sibpur, Howrah in March, 1983—A. K. Ghosh.

(*iv*) Presented a paper on "Recovery of Copper from Copper bearing materials by segregation roasting" in November 1982 and accepted for publication in Troma, I.I.M.—B. Chakraborty.

(*v*) Presented an invited talk on "Fundamentals of Metal Working" at the Metallurgical Engineering Deptt. B. E. College, Sibpur, Howrah in February 1983—B. Choudhury.

(*vi*) Delivered a lecture on "Vacuum Metallurgical Applications" in Workshop on Vacuum Technology organised by IVS on 9th February, 1983—P. K. Mitra.

(*vii*) Attended Short term Course on "Surface Phenomenon in Metallurgical Processes (17 May 1982 to 5 June 1982) under QIP organised by the Department of Metallurgical Engineering, I.I.T. Bombay—P. K. Mitra.

(*viii*) Attended 36th Annual Technical Meeting of I.I.M. held at Rourkela from 11–14 November, 1982 and presented the following papers—S. Mukherjee.

(*a*) Recovery of Copper from Copper bearing materials by Segregation Roasting.

(*b*) Segregation Roasting of Coper Converting Slag.

(*c*) Upgrading of Chromite for the production of high grade ferro-chrome.

(*ix*) Attended a Winter School at I.I.T., Kanpur in December, 1983 on "Rate Phenomena in Extractive Metallurgy" sponsored by ISTE. Also presented a paper on" Reducibility of Iron Oxide with methanol during the above Winter School—D. Ghosh.

(*x*) Participated in Summer School at I.I.T., Kharagpur on the topic "Design of Experiments and Experimental Data Processing, sponsored by ISTE—D. Ghosh.

Pharmacy

(*i*) Presented a paper on "Antifungal activity of cassia tora leaf extract and emodin isolated from C. Tora Leaf" at the 69th Session of Indian Science Congress in 1982—Dr. (Mrs.) M. Pal.

(*ii*) Presented a paper on "Metabolism of 1, 6, 8 trihydroxy-3-methyl anthraquinone isolated from cassia tora leaf in rats" in the 70th Session of Indian Science Congress in 1983—Dr. (Mrs.) M. Pal.

(*iii*) Attended the 33rd IPCA Congress at Jaipur and presented a research paper in 1981—S. K. Dutta.

(*iv*) Attended the VI and VII Bangladesh Science Congress held at Jaydebpur, Dhaka and delivered a popular talk on "Physico Chemical Aspects of Protein-Binding of Drugs" in February 1982—S. K. Dutta.

(*v*) Attended the 8th Bangladesh Science Congress held at Dhaka University in February, 1983 and presented a paper on the "Preparation and Evaluation of New Water Soluble Salt of Erythromycin—Erythromycine Nicotinate"—S. K. Dutta.

(*vi*) Attended the 35th IPCA Congress held at Hyderabad in December 1983 and presented a paper on "Physico-Chemical Aspects of Protein Binding of Drugs—Methyl Dopa and Guanethidine"—S. K. Dutta.

(*vii*) Attended and presented scientific paper in the clinical and research section of the "Asian Conference on Traditional Asian Medicines" held at Bombay from 6–9, March, 1983—A. Nandy.

(*viii*) Paper presented in Vth International IUPAC Symposium on Mycotoxin and Phycotoxin, Vienna, September 1982—Prof. (Mrs.) Malaya Gupta.

(*ix*) Paper presented in All-India Symposium on Mycotoxin, Bhagalpur University, February 1983—Prof. (Mrs.) Malaya Gupta.

(*x*) Attended International Seminar on Chemical Engineering Education Research and Training—Dr. T. K. Pal.

Production Engineering

(*i*) Dr. Bhattacharyya delivered a keynote address in the VSESCO CIRP International Seminar on Manufacturing System held at Singapore.

(*ii*) Dr. S. Deb presented a paper on "Robotics" in an all-India Seminar on "Productivity Maximisation in Industries" organised by the Institute of Engineers (India) in Calcutta in April 1983. He also presented a paper on Robotics in the Seminar on "Machine Tools" organised by the Indian Institute of Plant Engineers in October 1983.

(*iii*) Dr. S. K. Sorkhel presented a paper on "Electrochemical Machining" in the International Symposium on "Recent Aspect of Electro analytical chemistry and Electrochemical Technology held in December 1982 at Chandigarh. He also presented a paper on "Maintenance Management in an All-India Seminar organised by the Institute of Engineers (India) Calcutta in April, 1983.

Physics

(*i*) "Meterological Sky condition from infra-red radiation study" at the 2nd International Symposium on Instrumentation, I.I.S.T. (India) December 1983.

(*ii*) Altered Lipid composition and properties of utirie tumor and Cancer" at the International Conference on current trends in Cancer Research 1982.

(*iii*) "Elastic and rearrangement processes in poitron—hydrogen

Collisions" at the 4th National Workshop on Atomic and Molecular Physics, 1982.

(*iv*) "Electron Capture processes in proton-alkali atom collisions" at the 4th National Workshop of Atomic and Molicular Physics, 1982.

(*v*) "Atom energy levels: revisited" at the 4th National Workshop of Atomic and Molecular Physics, 1982.

(*vi*) "Formation of (ppt d)+ exotic molecular ion at the 4th National Workshop on Atomic and Molecular Physics 1982.

(*vii*) "Negative Ion formation in collision of electron with H_2 and isotopes" at the 4th National Workshop on Atomic and Molecular Physics, 1982.

(*viii*) "Probable contribution to cosmic rays by Jupiter" at the International Conference of Cosmic Rays, 1983.

(*ix*) "The charge of Jouian decametric radio emission during an apparition at the National Space Science Symposium, Poona, 1983.

Philosophy

(*i*) Prof. D. P. Chattopadhya delivered Premnath Memorial Lectures on "Remarks on Two Approaches to History of Science: Sartre's Historism and Levi—Strauss's Structuralism" at Punjab University, Chandigarh on 9–10 March 1983.

He attended and delivered the key note address "Philosophy in Asia and the Pacific Region: Retrospect and Prospect" at the USESCO sponsored Seminar on Philosophy in Asia and the Pacific Region held at Bangkok on 21–25 March, 1983. He also acted as a Resource Person.

He attended a Seminar at Oxford on 2–3 May, 1983 and presented a paper on "Governance Disobedience and Legitimacy: Some reglected Aspects of the Developing Indian Scene.

(*ii*) Prof. P. K. Sen contributed a paper in Seminar organised by the United Nations Universities in collaboration with the Free University of Berlin on "World Views and World Crises Religion and Philosophy on the Transformation of World held in Berlin.

Comparative Literature

(*i*) Dr. Naresh Guha contributed a paper on "The Baskon Brahmins" at the Dhvanyaloke Seminar at Mysore on the American Transcendentalists, 1982.

He also delivered the plenary lecture at the first National Convention of the Indian National Comparative Literature Association at Jadavpur University, in January 1983.

(*ii*) Dr. Amiya Deb contributed a paper on "The Renaissance in Indian Literature" in the All-India Symposium at Kerala Sahitya Akademi in December 1982.

He presented a paper on "Comparative Western Literature" at the first National Convention of the Indian National Comparative Literature Association at Jadavpur University, January, 1983.

He delivered lectures on "Some Generalizations about post-1945 British and American Fiction" at the UGC Seminar at Berhampur University, February, 1983.

(*iii*) Dr. (Mrs.) Nabaneeta Deb Sen delivered 3 lectures as "Tagore Memorial Lecture" at Mysore University in 1982.

(*iv*) Sri Manabendra Bandopadhyaya gave talks on "Third World Literature" at M.S. University, Baroda, Gujrat Sahitya Sabha, Bombay and Gujrat Sahitya Parishad, Ahmedabad.

(*v*) Sri Swapan Majumder contributed a paper on "Comparative Indian Literature: A Pageant of Problems" at the first National Convention of Indian National Comparative Literature Association at Jadavpur University, January, 1983.

He also contributed a paper on "Book-Reviewing: Recent Tendencies in Bengal" at Sahitya Akademi, Calcutta in 1982.

History

(*i*) Prof. C. Palit presented a paper on "Female Workers in Eastern Coalfields, 1890–1930" at the Annual Conference of the Institute of Historical Studies, November, 1982.

He also gave a talk on "Share Cropping in Bengal, 1885–1978" at Patna University, June 1982.

He gave talk on "Commercial Politics in Bengal, 1937–1947 on the occasion of Sarat Bose Anniversary Seminar at the Netaji Research Bureau, Calcutta, September 1982.

(*ii*) Dr. Pranjal Kr. Bhattacharyya, participated in a Seminar on "Modern Indian History: Non-Dimensions in Methodology" organised by the Indian Council of Historical Research held at the Utkal University, Bhubaneswar, February 1983.

(*iii*) Dr. Nemai Sadhan Bose was invited as key-speaker to the Seminar on the Indian Freedom Movement at Bhubaneswar sponsored jointly by Utkal University and Indian Council of Historical Research.

He also gave "Malatimala—Bankbehari Lecture" organised by the Ramakrishna Mission Institute of Culture, Calcutta.

He gave "Anil Roy Memorial Lecture" being organised by the Memorial Committee and the Annual Lecture organised by the Calcutta Historical Society.

(*iv*) Dr. Amalendu De delivered the inaugural address at the opening ceremony of the Society for Islamic Studies at the Bhasa Parishad, Calcutta, August 1982.

He gave a talk on "Condition of Chinese Women from ancient times to the year 1949" at a discussion meeting organised by the Women in Calcutta, August 1982.

He gave a talk over the All India Radio, Calcutta on "History in Indian Literature" September 1982.

He delivered a talk on "Muslim Politics in Bengal" at the Netaji Bhawan, Calcutta, September 1982.

He was invited to deliver a talk on "Women's Liberation Movement: International Background" at a discussion meeting organised by Women in Calcutta, September 1982.

He was invited to deliver a talk on "To-day's Crisis and Relevance of Jay Prakash Narayan's Thought" at Gandhi Memorial Hall, Calcutta, October 1982.

He also delivered "Rash Behari Memorial Lecture" at the Mahajati Sadan, Calcutta, February 1983.

(*v*) Dr. Bela Lahiri read a paper on "Observations on the Coins of the Mitra Rulars of Mathura" at the 70th Annual Conference of the Numismatic Society of India, held at Ujjain, November, 1982.

She read a paper on "Numismatography of Tribal Coins" held at Ujjain, 1982. She also read a paper on "Sassanian Influence on the Coinage of India" in the seminar held at Calcutta in January, 1983.

Bengali

(*i*) Dr. Sunil Kumar Chatterjee attended a seminar on Bengali Novel at Rabindra Bharati University and presented a paper on Bibhuti Bhusan.

(*ii*) Dr. Madan Mohan Goswami also attended the Seminar at Rabindra Bharati University.

(*iii*) Dr. Pabitra Sarkar presented papers in (1) a Seminar on Book Review organised by Sahitya Akademi (2) a Seminar on

Teaching Bengali, organised by the Eastern School of Regional Language, Bhubaneswar and Department of Comparative Philosophy and Linguistics, University of Calcutta (3) Seminar-cum-Workshop on Mathematical Linguistics, Mathematical Language and their Interaction with Mathematical Teaching.

(*iv*) Sri Sankha Ghosh was invited by the Govt. of Madhya Pradesh at Bhopal to supervise some Hindi Translations of his poems at a Workshop on Translation.

(*v*) Sri Chittaranjan Ghosh attended two seminars at (1) Rabindra Bharati University (2) University of Calcutta and presented papers in both the seminars.

(*vi*) Dr. Satyabrati Giri attended a seminar at Rabindra Bharati University.

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English

(*i*) Prof. Kitty Dutta delivered lectures (1) at the M.S. University of Baroda on the occassion of the ter-centenary of Sir Thomas Brown's death, in February 1982 (2) at the University of Hyderabad on the "High Church Movement and English Literature" in January 1983 and presented a paper at the Jadavpur Seminar on the Romantic Tradition on "Romanticism, Religion and the Self" in April, 1983.

(*ii*) Prof. Jagannath Chakraborty delivered a series of lectures in 1983 at Calcutta University on "Tagore's Gitanjali in the light of Existentialism" being the Sudhir Kumar Das Gupta Endowment Lectures of the University.

(*iii*) Prof. D. Mukherjee was invited by the Department of English Sambalpur University to read a paper on "Satire as Poetry".

He also delivered lectures on Drama at the Summer School for teachers of English under the QIP Programme organised by the I.I.T., Kharagpur in June 1983.

(*iv*) Prof. V. Chatterjee read a paper on "Shakespeare's Tragic Heroines" in January 1983 at the all-India Seminar on Shakespeare at the University of Mysore.

He gave a lecture on "Shakespeare, Tagore and the Art of Living" at the Rabindra Bharati Society, Calcutta.

He presented a paper on "Shelly's *Adonais*: Romantic Transmutation of the Elegiac Tradition" at the Jadavpur Seminar on the Romantic Tradition.

He addressed the Convocation of the Institute of English, Calcutta in May, 1983.

(*v*) Prof. D. C. Biswas presented a paper on "Shakespeare's Courtiers" at the Jadavpur Seminar on the Romantic Tradition.

(*vi*) Prof. Jasodhara Bagchi presented a paper on "The Image of Women in the New Indian Cinema" at a National Seminar on "Women and Development" held at Warangal (Kakatiya University) in August 1982.

She read a paper (in Bengali) on "Women and the Problems of Adult Education" at a Seminar entitled "Education without Walls" at the Annual General Meeting of JUTA in 1983.

She also read a paper on "Literary History and the problem of Modernity in Nineteenth-Century Bengal" at a Seminar organised by the Maison—de—l'Inde, Paris.

(*vii*) Sm. Sati Chatterjee presented a paper on "Art and Inspiration : a Continuing Debate" at the Jadavpur Seminar of the Romantic Tradition.

As a Visiting Lecturer at Sambalpur University she gave a series of lectures on English Literature. She also spent three weeks at the American Studies Research Centre at Hyderabad on Middle Grant award in Nov.–December, 1983.

(*viii*) Dr. Sheila Lahiri Chowdhury presented a paper on "D. H. Lawrence and the Prophet—Artist Tradition" at a Seminar on Lawrence.

She also presented a paper on "Anti-Industrial and Anti-Mechanical Trends in Nineteenth Century Fiction" at a Seminar in Lady Brabourne College.

(*ix*) Dr. Malini Bhattacharyya presented papers on "Marxism and Realism in Cultural Movements" at the Jadavpur University Seminar on Marx in 1983.

She also contributed paper on "Marxism and Realism: a Theoretical Survey" at the Janwadi Lekhak Manch in Delhi, 1983 and "Colonialism and the Bengali Baboo in Tagore" at a conference on the colonial theme in Common-Wealth Short Stories at the University of Mysore.

(*x*) Sri Mihir R. Bhattacharyya presented conference paper on "Lenin School of Social Sciences at Kasouli, 1982, "Marxism and the Production of Literature" at the all-India Conference on Marx, North Bengal University, 1983.

(*xi*) Arup Rudra presented conference papers on "A Vision: Between Romantic and Modern" at the Jadavpur Seminar on Romantic Tradition, "Concept and Anti-Tragedy" at the Seminar on Tragedy at Rabindra Bharati University, "Ode to Nightingale" and "Sailing to Byzantium: Bird, Romantic

and Modern" at the All India English Teachers' Conference, 1983.

(*xii*) Sm. Malabika Sarkar presented a paper on "The Quest for Paradise: Milton and the Romantics" at the Jadavpur Seminar on the Romantic Tradition.

(*xiii*) Dr. Indrani Halder participated in a seminar on "American literature" at the American Studies Research Centre, Hyderabad, 1982, in a seminar on "Post—1945 British and American Fiction" at Berhampur University, Orissa, 1983, in the All-India English Teachers' Conference (New Delhi), 1982 where she presented a paper on "Impressionism and Modern Fiction —Writing". She gave a radio-talk on "Twentieth-Century" in 1982 and on "Modern Short Story" in 1983.

