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(iii) *Technical Reports*

1. Majumdar, B. : Optimum Frequency of Bath Change as Pickling.
2. — : Effect of Temperature and Residence Time on MF1 and its variability.
3. — : Simulating the characteristics of Alternative Decision Rules.
4. — : Variation in Weight of soap and its control.
5. Top Management Appreciation Seminar Manual (Tribeni Tissues Ltd.).
6. Middle Management In-plant Training Course Manual (Tribeni Tissues Ltd.).
7. Chakraborty, T. K. : Wald-Wolfwitz Type Sampling Plan for Control of continuous Production Processes and to achieve a limit on the outgoing quality.

(iv) *Manual/ Note*

1. 'Industrial Experimentation' for Executive Programme on Orthogonal Array Experimentation.
2. Course Note on 'Process Control Technique' for the Training programme of the IAQR, Trivandrum Branch.
3. Course Note on 'Fits & Tolerance' for the training programme of the IAQR, Trivandrum Branch.
4. Course Note on 'Process Capability Analysis' for the training programme of the IAQR, Trivandrum.
5. Training Course Manual on 'SQC & OR' (with Textile Application).
6. Manual on 'Operative Training Programme on Defect Prevention' at M/s. Palani Andavar Mills Ltd. in Tamil language.
7. Manual on 'Operative Training Programme on Defect Prevention' at M/s. Rajapalayam Mills Ltd. in Tamil language.
8. Manual on 'Operative Training Programme on Defect Prevention' at M/s. Kerala Lakshmi Mills in Malayalam language.
9. Manual for Training Programme on 'SQC in Engineering Industries' at M/s. Lakshmi Machine Works.

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10. Majumdar, A. & Sengupta, S. : Course manual on 'Induction Programme on Statistical Quality Control for W1 Staff of Vehicle Factory, Jabalpur'.
11. — : Course manual on 'Orientation Course in SQC for Officers, VFI'.
12. Top Management Appreciation Seminar Manual (Tribeni Tissues Ltd.).
13. Middle Management In-plant Training Course Manual (Tribeni Tissues Ltd.).
14. Middle Management In-plant Training Course Manual (Bokaro Steel Plant).
15. Training Course Manual on 'Orthogonal Array Experimentation for M/s. Tata Engg. & Locomotive Co. Ltd., Jamshedpur.
16. Training Course Manual on SQC in Marathi for M/s. Kirloskar Oil Engines Ltd., Pune.
17. Training Course Manual on SQC for M/s. Electronics & Electricals Ltd., Pune.
18. Training Course Manual on SQC for Evening Course on SQC held during 3-5 Aug. 1981 and 6-10 Aug. '81.
19. Training Course Manual on Quality Appreciation Programme for Managers of M/s. Peico Electronics & Electricals Ltd., Pune.
20. Training Course Manual on SQC in Marathi for M/s. Kirloskar Oil Engines Ltd., Pune.
21. Training Course Manual on SQC for Evening Course on SQC held during 15-25 March 1982.

(v) *Technical Note/Paper*

1. Iyer, V. Narayana : Reporting Systems for Mechanical Maintenance Section of Fertiliser unit.
2. Majumdar, B. : Optimum Frequency of Bath Change as Pickling.
- 3.— : Effect of Temperature and Residence Time on MF1 and its variability.
4. — : Economic lot Size for Glass wares.
5. Rau, Y. R. : Application of Statistical Theory of tolerancing to an assembly problem.

### E. Documentation Research and Training Centre

1. Bhattacharyya, G. (1981) : Essence of POPSI. (Course material prepared for the Training Course in Indexing, sponsored by DESIDOC (New Delhi) and held in Bangalore during 6-16 May.
2. Ravichandra Rao, I. K. : An application of Bradford's Law of Scattering (with A. K. Chatopadhyay). (DRTC Technical report). (Bibliometric series).

### Part II. Convocation, Visiting Scientists, Honours and Awards, Scientific Tours and Assignments.

#### 6. Sixteenth Convocation

The sixteenth Convocation of the Indian Statistical Institute held on 6 February 1982, was presided over by Shri Subimal Dutt, President of the Institute. Professor J. V. Narlikar, Professor and Head, Theoretical Astrophysics Group, Tata Institute of Fundamental Research, Bombay delivered the Convocation Address on "Statistical Techniques in Astronomy". Dr. B. P. Adhikari, Director of the Institute, presented the annual review of research, teaching and training.

The number of candidates awarded Ph.D., M.Stat. and B.Stat. (Hons.) Degrees, Statistician's Diploma and Post-Graduate Diplomas in Applied Statistics and Certificates to Trainees at the International Statistical Education Centre, Calcutta, is given below.

Degrees/Diplomas/Certificates	Number of candidates
Doctor of Philosophy (Ph.D.)	10
Master of Statistics (M.Stat.)	30
Bachelor of Statistics (Honours) (B.Stat.) (Hons.)	25
Post-graduate Diplomas in Applied Statistics :	
(i) Advanced Diploma in Computer Science, Calcutta	12
(ii) Statistical Quality Control and Operation Research, Calcutta	5
(iii) Statistical Quality Control and Operation Research, Delhi	6
(iv) Statistical Quality Control and Operation Research, Bombay	5
(v) Statistical Quality Control and Operation Research, Madras	10
Associateship in Documentation and Information Science, Bangalore	8
Professional Examinations in Statistics :	
(i) Senior Diploma in Statistics	1
(ii) Junior Diploma in Statistics	4
ISEC Regular Courses	27
ISEC Special Courses	4
<b>Total</b>	<b>147</b>

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*Annual Review by Dr. B. P. Adhikari, Director :*

Mr. President, Mr. Chairman, Professor Narlikar, students receiving degrees and diplomas, distinguished guests, colleagues of the scientific disciplines and the administration, may I present before you a brief account of our activities during the last one year. Summaries of teaching, research and allied activities are given in the following pages, and I shall only mention some salient points.

As regards teaching, the Institute has been recognised as one of the premier centres of the teaching of computer science with particular reference to statistical software in the country by the Electronics Commission and requests have been made to us to expand our courses in this area. To start with, we have elevated the two-year advanced diploma in computer science to the level of an M.Tech. degree and shall consider further expansion and diversification in the future. Our summer courses are always very successful and of profit to participants, and a summer course was held at Bangalore in certain selected areas of statistics. There is an ever-increasing demand on us for training in Statistical Quality Control and Operational Research. Apart from the numerous regular and in-plant courses offered by us in these fields, we have started a six-month evening course at Hyderabad for the benefit of the surrounding industrial area.

All our scientific divisions have continued their research and consultancy work with usual devotion and vigour in their individual and collective fields of interest. Besides, our scientists are developing increased contacts with other professional bodies through seminars, conferences, membership of technical committees and groups, etc. Also, research projects are being undertaken for the benefit of or under the sponsorship of user organisations or research funding bodies. In the area of sample surveys, the Department of Tourism has entrusted us with a large all-India survey of foreign tourists, and the Rural Electrification Corporation is negotiating with us about extensive project evaluation and cost benefit studies. It may be mentioned that surveys on such complex subjects give rise to interesting problems of survey methodology, which is the point of interest to the Institute. The study already undertaken by us on the immunology of malaria, sponsored by the Indian Council of Medical Research, is likely to see elaboration and expansion through contacts already established with the National Institute of Communicable Diseases and the National Malaria Eradication Programme. Epidemiology is one of the most exciting areas of application of statistics and probability, and we hope that our interdisciplinary team will be able to produce interesting results. Another new and interesting area of application of statistics is in earthquake prediction. The seismological laboratory of the North Eastern Council is collaborating with us in formulating statistical models on the basis of data supplied by them. In the field of electronics and its applications, while one project on continuous patient-monitoring systems is proceeding towards completion, two others are under active consideration of the Department of Science and Technology. One of them, bearing on the subject of pattern recognition, has been proposed in collaboration with four other

Indian groups actively working in the area. The second relates to automated meteorological data recording system for use by the Damodar Valley Corporation. In the field of molecular biology, jointly with Bose Institute, we have submitted a project proposal for further study of pheromones in tigers and leopards. In the area of Statistical Quality Control and Operational Research apart from demands for training, the number of industrial organisations using our expertise to solve their problems has significantly increased.

Some of our colleagues have won high scientific recognition during the year. Three of them, Professors S. K. Mitra and J. K. Ghosh in statistics and Professor S. Sengupta in geology, have been elected Fellows of the Indian National Academy of Sciences. Professor Ghosh is also this year's recipient of the Shanti Swarup Bhatnagar Memorial Award (in the mathematical sciences) of the Council of Scientific and Industrial Research. Our young colleague, Dr. S. M. Srivastava has received the Young Scientists' Award of the Indian National Science Academy.

The most significant set of activities of the year, apart from normal teaching, research and consultancy, as briefly described above, of course, consists of those in connection with the Golden Jubilee celebrations of the Institute. As most of you know the celebrations were formally inaugurated by Smt. Indira Gandhi, Prime Minister of India, on the 29th of December last on which day she also spent some time meeting the heads of our units of scientific research. Of the seven international conferences and a few smaller seminars and symposia announced as part of the celebrations, five conferences and one symposium have already taken place. The conferences at Calcutta were on Statistics, Review of the Indian Planning Process, Advances in Information Science and Technology and Human Genetics and adaptation. At Bangalore we had a conference on Random Fields and their Applications and Symposium of Economic Theory and Planning. Delhi will hold a conference on Quality, Reliability and Operational Research during the current month, followed by a symposium on Price and Distribution Controls in the Indian Economy. The seventh conference on Frontiers of Research in Agriculture is scheduled to take place during the coming September-October. The convening of these conferences, reflecting work in several of the broad areas of interest of the scientists of the Institute, has been a wise decision in many ways. Each of the conferences has been excellent in quality judged by the international professional standards, and the proceedings of the conferences when published will constitute excellent state-of-the-art documents for researchers. The participation in each conference has been from the world over and many of the participants are the most well-known authorities in their subjects, among them being Noble Laureates and Fellows and Members of the most distinguished scientific societies and academies of the world. It has been of great benefit for our scientific groups to have had such collections of eminent scientists among them, to be able to gauge the value of their own work, be aware of the most current new lines of research and establish valuable scientific contact. The willing and massive response to the conferences from the international scientific community is also proof positive of the professional recognition and standing of the work of our scientists in the diverse fields in which the conferences have been organised. The proceedings also bear strong evidence of the importance of statistics in a wide variety of

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subjects and of the desirability of pursuing research in statistics and other disciplines in close proximity, justifying the motto "unity in diversity" of the Indian Statistical Institute. I sincerely hope that those who are entrusted with passing judgement on the work of the Institute to ponder over the desirability of diversity and the scientific advantages of catholicity of mind.

The last year, particularly the last few months when arrangements for the Golden Jubilee celebrations were under way, has meant stupendous scientific and organisational efforts from all sections of the workers of the Institute. The entire body of workers has risen to the occasion as one man and, whether in the organisation of the conferences or in the transformation of the campus, the quiet efficiency and sincerity shown by all my colleagues has been exemplary, and I am thankful to all. My particular thanks are due to my colleagues who have so successfully coordinated the conferences. My special thanks are due to the Statistical Publishing Society which has not only brought our prestigious journal, *Sankhya*, up to date, but also undertaken and completed a number of publications in record time. May I also thank the ISI Club for organising excellent cultural evenings for the participants of each conference. To me personally it has been a matter of great privilege to have been associated with the Golden Jubilee celebrations of this Institute of which we are so proud, and I shall always remember with joy the part which has been successful, while taking the responsibility for that which has not.

Apart from the enormous scientific activity, we have had some beneficial events for our workers during the year. We are shortly going to undertake the first stage of the construction of quarters for the low-paid staff in Calcutta, for which architects have been appointed. After a long wait we have finally been able to announce the Pension-General Provident Fund-Gratuity scheme for those workers who would opt for it. We have almost completed the fifth and sixth floors of the composite library building and hope to begin the construction of a hostel building for senior students and scholars. With two more floors of the library building complex and an administrative block, the non-residential needs at the headquarters would be largely satisfied. This would still leave us with the acute problem of residential quarters, emphasised by us repeatedly over the years, and we hope that Government will appreciate the problem and provide us with funds.

Shouldering the responsibility of the management of the Institute for the last two and a half years, I can say with confidence that, given cooperation and a strong will to work towards the fulfilment of the objects of the Institute, we can achieve a great deal not only in scientific work but also in improving the conditions of service of workers and providing the Institute with increased infrastructural facilities. If these conditions prevail the Institute will prosper and no harm will come to it. I invite all workers and students to continue in this effort.

In the end, I would like to thank our President and Chairman for their counsel and guidance. My particular thanks are for Shri P. N. Haksar, our Chairman whose

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requests and quiet persuasion on our behalf has helped us in so many matters. I am also thankful to the ISIWO which, while working for the improvement of the conditions of service of workers, has shown great appreciation of the need for cooperation, tranquility and performance of one's duty.

### 7 Visiting Scientists

A number of distinguished scientists from abroad participated in the research, training and other scientific activities of the Institute during the year. Some of them came to the Institute on invitation and spent fairly long periods at the Institute to assist in the regular research and teaching programme and some came for short periods on different assignments for giving lectures and participating in conferences and seminars. There are, in addition, a number of scientists who participated in the golden jubilee celebration of the Institute.

Prof. George Andrews, Department of Statistics, Pennsylvania State University, Pennsylvania, U.S.A. (11.10.81 to 14.10. 81).

Prof. D. Basu, Florida State University, Tallahassee, USA. (23.10.81—28.10.81)

Prof. M. L. Chaudhury, Royal Military College, Kingston, Canada (10.7.81)

Prof. E. B. Dynkin, Department of Mathematics, Cornell University, USA.

Prof. F. Eieker, ART Math, Stat. The University, Dortmund, N. Germany—(22.9.81 to 26.9.81).

Dr. Malay Ghosh, Department of Statistics, Iowa State University, U.S.A.—(10, 12, 16 and 18 May '81).

Prof. Yoshiki Ito, *Inst. of Stat. Math.*, Tokyo, Japan—(December '81—February 1982).

Prof. C. G. Khatri, Department of Statistics, University of Gujarat, Ahmedabad (28.3.82—30.3.82).

Prof. Renn Laskur, Clemson University, Clemson, U.S.A.

Shri S. Mandal, School of *Math.*, T I F R, Bombay (27.5.81)

Prof. R. D. Mauldin, North Texas State University, Denton, Texas, U.S.A.—(1.7.81—26.7.81).

Prof. J. B. Mookus, Department of Theory of Optimal Decision, Inst. of Mathematics and Cybernetics, Lithuanian Academy of Sciences, U.S.S.R.—(2.11.81—24.12.81).

Dr. Ryozo Miura, Osaka City University, Osaka, Japan—(December 81—January 82).

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Prof. M. N. Murthy, Statistical Institute for Asia & the Pacific, Tokyo, Japan—(21.7.81).

Dr. U.S.R. Murthy, University of Waterloo, Canada—(19.10.81—23.10.81).

Dr. A. A. Novikov, Steklov Mathematical Institute, Academy of Sciences, U.S.S.R.—(8—16 May, 1981).

Professor J. Sethuraman, Department of Statistics, Florida State University, Florida, U.S.A.

Dr. Jaya Srivastava, Colorado State University, Colorado, U.S.A.—(31 March, 1981—2 April, 1981).

Dr. Abdus Samad, General Demography Section, Population Division, ESCAP, Bangkok (27 April 1981). *Seminar* : Source Availability and Quality of Mortality Data in Some Asian Countries.

Shri C. N. Rao, Florida State University, U.S.A. (13 June '81) *Talk* : First Passage Time Distribution for a class of Mark Chains.

Dr. Utpal Banerjee, Computronics India, New Delhi (10 September, 1981). *Talk* : Operations Research and Computers.

Professor E. V. Krishnamurthy, Indian Institute of Science, Bangalore (19 September 1981). *Talk* : Parallel Computation of  $G$ -inverse and Rank of a Matrix.

Professor M. N. Das, ICAR, New Delhi (10 September, 1981). *Seminar* : Main Effects Plans.

Dr. R. N. Shil, Bangladesh Agricultural University (18 September, 1981). *Talk* : Some observations on Galois Field.

Professor F. Eicker, Department of Mathematics and Statistics University of Dortmund, W. Germany (22 September, 1981). *Talk* : Some Statistical Methods in Evaluating the Performance of a Computer System.

Professor Yoshiaki Itch, Institute of Statistical Mathematics, Tokyo. *Talk*: Random Collection Model for Population Biology.

Professor J. B. Mockus, Department of Theory of Optimal Decision, Institute of Mathematics and Cybernetics, Lithuanian Academy of Sciences, Vilnius, USSR (December, 1981). *Talk* : Bayesian Approach to Global Optimization.



Professor J. C. Gower, Rothamstead Experimental Station, (16-20 December, 1981).  
*Seminar* : Statistical Computing (17 December, 1981).

Professor R. Darrell Bock, University of Chicago, U.S.A. (16-20 December, 1981).

Professor Rolf B. Bargmann, University of Georgia (USA) (16-20 December, 1981).

Dr. Ashis Sen Gupta, University of Wisconsin, Madison, USA (30 December, 1981). *Talk* : Test for Clusters with Multi observations of Possibly Different Dimensions.

Dr. Q. M. Rahman, University of Dacca, Bangladesh (30 December, 1981).  
*Seminar* : Statistical Activities in Bangladesh.

Professor Vondrachek, Mathematical Institute, Czechoslovakian Academy of Science (January, 1982). *Talk* : On Clustering Techniques.

Professor Geofray Kullick, Department of Computer Science, Queen's University, Canada (17 June, 1981). *Lecture* : Automated Processing of Chest Radiographs, 3-Dimensional Position Tomography and Computers in Medical Sciences.

Professor K. S. FU, Goss Professor of Engineering, School of Electrical Engineering, Purdue University, USA (5-11 January, 1982). Delivered a series of lectures from 6 to 8 January, 1982 in the pre-conference tutorial arranged by ECSU on Pattern Recognition and Image Analysis.

Professor Azriel Rosenfeld, Computer Vision Laboratory, University of Maryland, USA (5-11 January, 1982).

Dr. Morton Nadler, Consciller Scientifique, INRIA, France (10-15 January, 1982). *Lecture on Hybrid Pattern Recognition : A Synthesis of Numerical and Qualitative Approaches in the International Conference on Advances in the Information Sciences and Technology, 11-14 January, 1982.*

Dr. P. A. Devijver, Philips Research Laboratory, Belgium, (9-16 January, 1982). *Lecture on Hybrid Recognition : A Synthesis of Numerical and Qualitative Approaches in the International Conference on Advances in the Information Sciences and Technology, 11-14 January, 1982.*

Dr. V. Pollak, University of Saskatchewan, Canada (10-15 January, 1982).

Dr. Hidemitsu Ogawa, Tokyo Institute of Technology, Japan (10-14 January, 1982).

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Dr. J. S. Counells, University of San Francisco, USA (10—16 *January*, 1982).

Dr. D. Braggins, Cambridge Instrument Inc., England (10—15 *January*, 1982).

Professor S. N. Mitra, Rookri University.

Professor S. S. Agarwal, Ceeri, Pilani.

Dr. N. D. Mitra, Geological Survey of India, Calcutta (26 *November*, 1981).  
*Seminar* : Problems of Gondwana Geology.

Dr. L. P. Tatarinov, USSR Academy of Sciences and Institute of Palaeontology, Moscow (29 *December*, 1981—2 *January*, 1982). *Seminar* : Palaeontological research in the USSR on 1 *January*, 1982).

Dr. James D. Howard, Skidaway Institute of Oceanography, Georgia, USA (1 *February*—11 *March*, 1982).

Mr. Nguyen Hoa, Population Department, General Statistics Office, Socialist Republic of Vietnam, as leader of a delegation consisting of MR. TRAN VAN CLUEN AND MR. NGUYEN VAN PHAI (24—25 *April*, 1981).

Professor Asok Mitra, Jawaharlal Nehru University, Delhi (12 *November*, 1981).

Mr. Joseph B. Kadane, Department of Statistics, Carnegie Mellon University, Pittsburgh, USA (18 *January*, 1982).

Mr. Delwar Hossain, Bangladesh Bureau of Statistics (24—26 *February*, 1982).

Dr. N. P. Chaubey, Indian Institute of Mass Communication, New Delhi (19 *March*, 1982).

Professor T. Lancaster, University of Hull, U. K. (17 *July*, 1982). *Lecture* : Simultaneous equations with endogenous hazards.

Professor John Pollard, New University of Ulster, North Ireland (23 *March* 1982).  
*Seminar* : Some personal factors influencing in agricultural production in Trinidad, West Indies.

Professor N. H. Stern, University of Warwick, England (11 *March* 1982). *Seminar* : Nutrition and measurement of poverty : sceptical thoughts and some positive suggestions.

Professor Henrik Forsius, M. D., Department of Ophthalmology, University of Oulu, Finland (20 October 19 November, 1981).

Dr. C. R. Rao, F.R.S., Department of Mathematics and Statistics, University of Pittsburgh, U.S.A.

Professor H. R. Bahadur, Department of Statistics, The University of Chicago, U.S.A.

Professor G. Kallianpur, Department of Statistics, The University of North Carolina at Chapel Hill, U.S.A.

Professor G. M. Wilkinson, Waite Agricultural Research Institute, South Australia.

Professor P. K. Sen, Department of Bio-Statistics, The University of North Carolina at Chapel Hill, U.S.A.

Professor Persi Diaconis, Department of Statistics, Stanford University, U.S.A.

Dr. E. Sundgren, National Central Bureau of Statistics, Sweden.

Professor Elizabeth Scott, Department of Statistics, University of California, U.S.A.

Professor Sir John Hicks, Nobel Laureate, Professor Emeritus, All Souls College, U. K.

Professor T. N. Srinivasan, Economic Growth Centre, Yale University, U.S.A.

Professor Rahman Sobhan, Bangladesh Institute for Development Studies, Bangladesh.

Professor Mosharref Hossein, University of Dacca, Dacca.

Professor Kiyosi Ito, Department of Mathematics, Gakushuin University, Japan.

Professor Takeyuki Hida, Department of Mathematics, Nagoya University, Japan.

Dr. D. S. Prasada Rao, University of New England, Australia. *Lecture ; International comparison of purchasing power of currencies.*

Professor Sakti P. Ghosh, IBM T. J. Watson Research Centres, U.S.A.

