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Theoretical Statistics and Mathematics Division

Delhi Unit

Prakasa Rao, B.L.S. : On some recent advances in nonparametric functional estimation, Proc. of Presidential Addresses 83rd Session of Indian Science Congress Association.

Applied Statistics, Surveys and Computing Division

Computer Science Unit

Basu, A., Harris, I.R and Basu, S. : Minimum distance estimation : the approach using density - based distances, Handbook of Statistics, Vol.15 (Robust Inference) eds. C.R. Rao & G.S. Maddala.

Physical and Earth Sciences Division

Geological Studies Unit

Chatterjee, S. and Rudra, D.K. : K-T events in India, Impact. Rifting Volcanism and Dinosaur Extinction, Gondwana, Dinosaurs, eds. R. Molar and F. Novas.

Machine Intelligence Unit

De, S., Ghosh, A. and Pal, S.K. : Fitness evaluation in genetic algorithms with ancestors' influence, *Genetic Algorithms for Pattern Recognition.* Pal, S.K. and Wang, P.P. (eds.), CRC Press, Boca Raton, U.S.A., 1996.

Murthy, C.A., Bandyopadhyay, S. and Pal, S.K. : Genetic algorithm based pattern classification : relationship with Bayes classifier, *Genetic Algorithms for Pattern Recognition,* Pal, S.K. and Wang, P.P. (eds.), CRC Press, Boca Raton, U.S.A., 1996

Physics and Applied Mathematics Unit

Mandal, B.N. and Banerjee, S. : A singular integral equation and its application to some barrier problems, Mathematical techniques for water waves, International series on Advances in Fluid Mechanics, B.N. Mandal (Ed.) Computational Mechanics Publications, Southampton, U.K.

Social Sciences Division

Economic Research Unit

Chakravarty, S.R. : Measuring inequality : The axiomatic approach : *Income Inequality Measurement : From Theory to Practice*, J. Silber (ed.), Klvwer Academic, Boston.

Chakraborty, S. and Mitra, S. : Sustainable agricultural development in India : Some issues, *Sustainable Development*, R.K. Sen, K.C. Ray and C. Tisdell (eds.), New Age International, Calcutta.

Rakshit, M.K. : Development economics : A synoptic view : *A Development Reader*, Sukhomoy Chakravarty (ed.), Oxford University Press.

Rakshit, M.K. : Money, credit and government finance in a developing economy : *Economic Theory and Policy*, M.K. Rakshit, A. Bose and A. Sinha (eds.), Oxford University Press, Delhi.

Planning Unit

Anant, T.C.A. and Goswami, O. : Getting everything wrong : India's policies regarding 'sick' firms, *Indian Industry : Policies and Performance*, Dilip Mookherjee (ed.), Oxford University Press, Delhi.

Anant, T.C.A., Datta Chaudhuri, T., Gangopadhyay, S. and Goswami, O. : Industrial sickness in India : Corporate restructuring — its agency : Problems and institutional responses, Govt. of India, Min. of Industry, Studies in Industrial Development, Paper No. 17.

Chander, P. : Incentive in iterative planning, *Poverty, Environment and Economic Development*, N.S.S. Narayana and A. Sen (eds.), Interline Publishing Pvt. Ltd., Bangalore.

Goswami, O. : Corporate bankruptcy in India : A comparative perspective, *OECD Development Centre Monograph*, OECD, Paris

Goswami, O. : India : Legal and institutional impediments to corporate growth, *Policy Reform in India*, Charles Oman (ed.), OECD, Paris.

Linguistics Research Unit

Bandyopadhyay, Debaprasad : Kolkata dialects and the aspects of standardization : Preliminary observations, *Standardization*, Bahari Publication, Delhi.

Choudhry, Amitav, : Quantitative linguistics studies in the Indian Statistical Institute : An overview, *Linguistics Structures* to honor J. Tuldava, Bochum. Ruhr Univ.

Gangopadhyay, Subhasree : Standardizing doordarshan language, *Standardization*, Bahari Publication, Delhi.

Population Studies Unit

Majumdar, P.K. : An appraisal of Child Labourers in India : Some facts and Fugures, *Socio Economic transformation in India*, Biswanath Roy (ed.)

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Mukhopadhyay, B.K. : Trends and developments in Maternal Mortality vis-a-vis a Differential Health-Socio-Economic-Infrastructural Transformation among the major states in India, *Socio Economic Transformation in India*, Biswanath Roy (ed.).

Psychometric Research and Services Unit

Dutta Roy, D. and Chakraborty, P. : Psychological stress of elderly people in a village of West Bengal. *Life in twilight years*, Dr. Indrani Chakraborty (ed.), Calcutta Metropolitan Institute of gerontology.

Sociological Research Unit

Chatterjee, Arun : On Tribal transformations, A critical response, *Socio-economic Transformation in India*, Ray, B. (ed.) Mittal, New Delhi.

Papers Read in Conferences/Seminars/Symposia/Workshops

Theoretical Statistics and Mathematics Division

Calcutta Unit

Chaudhuri, P. : Exploring patterns and unmasking low dimensional structures in noisy high dimensional data. *Invited lectures, Indian Academy of Science*, July 1995.

Dasgupta, R. : One sided estimation in non-regular cases. Invited talk at the *Workshop on Statistical Inference under Non-standard Conditions*, Punjab University, Chandigarh, 9-12 January 1996.

Dasgupta, S. : On Gini correlation, *50th Session of International Statistical Institute*, Beijing, August 1995.

Ghosh, J.K. : On convergence of posterior to truth - positive results in the infinite dimensional case, *Special talk, Indian Science Congress*, Patiala, January 1996.

Raha, A.B. : A look into Function space topologies, *Conference on Topology and Geometry*, Rani Durgawati University, Jabalpur, December 1995.

Rao, A Ramachandra : Reciprocity in a network : Theory and Applications, *National Workshop on Graph Theory and Its Applications*, Manonmaniam Sundaranar University, Tirunelveli, 21-27 February 1996.

Rao, B.V. : Quadratic map and random iterations, *23rd Annual Conference of Orissa Mathematical Society*, 2 March 1996.

Rao, T.J. : Allocation of sample size in stratified populations, *50th session of the International Statistical Institute*, 21-29 August 1995.

SahaRay, R. : On a partitioned linear model and some reduced models, *Fourth International Workship on Matrix Methods in Statistics*, Montreal, Canada, July 1995.

Sinha, Bikash K. : Repeated Bernouli trials and related probability inequalities, Invited paper, *Third International Symposium Optimization and Statistics*, Aligarh Muslim University, 19-21 December 1995.

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Tripathi, T.P. : Use of prediction approach for estimating finite population parameters, Invited Paper, *National Conference on Sample Surveys*, Banares Hindu University, Varanasi, April 1995.

Tripathi, T.P. and Khare, B.B. : Estimation of mean vector in presence of non-response, *Third International Symposium on Optimization and Statistics*, Aligarh Muslim University, December 1995.

Applied Statistics, Surveys and Computing Division

Biometry Research Unit

Basu, T.K., Ganguly, S. and Sarkar, S.K. : Longitudinal study of length measurements of an Indian major carp, Catla catla (Ham), *Biometrics'95* (Australian Region), Department of Mathematics, University of Queensland, Australia, 25-27 September, 1995.

Basu, T.K. : Analysis of survey data investigating the material endemicity of a tribal population of India, *Network Meeting of the International Biometric Society* (African Region), Department of Biometry, University of Stellenbosch, South Africa, 5-7 December, 1995.

Ganguly, S., Bhattacharyya, B., Sarkar, S.K. and Basu, T.K. : Nutritional effect on digestive enzymes of Cirrhinus mrigala and Catla catla fingerlings, *National Symposium on Technological Advancements in Fisheries and its Impact on Rural Development*, Industrial Fisheries Development, Cochin, University of Science and Technology, Cochin, 5-7 December, 1995.

Gupta, S.K. : Retinal features of Tropical Pancreatic Diabetes or Fibrocalculus Pancreatic Diabetes (FCPD) vis-a-vis those of primary forms of diabetes, *Annual Conference of the Physiological Society of India*, Defence Institute of Physiology, New Delhi, 28 December, 1995.

Computer Science Unit

Chaudhuri, A., Adhikary, Arun Kr. and Seal, A.K. : Small domain estimation by empirical Bayes and Kalman filtering procedures - a case study at *83rd Session of Indian Science Congress*, Punjab University, Patiala; 3-8 January, 1996.

Dewanji, Anup : A two stage, model for carcinogenesis - some results and applications, i) *North West Statistical Society Annual Meeting*, April'95 and ii) *Symposium on Reliability and Survival Analysis* at Calcutta University, June, 1995.

Physical and Earth Sciences Division

Electronics Unit

Basu, S.K. and Dattagupta, J. : Parallel processing with ring connected tree, *Proc. of International Conference on High Performance Computing (HiPC) : Tata McGraw Hill*, New Delhi, December, 1995.

Das, D.K. and Bhattacharya, B.B. : Does retiming affect redundancy in sequential circuits?, *Proc. of the 9th International Conference on VLSI Design, IEEE CS Press*, 1996.

Das, D.K., Bhattacharya, U.K. and Bhattacharya, B.B. : Isomorphic redundancies in sequential circuits, *Proc. of the 14th VLSI Test Symposium (VTS), IEEE CS Press*, New Jersy, USA, April, 1996.

Das, D.K. and Bhattacharya, B.B. : Testable design of non-scan sequential circuits using extra logic, *Proc. of Asian Test Symposium (ATS), IEEE CS Press*, Bangalore, November, 1995.

Das, D. and Sinha, B.P. : Multi-Mesh - An efficient topology for parallel processing, *Proc. of the International Parallel Processing Symposium, (IEEE Press),* Santa Barbara, April, 1995.