(*xiv*) Sm. Sajani Mukherjee presented a paper on "Telescoping Philanthrophy: Dickens and the Empire" at the Centre for Social Science, on "Women Novelists and Industrial Revolution" at a seminar in Lady Brabourne College.

(*xv*) Dr. Shirshendu Chakraborty gave seminar lectures on "Swift's Satire and Political Vocabulary" at the Jadavpur University, "Swift's view of Sciences" at the British Council, English Study Centre, "Swift and Montaigne: Influences and Affinities" at the Jadavpur University.

(*xvi*) Sri Ashoke Ghosh presented a paper on "The *Georgics* and Thomson's *Seasons* at the Jadavpur Seminar on the Romantic Tradition.

International Relations

(*i*) Dr. Baladas Ghoshal attended in November, 1983 the all-India Seminar on "Southeast Asia and its importance for India" organised by the India International Centre (New Delhi) and submitted a paper on "Indonesia in the Eighties".

(*ii*) Prof. J. Bandopadhyaya and Dr. Jyotirmoy Banerjee participated in the seminar organised by the Jadavpur University. Dr. Banerjee also took part in the seminar on Marx organised by the Max Muller Bhawan, Calcutta.

(*iii*) Miss Basanti Mitra presented a paper on "Legal aspects of Political Offence in a Changing World" in a seminar held in Calcutta in December 1983 on the occasion of the 44th birth-day anniversary of Hugo Grotius organised by the West Bengal Local Chapter of World Constitution and Parliament Association.

Sanskrit

(*i*) Dr. Bhabani Prasad Bhattacharyya participated in the All-

India Oriental Conference held in October 1982 at the University of Rajasthan, Jaipur. He presented a paper in the Vedic Section of the conference.

He attended the UGC Seminar on "Retrospect and Prospect of Vedic Studies" held under the auspices of Rabindra Bharati University in Feb. 1983. He also attended the International Conference in Philosophy organised by the Department of Philosophy, Jadavpur University in January 1983.

(*ii*) Dr. Sukumari Bhattacharyya attended the UGC Seminar organised by the Rabindra Bharati University in February 1983 and another UGC Seminar organised by the Visva Bharati University in Nov. 1983 and delivered lectures.

(*iii*) Sri Nirmal Kanti Basu delivered a lecture in Sanskrit on the occasion of the 105th birth anniversary of Hari Nath De organised by Harinath De Centenary Celebration Committee in August 1982 at the Bose Institute, Calcutta. He attended in January 1983 the 1st National Convention of Indian National Comparative Literature Association and the International Conference in Philosophy in January 1983. He also attended the All-India Seminar on "Retrospect and Prospect of vedic studies" held under the auspices of the Rabindra Bharati University in Feb. 1983 and the Conference of the Sanskrita Sanskriti Sangram Samiti held at Bahrampur in April 1983.

(*iv*) Dr. Sitanath Goswami presented a paper on "Wide Spread influence of Vedanta" in a Seminar held in S. C. S. College, Puri, Orissa.

He also delivered Endowment Lecture Series in R. K. Mission Institute of Culture on "India's Spiritual Tradition: Yoga".

JADAVPUR UNIVERSITY

Statement of Awards of Doctorate Degrees (1982-83)

1st April, 1982 to 31st March, 1983

Sl. No.	Date of Admission to the Degree	Name of the candidate	Degree	Subject	Title of the thesis
ENGINEERING					
1.	17. 4. 82	Sri Amit Kumar Mukhopadhyay	Ph.D. (Engg.)	od Technology	Studies on the microbial production of valine.
2.	3. 7. 82	Sri Amarnath Paul	Ph.D. (Engg)	ectronics and le-Comm. Engg.	"On the studies of active RC network functions for non autonomous and autonomous systems".
3.	21. 8. 82	Sri Rabindranath Bhattacharyya	Ph.D. (Engg)	vil	"Development of Design methodology for economic waters distribution system".
4.	21. 8. 82	Sri Saroj Kumar Mukhopadhyay	Ph.D. (Engg)	echanical	"Some aspects on special welding process".
5.	8. 10. 82	Sri Bholanath Mukhopadhyay	Ph.D. (Engg)	emical	"Diluents on the combustion characteristic of pure and multi-component gas mixtures in air/oxygen".
6.	4. 12. 82	Sri Pradipta Kumar Bose	Ph.D. (Engg)	emical	"Study of tonnage air seperation plant for process applications with particular reference to the design of air purification systems".
7.	4. 12. 82	Sri Tapas Kumar Datta	Ph.D. (Engg)	emical	"Studies on plate type heat exchangers and the effect of surface designs of plates on heat transfer rates".
8.	4. 12. 82	Sri Niranjan Das	Ph.D. (Engg)	T.C.E.	"Some studies on microstrip antennae on ferrimagnetic and dielectric substrates".
9.	14. 12. 82	Sri Samir Kumar Saha	Ph.D. (Engg)	echanical	"A Regional approach of power planning strategies".
10.	3. 7. 82	Sri Mridul Kanti Ghosh	Ph.D. (Pharm)	armacy	"Homogeneous enzyme Immunoassay".
11.	11. 8. 82	Sri Debashish Banerjee	Ph.D. (Pharm)	armacy	"A study on the physico chemical para meters govening uptake of drugs in biosystems".
SCIENCE (CHEMISTRY)					
1.	17. 4. 82	Sri Gopal Chandra Bandyopadhyay	Ph.D. (Science)	ganic Chemistry	"Search for new reagents and synthesis of organic compounds".
2.	17. 4. 82	Sri Pijush Kanti Chakraborty	Ph.D. (Science)	organic Chemistry	"A tridentate triazene, n–oxide as mixed ligand complex former".
3.	17. 4. 82	Sri Tapas Kumar Das	Ph.D. (Science)	ganic Chemistry	"Studies on Diazoketo compounds".
4.	3. 7. 82	Sri Partha Chattopadhyay	Ph.D. (Science)	emistry	"Syntheses of carbocyclic systems related to natural products".
5.	3. 7. 82	Sri Somsubhra Sen Sarma	Ph.D. (Science)	emistry	"Development of a process for the production of copper ruby crystal glass ware and study of chemical principles involved therein".
6.	11. 8. 82	Sri Debasis Bagchi	Ph.D. (Science)	emistry	"Chemical investigation of anaphalis araneosa DC".
7.	11. 8. 82	Sri Bimal Kumar Sadhukhan	Ph.D. (Science)	emistry	"Thermodynamics of hydration and binding interactions of proteins and collodial aggregates in the presence and absence of fat, electrolytes and detergents".
8.	21. 8. 82	Sri Motilal Nath	Ph.D. (Science)	hemistry	"Studies on the reactions of some organotim halides with N-substituted hydroxy lawines".
9.	21. 8. 82	Sri Brindaban Chandra Ranu	Ph.D. (Science)	hemistry	"Synthesis of bridged ring compounds".
10.	21. 8. 82	Sri Gourhari Mondal	Ph.D. (Science)	hemistry	"Investigation on polysaccharides".
11.	25. 9. 82	Sri Hemanta Kumar Pal	Ph.D. (Science)	hemistry	"Substituted thin carbamide hydrazins as analytical reagent".
12.	25. 9. 82	Sri Ujjal Kumar Bandopadhyay	Ph.D. (Science)	hemistry	"Synthesis of Alicyclic compound related to natural products".

Sl. No.	Date of Admission to the Degree	Name of the candidate	Degree	Subject	Title of the thesis
13.	4. 12. 82	Sri Susil Kumar Bandyopadhyay	Ph.D. (Science)	Chemistry	"Reactions of N-arylbenzohydroxemic acid chelates with protic substances".
14.	14. 12. 82	Smt. Banasri Hazra (nee Mondal)	Ph.D. (Science)	Chemistry	"Studies on antitumour principles derived from indigenous medicinal plant".
15.	12. 3. 83	Sri Radhaballav Debnath	Ph.D. (Science)	Chemistry	"Spectroscopic studies on some aromatic alpha dicarbonyls".
16.	7. 2. 83	Smt. Kakoli Ghosh	D.Sc.	Chemistry	"Structural and function of transfer ribonucleic acid".
SCIENCE (PHYSICS)					
1.	17. 4. 82	Sri Dilip Kumar Datta	Ph.D. (Science)	Physics	"Quantum mechanical studies of the spectroscopic properties of atoms and molecules".
2.	17. 4. 82	Sri Subal Chandra Saha	Ph.D. (Science)	Physics	"Hartree fock tjepru add nuclear effects on atomic spectra".
3.	12. 6. 82	Sri Amal Som	Ph.D. (Science)	Physics	"On some non-parametric methods in pattern recognition".
4.	11. 8. 82	Sri Swadesh Kumar Ghosal	Ph.D. (Science)	Physics	"Quantum mechanical studies of atoms and molecules with reference to spectroscopy".
5.	4. 12. 82	Sri Debabrata Bhattacharyya	Ph.D. (Science)	Physics	"Some problems on Einestine Maxwell scalar fields".
6.	4. 12. 82	Sri Promothesh Banerjee	Ph.D. (Science)	Physics	"Some application of the phase-amplitude method".
7.	14. 12. 82	Sri Swapan Kumar Das	Ph.D. (Science)	Physics	"Development of some cryogenic thermal insulators".
8.	14. 12. 82	Smt. Madhumita Basu	Ph.D. (Science)	Physics	"Inelastic hadron nucleus and neucleus-nucleus interaction at machine energies".
9.	14. 12. 82	Sri Kaushik Sengupta	Ph.D. (Science)	Physics	"Studies on high energy interaction of hadron and heavy ion with emulsion nuclei".
10.	12. 2. 83	Smt. Keya Chowdhury	Ph.D. (Science)	Physics	"Biophysical studies of the Cholers phase 2".
11.	12. 2. 83	Smt. Sujata Majumdar	Ph.D. (Science)	Physics	"Structure determination and molecular conformation through potential of crystalline solids".
SCIENCE (MATHEMATICS)					
1.	17. 4. 82	Sri Bijan Kumar Datta	Ph.D. (Science)	Mathematics	"Some mathematical models of cellular control processes and their qualitative and quantitative studies".
2.	3. 7. 82	Sri Subhash Chandra Dandapath	Ph.D. (Science)	Mathematics	"Some aspects of studies on numerical methods in electro mechanical problems".
3.	21. 8. 82	Sri Dipak Kumar Datta	Ph.D. (Science)	Mathematics	"Some problems on non-newtonian fluids".
4.	4. 9. 82	Smt. Susama Saha	Ph.D. (Science)	Mathematics	"Some problems on water waves".
5.	4. 9. 82	Sri Kartick Kumar Kundu	Ph.D. (Science)	Mathematics	"Some investigations on disturbances produced in piezoelectric solids".
6.	25. 9. 82	Late Smt. Mina Majumdar	Ph.D. (Science)	Mathematics	"Some two dimensional problems of mathematical theory of elasticity".
7.	25. 9. 82	Smt. Mira Sarkar (nee Banerjee)	Ph.D. (Science)	Mathematics	"Studies in some problems of set topology and fuzzy topology".
8.	12. 2. 83	Smt. Rina Thakur (nee Ghosh)	Ph.D. (Science)	Mathematics	"Studies in problems of mathematical neurobiology and cybernetics".

Sl. No.	Date of Admission to the Degree	Name of the candidate	Degree	Subject	Title of the thesis
9.	12. 3. 83	Sri Proloy Purkeyestha	Ph.D. (Science)	Mathematics	"Operational analysis studies on multi product system".
10.	12. 3. 83	Sri Amal Kumar Das	Ph.D. (Science)	Mathematics	"Some aspects of analytical studies on interaction between mathematical linguistics and mathematics".
11.	26. 3. 83	Sri Surendra Narayan Panday	Ph.D. (Science)	Mathematics	"Some boundary problems of two dimensional elasticity by complex variables method".
12.	26. 3. 83	Sri Amiyadeb Mukhopadhyay	Ph.D. (Science)	Mathematics	"Studies in relativities approaches to some problems of deformable media".
13.	26. 3. 83	Sri Baidyanath Chatterjee	Ph.D. (Science)	Mathematics	"Propagation of disturbances in certain types of anistropic elastic media".
SCIENCE (GEOLOGY)					
1.	17. 4. 82	Sri Adhir Kumar Basu	Ph.D. (Science)	Geology	"A study on the petrology and evolution of the Bundelkhund granities complexes".
2.	14. 12. 82	Sri Apurba Kumar Basu	Ph.D. (Science)	Geology	"Geological, geochemical and hydrogeochemical investigation on Darjeeling and Sikkim Himalaya".
ARTS (ENGLISH)					
1.	25. 9. 82	Smt. Sunanda Mukherjee	Ph.D. (Arts)	English	"The Myth of Diana in Elizabethean poetry and Drama".
ARTS (BENGALI)					
1.	21. 8. 82	Sri Tarun Chakraborty	Ph.D. (Arts)	Bengali	"Adhunik Bangla Kavitar Andolaneya Kavita Patrikar Bhumika".
ARTS (HISTORY)					
1.	3. 7. 82	Smt. Shyamali Sur	Ph.D. (Arts)	History	"Development of Bengali Historigraphy from 1870–1912".
2.	14. 12. 82	Smt. Sultan Jahan Ahmed	Ph.D. (Arts)	History	"Muslim society of Midnapore: A social study of a Bengal District (1800 AD to 1919 AD)".
ARTS (PHILOSOPHY)					
1.	4. 12. 82	Sri Chandidas Bhattacharyya	Ph.D. (Arts)	Philosophy	"Meaning and bearers of meaning".
2.	4. 12. 82	Sri Amal Kumar Mukhopadhyay	Ph.D. (Arts)	Philosophy	"The nature of explanation in the physical sciences".
ARTS (SANSKRIT)					
1.	11. 8. 82	Sri Tapodhir Bhattacharyya	Ph.D. (Arts)	Sanskrit	"Influence of Sanskrit epic on 19th Century Bengali epic poetry".
2.	21. 8. 82	Smt. Bijoya Acharyya	Ph.D. (Arts)	Sanskrit	"A critique of Alamkaras in Rasagangadhara".
3.	4. 12. 82	Sri Pramodranjan Roy	Ph.D. (Arts)	Sanskrit	"An otymological study of the poetic vocables in the family mandalas of the RV (II–VII)".
4.	4. 12. 82	Smt. Arati Banerjee	Ph.D. (Arts)	Sanskrit	"Advaitavedanta Pramanya Vichara".
5.	14. 12. 82	Sri Bisweswar Kundu	Ph.D. (Arts)	Sanskrit	"Rupe Goswamir Natya Trayeer Samiksha".

DISTINCTION/FELLOWSHIP/ MEMBERSHIP EARNED BY FACULTY MEMBERS

Chemical Engineering

(*i*) Prof. R. N. Mukherjee was elected Chairman of the West Bengal State Centre of the Institution of Engineers (India).

(*ii*) Prof. R. N. Mukherjee has been nominated as a Member of the Engineering and Technology Panel of the University Grants Commission, New Delhi.

Civil Engineering

(*i*) Prof. P. Som has been nominated as a Member of the Research Advisory Council, Structural Engineering Research Centre, Roorkee, U.P.

(*ii*) Dr. N. Som has been nominated as a Member of Soil Engineering and Rock Mechanics Sectional Committee: BDC 23 of Indian Standard Institution, New Delhi.

(*iii*) Dr. N. Som has been nominated as a Member of Foundation Instrumentation Sub-Committee of the Indian Standard Institution, New Delhi.

(*iv*) Prof. J. Sarkar has been nominated as a Member of the Civil, Structural and Environmental Research Advisory Committee, C.S.I.R., New Delhi.

(*v*) Sri S. Neogy has been nominated as a Member of the Environmental Studies Advisory Committee, Department of Environment, Govt. of West Bengal.

(*vi*) Sri S. Neogy has been nominated as a Member of the Expert Committee on Air Pollution Control, West Bengal Pollution Control Board, Department of Environment, Govt. of West Bengal.