Professor E. J. Neuhold, Institute for Informatik, West Germany.

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Professor M. D. Levine, Department of Electrical Engineering, McGill University, Montreal, Canada.

Dr. E. Backer, Department of Electrical Engineering, Delft University of Technology, Netherlands.

Professor W. K. Giloi, Institute for Technische Informatik Technische Universität, Berlin, West Germany.

Dr. D. C. Gadjusek, Chief, Laboratory of Central Nervous System Studies, National Institute of Neurological and Communicative Disorders and Stroke, National Institute of Health, U.S.A.

Professor G. Ainsworth Harrison, Department of Biological Anthropology, University of Oxford, U. K.

Professor Sukhamay Lahiri, Asstt. Director, Institute for Environmental Medicine, University of Pennsylvania, U.S.A.

Professor M. NEI, Centre for Demographic and Population Genetics, The University of Texas, U.S.A.

Professor Donald Heath, The George Holt Professor of Pathology, Royal Liverpool Hospital, England.

Dr. J. D. Haas, Division of Nutritional Sciences, Cornell University, U.S.A.

Dr. R. M. Garruto, Central Nervous System Studies Laboratory, National Institute of Neurological and Communicative Disorders and Stroke, National Institute of Health, U.S.A.

Professor D. Gale, Nordisk Kollegium, Denmark.

Professor P. R. Brahmananda, University of Bombay, Bombay. *Lecture* ; Some explorations in macroeconomic modelling.

Shri G. S. Sathya, Fairchild Corporation, U.S.A. *Lecture* ; Managing productivity and planning for growth in high technology companies.

Professor D. U. Sastry, Institute of Economic Growth, Delhi. *Lecture* ; Capital surrogates and the production function : some results based on Indian cotton mill industry.

Dr. U. L. Gouranga Rao, Dalhousie University, Canada. *Lecture* ; On the unbiasedness of the Swamy's estimator for the random coefficient regression model.

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Professor S. K. Ekambaram, Institute for Statistical and Managerial Studies, Madras. *Lectures* ; Drought relief in Karnataka through rainfall in Western Ghats. Forecasting for business and for the monsoon.

Professor Angus B. Deaton, University of Bristol, UK, *Lectures* ; The modern theory of optimum taxation (5 lectures). Applied consumer demand analysis (4 lectures)

Professor T. Krishna Kumar, Indian Institute of Management, Bangalore. *Lecture* : On the estimation of probability density function.

Dr. Vinod Vyssulu, Indian Institute of Management, Bangalore. *Lecture* ; The Orissa Aluminium Project : Points for debate.

Professor B. N. Sarkar, Indian Statistical Institute, Calcutta. *Lecture* ; The Population Control Planning.

Dr. Clive Bell, World Bank, USA. *Lecture* ; Tenancy, Markets and Public Policy in Indian agriculture.

Prof. J. R. Hicks, All Souls College, Oxford. UK. (Dec. 1981—Jan 1982)

Prof. A. K. Sen. All Souls College, Oxford. UK. (Dec. 1981—Jan 1982).

A. E. Granovsky, The Institute of Oriental Studies, U.S.S.R.

J. Benard, France.

U. Hicks, U.K.

A. T. A. Learmonth, U.K.

K. S. Parikh, Austria.

S. M. Kanbur, USA.

B. Singh, USA.

Dr. Lennert Sandholm, Consulting and Training in Quality and Reliability Assurance, Bjorkland & Sandholm, Sweden (3 November 1981).

Dr. K. G. Murthy, Industrial and Operations Engineering, University of Michigan, U.S.A. (7—20 February 1982). Presided over a technical session of the ISI golden jubilee conference on Quality, Reliability and Operations Research. Also conducted a training programme on advanced linear programming.

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Dr. Salah E. Elmagraby, Operations Research Program, North Carolina State University, USA (*February-March 1982*). Presided over a technical session of the golden jubilee conference on Quality, Reliability and Operations Research. Also delivered lectures on selected OR topics to the participants of Staff Development Programme.

Prof. David Gale, International Institute for Applied System Analysis, A 2361 Luxemburg, Austria (*18 February—5 March 1982*). Presided over a technical session of the Golden Jubilee Conference on Quality, Reliability and Operations Research. Also delivered lectures to the participants of Staff Development Programme.

### 8. Honours, Awards and Special Assignments

Dr. J. Roy (*Applied Statistics, Surveys & Computing*) continued to represent the Institute in the Governing Council of the National Sample Survey Organisation (NSSO). He also served as the Chairman of the NSSO Working Group on Acceleration of Data Processing.

Dr. B. N. Mukherjee (*Applied Statistics, Surveys & Computing*) continued to serve as (a) Chairman of the Human Relations Research Advisory Committee, Ahmedabad Textile Industries Research Association, Ahmedabad (b) Member, Advisory Committee of the Planning Research, Evaluation and Monitoring (PREM) Cell of Lutheran World Service, Calcutta (c) Member, Educational Research Innovation Committee (ERIC) of National Council of Educational Research and Training, New Delhi.

Shri Durgoprasad Bhattacharya (*Pre-Census Population Studies*) continued to serve as (i) Member, Indian Historical Records Commission, (ii) Member, Committee on Historical Statistics of the Indian Council of Social Science Research (ICSSR), (iii) Member-Secretary, Committee of Direction, Evaluation of Land Reforms in West Bengal sponsored by the Board of Revenue. (iv) Secretary, Socio-Economic Research Institute, (v) President and Government nominee, Entally Academy, Calcutta, (vi) Editor, Bulletin of the Socio-Economic Research Institute, (vii) Hony. Co-Director, ICSSR Project on Sociological Writings in Bengali, 1818-1947.

Sm. Rama Deb Roy (*Pre-Census Population Studies*) was nominated as a Member of the Committee of Direction, Evaluation of Land Reforms in West Bengal and was re-elected as a Joint Secretary, Socio-Economic Research Institute.

Dr. K. C. Malhotra (*Anthropometry & Human Genetics*) has been appointed (1) a member of the editorial board of (i) International Journal of Dermatoglyphics (ii) Bionaturalist (iii) Ind. J. Physical Anthropology and Human Genetics, (2) a member of Advisory Commission on Human Genetic Research in India, Ind. Soc. of Human Genetic and (3) a member of the (a) International Commission on Nomadic Peoples, and (b) International Commission on Food. He was a visiting UGC Fellow. He was honoured by the Maharashtra Dhangar Samaj Unnoti Mandal at Kolhapur on *March 20, 1982* for his research work among the Dhangar peoples of Maharashtra. He

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continued to serve as a council member of the Indian Society of Human Genetics and appointed external examiner for Ph.D. dissertation of Saugar University and Andhra University. and M.Phil dissertation of Patiala University.

Professor S. K. Roy (*Botany*) has been appointed a member of the State Council. for Adaptive Research in Agriculture, Government of West Bengal, on July 24, 1981.

P. K. Tapaswi (*Embryology*) has been awarded the Ph.D. (*Science*) degree in Mathematics from the Jadavpur University at the convocation held in December, 1981.

Professor A. Sen (*Electronics*) has been serving as a member of the Science and Technology Committee of the Government of West Bengal since July, 1978.

Shri Asoke Das (*Theoretical Physics*), Lecturer, Scottish Church College, Calcutta, who worked under the supervision of P. Bandyopadhyay has been awarded the Ph.D. degree of the Calcutta University for his thesis entitled 'Nucleon-Nucleon Potential and Neutron-Proton Charge Exchange Reaction'.

Dr. G. Bhattacharyya (*Documentation Research and Training Centre*) was in Moscow as the leader of the Indian delegation for information science, sent by the Government of India on an invitation from the USSR State Council for Science and Technology during the period of 22-30 August 1981. Dr. Bhattacharyya left on 21 August 1981 and returned on 2 September 1981.

Professor J. K. Ghosh (*Stat-Math*) was elected a Fellow of the Indian National Science Academy. He was awarded the Shanti Swarup Bhatnagar Award for his outstanding contributions to Statistics.

Dr. S. M. Srivastava (*Stat-Math*) was awarded the Indian Science Academy medal for Young Scientists.

### 9. Scientific Tours and Assignments Abroad

Dr. J. Roy (*Computer Science*) acted as an adviser on survey methods and data processing in connection with the evaluation of a rural development project in Nepal Kathmandu and visited on several occasions.

Dr. T. Krishnan (*Computer Science*) visited the University of Western Australia where he delivered a series of talks on Discriminant Analysis.

Dr. Parimal Mukhopadhyay (*Computer Science*) visited the Department of Mathematics and Statistics of Carleton University, Ottawa in the first week of April 1981. He also visited the University of Waterloo, Canada. On his way back home he stopped over for some time in Technical University, Holland.

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Shri Taresh Maltra (*Computer Science*) on being invited by I.L.O., went to Bangkok in May 1981 and participated in a seminar organised by the ILO's Asian Regional Team for Employment Promotion.

Shri R. K. Naha (*Computer Science*) visited Moscow, Minska and Kazan in USSR for receiving managerial training in connection with EC-1033 computer. He also visited the Computer Centres in London University, Oxford University and Imperial College of Science and Technology in United Kingdom from 23 August to 2 September 1981.

Dr. B. P. Sinha and Dr. P. K. Srivani (*Electronics*) returned in May 1981 after completing their Humboldt fellowship at the Informatik Kollege, G.M.D.

Dr. R. K. Roy Chaudhuri (*Electronics*) had been to Durham University, U.K., for nine months during the year and participated in a project to calculate phaseshifts in electron and hydrogen, helium and higher atoms based on pseudo states.

Shri P. Bandopadhyay (*Electronics*) attended the International Conference on high Energy Physics and Nuclear Structure in July 1981 at Versailles, France. He also attended the International Conference on Cosmic Rays in Paris and visited the International Centre for Theoretical Physics, Trieste in 1981.

Shri S. Roy (*Electronics*) went abroad to participate in discussions in the Department of Mathematics in Toronto University and in seminars and discussions in Institute Matematica in Rome University.

Dr. B. B. Chaudhuri (*Electronics and Communications Science*) went abroad for ten months to work on a project. Some Studies on Image Processing and Pattern Analysis Problems in the Queen's University of Belfast, Ireland. He received Liverhulm Fellowship.

Dr. S. L. Jain (*Geological Studies*) attended the 41st Meeting of the Society of Vertebrate Paleontology at Ann Arbor Michigan, USA from 28 to 31 October 1981 and presented a paper on 'New Material of Upper Cretaceous Fishes from Central India'.

Dr. S. L. Jain (*Geological Studies*) left for USA on 19 September 1981 to work at the Carnegie Museum of National History Pittsburgh under Visiting Museum Specialists Programme of the Museum. He worked on a small sauropod dinosaur braincase, jointly with David S. Berman. He was also invited as a consultant by the Texas Tech University, Lubbock, Texas, 17-23 November 1981. He visited National History Museum at Houston (Texas), Museum of Paleontology, Ann Arbor, Michigan and American Museum of Natural History, New York, Dr. Jain also received a British Council visitorship award for stay in London, 16-22 December 1981 to work at the British Museum (*Natural History*). London. He returned on 26 December 1981.



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Dr. S. L. Jain delivered invited lectures in USA at the following centres : (1) Department of Biostatistics, University of Pittsburgh, Pittsburgh, 10 November 1981 (2) Carnegie Museum of Natural History, Pittsburgh, 11 November 1981 ; (3) Genetics and Evolutionary Biology Section, University of Texas, Health Science Centre at Houston, 16 November 1981 ; and (4) The Museum, Texas Tech. University, Lubbock, Texas, 19 November 1981.

Dr. Sankar Chatterjee (Geological Studies) who continued to be on leave abroad during the year, was selected to participate in the U.S. Antarctic expedition 1981-82. During the expedition the team discovered fossilised remains of a small marsupial, the size of a rat, in addition to several new taxa of fish and reptile remains. This is the first time that any mammal remains have been found in Antarctica.

Dr. C. R. Malakar and Sri S. Guha Roy (*Demography*) were invited by the International Union for the Scientific Study of Population (IUSSP), Liege Belgium and participated in its XIXth General Conference in Manila during 9-16 December, 1981 and each of them presented a paper.

During 20 April—10 May 1981 Dr. A. Basu (*Anthropometry*) gave invited lectures at the Intercongress of the International Union of Anthropological and Ethnological Sciences in Amsterdam, The Netherlands and Department of Anthropology, Durham University, U.K. He also visited the Department of Human Genetics, University of New Castle upon Tyne, U.K.

During 29 December 1981-20 January 1982 R. Gupta (*Anthropometry*) gave invited lectures at (a) Departments of Ophthalmology and Gynaecology, University of Oulu, Finland (b) Institute of Work Physiology University of Dortmund, West Germany and (c) Institute of Anthropology, University of Torino, Turin, Italy. He also visited the Department of Public Health Sciences and Paediatrics University of Oulu, Finland.

Dr. K. C. Malhotra (*Anthropometry*), gave invited lectures at the International Union of Anthropological and Ethnological Sciences Inter Congress at Amsterdam, Holland, April 22-25 1981. He also gave invited lectures at the University of Ifnburg, Bremen and Meidedberg in W. Germany from 26 April to 30 April 1982, and at the universities of New Castle upon Tyne and Durham in UK from 4-9 May 1982.

Dr. K. C. Malhotra (*Anthropometry*) left for USSR on August 22, 1981 and visited Institutes of Ethnography at Moscow, Leningrad, Tbilisi and Yerevan. During his visit he finalized the editing of the results of the 3rd joint Indo-Soviet Anthropological expedition in north-western India (1977-79), held discussions regarding the 4th field expedition and gave a series of lectures. He left Moscow on September 19 for Athens, Greece to participate in the International Symposium on Dermatoglyphic Methodology held at Athens, 22-25 September 1981. At this meeting he gave an invited paper on progress in palmar ridge counts, presented a contributory paper and carried a session. He returned to India on 26 September 1981.

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Shri S. M. Sunara Raju (*SQC & OR*) continued to be on a UNIDO assignment in Iraq.

Dr. J. K. Ghosh (*Stat-Math*) visited the Pittsburgh University, Pittsburgh, USA from 21.5.81 to 30.5.81 and worked on a problem of third order efficiency. He attended the 3rd Purdue Symposium on Statistical Decision Theory and Related Topics and delivered a lecture on "Expansion for the Posterior and the Integrated Bayes Risk" on 4.5.81. The Symposium was held from 1.5.81 to 5.5.81. He also visited the Indiana University.

Dr. K. P. S. Bhaskara Rao (*Stat-Math*) visited (a) University of Napoli, Italy on invitation during September-December 1981 and delivered a series of lectures on the Theory of Charges, (b) University of Lecce, Lecce, Italy and gave two lectures on Ranges of Charges, (c) Danish Mathematical Society, Copenhagen, Denmark and gave a lecture on Borel spaces, (d) Mathematical Institute of the University of Copenhagen, Copenhagen, Denmark and gave a lecture entitled Ranges of Charges.

Dr. S. B. Rao (*Stat-Math*) spent the period 23 September 1980 to 18 December 1981 teaching and doing research at Department of Mathematics, Ohio State University, Columbus, Ohio, U.S.A.

Dr. A. K. Roy (*Stat-Math*) spent the period July-September 1981 teaching and doing research at McMaster University, Hamilton, Canada. During this period, he gave some invited lectures at the University of Windsor and McGill University, Montreal, Canada.

Dr. S. M. Srivastava (*Stat-Math*) attended a conference on Measure Theory at the Mathematical Institute, Oberwolfach, West Germany from June 21 to June 25, 1981. The tour was sponsored by the Mathematical Institute at Oberwolfach.

### 10. Scientific Assignments in India

Shri Arup Bose (*Stat. Math.*) attended the IFIP Conference on the theory and application of Random Fields held at Bangalore from 4-9 January 1982.

Dr. B. S. Majumder (*Stat. Math.*) attended the 26th Congress of Indian Society of Theoretical and Applied Mechanics (ISTAM) held at Coimbatore Institute of Technology, Coimbatore, December 28-31, 1981 and presented a joint paper with B. S. Dandapat entitled "Unsteady free and forced convective diffusion through a channel. He also attended the IYTH CASAM-CU National Research Symposium held on 25-26th March 1982 at Calcutta.

Dr. A. B. Raha (*Sat. Math.*) attended the Symposium on Recent Advances in Topological and Bitopological Spaces held at Delhi University from December 27-30,

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1981 sponsored by the University Grants Commission and gave a talk entitled "Some covering properties and their relationship with closed projections.

Dr. G. M. Saha (*Stat. Math.*) attended the 35th Annual Conference of the Indian Society of Agricultural Statistics, held at I A S R I, New Delhi during December 28, 1981 to December 30, 1981. He presented two papers at the Conference entitled (1) A note on the analysis of balanced incomplete multiresponse designs (with R.K. Mitra), and (2) A construction of balanced arrays of strength and some related incomplete block designs (with B. K. Samanta).

Dr. Pradip Kumar Sen (*Stat. Math.*) attended the ISI-IFIP Conference on Theory and Applications of Random Fields in Bangalore, January 4-8, 1982.

Dr. K. Sikdar (*Stat. Math.*) attended the 1st Conference on Foundation of Software Technology and Theoretical Computer Science held in Bangalore from 11-12 December 1981 and presented a paper "On the complexity classes and optimal algorithms for Parallel Evaluation of Polynomials.

Dr. T. P. Tripathi (*Stat. Math.*) attended the 35th Annual Conference of the Indian Society of Agricultural Statistics, held at I.A.S.R.I, New Delhi, during December 28, 1981 to December 30, 1981. He presented two papers at the Conference entitled (1) A class of estimators for coefficient of variation using knowledge on the C. V. of an auxiliary character (with A. K. Das), (2) Estimation of population ratio on two occasions using multivariate auxiliary information (with T. K. Chaturvedi).

Dr. J. Roy (*Applied Statistics, Surveys and Computing*) presented one paper on A stepwise procedure for choosing a subset of variables for discrimination at the conference on Mathematical Statistics : Applications and New Directions held in Calcutta from 16 December to 20 December 1981.

Biswa Nath Mukherjee (*Applied Statistics, Surveys and Computing*) presented one paper on A Simple Approach for Analysis of a class of Covariance Structures at the Conference on Mathematical Statistics : Applications and New Directions held in Calcutta from 16 December to 20 December 1981.

A. C. Mukhopadhyay and Sunanda Mukhopadhyay (*Applied Statistics, Surveys and Computing*) presented one paper on Optimality of Block Designs in Multiway Setting at the Conference on Mathematical Statistics : Applications and New Directions held in Calcutta from 16 December to 20 December 1981.

Arijit Chaudhuri (*Applied Statistics, Surveys & Computing*) Presented one paper on A note on optimal model sampling strategies with Different Inferential Approaches at the Conference on Mathematical Statistics : Applications and New Directions held in Calcutta from 16 December to 20 December 1981.

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T. Mathew, P. Bhimasankaram and B. K. Sinha (*Applied Statistics, Surveys, & Computing*) presented one paper on Some observations on the estimation of error variance under non-normal set up at the Conference on Mathematical Statistics : Applications and New Directions held in Calcutta from 16 December to 20 December 1981.

Subir Bandyopadhyay (*Applied Statistics, Surveys and Computing*) presented one paper on A Data Base for Time Series Data to the International Conference on Advances in Information Sciences and Technology, held on the occasion of Golden Jubilee celebration from 11-14 January 1982.

C. H. Sastry (*Applied Statistics, Surveys & Computing*) presented one paper on A Project for an Interactive System of Data Base Development and Information Retrieval to the International Conference on Advances in Information Sciences and Technology held on the occasion of Golden Jubilee Celebration from 11-14 January 1982.

Abhijit Sengupta (*Applied Statistics, Surveys & Computing*) presented one paper on SDMS—A Statistical Data Base Management System to the International Conference on Advances in Information Sciences and Technology held on the occasion of Golden Jubilee Celebration from 11-14 January 1982.

Sri Anirban Basu (*Applied Statistics, Surveys & Computing*) presented one paper on High Speed computation on Pipelined Process in the International Conference on Communication, Circuits and Systems held in ISI, Calcutta in December 1981.

Dr. Shibdas Bandyopadhyay (*Applied Statistics, Surveys & Computing*) presented the papers at the ISI Golden Jubilee Conference on Human Genetics and Adaptation, 1-5 February, 1982. i) A Statistical model-based-comparative-study of interrelationship between G-6-PD and HBS in a Mahar Population inhabiting three geographically different 'zones' in Maharashtra, India, ii) Spatial and social variation in sickle-cell trait, G-6-PD deficiency and Malaria in North Maharashtra : A preliminary report.

Dr. A. K. Chaudhuri (*Geological Studies*) served as external examiner for two M.Sc. theses in Geology of Jadavpur University.

Shri T. S. Kutty (*Geological Studies*) served as Member of a team in an I.S.I. project on earthquake prediction.

Dr. S. L. Jain (*Geological Studies*) continued to serve as Chairman of the Gondwana Vertebrate Paleontology Working Group set up by the Subcommission on Gondwana stratigraphy under the International Union of Geological Sciences. The group represents 28 members from ten countries. Dr. Jain was also appointed an external examiner for a Ph.D. thesis of Lucknow University ; he delivered the Centenary lecture of Burdwan Raj College, Burdwan, on 3 Feb. 1982 ; he was invited by the Editors of World Dinosaur Encyclopaedia (Avon Books, U.S.A. and Canada) to contribute an article on dinosaurs of the Indian subcontinent and Marquis Who's Who Inc., Chicago

invited him to contribute his biographical sketch for the sixth Edition of "Who's Who in the world" (93rd year of publication) to be published in late 1982.

A. B. Gupta (*Physics*) attended the XII Biennial Conference of Indian Association of Leprologists, sponsored by Indian Association of Leprologists, Agra, September 9-12, 1981. Participated, on invitation, in the proceedings of the Conference.

A. B. Gupta (*Physics*) attended the Xth National Conference of Dermatologists, Hyderabad, January 3-6, 1982, sponsored by Indian Association of Dermatologists, Venereologists and Leprologists, presented a paper on the tensile properties of normal human skin

Dr. A. Bessu (*Anthropometry*) participated in (a) the Annual Conference of Haematology and Blood Transfusion, Calcutta 11-13 December 1981 (b) Annual Conference of the Indian Society of Human Genetics, Pune 26-28 November 1981 (c) Organised as a coordinator the ISI Golden Jubilee Conference on Human Genetics and Adaptation, Calcutta, 1-10 February 1982, and (d) Participated in a workshop organised by the National Institute of Health and Family Welfare, New Delhi, 24-27 March 1982.