Das, N. and Dattagupta, J. : A fault location technique and alternate routing in benes network, *Proc. of Asian Test Symposium (ATS), IEEE CS Press,* Bangalore, November, 1995.

Das, S. and Bhattacharya, B.B. : Channel routing in manhattan-diagonal model, *Proc. of the 9th International Conference on VLSI Design, IEEE CS Press,* 1996.

Dasgupta, P.S., Sen, A.K., Nandy, S.C. and Bhattacharya, B.B. : Geometric bipartitioning problem and its applications to VLSI, *Proc.of the International Conference on VLSI Design, IEEE CS Press,* 1996.

Dasgupta, P.S., Sur-Kolay, S. and Bhattacharya, B.B. : A unified approach to topology generation and area optimization of general floorplans, *Proc. of International Conference on Computer-Aided Design, (ICCAD), IEEE CS Press,* November, 1995.

De, M., Das, D., Ghosh, M. and Sinha, B.P. : Efficient sorting on the Multi-Mesh topology, *Proc. of International Conference on High Performance Computing (HiPC), Tata McGraw Hill,* New Delhi, December, 1995.

De, M. and Sinha, B.P. : Testing of a parallel ternary multiplier using I²L logic, *Proc. of Asian Test Symposium (ATS), IEEE CS Press,* Bangalore, November, 1995.

De, M., Das, D., Ghosh, M. and Sinha, B.P. : An efficient sorting algorithm on the Multi-Mesh network, *Proc. of Fifth National Seminar on Theoretical Computer Science,* TIFR, Bombay, India, August, 1995.

Ghosh, M., Das, D., Bhattacharya, B.B. and Sinha, B.P. : Fractal graphs : A new class of self-similar network topologies, *Proc. of International Conference on High Performance Computing (HiPC), Tata McGraw Hill,* New Delhi, December, 1995.

Sen Gupta, S., Das, D. and Sinha, B.P. : A fast parallel algorithm for polynomial interpolation using Lagrange's formula, *Proc. of International Conference on High Performance Computing (HiPC), Tata McGraw Hill,* New Delhi, December, 1995.

Electronics and Communication Science Unit

Banerjee, S., Mukherjee, D.P., Dutta Majumder, D., Kohli, S. and Mishra, V.K. : A fuzzy c-means approach to tissue classification in multimodal medical imaging, *Electronics Imaging 1996,* San. Jose, California, U.S.A., 1996.

Banerjee, S., Dutta Majumder, D., Kohli, S. and Mishra, V.K. : Tissue segmentation in multimodal medical imaging, *Computer Aided Radiology,* Paris, France, 1996.

Saha, P.K. : A new thinning and segmentation.approach for 3D digital images, *83rd Indian Science Congress Assocaition,* Punjab University, Patiala, Punjab, 1996.

Machine Intelligence Unit

Banerjee, M. and Chakraborty, M.K. : Algebra for logic of rough sets, *Seminar on Logic and the Theoretical Enterprise,* Visva-Bharati, November 8-10, 1995.

De, R.K., Mitra, S. and Pal, S.K. : Neuro-fuzzy knowledge-based system for rule generation, Indian *Conf. on Patt. Recog., Image Process. and Computer Vision (ICPIC'95)*, Kharagpur, December 13-15, 1995.

De, S., Ghosh, A. and Pal, S.K. : An application of genetic algorithms to evolve Hopfield type optimum network architectures for object extraction, *IEEE Int. Conf. Evolutionary Computation (ICPIC'95)*, Perth, Australia, 1995.

Mitra, S.K., Murthy, C.A. and Kundu, M.K. : Fractal based image coding using genetic algorithm, *Indian Conf. on Patt. Recog., Image Process. and Computer Vision (ICPIC'95)*, Kharagpur, December 13-15, 1995.

Mitra, S.K., Murthy, C.A. and Kundu, M.K. : Image compression using iterative function system and genetic algorithm. *Conf. of Frontiers of Radio Science (INCURSI'96)*, Calcutta, January 16-20, 1996.

Saha, A.K. and Sarbadhikari, S.N. : Immune system functions - a simple mathematical approach, *Applied Mathematics Conf. (ANZIAM'96)*, Masterton, New Zealand, February 4-8, 1996.

Sarbadhikari, S.N. : Medical informatics - are the doctors ready ? *83rd Indian Science Congress*, Patiala, January 3-8, 1996.

Sarbadhikari, S.N. : Computers for securing health, *83rd Indian Science Congress*, Patiala, January 3-8, 1996.

Sarbadhikari, S.N., Basak, J., Kundu, M.K. and Pal, S.K. : Neural network based classification of fingerprints from gray level images, *Conf. of Frontiers of Radio Science (INCURSI'96)*, Calcutta, January 16-20, 1996.

Sinha, S. : Chaos and control in oscillatory neural networks, *Int. Conf. on Dynamics of Complex Systems*, August 6-11, 1995.

Uma shankar, B., Murthy, C.A. and Pal, S.K. : Hough transform for region extraction in remotely sensed images, *Conf. of Frontiers of Radio Science (INCURSI'96)*, Calcutta, January 16-20, 1996.

Physics and Applied Mathematics Unit

Bandyopadhyay, P. : Quantization and Topology.

Bandyopadhyay, P : Nonperturbative Quantum geometry, *International Conference on '70 years of Quantum Mechanics and Recent Trends in Theoretical Physics*, ISI, January 29 - February 2, 1996.

Bandyopadhyay, P : The concept of reality from the view point of recent developments in quantum mechanics, *National symposium on reality and science*, S.N. Bose National Centre for Basic Sciences, Calcutta, February, 1996.

Bandyopadhyay, P : Karl Poppers' propensity interpretation of probability and quantum mechanics, *National seminar on Karl Popper* at Visva-Bharati, Santi Niketan, February 19, 1996.

Bandyopadhyay, P : Symposium on Science, Tradition and Traditional Science, *the National Institute for Advanced study*, Bangalore, March 13-14, 1996.

Bandyopadhyay, P. : Socio-Historical Background of Scientific Research, *National Seminar on History of science*, Jadavpur University, March 28, 1996.

Bandyopadhyay, P : Nonperturbative quantum gravity, *Seminar on Theoretical physics, centre for Advanced study in applied mathematics*, Calcutta University, March 29, 1996.

Banerjee, S., Dolai, D.P. and Mandal, B.N. : Water waves due to rolling of a plate submerged in water of finite depth, *21st CASAM-CU National Research Symposium on Applied Mathematics*, Calcutta University, Calcutta, 28-29 March, 1996.

Basu, B. : Integral and fractional quantum Hall effect, *International conference on '70 years of quantum mechanics and recent trends in theoretical physics*, ISI, 29 January - 2 February 1996.

Dutta (Das), S. : Periodic boundary layer flow of a dusty viscous incompressible fluid about a circular cylinder, *21st CASAM-CU National Research Symposium on Applied Mathematics*, Calcutta University, Calcutta, 28-29 March, 1996.

Ghosh, P. and Basu, U. : Waves due to initial disturbance at the inertial surface in a stratified fluid of finite depth, *21st CASAM-CU National Research Symposium on Applied Mathematics*, Calcutta University, Calcutta, 28-29 March, 1996.

Kanoria, M. and Mandal, B.N : Water wave scattering by an intertial surface, *21st CASAM-CU National Research Symposium on Applied Mathematics*, Calcutta University, Calcutta, 28-29 March, 1996.

Kumar, K. : Saturation of thermal convection in the limit of zero Prandtl number, *Asiatic Society of Calcutta*, December 1995.

Mandal, B.N. : An ocean atmosphere model involving thin break water, *National Seminar on atmospheric and oceanic sciences*, Visva-Bharati University, Bolpur, W.B., 3-4 February 1996.

Mandal, B.N. : Water wave scattering by thin barriers, *21st CASAM-CU National Research Symposium on Applied Mathematics*, Calcutta University, Calcutta, 28-29 March, 1996.

Mandal, N., Mandal, B.N. and Chakraborti, A. : Solution of a system of generalised abel integral equation using fractional calculus, *21st CASAM-CU National Research Symposium on Applied Mathematics*, Calcutta University, Calcutta, 28-29 March, 1996.

Biological Sciences Division

Agricultural Science Unit

Bagchi, D.K., Banik, P. and Sasmal, T. : Selection of appropriate technologies for upland rainfed rice growing on the Bihar plateau, India, *International Rice Research Conference, IRRI*, Los Banos, Philippines, 13-17 February, 1995.

Bagchi, D.K. and Sasmal, T. : Resource uutilization and constraints in South Bihar plateau : Need for microlevel planning approach for sustainable agriculture, *National Synposium on sustainable Agriculture in Sub-humid zone*, Visva Bharati, Institute of Agriculture (Palli Siksha bhavana), Sriniketan, March 3-5, 1995.

Chattopadhya Molly and Jackson Cecile : Regional political formation and changing environmental relationship in South Bihar, India, *Agrarian Questions Congress*, .Wageningen Agricultural University, The Netherlands, May 22-24, 1995.

Biochemistry Unit

Ghosh, R., Sengupta, S. and Bhattacharyya, N.P. : Induction of apoptosis by ionizing radiation in Chinese hamster V79 cells and radioresistant cells strain derived from V79, *International Symposium on Radiomodifiers in Human Health*, Kasturba Medical College, Manipal, Karnataka, December 28-31, 1995.

Sengupta, S. and Bhattacharyya, N.P. : Possible role of glutathione in the resistance to heavy metals and hydrogen-peroxide in a radio resistant Chinese hamster V79 cell strain, *International Symposium on Radiomodifiers in Human Health*, Kasturba Medical College, Manipal, Karnataka, December 28-31, 1995.