Electronics and Tele-Communication Engineering

Sri S. K. Roy and Sri A. K. Mondal have been awarded the Senior Membership of the Institute of Electrical and Electronics Engineering Inc. (U.S.A.)

Mechanical Engineering

(*i*) Dr. S. Pal has been nominated as a Member of the Bio-Medical Engineering Society.

(*ii*) Dr. B. Bose has been nominated as an Advisor in the Advisory Council of the Institute of Ecological Exploration, Calcutta.

Metallurgical Engineering

(*i*) Sri S. Mukherjee has been enroled asa member of the Indian Society for Technical Education, 1983.

(*ii*) Sri D. Ghosh earned the membership of the Indian Society for Technical Education.

Production Engineering

(*i*) Dr. A. Bhattacharyya has been nominated by the Director General, Council of Scientific and Industrial Research, as a Member of the Executive Committee of the CMERI, Durgapur.

(*ii*) Dr. A. Bhattacharyya has been appointed Convenor of the Working Group by the North Eastern Council for establishment of North Eastern Regional Institute of Science and Technology.

(*iii*) Dr. A. Bhattacharyya has been nominated by the Govt. of West Bengal as a Member of the Expert Committee for establishment of an Engineering College at Salt Lake.

(*iv*) Dr. A. Bhattacharyya has been appointed as Visiting Consulting Advisor (Tech. Education) for North Eastern Council, Govt. of India.

(*v*) Dr. A. Bhattacharyya has been nominated to Chair a Session in the International Seminar in Connection with the Diamond Jubilee Celebration of Chemical Engineering Education in India.

(*vi*) Dr. A. Bhattacharyya has also been nominated as Member of the All India Council for Technical Education.

(*vii*) Dr. S. K. Sarkhel has been nominated by Institution of Engineers (India) as a Member of the Governing Body of Birla Institute of Technology, Calcutta.

Sanskrit

(*i*) Dr. Nirmal Kumar Basu has been elected Vice-President of Sanskrita Sanskriti Samgram Samiti, Calcutta.

He has also been elected Member of the Executive Committee of Sanskrit Sahitya Parishad.

(*ii*) Dr. Sitanath Goswami has been appointed UGC Visiting Fellow in Nagpur University in February 1983.

He has also been appointed external Member of the Board of Studies of the Gorakhpur University, Burdwan University,

Vikram University and Sampurnanand Sanskrit Vishwavidyalaya.

(*iii*) Dr. Manabendu Banerjee has been elected as Council Member and Philological Secretary of the Asiatic Society, Calcutta.

Philosophy

(*i*) Prof. D. P. Chattopadhya was awarded a Senior Full Bright Research Fellowship in the U.S.A. for research in the fields of Anthropology and History of Sciences at the University of Harvard and Columbia.

(*ii*) Prof. P. K. Sen had the distinction of being a National Lecturer in Philosophy.

Comparative Literature

(*i*) Dr. Naresh Guha was elected as a Bureau Member of the International Comparative Literature Association.

He was also elected President of the Indian National Comparative Literature Association.

(*ii*) Dr. Amiya Kr. Deb was elected Vice-President of the Indian National Comparative Literature Association.

(*iii*) Dr. Pranabendu Dasgupta was elected Vice-President of the Indian National Comparative Literature Association.

(*iv*) Dr. (Mrs.) Nabaneeta Deb Sen was elected Secretary of the Indian National Comparative Literature Association and also nominated a Member of the Centre for Women's Studies from the eastern region.

(*v*) Sri Subir Roy Choudhury was elected Treasurer of the Indian National Comparative Literature Association.

History

(*i*) Prof. N. S. Bose was nominated a Member of the History Panel by the University Grants Commission.

(*ii*) Dr. Amalendu De was nominated a Member of the Advisory Committee, West Bengal State Academy of Dance, Drama, Music and Fine Arts.

He was a Member of the Governing Body, Govt. College of Arts and Craft, Calcutta.

He was a Member of West Bengal Regional Records Survey Committee, Govt. of West Bengal.

He was a Member of the Statute Framing Committee, University of Kalyani.

He was a Member of Road Renaming Advisory Committee Corporation of Calcutta.

He was a Member of the Regional Committee to organise First Regional Conference of Literature, Biographical and Memorial Museum in Calcutta (1982).

English

Prof. Jagannath Chakraborty has been elected President of the Forum Indian Literature, an all-India organisation of creative writers belonging to the different languages in India.

Bengali

(*i*) Dr. Pabitra Sarkar was elected a Member of the General Council, Sahitya Academy. He was also selected in the final panel of judges to award the Bankim Prize of the Govt. of West Bengal.

(*ii*) Dr. Satyabati Giri received the degree of Ph.D. from the University of Calcutta.

Library and Information Science

(*i*) Sri P. B. Roy was the President of Bengal Library Association and Member of State Library Council.

(*ii*) Sri P. Roy Choudhury was Vice-President of Bengal Library Association, Member of State Library Council and Training Course of Bengal Library Association.

(*iii*) Sri M. P. Sinha was the Secretary, Training Course of Bengal Library Association.

(*iv*) Sri B. P. Mookerjee was the Vice-President of Bengal Library Association.

Chemistry

Prof. Dr. (Mrs.) K. K. Rohatgi Mukherjee, former Head of the Deptt. of Chemistry has been elected Fellow of the National Academy of Science (FNA).

Geological Sciences

(*i*) Dr. (Miss) Sudipta Sen Gupta, a teacher and ex-student of the department has been chosen as one of the two Women-Scientists in the Third Indian Antartics Expedition, 1983.

(*ii*) Prof. Dr. Supriya Roy, was appointed a National Fellow of U.G.C. and also won Narayanswami Award of Geological Society of India.

(*iii*) Prof. Kanailal Chakraborty was appointed a member of U.G.C. Earth Science Panel.

LECTURES DELIVERED BY VISITING EXPERTS

Architecture

(*i*) Lecture session conducted by Prof. Anupam Banerjee, Professor of the University of Waterloo, Faculty of Environmental Studies, School of Architecture, Canada. Prof. Banerjee reviewed the development of modern architecture in India as well of the West.

(*ii*) Prof. Dr. Merianov and Prof. Jorge Anzovena, both of the department of Architecture, University of Sophia, Bulgaria, visited the department. In their lectures Dr. Merianov and Prof. Anzovena informed the students different development activities those were being taken place in Eastern European Countries with particular emphasis on residential development.

(*iii*) Prof. Dr. Christan Furedy of York University, Canada, conducted a lecture session. Prof. Furedy undertook indepth study of different reforms which did take place in the building and planning by-laws of the Corporation of Calcutta.

(*iv*) Prof. Santosh Ghosh, University of Jordon, who is at present teaching in the University, spoke on architectural education in his University and attempted to bring out the saleant features of both the educational approach of the country as well as the of the University of Jordon.

(*v*) Prof. Ashesh Moitra from S.P.A., Delhi, spoke to the P. G. Students and conducted survey on Human Settlement along with the students of Delhi School and Architecture Department, Jadavpur University.

Chemical Engineering

(*i*) Dr. P. Purakayastha, R. and D. Manager, Tribeni Tissues Ltd. delivered a series of 10 lectures on 'Thermoplastic Extrusion, Extruder and Die Design' to the students of Polymer Engineering.

(*ii*) Sri K. Saha, Manager, P.M.F. Unit, Philips India Ltd. delivered a series of 10 lectures on 'Injection Moulding, Die and Product Design to the students of Polymer Engineering.

(*iii*) Dr. P. K. Mukhopadhyaya, Managing Director, Poly Products India Ltd. delivered 10 lectures on 'Rubber Processing' to the students of Polymer Engineering.

Civil Engineering

Dr. Jindrich Melcher, Technical University, Brno, Czechoslovakia,

delivered a talk on the technical education in Czechoslovakia. He also discussed about tortion of thin walled members with open cross section and beam buckling problems. He compared the theoretical results of Vlasov and Timoshenko with experimental results carried out at Brno. He finally talked about the design of the biggest Steel Roof Structure of Czechoslovakia for the Stadium 68m by 100m in the town of Olomorec and others.

Electrical Engineering

Mr. S. N. Ghosh, Manager, Technical Coordination, Siemens India Ltd. and an eminent technologist delivered lectures on 'Specification of Rotating Electrical Machine and Selection and Application of Electrical Motors' in February, 1983.

Electronics and Tele-Communication Engineering

(*i*) Prof. F. Pfixterer, University of Stutgart, F.R.G., delivered a series of lectures on 'Devices' in January, 1982.

(*ii*) Prof. Bernd Reusch, Department of Computer Science, University of Dortmund, FRG, delivered a series on lectures on 'Theory of Computing' in February 1982.

(*iii*) Prof. I. Baltov., Institute for Solar Energy and other New Energy Sources, Sofia, Bulgaria, delivered a series of lectures on 'Solar Cells' in October, 1982.

Mechanical Engineering

(*i*) Sri Ramen Chakraborty delivered lectures on 'Nuclear Power Plant'.

(*ii*) Dr. Anirudhha Das delivered lectures on 'Reliability of Satellite Design'.

(*iii*) Dr. Apurba Roy delivered lectures on 'Design of Heat Exchangers for Nuclear Applications.

Metallurgical Engineering

(*i*) Dr. P. P. Das, Professor and Head of the Department of Metallurgical Engineering, B.E. College, Howrah, delivered lectures on 'Design of Ni-Cr. Steels and their temper-embrittlement on 2nd April 1982.

(*ii*) Dr. A. K. Seal, Principal, B.E. College, Howrah, delivered lecturer on 'Metallurgy of TRIP Steel' on 16th April 1982.

(*iii*) Prof. P. K. Jena, Director, Regional Research Lab. Bhubaneswar, delivered lectures on 'Recent Advances in Extractive Metallurgy'.

(*iv*) Prof. Dr. A. Ghosh, Head of the Department of Metallurgical Engineering, I.I.T. Kanpur, delivered lectures on 'Aspects of Metallurgical Thermodynamics and Kinetics and their applications' on 10th December, 1982.

(*v*) Dr. R. K. Bose, Scientist, D.M.R.L. Hyderabad delivered lectures on 'Crystallographic Texture of Metals and Alloys and their industrial importance' on 16th March, 1983.

Pharmacy

(*i*) Mr. S. Roy Choudhury of Computer Society of India delivered lecture on 'Computer—its concept and its implications' on 16th December 1982.

(*ii*) Dr. Ashok Rakshit, Drug Metabolism Research Geigy, Ardslely, New York, delivered lecture on 'Some aspects of Pharmacokinetics in Drug Development' on 2nd December, 1983.

(*iii*) Mr. Sudipta Guha Roy, Clinical Pharmacist, Portesville State Hospital, Portesville, delivered lecture on 'Clinical Pharmacy Practice in U.S.A.'.

(*iv*) Mr. Dipankar Dutta of Chelso Laboratories, New York, delivered lecture on 'Total Technology and Modern Trend in U.S.A.' on 26th July 1983.

(*v*) Mr. J. Datta, Managing Director, M/S. Smith Stanistreet and Co. Ltd. Calcutta, delivered lecture on 'Implementation of G.M.P. in Pharmaceutical Industry'.

Physics

(*i*) Prof. B. L. Moiseiwitsch of the Queen's University of Belfast, U.K. delivered lectures on 'Variational Principle'.

(*ii*) Dr. C. Jacquet, Centre de Recherches Nuclearies, Strassburg, France, delivered lectures on 'New Technique for Studying Hardonic Jet'.

Mathematics

(*i*) Prof. G. Paria of Shri G. S. Institute of Science and Technology, Indore, delivered a course of lectures on 'Elasticity and Plasticity'.

(*ii*) Prof. K. K. Sen of University of Singapore (Retd.) gave a talk on 'Some Aspects of Theoretical Physics'.

(*iii*) Prof. A. M. Vaidya of South Gujrat University, gave a talk on 'Aspects of Mathematical Modelling'.

Sanskrit

(*i*) Prof. Dr. Satyvart Sastri, Vice-Chancellor, Sri Jagannath Sanskrit University, Puri, delivered a lecture on 'The Ramayana in Thailand' on 31st March 1983 under the programme of National Lecture (U.G.C.)

(*ii*) On the occasion of a two-day Seminar held on 22–23 March 1983 on 'Vyakarana and Alankar' the following distinguished speakers delivered lectures:

Prof. Bishnupada Bhattacharyya, Retd. Principal, Govt. Sanskrit College, Calcutta, Sri Hementa Kr. Ganguly, Retd. teacher in Sanskrit (J.U.), Dr. Kalikumar Datta Sastri, Retd. Professor, Research Deptt. Sanskrit College, Calcutta, Sri Siddheswar Mukhopadhyya, Deptt. of Sanskrit, Rabindra Bharati University, Dr. Gaurinath Sastri, Vice-Chancellor, Sampurnanda Sanskrit University, Varanasi, Dr. Narayan Chandra Bhattacharyya, Secretary Bangiya Sanskrita Siksha Parishad, and many others.

Comparative Literature

(*i*) Prof. Ngugi wa Mirii who collaborated with Ngugi wa Thiong 'O in writing and producing Ngashika Nideenda that led to latter's detention without trial and his own exile in Zimbabwe, was in the deptt. in Feb. 1983. In his colloquy on the recent trends in Kenyan Literature he spoke of the political tensions in present-day Kenya.

(*ii*) The Midnight's children—famed Salman Rushdie was in the deptt. in March 1983 and gave a talk on the 'Changing Homelands'.

(*iii*) Anisuzzaman of Chittagong University, Bangladesh gave a talk in March, 1983 on the Socio-economic conditions of Bengal as revealed in the factory correspondence of the East India Company with the Kuthi Manager at Dacca.

(*iv*) Jeam Hagstrum, formerly a distinguished Professor of English at the North-Western University, Illinois was at the department in March, 1982 and gave a talk on 'Law for Man, Law for Thing: The Background of the Macuine in the American Garden'.

(*v*) Pobin Lewis of Columbia University who was here in 1982 spoke on the British Colonial Attitude in Victorian juvenile fiction: 'Catch'em Young'.

(*vi*) Cliton Seely of Chicago University who has worked on Jibanannda Das and is now working on Madhusudan, gave three talks in May, 1982.

History

(*i*) Prof. D. C. Sircar delivered three lectures on 'Early Indian Inscriptions'.

(*ii*) Prof. W. B. Yearns delivered lecture on 'Meaning of American Civil War'.

(*iii*) Prof. A. C. Banerjee delivered two lectures on 'English Law in India'.

(iv) Prof. A. L. Basham delivered lecture on 'The Origin of the Doctrine of Transmigration'.

Bengali

(*i*) Dr. Ratnabali Chatterjee delivered a lecture on *Pots*.

(*ii*) Sri Abanti Sanyal of Burdwan University delivered two lectures on 'Poems of Protest in World Literature'.

(*iii*) Dr. Danielchuk of the University of Moscow delivered two lectures on 'Rabindranath's short stories'.

English

(*i*) Alan Sillitoe, the British Novelist gave a talk at the British Council meant especially for the department.

(*ii*) Prof. Jean Hagstrum, formerly a distinguished professor of English at the North-Western University, Illinois, spoke on Wordsworth's Poetry.

(*iii*) Mr. Michael Holroyd, Biographer of Lytton Strachey, spoke on Bernard Shaw and the Bloomsbury Group.

(*iv*) Prof. Philip Brockbank spoke on Shakespeare's 'Measure for Measure'.

(*v*) In the one-day seminar on Dickens held in Feb. 1983 in the department, Prof. Angus Wilson, the novelist and Dickens Scholar spoke on 'Dostoevsky and Dickens'.

(*vi*) Sister Frances Gussenhoven of the Department of English, Loyala Marymount University, Los Angeles, California,, while in the department as a Full Bright Fellow, gave several lectures on 'Fourteenth Century Literature' and 'Women in Medieval Art and on the 'Mystery Cycles'.