R. Gupta and B. Mukhopadhyay (*Anthropometry*) participated in the 8th Annual Conference of the Indian Society of Human Genetics, Pune 26-28 November 1981.

R. Gupta, B. Mukhopadhyay and P. Bharati (*Anthropometry*) participated in the ISI Golden Jubilee Conference on Human Genetics and Adaptation, Calcutta 1-10 February 1982.

Dr. K. C. Malhotra (*Anthropometry*) attended (i) VIII annual conference of the Indian Society of Human Genetics, Pune, November 1981 and presented 4 papers (ii) participated in the Golden Jubilee Conference on Human Genetics & Adaptation, February 1-5, 1982 at ISI, Calcutta and presented 4 papers, (iii) participated in the DOE sponsored Indo-US workshop on management and conservation of natural resources, IJSC, Bangalore 2-3 March, 1982, gave an invited lecture and chaired a session (iv) participated in the DOE sponsored Non-Governmental Organizations conference, New Delhi, 12-14 March 1982 and presented a paper, (v) participated in the symposium on Action Research sponsored by Ind. Inst. of Public Administration, New Delhi 15-16 March 1982 and presented a paper, and (vi) participated in the workshop on population Genetics and Health care, sponsored by NIFPW, New Delhi 24-27, March 1982 and chaired a session.

B. N. Mukherjee (*Anthropometry*) attended the 22nd Annual Conference of Indian Society of Haematology and Blood transfusion, held at Calcutta during 11-13 December 1981 and read a paper "Genetic study of a Nomadic tribe Kuruvikkarans, of Andhra Pradesh and Tamil Nadu, India.

B. N. Mukherjee (*Anthropometry*) attended 8th Annual Conference of the Indian Society of Human Genetics and the International Symposium on Early diagnosis and

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prevention of disability, held at Pune during 27-28 November 1981 and read the following papers (i) Widespread distribution of LDH variants in various ethnic groups of India. (i) Biochemical genetic studies in the tribal population of India : Its relevance with the planning of health strategies.

B. N. Mukherjee (*Anthropometry*) attended the conference on Human genetics and Human adaptation in the Golden Jubilee celebration of Indian Statistical Institute, held in Calcutta during 1-5 February 1982, and read the paper 'Spatial and social variation in sickle cell trait, G-6PD deficiency and Malarial incidence in North Maharashtra a preliminary report.

Professor S. K. Roy (*Botany*) attended the National Workshop on Betelvine 1982 during March 4-6, 1982, sponsored by the West Bengal Science and Technology Committee, State Department of Agriculture, Bidhan Chandra Krishi Viswa Vidyalaya, University of Calcutta and Jadavpur University. He also acted as a member of the Organizing Committee, Convener of the Technical and Publication Sub-Committees of the workshop.

Dr. N. Bhattacharya (*Economic Research Unit*) continued to serve as ISI representative on Governing Council of NSS Organisation, Govt. of India, served as Chairman/Member of several working groups set up by this Governing Council. He also served on Steering Committee and served on Expert Working Groups of Road User Cost Study Project of Central Road Research Institute, New Delhi, Dr. Bhattacharya served on a two;-member team invited by the Govt. of Tripura to review the activities and organisation of the Directorate of Statistics and Evaluation of Govt. of Tripura. He visited Agartala in September 1981 and submitted a report to the Govt. in October 1981 suggesting steps for development and reorganisation of the said organisation. He served as chairman of a Technical Committee set up by the Govt. of W. Bengal to examine proposals for mixed tram and bus services in the Salt Lake area. The Committee submitted its report in August 1981.

D. K. Bose (*Economic Research Unit*) has been a member of the Committee for Annual Power Survey. The report for the 11th Annual Power Survey was completed during the period. He has been nominated a member of the Commission for Planning of Higher Education in West Bengal set up by the State Government.

Dr. Bina Roy (*National Income Research*) submitted a paper on Sharing gains in Productivity in India jointly with Sm. Pranati Datta to the Annual General Conference of the Indian Labour Economic Society held at Jamshedpur in October 1981.

Professor Muni Mukherjee, Dr. N. Bhattacharya, Dr. Bina Roy, Dr. Krishna Mazumdar, Shri Somesh Saha and Sm. Pranati Datta (*National Income Research*) attended the 13th General Conference of IARNIW held at Bhubaneswar in December '81-January '82. Professor M. Mukherjee organized a Session on Monetization of the Conference. The participants named above contributed a number of papers to the Conference.

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Dr. N. Bhattacharya (*National Income Research*) was elected as a member of the IARNIW.

Dr. N. Bhattacharya, Prof. M. Mukherjee, Dr. Bina Roy, Dr. Krishna Mazumder, Sm. Pranati Datta, Sri S. Saha (*National Income Research*) participated in the Golden Jubilee Celebrations Seminar of the Indian Statistical Institute on "Review of the Planning Process" held in Calcutta in January 1982.

Dr. Bina Roy and Dr. Krishna Mazumder, Sm. Pranati Datta, Sm. Sunanda Chakraborty and Swagata Guptn (*National Income Research*) participated in the Golden Jubilee Celebrations Seminar on "Population Control Planning".

Dr. Krishna Mazumder (*National Income Research*) submitted a paper on An inter-class time series analysis in sharing gains in productivity of manufacturing industries (with Dr. B. Bhattacharya) to the General Conference of the Indian Labour Economic Society held at Jamsledpur in October 1981.

Dr. Krishna Mazumder (*National Income Research*) attended the Conference on Urbanisation held at the Department of Economics, Calcutta University, in November 1981 and presented two papers on Changes in structure of the urbanisation of big cities in inter-sectoral comparative analysis (with Dr. B. Bhattacharya of ERU) and Measurement of the Degree of Urbanisation.

Smt. Praunti Datta (*National Income Research*) attended the Second Annual conference of Bangiya Parishad held in Rabindra Bharati University (Jorasanko Campus) and submitted a paper Infrastructure Development and regional Imbalances in India (with Kunal Chattopadhyay).

Durgaprasad Bhattacharya (*Pre-Consus Population Studies*) attended a Conference on Town and Municipal Development organised by the Centre for Urban Economic Studies of Calcutta University at Calcutta on November 20-21, 1981 and participated in discussion.

Durgaprasad Bhattacharya and Sm. Rama Deb Roy (*Pre-Census Population Studies*) attended the Seminar on Land Reforms in West Bengal on 26-27 March, 1982 organised by Asiatic Society at Calcutta. A paper was presented.

Durgaprasad Bhattacharya continued to serve as (i) Member, Indian Historical Records Commission, (ii) Member, Committee on Historical Statistics of the Indian Council of Social Science Research (ICSSR), (iii) Member-Secretary, Committee of Direction, Evaluation of Land Reforms in West Bengal sponsored by the Board of Revenue, (iv) Secretary, Socio-Economic Research Institute, (v) President and Government nominee, Entally Academy, Calcutta, (vi) Editor, Bulletin of the Socio-Economic Research Institute, (vii) Hon'y. Co-Director, ICSSR Project on Sociological Writings in Bengali, 1818-1947.

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Kunal Chattopadhyay (*Pre-Census Population Studies*) participated in the second Annual Conference of the Bangiya Arthaniti Parishad on the 6th & 7th February, 1982 at Calcutta and presented a paper.

Sm. Rama Deb Roy (*Pre-Census Population Studies*) was nominated as a Member of the Committee of Direction, Evaluation of Land Reforms in West Bengal and was re-elected as a Joint Secretary, Socio-Economic Research Institute.

Shri A. K. Dasgupta (*Sociological Research*) is working as a member, in an honorary capacity, in the committees: The State Advisory Committee on District Gazetteers; The State Archaeology Advisory Committee; The Regional Historical Records Committee; and The Advisory Committee on Permanent Gallery for Freedom Movement in Bengal.

Dr. J. Roy (*Applied Statistics, Surveys & Computing*) gave a talk on Computer in Management at Jamshedpur on 10 August 1981 on invitation from the Computer Society of India, Jamshedpur Chapter.

Dr. J. Roy (*Applied Statistics, Surveys & Computing*) gave two invited talks at the UNESCO regional course on Application of computers for development at the Indian Institute of Technology, Kanpur, December 11-12, 1981 on Computerisation of Survey Data Processing and use of computers in planning for national development.

Dr. Biswa Nath Mukherjee delivered a key-note address entitled 'Indicative Plans for Ranaghat Block II and Need for Building Institutions for the Poor' in Ranaghat on April 28, 1981 at a Seminar on Block Level Planning.

Dr. T. Krishna (*Applied Statistics, Surveys and Computing*) delivered a series of lectures on Discriminant Analysis and Computability while on a visit to the University of Western Australia.

Dr. Arijit Chaudhuri (*Applied Statistics, Surveys and Computing*) participated as a resource person for a Course on Recent Developments in Survey Sampling and delivered six lectures to ISS Officers in October, 1981, on invitation from Central Statistical Organisation, New Delhi. Dr. Chaudhuri also went to Marathwada University, Aurangabad as a Visiting Fellow under UGC scheme during February—March, 1982 in order to deliver a series of lectures on Sampling.

### 11. Eighty-eighth Birth-Anniversary of the Late Professor P. C. Mahalanobis

In memory of the late Professor P. C. Mahalanobis, founder of the Indian Statistical Institute, a meeting of the workers and students of the Institute was held in the Institute at Baranagar on Monday, 29 June 1981. Professor Sushil Kumar Mukherjee, former Vice-Chancellor of the Calcutta University and Kalyani University, addressed the gathering. Dr. B. P. Adhikari, Director of the Institute, presided over the meeting.



## 12. Golden Jubilee of the Institute

The Institute having completed 50 years on 17 December 1981, its golden jubilee was celebrated according to a programme as follows :

- (1) Inauguration of the celebrations by the Prime Minister.
- (2) Holding of a series of international conferences and publication of the proceedings of the conferences.
- (3) Publication of the history and activities of the Institute.
- (4) Establishment of the Mahalanobis Memorial Lecture Series.

The celebrations were inaugurated by Smt. Indira Gandhi in the Mango Grove of the Calcutta campus on 29 December 1981, at a meeting presided over by Shri Subimal Dutt, President of the Institute. Besides the Prime Minister, Shri S. B. Chavan, Minister for Planning, Shri Subimal Dutt, President of the Institute, Shri P. N. Haksar, Chairman of the Council of the Institute, Dr. C. R. Rao, Jawaharlal Nehru Professor, Dr. G. Kallianpur, former Director and Dr. B. P. Adhikari, Director, spoke at the meeting. Also present on the dais were Shri Pranab Mukherjee, present Minister of Finance, Shri A. B. A. G. Khan Chowdhury, Minister for Energy and Power and Shri Vikram Mahajan, Minister of State for Energy and Shri B. D. Pande, Governor of West Bengal.

Among the distinguished guests were representatives of Indian scientific organisations and consular representatives of different countries. Besides, official representatives of the Chinese and USSR Academy of Sciences and the Centre National De la Recherche Scientifique were present in the meeting.

After the inauguration meeting the Prime Minister had a 45-minute informal discussion with heads of scientific units and the delegates of the conference on Review of the Indian Planning Process which was to begin the next day.

Prior to the formal inauguration, on 17 December, the date of foundation of the Institute, a meeting of present and past workers of the Institute was held to remember the foundation date. Shri S. C. Roy, former Chairman of the Institute, Professor P. K. Bose, Dr. C. R. Rao, Dr. G. Kallianpur, Dr. R. R. Bahadur, Dr. G. N. Wilkinson of Adelaide and Reserve Bank of Australia, Shri Sital Chatterjee, Secretary of the ISIWO and Dr. B. P. Adhikari, Director, addressed the gathering.

The programme of international conferences drawn up extended over a period from 16 December 1981 to 1 October 1982, during which period seven conferences were scheduled to be held. During the year under review four conferences were held at

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headquarters, one in Bangalore and another in Delhi. All conferences were meticulously organised and had substantial national and international participation.

- (i) *Conference on Statistics ; Applications and New Directions, Calcutta, 16-19 December 1981*

Besides several distinguished participants from abroad, among whom were representatives of the Royal Society and Royal Statistical Society of U. K. and the Institute of Mathematical Statistics of the USA, almost all well-known Indian Statisticians, working in India or abroad, participated in this conferences. The total number of participants were 83, of whom 29 were from abroad.

- (ii) *Conference on Review of the Indian Planning Process, Calcutta, 30 December 1981—3 January 1982.*

This was the first conference of its kind to attempt a comprehensive review of the Indian planning process, particularly its economic aspects. The inaugural meeting of the conference was addressed by Shri S. B. Chavan, Minister for Planning, Shri P. N. Haksar, former Deputy Chairman of the Planning Commission and Chairman of the Institute, and Shri G. C. Bavaja, Secretary to the Department of Statistics as well as Finance. A distinguished participant from abroad was Professor Sir John Hicks, Nobel Laureate. His wife, Lady Ursula Hicks had also participated. In all there were 105 participants, of whom 11 were from abroad. A large number of distinguished economists, well-known for work on various aspects of planning, were present.

- (iii) *Conference on Theory and Applications of Random Fields, Bangalore, 4-10 January 1982.*

This conference, organised in collaboration with the International Federation of Information Processing (IFIP), was on a new area of probability theory, which has simultaneously a high level of mathematical sophistication and interesting applications. Several renowned probabilists of the world participated, among them being E.B. Dynkin, K. Ito, T. Hida, S.R.S. Varadhan and G. Kallianpur. There were 34 participants, of whom 20 were from abroad.

- (iv) *Conference on Advances in Information Sciences and Technology, Calcutta, 11 to 14 January 1982.*

This was also an extremely well-attended conference, with some of the foremost scientists in the different topics covered attending. There were 146 participants, of whom 11 were from abroad.

- (v) *Conference on Human Genetics and Adaptation, Calcutta, 1-5 February 1982.*

This conference organised in collaboration with the Indian Society of Human Genetics and the International Association of Human Biologists, was exceptional both

in the topic coverage as well as the level of participation, many renowned scientists having taken part. Among them was Dr. D. C. Gajdusek, Nobel Laureate. In all 86 scientists participated, of whom 36 were from abroad.

(vi) *Conference on Quality, Control, Reliability and Operation Research, Delhi, 18 to 20 February 1982.*

This was an extremely largely attended conference organised in collaboration with the Operational Research Society of India, with over 400 delegates, the majority being from a wide range of industries and a fair number from universities and other research institutions. Two eminent scientists from abroad also attended the conference. At the inaugural session the keynote address was delivered by Shri S. Samarapungavan, Chairman, Steel Authority of India Ltd. Shri P. N. Haksar, Chairman of the Council of the Institute and Dr. B. P. Adhikari, Director, addressed the session.

In all these conferences the scientists of the Institute participated actively and substantially. Except for the conference on Theory and Applications of Random Fields, whose proceedings will be published by the IFIP, the proceedings of all the other conferences will be published by the Institute. The work of finalisation of the texts, including refereeing and revision by authors, is well under way and the printing may begin by the end of May 1982.

Many scientists who participated in these conferences have, on their return, written in appreciation of the high scientific level of the conferences, the work done in the Institute in the different fields and the arrangements made for the participants.

Apart from the centrally organised conferences, two symposia had been organised : one at Bangalore on "Economic Theory & Planning, 3-5 December 1981 and the other at Delhi on "Price and Distribution Controls in the Indian Economy" from 22 to 23 February 1982. A third symposium will be held in Delhi, on "Women, work and society" from 22 to 23 September 1982.

*Publication of the history and activities of the Institute.*

A draft volume has been prepared by a group appointed by the Director, under the general guidance of Professor Moni Mukherjee. After a thorough re-editing of the draft, the final text will be sent to the press. It is difficult to say how long this process will take.

*Mahalanobis Memorial Lecture Series*

This series has been instituted to invite, once in every two year, an eminent scientist to deliver a series of lectures which would then be published. It is gratifying that Professor Samuel Karlin of Stanford University, a scientist of great renown who has made very significant contributions in theoretical and applied statistics and in pure mathematics, has agreed to be the first speaker of this series. His lectures will be held in January 1983.

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### *Response of scientific bodies to celebrations*

The Indian National Science Academy, the Department of Science & Technology, the Indian Council of Social Science Research, the Indian Council of Medical Research and the Reserve Bank of India were directly involved in the Golden Jubilee celebrations through the Heads of these organisations being members of the National Committee constituted by the Council, under whose auspices the celebrations have been organised. The International Federation of Information Processing, the International Association of Human Biologists, the Indian Society of Human Genetics and the Operational Research Society of India had collaborated in the organisation of some of the conferences. The President of the Indian Academy of Sciences had sent a message of goodwill. The Department of Science & Technology, the Indian Council of Medical Research, the Indian Council of Social Science Research and the University Grants Commission have made token contribution towards the expenses of pre-conference publications and internal travel of invited participants. Among foreign learned bodies, who have sent representatives to the inauguration and the conferences or have sent messages of goodwill are the Royal Society and Royal Statistical Society of the U. K., the National Science Academy and the Institute of Mathematical Statistics of the U.S.A., the Academy of Sciences of China, Czechoslovakia, German Democratic Republic and the U.S.S.R., and the Centre National de la Recherche Scientifique of France.

## PART III ADMINISTRATION AND OFFICE-BEARERS

### 13. General Administration

13.1 *Membership* ; During the year 48 persons were elected as ordinary members, and 14 ordinary members became life members. Two ordinary members resigned from membership. One ordinary member, one honorary life and two life members died. The membership position as on 31 March 1982 was 567 (ordinary member 412, honorary life member 2, life member 142 an institutional member 11). During the year 162 student members were enrolled.

13.2 *Annual General Meetings* ; One Annual General Meeting of the Institute was held on 23 December 1981.

13.3 *Council Meetings* ; Three meetings of the Council of the Institute were held during the year on 28 July, 29 September and 23 December 1981.

13.4 *Finance Committee Meetings* ; Two meeting of the Finance Committee were held during the year on 28 September and 22 December 1981.

A list of the names of the President of the Institute and Chairman and Members of the Council of the Institute together with the names of the members of the different committees is given in Chapter 13.

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13.5 *Institute Staff* : The following senior members of the staff have been functioning in the posts mentioned during the year :

- (1) Dr. B. P. Adhikari, M.Sc.(Cal, Dr. es Sc.(Paris), Director
- (2) Dr. Ambarish Ghosh, Dean of Studies.
- (3) Dr. K. R. Parthasarathy, Head of Delhi Centre.
- (4) Shri N. Srinivasan, Officer on Special Duty (Administration & Finance).

13.6 *New Appointments* : The following scientific staff joined the Institute during the year :

- (1) Dr. Biswanath Mukherjee, Professor, Computer Science Unit
  - (2) Dr. V. S. Sunder, Lecturer, Planning Unit, Delhi
  - (3) Dr. K. C. Majumder, Visiting Professor, Economic Research Unit
  - (4) Dr. Tapas Kr. Chandra, Lecturer, Stat-Math Division
  - (5) Shri K. Ganesh, Project Engineer, Bangalore Centre
  - (6) Shri Tapas Kumar Datta, Trainee Programmer, Computer Science Unit
  - (7) Shri Pal Chaudhury, Computer Engineer, Computer Science Unit
  - (8) Shri V. V. Iyer, Technical Officer, Gr. II, SQC Unit, Madras
  - (9) Shri Santanu Pramanik, Computer Engineer, Electronics and Communications Science Unit
  - (10) Shri S. B. Saha, D. P. Technician, Computer Science Unit
  - (11) Shri K. B. Goswami, Publications Officer, Publication Unit
  - (12) Shri R. K. Verma, Senior Translator, Library, Delhi Centre
- 13.7 *Retirement* : The following staff retired from the service of the institute :
- (1) Shri R. K. Verma, Senior Translator, Library, Delhi Centre
  - (2) Shri K. B. Goswami, Publications Officer, Publication Unit
  - (3) Shri H. K. Majumder, Senior Security Officer at headquarters

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13.8 *Resignation and termination of service* : The following staff left the Institute on resignation/termination of service :

- (1) Shri Asis Ranjan Basu, Technical Officer, SQC Unit, Bombay
- (2) Dr. T. A. Davis, Professor, Crop Science Unit
- (3) Dr. Pradip Srimani, Computer Engineer, Electronics Unit
- (4) Dr. Bimal Kumar Sinha, Associate Professor, Stat-Math Division
- (5) Dr. Subir Ghosh, Lecturer, Computer Science Unit
- (6) Shri S. A. Lakshminarayan, Computer Engineer, Computer Science Unit

13.9 *Staff position as on 31 March 1982* :

- (1) Scientific and Technical Group 481
- (2) Non-Scientific Group 1019

13.10 *Land and Construction*

(a) *Calcutta : Composite Library Building* : Civil engineering work for the fifth and sixth floors of the composite library building was completed by the end of the year. Contracts have been awarded for electrical installation and electrical wiring work in these two floors and also for plumbing and sanitary work. Messrs. Dey, Mitra and Co. were appointed contractors for electrical wiring work for a sum of Rs. 1,01,743.00. The plumbing and sanitary work was entrusted to Messrs. Bharat Sanitation Co. at a cost of Rs. 2,64,426.25.

Proposals were invited for wooden partitioning of the sixth floor. After considering the estimates given by the consulting architect firm it has been decided to take up the partitioning work departmentally. The partitioning work will be completed in eight months' time.

The Government has approved the proposal for construction of low paid staff quarters in Delux Garden. For this new project Messrs. Ghosh, Bose and Associates have been appointed as the consulting architect firm. Three blocks of sixteen units each have been planned for construction. The contract will be awarded soon.

(b) *Delhi* ; The work pertaining to the construction of B-2 quarters (six dwelling units) was completed. The electrical wiring and sanitary and plumbing work have also been completed and the quarters have been allotted for occupation.

(c) *Bangalore* ; The Government has cleared the proposal for construction of an academic block of the Bangalore Centre on the site belonging to the Institute. Messrs.

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K. P. Padmanabha and V. H. R. Naidu have been appointed as the consulting architect firm for the construction work. In the first phase of the work an academic block with 30,000 sq. ft. built-up area has been planned at an estimated cost of around Rs. 30 lakhs.