Sengupta, S. and Bhattacharyya, N.P. : Some aspects of genomic - instability in V79 cells, *XXI Annual Conference of the Indian Society of Human Genetics*, Calcutta, January 15-17, 1996.

Sengupta, S. and Bhattacharyya, N.P. : The importance of glutathione in cellular defence towards oxidative stress, *XIX All India Cell Biology Conference*, (Indian Society of Cell Biology), IICB Calcutta, February 23-25, 1996.

Social Sciences Division

Linguistic Research Unit

Bandyopadhyay, Debaprasad : Delivered Guest lecture on Folklore and Folklanguage at Rabindrabharati University, August, 1995.

Bandyopadhyay, Debaprasad : The glottopolitics of technical terms, a case of India, *Seminar cum workshop on Language Planning, Technical terms in Administration*, CIIL and Telugu University, Hyderabad, February, 1996.

Bandyopadhyay, Debaprasad : The myth of national language, *Symposium on National language policy in India, Indian Social Science Congress*, Allahabad, March, 1996.

Bandyopadhyay, Debaprasad : Sustainable creativity, an agenda for planning from below, *Indian Social Science Congress*, Allahabad, March, 1996.

Choudhry, Amitav : Delivered a guest lecture at the conference on Rehabilitation of persons with speech and hearing impairment, a social responsibility, organized by the West Bengal Association of the Deaf, 21-23 March, 1996.

Choudhry, Amitav, Bandyopadhyay, D. and Majumder, M. : Management of technical terms in Bangla, *National Seminar cum Workshop on Language planning for administration : Technical terms*. Telugu University and CIIL Mysore, Telugu University, Hyderabad, February, 1996.

Population Studies Unit

Majumdar, P.K. : Health benefits of contraceptions on reproductive health, some research issues, Regional Workshop on Reproductive Health Research, Lucknow, 6-8 February, 1996.

Psychometric Research and Services Unit

Banerjee, S.N. : Development of psychometric test and the related problems, *Seminar on the development of psychology*, Deptt. of Psychology, Calcutta University, Calcutta, 18-19 January, 1996.

Banerjee, S.N. : A study on the attainment level of the neoliterates in North 24 Parganas district at the end of TLC programmes, *West Bengal Vigyan Congress*, Burdwan University, Burdwan, 1 March, 1996.

Banerjee, S.N. : A study on the socio-economic factors related to the Educational drop out of the children of the slum areas in a Municipal town near Calcutta, *West Bengal Vigyan Congress*, Burdwan University, Burdwan, 28 February - 1 March, 1996.

Banerjee, S.N. : A study in developing a standardised scoring and interpretation manual for Wagner's hand test responses through computer, National Seminar on Applied Psychology, Deptt. of Applied Psychology, Calcutta University, 7-9 March, 1996.

Banerjee, S.N. : A study on the attainment level of minimum levels of learning in Mathematics for the primary school leaving children, *Seminar on Innovation in Primary Mathematics Education - looking back and looking ahead*, Centre for pedagogical studies in mathematics, Calcutta, 31 March 1996.

Statistical Quality Control and Operations Research Division

Goel, Rajiv : Weighted Majority Games, *International Conference on Game Theory, Bangalore*, 1996.

Mohan, S.R. : Linear Complementarity Problem and a Discounted Polystochastic Game : *International Conference on Game Theory, Bangalore*, 1996.

Neogy, S.K. : The Vertical Linear Complementarity Problems and its Applications, *International Conference on Game Theory, Bangalore*, 1996.

Prasad, G.K., Kharishikar and Dharmadhikari : Orthogonal Array for Multiplicative Effects under censoring, Chandigarh, 1996.

Seth, A. : Consecutive K - out-of-n : Faud Component Importance, *Third Iranian Statistics Conference, Tehran*, 1996.

Library, Documentation and Information Sciences Division

DRTC (Bangalore)

Gopinath, M.A. : Public Access to Information and Rural Libraries, *seminar on Future of Public Library System in Karnataka*, Dharwad.

Gopinath, M.A. : Integrative Library Service into Management of Rural Economy, *National Seminar on Library Legislative*, Tenail, 1995.

Ravichandra Rao, I.K. and Suma, P. : Digital Libraries. Challenges and Issues, SIS'96, *15th Annual Convention and Conference*, 18-20 January, 1996, Bangalore.

Lakshmi, R. and Ravichandra Rao, I.K. : Design and development of a serial database. A case study, *Third Convention and Automation of Libraries Education and Research Institute CALIBER-96*, Library Database Management, Baroda, 18-20 February, 1996.

8. VISITING SCIENTISTS

A number of distinguished scientists from abroad and India 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 in the Institute to assist in the regular research and teaching programmes, while others came for short periods and gave lectures and seminars. Most of them were available for consultation by the faculty members of the Institute. Names of the Visiting Scientists are indicated below :

1. Achuthan, N.R., Curtin University of Science and Technology, Curtin, Perth, Australia, *SQC & OR Unit, Delhi.*

2. Adak, Sudeshna, Stanford University, USA, July, 1995, *Stat-Math Unit, Calcutta.*

3. Adke, S.R., University of Poona, 14 February, 1996, *Stat-Math Unit, Calcutta.*

4. Agrawal, S.S., Head, Speech and Computer Systems Group, Central Electronics Engineering Research Institute, New Delhi, 22 March, 1995, *Computer Vision and Pattern Recognition Unit, Calcutta.*

5. Andersson, H.I., Institute of Mechanics, the Norwegian Institute of Technology, Norway, 1 - 8 January, 1995, *Physics and Applied Mathematics Unit, Calcutta.*

6. Ara, Shawkat, Rajshahi University, Bangladesh, 6 - 12 March, 1996, *Psychometric Research and Services Unit, Calcutta.*

7. Athreya, K.B., University Iowa, August 1995 - May 1996, *Stat-Math Unit, Bangalore.*

8. Aujla, Jaspal Singh, Dr. B.R. Ambedkar Regional Engineering College, Jallandhar, 21 - 27 March, 1996, *Stat-Math Unit, Delhi.*

9. Bhattacharjee, M.C., New Jersey Institute of Technology and Bell Laboratory, AT & T, USA, 9 November, 1995, *Stat-Math Unit, Calcutta.*

10. Boland, P.J., University College, Dublin, Ireland, 4 - 8 January, 1996, *Stat-Math Unit, Delhi.*

11. Bose, Smarajit, Ohio State University, USA, July, 1995, *Stat-Math Unit, Calcutta.*

12. Browne, Mariread, Dean, University of Technology Sidney, Faculty of Humanities and Social Science, Australia, *DRTC, Bangalore.*

13. Burma, D.P. Centre for Molecular Biology and Genetic Engineering, Benaras Hindu University, 6 December, 1995, *Stat-Math Unit, Calcutta.*

14. Burman, Prabir, University of California, USA, August, 1995, *Stat-Math Unit, Calcutta.*

15. Chakravorty, Nilotpal, Indian Institute of Management, Calcutta, 8-14 January, 1996, *SQC & OR Unit, Delhi.*

16. Chatterjee, Sankar, Horns Professor, Texas Tech. University, Lubbock, U.S.A., April 1 - May 29, 1995, *Geological Studies Unit, Calcutta.*

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17. Chaturvedi, Ajit, CCS University, Meerut, 4 September, 1995, *Stat-Math Unit, Calcutta.*

18. Dani, S.G., T.I.F.R., Bombay, 18 October, 1995, *Stat-Math Unit, Calcutta.*

19. Das, Sajal Kumar, Department of Computer Science, University of North Texas, USA, January 2 - February 1, 1996, *Electronics Unit, Calcutta.*

20. Das, Shubhabrata, University of Nebraska, USA, July 1995, *Stat-Math Unit, Calcutta.*

21. Douglas, Ronald, State University of New York, Stony Brook, U.S.A., 2 - 4 February, 1996, *Stat-Math Unit, Delhi.*

22. Douglas, R.G., SUNY at Stony Brook, January 1996 - February 1996, *Stat-Math Unit, Bangalore.*

23. Dutta, Amartya Kumar, T.I.F.R., Bombay, 11 December, 1995, *Stat-Math Unit, Calcutta.*

24. Folland, G.B., University of Washington, January 1996 - February 1996, *Stat-Math Unit, Bangalore.*

25. Fontains, Jean-Marc, Universite Pantheo-Sorbonne, Paris, 3 - 5 January, 1996, *Economic Research Unit, Calcutta.*

26. Garg, R.C., Director and Dr. R. Krishnan, Associate Director, Advanced Data Processing Research Institute, Secunderabad, 27 - 29 December, 1995, *Computer Vision and Pattern Recognition Unit, Calcutta.*

27. Gill, Amar Nath, Punjab University, Chandigarh, 18 - 29 March, 1996, *Stat-Math Unit, Delhi.*

28. Gowda, M.S., University of Maryland, Baltimore, USA, 18 January 1996, *SQC & OR Unit, Bangalore.*

29. Hampel, Frank, ETH, Zurich, 16-18 October and 25-27 October, 1995, *Stat-Math Unit, Delhi.*

30. Heltzman, James, Institute of Social Economic Change, 24 - 26 May, 1995, *DRTC, Bangalore.*

31. Hislop, P., University of Kentucky, U.S.A., 13 - 18 December, 1995, *Stat-Math Unit, Delhi.*

32. Huda, S., King Saud University, Saudi Arabia, August, 1995, *Stat-Math Unit, Calcutta.*

33. Hudson, R.L., University of Nottingham, U.K., 6 February - 1 April, 1995, *Stat-Math Unit, Delhi.*

34. Hussain, M., International Rice Research Institute, Manila, Philippines, 2 - 3 November, 1995, *Agricultural Sciences Unit, Calcutta.*