International Relations

(*i*) Prof. Richard B. Lillich, the well-known authority on International Law, gave a talk on 'The Use of International Law' on 12th January 1983.

(*ii*) Prof. Vadim Popov of Lumumba University of Moscow gave a talk on 'National Liberation Movement—Theory of Practice' in September, 1982.

(*iii*) Dr. V. M. Reddi, Professor and Director of the Centre of Indo-Chinese Studies, Department of History, Venkateshwara University, Tirupati, delivered two lectures on the Political Development of Vietnam in January 1983.

(*iv*) Dr. Vishal Singh, Chairman of the Centre in South and South-east Asia of the School of International Studies, Jawharlal Nehru University, was invited by the Department to give three lectures on 'The Recent Political Situation of South-east Asia'.

Philosophy

The following eminent visitors visited the Department as Visiting Professors, Fellows and Lecturers:

Pandit Madhusudan Nyayacharya, Prof. J. W. N. Watkins (London School of Economics), Dr. A. P. Rao, Dr. B. K. Matilal (Spalding Professor of Eastern Religions and Ethics, Oxford), Dr. Mark Plats (Birkbeck College, London), Mr. John Mcdowell (Oxford), Prof. W. V. Quine (University of Harvard), Prof. D. Davidson (University of California) and Dr. T. Organ (University of Ohio).

Some casual visitors also delivered lectures in the Department viz. Dr. F. W. Clothey (University of Pittsburg, U.S.A.) and Dr. Wolfgang Kliemy (Humboldt University, East Berlin).

CULTURAL EXCHANGE PROGRAMME AND INTERNATIONAL COLLABORATION

Electrical Engineering

Dr. S. Choudhuri visited U.K. under Commonwealth Academic Staff fellowship between September 1981 and August, 1982.

Pharmacy

Dr. T. K. Pal carried out research work in Darmestadt (West Germany) under the invitation of German Academic Exchange Service (DAAD) during September to November 1983.

Electronics and Tele-Com. Engineering

Sri A. Kar visited University of Wales, U.K., as a Commonwealth fellow from 1980–83.

Food Technology and Bio-Chemical Engineering

Prof. Sunit Mukherjee visited USSR under Exchange Programme during September and October 1983.

Production Engineering

Dr. A. Bhattacharyya, visited Sofia, Bulgaria being invited by Prof. Popov to sign on behalf of India under an academic exchange agreement with Scientific Society of Bulgaria in October, 1982.

Mathematics

Prof. K. S. Choudhuri visited Universities and Institutions in Hungary in November 1983 under the Indo-Hungarian Cultural Exchange Programme.

VISITS ABROAD BY FACULTY MEMBERS

Architecture

(*i*) Prof. Monidip Chatterjee visited in the early part of 1983 Rome and participated in a short course on 'Conservation of Monuments'.

(*ii*) Prof. T. K. Chattopadhyaya attended the 7th INTA Conference at Barcelona, Spain. He also paid a visit to U.K. to several Polytechnics and Universities offering courses on architecture and planning and held discussion with teachers and students.

Chemical Engineering

(*i*) Prof. R. N. Mukherjee went to ACHEMA Congress at Frankfurt, West Germany in June 1982.

(*ii*) Prof. D. N. Ghosh along with Prof. Sunit Mukherjee of Food Technology and Bio-Chemical Engineering Deptt. visited the Tashkent Polytechnic Institute, USSR to explore the possibilities of a collaborative programme between the Institute and the Jadavpur University.

Civil Engineering

(*i*) Dr. B. Chattopadhya visited Polytechnic of Central London.

(*ii*) Dr. M. Chakraborty visited University of Saskatchewan, Canada.

(*iii*) Dr. R. D. Purakayastha visited Technical Institute of Nova Scotia, Halifax, Canada.

Electrical Engineering

(*i*) Dr. T. K. Basak visited the International Centre of Theoretical Physics, Trieste, Italy Summer College in Bio-Physics, August, 1983.

(*ii*) Dr. S. Goswami is in Nigeria from September 1981 onwards on lien to Ibadon Polytechnic.

(*iii*) Dr. S. Choudhuri visited U.K. under Commonwealth Academic staff fellowship between September 1981 and August 1982.

(*iv*) Prof. J. K. Choudhury attended 9th IMEKO Conference at Berlin in May 1982.

Electronics and Tele-Communication Engineering

(*i*) Dr. D. K. Basu visited Madrid, Spain to attend the 2nd International Symposum De Ingenieria Biomedica in October 1983.

He also visited Bultimore, U.S.A. to attend the 7th Symposium on Computer Applications in Medicine in Oct., 1983.

(*ii*) Dr. J. S. Chatterjee visited National Chiao Tung University, Taiwan as a Visiting Research Professor from December 1982 to March 1983.

(*iii*) Sri A. K. Das visited Hong Kong to attend the International Summer School of Optoelectronics at the Chinese University of Hong Kong in July 1982.

He also visited Montreal, Canada to attend the Canadian Communication and Energy Conference in October 1982.

He also visited Concordia University to deliver a lecture in the Electrical Engineering Department in October 1982.

(*iv*) Dr. R. Datta Gupta visited G.M.D. Bonn (FRG) as a Research Scientist from January to December 1983.

He also visited Bultimore, U.S.A. to attend the 7th Symposium on Computer Applications in Medicine in October 1983.

(*v*) Dr. S. Ghosh visited Washington D.C., U.S.A. to attend the IEEE COMPCON FALL Conference in September 1982.

He also visited the department of Electrical Engineering at Computer Science, Johns Hopkins University, Bultimore, Maryland, U.S.A. to deliver a Visiting Lecture.

(*vi*) Sri A. Kar visited the University of Wales, U.K. as a Commonwealth fellow from 1980 to 1983.

(*vii*) Dr. M. K. Mukherjee visited Mexico to attend the IEEE Conference on IAS in October 1983.

(*viii*) Sri R. Nandi visited Mexico to attend the 26th Midwest Symposium on Circuits and Systems in August 1983.

(*ix*) Sri A. K. Nath visited Institute of Control Engineering, National Chiao Tung University, Tawian as a Visiting expert from October 1981 to December 1983.

(*x*) Dr. M. N. Roy visited Colorado, U.S.A. to attend the 1982 IEEE Region 5 Conference in May 1982.

He also visited the University of California and Stanford University.

Mechanical Engineering

Dr. R. K. Chakraborty, Dr. A. K. De, Dr. S. Paul, Dr. Tapan Chattopadhyaya, Dr. Rajen Banerjee and Dr. S. R. Bhattacharyya visited abroad to attend different Conferences during the year.

Food Tech. and Bio-Chemical Engineering

Prof. Sunit Mukherjee visited USSR under exchange programme during September–October 1983.

Pharmacy

(*i*) Dr. A. K. Bandopadhyya is now in AHMADU BELLO University, Zaria, Nigeria, on lien from the Deptt.

(*ii*) Dr. T. K. Pal visited Hungary in August 1983 to attend the 4th International Conference on Applied Chemistry and carried out research work in Darmtadt (West Germany) under the invitation of German Academic Exchange Service (DAAD) during September to November 1983.

(*iii*) Dr. Malay Chatterjee was in U.S.A. as a Post-doctoral Research Associate of National Institute of Health, U.S.A.

(*iv*) Prof. A. N. Bhaduri attended the International Conference of Bio-Chemistry in Perth, Australia, in 1982.

(*v*) Prof. (Mrs.) M. Gupta attended the International IUPAC Symposium on Mycotoxins and Phycotoxins at Vienna Technical University, Austria in March, 1982.

(*vi*) Prof. S. K. Dutta attended VI, VII and VIIIth Bangladesh Science Congress held in Feb. 82 and Feb. 83 at Dhaka.

Production Engineering

(*i*) Prof. A. Bhattacharyya visited Sofia, Bulgaria being invited by Prof. Popov to sign on behalf of India an academic exchange agreement with Scientific Society of Bulgaria (October 1982).

He also visited Belgrade, Yogoslavia to preside over the Meeting Committee on Engineering Education and Training.

He also visited Tunis (Tunisia) to attend the Executive Committee of World Federation of Engineering Organisations and the Seminar on Environmental Education (October 1982).

Physics

Prof. A. Chaudhuri visited U.S.A. and Japan under the U.G.C. Visitorship Programme.

Mathematics

(*i*) Dr. D. K. Sinha and Prof. K. S. Chaudhuri participated in the Autumn College on Mathematical Ecology held at the International Centre for Theoretical Physics, Trieste, Italy from Nov. 16 to Dec. 10, 1982. They presented papers at the International Symposium on Mathematical Ecology held there.

(*ii*) Prof. K. S. Chaudhuri and Dr. A. B. Roy presented papers at the International Conference held at the University of Missouri, Rolla, U.S.A. on 27–29 October, 1982 on the occasion of the 19th Annual Meeting of the Society of Engineering Science, U.S.A. Prof. K. S. Chaudhuri delivered lectures at the Courant Institute of Mathematical Sciences, New York and Stitchting Mathematisch Centrum, Amsterdam, Netherland on November 5 and November 12, 1982 respectively.

(*iii*) Dr. A. B. Roy served the University of Minnesota, Duluth, U.S.A. from September to December 1982 as an Associate Professor.

(*iv*) Dr. A. B. Roy presented a paper at the 4th European Symposium on Chemical Structure—Biological Activity: A Quantitative Approach held at the University of Bath, England on 5–8 August, 1982.

(*v*) Dr. N. C. Das presented a paper in the 24th Polish Solid Mechanics Conference held at Warsaw, Poland on 22–27 August 1983.

(*vi*) Dr. D. K. Sinha presented a paper in the Ultrasonic International in July 1983 at the University of Dalhousie, Halifax, Canada. He also participated in the International Congress on Accoustics held in July 1983 in Paris. Prof. Sinha presided over a technical session at the Fourth International Conference on Mathematical Modelling in August 1983 at Zurich, Switzerland. He had been, on invitation, for a couple of weeks at ICTP, Trieste, Italy for a summer Programme on Dynamical System and also participated in the Research Workshop on 'Solitons' held at ICTP.

(*vii*) Prof. K. S. Chaudhuri visited Universities and Institutions in Hungary in November 1983 under Indo-Hungarian Cultural Exchange Programme.

(*viii*) Mrs. G. Dutta was in the University of Cincinnati, Ohio, U.S.A. for higher studies during the period September 1981 to September 1983.

Chemistry

(*i*) Dr. M. K. Das attended the 4th International Conference on the Organometallic and Coordination Chemistry of Ge, Sn and Pb, 1983 held at MgGill University, Montreal, Canada.

(*ii*) Dr. D. Chakraborty attended the International Conference on 'Heavy Metals in the Environment' held in Heidelberg, West Germany.

Geological Sciences

(*i*) Dr. Prasanta Bhattacharyya, visited University of Arizona, Tucson, U.S.A. and took part in research project related to geochemistry of Kimberlites of South India.

(*ii*) Dr. Pradip Bose visited Oxford University and Reading University, U.K. and Skidway Institute of Oceanography, Georgia and University of Miami and actively took part in research project on Modern sediments and ancient counterpart of similar sedimentary rocks.

(*iii*) Dr. Sibendu Choudhury visited West Virginia State University Morgan Town, U.S.A. and University of Keele, U.K. and studied coal geology and fluvial sedimentology.

(*iv*) Sri Arun Bhattacharyya visited Menlo Park Engineering Geology, Division of U.S. Geological Survey and Stanford University, U.S.A. to carry out research work on engineering geology problems. He also attended a conference on Landslide and Flooding in San Francisco Region held at Stanford University, U.S.A.

(*v*) Late Dr. Bankim Mukherjee attended International Carboniferous Congress held in Spain.

(*vi*) Prof. Supriya Roy visited Tblisi, USSR to attend the VIth IAGOD Symposium. He also visited different Universities and Geological Institutes of Japan as a delegate from India under the Indian National Science Academy and Japan Society of Promotion of Science, Exchange of Scientist Programme.

(*vii*) Dr. Ajit Bhattacharyya visited Rensselaer Polytechnic Institute, Troy, U.S.A. as a Visiting Scientist for two years and participated in a research project on deep-burial diagenesis of carbonate rocks sponsored by the Department of Energy, Govt. of United States of American, Washington. He also presented paper in the annual meeting of International Association of Sedimentologists held at McMaster University, Hamiltion, Canada and also attended meeting of North Eastern Section of Society of Economic Paleontologist and Mineralogists held in Washington.

Philosophy

Prof. D. P. Chattopadhyaya attended UNESCO sponsored Karl Jasper Centenery Round Table at Paris on June 17, 1983.

He also attended and delivered keynote address 'Philosophy in

Asia and the Pacific Region: Retrospect and Prospect' at the UNESCO sponsored seminar on Philosophy in Asia and the Pacific region held at Bangkok on March 21–25, 1983.

He also attended a seminar on Indian Society at St. Antony's College, Oxford on May 2–3, 1983. The title of the paper was 'Governance, Disobedience and Legitimacy: Some neglected Aspects of the Developing Indian Scene'.

Comparative Literature

(*i*) Dr. Naresh Guha attended the 10th Congress of the International Comparative Literature Association in New York in August 1982.

He also attended the Bureau Meeting of the International Comparative Literature Association in Paris in December, 1982.

(*ii*) Dr. (Mrs.) Nabaneeta Deb Sen attended the 10th Congress of the International Comparative Literature Association in New York in August 1982.

She also attended the Joyce Centenary Seminar at Dublin in September 1982.

She gave lectures at the University of Alberta, Canada in August, 1982.

History

(*i*) Dr. Nemai Sadhan Bose was in Bellagio, Italy for research on "Ideals on Traditions of Human Rights in India" in October–November 1982 being invited by the Rockfellor Foundation under an award of Bellagio Residency.

He also visited South Asia Institute, Heidelberg University as a Visiting Professor under a grant from German Academic Exchange.

(*ii*) Dr. Ratnalekha Roy visited U.S.A. as Senior Fullbright Scholar, 1982.

(*iii*) Prof. C. Palit attended the National History Conference of Bangladesh, Dhaka.

He also visited Jahangir Nagar University at Dhaka and the Rajshahi University, Rajshahi.

English

(*i*) Prof. Kitty Datta visited U.K. in August–September 1983 for collection of research materials in Britain in connection

with a project to study a number of Scottish member of the Asiatic Society of Bengal and Scottish orientalists.

(*ii*) Prof. Jasodhara Bagchi visited Paris to read a paper on 'Literary History and the Problem of Modernity in Nineteenth-Century Bengal' at a seminar organised by Maison de l'Inde, Paris.

She also attended Paris under an invitation from Maison des Sciences de l Homme to look at source materials and hold discussion with scholars working in related areas for her work on Comteian Positivism and its impact on Nineteenth-Century Bengal.

Under the sponsorship of the British Council she spent several months in the U.K., first as a Summer Visitor Darwin College, and later as a Visiting Research Associate in Queen Elizabeth House, Oxford.

(*iii*) Dr. Sobha Chattopadhyay was on study leave for 2 years from August 1981 to September 1983 at Lamar University, Texas, U.S.A. She also taught English at the Lamar Language Institute during the Spring Semester, 1982.

International Relations

(*i*) Prof. J. B. Das Gupta went to U.S.A. to participate in a Seminar on 'New Directions of U.S.A. Foreign Policy,' organised by the Georgetown University Centre for Strategic study held in February, 1983. He also visited a number of American Universities including the Universities of California, Pennsylvinia, Texas, South Carolina and Wyoming.

(*ii*) Dr. Baladas Ghoshal visited South-east Asia and conducted field research in five Asian countries, namely Thailand, Malayasia, Singapore, Indonesia and the Philippines during the period February–May, 1983.

(*iii*) Dr. Arun Banerjee has gone to U.S.A. on the American Council of Learned Society Fellowship for research on the 'Role of the super Powers in the politics of the Middle East'.