The contract has been awarded for the masonry compound wall on one side of the site. The other three sides have already been covered by barbed wire fencing. A stores-cum-office shed has been completed. Two bore wells have already been sunk within the campus area and fitted with pumps for providing water supply required for the construction work.

14. List of President, Chairman and Members of the Council  
Members of the Committees of the Council  
and Academic Council

*President* : Shri Subimal Dutt, ICS (Retd.)

*The Council*

1. *Chairman* : Shri P. N. Haksar, M.Sc., Bar-at-Law, IFS (Retd.)

Representatives of Government of India (4)

2. (i) Dr. K. C. Seal, Director, Central Statistical Organisation, Department of Statistics, Ministry of Planning.
3. (ii) Shri N. K. Panda, Joint Secretary, Ministry of Finance, Department of Expenditure.
4. (iii) Dr. (Mrs.) A. R. Rajeshwari, Principal Scientific Officer, Department of Science and Technology.
5. (iv) Shri K. P. N. Nair, Department of Statistics, Reserve Bank of India.

*Scientists not employed in the Institute (7)*

*Representative of ICSSR (1)*

6. Professor Bhabatosh Datta

*Representatives of INSA (4)*

7. (i) Professor M. S. Narasimhan, School of Mathematics, Tata Institute of Fundamental Research, Bombay.
8. (ii) Professor S. S. Shrikhande
9. (iii) Professor A. K. Sharma, F.N.A. Professor and Head, Department of Botany, University of Calcutta.

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60. (iv) Dr. S. C. Bhattacharyya, Director, Bose Institute, Calcutta.

*Scientists co-opted by the Council (2)*

44. (i) Professor Biswajit Nag, Chairman, Electronics Commission and Secretary, Department of Electronics.
62. (ii) Professor S. R. Adke, Head, Department of Statistics, University of Poona.

*Elected representatives of the Institute Members not employed in the Institute (2)*

13. (i) Dr. P. K. Bose, M.Sc., Ph.D. FSS (London), Centenary Professor and Head, Department of Statistics, University of Calcutta.
14. (ii) Shri S. B. Sen, Planning Adviser, Government of West Bengal.

*Elected representatives of the employees of the Institute (2)*

15. Shri Suhas Biswas, Representative of scientific workers of the rank below that of Associate Professor or equivalent.
16. Shri K. M. Patnaik, Representative of non-scientific workers.

*Officers of the Institute (ex-officio) (9)*

17. (i) Director, Dr. B. P. Adhikari

*Professors-in-charge of Scientific Divisions (5)*

18. (ii) Dr. Jayanta Kumar Ghosh, Theoretical Statistics and Mathematics Division.
19. (iii) Dr. Jogabrata Roy, Applied Statistics, Surveys and Computing Division.
20. (iv) Dr. Nikhilesh Bhattacharyya, Social Sciences Division.
21. (v) Dr. Tapan Roychoudhury, Physical and Earth Sciences Division. (Shri Ashis Sen from 1 December 1980 to 28 February 1981 in absence of Dr. T. Roychoudhury).
22. (vi) Shi Shyam Matai, Biological Sciences Division.
23. (vii) Dr. K. G. Ramamurthy, Head, Statistical Quality Control and Operations Research Division.



24. (viii) Dr. K. R. Parthasarathi, Head of Delhi Centre.

25. (ix) Dr. Ambarish Ghosh, Dean of Studies.

Shri N. Srinivasan, Officer-on-Special Duty,

(Administration and Finance), acted as non-member Secretary.

*List of Members of the Academic Council*

1. Dr. B. P. Adhikari, *Chairman*

2. Dr. A. Ghosh, Dean of Studies, *Convenor*

*Theoretical Statistics and Mathematics Division*

3. Dr. J. K. Ghosh, 4. Dr. A. Maitra, 5. Dr. E. M. Paul, 6. Dr. B. V. Rao, 7. Dr. A. K. Roy, \*8, Dr. Gutti Jogesh Babu, \*9. Dr. Somesh Chandra Bagchi.

*Applied Statistics Surveys and Computing Division*

10. Dr. J. Roy, 11. Dr. B. C. Das, 12. Dr. T. V. Honurav, \*13. Dr. Subir Bandyopadhyay, 14. Dr. P. Bhimasankaran, 15. Dr. B. N. Mukherjee.

*Social Sciences Division*

16. Dr. N. Bhattacharya, 17. Dr. D. K. Bose, 18. Dr. S. Chatterji, 19. Dr. Partha Nath Mukherjee \*20, Dr. D. Das Gupta, \*21. Shri S. Guha Roy.

*Biological Sciences Division*

22. Professor S. K. Roy, \*23. Shri Biswanath Mukherjee, \*24. Dr. K. Pakrasi.

*Physical and Earth Sciences Division*

25. Dr. T. Roychoudhury, 26. Dr. Ambarish Ghosh (same as Sl. No. 2), 27. Dr. D. Dutta Majumder, 28. Professor P. Bandyopadhyay, 29. Shri Ashis Sen, 30. Dr. S. L. Jain 31. Dr. Supriya Sengupta, \*32. Shri A. B. Gupta, \*33. Dr. J. Das.

*Delhi Centre*

34. Dr. K. R. Parthasarathy, 35. Dr. L. S. Bhat, 36. Dr. V. K. Chetty 37. Dr. B. S. Minhas, 38. Dr. Sujit Kumar Mitra, 39. Dr. T. Parthasarathy, 40. Dr. B. Ramachandran, 41. Dr. B. L. S. P. Rao.

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### *SQC and OR Division*

42. Dr. K. G. Ramamurthy 43. Shri R. G. Narasimhan, 44. Shri C. R. Prasad  
Shri B. K. Barkar, 46. Shri C. A. Setty, \*47. Shri N. T. V. Ranga Rao, \*48. Shri  
Y. R. Rau.

### *Library, Documentation and Information Science Division*

49. Professor Ganesh Bhattacharyya, 50. Dr. J. Misra.

### *Member-Secretary, ISEC, Calcutta*

51. Dr. N. Bhattacharya (same as SI no. 16).

### *Head, SQC T and P. Unit*

52. Shri R. J. Pandey.

### *Secretary, Examinations Committee*

53. Shri Tares Maitra.

### *Bangalore Centre*

54. Dr. N. S. Iyenger.

\*Representatives selected by the Divisional Committees of Scientific workers.

### **List of Members of Different Committees of the Institute**

#### **1. Finance Committee :**

1. Dr. B. P. Adhikari, Director (*Ex-Officio Chairman*) 2. Dr. P. K. Bose, Centenary  
Professor and Head, Department of Statistics, University of Calcutta, 3. Dr. J. Roy,  
4. Shri N. Srinivasan, 5. Dr. K. C. Seal, 6. Sri N. K. Panda, 7. Dr. K. R. Parthasarathy  
8. Dr. Ambarish Ghosh, 9. Dr. D. Dutta Majumder, 10. Shri Tapan Basu Mallick,

Shri P. K. Chatterjee, Senior Accounts Officer, Indian Statistical Institute,  
(Non-member Secretary).

#### **2. Journal Committee :**

*Editors : Sankhya, Series A and B*

Dr. C. R. Rao and Dr. G. Kallianpur

*Co-editors : Series A*

1. Dr. J. K. Ghosh, 2. Dr. G. Jogesh Basu, 3. Dr. S. K. Mitra, 4. Dr. K. R. Parthasarathy, 5. Dr. B. Ramchandran, 6. Dr. Bimal Kumar Sinha.

*Co-editors : Series B*

1. Dr. N. Bhattacharya, 2. Dr. S. K. Chakraborty, 3. Dr. Arijit Chaudhury, 4. Dr. S. K. Mitra, 5. Dr. K. G. Ramamurthy, 6. Dr. J. Roy.

*Members of Journal Committee : Sankhya, Series A and B*

1. Dr. R. R. Bahadur, 2. Dr. D. Basu, 3. Dr. S. K. Chatterjee, 4. Dr. Malay Ghosh, 5. Dr. C. G. Khatri, 6. Dr. J. Sethuraman, 7. Dr. S. S. Shrikhande, 8. Dr. S. R. S. Varadhan, 9. Dr. R. P. Pakshirajan, 10. Dr. M. N. Murthy, 11. Dr. B. L. S. Prakasa Rao, 12. Dr. Sukhamay Chakraborty.

The Editors and Co-editors are ex-officio members of the Committee. The Editorial Secretary will function as Convenor of the Committee.

3. *Examinations Committee :*

1. Dr. P. K. Bose, Centenary Professor and Head, Department of Statistics, University of Calcutta, 2. Dr. Prasad Kumar Banerjee, Department of Statistics, University of Calcutta, 3. Dr. J. Roy, Indian Statistical Institute, 4. Professor T. V. Avadhani, University of Andhra Pradesh, 5. Officer-in-Charge, Training, Central Statistical Organisation, New Delhi 6. Dr. Ambarish Ghosh, Dean of Studies, Indian Statistical Institute, 7. Dr. B. Ramchandran, Indian Statistical Institute, 8. Professor A. M. Goon, Presidency College, Department of Statistics, Calcutta, 9. Dr. K. G. Ramamurthy, Indian Statistical Institute, 10. Dr. D. K. Bose, Indian Statistical Institute, 11. Shri Tares Maitra, Indian Statistical Institute, (*Secretary-Convenor*).

4. *Works Advisory Committees for Consluction*

(a) *Baranagar, Calcutta ;*

1. Dr. P. K. Bose, (*Chairman*) ; 2. Shri S. Bandopadhyay (*Outside expert*) ; 3. Outside expert to be selected by the Committee, 4. Dr. J. Roy, 5. Shri Asish Sen, 6. Dr. D. K. Bose, 7. Shri Somen Chakravarti, 8. Shri Supriya Gupta, 9. Shri V. S. Bhat, 10. Shri Shyam Matai, 11. Shri N. Srinivasan, 12. Shri Biman Bose (*Convenor*).

(b) *Delhi*

1. Dr. Jagjit Singh, (*Chairman*) (2. Shri R. S. Panesar, 3. Dr. K. R. Parthasarathy, 4. Shri B. K. Sarkar, 5. Dr. V. K. Chetty, 6. Dr. K. G. Ramamurthy, 7. Dr. B. Ramchandran, 8. One external member to be appointed by the Committee, 9. Shri R. K. Sawhney, (*Convenor*).

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### (c) *Bangalore*

1. Shri C. S. Seshadri, (*Chairman*) 2. Professor Srinagabhushana, 3. Shri K. G. Katway, 4. Dr. Ganesh Bhattacharya, 5. Shri C. A. Setty, 6. Dr. N. S. Iyenger, 7. One nominee of the Government of Karnataka, 8. Engineer-in-Charge.

### 5. Technical Advisory Committees of Divisions

#### I. *Theoretical Statistics and Mathematics Division*

1. Dr. B. P. Adhikari, Director (*Chairman*) 2. Dr. R. P. Pakshirajan, Professor and Head, Department of Post-Graduate Studies and Research in Statistics, University of Mysore. 3. Professor M. S. Narasimhan, Professor, School of Mathematics, Tata Institute of Fundamental Research, Bombay. 4. Professor S. K. Adke, Department of Statistics, University of Poona, Poona. 5. Professor S. K. Chatterjee, Professor of Statistics, University of Calcutta. 6. Professor J. K. Ghosh, Professor-in-Charge (*Convener*).

#### II. *Applied Statistics, Surveys and Computing Division*

1. Dr. B. P. Adhikari, Director (*Chairman*); 2. Dr. G. G. Khatri, Professor of Statistics, Gujarat University. 3. Dr. T. V. Avadhani, Professor of Statistics, Andhra University. 4. Dr. K. C. Seal, Director-General, Central Statistical Organisation, Department of Statistics. 5. Dr. S. K. Chatterjee, Professor of Statistics, University Calcutta. 6. Dr. S. N. Roy, Director, National Sample Surveys Organisation. 7. Dr. E. V. Krishnamurthy, Professor, Department of Applied Mathematics, Indian Institute of Science. 8. Dr. Daroga Singh, Director, Indian Agricultural Statistics Research Institute. 9. Dr. R. Sankar, Professor, Computer Science, Indian Institute of Technology, Kanpur. 10. Dr. Amitabha Bagchi, Professor, Indian Institute of Management, Calcutta. 11. Dr. Arun Chowdhury, Professor of Computer Science, University of Calcutta. 12. Dr. J. Roy, Professor-in-Charge (*Convener*).

#### III. *Social Sciences Division*

1. Dr. B. P. Adhikari, Director (*Chairman*); 2. Professor Bhabatosh Datta. 3. Professor H. K. Paranjape, (*Ex-Chairman*, *Monopolies Restrictive Trade Practices Commission*). 4. Professor C. Hanumantha Rao, Institute of Economic Growth, Delhi University. 5. Professor U. Shankar, Professor, Department of Econometrics, Madras University. 6. Professor Asok Mitra, Professor, Centre for Regional Development, Jawaharlal Nehru University. 7. Professor S. J. Poti. 8. Professor Surajit Sinha, Professor of Social Anthropology, Centre for Studies in Social Sciences, Calcutta. 9. Professor Barun De, Director, Centre for Studies in Social Sciences, Calcutta. 10. Professor P. C. Joshi, Institute of Economic Growth, Delhi University. 11. Professor A. E. Harper, Indian Institute of Psychological Measurement, Ewing Christian College, Allahabad. 12. Professor Shib Kumar Mitra, National Council of Educational Research and Training. 13. Professor K. V. Limaye, National Institute of Bank Management. 14. Professor Bh. Krishnamurthy, Professor of Linguistics, Osmania University, Hyderabad. 15. Professor N. Bhattacharya, Professor-in-Charge (*Convener*).

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### IV. Physical and Earth Sciences Division

1. Dr. B. P. Adhikari, Director (*Chairman*); 2. Professor S. N. Sen, Department of Geology, University of Calcutta. 3. Professor A. K. Saha, Head, Department of Geology, Presidency College, Calcutta. 4. Professor B. S. Tewari, Centre of Advanced Study in Geology, Punjab University. 5. Professor B. B. Roy, Emeritus Scientist, ICAR, College of Agriculture, University of Calcutta. 6. Professor A. N. Mitra, Department of Physics, Delhi University. 7. Professor B. R. Nag, Head, Institute of Radio Physics and Electronics, University of Calcutta. 8. Professor J. Das, Department of Electronics and Electrical Communication Engineering, Indian Institute of Technology Kharagpur. 9. Professor R. K. Verma, Physical Research Laboratory, Ahmedabad. 10. Professor G. Krishna, Chairman, School of Automation, Indian Institute of Science, Bangalore. 11. Professor A. K. Chowdhury, Head, Department of Computer Science, University of Calcutta. 12. Professor M. Datta, Professor-in-Charge, Satyendra Nath Bose Institute of Physical Sciences, University of Calcutta. 13. Dr. Tapan Roychowdhury, Professor-in-Charge (*Convener*)

### V. Biological Sciences Division

1. Dr. B. P. Adhikari (*Chairman*) Director; 2. Dr. L. D. Sanghavi, Dean, Cancer Research Institute, Tata Memorial Centre, Bombay. 3. Dr. A. J. Baxi, Assistant Director, Haffkine Institute, Bombay. 4. Dr. Narendra Singh, Scientist, Protein Technology Discipline, Central Food Technological Research Institute, Mysore. 5. Dr. Sivatosh Mookerjee, Dean, School of Life Science, Jawaharlal Nehru University. 6. Professor P. N. Bhadhuri, Emeritus Professor (ICAR), Bidhan Chandra Krishi Viswa Vidyalaya, Kalyani. 7. Professor B. B. Biswas, Head of the Department of Biochemistry, Bose Institute, Calcutta. 8. Professor J. J. Ghosh, Centenary Professor and Head, Department of Biochemistry, University of Calcutta. 9. Shri H. K. Rakshit, Director, Anthropological Survey of India, Government of India, Indian Museum. 10. Professor J. P. Singh, Head, Department of Anthropology and Dean, Faculty of Science, Delhi University. 11. Dr. A. K. Sharma, Professor and Head, Department of Botany, University of Calcutta. 12. Dr. D. K. Dasgupta, Professor of Crop Physiology, University College of Agriculture, University of Calcutta. 13. Shri S. Matai, Professor-in-Charge (*Convener*).

### VI. Statistical Quality Control and Operations Research

1. Dr. B. P. Adhikari, Director (*Chairman*); 2. Shri P. N. Arumugham, Chief, Quality Assurance, Bharat Heavy Electricals Ltd., New Delhi. 3. Shri Y. K. Bhat, Director of Statistics, Indian Standards Institution, New Delhi. 4. Shri M. V. V. Raman, Regional Director, National Productivity Council, Madras. 5. Shri G. V. S. Desikan, Chairman, Kerala State Textile Corp. Ltd., Trivandram. 6. Dr. K. G. Ramamurthy, Head, SQC & OR (*Convener*).

### VII. Library, Documentation and Information Science Division

1. Dr. B. P. Adhikari, Director (*Chairman*); 2. Dr. A. K. Ohledner, (*Former Chief Librarian, Jadavpur University Library*). 3. Shri Bimalendu Guba, Scientist,

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INSDOC, New Delhi. 4. Shri S. K. Havnur, Librarian, Tata Institute of Fundamental Research, Bombay. 5. Dr. V. A. Kamath, Head, Library & Information Services, Bhabha Atomic Research Centre, Trombay, Bombay. 6. Chief Librarian (*Convener*).

### PART III (A) BRANCH ACTIVITIES

#### Karnataka Branch

During the year under review the Karnataka Branch organised a number of seminars/lectures/talks, etc. as below.

1. Talk by Prof. P. R. Brahmanand on 11 June 1981 dealing with monetary and fiscal problems of the country.
2. Lectures by Prof. S. K. Ekambaram on "Forecasting for Business and for the Monsoon" and "Drought Relief in Karnataka through rainfall in western India" arranged jointly with the Bangalore Centre on 29 and 30 July 1981.
3. Seminar on "Improving Profit through Quality Control and other Quantitative Techniques" held jointly with the Shree Kutchi Dasha Oswal Jain Foundation on 28 June 1981 at Hubli.
4. Round-table discussion on "Housing Problems in Bangalore City" arranged jointly with Bangalore Centre on 11 September 1982.
5. Symposium on Economic Theory and Planning held jointly with Bangalore Centre on 3 December 1981, where papers on Indirect Tax System, Role of Feed Back, Optimal tax problems, etc. were discussed.
6. ISI Golden Jubilee Symposium was arranged by the Statistical Department of the Bangalore University and the Karnataka Branch at the Gnana Bharathi premises on 19 and 20 December 1981. The conception and development of the Institute by Prof. P. C. Mahalanobis and his constructive powers of organisation and building people were highlighted in the discussions that took place.
7. A talk by Dr. C. R. Rao, FRS. on 5 January 1982 on "Statistics : A National Resource", explaining the various circumstances statistical studies helped in making predictions and taking decisions by the state.
8. A golden jubilee lecture by Prof. Asok Mitra, ICS (Retd) on 30 January 1982 on "Prospects of India's Population Growth", highlighting the contributions of Prof. Mahalanobis as well as other members of the Institute towards the growth of statistics and its importance as well as the development of the Institute as a world's leading centre for statistics.
9. A two-day seminar on "Quality : A Means to Prosperity" organised jointly by the Mangalore Management Association, Institution of Engineers, Mangalore and

the Karnataka Branch on 5 and 6 February 1982 at Mangalore. Discussions centred on the methods of Quality Control in small and big industries, its organisation and management as well as application of QC leading to handsome gains in industries.

40. Symposium on "Applications of Statistics" organised jointly with the Statistical Department of the Karnataka University in Dharwar on 19 and 20 March 1982 where six papers on the subject from different speakers from the University of Karnataka and from Bombay, Poona, Texas and Nepal were discussed.

**List of Office-bearers of Karnataka Branch for 1981-82**

<i>Chairman</i>	:	Shri C. S. Seshadri
<i>Vice-Chairman</i>	:	Shri H. C. Ramanna (Co-opted)
<i>Secretary</i>	:	Prof. Srinagabhushana
<i>Joint Secretary</i>	:	Shri C. A. Setty
<i>Treasurer</i>	:	Shri R. Anantha Rao
<b>Members :</b>		Dr. N. S. Iyengar ; Shri P. Krishna ; Shri M. Haridas (KSFC) ; Shri T. P. Subba Pakkala ; Shri H. S. Vijayendra Kumar ; Dr. T. Sri Venkataramana (Bangalore University) (Co-optd) ; and Director, Bureau of Economics & Statistics (Co-opted).

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## Part IV. Statement of Accounts and Auditors' Report for the year 1981-82

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## Part IV. Statement of Accounts and Auditors' Report for the year 1981-82

### AUDITORS' REPORT

We have audited the attached Balance Sheets of Indian Statistical Institute as at 31st March, 1982 for

- a) General Account and
- b) Other Funds

and the annexed relative Income and Expenditure Accounts for the year ended on that date.

The Balance Sheets and the Accounts are in agreement with the books and records maintained by the Institute and produced to us. According to information and explanations given to us, the said Balance Sheets read with Notes appearing thereon and subject to Notes 1 (Fixed Assets), 5 (Loans and Advances) and 6 (Additional D.A. Deposit with Regional Provident Fund Commissioner) of Schedule 'X', and also subject to the remarks given below, give a true and fair view of the state of affairs of the Institute.

The remarks referred to above are :

1. Though National Sample Survey Unit has been separated from the Institute with effect from 1st June, 1972, the consequential changes with regard to assets and liabilities taken over by them, have not taken place in the accounts as yet. As such, Balance Sheet as at 31st March, 1982 of the Indian Statistical Institute and Income and Expenditure Account for the year ended on that date do not give a true and fair view to the extent of this unadjusted position.
2. Security Deposits—Rs. 85,151.57 (Dr) :  
Receipts of deposits and/or confirmation letters could not be produced for our verification except for some deposits amounting to Rs. 43,692.41.
3. In the absence of confirmatory letters, the balances in the following accounts remained unverified (a) Loans and Advances, (b) Deposits and Other Liabilities.
4. Relief (Flood, Draught) Loan Account Rs. 2,50,216.51 (Dr.) :  
No list in support of the above account was produced to us for our verification and consequently we are unable to comment on the accuracy and recoverability of this amount.
5. For the purpose of Income and Expenditure Account, the allocations of expenses between plan and non-plan as made by the Institute have been accepted by us.