35. Ichinose, T., University of Kanazawa, Japan, 13 - 18 December, 1995, *Stat-Math Unit, Delhi.*

36. Iyer, Srikant, Technion, Israel, 14 September, 1995, *Stat-Math Unit, Calcutta.*

37. Jackiw, R., M.I.T., USA, 1 February, 1996, *Stat-Math Unit, Calcutta.*

38. Jeganathan, P., University Michigan, May 1995 - June 1995, *Stat-Math Unit, Bangalore.*

39. Jenkins, T., Department of Human Genetics, South African Institute of Medical Research, Johannesburg, South Africa, January, 1996, *Anthropometry and Human Genetics Unit, Calcutta.*

40. Kam, S.P., International Rice Research Institute, Manila, Philippines, 2 - 3 November, 1995, *Agricultural Sciences Unit, Calcutta.*

41. Kerman, R., Brock University, January 1996 - February 1996, *Stat-Math Unit, Bangalore.*

42. Kittaneh, F., University of Jordan, August 17 - September 7, 1995, *Stat-Math Unit, Delhi.*

43. Korvar, Ramesh M., University of Massachusetts at Amherst, U.S.A., January, 1996, *Stat-Math Unit, Delhi.*

44. Krishnan, J.V., Washington State University, June, 1995, *Stat-Math Unit, Bangalore.*

45. Krishnan, R., Associate Director, Advanced Data Processing Research Institute, 27 - 29 December, 1995, *Computer Vision and Pattern Recognition Unit, Calcutta.*

46. Kundu, Subrata, University of California, USA, 21 August, 1995, *Stat-Math Unit, Calcutta.*

47. Kunhanandan, M., October 1995 - December 1995, *Stat-Math Unit, Bangalore.*

48. Lahiri, Parthasarathy, University of Nebraska, USA, December 1995 - May 1996, *Computer Science Unit, Calcutta.*

49. Lucia, Paola De, University of Milan, Italy, 14 - 20 February, 1996, *Stat-Math Unit, Delhi.*

50. Madon, Shirin, Information Systems Dept., London School of Economic & Political Science, London, 21 July 1995, *DRTC, Bangalore.*

51. Mashelkar, R.A., Director General, CSIR, February 15, 1996, *Machine Intelligence Unit, Calcutta.*

52. Mathew Harris, Technical University, Delft, 16 - 19 May, 1995, *Stat-Math Unit, Delhi.*

53. Matis, James H., Texas A & M University, USA, October 30, 1995, *Stat-Math. Unit, Calcutta.*

54. Matsumoto, Katsuhisa, Library and Information Science Department, Sakushin Garuin Women's College, Japan, 16 November, 1995, *DRTC, Bangalore.*

55. Min, Yinghua, Academic of Sinica, Beijing, November, 29-31, 1995, *Electronics Unit, Calcutta.*

56. Mohapatra, A.N., April 19, 1995 - February 19, 1996, *Stat-Math Unit, Delhi.*

57. Monsuwe, Andres, University of Limburg, Netherlands, 11 January, 1996, *SQC & OR Unit, Bangalore.*

58. Mukhopadhyay, Saurabh, University of Connecticut, USA, August, 1995, *Stat-Math Unit, Calcutta..*

59. Munshi, Surendra, Indian Institute of Management Calcutta, June 1995 - March 1996, *Sociological Research Unit, Calcutta.*

60. Muraleedharan, T.K., Ramanujam Institute, 1995, *Stat-Math Unit, Bangalore.*

61. Naastepad, C.W.M., Centre for Development Planning, Erasmus University, Rotterdam, 23 - 30 April, 1995, *Economic Research Unit, Calcutta.*

62. Nelson, James E., University of Colorado, USA, 17 August, 1995, *Stat-Math Unit, Calcutta..*

63. Oja, Hannu, University of Oulu, Finland, November, 1995, *Stat-Math Unit, Calcutta.*

64. Pal, Nabendu, University of South-western Louisiana, USA, 21 December, 1995, *Stat-Math Unit, Calcutta.*

65. Pal, S.K., Bidhan Chandra Krishi Viswavidyalaya, Kalyani, March 1995 - February 1996, *Agricultural Sciences Unit, Calcutta.*

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66. Parthasarathy, Mallela, Northern Illinois University, U.S.A., 8 - 15 March, 1996, *Stat-Math Unit, Delhi.*

67. Pattanaik, S., Sambalpur University, January, 1996, *Stat-Math Unit, Bangalore.*

68. Pattanayak, S., Sambalpur University, 6 November, 1995, *Stat-Math Unit, Calcutta.*

69. Pattanayak, S., Sambalpur University, October 23, 1995 - November 24, 1995, *Computer Science Unit, Calcutta.*

70. Prasad, K. Manjunatha, April 1995 - March 1996, *Stat-Math Unit, Delhi.*

71. Raghavachari, M., Rensselaer Polytechnic Institute, New York, USA, May - June, 1995, *SQC & OR Unit, Bangalore.*

72. Ramamurthy, K.G., 28 August 1995, *SQC & OR Unit, Delhi.*

73. Saha, N., University of Pittsburgh, U.S.A., February, 1996, *Anthropometry and Human Genetics Unit, Calcutta.*

74. Sahoo, Prasanna, University of Louisville, Kentucky, USA, 20 - 30 November, 1995, *Computer Science Unit, Calcutta.*

75. Sen, Pranab Kumar, University of North Carolina, USA, 18 December, 1995, *Stat-Math Unit, Calcutta.*

76. Sethuraman, J., University Florida, July 1995 - January 1996, *Stat-Math Unit, Bangalore.*

77. Shtyrkov, Eugene I., Russian Academy of Science (Kazan), January - March 1996, *Physics and Applied Mathematics Unit, Calcutta.*

78. Shukla, R.P., Mehta Research Institute, June, 1995, *Stat-Math Unit, Bangalore.*

79. Singh, Dinesh, Delhi University, 1995-1996, *Stat-Math Unit, Delhi.*

80. Sridharan, R., T.I.F.R., Bombay, 13 February, 1996, *Stat-Math Unit, Calcutta.*

81. Storm, S., Centre for Development Planning, Erasmus University, Rotterdam, 23 - 30 April, 1995, *Economic Research Unit, Calcutta.*

82. Subramaniam, V.I., Director, International School of Dravidian Linguistics, Trivandrum, 10 - 11 January, 1995, *Computer Vision and Pattern Recognition Unit, Calcutta.*

83. Taguchi, Genichi, Japan, April, 1996, *SQC & OR Unit, Bangalore.*

84. Unni, K.R., Formerly of Institute of Mathematical Sciences, Madras, 15 September, 1995, *Stat-Math Unit, Calcutta.*

85. Venkatalakshmi, G., University de Poitiers, August 1995, *Stat-Math Unit, Bangalore.*

86. Viswanath, K., University of Hyderabad, October, 1995, *Stat-Math Unit, Calcutta.*

87. von Eschen , Donald, McGill University, Montreal, Canada, 1995, *Sociological Research Unit, Calcutta.*

88. Yanai, H., National Centre for University Entrance Examination, Japan, 4 - 10 December, 1995, *Stat-Math Unit, Delhi.*

89. Yanai, Haruo, National Centre for University, Tokyo, Japan, 13 December, 1995, *Stat-Math Unit, Calcutta.*

90. Yuba, Toshitsugu, Department of Information and Network Science, University of Electro-Communications, Tokyo, September, 3-7, 1995, *Electronics Unit, Calcutta.*

91 Znojil, M., Institute of Nuclear Physics, Prague, Czech Republic, 3 - 7 April, 1995, *Physics and Applied Mathematics Unit, Calcutta.*

9. HONOURS, AWARDS AND SPECIAL ASSIGNMENTS

Dasgupta, Somesh (Stat-Math Unit, Calcutta) was awarded the position of Senior Scientist by Indian National Science Academy in September 1995.

Ghosh, J.K. (Stat-Math Unit, Calcutta) was awarded Jawaharlal Nehru Professorship of the Institute.

Rao, S.B. (Stat-Math Unit, Calcutta) served as Member, Governing Board of Jagdish Bose National Science Talent Search. He also served as Member, Organising Committee of the International Mathematical Olympiad of N.B.H.M. to be held in Bombay in July 1996.

Rao, T.J. (Stat-Math Unit, Calcutta) served as Member, Governing Council, NSSO.

Srivastava, S.M. (Stat-Math Unit, Calcutta) conducted the Indian National Mathematical Olympiad-96 of the National Board for Higher Mathematics (NBHM), DAE as Regional Coordinator for West Bengal.

Bhatia, R. (Stat-Math Unit, Delhi) received the Shanti Swarup Bhatnagar Prize for Science and Technology. He also served as Editor of "Linear Algebra and Its Applications" and "SIAM Journal on Matrix Analysis". He was elected member of the Board of Directors, International Linear Algebra Society.

Rao, B.L.S. Prakasa, (Stat-Math Unit, Delhi) was (i) elected President, Statistics Section of 83rd Session of Indian Science Congress Association and (ii) awarded Outstanding Alumni award by the College of Natural Sciences, Michigan State University, U.S.A. He also served as (i) Chairman, Bhatnagar Award Committee for Mathematical Sciences, CSIR, Government of India (1995), (ii) Chairman, Program Advisory Committee on Scientometrics and Informatics, DST, Government of India (1995-96), (iii) Member, Emeritus Scientist Scheme and Onetime Grant Research Committee, CSIR, Government of India (1994-96) and (iv) Member, UGC Panel on "Statistics" (1994-96).