FOREIGN VISITORS UNDER EXCHANGE PROGRAMME

Sl. No.	Name	Country	Designation	Period of Stay
1.	Prof. Vadim Popov	U.S.S.R.	Head of the Dept. Scientific Communism PUF Moscow.	17. 9. 82 to 2. 10. 82
2.	Dr. Mrs. Inna Sergueena	U.S.S.R.	Senior Research Worker at the Institute of Oriental Studies, Moscow.	14. 9. 82 to 19. 9. 82
3.	Dr. Ruzica Cicak Chand	YOGOSLAVIA		15. 9. 82 to 20. 9. 82
4.	Dr. Mrs. Annemarie Hefner	G.D.R.	Research worker Central Institute of History, 1080, Berlin.	29. 9. 82 to 31. 12. 82
5.	Dr. Mrs. Bianka Schorr	—Do—	—Do—	—Do—
6.	Dr. Martin Blake	U.S.A.		7. 10. 82 to 8. 10. 82
7.	Mrs. Elena Panova	BULGARIA	Prof. of Sofia University	5. 2. 83 to 8. 2. 83
8.	Dr. Mrs. N. B. Lebedeva	U.S.S.R.	Prof. of Pol. Sciences, U.S.S.R. Academy of Sciences.	5. 2. 83 to 8. 2. 83
9.	Dr. Mrs. Z. Visi	HUNGARY	Principal Assistant Hungarian Tropical Health Institute Budapest.	14. 2. 83 to 22. 2. 83
10.	Dr. Abdul Ahmed Javed	AFGHANAISTHAN		25. 11. 82 to 1. 12. 83
11.	Mrs. Chernorutskya Lyubov Ivanovna	U.S.S.R.	Head of Information Dept. Institute of Oriental Studies.	12. 2. 83 to 21. 2. 83
12.	Prof. Ludevit Vegh	CZECHOSLOVAKIA	Associate Professor Tech. University, Praha	7. 1. 83 to 11. 1. 83
13.	Prof. S. Panchev	BULGARIA		12. 2. 83 to 21. 2. 83

FACULTY APPOINTMENT/ PROMOTIONS/RETIREMENTS/ RESIGNATION ETC.

New Appointments

Sri Amar Kumar Banerjee	Reader in Mechanical Engineering
Sri Tarun Kanti Naskar	Lecturer in Mechanical Engineering
Sri Amitabha Sarkar	Lecturer in Mechanical Engineering
Sri Subir Kumar Sanyal	Lecturer in Mechanical Engineering
Sri Prabir Kumar Basu	Lecturer in Mechanical Engineering
Sri Subodh Kumar Saha	Lecturer in Mechanical Engineering
Sri Goutam Nandi	Lecturer in Mechanical Engineering
Sri Prabir Kumar Ghosh	Lecturer in Mechanical Engineering
Sri Gadadhar Das	Lecturer in Electrical Engineering
Sri Amar Nath Sanyal	Lecturer in Electrical Engineering
Sri Asoke Kumar Ganguly	Lecturer in Civil Engineering
Sri Somenath Ghosh	Lecturer in Civil Engineering
Sri Amitava Gangopadhyaya	Lecturer in Civil Engineering
Sri Himadri Guha	Lecturer in Civil Engineering
Sri Sankar Chakraborty	Lecturer in Chemical Engineering
Sri Alakananda Mukhopadhyaya	Lecturer in Elec. and Tele-Com. Engg.
Sri Salil Kumar Sanyal	Lecturer in Elec. and Tele-Com. Engg.
Sri Kishore Kumar Bose	Lecturer in Elec. and Tele-Com. Engg.
Sri Surajit Bhattacharyya	Lecturer in Elec. and Tele-Com. Engg.
Sri Anup Kumar Majumdar	Lecturer in Instrumentation & Elec. Engg.
Dr. Kalyan Kumar Mallick	
Dr. Soumen Kumar Roy	Lecturer in Physics
Dr. Soumya Chakraborty	Lecturer in Physics
Dr. Debi P. Bhattacharyya	Lecturer in Physics
Dr. Dilip Kr. Bhattacharyya	Lecturer in Physical Chemistry
Sri Somenath Ghosh	Lecturer in Inorganic Chemistry

Promotions

Dr. Madan Mohan Goswami	Professor in Bengali
Dr. Sunil Chatterjee	Professor in Bengali
Dr. (Mrs.) Maitreyee Chaudhury	Reader in Bengali
Dr. Pinakesh Ch. Sarkar	Reader in Bengali
Dr. Amalendu De	Professor in History
Dr. Chittabrata Palit	Professor in History

Dr. Deba Prasad Chowdhury	Reader in History
Sri Mihir Ranjan Bhattacharyya	Reader in English
Sri Arup Kumar Rudra	Reader in English
Smt. Malabika Sarkar	Reader in English
Smt. Indrani Halder	Reader in English
Dr. Sukamal Chanda	Professor in Geo. Science
Dr. Sanjib Chandra Sarkar	Professor in Geo. Science
Dr. Prodip Kumar Bose	Reader in Geo. Science
Dr. Arabinda Ghosh	Reader in Geo. Science
Dr. Nakul Chandra Das	Professor in Physics
Dr. Debaprosad Sural	Professor in Physics
Dr. Parthasarathi Mukherjee	Professor in Physics
Dr. Satya Narayan Banerjee	Professor in Physics
Md. Khalil	Reader in Physics
Dr. Utpal Kumar Dey	Reader in Physics
Dr. Dilip Kr. Bhattacharyya	Reader in Physics
Dr. Sankar Sen Gupta	Reader in Physics
Dr. Ashesh Ray Choudhury	Reader in Physics
Dr. Kusalendu Goswami	Reader in Physics
Dr. Ramendra Nath Joarder	Reader in Physics
Dr. Dipak Kumar Ghosh	Reader in Physics
Dr. K. K. Kundu	Professor in Physical Chemistry
Dr. K. K. Sen Gupta	Reader in Physical Chemistry
Dr. S. P. Moulik	Reader in Physical Chemistry
Dr. Subhas Ch. Bera	Reader in Physical Chemistry
Dr. Amalendu Das	Professor in Organic Chemistry
Dr. K. K. Mahalanabis	Reader in Organic Chemistry
Dr. Lakshmi Nath Datta	Reader in Organic Chemistry
Dr. Dipankar Chakraborty	Reader in Inorg. Chemistry
Dr. Rupak Ranjan Ray	Reader in Inorg. Chemistry
Dr. Manju Bikash Saha	Reader in Inorg. Chemistry
Dr. Dulal Chandra Bera	Reader in Inorg. Chemistry
Dr. Suprakash Lahiri	Reader in Inorg. Chemistry
Dr. Sailesh Ch. Saha	Reader in Inorg. Chemistry
Dr. Aloke Sen Gupta	Reader in Mathematics
Dr. Madhab Ch. Bagchi	Reader in Mathematics
Dr. Asis Kumar Pal	Reader in Mathematics
Dr. Arup Kumar Ghosh	Reader in Mathematics
Dr. Madhusudan Bhattacharyya	Professor in Mechanical Engineering
Dr. Ananta Kumar Pal	Professor in Mechanical Engineering
Dr. Ram Narayan Banerjee	Professor in Mechanical Engineering

Sri Subhash Datta Gupta	Reader in Mechanical Engineering
Sri Sukrit Ranjan Bhattacharyya	Reader in Mechanical Engineering
Sri Soumendra Nath Pal	Reader in Mechanical Engineering
Dr. Subrata Pal	Reader in Mechanical Engineering
Sri Sankar Prosad Choudhury	Reader in Mechanical Engineering
Sri Amar Kumar Banerjee	Reader in Mechanical Engineering
Sri S. N. Mukherjee	Reader in Electrical Engineering
Sri Samir Kr. Rakshit	Reader in Architecture
Dr. Sankar Kr. Mukherjee	Reader in Food Tech. & Bio-Chem. Engg.

Retirement/Expired

Dr. Dinesh Chandra Biswas	Professor in English
Sri Ranajoy Karlekar	Lecturer in English (expired)
Prof. K. K. Banerjee	Professor in Philosophy (expired)
Dr. Karun Ch. Mitra	Reader in Geo. Science (expired)
Dr. Amarendra Nath Chakraborty	Professor in Mech. Engg. (expired)
Dr. B. C. Chanda	Professor in Chemical Engineering

Resigned

Dr. Pritish Ch. Datta	Professor in Economics
Sri Milan Kr. Mitra	Lecturer in Mathematics
Dr. Ashesh Kr. Ghosh	Lecturer in Physical Chemistry
Sri Kunal Bose	Lecturer in Mechanical Engineering
Dr. P. K. Misra	Lecturer in Mechanical Engineering
Dr. T. Bhattacharyya	Reader in Elec. and Tele-Com. Engg.

PART II

CENTRALISED SERVICES / STUDENTS ACTIVITIES

UNIVERSITY SERVICE AND INSTRUMENTS CENTRE

During the year under review the University Service and Instrument Centre has rendered services in the following five sophisticated equipments of multi-disciplinary utility among various research workers inside and outside the University. Measurements were taken by technical personnel/ scholar in respective cases under the guidance of the Professor/Reader who is in-charge of the instrument.

1. Scanning Electron Microscope (Model ISI 60 A, located at the Metallurgical Engineering Department).

   Studies on Cadmium Sulphide Solar Cell were done by a research worker of the Deptt. of Electronics and Tele-Communication Engineering. Fracture of welded specimen of 9% Nickel Steel and cast Iron specimen were studied by two different workers of the Deptt. of Metallurgical Engineering.

   Since August 1982 the instrument is out of order and has not been comissioned due to non-availability of fund for purchasing spare parts.

2. Fluorescence Spectrophotometer (Perkin Elmer Type MPF located at the Department of Chemistry).

   Ultra trace determination of heavier metals such as Zirconium, Niobium, Thorium, Tungsten, Cerium etc. have been done. Based on the results obtained from this instrument six Ph.D. Thesis work have been completed during the year under supervision of four professors of this University. About twenty five research papers have been produced out of which fifteen have already been published and the rest under process of publication.

   This instrument has also been utilised by research workers of the departments of Pharmacy, Food Technology and Biochemical Engineering, Jadavpur University, Indian Association for the Cultivation of Science, Deptt. of Fisheries, Govt. of West Bengal.

Since January 1983 the instrument is not in operating condition due to non-availability of requisite funds for the purchase of necessary spare parts.

3. Microcomputer Development System (Intel Type MDS 210, installed in the Department of Electronics and Tele-communication Engineering).

   Several ME and Ph.D. Thesis work have been completed with the help of this instrument. This instrument is working very satisfactorily.

4. FPM Integrating Weissenburg Goniometer (CZ Instruments Type WBG 2 located at the Department of Physics).

   Two crystals were studied using the instrument viz. 3–(O-Carboxy-phenyl)–1–Phenyltriazene-1 oxide, C_{13} H_{11} N_3 O_3 and 3-hydroxy-5 chloro—3 methyl Oxindole, C_9 H_8 O_2 Cl N.

5. Preparative Ultracentrifuge (JRNETZKI Type VAC 601, located at the Department of Food Technology and Bio-chemical Engg) has been utilised for research work, such as preparation of protein (casein) from raw skim milk, preparation of actomyonin from fish and meat for physico chemical studies; and for separating emulsified oil droplets from aqueous phase. The instrument is at present working satisfactorily.

6. The Gas—Chromatograph Hewlett Packard Model HP 5711A located at the Deptt. of Pharmacy will be installed shortly. One Flame Atomic Absorption Spectrophotometer Perkin Elmer Model 2380 with Hollow Cathode Lamps of Ca, Co, Cu, Mg, Mo, Ni, Pb, Sn, Zn, has been ordered and is expected to arrive soon. The AAS will be installed at the Deptt. of Metallurgical Engineering.

Collection

(*a*) With the purchase of new 6414 books during the year the total collection of books and periodicals at the end of the year became 3,59,881

(*b*) The present stock under different heads is as follows:

(*i*) The total no. of books and periodicals (completed volumes) at the beginning of the year: 3,49,669

Addition during the year

(*ii*) No. of Books purchased 6,414

(*iii*) No. of periodicals (completed volumes)

Comprising of :

— Books and Journals received as gift 875

— Bound volumes of journals 1,253

— Doctorate Thesis 120

— Pamphlets and specifications etc. 1,550

Other relevant information

(*c*) No. of current journals (subscribed) 1,208

(*d*) No. of current journals (gift) 140

Space

The University Central Library is a three-storeyed building having a built-up area of 36,987 sq. ft. The carpet area of the building is 28,329 sq. ft. including an area 8016 sq. ft. for stack room. Besides the above, the University has also departmental Library for each of the departments of the University.

Service and Facilities

The Library provides all sorts of facilities that are available in a grade-I Library. The publications and documents are procured from different sources for making them available for use of the readers. Services are rendered to the readers by answering of reference and bibliographic enquiries, inter-library borrowing and lending, providing Xerox facilities etc. The departmental Libraries also provide services to the students, teachers and research scholars of the department concerned.

The volume of services rendered by the Library during the year under review are as follows:

(*a*) No. of readers in the reading room (ground floor) 1,40,000

(*b*) No. of readers in the reading room (1st floor) 29,825

(*c*) No. of readers in the reading room (2nd floor) 6,000

(*d*) No. of volumes used in the ground floor reading room 3,43,000

(*e*) No. of volumes issued on loan 92,350

(*f*) Inter-Library Loan services available B. 30–L53

(*g*) Books and others requisition slip handled 1,95,980

(*h*) No. of questions and Journals used 57,912

(*i*) No. of volumes processed 7,288

(*j*) No. of reference querries 2,000

Routine Works

The following routine works were also performed by the Library during the year 1982–83.

(*a*) Books and question papers processed 3,935

(*b*) No. of Journals bound 4,000

(*c*) Renewal of student membership 3,782

(*d*) No. of new Library members 1,900

(*e*) No. of photo-copies, xerox print etc. 9,469

(*f*) Books and Journals labelled 12,220

(*g*) No. of borrowers receiving assistance 9,392

Extended hour of opening and Circulation

The University Library is kept open for services from 10-20 A.M. to 8-15 P.M. on all Weekdays. On Saturday it remains open from 10-20 A.M. to 4-15 P.M. During the vacation and other holidays the Library remains closed.

Expenditure

(*a*) Recurring cost on Central Library (including the departmental Libraries) during 1982-83 is as follows:

		Rs.
(*i*)	Expenditure on the maintenance of staff salaries etc.	6,45,067
(*ii*)	Other allowance	2,40,000
(*iii*)	Provident Fund Contribution	47,301
(*iv*)	General reference books and periodicals (inter-disciplinary)	1,88,440
(*v*)	Binding charges	8,604
(*vi*)	Library Accessories	11,751
(*vii*)	Printing, Stationery and Contingencies	16,694
(*viii*)	Furniture and Photographic Accessories	8,696
	Total (a)	11,66,553

(*b*) Recurring cost on purchase of Books and journals for teaching departments 4,44,048

Total (b) 4,44,048

(*c*) Non-Recurring cost

(*a*) Books and Journals (out of U.G.C. grant) 1,09,615

(*b*) Books and Journals (out of State Govt. grant) 5,50,000

Total (c) 6,59,615

Grand Total (R. and N.R.) 22,70,216

TRAINING AND PLACEMENT SECTION

The Office of the Officer of Placement and Training was established in 1963. The University Employment Information and Guidance Bureau was set up in collaboration with the State and Central Government in 1965. The Officer of Placement and Training was logically placed as the Chief of the UEIGB and both the offices have merged their activities since then for rendering valuable students services.

Broadly the functions carried out by the office may be classified as.

(*a*) Vocational Guidance
(*b*) Career Guidance
(*c*) Individual Information
(*d*) Occupational Information
(*e*) Career Talks
(*f*) Personality Development Programmes
(*g*) Practical Training
(*h*) Opportunities for Higher Studies in this Country and Abroad
(*i*) Information on Self Employment
(*j*) Placement Assistance

Reports containing monthly statistics are sent regularly to the Directorate of National Employment Services and also to the Directorate General of Employment and Training, New Delhi.