FIFTIETH ANNUAL REPORT : 1981-82

6. General observations :

- a) The Institute had no internal audit system during the year under audit. The Internal control procedures should be made more effective in view of certain irregularities stated in Schedule X.
- b) The revised final budget of the Institute was approved by "Section 8(1) Committee" with certain modifications. Actual total plan expenditure compares favourably with such budget estimate, whereas actual total non-plan expenditure was excess by Rs. 6.01 lacs when compared to budget estimate. It was explained to us that the Institute had to incur additional expenditure of Rs. 5,70,980/- for visit of the Foreign Scientists who participated in the Golden Jubilee Celebration vide Note No. 11(c) of Schedule 'X'.
- c) During the year under audit, the Institute disposed off certain assets i.e. vehicles, calculators, office equipments etc. vide column 3 of Schedule I, with prior approval of the Govt. of India. The sales proceeds stand merged in General Fund Account.

1A, Raja Subodh Mullick Square  
Calcutta-700 013  
The 18th March, 1983

Roy & Bagchi  
Chartered Accountants

INDIAN STATISTICAL INSTITUTE

BALANCE SHEET

As at 31st March 1981 Rs. P.	Fund and Liabilities	Rs. P.	As at 31st March 1980 Rs. P.
	<b>1. GENERAL FUND :</b>		
5,84,93,544.38	As per Schedule VII .. .. .		5,91,39,667.72
	<b>2. OTHER FUNDS :</b>		
41,93,982.18	As per Schedule IV per contra .. .. . (Excluding Director's Contributory Fund, Indian Statistical Institute Contributory Provident Fund)		48,52,488.29
	<b>3.1 GRANT-IN-AID FOR FLOOD ADVANCE TO STAFF REFUNDABLE TO GOVT. OF INDIA</b>		
7,30,000.00	As per last account .. .. .		7,30,000.00
	<b>3.2 GRANT-IN-AID FOR HOUSE BUILDING ADVANCE TO STAFF REFUNDABLE TO GOVERNMENT OF INDIA</b>		
	As per last account .. .. .	13,60,000.00	
18,50,000.00	Add : Received during the year .. .. .	5,00,000.00	18,50,000.00
	<b>4. ROCKFELLER FOUNDATION GRANT PER CONTRA :</b>		
1,182.29	As per last account .. .. .		1,182.29
	<b>5. FORD FOUNDATION GRANT :</b>		
	Balance of Grant—As per last account .. .. .	8,19,458.47	
8,19,458.47	Less : Expenses and Refunded during the year as per Annexure II	8,19,458.47	—
	<b>6. DEPOSITS AND OTHER LIABILITIES :</b>		
	As per Schedule VIII .. .. .	82,74,154.43	
82,30,382.59	ADDITIONAL EMOLUMENTS COMPULSORY DEPOSIT ..	1,15,932.46	82,30,086.58
	<b>7. EXCESS OF RECEIPTS OVER EXPENDITURE IN RESPECT OF CAPITAL EXPENDITURE GRANT :</b>		
73,68,721.51	As per Schedule IX .. .. .		94,06,100.28
	<b>8. EXCESS OF RECEIPTS OVER EXPENDITURE IN RESPECT OF PLAN REVENUE EXPENDITURE GRANT RECEIVED FROM GOVT. OF INDIA</b>		
	As per last account .. .. .	5,77,918.45	
	Add : Transfer from Income and Expenditure Account ..	13,701.23	
		5,90,619.68	
5,77,918.45	Less : Adjusted during the year .. .. .	5,78,000.00	12,619.68
	<b>9. EXCESS OF RECEIPTS OVER EXPENDITURE IN RESPECT OF NON-PLAN REVENUE EXPENDITURE :</b>		
	As per last account .. .. .	66,165.49	
66,165.49	Less : Adjustment of balance per contra .. .. .	66,165.49	—
7,48,10,355.21	Carried over ..		7,93,72,133.14

FIFTIETH ANNUAL REPORT : 1981-82

AS AT 31ST MARCH 1982

As at 31st March 1981 Rs. P.	Property and Assets	Rs. P.	As at 31st March 1982 Rs. P.
	<b>1. FIXED ASSETS :</b>		
5,13,70,973.07	As per Schedule I .. .. .		5,41,46,283.90
	<b>2. INVESTMENT AT COST .. .. .</b>	38,11,059.31	
	Interest accrued on above		
22,84,469.65	As per Schedule II .. .. .	4,44,947.77	42,56,007.08
	<b>3. STOCK OF BUILDING MATERIALS ETC. :</b>		
7,96,367.32	At cost .. .. . (Including materials purchased for construction work Rs. 5,32,454.62 and salvaged materials Rs. 072.70)		10,44,858.42
2,49,583.70	<b>4. ADDL. DEARNESS ALLOWANCES DEPOSITED WITH REGIONAL PROVIDENT FUND COMMISSIONER .. .. .</b>		1,03,477.25
	<b>5. LOANS AND ADVANCES :</b>		
43,14,454.40	As per Schedule III .. .. .		50,42,263.75
7,50,000.00	<b>6. AMOUNT RECEIVABLE .. .. .</b>		—
	<b>7. NET ASSET OF OTHER FUNDS :</b>		
41,92,982.13	As per Schedule IV per contra .. .. . (Excluding Director's Contribution Fund, Indian Statistical Institute Contributory Provident Fund)		48,52,486.29
	<b>8. EXCESS OF EXPENDITURE OVER RECEIPTS IN RESPECT OF NON-PLAN REVENUE EXPENDITURE :</b>		
	Transfer from Income & Expenditure Account .. .. .	8,01,117.52	
—	Less : Adjustment of balance per contra .. .. .	86,165.49	5,34,952.03
	<b>9. EXCESS OF EXPENDITURE OVER RECEIPTS IN RESPECT OF MISC. PROJECT AND ACTIVITIES ON BEHALF OF THE GOVT. OF INDIA AND OTHER BODIES :</b>		
27,33,492.53	As per Schedule V .. .. .		22,45,880.54
1,79,774.00	<b>10. BANK GUARANTEE, PAY ORDERS AND NATIONAL SAVINGS CERTIFICATES LODGED BY OUTSIDE PARTIES PER CONTRA .. .. .</b>		69,774.00
6,86,72,268.86	Carried over ..		7,22,96,981.58

INDIAN STATISTICAL INSTITUTE

BALANCE SHEET

As at 31st March 1981 Rs. P.	Fund and Liabilities	As at 31st March 1982 Rs. P.
7,49,10,968.31	Brought forward : ..	7,99,76,182.16
	10. EXCESS OF RECEIPTS OVER EXPENDITURE IN RESPECT OF MISG. PROJECT AND ACTIVITIES :	
8,65,558.18	As per Schedule V .. .. .	10,79,466.41
	11. LIABILITIES FOR BANK GUARANTEE, PAY ORDERS AND NATIONAL SAVINGS CERTIFICATES LODGED BY OUT- SIDE PARTIES PER CONTRA .. .. .	69,774.00
1,79,774.00		
7,99,55,697.48		8,06,17,579.56

P. K. CHATTERJEE  
Senior Accounts Officer

N. SHUKTYARAN  
Officer on Special Duty  
(Administration & Finance)

B. P. ADHIKARI  
Director  
Indian Statistical Institute

FIFTIETH ANNUAL REPORT : 1961-62

AS AT 31ST MARCH 1962—Contd.

As at 31st March 1961 Rs. P.	Property and Assets	Rs. P.	As at 31st March 1962 Rs. P.
6,46,72,368.86		Brought forward : ..	7,32,96,981.26
	11. CASH AND BANK BALANCE :		
	.1 Cash in hand :		
	As per Schedule VI .. .. .	15,283.12	
	.2 At Banks on Current Account with :		
	(i) American Express International Banking Corporation, Calcutta for Rockefeller Foundation Grant .. .. .	1,182.29	
	As per contra .. .. .		
90,63,330.57	(ii) Other Banks as per Schedule VI ..	82,04,925.88	82,06,108.17
	12. NOTES ON ACCOUNTS :		
	As per Schedule X enclosed		

7,59,56,697.43

8,06,17,372.56

This is the Balance Sheet referred to in our report of even date

1A, Raja Subodh Mallik Square,  
Calcutta 700 013  
18th March, 1962

ROY & BAGCHI  
Chartered Accountants

INDIAN STATISTICAL INSTITUTE

INCOME AND EXPENDITURE ACCOUNT

Previous year			Expenditure	Current year		
Plan		Non-plan		Plan		Non-plan
Rs.	P.	Rs.	P.	Rs.	P.	
<b>1. SALARY &amp; ALLOWANCES</b>						
4,10,215.87		1,00,84,900.04	.1	Salary & Remuneration to Teachers etc. ..	9,32,228.81	1,01,48,988.00
—		5,578.92	.2	Dearness Pay .. .. .	—	1,300.60
1,56,693.11		53,95,253.98	.3	Dearness Allowance .. .. .	5,54,027.47	64,41,411.35
30,757.58		11,47,434.55	.4	House Rent Allowance .. .. .	95,985.57	11,01,934.18
12,587.08		5,14,950.95	.5	City Compensatory Allowance .. .. .	44,490.44	4,93,594.09
—		2,276.80	.6	Interim Pay .. .. .	—	2,788.48
—		—	1A.	Leave Salary to Teaching Staff .. .. .	—	—
4,325.87		4,99,070.22	2.	Overtime Allowance .. .. .	71,309.57	5,55,818.39
—		—	3	Payment of Leave Vacancies .. .. .	—	—
—		8,635.50	4.	Children's Education Allowance .. .. .	—	8,275.00
2,282.40		7,57,997.76	5.	Leave Travel Concession .. .. .	41,665.77	2,80,351.35
1,572.92		2,43,849.81	6.1	Reimbursement of Medical Expenses .. .. .	58,353.82	4,40,342.85
628.55		4,09,709.80	.2	Expenses on Medical Welfare to Staff, Students, Research Scholar, Visiting Professors etc. .. .. .	1,548.77	3,02,541.46
20,499.39		9,77,987.91	7.	Employer's Contribution to Provident Fund .. .. .	80,863.21	9,51,452.88
—		3,16,468.78	8.	Gratuity Payment .. .. .	—	5,08,460.48
1,41,515.60		3,87,300.11	9.	Travelling Expenses (include air fare of Rs. 5,79,986/- for foreign scientists to attend Golden Jubilee Celebration vide Note 11(c) Schedule X) .. .. .	3,05,238.49	11,30,610.01
74,342.43		1,17,265.32	10.	Visiting Professors, Foreign Scientists, Fellows and Experts .. .. .	8,070.00	1,91,288.95
1,72,185.19		10,84,064.29	11.	Scholarship, Stipend and Other Assistance to Trainees .. .. .	3,08,849.22	10,40,644.47
—		200.00	12.	Prize to Workers for initiative .. .. .	—	350.00
94,816.98		3,29,937.55	3.	Machine Tabulation Expenses: Hire and maintenance of tabulating equipment, punches, verifying machine etc. including service charges, freight, custom and other charges for new machine and cost of carts, cabinets, stores and stationeries .. .. .	91,784.89	1,79,439.50
6,749.43		1,51,085.76	14.	Printing and Publication .. .. .	2,78,027.51	4,71,800.72
11,09,082.07		2,24,83,987.72	Carried over:	.. .. .	28,71,188.04	2,43,09,871.84





INDIAN STATISTICAL INSTITUTE

INCOME AND EXPENDITURE ACCOUNT

Previous year				Expenditure	Current year			
Plan		Non-plan			Plan		Non-plan	
Rs.	P.	Rs.	P.		Rs.	P.	Rs.	P.
11,09,082.07		2,24,33,987.72		Brought forward :	28,71,138.04		2,45,09,371.34	
20,248.55		1,10,793.01	16.1	Society Typo Activities (entertainment and conference expenses) .. ..	27,860.10		2,70,416.18	
10,237.15		58,982.11	.2	Examination Expenses .. ..	942.85		59,350.90	
4,38,349.00		14,13,226.87	16.1	Books & Journal (including cost of binding etc.) .. ..	4,58,027.81		15,15,453.21	
238.60		74,339.45	.2	Microfilm Photo and Audiography Expenses	40,600.00		19,833.93	
5,748.53		1,92,410.14	17.	Repairs, Replacement and Maintenance of Office Equipment, Furniture and Accessories	19,733.41		2,28,135.06	
1,08,639.00		5,51,854.03	18.1	Stationeries and Consumable Stores ..	1,04,328.09		11,05,880.90	
29,383.98		2,36,950.58	.2	Other Misc. Expenses viz., Advertisement, Insurance Premium, Labour Charges, Coolie, Cartage, Convoynance and Petty Expenses like Hot Weather Contingencies etc. ..	89,333.77		3,47,403.05	
				19. Other Non-Salary Contingencies :				
4,84,232.12		12,07,918.90	.1	Postal and M.O. charges, Air and Railway Freight, Electric, Telephone Charges and Generator Maintenance .. ..	99,071.04		13,49,036.85	
—		25,460.00	.2	Audit Fee and Expenses .. ..	—		27,006.00	
—		14,700.47	.3	Interest and Bank Charges .. ..	—		9,028.84	
2,05,410.80		8,74,872.88	20.	House rent, Rates and Taxes .. ..	5,23,856.45		7,91,343.86	
2,002.76		4,52,028.48	21.	Repair and/or Maintenance of Building, Lead etc. and Petty Construction etc. ..	3,068.00		7,26,148.73	
86,377.77		2,79,858.03	22.	Transport .. ..	99,788.45		3,85,837.74	
—		1,87,057.22	23.	Worker's Welfare and Amenities (excluding Reimbursement of Medical Expenses) ..	3,062.26		2,17,712.12	
—		400.00	24.	Director's Discretionary Expenses ..	—		700.00	
48,828.51		1,05,949.97	25.1	Laboratory Stores, Tools and Minor Accessories .. ..	85,306.89		1,40,973.23	
—		32,110.83	.2	Materials and Other Charges for Experimental Farming and Rice Research Scheme	—		44,559.88	
25,88,568.99		2,82,22,075.48		Carried over :	44,87,288.77		3,16,48,181.82	

FIFTIETH ANNUAL REPORT: 1981-82

FOR THE YEAR ENDED 31st MARCH 1982—Contd.

Previous year				Income	Current year				
Plan		Non-plan			Plan		Non-plan		
Rs.	P.	Rs.	P.		Rs.	P.	Rs.	P.	
28,60,000.00		2,84,82,801.09		Brought forward :	..	45,00,000.00		3,16,48,181.82	

<u>28,60,000.00</u>		<u>2,84,82,801.09</u>		Carried over :	..	<u>45,00,000.00</u>		<u>3,16,48,181.82</u>	
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INDIAN STATISTICAL INSTITUTE

INCOME AND EXPENDITURES ACCOUNT

Previous year				Expenditure	Current year				
Plan		Non-plan			Plan		Non-plan		
Rs.	P.	Rs.	P.		Rs.	P.	Rs.	P.	
25,88,568.99		2,82,22,075.48		Brought forward :	..	44,87,288.77	2,16,48,181.82		
—		1,84,051.43	26.	Expenditure for Miscellaneous Projects	..	—	—		
12,61,433.01		2,78,694.19	27.	Excess of Income over Expenditure transferred to Balance Sheet	..	12,701.23	—		
<hr/>						<hr/>			
39,50,000.00		2,86,82,801.09				46,00,000.00	2,16,48,181.82		
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- NOTES: (a) Expenditure for Visiting Scientists and Scholars to and from India are met out of Ford Foundation Grant paid directly through American Express International Banking Corporation, New York, in U.S. \$ and grant to the Institute was directly credited to the aforesaid Bank Account by the Sponsoring Authority in U.S. \$ These transactions are excluded from the Income and Expenditure Account of the Institute but this Grant Account is shown separately in the Balance Sheet.
- (b) This account does not include the transactions in respect of International Statistical Education Centre, Colombo Plan Fellowship, net effect of which has been given in the Balance Sheet (vide Schedule V enclosed).
- (c) An amount of Rs. 28,89,131.06 being depreciation on Fixed Assets has been adjusted in General Fund.
- (d) In accordance with the consistent practice, the cost of cards, cabinets, stationeries and stores etc. have been written off in this account and any stocks in hand as on 31st March 1982 have not been treated as assets in Balance Sheet.
- (e) In accordance with previous practice, certain transactions have been included in these accounts on cash basis.
- (f) Payment of Leave Salary and Gratuity to ISI workers and NSSO workers are considered on cash basis.
- (g) This account includes transactions in respect of earlier years which have not been segregated and shown separately.
- (h) Receipts and Expenditures of Miscellaneous Projects and Activities on behalf of various Sponsoring Authorities have been excluded from this account and exhibited through Schedule V and Annexure I as the transactions do not constitute Income and Expenditure of the Institute.
- (i) This account does not include Income and Expenditure of some Funds which are exhibited separately vide Schedule IV.

P. K. CHATTERJEE  
Senior Accounts Officer

N. SRINIVASAN  
Officer-on-Special Duty  
(Administration & Finance)

B. P. ADIKARI  
Director  
Indian Statistical Institute

FIFTIETH ANNUAL REPORT : 1981-82

FOR THE YEAR ENDED 31ST MARCH 1982—Contd.

Previous year				Income	Current year				
Plan		Non-plan			Plan		Non-plan		
Rs.	P.	Rs.	P.		Rs.	P.	Rs.	P.	
89,50,000.00		2,88,82,801.09		Brought forward :	..	45,00,000.00		3,15,48,181.82	
<hr/>		<hr/>				<hr/>		<hr/>	
89,50,000.00		2,88,82,801.09				45,00,000.00		3,15,48,181.82	

1A, Raja Subodh Mulkik Square,  
Calcutta-700 013.  
18 March 1983

ROY & BACHY  
Chartered Accountants

INDIAN STATISTICAL INSTITUTE

SCHEDULE

SCHEDULE OF FIXED ASSETS

Sl. no.	Particulars	Written down value as on 31.3.1981		Deletions/adjustment made during the year		Value after deletions/adjustment (Col. 2-3)	
		(1)	(2)	(3)	(4)	Rs.	P.
<b>A. Land and Land Development :</b>			Rs. P.	Rs.	P.	Rs.	P.
<b>1. Calcutta :</b>							
.1	At 183, Gopal Lal Tagore Road (adjoining 203, B.T. Road) ..		65,545.90	—		65,545.90	
.2	Development of above land .. .. .		40,624.78	—		40,624.78	
.3	At 205, B. T. Road (including cost of development) ..		4,38,916.70	—		4,38,916.70	
.4	At 186, 184, 185 & 186/1, Gopal Lal Tagore Road ..		98,893.71	—		98,893.71	
.5	Development of above lands .. .. .		6,618.51	—		6,618.51	
.6	At 208, B. T. Road (including cost of development) ..		21,36,174.84	—		21,36,174.84	
.7	At 202, B. T. Road .. .. .		5,79,104.75	—		5,79,104.75	
.8	At 203, B. T. Road .. .. .		97,558.95	—		97,558.95	
.9	Bidyayatan Sarani .. .. .		50,000.00	—		50,000.00	
.10	189, Gopal Lal Tagore Road .. .. .		1,03,856.00	—		1,03,856.00	
<b>2. Giridih :</b>							
.1	Farm land .. .. .		24,175.67	—		24,175.67	
.2	Development and fencing etc. .. .. .		29,689.55	—		29,689.55	
.3	Farming Development .. .. .		10,682.00	—		10,682.00	
.4	Irrigation and water supply .. .. .		28,215.00	—		28,215.00	
.5	In Village "Makaspur", Giridih .. .. .		1,34,538.67	—		1,34,538.67	
.6	Purchased from Smt. Prakriti Devi Gangopadhaya ..		14,000.00	—		14,000.00	
.7	Rosa Villa .. .. .		1,07,602.72	—		1,07,602.72	
.8	Biraja Kutir .. .. .		7,446.19	—		7,446.19	
<b>3. Delhi :</b>							
.1	Lease-hold (see note (a) below) .. .. .		24,72,764.12	—		24,72,764.12	
.2	Development of above land .. .. .		63,750.67	—		63,750.67	
.4	Baroda .. .. .		27,611.32	—		27,611.32	
.5	Bangalore (see note 'b' below) .. .. .		47,558.25	—		47,558.25	
.6	Hyderabad .. .. .		1,14,385.00	—		1,14,385.00	
.7	Madras .. .. .		71,569.60	—		71,569.60	
.8	Takda Planters Club (lease-hold), Darjeeling (see note (c) below)		17,812.36	—		17,812.36	
Sub-total : .. .. .			67,86,750.94	—		67,86,750.94	

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as on 31st March 1982

Depreciation for the year		Additions during the year				Written down value as on 31st March 1982
Rate	Amount	Not value (Col. 4-6.1)	Out of capital expenditure grant (7.0)	Out of current expenditure grant (7.1)	Total (Col. 7.0+7.1) (7.2)	(Col. 6+7.2) (8)
(6.0)	(6.1)	(8)	(7.0)	(7.1)	(7.2)	(8)
	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
—	—	65,546.90	—	—	—	65,546.90
—	—	40,524.70	—	—	—	40,524.75
—	—	4,38,916.70	—	—	—	4,38,916.70
—	—	99,003.71	—	—	—	96,663.71
—	—	6,818.51	—	—	—	6,818.51
—	—	21,36,174.64	—	—	—	21,36,174.64
—	—	5,79,104.75	—	—	—	5,79,104.75
—	—	97,568.95	—	—	—	97,568.96
—	—	50,000.00	—	—	—	50,000.00
—	—	1,03,865.00	—	—	—	1,03,865.00
—	—	24,176.07	—	—	—	24,176.67
—	—	29,689.55	—	—	—	29,689.55
—	—	10,882.00	—	—	—	10,882.00
—	—	28,216.00	—	—	—	28,216.00
—	—	1,34,638.67	—	—	—	1,34,638.67
—	—	14,000.00	—	—	—	14,000.00
—	—	1,07,602.72	—	—	—	1,07,602.72
—	—	7,445.19	—	—	—	7,445.19
—	—	24,72,764.12	—	—	—	24,72,764.12
—	—	83,760.67	—	—	—	83,760.67
—	—	27,811.32	—	—	—	27,811.32
—	—	47,658.25	40,200.84	—	40,200.84	83,819.09
—	—	1,14,385.00	—	—	—	1,14,385.00
—	—	71,502.50	—	—	—	71,562.50
—	481.42	17,330.94	—	—	—	17,330.94
—	481.42	87,86,269.52	46,260.84	—	46,260.84	88,32,530.38