Parthasarathy, K.R. (Stat-Math Unit, Delhi) was the Hardy Lecturer of the London Mathematical Society, May - June 1995. He was awarded the C.V. Raman Professorship of the I.N.S.A. (for a period of 5 years starting from 1996).

Dewanji, Anup (Computer Science Unit) received American Cancer Society International Research Fellowship, to work on Quantitative Analysis of Premalignant Tumour, at Fred Hutchinson Cancer Research Centre Seattle, USA, June 1994 - May 1995.

Chaudhuri, B.B. (Computer Vision and Pattern Recognition Unit) was elected a Fellow of the Indian National Academy of Engineering, 1995. He was also awarded the Hari Om Ashram Prerit Dr. Vikram Sarabhai Research Award, 1995.

Pal, Umapada (Computer Vision and Pattern Recognition Unit) received the best student paper award at the National Student Convention by Computer Society of India, Madras, 1995.

Bhattacharya, Bhargab B., (Electronics Unit) has been serving as the Chairman of the Programme Committee of the Tenth International Conference on VLSI Design 1997 jointly sponsored by IEEE Circuits and Systems Society, IEEE Computer Society, ACM SIGDA and VLSI Society of India.

Sinha, Bhabani P. (Electronics Unit) has been serving as a member of the Programme Committee of the 3rd International Conference on High Performance Computing jointly sponsored by IEEE Computer Society, ACM SIGARCH and CDAC, India. He also became a senior member of the Institute of Electrical and Electronics Engineers, USA.

Bandyopadhyay, Saswati (Geological Studies Unit) participated upon invitation in a Panel Discussion on Dinosaurs for Doordarshan telecast at Lucknow between 21 February to 23 February 1996, under the auspices of the Regional Science Centre (National Council of Science Museum, Government of India).

Banerjee, M. (Machine Intelligence Unit) received the INSA Medal for Young Scientists, 1995, in Mathematical Sciences.

Deb, S. (Machine Intelligence Unit) was elected a Senior Member of the Institute of Electrical & Electronics Engineers Inc. (IEEE), USA. He also became an Associate Editor of Robotics and Computer Integrated Manufacturing.

Ghosh, A. (Machine Intelligence Unit) received the INSA Medal for Young Scientists, 1995, in Engineering Sciences.

Kundu, M.K. (Machine Intelligence Unit) became a Member of the Editorial Board of Resonance.

Pal, N.R. (Machine Intelligence Unit) served as an Associate Editor of International Journal of Approximate Reasoning and IEEE Transactions on Fuzzy Systems. He also acted as a Guest Editor for a Special Issue of International Journal of Uncertainty, Fuzziness and Knowledge Based Systems.

Pal, S.K. (Machine Intelligence Unit) was elected a Fellow of the Indian Academy of Sciences (FASc) and the Indian National Academy of Engineering (FNAE). He was awarded a Patent Application Award from NASA Invention and Contribution Board, USA. He was nominated by the Indian National Science Academy (INSA) to visit Japan under International Collaboration/Exchange program. He served as an Associate Editor of the journals - IEEE Transactions on Neural Networks, Pattern Recognition Letters, Neuro Computing, Far-East Journal of Mathematical Sciences, Information Sciences (Applications) and Applied Intelligence; as an Executive Advisory Editor of IEEE Transactions on Fuzzy Systems and International Journal of Approximate Reasoning; and a member of the Review Board of Mathematical Reviews (American Mathematical Society) and IEEE Computer. He served as a Guest Editor of the special issue of IEEE Computer entitled "Neural Computing", vol. 29, No.3, March 1996. He is also acting as a Guest Editor of a special issue on Neural Networks of the Journal of Inst. of Engg. & Telecom. Engrs. (IETE) India. He served as a member of the Planning and Programming Committee of Birla Industrial and Technology Museum (BITM), India; Engineering Sciences Research Committee of the Council of Scientific & Industrial Research (CSIR); Expert Screening Committee of the All India Council for Technical Education (AICTE); and a member of Program Committee, IS & T/SPIE Symp. on Electronic Imaging : Science and Technology, January 28 - February 2, 1996, San Jose, CA and IEEE International Conference on Neural Nets, Perth, Australia, November 1995.

Bandyopadhyay, P. (Physics and Applied Mathematics Unit) was appointed a Honorary Full Professor at the Instituto Per la Researche de Base, Italy. He was also appointed a member of the Expert Committee for the project on "Encyclopaedia Asiatica" for the Asiatic Society.

Roy, S. (Physics and Applied Mathematics Unit) was appointed member of the International organizing Committee for the conference on "The Present Status of Quantum Theory of Light" at York University, Canada (1995), and of the 2nd "Vigier Symposium", Mexico (1997). He also served as an Associate Editor for the series "The Contemporary Chemical Physics", World Scientific Publishers, Singapore.

Basu, A. (Anthropometry and Human Genetics Unit) was appointed Member, Steering Committee, Golden Jubilee Celebration, Anthropological Survey of India, Government of India.

Gupta, Ranjan (Anthropometry and Human Genetics Unit) was selected Member, Editorial Advisory Committee of "Journal of Human Ecology".

Majumder, Partha P. (Anthropometry and Human Genetics Unit) was selected as a Member of the Editorial Board of "Journal of Genetics".

Coondoo, Dipankar (Economic Research Unit) was nominated as a member of the Advisory Committee of the Eastern Regional Centre for the Indian Council of Social Sciences Research.

Krishnakumar, T. (Economic Analysis Unit, Bangalore) served as a member of (i) The Editorial Board of the Journal of Quantitative Economics, (ii) Executive Council of the Indian Econometric Society, (iii) Research Advisory Committee for Industry and Trade of Indira Gandhi Institute for Development Research, Bombay.

Narayana, N.S.S. (Economic Analysis Unit, Bangalore) served as (i) Member, Board of Studies, Department of Econometrics, Madras University, (ii) Member, Research Advisory Committee for Agriculture, Poverty and Rural Development of the Indira Gandhi Institute for Development Research, Bombay, (iii) Secretary, Organising Committee and Convener, Programme Committee of 32nd Annual Indian Econometric Society Conference held at Bangalore, March 21-23, 1996, (iv) Member, Board of Editors, Indian Journal of Agricultural Economics, (v) Member, Executive Council of the Indian Econometric Society.

Rao, K. Surekha, (Economic Analysis Unit, Bangalore) was nominated as Associate Editor, Journal of Quantitative Economics.

Choudhury, Amitav, (Linguistic Research Unit) was nominated as the Coordinator of the Indian National Chapter of the International Quantitative Linguistic Association, (Trier, Germany).

Ghosh, Anjali, (Psychometric Research and Services Unit) was appointed a member of the District Primary Education Programme, Govt. of West Bengal.

Bandyopadhyay, Suraj, (Sociological Research Unit) was selected as a Member of the Advisory Committee of the Eastern Regional Centre (ERC) of Indian Council of Social Science Research, New Delhi.

Chakrabarti, Prafulla, (Sociological Research Unit) was selected as a Member of the Expert Committee in respect of Vol. I of Encyclopaedia Asiatica by the Asiatic Society, Calcutta.

Dasgupta, Atis (Sociological Research Unit) was selected a member of the following State-level committees : (i) Advisory Committee of the State Archives of Government of West Bengal, (ii) Advisory Committee of the State Archaeology of Government of West Bengal, (iii) Advisory Committee on the District Gazetteers, Government of West Bengal, (iv) Governing Body of Netaji Institute for Asian Studies, (v) Governing Body of Calcutta Museum, (vi) State-level Committee on the 'Birth Centenary of Netaji Subhas Chandra Bose'. (The Governor has also selected Dr. Dasgupta to be a member of the Working Committee constituted by the above State-level Committee).

10. SCIENTIFIC TOURS AND ASSIGNMENTS ABROAD

Bose, Arup (Stat-Math Unit, Calcutta) went on a visiting position to Purdue University, USA.

Das, A.K. (Stat-Math Unit, Calcutta) continued with his visiting position at Ohio State University, Columbus, USA. He also visited University of Waterloo, Canada.

Dasgupta, Somesh (Stat-Math Unit, Calcutta) visited Beijing, People's Republic of China, in August 1995 and participated in the Conference of the International Statistical Institute. He also served as a visiting scholar in the Department of Statistics, University of Washington, Seattle, USA, during September 1995.

Ghosh, J.K. (Stat-Math Unit, Calcutta) attended the two-week 50th biennial meeting of International Statistical Institute as President and chaired several meetings including the General Assembly in August 1995. He visited Purdue University, USA, during 25 July to December 1995 for research and teaching.

Goswami, Aloke (Stat-Math Unit, Calcutta) visited Department of Statistics, Stanford University, USA.

Raha, A.B. (Stat-Math Unit, Calcutta) visited U.K. from August to October 1995 under Exchange of Scientists Programme of INSA and Royal Society, London. The host Institute was Department of Mathematics of York University. Dr. Raha collaborated with Dr. M.M. Dotson and also visited University College London, University of NewCastle-upon-Tyne, University of Cambridge, University of Liverpool and Imperial College, London.

Rao, T.J. (Stat-Math Unit, Calcutta) visited Beijing, P.R. China to participate in the 50th session of the International Statistical Institute during 21-29 August 1995 and presented a paper.

SahaRay, Rita (Stat-Math Unit, Calcutta) was a Visiting Assistant Professor at the Department of Statistics and Actuarial Science, University of Waterloo, Waterloo, Canada during 13 June to 31 July 1995.