The activities of this office have been highlighted by newspapers and the Chief has also appeared in Television Programmes in subjects relating to Self-Employment and Practical Training.

TRAINING AND EMPLOYMENT POSITION OF OUTGOING STUDENTS (1982-83)

	Mech.	Chem.	Elec.	Civil	I.E.E.	Prod Engg	Tele-Com.	FTBE	Met.	Pharm.
1. No. of Students sent for Summer vacational training	138	26	103	41	17	29	30	Nil	31	25
2. No. of Students who registered for placement assistance (*day students only*)	53	34	68	55	23	22	26	6	14	Nil
3. No. of students placed	41	17	41	47	16	16	3	1	3	1
(*a*) Public Sector	7	6	5	13	5	3	Nil	Nil	Nil	Nil
(*b*) Private Sector	34	11	36	34	11	13	3	1	3	1
(*c*) Self Employed	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
(*d*) Position not known	4	5	9	5	5	6	4	Nil	3	Nil
(*e*) Higher studies	8	12	18	3	2	Nil	19	5	8	Nil

SPECIAL CAMPING PROGRAMMES DURING THE YEAR 1982-83

1. Camp at Nayagram, Midnapore

One Eco-Development camp was held at Nayagram in Jhargram sub-division of Midnapore from 27th June to 6th July, 1982 in attachment with the Hammer Gren Society, Nayagram. Nayagram is a drought prone area inhabitated by people of various ethnic origins like Santhals, Lodhas and Bhumijs etc., who are very poor and educationally extremely backward.

The place of work is a locality of Nayagram where Hammer Gren Society has a piece of land. The Society is named after the philanothropist Hammer Gren, a native of Scandinovia, who came in India in the nineteenth century and worked tirelessly for the upliftment of Indian people and died early in his life in this country. The Society invited us to work on eco-development on this plot of land.

Our volunteers dug a large number of pits for tree planting around about 15 bighas of land encircling a primary school made for the backward communities by Hammer Gren Society. The seed beds prepared were about 550. But as it was a very hot season and drought condition prevailing seedlings were not planted. The work of planting during the coming rains and subsequent protection of the planted seedlings were left to the Hammer Gren Society.

The volunteers also contacted the local people and got an idea of the appalling living condition of the poorer section of the people, a real experience for them. They participated in some local cultural activities during their stay.

The camp was organised by Dr. M. B. De with student leaders Sri Siddhartha Das and Smt. Kajori Sen.

The camp was visited by Prof. N. C. Das, Programme Co-ordinator, N.S.S., Dr. B. P. Saha, Assistant Programme Co-ordinator and Dr. B. L. Das, Ex-Programme Co-ordinator, N.S.S.

2. (a) Training Camp at Dum Dum

A leadership training camp was held at Dum Dum from 27th December 1982 to 1st January, 1983.

It was a camp with some special features where the campers had to lead a very disciplined life and had service training with the learned discourses by a number of noted sociologists, educationists, historians and spiritual leaders. All of these discourses sought to put emphasis on social, cultural and moral values, particularly, in the present-day context. They put special reference to India's cultural and spiritual heritage.

There were about 120 participants from different colleges and different communities.

Our volunteers were very happy as they had a feeling of belonging to one community, one nation. Though the campers were collected from different places and were at different strata still they had a sense of mutual involvement which ultimaiely paved the way for national integration.

Camp-in-charge: Smt. Krishna Dutta

Student Leader: Smt. Anita Roy

2. (b) **Special Camp at Nimpith, 24-Parganas**

A Special Camp was held at Nimpith, 24-Parganas from 3rd to 12th November, 1982.

The campers visited different work centres of Nimpith Ashram with a guide who explained the various activities of the Centre. They attended classes in the Health Centres to understand the role of Primary Health Centre. They regularly visited Hatpara and Tulsighata villages where they exchanged their views with local people and studied the local problems and the way of their daily life. They also taught music to the children and gave bratachari demonstration. The women folk of the locality were given useful instructions by our girl volunteers on child and mother care, nutrition and family planning.

In attachment with the Nimpith workers of the Ashram they went to the villages of Sankijahan, Kaikhali and Deulbari where they distributed food packets to the needy and poor people. They met the village folk and listened to the harrowing tales of the earlier cyclone which left a picture of vast devastation.

This visit made a very deep and permanent impression on the minds of the young campers for whom it would be hard to forget their unfortunate brothers and sisters of the vast areas of South Bengal who have calmly accepted all hazzards of life and accepted the everyday challenge of a collosal battle against the horror of Royal Bengal Tigers at the estuaries of river Matla and Bay of Bengal.

The camp was organised by Smt. Krishna Dutta and student leaders were Sm. Mita Bhowmick and Sm. Sambita Roy.

The camp was visited by Prof. P. Kundu, Vice-Chancellor (Officiating) Shri A. K. Gupta, Registrar, Shri H. Biswas, Dean of Students, Shri T. D. Bhattacharyya, Finance Officer, Prof. N. C. Das, Programme Co-Ordinator and Dr. B. L. Das, Ex-programme Co-Ordinator, N.S.S.

3. **Special Camp at Ukilerhat, 24-Parganas**

A Special Camp was held at Ukilerhat, 24-Parganas from 2nd to 11th November, 1982 by the volunteeers of Aurobinda group.

In this programme the volunteers constructed the doors and windows of a school named Sahid Smriti. They also developed a play ground in front of the School. Besides these works, they made a socio-economic survey in the Ukilerhat area. Our volunteers were glad to receive help in this project, from Panchayat members and local people who promised to maintain and develop the school in near future. Coaching classes for Madhyamik examinees were regularly taken by our students in the afternoon.

In-charge of the Camp was Sri Tridib Chakraborti, Programme Assistant.

4. **Special Camp at Laudaha Midnapore**

A Special Camp was held at Laudaha, Midnapore from 21st January to 30th January, 1983 by the volunteers of Azad Group.

In this camp a survey was carried out on the recent drought conditions in West Bengal and useful data were collected.

STUDENTS ACTIVITIES
(SPORTS AND GAMES)

The Sports Activities of the University students are broadly divided into the following areas :

(*a*) Football
(*b*) Cricket
(*c*) Table Tennis
(*d*) Badminton
(*e*) Basketball
(*f*) Volleyball
(*g*) Chess and Swimming
(*h*) Rowing
(*i*) Hockey
(*j*) Annual Sports
(*k*) Gymnasium

The activities/achievements of the students during the year 1982-83 are shown below:

(a) Football

The University Football team participated in the East Zone Inter-University Tournament held at Ranchi. The team was defeated in the first round against Ranchi.

The coaching period was extended to about 4 months this year and 13 friendly matches were held. These friendly matches were also a part of the coaching programme.

Prof. G. C. Sen Memorial Invitation Football Tournament was also conducted by us on our ground. The following teams and Colleges participated in the Tournament:

F.E.T., Combined Arts and Science, Physical Education College of Jadavpur Vidyapith, J.U. Staff, Ex-Blues, B.E. College and St. Xavier's College, Bhowanipur Education Society College and Marine Engineering College of Calcutta.

The F.E.T. and the Combined Arts and Science team of J.U. became the winners and runners-up in the tournament. Prof. H. C. Guha was the Chief Guest at the final game and our Vice-Chancellor presided over the ceremony.

The Inter-department Football competitions was also conducted in which a large number of students participated with great enthusiasm. Such tournaments are arranged particularly for those students who are eager to play the game but are not selected in the University teams. Prizes are awarded to the winning and the runners-up teams and tiffins are provided for each teams after the matches.

(b) Cricket

The University Cricket team participated in the East Zone Inter-University Tournament held at Patna in the month of January '83. The team reached the Semi-final by defeating Burdwan University. In the semi-final, the team lost to Utkal University.

The period of coaching exceeded 3 months and more than 40 students attended the coaching under Sri Kalyan Biswas and 14 friendly matches were organised against local Ist division teams.

The University team also participated in the West Bengal Inter-University Cricket Tournament (Ajoy Ghosh Trophy, sponsored by the C.A.B.) and become Champion this year by defeating Rabindra Bharati in the final held at the Eden Garden. In the previous rounds, our team met North Bengal University. Kunal Bose was the captain of our team.

The F.E.T. team participated in the All India Inter-Engineering Cricket Tournament held at Durgapur and become the Champion.

A Double—Wicket Cricket Tournament was arranged on Inter-Faculty basis. The F.E.T. was however, divided into two teams—1st and 2nd year and 3rd and 4th year. The staff team was also included in the tournament. F.E.T. 3rd and 4th year team and the Science Faculty team reached the final who were declared joint winners. Attractive prizes were awarded to the players and in the following year the players of these two teams received the Season tickets Rs. 20 from the C.A.B. Such tickets were issued by the C.A.B. for the first time in addition to the usual allotments.

(c) Table Tennis

The University Table Tennis Team (men and women) participated in the North Zone Inter-University Tournament held at Gauhati in the last week of October. The Men's team reached the Semi-final and lost to Himachal Pradesh by the narrowest marjin of 4–5 games. In the previous rounds our team defeated Punjab Agricultural University by 5–0 games, Kanpur University by 5–1 games, Jammu and Kashmir University by 5–0 games.

The Women's team defeated Assam Agricultural University by 3–0 games, Saugar University by 3–2 games, Kanpur University by 3–0 games but lost to Allahabad University in the Quarter Final by 0–3 games.

The team was coached by Sri Sadhan Datta, a leading Table Tennis player of the State team, for 4 months at the Bidyarthi Bhawan of the University in the morning hours.

The Table Tennis Teams (men and women) were also sent to participate in some of the leading Inter-College Tournaments of the City.

At the All Bengal Inter-College Dr. G. C. Chakrabarty Memorial

Tournament organised by R. G. Kar Medical College our team played very well and won Championship at the following events:

Men's Singles
Men's Doubles
Mixed Doubles

Women's Singles
Women's Doubles

At the Munish Chatterjee Memorial Inter-College Tournament organised by Bengal Table Tennis Association. 2 Men's teams and 1 Women team participated and the results were very satisfactory.

Men's team — Winner—Jadavpur University "A" team.
Men's team — Runners-up —do— "B" team.

Women's Singles — Winner
Men's Singles — Runners-up

At the Inter-College Tournament organised by Nil Ratan Sarkar Medical College our University won almost all the events including team championship.

At the Winter Meet, held at B. E. College, Sibpur the F.E.T. team won in all the events.

In this context, it may be mentioned that the following players of of our University made remarkable achievements at the higher level tournaments than the University as well:

1. Sri Rajib Singh represented the Senior State team in the National Championship and was also invited to play matches at Bangladesh.

2. Sri Debangshu Bhattacharjee won the Senior State Doubles event along with his partner Sri Rajib Singh.

(d) **Badminton**

The East Zone Inter-University Badminton Tournament was finally adandoned owing to various difficulties of the Inter-University Sports Board of India (Assn. of Indian Universities (Sports Division) although our teams (men and women) were ready and were eager to participate after 3 months extensive coaching under Sri Monoj Guha, the renowned International player of the past.

However, our teams were sent to participate in the West Bengal Inter-University Tournament which was organised by West Bengal Badminton Association. Our Men's and Women's teams won the, Championship at this Tournament as well as the Singles titles.

In the Inter-District Tournament conducted by West Bengal Badminton Association, West Bengal University teams have been included since last 3 years and these teams have always been constituted mostly with our men and women players. The tournament was held at Chandannagar.

(e) **Basketball**

The University Basketball team was sent to participate in the East Zone Inter-University Tournament held at Banaras. The team after reaching the 3rd round was defeated by Banaras Hindu University.

The team was coached by Sri Mihir Mukherjee, ex-All India player and the State Coach in Basketball, for 2 months.

In the Wathoo Memorial Basketball Tournament organised by the Sports Board of our University the following College teams were invited to participate including our team.

1. B. E. College.
2. Bhowanipur Education Society College
3. Umesh Chandra College
4. Burdwan Raj College
5. St. Xavier's College
6. Vivekananda College of Behala

Our team became the Runners-up while Umesh Chandra College became the Winners. Referees were brought from West Bengal State Basketball Association to supervise the games.

(f) **Volleyball**

The University Volleyball team was sent to participate in the East Zone Inter-University Tournament held at Sambalpur. The team after defeating Berhampur University lost to Patna University in the 3rd round.

In this connection, it may be noted that the game of Volleyball has been re-introduced into this University since last 3 years only after a lapse of 12 years and efforts are being made to make it more popular.

The Volleyball is coached by Sri Shibshankar Chatterjee, State Coach, for 2 months every year.

The Inter-Class Volleyball Competition was organised where the IV-year Engineering team was the Winner and the Science Faculty was the Runners-up.

The Volleyball team participated in the Inter-Engineering Winter Meet held at B. E. College, Sibpur and had the distinction of becoming the Champion. The performance of the team was highly appreciated by the organisers and the spectators.

(g) **Chess and Swimming**

The University Chess team was sent to Mangalore to participate in the All India Inter-University Tournament. The team was coached volentarily by the Audit Officer of our University after the office hours. The result of the team at the tournament was satisfactory. Out of 47 Universities which participated in the tournament, our team secured the 11th position but among the Universities of the East Zone which participated in the tournament, the position of our team was on the top.

The J.U. Chess Championship was also organised in which 28 players participated and Sri Dhiman Singh became the Champion. The second position was won by Sri Soumyendu Banerjee.

The Swimming team (women) was sent to participate in the All India Inter-University Swimming Meet held at Ahmedabad. The team secured the 3rd position in the Relay event.

The team was voluntarily coached by Sri Anil Kr. Das Gupta at the Pool of Anderson Club at Rabindra Sarobar. As the University has no Swimming Pool of its own, arrangements were made informaly with the authorities of the above named Club for providing the facilities of swimming to our trainees at their Pool.

(h) **Rowing**

The University Rowing team participated in the All India Inter-University Rowing Competition held in Calcutta at Rabindra Sarobar at the Lake Club Ltd. The Competition was organised by the University of Calcutta.

By making informal arrangements with the authorities of the Lake Club Ltd. our boys got the opportunities of training at their Club. The boats were also provided there.

(i) **Hockey**

The University Hockey team participated in the East Zone Inter-University Tournament held at Cuttack, but the team lost in the first round against Ravishankar University. The team was coached about 2 months by Sri Debu Ghosh.

Every year, coaching is arranged for 2 months and about 30 students participate in the coaching programme and finaly the team is sent to participate in the tournament. Inter-Faculty Hockey Tournament was also organised in which the Science Faculty and F.E.T. 1st and 2nd year combined were the Winners and runners-up respectively.

(j) **Annual Sports**

The 27th Annual Sports of the University was held on February 23, 24, 25 and 26 (Final) on the University ground.

About 275 Athlets took part in the Sports Meet. This number included the students of the 3 Faculties, trainees of the Physical Education Department of Jadavpur Vidyapith College of Education and members of the staff and the Ex-students. The trainees of the Physical Education College, in particular, recorded excellent timings in running events, heights in High Jump and distance in other jumping events as well as in throwing events and won a number of laurels.

Blazer Holders of the Year

Seven players were awarded Sports Blazers by the University in four branches of Sports.

Special Blazers were also awarded to four players for representing the Session State team of West Bengal.

Selection of candidates on Sports Quota in the 3 Faculties

During the year 1982-83, sixteen candidates were selected for admission on Sports Quota (11 Engineering and Tech., 2 Science and 3 Arts).

The above candidates were selected after the extensive trials conducted for the purpose for each game by a Selection Committee formed by the Sports Board. The Coaches of the concerned games acted as Expert in the Committee.

Gymnasium

At the Gymnasium, the students have taken regular exercises in the morning and evening hours alround the year under the guidance of Sri Jahar Pal and the part-time Instructor Sri Sib Shankar Chatterjee, Normally, the students take training—for muscle building and Yogasana. The players of different games also attended the gymnasium for their physical fitness and weight training.

Coaching Programmes of different games

The coaching programme of different games is conducted 2 to 4 months for each game under expert and renowned Coaches appointed on part-time basis each year. The same procedure was followed in the year under review also.