INDIAN STATISTICAL INSTITUTE

SCHEDULE

Sl. no.	Particulars	SCHEDULE OF FIXED ASSETS		
		Written down value as on 31.3.1981	Deletions/adjustment made during the year	Value after deletions/adjustment (Col. 2-3)
	(1)	(2)	(3)	(4)
<b>B. Buildings :</b>				
		Ra. P.	Ra. P.	Ra. P.
1.	Calcutta :			
1	Partly at 203 B. T. Road and partly at 163 Gopal Lal Tagore Road (Main Building) .. .. .	8,01,353.07	—	8,01,353.07
2	At 163 Gopal Lal Tagore Road .. .. .	8,37,160.79	—	8,37,160.79
3	At 205 B. T. Road .. .. .	17,00,032.70	—	17,00,032.70
4	At 206 B. T. Road .. .. .	1,26,499.07	—	1,26,499.07
5	Boy's Hostel at 206 B. T. Road .. .. .	23,10,736.69	—	23,10,736.69
6	At 202 B. T. Road .. .. .	43,687.92	—	43,687.92
7	Purchase of flats at Palpara Housing Estate .. .. .	2,77,154.73	—	2,77,154.73
8	Composite Library Building at 202 B. T. Road :			
	(a) Completed work .. .. .	77,49,761.48	-35,450.38	77,14,311.12
	(b) Work-in-progress .. .. .	12,41,790.20	—	12,41,790.20
9	Boundary wall .. .. .	69,011.32	—	69,011.32
10	Generator House at 203 B. T. Road .. .. .	27,343.09	—	27,343.09
11	At 169 Gopal Lal Tagore Road .. .. .	16,483.78	—	16,483.78
12	At Bidyayatan Sarani, Baranagar .. .. .	7,932.66	—	7,932.66
2.	Giridih :			
1	Rose Villa .. .. .	2,23,403.80	—	2,23,403.80
2	Health Home (see note 'd' below) .. .. .	9,177.29	—	9,177.29
3.	Delhi Construction :			
	(a) Completed work .. .. .	55,82,628.31	-1,02,982.02	54,79,646.29
	(b) Work-in-progress .. .. .	3,80,722.10	+1,05,823.50	4,86,545.60
4.	Hyderabad wall .. .. .	1,382.02	—	1,382.02
5.	Bangalore Construction : Work-in-progress .. .. .	—	—	—
	Sub-total: .. .. .	2,13,73,167.10	-1,41,073.89 +1,05,823.50	2,13,37,716.74
<b>C. Sheds &amp; Structures :</b>				
1.	Calcutta :			
1	203 B. T. Road and 163 Gopal Lal Tagore Road .. .. .	32,623.84	—	32,623.84
2	At 205 B. T. Road .. .. .	64,014.34	—	64,014.34
3	At 150, 184, 165 & 160/1 Gopal Lal Tagore Road .. .. .	19,930.24	—	19,930.24
4	At 202 B. T. Road .. .. .	1,48,166.93	—	1,48,166.93
5	At 5 R. N. Tagore Road (for UNTAA Workshop situated on rental premises) .. .. .	1,10,921.48	—	1,10,921.48
6	Car shed at 169 Gopal Lal Tagore Road .. .. .	89,271.86	—	89,271.86
7	Staff quarter at Bidyayatan Sarani (work-in-progress) (see note 'd' below) .. .. .	62,768.32	+7,663.35	70,431.67
8	Student's Hostel at 206 B. T. Road (—do—) .. .. .	60,183.19	-7,863.35	52,319.84
9	169 Gopal Lal Tagore Road, Baranagar .. .. .	26,306.51	—	26,306.51
10	Post Office at 204 B. T. Road .. .. .	195.83	—	195.83
11	Bidyayatan Sarani, Baranagar .. .. .	511.22	—	511.22
2.	Petty Construction at Giridih .. .. .	2,369.60	—	2,369.60
3.	Delhi :			
1	Partitions, structures etc. .. .. .	6,447.35	—	6,447.35
2	Hut for a Chowkidar .. .. .	653.48	—	653.48
4.	Hyderabad : Hut for Chowkidar .. .. .	2,409.95	—	2,409.95
	Sub-total: .. .. .	6,33,636.44	+7,663.35 -12,820.00	6,38,479.79

FIFTIETH ANNUAL REPORT : 1981-82

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AS ON 31st MARCH 1982

Depreciation for the year		Additions during the year					Written down value as on 31st March 1982
Rate	Amount	Net value (Col. 4—5.1)	Out of capital expenditure grant	Out of current expenditure grant	Total (Col. 7.0+7.1)	(Col. 6+7.2)	
(6.0)	(6.1)	(6)	(7.0)	(7.1)	(7.3)	(8)	
	Ra. P.	Ra. P.	Ra. P.	Ra. P.	Ra. P.	Ra. P.	
2.5%	17,283.83	6,74,088.24	—	—	—	6,74,088.24	
"	20,928.17	8,16,237.82	—	—	—	8,16,237.82	
"	44,228.82	17,24,806.87	4,302.44	—	4,302.44	17,29,109.41	
"	3,162.48	1,23,336.68	—	—	—	1,23,336.68	
"	57,993.42	22,81,743.27	61,818.18	—	61,818.18	23,13,361.46	
"	1,092.20	42,596.72	8,480.00	—	8,480.00	51,076.72	
"	6,928.87	2,70,226.86	—	—	—	2,70,226.86	
"	1,92,867.79	75,21,453.33	—	—	—	76,21,453.33	
"	—	12,41,790.20	13,06,627.21	—	13,06,627.21	20,37,317.41	
7.5%	5,176.85	63,836.47	—	—	—	63,836.47	
2.5%	683.68	29,669.61	—	—	—	29,669.61	
"	412.09	16,071.89	—	—	—	16,071.89	
"	198.31	7,734.25	—	—	—	7,734.25	
"	5,680.10	2,16,843.79	47,952.78	—	47,952.78	2,64,796.57	
"	229.43	8,947.88	1,487.32	—	1,487.32	10,435.18	
"	1,34,348.06	58,42,566.76	73,139.82	—	73,139.82	54,16,896.57	
"	—	4,88,346.00	60,829.19	—	60,829.19	5,47,174.70	
2.5%	34.65	1,847.47	—	—	—	1,847.47	
"	—	—	11,200.00	—	11,200.00	11,200.00	
	4,91,116.55	2,06,46,801.19	16,54,636.94	—	16,54,636.94	2,26,01,138.13	
7.6%	2,439.29	30,094.65	—	—	—	30,094.65	
"	4,868.61	60,040.23	8,600.00	—	8,600.00	68,640.23	
"	1,494.77	18,435.47	—	—	—	18,435.47	
"	11,112.52	1,37,054.41	—	—	—	1,37,054.41	
"	8,769.11	1,08,162.37	—	—	—	1,08,162.37	
"	6,696.39	82,576.47	—	—	—	82,576.47	
"	—	70,491.67	1,90,624.29	—	1,90,624.29	2,61,055.96	
"	3,652.24	43,810.95	—	—	—	43,810.95	
"	1,972.89	24,383.62	—	—	—	24,383.62	
"	14.76	181.88	—	—	—	181.88	
"	58.34	472.88	—	—	—	472.88	
"	177.72	2,191.88	—	—	—	2,191.88	
"	463.65	5,983.80	1,502.81	—	1,502.81	7,486.61	
"	49.01	504.47	—	—	—	504.47	
"	186.25	2,284.70	—	—	—	2,284.70	
	41,863.64	5,86,826.26	2,00,687.10	—	2,00,687.10	7,87,312.35	



INDIAN STATISTICAL INSTITUTE

SCHEDULE

SCHEDULE OF FIXED ASSETS

Sl. no.	Particulars	Written down	Deletions/	Value after	
		value as on 31.3.1961	adjustment made during the year	deltions/ adjustment	
		(1)	(2)	(3)	(4)
					(Col. 2-3)
<b>D. Machinery &amp; Equipment :</b>					
		Rs. P.	Rs. P.	Rs. P.	
.1	Calculating, punching and other tabulating equipment (see note 'f' below)	4,77,688.78	+2,840.00 -1,278.19	4,78,950.69	
.2	Office machinery and equipment (—do—)	8,17,788.40	—	8,08,847.10	
.3	Workshop machinery and equipment	6,957.12	—	6,957.12	
.4	Microfilm, photo, reprography and optical equipment	2,87,108.68	—	2,87,108.68	
.5	Laboratory equipment	12,02,286.99	—	12,02,286.99	
.6	Construction equipment	3,308.55	—	3,308.55	
.7	UNTAA Workshop machinery and equipment	7,267.04	—	7,267.84	
.8	Electronic Computer (HEO 2M) and other tabulating equipment	8,908.04	—	8,908.04	
.9	Mui Computer at Delhi	1,60,513.90	—	1,60,513.90	
.10	Electronic Computer at Baranagar	26,16,976.10	—	25,16,976.10	
.11	Honeywell Computer H-400	1,94,037.43	—	1,94,037.43	
	Sub-total:	58,82,736.33	+2,840.00 -10,419.49	58,74,956.84	
<b>E. Passenger Lift (completed)</b>					
	—do— (work-in-progress)	23,712.93	—	23,712.93	
		93,652.00	—	93,652.00	
<b>F. Electrical equipment &amp; installation :</b>					
.1	High tension electricity	70,083.98	—	70,083.98	
.2	Electrical equipment and fittings	22,69,904.61	-5,448.19	22,64,456.32	
.3	High tension electricity for UNTAA Workshop	16,421.04	—	16,421.04	
.4	Electrical installation for fume laboratory	9,084.04	—	9,084.04	
.5.1	Equipment for air-conditioning plant for Composite Library Building	5,88,689.76	—	5,88,689.76	
.2	Air-conditioning plant for Honeywell Computer	16,932.88	—	16,932.88	
.6	Electrical installation and fittings for Composite Library Building	3,26,931.14	+36,460.38	3,06,381.60	
.7	Electrical installation and fittings for Boy's Hostel at 200 B. T. Road	1,42,437.12	—	1,42,437.12	
.8	Electrical installation for Honeywell Computer	15,583.43	—	15,583.43	
	Sub-total:	34,29,647.90	-5,448.19 +36,460.38	34,59,653.07	
<b>G. Furniture &amp; Fittings</b>					
		23,06,776.47	+5,906.08 -4,116.40	23,11,567.15	
<b>H.1 Books &amp; journals</b>					
		91,28,894.82	—	91,28,894.82	
.2	Books and journals acquired out of Ford Foundation Grant	81,876.04	—	81,876.04	
<b>I. Motor cars and Vehicles (see note 'f' below)</b>					
		6,48,613.86	-2,577.36	6,43,936.51	
<b>J. Library equipment (including equipment procured through Ford Foundation Grant and Rockefeller Foundation Grant)</b>					
		43,716.40	—	43,716.40	

FIFTIETH ANNUAL REPORT : 1981-82

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AS ON 31st MARCH 1982

Depreciation for the year		Additions during the year				Written down value as on 31st March 1982 (Col. 6+7.2)
Rate	Amount	Net value (Col. 4—5.1)	Out of capital expenditure grant (7.0)	Out of current expenditure grant (7.1)	Total (Col. 7.0+7.1) (7.2)	
(5.0)	(6.1)	(6)	(7.0)	(7.1)	(7.2)	(8)
	Ra. P.	Ra. P.	Ra. P.	Ra. P.	Ra. P.	Ra. P.
15%	71,842.59	4,07,108.00	30,378.54	—	36,378.54	4,43,488.54
..	1,21,297.07	6,87,360.03	1,68,228.64	—	1,68,228.64	8,56,578.67
..	1,043.00	5,914.12	—	—	—	5,914.12
..	43,066.00	2,44,040.68	1,87,293.79	—	1,87,293.79	4,31,234.47
..	1,80,342.85	10,21,942.84	2,99,638.84	—	2,99,638.84	13,21,481.68
..	496.08	2,810.67	2,447.10	—	2,447.10	5,257.67
..	1,090.16	6,177.49	—	—	—	6,177.49
..	1,336.21	7,671.83	—	—	—	7,671.83
20%	32,102.78	1,28,411.12	—	—	—	1,28,411.12
..	5,68,182.02	19,48,793.08	5,70,266.30	—	5,70,266.30	25,19,049.38
..	38,807.49	1,55,229.94	—	—	—	1,55,229.94
	10,68,806.14	46,16,349.70	12,64,143.21	—	12,64,143.21	68,79,492.91
10%	2,371.29	21,341.64	—	—	—	21,341.64
..	—	93,652.00	49,868.00	—	49,868.00	1,43,510.00
10%	7,006.40	83,067.88	—	—	—	83,067.88
..	2,26,446.96	20,29,013.37	77,791.85	—	77,791.85	21,06,806.22
..	1,642.10	14,778.94	—	—	—	14,778.94
..	988.40	8,716.64	—	—	—	8,716.64
..	66,868.88	5,11,820.78	—	—	—	5,11,820.78
..	1,663.29	16,239.69	—	—	—	16,239.69
..	39,083.29	3,26,298.21	64,416.00	—	64,416.00	3,80,714.21
..	14,243.71	1,28,193.41	—	—	—	1,28,193.41
..	1,668.36	14,026.08	—	—	—	14,026.08
	3,48,510.47	31,11,142.60	1,32,207.86	—	1,32,207.86	32,43,360.46
10%	2,31,166.82	20,80,410.63	2,91,061.60	—	2,91,061.60	23,71,472.03
5%	4,66,434.74	86,72,260.08	—	18,76,406.46	18,76,406.46	1,06,47,866.54
..	3,093.76	68,781.29	—	—	—	68,781.29
20%	1,28,787.30	5,16,149.21	1,42,081.12	—	1,42,081.12	6,67,230.33
15%	6,667.46	37,168.94	—	—	—	37,168.94

INDIAN STATISTICAL INSTITUTE

SCHEDULE

SCHEDULE OF FIXED ASSETS

Sl. no.	Particulars	Written down value as on 31.3.1981		Deletions/adjustment made during the year		Value after deletions/adjustment (Col. 2-3)	
		(1)	(2)	(3)	(4)		
K.	Water supply arrangement :		Rs. P.	Rs. P.	Rs. P.		
	1 At Baranagar .. .. .		5,44,386.60	—		5,44,386.60	
	2 At Bangalore .. .. .		—	—		—	
L.	Overbridge : Calcutta .. .. .		3,423.48	—		3,423.46	
M.	Soviet Printing Machine (see note 'g' below) .. .. .		3,67,604.78	—		3,67,604.78	
N.	S.R.C. equipment .. .. .		38,578.70	—		38,578.70	
O.	F.A.I. Project equipment (Furniture acquired through F.A.I. Grant) .. .. .		903.68	—		903.68	
P.	Investigation of statistical problem connected with sediment transportation Project :						
	Laboratory equipment acquired out of grant from Indian National Science Academy .. .. .		15,894.55	—		15,894.55	
Q.	P.A.B.X. installation : Delhi .. .. .		9,370.00	—		9,370.00	
	P.A.B.X. undoe installation : Calcutta .. .. .		1,76,866.00	—		1,76,866.00	
	Internal telephone : Calcutta .. .. .		1,085.79	—		1,085.79	
R.	Survey Research Methodology Project :						
	Calculating equipment acquired out of grant from Indian Council of Social Science Research .. .. .		833.30	—		833.30	
	<b>Grand Total :</b> .. .. .		<b>5,13,70,973.07</b>	<b>-1,76,451.38</b> <b>+1,57,280.28</b>		<b>5,13,51,806.07</b>	

NOTES : (a) For lease-hold land at Delhi, lease deed has not yet been executed pending which no write off of the value could be made.

(b) Purchased out of ear-marked donation received from Statistical Publishing Society.

(c) Lease-hold land, building etc. acquired in 1964-65 for 54 years. Depreciation represents value written off in Rs. 481.42 per year.

(d) Situated on land received as gift, the value has been ignored for the purpose of these accounts.

(e) Staff quarters at Bidyayatan Sarani are under progress. Some reclaimed materials from a demolished shed item No. C.1.8 have been used for which necessary adjustment of value has been made on estimate.

(f) Necessary permission from Government of India for sale of the assets has been obtained.

(g) Represents value of Soviet Printing machine received as gift from the Soviet Academy of Science, USSR which has been made over to the Statistical Publishing Society for utilisation as per agreement.

P. K. CHATTERJEE  
Senior Accounts Officer

N. SUNDARAM  
Officer-in-Special Duty  
(Administration & Finance)

B. P. ADHYAKAM  
Director  
Indian Statistical Institute

FIFTIETH ANNUAL REPORT : 1981-82

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AS ON 31st MARCH 1982

Depreciation for the year		Net value (Col. 4-5.1)	Additions during the year			Written down value as on 31st march 1982 (Col. 6+7.2)
Date	Amount		Out of capital expenditure grant	Out of current expenditure grant	Total (Col. 7.0+7.1)	
(5.0)	(5.1)	(6)	(7.0)	(7.1)	(7.2)	(8)
	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
10%	54,483.68	4,89,902.94	—	—	—	4,89,902.94
—	—	—	18,653.50	—	18,653.50	18,653.50
7.5%	266.76	3,166.70	—	—	—	3,166.70
16%	55,125.72	3,12,379.06	—	—	—	3,12,379.06
15%	5,786.51	32,760.19	—	—	—	32,760.19
10%	90.07	813.29	—	—	—	813.29
15%	2,209.18	13,086.37	—	—	—	13,086.37
10%	927.00	8,343.00	—	—	—	8,343.00
—	—	1,75,888.00	8,714.37	—	8,714.37	1,84,598.37
10%	108.58	977.21	—	—	—	977.21
15%	125.00	708.30	—	—	—	708.30
	28,89,131.06	4,84,62,874.01	38,08,204.43	18,75,405.48	58,83,609.91	5,4,14,823.90

1A, Raja Subodh Mullik Square,  
Calcutta-700 013.  
18 March 1983

ROY & BANERJEE  
Chartered Accountants

# INDIAN STATISTICAL INSTITUTE

## SCHEDULE II

### SCHEDULE OF INVESTMENT AND INTEREST ACCRUED AS ON 31st MARCH 1983

Particulars	Investment	Accrued interest	Total
1. Fixed Deposit			
With United Bank of India .. ..	8,41,768.26	23,843.77	
With Grindlays Bank P.L.C. .. ..	3,00,000.00	..	
With Allahabad Bank .. ..	90,00,000.00	38,41,768.30	60,000.00
	<hr/>	<hr/>	<hr/>
			73,843.77
			33,16,202.03
2. 5½% Loan 1989 (Market value Rs. 4,14,653.00) .. ..	5,19,230.05	..	3,41,164.00
5½% Loan 2000 (Market value Rs. 40,650.00) .. ..	50,075.00	5,86,301.05	30,250.00
	<hr/>	<hr/>	<hr/>
		38,11,060.31	4,44,947.77
			<hr/>
			42,56,007.08

P. K. CHATTERJEE  
Senior Accounts Officer

N. SHINIVARAN  
Officer-on-Special Duty  
(Administration & Finance)

B. P. ADHIKARI  
Director  
Indian Statistical Institute

1A, Raja Subodh Mullick Square,  
Calcutta 700 013  
18 March 1983

ROY & BACOR  
Chartered Accountants

FIFTIETH ANNUAL REPORT : 1981-82

SCHEDULE III

LOANS AND ADVANCES AS AT 31st MARCH 1982

Particulars	Rs. P.	Rs. P.
Advance for land .. .. .		30,848.34
Security Deposit paid .. .. .		85,151.57
Sundry Debtors (partly irrecoverable) .. .. .		81,250.80
Charges prepaid .. .. .		5,09,622.80
Marginal Deposit .. .. .		5,000.00
ISI Contributory Provident fund .. .. .		3,20,851.19
Students' Benefit Fund .. .. .		350.00
Staff Insurance .. .. .		1,605.35
Staff Insurance (Giridih & Delhi) .. .. .		3,503.47
Amount due for Scholarship & Fellowship payable by other bodies .. .. .		21,570.84
Education Loan .. .. .		892.00
House Building Loan (Old) .. .. .		42.00
House Building Loan (New) .. .. .		15,19,227.00
Relief Loan (Flood/Drought) .. .. .		2,50,210.51
Advance against T.A. .. .. .		2,46,813.22
Advance against L.T.C. .. .. .		2,60,714.33
Advance for purchase of Cycle .. .. .		1,24,743.00
Advance to Suppliers and contractors .. .. .		10,82,378.77
Suspense and Advance .. .. .		1,77,844.74
Festival advance to staff .. .. .		2,90,687.27
Departmental imprest .. .. .		31,177.47
		<u>60,54,199.37</u>
<i>Less :</i>		
ISI Co-operative Credit Society Ltd. (Baranagar) .. .. .	4,458.15	
ISI Co-operative Credit Society Ltd. (Giridih) .. .. .	2,835.37	
Interest on House Building Loan (New) .. .. .	1,586.25	
Food Grain Advance .. .. .	1,820.00	
Students' Amenities Advance (Delhi) .. .. .	1,085.85	11,835.82
		<u>Total Rs. 50,42,363.75</u>
 P. K. CHATTERJEE Senior Accounts Officer	 N. SRINIVASAN Officer-on-Special Duty (Administration & Finance)	 B. P. ADHIKARI Director Indian Statistical Institute
 1A, Raja Subodh Mulkik Square, Calcutta 700 013 18 March 1983		 ROY & BAOCI Chartered Accountants

INDIAN STATISTICAL INSTITUTE

SCHEDULE V

EXCESS OF RECEIPTS OVER EXPENDITURE(+) AND EXCESS OF EXPENDITURE OVER RECEIPTS(-) IN RESPECT OF  
MISCELLANEOUS PROJECTS AND ACTIVITIES ON BEHALF OF GOVERNMENT OF INDIA AND  
OTHER BODIES AS ON 31st MARCH 1982

Projects and Activities	Excess of receipts(+)/expenditure(-)				Upto	
	upto 31st March 1981		for the year		31st March 1982	
	Rs.	P.	Rs.	P.	Rs.	P.
<b>A. OTHER BODIES :</b>						
1. Estimates of Probabilities of Hospitalisation according to age, sex and diagnosis etc. As per last account	+	12,468.00	—		+	12,468.00
2. International Course on Management of Quality Control in collection with Dr. J. M. Juran As per last account	+	17,828.55	—		+	17,828.55
3. An investigation of age and related change in the Electrophoretic and Immunoelectrophoretic components of serum-proteins As per last account	+	87,074.89	—		+	87,074.89
4. Fertiliser optimal Demand Study Projecting Fertiliser Demand in India As per last account	+	1,69,886.93	—		+	1,69,886.93
5. Project on Exchange Control and Liberalisation As per last account	+	17,027.85	—		+	17,027.85
6. Research Project : "Central Place Hierarchy for developing Agricultural Region", Kerala Area As per last account	+	1,400.00	—		+	1,400.00
7. Seminar by Prof. J. Kernal under ICSSR Programme As per last account	+	927.13	—		+	927.13
8. Ford Foundation for Energy Project As per last account	+	2,960.53	—		+	2,960.53
9. Econometrics Project As per last account	+	15,258.35	—		+	15,258.35
10. Journal of Economic Development Project As per last account	+	2,631.10	—		+	2,631.10
11. Cost Benefit Analysis of Rural Electrical Schemes Project As per last account	+	54,901.32	—	1,265.10	+	53,636.22
12. System Development of Data Processing for Examination Project As per last account	+	28,849.25	—		+	28,849.25
13. Survey of Unorganised Labour in Transport Industry As per last account	+	16.36	—		+	16.36
14. Survey on Foreign Tourist in India As per last account	—		+	1,58,212.47	+	1,58,212.47
15. Project on Health and Socio-Economic Survey in CMDA Area As per last account	+	74,836.79	+	7,260.13	+	81,686.93





FIFTIETH ANNUAL REPORT : 1981-82

SCHEDULE V—Contd.