Sinha, Bikas K. (Stat-Math Unit, Calcutta) visited the Department of Statistics of the Institute of Mathematics, Federal University of Balia, Brazil, during May-June 1995. He conducted a Workshop on Regression Diagnostics and acted as a resource person for bio-statistical problems in the School of Public Health of the University. He visited Beijing during August 1995 to attend the Conference of International Statistical Institute as an invited speaker in the Session on Statistical Training Activities in Developing Countries., He delivered a talk on 'Four decades of statistical training at the Indian Statistical Institute - An Overview'. He also visited (i) USEPA during March 1996 to conduct Workshop on Regression Diagnostics as the resource person, and (ii) The University of Tampere, Finland, during March 1996 to continue collaborative research with Prof. E. Liski.

Parthasarathy, K.R. (Stat-Math Unit, Delhi) (i) visited Institut Henri Poincare, Paris (11-13 May) and participated in the IMU meeting; (ii) visited University of Strasbourg, France (14-21 May) and delivered 3 lectures on Strong Markov Processes and Dirichlet Problem in von Neumann Algebras; (iii) undertook the Hardy Lecture Tour of the London Mathematical Society (21 May - 19 June) and delivered 12 lectures in 11 universities in U.K. on different topics in quantum probability; (iv) visited Nottingham University, U.K.; (v) participated in European Stochastic Analysis Symposium at Gregynog in Wales, U.K. (10-14 July) and delivered an invited address on Quantum Markov Processes; (vi) visited Columbia University, New York; participated in Conference on "Probability towards 2000" during 2-5 October 1995 and delivered an invited address on Quantum Markov Processes and Dirichlet Problem in von Neumann Algebras; (vii) participated in Conference on Quantum Probability at Trento, Italy, during 29 January - 3 February and delivered an invited address on Quantum Markov Processes with a given Christensen - Evans generator.

Bapat, R.B. (Stat-Math Unit, Delhi) visited (i) Department of Mathematics, Ohio University, during March 28, 1995 to June 9, 1996; gave seminars at University of Illinois at Chicago and University of Pittsburgh; and (ii) Department of Econometrics, University of Tilburg, The Netherlands, during June 12, 1996 to July 8, 1996 to work with Prof. Stef Tijs; gave seminar at Eindhoven University of Technology.

Dey, Aloke (Stat-Math Unit, Delhi) visited Department of Mathematical Sciences, University of Akron, U.S.A., July 1 - December 31, 1995. During this visit he also delivered talks at University of Akron, Ohio State University, Wright State University, Northern Illinois University, University of Virginia and University of Michigan.

Parthasarathy, T. (Stat-Math Unit, Delhi) visited U.S.A. during the period October 30, 1995 to November 21, 1995. During this period, he (i) attended an International Conference on "Complementarity Problems : Engineering and Economic Applications and Computational Methods" at the Johns Hopkins University during November 1-4, 1995 and gave a talk on "Stochastic Games"; and (ii) delivered two talks at the Department of Mathematics, University of Maryland, Baltimore County.

Prakasa Rao, B.L.S. (Stat-Math Unit, Delhi) visited the University of Bahrain, November 19-22, 1995 and delivered a talk on "Wavelets and Non-parametric Inference" in the International Conference on Pure and Applied Mathematics held there.

Rao, T.S.S.R.K. (Stat-Math Unit, Bangalore) visited the Department of Mathematics, University of Catania, Italy, during May 1995.

Sastry, N.S.N. (Stat-Math Unit, Bangalore) is currently visiting the University of Florida, Gainesville, USA.

Thangavelu, S. (Stat-Math Unit, Bangalore) gave a talk at the conference on Harmonic Analysis held at Tuczno, Poland, during June-July 1995.

Bandyopadhyay, Shibdas (Computer Science Unit) visited the Department of Mathematical Sciences of University of Wisconsin, USA, from August 1994 to June 1995.

Dewanji, Anup (Computer Science Unit) visited the Fred Hutchinson Cancer Research Centre, Seattle, USA, during 15 June 1994 to 14 June 1995.

Krishnan, T. (Computer Science Unit) visited the Curtin University of Technology, Perth, Australia from 1 February to 30 June 1995.

Sengupta, Debasis (Computer Science Unit) is visiting the Department of Statistics and Applied Probability, University of California, Santa Barbara, USA, for a year from September 1995.

Vijayan, K.S. (Computer Science Unit) was an invited speaker and chairman of a Session at the R.C. Bose Memorial Conference on "Statistical Design and Related Combinatorics", during June 7-11, 1995 at Colorado State University, Fort Collins, USA.

Ray Chaudhuri, Anirban (Computer Vision and Pattern Recognition Unit) visited National Technological University, Singapore, during 9-13 December, 1995 to participate in the 2nd Asian Conference on Computer Vision.

Sengupta, P. (Computer Vision and Pattern Recognition Unit) visited the Institute for Research in Cognitive Science, University of Pennsylvania, from 20 March to 22 July, 1995. Thereafter he visited GSF - Gesellschaft fur Strahlen - und Umweltforschung, Munich, Germany from 31 July, 1995 to 3 February, 1996.

Sinha, Bhabani P. (Electronics Unit) attended the 9th International Parallel Processing Symposium (IPPS) held in Santa Barbara during April 25-28, 1995 and presented a paper. He also visited the Departments of Computer Science of (i) University of Central Florida, Orlando, (ii) University of Nevada, Las Vegas, (iii) University of North Texas, Denton and (iv) University of Texas A & M, College Station, and delivered lectures in each of these places during his trip to USA from April 19, 1995 to May 11, 1995.

Basak, J. (Machine Intelligence Unit) attended the CIMPA-CIMI-UNESCO Summer School on Virtual Reality held at the International Centre for Pure and Applied Mathematics, Nice, France, June 26 - July 7, 1995.

Biswas, S.N. (Machine Intelligence Unit) attended the Workshop on Wavelet Methods in Mathematical Analysis, Statistics and Computation, held in Australian National University, Canberra, Australia, June 25-30, 1995.

De, S. (Machine Intelligence Unit) attended the 1995 IEEE International Conference on Neural Networks (ICNN'95) and 1995 IEEE International Conference on Evolutionary Computation (ICEC'95), Perth, Australia, November 27 - December 1, 1995, and presented four papers.

Deb, S. (Machine Intelligence Unit) visited San Diego, USA as an Asian Expert to attend a meeting of Advance Research Projects Agency (ARPA), Department of Defence, USA, during January 15 - February 10, 1996. He also visited and delivered a series of lectures in Stanford University during that period.

Ghosh, Ashish (Machine Intelligence Unit) is visiting the University of Osaka Prefecture, Osaka, Japan, since October 1995 supported by a Japanese Government Postdoctorate Fellowship.

Mandal, Deba Prasad (Machine Intelligence Unit) visited the University of Osaka Prefecture, Osaka, Japan during June 1995 - March 1996, supported by a Japanese Government Postdoctorate Fellowship.

Bandyopadhyay, P. (Physics and Applied Mathematics Unit) delivered two invited lectures on "Gravity without the Metric and Torsion" at the Ettore Majorana International School on Quantum Gravity at Erice, Italy, during May 11-18, 1995. He also gave an invited talk on "Skyrmions and Hadrons" at the International Workshop on Theoretical Physics and chaired a session at Monteroduni, Italy, during August 7-14, 1995.

Dandapat, B.S. (Physics and Applied Mathematics Unit) visited the Norwegian Institute of Technology, Norway, during June 13 - 24, 1995 and delivered invited lectures. He also attended the 336th Euromech colloquium on Flows Dominated by Centrifugal and Coriolis Forces and chaired a session. He visited Fraunhofer - Institute fur Zerstorungsfreie Prufverfahren in Germany during 25-30 June 1995 and delivered an invited lecture and carried out scientific discussions.

Roy, S. (Physics and Applied Mathematics Unit) delivered an invited lecture at the International Conference on the present status of Quantum theory of Light at York University, Canada, August 25 - September 6, 1995.

Chaudhuri, A.K. (Geological Studies Unit) visited Turkey to attend a field workshop-cum-meeting on the Genesis of Polymetallic Marine Oxides, IGCP Project No.318, during September 22-30, 1995. The programme was conducted under the auspices of the UNESCO.

Sengupta, D.P. (Geological Studies Unit) visited Australia during May 15 - July 16, 1995. He attended a workshop titled "An Investigation of the Mesozoic Temnonspondyls from India, Argentina and Australia". There, he studied the Australian temnospondyl collection. He visited the La Trobe Paleo Lab and the Monash Paleo Lab at Victoria and also the Brisbane and the Tasmania University Paleo Labs. He also visited the major repository at the museums of Melbourne, Sydney, Brisbane, Townsville and Tasmania. During his visit, he participated in a field work on the Triassic vertebrate bone-bearing deposits of Queensland and Tasmania.

Chattopadhyay, Molly (Agricultural Science Unit) visited School of Development Studies, University of East Anglia, Norwich, U.K. during June-July 1995 to complete a research report on Reproductive Decision-Making and Environmental Relations, as part of phased collaborative research programme on Livelihood Sustainability in East India Plateau Region between Indian Statistical Institute and University of East Anglia, Norwich, UK, funded by Overseas Development Administration, U.K.

Basu, A. (Anthropometry and Human Genetics Unit) participated in the International Congress of Anthropological and Ethnological Sciences (IUAES), Inter-Congress 1995, Universities of Bari and Florence, Italy, during 19-22 April 1995 and presented a paper at the Symposium at Bari, and Chaired a session at the General Assembly in Florence.

Bharati, P. (Anthropometry and Human Genetics Unit) visited Human Science Research Council, Pretoria, South Africa, on a teaching assignment for two weeks in August 1995.

Majumder, Partha P. (Anthropometry and Human Genetics Unit) visited the University of Pittsburgh, U.S.A. from May 1 - June 10, 1995, for carrying out a collaborative scientific project. He also delivered an invited lecture entitled "Some statistical models relevant to the study of complex genetic diseases" at the University of Pittsburgh School of Medicine on 15 May 1995.