The coaching programme includes physical fitness training, weight training at the gymnasium with the help of various instruments, increasing the stamina by running and other physical activities and practising games, practice matches etc. Sometimes, theoretical classes are also taken by some of the Coaches.

Two to four hours coaching is conducted daily during the Coaching programme.

Nutritive food has been provided for the trainees after the end of Coaching every day during training period.

General participation of the students in different games

The number of the students taking part in various in-door and out-door games in the true recreational spirit is quite large.

In this connection, it may be noted that sports is divided into two distinct groups. One is for those who have achieved proficiency to a reasonable extent or are keen to achieve proficiency for which they strive hard and attend the Coaching programmes even by ignoring a number of obstacles in their way. In fact the standard of sports as a whole is increased by them while they themselves also earn name and fame by displaying excellent performances.

The second group of players take part in Sports for the sake of joy only.

Members of the University Sports Board, 1982-83

1. Prof. Dr. M. M. Chakrabarty, Vice-Chancellor and President.
2. Prof. Dr. B. B. Chatterjee, Vice-President.
3. Sri A. K. Gupta, Registrar and General Secretary.
4. Sri R. K. Sen, Director of Physical Instruction and Assistant General Secretary.
5. Sri H. Biswas, Dean of Students.
6. Sri A. Chatterjee, Officer of Placement and Training.
7. Sm. S. Sarkar, Physical Instructress.
8. Sri Dipak Kumar Banerjee, Teacher.
9. Sri Prodyot Kumar Mitra, Teacher.
10. Sri Bibhuti Bhusan Roy, Teacher.
11. Dr. Dilip Kumar Bhattacharjee, Teacher.
12. Dr. Mihir Kr. Bhattacharjee, Teacher.
13. Sri Santanu Chakrabarty, University Blue.
14. Sri Bipra Chakrabarty, University Blue.
15. Sm. Sriparna Banerjee, University Blue.
16. Sri Amal Chowdhury, Ex-University Blue.
17. Sri Samarlal Mukherjee, Ex-University Blue.
18. Sri Mihir Kr. Datta, Ex-University Blue.
19. Sri Soumya Sen Sarma, General Secretary, F.E.T. Students Union.
20. Sri Soumitra Baul, General Secretary, Arts Faculty Students Union.
21. Sm. Sudeshna Banerjee, General Secretary, Science Faculty Students Union.

Best Sportsmen of the year

At the Convocation Pandal, along with the Degree Holders, Asoke Sarma Memorial Trophy for the best sportsman of the year was awarded to Sri Kalyan Dhall (Cricket and Football) and Sm. Mousumi Roy (Badminton and Swimming and Athletics) jointly, Sri Kalyan Dhall was actually the best Cricket player of the University of the last 15 years. His performances were best of all the previous Cricketers of the University while Sm. Mousumi Roy became the first Badminton player of the University to become Sr. State No. 1 title.

PART III

STATISTICAL INFORMATION OF STUDENTS, SCHOLARS AND FINANCE

ADMISSION (1982–83)
(Details in the next pages)

UNDERGRADUATE COURSES:
(All faculties)

	General	S.C.	S.T.	Total
1. Number of applications received	14,439	105	—	14,544
2. Number of applications rejected	—	—	—	—
3. Number of applications found valid	14,439	105	—	14,544
4. Number offered for admission	1,058	16	—	1,074
5. Number actually admitted	1,049	16	—	1,065
6. Number admitted directly (Govt. of India quota)	21	—	—	21
7. Other Reserved quota	116	—	—	116

POST GRADUATE COURSES:
(All faculties)

1. Number of applications received	2,294	5	—	2,299
2. Number of applications rejected	—	—	—	—
3. Number of applications found valid	2,294	5	—	2,299
4. Number offered for admission	550	1	—	551
5. Number actually admitted	550	1	—	551
6. Number admitted directly	—	—	—	—
7. Other Reserved quota	5	—	—	5

M. PHIL. COURSES:

1. Number of applications received	208	—	—	208
2. Number of applications rejected	—	—	—	—
3. Number of applications found valid	208	—	—	208
4. Number obtained for admission	52	—	—	52
5. Number actually admitted	52	—	—	52
6. Number admitted directly	—	—	—	—
7. Other Reserved quota	—	—	—	—

BREAK UP OF ADMITTED STUDENTS

	GENERAL		S. C.		S. T.		Govt. of India Quota		Other Reserved Quota		TOTAL
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
A. Undergraduate Courses in Engg.											
1. Number of applications received : 6577											
2. Number actually admitted:											
Mechanical Engg.	83	—	3	—	—	—	1	—	8	1	96
Electrical Engg.	75	8	1	—	—	—	1	1	5	—	91
Civil Engg.	56	2	1	1	—	—	4	—	13	—	77
Chemical Engg.	29	10	—	—	—	—	2	—	4	1	46
Metallurgical Engg.	18	—	—	—	—	—	—	—	4	—	22
Architecture	10	6	—	—	—	—	2	—	2	1	21
Electronics & Tele-Com. Engg.	28	3	—	—	—	—	2	—	2	—	35
Comp. Science & Engg.	10	2	—	—	—	—	—	—	15	1	28
Pharmacy	20	—	—	—	—	—	1	3	15	3	42
Production Engg.	19	—	—	—	—	—	—	—	—	—	19
B. Part-time Degree Course in Engg.											
1. Number of applications received : 1317											
2. Number actually admitted:											
Civil Engg.	30	—	1	—	—	—	—	—	2	—	33
Mechanical Engg.	31	—	1	—	—	—	—	—	—	—	32
Electrical Engg.	28	—	2	—	—	—	—	—	—	—	30
C. B. Tech.											
(i) Number of applications received : 338											
(ii) Number actually admitted:											
B.Tech. (Food Tech.)	17	1	—	—	—	—	2	—	—	—	20
B.Tech. (Instrumentation)	4	1	—	—	—	—	2	—	—	—	7

ADMISSION (1982-83)

BREAK UP OF ADMITTED STUDENTS

	GENERAL		S. C.		S. T.		Govt. of India Quota		Other Reserved Quota		TOTAL
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
D. Post Graduate degree in Engg.											
(i) Number of applications received : 638											
(ii) Number actually admitted:											
Elec. & Tele-Com.	14	—	—	—	—	—	—	—	—	—	14
Comp. Sc. (Teachers Trainee)	1	1	1	—	—	—	—	—	—	—	3
Electrical Engg.	19	3	—	—	—	—	—	—	—	—	22
Pharmacy	16	4	—	—	—	—	—	—	—	—	20
Mechanical Engg.	19	—	—	—	—	—	—	—	—	—	19
Architecture	4	1	—	—	—	—	—	—	—	—	5
Chemical Engg.	14	6	—	—	—	—	—	—	—	—	20
Metallurgical Engg.	7	—	—	—	—	—	—	—	—	—	7
Civil Engg.	13	—	—	—	—	—	—	—	1	1	15
Food Tech. & Bio-Chem. Engg.	1	—	—	—	—	—	—	—	—	—	1
E. Post Graduate Diploma in Engg.											
(i) Number of applications received : 134											
(ii) Number actually admitted:											
Chemical Engg.	6	—	—	—	—	—	—	—	—	—	6
Elec. & Tele-Com. Engg.	2	—	—	—	—	—	—	—	—	—	2
Electrical Engg.	3	1	—	—	—	—	—	—	—	—	4
Mechanical Engg.	1	—	—	—	—	—	—	—	2	—	3
Civil Engg.	4	—	—	—	—	—	—	—	—	—	4
Food Tech. & Bio-Chem. Engg.	2	—	—	—	—	—	—	—	—	—	2
F. Undergraduate Science											
(i) Number of applications received : 2349											
(ii) Number actually admitted:											
Physics	21	5	—	—	—	—	—	—	—	—	26
Chemistry	20	11	1	—	—	—	—	—	3	1	36
Geological Science	21	—	1	—	—	—	—	—	—	—	22
Mathematics	24	7	—	—	—	—	—	—	3	1	35

BREAK UP OF ADMITTED STUDENTS

	GENERAL		S.C.		S.T.		Govt. of India Quota		Other Reserved Quota		TOTAL
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
G. Post Graduate Science											
(i) Number of applications received : 600											
(ii) Number actually admitted:											
Physics	17	7	—	—	—	—	—	—	—	—	24
Chemistry	6	17	—	—	—	—	—	—	—	—	23
Geological Science	12	—	—	—	—	—	—	—	—	—	12
Mathematics	35	15	—	—	—	—	—	—	—	—	50
H. Undergraduate Arts											
(i) Number of applications received : 3963											
(ii) Number actually admitted:											
Bengali	3	22	—	1	—	—	—	—	1	1	28
English	11	22	—	—	—	—	—	—	2	10	45
Economics	13	26	1	—	—	—	—	—	3	2	45
Sanskrit	—	7	—	—	—	—	—	—	—	1	8
Political Science	9	31	—	1	—	—	—	—	2	2	45
Philosophy	2	37	—	—	—	—	—	—	—	2	41
Comparative Literature	4	33	—	—	—	—	—	—	—	—	37
History	7	31	—	1	—	—	—	—	1	1	41
Library & Information Science	25	31	—	—	—	—	—	—	1	—	57
I. Post Graduate Arts											
(i) Number of applications received : 927											
(ii) Number actually admitted:											
Bengali	3	33	—	—	—	—	—	—	—	—	36
English	8	46	—	—	—	—	—	—	—	—	54
Economics	15	17	—	—	—	—	—	—	—	—	32
Sanskrit	1	13	—	—	—	—	—	—	—	—	14

BREAK UP OF ADMITTED STUDENTS

	GENERAL		S. C.		S. T.		Govt. of India Quota		Other Reserved Quota		TOTAL
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
									1	—	52
International Relations	9	42	—	—	—	—	—	—	—	—	36
Philosophy	4	32	—	—	—	—	—	—	—	—	27
Comparative Literature	6	21	—	—	—	—	—	—	—	—	44
History	4	40	—	—	—	—	—	—	—	—	
J. M. Phil. (Arts)											
(i) Number of application received : 208											
(ii) Number actually admitted											
Philosophy	—	8	—	—	—	—	—	—	—	—	8
Comparative Literature	1	6	—	—	—	—	—	—	—	—	7
English	6	9	—	—	—	—	—	—	—	—	15
International Relations	4	4	—	—	—	—	—	—	—	—	8
Sanskrit	—	14	—	—	—	—	—	—	—	—	14

STUDENTS' POPULATION—1982-83

1. Undergraduate Courses:

Name of the Course offered	STUDENTS ON ROLL 1st Year	2nd Year	3rd Year	4th Year	5th Year
B.A.					
Bengali	28	28	41	—	—
Comparative Literature	36	32	26	—	—
Economics	43	46	53	—	—
English	44	48	39	—	—
History	43	37	42	—	—
Political Science	45	37	39	—	—
Philosophy	42	38	42	—	—
Sanskrit	8	8	5	—	—
Library and Information Science	57	—	—	—	—
TOTAL	346	274	287	—	—
B.Sc.					
Chemistry	36	32	27	—	—
Geological Science	22	23	21	—	—
Mathematics	31	44	34	—	—
Physics	24	27	27	—	—
TOTAL	113	126	109	—	—
B.E.					
Architecture	21	16	14	14	—
Chemical Engg.	55	28	30	28	—
Civil Engg.	91	64	57	55	—
Electrical Engg.	99	77	74	66	—
Electronics & Tele-Com. Engg.	36	28	25	26	—
Food Tech. & Bio-Chem. Engg.	8	15	11	—	—
Instrumentation Electronics	20	21	23	—	—
Mechanical Engg.	101	72	83	49	—
Metallurgical Engg.	25	6	9	15	—
Pharmacy	54	27	10	20	—
Computer Sc. & Engg.	29	21	—	—	—
Production Engg.	21	18	19	22	—
TOTAL	560	393	355	295	—
B.E. (Evening)					
Electrical Engg.	29	29	28	29	30
Mechanical Engg.	31	29	34	32	30
Civil Engg.	31	33	32	28	29
TOTAL	91	91	94	89	89

2. Post Graduate Courses

Name of the Course offered	STUDENTS ON ROLL 1st Year	2nd Year	3rd Year
M.A.			
Bengali	35	46	
Comparative Literature	28	32	
Economics	32	56	
English	55	48	
History	45	56	
International Relation	51	48	
Philosophy	35	34	
Sanskrit	13	23	
TOTAL	294	343	
M.A. (Evening)			
Economics	No. admission	21	36
Bengali	,,	51	39
English	,,	54	56
History	,,	36	55
Philosophy	,,	18	30
Sanskrit	,,	14	9
TOTAL	—	194	225
M.Sc.			
Applied Geology	13	17	21
Chemistry	23	23	—
Mathematics	48	31	—
Physics	23	19	—
TOTAL	107	90	21
M.Sc. (Evening)	1st Year	2nd Year	3rd Year
Chemistry	No admission	21	25
Mathematics	,,	23	49
Physics	,,	29	23
TOTAL	—	73	97
M.E. Degree			
Architecture	5	5	—
Chemical Engg.	19	5	—
Civil Engg.	15	12	—
Electrical Engg.	20	13	—
Electronics & Tele-Com. Engg.	13	19	—
Food Tech. & Bio-Chem. Engg.	2	5	—
Mechanical Engg.	20	12	—
Metallurgical Engg.	7	2	—
Pharmacy	20	22	—
TOTAL	121	95	—

Name of the Course offered	STUDENTS ON ROLL 1st Year	2nd Year	3rd Year
M.E. Diploma			
Chemical Engg.	5	—	—
Civil Engg.	4	—	—
Electrical Engg.	4	—	—
Elec. & Tele-Com. Engg.	2	—	—
Food Tech. & Bio-Chem. Engg.	3	—	—
Mechanical Engg.	3	—	—
TOTAL	21	—	—

STUDENTS POPULATION AT A GLANCE (1982-83)

		Nos.
(a) University Teaching Departments		
3 Year B.A. (Hons.) Course in Arts Subjects	..	850
2 Year M.A. Courses in Arts Subjects	..	637
3 Year M.A. (Evening) Courses in Arts Subjects	..	419
3 Year B.Sc. (Hons.) Courses in Science Subjects	..	348
2 Year M.Sc. Courses in Science (excluding Applied Geology)	..	167
3 Year M.Sc. Courses in Applied Geology	..	51
3 Year M.Sc. (Evening) Courses in Science	..	170
4 Year degree Courses in Engineering	..	1603
5 Year Part-time (Evening) degree Course in Engineering	..	454
2 Year P.G. Course in Engineering	..	216
1 Year P.G. Diploma Courses in Engineering	..	21
2 Year M. Phil. Courses	..	45
1 Year Library and Information Science degree Course	..	57
	TOTAL	5038
(b) Affiliated Colleges		
Home Science Courses	..	259
Bachelor of Education Courses	..	282
	TOTAL	541

FOREIGN STUDENTS / SCHOLARS ON ROLL (1982-1983)

Scheme under which the Students/ Scholars are sponsored	Country of Domicile	At the end of the Session
Govt. of India Scholarship for the National of Bangladesh	Bangladesh	2
General Cultural Scholarship, Govt. of India	Uganda	1
Technical Cooperation Scheme, Colombo Plan, Govt. of India	Nepal	5
General Cultural Scholarship Scheme, (Govt. of India, Ministry of Education & Culture)	Sudan	1
Private		
	Iran	2
	Bangladesh	1
	Egypt	1
	Mauritius	2
	Jordan	2