EXCESS OF RECEIPTS OVER EXPENDITURE (+) AND EXCESS OF EXPENDITURE OVER RECEIPTS (-) IN RESPECT OF MISCELLANEOUS PROJECTS AND ACTIVITIES ON BEHALF OF GOVERNMENT OF INDIA AND OTHER BODIES AS ON 31st MARCH 1982

Projects and Activities	Excess of receipts(+) / expenditure(-)				Upto 31st March 1982	
	upto 31st March 1981		for the year		Ra.	P.
	Ra.	P.	Ra.	P.		
18. Road Users' Survey As per last account	-	1,077.40	-	12,061.00	-	13,128.40
17. Project on Contour mapping and Estimation of Geological Parameters As per last account	+	15,173.79	-	694.63	+	14,479.28
18. Training Course of Afghan Nationals As per last account	+	28,851.90	—	—	+	28,851.90
19. ICSSR Course on Survey Research Methodology (8th March 1978 to 29th April 1978) As per last account	+	5,278.52	—	—	+	5,278.52
20. ICSSR Course on Survey Research Methodology (16th January 1979 to 24th February 1979) As per last account	+	6,346.06	—	—	+	6,346.06
21. ICSSR Project: Survey of Distribution of Public expenditures in Social Services in West Bengal As per last account	-	26,577.78	-	22,330.51	-	48,808.09
22. Summer School on use of Electronic Computers in Research and Development As per last account	+	3,769.30	—	—	+	3,769.30
23. ILO/Village Study Project As per last account	+	12,955.03	+	2,942.28	+	15,897.29
24. Project on Strategies for Integrated Rural Development—A case study, North Canara District in Karnataka As per last account	+	10128.00	-	2,493.40	+	7,634.60
25. Project on An Alternative Plan with the Basic Social objective of Ensuring the minimum level of Living to the poor As per last account	+	7,083.38	—	—	+	7,083.38
26. ICSSR Project on Changing Land Relation and Woman As per last account	+	168.28	—	—	+	168.28
27. ICSSR Project on Pulayes in a Changing Society As per last account	+	586.52	—	—	+	586.52
28. ICSSR Project on Women and Rice Cultivation As per last account	-	4,016.58	-	6,176.84	-	10,193.42
29. Survey on malasia Project As per last account	+	24,860.20	+	25,117.59	+	49,977.79
30. D.N.C.F.P.M.S. As per last account	+	1,20,716.94	+	26,199.75	+	1,52,916.69

# INDIAN STATISTICAL INSTITUTE

## SCHEDULE V—Contd.

**EXCESS OF RECEIPTS OVER EXPENDITURE (+) AND EXCESS OF EXPENDITURE OVER RECEIPTS (—) IN RESPECT OF MISCELLANEOUS PROJECTS AND ACTIVITIES IN BEHALF OF GOVERNMENT OF INDIA AND OTHER BODIES AS ON 31st MARCH 1982**

Projects and Activities	Excess of receipts (+)/expenditure (—)				Upto		
	upto 31st March 1981		for the year		31st March 1982		
	Rs.	P.	Rs.	P.	Rs.	P.	
31. Rural Survey Project—Cooch Behar As per last account	+	3,246.70	+	3,950.97	+	7,196.67	
32. Solar Powered Pump Set As per last account	+	1,00,086.35	—	1,800.00	+	98,286.35	
33. Research Methodology in Economic Theory As per last account	+	2,955.70	—	—	+	2,955.70	
34. Project on Quantitative analysis of some aspects in Indian Agriculture:							
(a) Dr. A. Rudra	—	85,909.09	—	—	—	85,909.09	
(b) Sri R. Talwar and other fellowship	—	15,202.91	—	—	—	15,202.91	
35. Enquiry into Nature of Urban Poverty: Survey of Humbleton Pavona in Calcutta							
As per last account		-68,232.88					
Survey living in houses							
As per last account	+	32,290.05	—	576.00	—	26,617.33	
36. Project on Trade Strategies and Employment Patterns							
As per last account	—	270.58	—	—	—	270.58	
37. The problem of Diesel distribution for Agri- culture—A case study of Gonda Gorakhpur Distt. of Eastern Railway							
As per last account	—	—	+	4,464.28	+	4,464.28	
38. MICEP Project As per last account							
				+	17,313.42	+	17,313.42
Net :	+	6,74,270.90	+	1,98,184.69	+	8,72,455.59	
Sub-total :	+	8,33,267.57	—	2,45,450.87	+	10,72,465.41	
	—	1,58,996.67	—	47,288.18	—	2,00,929.82	
<b>B. On behalf of Government of India :</b>							
1. Research and planning committee of the Plann- ing Commission for Sociological Studies	—	23,765.14	—	—	—	23,765.14	
2. ISEC Colombo Plan Fellowship As per last account	—	12,31,888.76	—	—	—	—	
Expenditure during the year		1,78,984.33					
Less : Amount received during the year		44,060.09	—	1,34,324.29	—	13,60,013.06	
3. Ministry of Health & Family Welfare, Govt. of India for Integrated Population Research Centre (formerly Communication Action Research Centre & Demographic Research Centre)	—	6,14,774.58	+	6,14,774.58	—	—	
4. Ministry of Planning, Government of India for National Sample Survey Organisation As per last account	—	6,71,986.83	—	—	—	—	
Received during the year		1,41,583.58					
Less : Expenditure during the year		1,25,079.28	—	15,904.30	—	6,56,982.53	
Sub-total :	—	25,42,206.31	+	6,30,678.88	—	20,45,850.72	
	—	—	—	1,34,324.29	—	—	
Summary : Total A	+	8,33,267.57	+	8,76,129.75	+	10,72,465.41	
Total B	—	27,01,201.98	—	1,81,010.47	—	22,45,880.54	

*Note : For Receipts and Expenditure of the projects during the year see Annexure I.*

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18 March, 1983

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Chartered Accountants

FIFTIETH ANNUAL REPORT : 1981-82

SCHEDULE VI

STATE OF CASH IN HAND AS ON 31st MARCH 1982 AT THE CENTRAL OFFICE AND OTHER OFFICES OF THE INSTITUTE & BANK BALANCES ON THAT DATE (EXCEPT AMERICAN EXPRESS INTERNATIONAL BANKING CORPORATION, CALCUTTA)

	Cash Amount	with Bank (Name of the Bank)	Total
At Central Office (Calcutta)	14,476.12	SBI, Strand Road 'A' SBI, Shambazar 'B' UBI, Dunlop Bridge RBI, (P/L A/o) Nath Bank Ltd. (in liquidation—doubtful) SBI, Delhi 'A' SBI, Delhi 'B' Grindlays Bank Ltd. Allahabad Bank	20,146.65 6,46,416.32 6,97,060.10 2,108.80 2,812.67 1,632.73 688.60 40,82,878.24 9,83,619.46
<b>BRANCHES :</b>			
At Delhi	4,462.30	Canara Bank	8,36,227.04
" Guridiah	1,040.82	UCO Bank	132.10
" Bangalore	558.43	United Bank of India SBI, Bangalore Bank of Baroda, Bangalore	14,745.80 3,31,568.42 4,91,153.14
" Kerala	905.68	S.B. of Travancore	25,089.06
" Coimbatore	448.52	Syndicate Bank, Coimbatore	18,760.66
" Madras	4,524.18	SBI, Madras Branch	1,21,677.03
" Bombay	419.24	SBI, Bombay	37,893.74
" Baroda	202.25	Bank of Baroda, Baroda	33,476.53
" Hyderabad	522.23	Indian Bank, Hyderabad S.B. Hyderabad	67,988.26 742.08
" Pune	319.00	SBI, Pune	26,077.09*
" Tokyo, Japan**	7,668.82		
	<u>36,444.19</u>		<u>83,66,423.11</u>

\*Includes Rs. 10,000/- draft in transit.

\*\*With International House of Japan, Translation Unit, converted @ Rs. 100 = 7600 yen approx.

The above amount have been shown in the following Balance Sheets of the Institute and its various funds :

The Institute	16,283.12	The Institute	82,04,928.88
Development Fund I	13,860.84	Statistical Quality Control Development Fund	1,69,528.56
Director's Contribution Fund	6,300.23	1974 International Symposium Prize in Statistics Fund	1,858.68
	<u>36,444.19</u>		<u>83,66,423.11</u>

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INDIAN STATISTICAL INSTITUTE

SCHEDULE VII

GENERAL FUND AS ON 31st MARCH 1983

Particulars	Amount	Amount
1. Opening balance .. .. .		5,64,92,544.28
2. Add : Assets required during the year :		
.1 Capital Expenditure Grant A/o.		
As per Schedule I (col. 7.0) annexed to the Balance Sheet	28,08,304.43	
.2 Current Expenditure Grant A/o.		
As per Schedule I (col. 7.1) annexed to the Balance Sheet	18,75,405.46	56,83,609.89
3.1 Less : Value adjustment for effect not given in 1980-81 in respect of excess provision in 1979-80 for construction and equipment .. .. .	3,58,573.20	
.2 .. Depreciation written off during the year on fixed assets (including lease written off) As per Schedule I (col. 5.1) annexed to the Balance Sheet ..	28,69,131.06	
.3 .. On sheet at 208 B. T. Road—written off : As per Schedule I (col. 3) annexed to the Balance Sheet .. .. .	5,168.65	32,52,650.91
		24,30,748.98
4. Add : Interest on Investment :		
On Fixed Deposit with Banks .. .. .	1,44,545.64	
On G. P. Notes .. .. .	31,179.50	1,75,725.14
5. Add : Surplus on sale of assets .. .. .		29,639.32
		26,46,113.44
		5,91,39,657.72

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FIFTIETH ANNUAL REPORT : 1981-82

SCHEDULE VIII

DEPOSITS AND LIABILITIES AS AT 31st MARCH 1982

Particulars	Rs.	P.
Income tax : staff	71,767.69	
do : contractors	8,671.81	
Profession tax	7,713.00	
Library & Circulating Library deposits	74,385.00	
Laboratory deposit	3,775.00	
Hotel caution money deposit	7,300.00	
E.O.A.F.E.	704.27	
O.D.S. annuity deposit	89.00	
Machine training deposit	8,976.00	
Cumulative time deposit	16,211.25	
Caution money for electric meter (Dolhi) housing staff	1,376.00	
Statistical workers' housing scheme	7,987.32	
Workers' benefit Fund	1,344.71	
Felicitation fund	184.37	
Membership fee deposit	1,710.00	
Earnout money deposit	42,942.73	
Security deposit	46,876.67	
Retention money deposit	1,06,082.08	
Tender money deposit	43,746.40	
ISI Small Scale Industry Experimental Unit—Kalyanree	14,910.37	
Director of Health Service for purchasing Census Report through UNESCO	8,128.00	
Other liabilities	28,06,300.36	
	32,76,137.63	
Less : CTD (Guridib & Delhi)	4,983.21	
	<u>27,77,804.42</u>	
	Total : Rs. 32,74,164.42	

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# INDIAN STATISTICAL INSTITUTE

## SCHEDULE IX

EXCESS OF RECEIPTS OVER EXPENDITURE IN RESPECT OF CAPITAL EXPENDITURE GRANT  
RECEIVED FROM GOVERNMENT OF INDIA AND GOVERNMENT OF KARNATAKA AS ON 31st MARCH 1983

	Re. P.	Re. P.
<b>1. EXCESS OF RECEIPTS OVER EXPENDITURE IN RESPECT OF CAPITAL EXPENDITURE GRANT FROM GOVERNMENT OF INDIA</b>		
AS PER LAST ACCOUNT .. .. .		61,58,781.51
<i>Add</i> : Grant received during the year .. .. .	55,00,000.00	
.. Value adjustment for effect not given in 1980-81 in respect of excess provision in 1979-80 for construction and equipment .. .. .	3,58,572.20	68,58,573.90
		1,20,17,304.71
<i>Less</i> : Assets acquired during the year .. .. .		38,06,204.43
	Balance Cr. ..	82,09,100.28
<b>2. EXCESS OF RECEIPTS OVER EXPENDITURE IN RESPECT OF CAPITAL EXPENDITURE GRANT FROM GOVERNMENT OF KARNATAKA</b>		
As per last account	Balance : Cr.	12,00,000.00
Excess of Receipts over Expenditure transferred to Balance Sheet .. .. .		94,00,100.28

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## FIFTIETH ANNUAL REPORT : 1981-82

### SCHEDULE X

Notes forming part of the Balance Sheets as at 31st March, 1982, and the Income and Expenditure Accounts for the year ended on that date : of

(a) Indian Statistical Institute, and (b) Other Funds.

#### Balance Sheet

#### 1. Fixed Assets :

(a) The Institute is maintaining fixed assets registers on written down value method. Locations of Assets have been shown for all assets acquired from 1977-78, and for earlier period whenever available. As the identification marking has not been made complete, the asset registers do not contain such details. Locations and identification marks are maintained for land, buildings, sheds & structures, motor car and computer. In case of fixed assets acquired prior to 31st March, 1952, the value was taken on the basis of inventory prepared as on that date. No physical verification of fixed assets was carried out during the year 1981-82. However, the Management of the Institute has subsequently conducted physical verification and the report is under consideration of the Management. In respect of obsolete and discarded assets, a Committee was set up for their recommendation for write off action and their report has been submitted but pending further scrutiny. The matter is under active consideration of the Council.

In the accordance with the terms and conditions of the grants for Capital Expenditure received from the Government of India, the Institute shall not sell or otherwise dispose off or mortgage any property acquired by it with such grants without prior approval of the Government. Most of the assets have been acquired out of the Government grants, total written down value of which, however, are not ascertainable.

In respect of assets acquired under deferred payment scheme, liability for unpaid amount has not been accounted for although depreciation on such assets has been calculated on full value of such assets, in view of the capital grant sanctioning procedure by the Government of India.

(b) The Institute is holding land and landed properties acquired through Government or by direct purchase. In case of acquired land/landed property, the Institute has been given certificate/grant of possession and in other cases instruments of transfer have been executed by the sellers and the donors.

(c) Electronic Computer at Baranagar : Cost of a generator with installation charges is included in the above account. The generator is exclusively used for running the computer.

(d) As per past practice followed by the Institute, depreciation on fixed assets is charged in accounts from the year following the year of addition of such assets.

(e) 95% of the expenditures on Books and Journals (including cost of binding etc.) has been capitalised by crediting general fund as per past practice.

(f) No physical verification of Library Books was conducted during the year. Discrepancies found on physical verification of Library Books in Delhi in earlier years are under scrutiny.

(g) Imposition of liquidated damage clause for non-completion of the construction jobs by the contractors within stipulated time is usually considered at the time of final payment.

#### 2. Investments : Rs. 28,11,059.31

Investments including those under different funds stand in the name of the Institute. Securities earmarked for the specific funds have been disclosed in the balance sheets of the respective funds.

#### 2. Amount receivable on Miscellaneous Projects and Activities : Rs. 22,45,880.54.

(a) During the year an amount of Rs. 6,00,080.31 was received against dues of the earlier years. Effects are being made to realize the balance amount.

(b) A sum of Rs. 90,917.58 towards the expenditure on Integrated Population Research Centre has not been admitted by the Ministry of Health & Family Welfare and the same has been debited to the respective head in the income and expenditure account of the current year.

## INDIAN STATISTICAL INSTITUTE

(c) Fixed assets whenever acquired for any project are usually debited to the respective receipts and expenditure account in the year of acquisition. On completion of the project, these assets are to be disposed off as per terms of contract of the respective projects.

### 4. Stores at cost : Rs. 10,44,856.42

In respect of stores items other than cement and steel, the net handling loss of Rs. 732.13 for the year 1981-82 was charged to Income and Expenditure Account.

No physical verification of cement, steel has been made during the year. Losses/shortage, if any, will be adjusted as and when physical verification is made.

(b) Concerned departments have been advised to determine the obsolete/damaged stores and materials but no report has so far been received.

### 5. Loans & Advances : (Dr) Rs. 50,42,282.75

(a) Separate ledgers/register are maintained for each type of advance/loans e.g., House Building Loan, Flood Relief Loan, Festival Advance, Advance to Suppliers/Contractors, L.T.C. Advance, T.A. Advance etc. No write off in respect of old unadjusted outstanding advances are made in the cases of workers of the Institute since they are fully realised at the time of final settlement of their accounts i.e., at the time of resignation, retirement and death. Unless the nature of work differs or exigency arises, second T.A. L.T.C. advances etc. are not paid as long as the previous advance remains unadjusted/unsettled. Various accounts under above heads consists of old balances over one year and in some cases over three years. Necessary scrutiny and linking up is under progress.

Advance to suppliers/contractors include Rs. 22,213.66 is recoverable from Bharat Overseas (P) Ltd., Delhi. The Institute has filed a suit for recovery of the amount which is pending before the Court. As finally irrecoverable will be adjusted in the year it becomes actually bad.

(b) Suspense and other Advance : Rs. 1,77,844.74

(i) The difference of the above schedule with general ledger balance amounted to Rs. 718.71 (old) which is under reconciliation.

(ii) Included under suspense account some old balances in the name of some deceased persons, some visiting professors, regular employees of the Institute and others. Steps are being taken for recovery/adjusting the above amount.

(iii) This account includes the following :

Adjustment of unreconciled stock of materials	Rs. 5,181.73 (Net Cr., old)
Medical expenses recoverable from staff	Rs. 27,748.08 (Dr., old)
Medical Advance	Rs. 4,929.08 (Dr., old)
NSSO P.F., Interest <i>Ad hoc</i> Payment	Rs. 11,760.22 (Cr.)

(iv) Included in above is a sum of Rs. 22,000/- recoverable from some staff under suspension for which enquiry is in progress.

(e) Relief (Flood, Drought) Loans : Rs. 2,50,218.51

Amount paid to NSSO workers has not been ascertained and accounted for separately.

(d) Sundry Debtors : Rs. 81,350.80 (considered doubtful)

This item include old outstanding balances carried forward from 1982-84 and onwards. The major part of the balance is recoverable from Gun & Shell Factory (Rs. 40,721.87). Any amount becoming finally irrecoverable will be adjusted in the year it becomes actually bad.

(e) Institute adopted commercial accounting in the matter of LTC/LTD advance from 1978-79 only. Due to rigorous follow up action, year's recovery includes recoveries for the period prior to 1978-79.

(f) Some advances, loans and other accounts under the head are exhibited in the accounts net of credit as per past practice.



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6. *Additional D.A. Deposits with Regional Provident Fund Commissioners :*

Dr. Rs. 1,03,477.25

Cr. Rs. 1,16,932.46

The difference of Rs. 12,455.31 is under scrutiny.

7. *Cash and Bank Balances :*

(a) Cash balances in hand and at banks as shown in the Schedule VI attached to the balance sheet, indicate the balancing figures as the individual cash and bank balances are not maintained separately for individual fund account.

(b) Bank Balances :

(i) United Bank of India, Dunlop Bridge Branch : Rs. 5,97,060.10

The above includes pay order for Rs. 1000/- deposited by a contractor towards Earnest Money/ Security Deposit.

(ii) Nath Bank Ltd. (in liquidation) : Rs. 3,812.57

Liquidation proceedings is still continuing and dividends are received from time to time. After close of liquidation proceedings, unrecovered amount will be determined and written off.

(iii) Bank statement of United Bank of India, Dunlop Bridge Branch includes some entries (Dr. & Cr.) for which no details are available from the Bank. Follow up actions are being taken.

(iv) Certificates of State Bank of India, Strand Road, Branch, Delhi Branch and Nath Bank Ltd. (in liquidation) could not be obtained.

(c) Foreign currency cheques are accounted on realisation basis.

(d) Some cheques prepared and entered in cash book on or before the closing day of the year have been despatched to/collected by parties after 31st March, 1982.

8. *Deposit & other Liabilities : (Cr.) Rs. 32,74,154.42*

(a) Provision for liability has been made generally for payments made upto 30th June, 1982 for goods and services received by the institute relating to the year ended 31st March, 1982. Some payments have been made in this year for expenses of the past years for which no provisions were made.

(b) Some of the accounts included under his head are exhibited net of debit as per past practice.

(c) In respect of some of the accounts included under this head, no detailed lists could be prepared, e.g., Hostel Caution Money Deposit.

(d) The Institute has introduced the GPF-cum-Pension-cum-Gratuity Scheme as an alternative to the existing CPF-cum-Gratuity Scheme with effect from 1.1.1982. The employees of the Institute on the date of introduction of this pension scheme were requested to exercise option in favour of one of the two available retirement benefit scheme on or before 15th October, 1982.