Malhotra, K.C. (Anthropometry and Human Genetics Unit) participated in the Workshop on Rethinking Culture at Pokhra, Nepal, from 6-14 January 1996, organized by UNESCO.

Mukhopadhyay, Susmita (Anthropometry and Human Genetics Unit) participated in the Summer Short Course in Women's Health held at the University of Melbourne, Australia, during January 21 - February 16, 1996.

Saha, Asit Kr. (Embryology Unit) has joined AgResearch, Wallaceville Animal Research Centre, Upper Hutt, New Zealand, on a visiting assignment for one year.

Dewanji, Anjana (Leaf Protein Research Unit) visited Fred Hutchinson Cancer Research Centre and Harborview Medical Centre, Seattle, USA, during June 1994 to June 1995 where she was involved in a project on the use of hematofluorometry, a test procedure having widespread clinical use in the diagnosis of iron deficiency and chronic lead exposure.

Majumder, Amita (Economic Research Unit) attended the Seventh World Congress of the Econometric Society held at Tokyo, Japan, during August 22-29, 1995, and presented a paper entitled "Income Inequality and Relative Deprivation". She also visited the University of Kagawa, Takamatsu, Japan, during 20-21, 1995.

Neogi, C. (Economic Research Unit) presented a paper entitled "Impact of Productivity Differentials on Technical Efficiency : The Case of Indian Public and Private Industries", at the Conference on Efficiency and Productivity at University of New England, Australia, during November 23-24, 1995.

Rakshit, M.K. (Economic Research Unit) presented a paper on "The Tobin Tax" in the Conference on "Problems of Financing the United Nations" held at Tinbergen Institute, Rotterdam, in September, 1995.

Sarkar, A. (Economic Research Unit) visited International Centre for Economic Research, Turin, Italy, as a fellow from May to July 1995. He also gave seminars at (i) University of Bologna, Bologna, Italy, (ii) University of Pavia, Pavia, Italy and (iii) University of Torino, Turin, Italy, during this period.

Das, Sanghamitra (Planning Unit, Delhi) participated in the seventh Econometric Society World Congress held in Tokyo during August 22-31, 1995, and presented a paper entitled "Evolution of brand qualities of TVs in the US". She also participated in the American Economic Association Meetings at San Fransisco during January 5-7, 1996, and presented a paper entitled "Foreign vs. domestic technology, private vs. public ownership and product quality."

Sarma, Atul (Planning Unit, Delhi) visited the Academy of Sciences, Oriental Institute in Moscow during November 26 - December 2, 1995, as a member of the Indian delegation of social scientists.

Choudhury, Amitav (Linguistic Research Unit) on the invitation of the Universite Rene Descartes, Paris, the French Ministry of External Affairs and C.L.A.D., Universite Cheikh Anta Diop de Dakar visited Dakar, Senegal, from 16-18 December, 1995. He also delivered a plenary lecture entitled, "Language policy and planning in a plural society : The case of India", at the Conference on "Les politiques linguistiques, mythes et re' alite' s" jointly organized by C.L.A.D., Universite' cheikh Anta Diop de Dakar and U.F.R. de Linguistique ge'ne'rale et applique'e, Universite' Rene' descartes, Paris. He also visited the U.K., on the invitation of the Gujarati Literary Academy, London and the Gujarati Sikshan Sangh, Leicester, from 22 December, 1995 to 21 January, 1996, to work on language maintenance strategies amongst linguistic minorities in the U.K. At the Department of Language and Linguistic Science, University of York, he continued a collaborative research programme with the Department on language maintenance with reference to the Language attitudes of the Gujaratis in Britain during the same period. He was also visited Trier, Germany, from 23-26 January, 1996, on the invitation of the Department of Computational Linguistics, University of Trier. He held discussions with linguists on the scope for collaborative research in the field of Quantitative and Computational Linguistics. He also delivered lectures on (i) "Language policy and planning in India"; and (ii) "Quantitative linguistic research at the Indian Statistical Institute".

11. SCIENTIFIC ASSIGNMENTS IN INDIA

Dasgupta, Ratan (Stat-Math Unit, Calcutta) delivered an invited talk entitled 'Almost sure representation and sharper rates of convergence in CLT for U-statistics and L-statistics' at the Indian Science Congress held at Punjabi University, Patiala, during 3-8 January 1996. He also visited the Department of Statistics, University of Poona.

Bagchi, Somesh (Stat-Math Unit, Calcutta) served as a resource person in the Mathematics Training and Talent Search of the NBHM at Kanpur during May 1995. He also participated in the International Colloquium on Ergodic Theory and Lie Groups at the TIFR, Bombay, during 4-11 January 1996.

Bose, Arup (Stat-Math Unit, Calcutta) visited the Department of Statistics, University of Pune, during March 22 to April 5, 1995. He gave 4 lectures, wrote a paper and held discussions.

Chaudhuri, Probal (Stat-Math Unit, Calcutta) visited the Department of Statistics, Punjab University, Chandigarh, as a University Grants Commission Visiting Fellow in March 1996.

Dasgupta, Somesh (Stat-Math Unit, Calcutta) acted as Convener, Statistics Section of the CSIR-UGC Examination of the Government of India. He also served as a Member, Section Committee I, INSA, New Delhi.

Mathew, Joseph (Stat-Math Unit, Calcutta) participated in the International Colloquium on Ergodic Theory and Lie Groups at the TIFR, Bombay, during 4-11 January 1996.

Rao, S.B. (Stat-Math Unit, Calcutta) delivered the Inaugural Address at the 23rd Annual Conference of the Orissa Mathematical Society held during 2-3 March 1996 and gave a talk on Intersection Graphs. He also delivered the Inaugural Address at the meeting of the Association for Improvement of Mathematical Teaching held during 10-11 February 1996.

Roy, A.K. (Stat-Math Unit, Calcutta) delivered lectures in two UGC-sponsored Refresher Courses at the Department of Mathematics, Sambalpur University. He served as a member of the COSIST Committee of Department of Mathematics, Sambalpur University. He also continued to serve as a member of the National Board for Higher Mathematics and as the Regional Coordinator of the Eastern region for NBHM library grants.

Sinha, Bikas, K. (Stat-Math Unit, Calcutta) visited the Department of Statistics of the University of Meerut and delivered 'Prof. L.R. Goel Memorial Lectures' covering various topics in Mathematical Statistics. He acted as a member of the P.G. Board of Studies in Statistics for Calcutta University, Burdwan University and Kalyani University.

Srivastava, S.M. (Stat-Math Unit, Calcutta) participated in a conference on Topology and Geometry at Rani Durgavati University, Jabalpur. He also lectured at a UGC Refresher School on Analysis and Computing at Sambalpur University.

Bhatt, Abhay (Stat-Math Unit, Delhi) participated in the "Problem co-ordinators camps for the International Math Olympiad", 1996, held in ISI, Delhi and IISc., Bangalore.

Bapat, R.B. (Stat-Math Unit, Delhi) delivered invited talks in the (i) 16th Conference of Indian Society for Probability and Statistics, Osmania University, December 18-21, 1995, and (ii) International Conference in Game Theory, IISc., Bangalore, January 2-6, 1996.

Bhattacharya, Tilak (Stat-Math Unit, Delhi) delivered lectures at Delhi University as a part of refresher course for college teachers.

Singh, Dinesh (Stat-Math Unit, Delhi) delivered an invited talk entitled "Some Characterizations of De Branges Spaces" in the International Conference on Harmonic Analysis held at the University of Delhi in December, 1995.

Dewan, Isha (Stat-Math Unit, Delhi) presented a paper "Tests for the equality of cause specific hazard rates in the presence of censoring for the competing risks model" in the symposium on "Survival Analysis" at Indian Science Congress held at Punjabi University, Patiala, January 3-8, 1996 and also a paper "Kernel-Type Density Estimation For Associated Sequences" at the workshop on "Statistical Inference under Non-Standard Conditions" held at Punjab University, Chandigarh, January 9-12, 1996.

Kochar, S.C. (Stat-Math Unit, Delhi) (i) gave a series of lectures at the Refresher Course in Statistics for College and University Teachers held at Panjab University, Chandigarh in April 1995; (ii) visited Panjab University, Chandigarh, for a period of two weeks in December 1995 as a Visiting Fellow under the UGC scheme and gave a series of lectures. He also chaired a session and gave a talk on "Stochastic Properties of Normalized Spacings of Heterogeneous Distributions" in the Workshop on Statistical Inference Under Non Standard Conditions held at Punjab University during 9-12 January 1996.

Parthasarathy, K.R. (Stat-Math Unit, Delhi) served as member of (i) National Board for Higher Mathematics, and (ii) Council of the Institute of Mathematical Sciences, Madras.

Rao, B.L.S. Prakasa (Stat-Math Unit, Delhi) delivered the Keynote address at the conference on "Statistical Inference in Life Testing and Reliability" Benaras Hindu University, Varanasi, September 28-30 and presented a talk "On distribution with period failure rate and related inference problems". He gave a series of lectures at the Department of Statistics, Panjab University, Chandigarh, during October 25, 1995 and November 8, 1995 under the visiting Fellowship programme of UGC to the Department of Statistics, Panjab University, Chandigarh. He delivered the Presidential address, "On some recent advances in nonparametric functional estimation", Statistics Section, 83rd Session of Indian Science Congress Association, January 3-8, 1996, Punjabi University, Patiala. He also visited Panjab University, Chandigarh, October 25, 1995 to November 8, 1995.

Muthuramalingam, Pl. (Stat-Math Unit, Bangalore) participated in the winter school on Group representations and Function theory organised by ISI at JNC, Bangalore.