POPULATION OF RESEARCH SCHOLARS DURING 1982-1983

Authority	Department	Type of fellowship			Total
		SRF	JRF	RA	
University	Physics	—	1	—	1
	Mathematics	—	1	—	1
	Chemistry	—	10	—	10
	Food Tech.	—	2	—	2
	Chemical Engg.	—	6	—	6
	Sanskrit	—	1	—	1
	Pharmacy	—	3	—	3
	Computer Centre	6	6	—	12
	International Relations	1	9	—	10
	Geological Science	—	7	—	7
	Philosophy	—	12	—	12
	TOTAL	7	58	—	65
C.S.I.R.	Chemistry	3	9	—	12
	Physics	—	1	1	2
	Mathematics	1	4	1	6
	Geological Science	1	—	1	2
	Pharmacy	2	6	1	9
	Food Tech.	4	—	—	4
	Mechanical Engg.	2	—	—	2
	Electrical Engg.	1	—	—	1
	E.T.C.E.	3	—	—	3
	TOTAL	17	20	4	41
U.G.C.	Physics	1	5	—	6
	Chemistry	5	8	2	15
	Mathematics	2	8	—	10
	Geological Science	—	9	—	9
	History	—	4	—	4
	Com. Literature	—	2	—	2
	Bengali	—	2	—	2
	International Relation	—	3	—	3
	Economics	1	3	—	4
	Sanskrit	—	3	—	3
	Philosophy	—	2	—	2
	English	—	1	—	1
	Food Tech.	1	3	—	4
	Chemical Engg.	—	3	—	3
	Pharmacy	2	17	—	19
	Architecture	—	3	—	3
	Electrical Engg.	—	2	—	2
	E.T.C.E.	—	3	—	3
	Mechanical Engg.	—	2	—	2
	TOTAL	12	83	2	97

FOREIGN STUDENTS / SCHOLARS ON ROLL (1982-1983)

Scheme under which the Students/ Scholars are sponsored	Country of Domicile	At the end of the Session
Govt. of India Scholarship for the National of Bangladesh	Bangladesh	2
General Cultural Scholarship, Govt. of India	Uganda	1
Technical Cooperation Scheme, Colombo Plan, Govt. of India	Nepal	5
General Cultural Scholarship Scheme, (Govt. of India, Ministry of Education & Culture)	Sudan	1
Private		
	Iran	2
	Bangladesh	1
	Egypt	1
	Mauritius	2
	Jordan	2

POPULATION OF RESEARCH SCHOLARS DURING 1982-1983

Authority	Department	Type of fellowship			Total
		SRF	JRF	RA	
University	Physics	—	1	—	1
	Mathematics	—	1	—	1
	Chemistry	—	10	—	10
	Food Tech.	—	2	—	2
	Chemical Engg.	—	6	—	6
	Sanskrit	—	1	—	1
	Pharmacy	—	3	—	3
	Computer Centre	6	6	—	12
	International Relations	1	9	—	10
	Geological Science	—	7	—	7
	Philosophy	—	12	—	12
	TOTAL	7	58	—	65
C.S.I.R.	Chemistry	3	9	—	12
	Physics	—	1	1	2
	Mathematics	1	4	1	6
	Geological Science	1	—	1	2
	Pharmacy	2	6	1	9
	Food Tech.	4	—	—	4
	Mechanical Engg.	2	—	—	2
	Electrical Engg.	1	—	—	1
	E.T.C.E.	3	—	—	3
	TOTAL	17	20	4	41
U.G.C.	Physics	1	5	—	6
	Chemistry	5	8	2	15
	Mathematics	2	8	—	10
	Geological Science	—	9	—	9
	History	—	4	—	4
	Com. Literature	—	2	—	2
	Bengali	—	2	—	2
	International Relation	—	3	—	3
	Economics	1	3	—	4
	Sanskrit	—	3	—	3
	Philosophy	—	2	—	2
	English	—	1	—	1
	Food Tech.	1	3	—	4
	Chemical Engg.	—	3	—	3
	Pharmacy	2	17	—	19
	Architecture	—	3	—	3
	Electrical Engg.	—	2	—	2
	E.T.C.E.	—	3	—	3
	Mechanical Engg.	—	2	—	2
	TOTAL	12	83	2	97

Authority	Department	Type of Fellowship SRF	JRF	RA	Total
Other than U.G.C. and C.S.I.R.	Mathematics	—	1	—	1
	Chemistry	1	7	1	9
	Pharmacy	1	5	1	7
	Food Tech.	5	5	4	14
	Geological Science	2	2	1	5
	Physics	—	1	—	1
	Electrical Engg.	4	1	—	5
	Economics	—	1	—	1
	TOTAL	13	23	7	43

	Department	Sanctioned Post
Pool Officers C.S.I.R.	Metallurgical Engg.	1
	Chemical Engg.	1
	Chemistry	1
	Mathematics	4
	Electrical Engg.	1
	Civil Engg.	1
	TOTAL	9
Teachers Trainee (Sponsored by the Govt. of India	E.T.C.E.	8
Teachers Trainee (University)	Different Departments	9
	TOTAL	17
	GRAND TOTAL (of all categories)	272

DIFFERENT TYPE OF SCHOLARSHIPS PAID DURING THE FINANCIAL YEAR 1982-83.

Sl. No.	SOURCE	No. of Scholarship	Men	Women	Rate of Stipend/Scholarship P.M./P.A.	Amount Paid during 82-83
1	2	3	4	5	6	7
					Rs.	Rs.
	Other States Scholarship :					
1.	Andaman and Nicober Stipend	3	2	1	125/- p.m.+passage fare	3860.00
2.	Jammu and Kashmir Govt. Loan Scholarship	1	1	—	2999/- p.a.	2999.00
3.	Mizoram State Scholarship	6	5	1	112.50 p.m.	1350.00
4.	Sikkim State Stipend	1	1	—	300.00 p.m.	900.00
5.	Nagaland Stipend	2	2	—	300.00 p.m.+allowances	2100.00
6.	**Meghalaya Govt.**					
	(a) National Scholarship	5	2	3	170.00 p.m.	6,220.00
	(b) Post-Matric-Scholarship	1	1	—	185.00 p.m.	4440.00
7.	**Orissa Govt.**					
	(a) Tech. Education and Training Scholarship	5	5	—	1200.00 p.m.	7200.00
	(b) Sr. College Merit Scholarship	1	—	1	50.00 p.m.	1050.00
	(c) National Scholarship	2	2	—	120/- to 170/- p.m.	2030.00
	(d) National Loan Scholarship	1	1	—	80.00 p.m.	2160.00
8.	**Tripura Govt.**					
	(a) Merit-cum-Means Scholarship	6	5	1	175.00 p.m.	8800.00
	(b) Girl Stipend	1	—	1	30.00 p.m.	540.00
	(c) Post Matric Scholarship (L.I.G.)	3	2	1	130.00 p.m.	2457.00
9.	**Assam Govt.**					
	(a) National Scholarship	2	1	1	170.00 p.m.	2755.00
	(b) Sr. State Scholarship	2	—	2	65.00 p.m.	1300.00
	(c) Engg. Merit Scholarship	7	6	1	250.00 p.m.	15325.00
10.	North Eastern Council Secretariat	21	20	1	300.00 p.m.+allowances	58458.05

Sl. No.	SOURCE	No. of Scholarship	Men	Women	Rate of Stipend/Scholarship P.M./P.A.	Amount Paid during 82-83
1	2	3	4	5	6	7
					Rs.	Rs.
11.	**Govt. of West Bengal**					
	(a) National Scholarship	189	160	29	B.A./B.Sc. 60/- to 90/- p.m. and 100/- to 140/- for Hosteller Engg. and P.G. 120/- p.m. 170/- for Hosteller	
	(b) National Loan Scholarship	140	112	28	U.G. Arts and Sc. D.S. Rs. 540/-p.a. Rs. 720/- Hosteller, P.G./Arts and Science Rs. 675/- D.S. Rs. 900/- Hosteller Engg. D.S. 727/- and Hosteller 970/-	234580.00
	(c) N.S. (Teachers' son)	3	3	—	As per N.S. Scholarship	124141.00
	(d) S.C./S.T. Scholarship	36	28	8	Rs. 125/- to 185/- p.m. (about)	2940.00
12.	**Foreign Scholarship**					45300.00
	(a) Govt. of India Scholarship for the National of Bangladesh	2	2	—	Rs. 400/- p.m.+allowances	11940.05
	(b) General Cultural Scholarship Govt. of India	1	1	—	Rs. 400/- p.m.+allowances	6000.00
	(c) Indo-Yugoslav Cultural Exchange Programmes	1	—	1	Rs. 600/- p.m.+allowances	2756.70
	(d) Colombo Plan	5	3	2	Rs. 500/- p.m. +allowances	35733.35
13.	**Govt. of India Scholarship**					
	(a) Cultural Talent Search Scholarship	1	—	1	Rs. 50/- p.m.+Tution fees	800.00
	(b) National Talent Search Scheme	11	9	2	Rs. 200/- p.m.+allowances	22700.00
	(c) U.G.C.'s Special Assistance Scheme for M.A. Philosophy	4	3	1	Rs. 250/- p.m.	12472.30
	(d) U.G.C.'s Special Assistance Scheme for M.Sc. applied Geology for 3rd yr. students	23	21	2	Rs. 250/- p.m.	41000.00
	(e) **West Bengal Govt.** Director of Tech. Edn. Scholarship for Physically Handicapped	2	2	—	Rs. 125/- p.m.+Readers allowances	3576.00
	(f) Special Stipend (D.P.I.)	1	—	1	Rs. 25/- p.m.	300.00

Sl. No.	SOURCE	No. of Scholarship	Men	Women	Rate of Stipend/Scholarship P.M. / P.A.	Amount Paid during 82-83
1	2	3	4	5	6	7
					Rs.	Rs.
14.	**Internal Stipend (J.U.)**					
	(a) Anusilan Samity	3	3	—	Rs. 250.00 p.a.	750.00
	(b) G. Verma Memorial	1	1	—	Rs. 360.00 p.a.	360.00
	(c) C. C. Bose Memorial	1	1	—	Rs. 180.00 p.a.	180.00
	(d) S. R. Mundra Memorial	1	1	—	Rs. 600.00 p.a.	600.00
	(e) S. M. Bose Stipend	7	7	—	Rs. 250.00 p.a.	1750.00
	(f) C. C. Mitra Scholarship	1	—	1	Rs. 270.00 p.a.	270.00
	(g) Dwijendra Memorial Scholarship	14	12	2	Rs. 325.00 p.a.	4550.00
	(h) N. C. Law Stipend	2	1	1	Rs. 400.00 p.a.	800.00
	(i) C. S. Neogi Stipend	2	2	—	Rs. 180.00 p.a.	360.00
	(j) N. C. Neogi Stipend	1	1	—	Rs. 180.00 p.a.	180.00
	(k) K. K. Acharjee Stipend	1	—	1	Rs. 600.00 p.a.	600.00
	(l) G. K. Bose and K. M. Bose Stipend	2	2	—	Rs. 75.00 p.a.	150.00
	(m) R. P. Majumder Memorial Award	1	1	—	Rs. 350.00 p.a.	350.00
	(n) S. N. Nandan Stipend	2	2	—	Rs. 225.00 p.a.	450.00
	(o) Kunja Kusum Scholarship special on Joint Entrance Examination '79	4	3	1	Rs. 850.00 p.a.	5950.00
	K. K. Scholarship on Joint Entrance Examination '79 on stand	2	2	—	Rs. 350.00 p.a.	700.00
	(p) Alumni Association U.S. chapter	2	2	—	Rs. 280.00 p.a.	560.00
15.	**Scholarship from other Bodies of India**					
	(a) S. J. Jindal Trust	1	1	—	Rs. 150.00 p.m.	1800.00
	(b) Matri Sangha Janakalyan Ashram	3	1	2	Rs. 125.00 p.m.	375.00
	(c) Jagadish Bose National Science Talent Research	1	1	—	Rs. 250.00 p.m.	3000.00
	(d) Dr. K. Nath Public Trust	3	3	—	Rs. 50.00 p.m.	2200.00
	(e) Educational Assistance from Roan Consolidated Mines Ltd., Zambia	1	1	—	Educational Assistance for 1982-83	11972.85
					TOTAL	706091.30

EXAMINATION RESULTS

1982—1983

Faculty	Courses	No. Appeared	No. Passed	No. Incomplete	Failed
ARTS	B.A. (all subjects)	204	194	2	8
	B.A. (Home Science)	25	25	—	—
	B.Ed. (Phy.)	64	63	—	1
	B.Ed. (Edn.)	218	213	—	5
	B.Ed. (Home Science)	9	9	—	—
	M.A. (all subjects)	248	210	18	20
	M.A. (Edn.)	21	20	—	1
SCIENCE					
	B.Sc. (all subjects)	88	67	9	12
	M.Sc. (all subjects)	116	69	28	19
ENGG. & TECH.					
	B.E. (all subjects)	234	232	—	2
	B. Pharmacy	35	35	—	—
	B.Tech.	30	30	—	—
	B.E. (Evening)	87	76	5	6
	P.G. Degree	69	43	18	8
	M. Pharmacy	20	20	—	—
	M. Tech.	4	2	1	1
	P. G. Diploma	1	1	—	—
	M. Tel. E.	1	1	—	—
	P. G. Diploma (Elec.)	4	1	2	1
	Computer Science	9	3	2	4
D. Sc. (Science)		1	1	—	—
PH.D.					
	Arts	25	25	—	—
	Engg.	5	5	—	—
	Pharmacy	7	7	—	—
	Science	30	30	—	—
M. Phil.		1	1	—	—

RECEIPTS AND PAYMENTS ACCOUNTS FOR THE YEAR 1982-83

RECEIPTS AND PAYMENTS ACCOUNTS FOR THE YEAR 1982–83

RECEIPTS	Rs. (in lakhs)	Rs. (in lakhs)
A. Recurring		
1. Maintenance grant received:		
(*a*) State Govt.—Non Plan	487.61	
(*b*) University Grants Commission—Plan	14.15	
—Non-Plan	15.32	
		517.08
2. Fees from Students:		
(*a*) Tuition fee	7.97	
(*b*) Examination fee	2.61	
(*c*) Other fees	4.30	
		14.88
3. Seat rent from Hostel Boarders	..	1.20
4. Rent from buildings and staff quarters	..	1.37
5. Stipend and Scholarship	..	6.92
6. Pension Fund	..	4.75
7. Grant from Govt. of India/U.G.C./C.S.I.R. and other authorities sponsoring different research schemes/projects	..	48.39
		594.59
B. Non-Recurring:		
(*a*) Non-Plan		
State Govt.	3.26	
Other sources	2.55	
		5.81
(*b*) Plan		
University Grants Commission	..	5.00
		10.81
GRAND TOTAL		605.40

PAYMENTS	Rs. (in lakhs)	Rs. (in lakhs)
A. Recurring		
1. Salaries and Allowances:		
(*a*) Teaching Staff	100.48	
(*b*) Non-Teaching Staff	79.49	
(*c*) Allowances to Staff	126.56	
(*d*) Provident Fund and Pension	14.59	
(*e*) Overtime payment to non-teaching Staff	4.61	
		325.73
2. Students Activities	..	6.64
3. Hostels	..	10.30
4. Library (including Staff)	..	9.27
5. Examination (including Staff)	..	9.17
6. Lab. Teaching and Working Expenses	..	15.69
7. Journals and Books	..	5.52
8. Health Centre (including Staff)	..	1.23
9. University Press (including Staff)	..	2.11
10. Post Graduate Fellowship	..	12.55
11. (*a*) Departmental Research Expenses	8.19	
(*b*) Sponsored Research Scheme/Projects	46.09	
		54.28
12. Repair of buildings, installation and equipment	..	21.34
13. Extension Lectures/Seminers etc.	..	1.64
14. Advertisement, Printing and Stationery, Electricity, Telephone and other expenses	..	33.73
15. Stipends and Scholarship	..	7.06
		516.26
B. Non-Recurring:		
(*a*) Non-Plan:		
(*i*) Equipment	1.33	
(*ii*) Books and Journals	5.50	
		6.83
(*b*) Plan:		
(*i*) Building	12.04	
(*ii*) Equipment, Furniture and Books	12.77	
		24.81
		31.64
C. Balance Carried over		57.50
GRAND TOTAL		605.40

NOT TO BE LENT OUT

NO NELLE OTTO

NOT TO BE LENT OUT