Initially, it is proposed to meet the pension liability of the employees who have opted for the pension scheme and who have retired on or after 1.1.1982 from the pension fund to be created out of the employer's contribution to P.F. (including interest) accumulated in the account of such persons. In addition, it is proposed that an amount equivalent to 8-1/3% of the appropriate pay of those employees who have opted for pension scheme will be deposited in the pension fund every month. The monthly pension liability will be met out of pension fund thus created.

9. *Interest on Investments in Government Securities :*

Interest which is accrued and due for payment is only accounted for as per the practice followed. Actions are being taken to collect the overdue interest.

## INDIAN STATISTICAL INSTITUTE

### 10. Project Accounts :

As per the previous practice Project Accounts are exhibited on the following basis :

Receipts	—on cash basis
Expenditure	—on accrual basis

### Income and Expenditure Account

11(a) Purchase of stationeries, consumable stores, laboratory stores, tools and minor accessories, cost of cards, cabinet etc. for the year have been considered as expenditure. Physical verification of stationeries, stores etc. is being made to ascertain abnormal loss, if any. Opening and closing stocks of these materials are not considered to find out the revenue impact over the year as per usage. Similarly, opening and closing seed stocks at Giridih are also not exhibited in the account.

(b) Expenses to celebrate Golden Jubilee function of the Institute are included and merged under various heads of account.

(c) Included under the head Travelling and Conveyance is an amount of Rs. 5,79,986/- incurred for visit of foreign scientists to attend the Golden Jubilee function. Even though promised, the Government of India could not arrange for free passage but has indicated to reimburse the amount vide letter No. M.17011/8/81-ISI dated 17/20-4-82. The amount will be accounted for when received.

(d) Medical reimbursement expenses include Hospital Advances paid by the Institute. Incomplete bills entered in the record of MERU have not been considered in the accounts.

### 12. Capital Commitments :

Contracts remaining to be executed on capital accounts—Rs. 10,59,352/-.

### 13. Contingent Liabilities :

(a) The Institute may be liable to pay additional rent with interest in respect of Gupta Niwas accommodation at Calcutta, the amount of which is not readily ascertainable. A case is pending before the Calcutta High Court in this respect.

(b) The Institute is contingently liable for payment of claims relating to construction and other work amounting to Rs. 4,85,590/- and sundry other claims amounting to Rs. 2,27,863/-.

14. Figures for previous year have been regrouped and rearranged wherever necessary to make them comparable with the current year's figures except Grant-in-Aid and Expenditure for Miscellaneous Projects in the Income and Expenditure Account.

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INDIAN STATISTICAL INSTITUTE  
SCHEDULE IV

Income and Expenditure Account of Statistical Quality Control Development Fund, Development Fund I & 1974 International Symposium Prizes in Statistics Fund for the Year ended 31st March 1982

SOC Development Fund	Previous year			Current year			Income	Previous year			Current year				
	Development Fund I	1974 International Symposium Prizes in Statistics Fund	Total	Development Fund I	1974 International Symposium Prizes in Statistics Fund	Total		Development Fund I	1974 International Symposium Prizes in Statistics Fund	Total	Development Fund I	1974 International Symposium Prizes in Statistics Fund	Total		
₹ 67,996.90	12,79,311	1,97,938	₹ 2,10,000.00	1,35,643.36	1,73,882	₹ 2,40,900.92	2,40,900.92	12,565.21	1,97,938	2,10,000.00	1,35,643.36	1,35,643.36	13,566.74	1,73,882	₹ 2,40,900.92
24,70,662.00	12,56,621	1,97,938	₹ 2,10,000.00	1,35,643.36	1,35,674	₹ 2,40,900.92		12,565.21	1,97,938	2,10,000.00	1,35,643.36	1,35,643.36	13,566.74	1,73,882	₹ 2,40,900.92

Balance Sheet of Statistical Quality Control Development Fund, Development Fund I & 1974 International Symposium Prizes in Statistics Fund as at 31st March 1982

SOC Development Fund	Previous year			Current year			Property & Assets	Previous year			Current year				
	Development Fund I	1974 International Symposium Prizes in Statistics Fund	Total	Development Fund I	1974 International Symposium Prizes in Statistics Fund	Total		Development Fund I	1974 International Symposium Prizes in Statistics Fund	Total	Development Fund I	1974 International Symposium Prizes in Statistics Fund	Total		
₹ 23,97,411	1,36,539.39	16,472.82	₹ 21,73,463.61	40,32,796.90	1,39,191.80	₹ 41,52,988.70	₹ 24,10,000.00	1,35,500.00	17,500.00	₹ 33,94,000.00	1,11,000.00	₹ 44,10,000.00	1,35,500.00	17,500.00	₹ 45,94,000.00
24,70,662.00	12,56,621	1,97,938	₹ 2,10,000.00	1,35,643.36	1,35,674	₹ 2,40,900.92	₹ 2,40,900.92	12,565.21	1,97,938	2,10,000.00	1,35,643.36	1,35,643.36	13,566.74	1,73,882	₹ 2,40,900.92
74,10,490	—	—	₹ 74,10,490	31,80,234	—	₹ 31,80,234	₹ 24,42,466	382.39	74,10	₹ 24,932.89	—	₹ 24,932.89	—	—	₹ 24,932.89
62,31,782.30	1,39,191.80	16,002.22	₹ 61,52,988.70	46,79,996.90	1,42,748.24	₹ 48,32,745.14	₹ 42,31,782.30	1,39,191.80	18,002.22	₹ 41,52,988.70	1,11,000.00	₹ 42,74,988.70	1,39,191.80	18,002.22	₹ 44,10,000.00

1. Fund:  
As per last account  
Add: Excess of Income over Expenditure ₹ 2,35,643.36  
Excess of SOC receipts over Rs. 700,000.  
Excess of Income from current expenditure ₹ 1,35,643.36

1. Interest received but not due on Fixed Deposits  
2. Current Assets  
3. Cash and Bank Balance Forming part of Institute's cash and bank balance vide Schedule VI:  
Cash  
Bank

R. C. Chatterjee  
Senior Account Officer  
14, Bala Subudh Mukherjee Square  
Calcutta-700 013  
11 March, 1982

X. Banerjee  
Officer-in-Charge  
(Administration & Finance)

Zoy & Bhowmik  
Chartered Accountants

B. P. Chatterjee  
Indian Statistical Institute

INDIAN STATISTICAL INSTITUTE

ANNEXURE  
FORD FOUNDATION  
STATEMENT OF INCOME AND EXPENDITURE

Previous year		Expenditure	Current year	
U.S. \$	Rupee equivalent		U.S. \$	Rupee equivalent
78,867.10	8,42,618.92	To Expenses for Visiting Faculty out of New Delhi/ New York Account .. .. .	44,780.00	4,20,790.12
46,142.90	3,78,371.78	" Excess of Income over Expenditure transferred to Balance Sheet .. .. .		
		" Refund of unspent balance :		
		N.Y. \$ 64,025.00		
		N.D. \$ 1,332.90	55,837.90	5,98,668.12
<u>1,24,500.00</u>	<u>10,20,900.00</u>		<u>1,00,087.90</u>	<u>8,19,458.47</u>

Notes: (1) U.S. Dollars converted to rupee equivalent @ 9.41 per U.S. Dollar being rate as on 31st March 1962. All payments made in U.S. \$ only.

(2) Total Receipts and Expenditure (including refund) amounted to \$ 1,84,500.00.

P. K. CHATTERJEE  
Senior Accounts Officer

N. SRINIVASAN  
Officer-on-Special Duty  
(Administration & Finance)

B. P. ADITYAN  
Director  
Indian Statistical Institute

FIFTIETH ANNUAL REPORT : 1981-82

II

GRANT ACCOUNT

FOR THE YEAR ENDED 31st MARCH 1982

Previous year		Income	Current year	
U.S. \$	Ruppes equivalent		U.S. \$	Ruppes equivalent
88,000.00	6,97,000.00	By Grant received from Ford Foundation deposited to American Express Int. Banking Corp., New York .. .. .	—	—
28,500.00	2,22,900.00	" Grant received from Ford Foundation deposited to American Express Int. Banking Corp., New Delhi .. .. .	—	—
		" Excess of Income over Expenditure transferred from last account .. .. .	1,00,087.90	8,19,458.47
<u>1,16,500.00</u>	<u>10,20,900.00</u>		<u>1,00,087.90</u>	<u>8,19,458.47</u>

1A, Maja Subodh Mullink Square,  
Calcutta-700 013.  
18 March 1983

ROY & BACCH  
Chartered Accountants

# INDIAN STATISTICAL INSTITUTE CONTRIBUTORY PROVIDENT FUND

## AUDITORS' REPORT

We report that we have audited the attached Balance Sheet as at 31st March, 1982 of the Indian Statistical Institute Contributory Provident Fund signed by us under reference to this report and the relative Income and Expenditure Account for the year ended on that date with the books and records of the Fund maintained by the Institute and produced to us and on the basis of information and explanations given and subject to the remarks, mentioned below, have found them to be in accordance therewith.

1. We are informed that the differences between the General Ledger balances of the following accounts and the balances as per Members' Ledger are under scrutiny and reconciliation.

	<i>Balance as per General Ledger</i>	<i>Balance as per Members' Ledger</i>	<i>Difference</i>
Members' Own Subscription	77,46,003.63	77,41,801.51	(+), 4,202.12 (old)
Employer's Contribution	91,13,046.22	Not listed	—
Members' Voluntary Subscription	7,63,018.87	7,62,668.26	(+), 360.41 ,,
Interim Relief due to workers	16,551.26	16,311.66	(+), 239.60 ,,
Additional Dearness Allowance due to workers	4,61,885.95	4,56,608.02	(+), 5,216.73 ,,
<i>Interest Payable on</i>			
Members' Own Subscription	43,27,059.38	43,23,181.96	(+), 3,877.42 ,,
Employer's Contribution	54,42,080.46	54,53,779.14	(-), 11,698.68 ,,
Members' Voluntary Subscription	1,07,826.74	1,10,113.92	(-), 2,288.18 ,,
Interim Relief due to workers	15,257.07	14,855.71	(+), 401.36 ,,
Additional Dearness Allowance due to workers	1,76,214.48	1,75,799.59	(+), 414.89 ,,

2. Interest on Government Securities has been accounted for on cash basis as per past practice.

3. Loans to Members : Rs. 30,34,527.75

The balance as extracted from Members' Ledgers is Rs. 30,27,221.30. The difference of Rs. 7,306.45 should be reconciled.

4. Relief loan to ISI and NSSO Workers : Rs. 40,591.00

Balance as extracted from the Register is Rs. 31,134.00. Difference of Rs. 9,457.00 should be scrutinised.

5. Income Tax Recoverable : Rs. 18,570.00

The above amount is being carried forward for several years and in our opinion, the amount is doubtful of recovery and necessary provision should have been made in the accounts for this amount.

FIFTIETH ANNUAL REPORT : 1981-82

6. The Institute has introduced the GPF-Cum-Pension-Cum-Gratuity Scheme as an alternative to the existing CPF-Cum-Gratuity Scheme with effect from 1.1.1982. The employees of the Institute on the date of introduction of this Pension Scheme were requested to exercise option in favour of one of the available retirement benefit schemes on or before 15th October, 1982.

Pending determination of the actual amount to be transferred to the Pension Fund to be created by the Institute, no accounting adjustment has been made in this year's account.

7. Separate sets of books of account should be maintained for the Fund instead of keeping the same within the Institute's books of account.

8. There is a marked improvement in Book Keeping but there is further scope for improvement especially in the reconciliation of the differences as mentioned above.

The 18th March, 1983

Roy & Bagchi  
*Chartered Accountants*

INDIAN STATISTICAL INSTITUTE

INDIAN STATISTICAL INSTITUTE

BALANCE SHEET

As at 31st March 1981		Fund and Liabilities							
Ra.	P.				Ra.	P.	Ra.	P.	
		<i>Members' Own Subscription :</i>							
		As per last account .. .. .			82,55,705.97				
		Add : during the year .. .. .			10,32,348.07				
					<u>92,88,053.04</u>				
		Less : refunded during the year .. .. .			1,75,006.82				
					<u>91,13,046.22</u>				
69,69,656.44		Less : withdrawal to date .. .. .			13,67,042.69		77,46,003.83		
		<i>Employer's Contribution :</i>							
		As per last account .. .. .			82,55,705.97				
		Add : during the year from Institute .. .. .			10,32,348.07				
					<u>92,88,052.04</u>				
82,55,705.97		Less : refunded during the year .. .. .			1,75,006.82		91,13,046.22		
		<i>Members' Voluntary Subscription :</i>							
		As per last account .. .. .			5,95,223.86				
		Add : during the year .. .. .			3,14,259.02				
					<u>9,09,482.88</u>				
5,95,223.86		Less : refunded during the year .. .. .			1,46,464.21		7,63,018.67		
		<i>Interest payable :</i>							
		(a) On Members' Own Subscription :							
		As per last account .. .. .			43,49,729.36				
		Add : for the year .. .. .			8,22,473.81				
					<u>50,72,203.17</u>				
		Less : paid during the year .. .. .			1,11,841.89				
					<u>49,60,361.28</u>				
86,90,829.33		Less : withdrawal to date .. .. .			6,33,301.90		43,27,059.38		
		(b) On Employer's Contribution :							
		As per last account .. .. .			45,02,520.24				
		Add : for the year .. .. .			10,99,996.80				
					<u>55,92,517.04</u>				
48,03,520.24		Less : paid during the year .. .. .			1,50,436.68		54,42,080.40		
		(c) On Members' Voluntary Subscription :							
		As per last account .. .. .			72,181.81				
		Add : for the year .. .. .			46,311.61				
					<u>1,18,393.22</u>				
72,181.81		Less : paid during the year .. .. .			10,557.46		1,07,835.74		
<u>3,40,86,117.65</u>		Carried over : .. .. .					<u>3,74,92,034.10</u>		





INDIAN STATISTICAL INSTITUTE

INDIAN STATISTICAL INSTITUTE

BALANCE SHEET

As at 31st March 1961	Fund and Liability			Rs.	P.	Rs.	P.
Rs.	P.						
2,40,86,117.65		Brought forward :	..	..	..	2,74,99,094.10	
		(d) On Interim Relief :					
		As per last account	..	..	..	12,122.79	
		Add : for the year	..	..	..	2,629.33	
						<u>15,752.12</u>	
13,122.79		Less : paid during the year	..	..	..	495.05	15,267.07
		(e) On Additional Dearness Allowance due to Workers :					
		As per last account	..	..	..	1,33,148.81	
		Add : during the year	..	..	..	48,070.70	
						<u>1,81,219.51</u>	
1,33,148.81		Less : refunded during the year	..	..	..	5,005.03	1,76,214.48
		<i>Interim Relief due to Workers :</i>					
		As per last account	..	..	..	17,145.26	
17,148.24		Less : refunded during the year	..	..	..	594.00	16,551.26
		<i>Additional Dearness Allowance due to Workers :</i>					
		As per last account	..	..	..	4,34,034.25	
		Add : for the year	..	..	..	41,962.85	
						<u>4,76,997.10</u>	
4,34,034.25		Less : refunded during the year	..	..	..	14,111.25	4,61,885.85
		<i>Payable to NSSO Workers :</i>					
		As per last account	..	..	..	62,635.15	
62,625.16		Less : paid during the year	..	..	..	62,625.15	—
		<i>Account under Adjustment (net) :</i>					
1,996.01		As per last account	..	..	..		1,996.01
25,24,138.64		Undistributed income including amounts forfeited as per Income and Expenditure Account	..	..	..		25,16,435.23
6,80,982.95		Amount due to the Institute	..	..	..		3,30,651.19
<u>2,79,63,317.61</u>						<u>3,08,21,024.99</u>	

M. R. GUPTA  
Manager/Secretary

AJOY K. ADHARI  
Member, Board of Trustees

ASHUTJ ROYCHOWDHURY  
Member, Board of Trustees

FIFTIETH ANNUAL REPORT : 1981-82

CONTRIBUTORY PROVIDENT FUND—*Contd.*

as at 31st March 1982

As at 31st March 1981		Property and Assets			Re. P.		Re. P.	
Rs.	P.							
2,79,53,317.51		Brought forward :	..	..	..			3,08,21,024.99

2,79,53,317.51

3,08,21,024.99

This is Balance Sheet referred to in our report of even date

1A, Raja Subodh Mullick Square,  
Calcutta-700 013.  
18 March 1983

Roy & Bhowmik  
.. Chartered Accountants

## INDIAN STATISTICAL INSTITUTE

### INDIAN STATISTICAL INSTITUTE CONTRIBUTORY PROVIDENT FUND

#### INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 1982

1980-81 Rs. P.	Expenditure; Ra. P.	1981-82 Ra. P.	1980-81 Ra. P.	Income Ra. P.	1981-82 Ra. P.
	To Excess of income over expenditure carried down		24,85,989.31		
20,52,684.30				By Interest on :	
				(i) (a) G.P. Notes	3,60,632.00
				(b) Five years Postal Time Deposits	19,88,633.54
			19,11,774.90		23,29,368.54
				(ii) Loan given to the members	1,64,730.77
			1,40,909.31		1,64,730.77
20,52,684.30		24,85,989.31	20,52,684.30		24,85,989.31
	To Interest on :			By Amount brought forward from	
7,14,351.42	(i) Members' own Subscription ..	8,22,473.81	21,72,053.66	last account ..	25,24,138.64
9,15,505.28	(ii) Employer's Contribution	10,89,996.80	1,587.18	.. Amount forfeited during the year	—
32,369.23	(iii) Members' Voluntary Subscription	48,211.41	20,52,684.30	.. Excess of income over expenditure brought down	24,85,989.31
2,430.03	(iv) Interim Relief	2,629.33			
37,335.54	(v) Additional Dear- ness Allowances due to workers	48,070.70	20,09,382.06		
—	.. Interest paid to NSSO Workers	8,81,310.67			
25,24,138.64	.. Balance carried over to Balance Sheet	23,10,435.23			
42,26,330.14		60,10,127.06	42,26,330.14		60,10,127.06

M. R. GUPTA  
Manager/Secretary

AJOY K. ADHICARI  
Member, Board of Trustees

ABRISIT ROY CROWDERY  
Member, Board of Trustees

1A, Raja Subodh Mullick Square,  
Calcutta 700 013  
18 March 1983

ROY & BAGCHI  
Chartered Accountants

FIFTIETH ANNUAL REPORT : 1981-82

CANTEEN

BALANCE SHEET AS AT 31st MARCH 1982

1980-81 Rs. P.	Liabilities	1981-82 Rs. P.	1980-81 Rs. P.	Assets	1981-82 Rs. P.	1981-82 Rs. P.
	<b>Capital Fund :</b>			<b>Current Assets :</b>		
3,362.44	As per last account ..	3,362.44	376.05	Sundry Debtors ..	481.85	
	<b>Liabilities :</b>		3,106.05	Closing Stock (as taken valued and certified by the In-charge, Canteen) ..	5,161.44	
6,004.08	Sundry Creditors ..	5,604.82		Cash-in hand (as per accounts and as taken and certified by the in-charge, Canteen) ..	1,071.40	
			228.00	Deposit with Milk Commissioner and other ..	228.00	6,962.78
				<b>Income &amp; Expenditure A/c :</b>		
			5,169.07	Balance at debit as per last account ..	5,169.07	
				<b>Less : Excess of income over Expen- diture for the year ..</b>	<b>3,176.00</b>	<b>1,993.98</b>
<hr/>		<hr/>	<hr/>		<hr/>	<hr/>
9,366.52		8,966.76	9,366.52			8,966.52

A. MONDAL  
Senior Assistant, Canteen  
Indian Statistical Institute

B. BOSE  
Administrative Officer  
Indian Statistical Institute

We have audited the above Balance Sheet as at 31st March, 1982 of the Indian Statistical Institute Canteen 203, B. T. Road, Calcutta-700035 and the annexed Income & Expenditure Accounts for the year ended on that date with the books and records as maintained and produced to us have found them to be in accordance therewith.

1A, Raja Subodh Mullok Square,  
Calcutta 700 013.  
18 March 1983

ROY & BAGCHI  
Chartered Accountants

# INDIAN STATISTICAL INSTITUTE

## CANTEEN

### INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31st MARCH 1983

1980-81 Rs. P.	Expenditure Rs. P.	1981-82 Rs. P.	1980-81	Income	1981-82 Rs. P.
1,304.12	To Opening Stock ..	3,106.95	1,82,605.36	By Sales (Tea & Snacks) ..	2,56,707.8
	.. Sandry Purchase Coal (including Fire-wood & Kerosene oil) ..	18,130.15	62,677.10	.. Subsidy received from I.S.I.	1,18,400.00
10,698.03	.. Tea & Milk ..	44,987.84	20.40	.. Miscellaneous Receipt ..	—
32,036.92	.. Channa & K. Khir	55,638.00	3,106.95	.. Closing Stock ..	5,181.44
27,170.50	.. Bread & Butter	85,334.05			
59,472.01	.. Raw Materials Purchased (Bazar goods including sugar) ..	3,04,089.84			
1,28,471.08	.. Cleaning Materials Expenses ..	1,988.50			
2,100.50	.. Miscellaneous Expenses ..	1,615.57			
771.45	.. Cartage & Cartage	2,883.36			
1,822.50	.. Utensils ..	23.00			
16.40	.. Printing & Stationery ..	14.50			
81.80	.. Licence Fees ..	20.00			
20.00	.. Staff Tiffin ..	3,256.35			
2,718.05	.. Repairing Charges	54.50			
84.00	.. Bank Commission a/c.	37.00			
39.00	.. Excess of Income over Expenditure for the year trans- ferred to Balance Sheet ..	3,175.08			
1,127.05					
<u>2,68,409.81</u>		<u>3,80,289.04</u>	<u>2,68,409.21</u>		<u>3,80,289.04</u>

*Notes:* Expenses on salary, overtime, contribution to Provident Fund, Electrical Charges etc. are borne by the Indian Statistical Institute. Facilities like accommodation, use of furniture and equipment are also provided by the Institute free of cost.

A. MONDAL  
Senior Assistant, Canteen  
Indian Statistical Institute

I. HOSE  
Administrative Officer  
Indian Statistical Institute

1A, Raja Subodh Mallick Square,  
Calcutta 700 013  
18 March 1983

ROY & BAGCHI  
Chartered Accountants