Ramasubramanian, S. (Stat-Math Unit, Bangalore) served as a resource person at the UGC sponsored Refresher course in Mathematics for College and University teachers held in Cochin University of Science and Technology during March 1996.

Rao, K.P.S. Bhaskara (Stat-Math Unit, Bangalore) delivered a series of lectures at the "Measure Theory" conference held at University di Trieste in Grado, Italy, during September 1995.

Mukhopadhyay, P. (Computer Science Unit) visited Utkal University, Bhubaneswar, during 4-5 December 1995 to deliver special lectures on Sample Survey. He also visited Sardar Patel University, Gujarat, during 15-30 January 1996 to lecture on Sample Survey.

Chaudhuri, B.B. (Computer Vision and Pattern Recognition Unit) (i) visited and delivered an invited lecture on "Digital Image Processing Techniques and Their Applications" in a workshop on "Quantitative Approaches in Process Metallurgy", held at Regional Research Laboratory, Bhubaneswar during 26-28 October, 1995; (ii) visited IIT, Bombay (Computer Science Dept.) during 23-25 November, 1995 and held discussions on Image Processing problems; (iii) delivered an invited talk on "Visual texture segmentation using fractal features and neural networks" at the International Conference on New Directions in Applied Mathematics during 19-22 December 1995. He also visited ADRIN as well as Centre for Applied Linguistics Studies and had interaction with scientists on research projects; (iv) delivered an invited lecture on "How the computer can read an Indian language book" at Inter-University Centre for Astronomy and Astrophysics (IUCAA) at Pune on 29 January, 1996; (v) delivered an invited lecture on "Automatic spelling error detection and correction" at National Centre for Software Technology, Bombay, on 30 January, 1996.

Parui, S.K. (Computer Vision and Pattern Recognition Unit) visited Advanced Data Processing Research Institute, Secunderabad, during 27 February - 3 March, 1996 to hold discussions on satellite image analysis and development of an automatic map understanding system.

Chaudhuri, D. (Computer Vision and Pattern Recognition Unit) visited Advanced Data Processing Research Institute, Secunderabad, during 20 February - 3 March, 1996 in connection with a research project on road detection from satellite imagery.

Das, Niladri Sekhar (Computer Vision and Pattern Recognition Unit) visited International School of Dravidian Linguistics, Trivandrum, during 22 December 1995 - 2 January, 1996 to give a lecture on NLP, investigate MT and hold discussions on the possibility of a joint project between ISI and ISDL.

Bhattacharya, B.B. (Electronics Unit) acted as a member of the Programme Committee of the 9th International Conference on VLSI Design, Bangalore, January 1996. He also chaired a session in this conference.

Dattagupta, J. (Electronics Unit) attended the International Conference on High Performance Computing (HiPC), December 1995, New Delhi and presented a paper.

Sinha, B.P.(Electronics Unit) chaired a session in the International Conference on High Performance Computing (HiPC), December 1995, New Delhi. He attended the Fifth National Seminar on Theoretical Computer Science (NSTCS), August 1-4, 1995, BARC, Bombay and presented a paper there. He also attended the International Conference on High Performance Computing (HiPC), December 1995, New Delhi and presented two papers there.

Chakraborty, T. (Geological Studies Unit) participated, as a resource person in the Workshop entitled "Earth Through the Glasses of Science" organised by the Jagadish Bose National Science Talent Search during April 20-27, 1995, at Dimapur, Nagaland.

Saha, D. (Geological Studies Unit) participated upon invitation from the Department of Science and Technology, Government of India in a DST-sponsored Interaction Meet of the Earth Scientists held at the University of Jammu, Jammu, during 21-23 August 1995.

Banerjee, M. (Machine Intelligence Unit) delivered an invited talk at Workshop cum Seminar on Fuzzy Mathematics and Its Applications, Department of Applied Mathematics, Vidyasagar University, Midnapore, March 26-27, 1996. She also attended Seminar on "Logic and the Theoretical Enterprise", Visva Bharati, November 8-10, 1995.

De, R.K. (Machine Intelligence Unit) delivered an invited talk at Workshop Cum Seminar on Fuzzy Mathematics and Its Applications, Department of Applied Mathematics, Vidyasagar University, Midnapore, March 26-27, 1996. He also attended Indian Conference on Pattern Recognition Image Processing and Computer Vision (ICPIC'95), Kharagpur, December 13-15, 1995.

Ghosh, A. (Machine Intelligence Unit) visited the Defence Electronics Applications Laboratory, Dehradun, May 29-31, 1995.

Mitra, S. (Machine Intelligence Unit) delivered an invited talk at Workshop Cum Seminar on Fuzzy Mathematics and Its Applications, Department of Applied Mathematics, Vidyasagar University, Midnapore, March 26-27, 1996.

Mitra, S.K. (Machine Intelligence Unit) attended (i) Indian Conference on Pattern Recognition Image Processing and Computer Vision (ICPIC'95), Kharagpur, December 13-15, 1995, (ii) Conference of Frontiers of Radio Science (INCURSI-96), Calcutta, January 16-20, 1996.

Murthy, C.A. (Machine Intelligence Unit) visited the Defence Electronics Applications Laboratory, Dehradun, during September 11-13 and October 11-13, 1995. He is serving as a Guest Faculty of Computer Science, Calcutta University.

Pal, S.K. (Machine Intelligence Unit) delivered invited talks at (i) Space Application Center, ISRO, Ahmedabad, May 23-26, 1995; (ii) Institute of Radiophysics & Electronics, Calcutta University, September 8, 1995; (iii) Seventh Manipur Science Congress, Manipur University, Imphal, December 4, 1995; (iv) INCURSI-96, Frontier in Radio Science, Calcutta, January 17, 1996; (v) Platinum Jubilee Conference of the Institution of Engineers (India), Calcutta, February 4, 1996; (vi) Department of Mathematics, Sambalpur University, February 27-28, 1996; (vii) Workshop cum Seminar on Fuzzy Mathematics and Its Applications, Department of Applied Mathematics, Vidyasagar University, Midnapore, March 26-27, 1996, where he also chaired three sessions and was the Chief Guest in the valedictory program. He visited (i) Defence Electronics Applications Laboratory, Dehradun, May 29-31, 1995; (ii) All India Council for Technical Education (AICTE), New Delhi, August 29-30, 1995; (iii) National Aerospace Laboratory (NAL), Bangalore, October 26, 1995; (iv) Guru Nanak Dev University, Amritsar, December 26-28, 1995 (v) Structural Engineering Research Center, Madras, February 21, 1996.

Sarbadhikari, S.N. (Machine Intelligence Unit) delivered invited talks at (i) Department of Surgery, Calcutta Medical College & Hospital, Calcutta, August 24, 1995, (ii) Indian Medical Association House, Calcutta, September 3, 1995 and (iii) Academy of Fine Arts, Calcutta on November 8, 1995. He also attended (i) 83rd Indian Science Congress, Patiala, January 3-8, 1996 and (ii) Conference on Frontiers of Radio Science (INCURSI-96), Calcutta, January 16-20, 1996.

Sinha, S. (Machine Intelligence Unit) attended (i) International Conference on Dynamics of Complex Systems, Calcutta, August 6-11, 1995 and (ii) Winter School on Integrable Systems and Low-Dimensional Many-Body Problems, Bharathidasan University, Tiruchirapalli, December 18-23, 1995.

Uma Shankar, B. (Machine Intelligence Unit) visited the Defence Electronics Applications Laboratory, Dehradun, May 29-31, September 11-13 and October 11-13, 1995.

Mandal, B.N. (Physics and Applied Mathematics Unit) visited Indian Institute of Science, Bangalore, during 15 May 1996 - 29 June 1996 for collaborative research. He delivered a series of lectures on "Hypersingular integral equation and applications to water wave problems" during 12-21 December 1995 at the department of Mathematics, Jadavpur University under the COSIST programme in Mathematics. He also visited Visva Bharati, Bolpur and delivered two lectures, entitled "On integral expansions related to Mehler-Fok type transforms," and "Galeskin method of solving an integral equation and its use to some water wave problems", during 14-15 January 1996, in the Department of Mathematics. He again visited Visva Bharati on 16 March 1996 and delivered a lecture "On water waves" at the Instructional Workshop under UGC special Assistance Programme in the Department of Mathematics.

Dandapat, B.S. (Physics and Applied Mathematics Unit) delivered an invited lecture at 3rd Annual Conference of Society of Industrial and Applied Mathematics, held in the Department of Applied Mathematics, University of Calcutta. He delivered an invited lecture at the 30th CASAMCU National Research symposium on Applied Mathematics at Calcutta University, February 1996.

Kumar, Krishna (Physics and Applied Mathematics Unit) visited IIT Kanpur, during 24-25 September 1995 and delivered a lecture on 'Instabilities in extended systems'. He also visited SINP on 7th March and delivered a lecture on "Dissipative Systems". He delivered a lecture on "Faraday instability in viscous fluid" in Applied Mathematics Department, Calcutta University.

Basu, A. (Anthropometry and Human Genetics Unit) visited Gauhati University during 18-22 December 1995 and delivered a series of lectures on "Demographical Anthropology" and "Ecological Anthropology" as part of a Refresher Course sponsored by the UGC. He also visited MACS-Agharkar research Institute (ARI), Pune, during 15-19 January 1996 and delivered an invited lecture at the National Seminar on "Statistical Aspects of Nutritional Epidemiology" organized by ARI He participated in the activities of Sambalpur, Gauhati, Dibrugarh, Punjab and Calcutta Universities in various capacities.

Majumder, Partha P. (Anthropometry and Human Genetics Unit) (i) delivered an invited lecture entitled "Genetic epidemiology", Eden Hospital, Medical College, Calcutta, July 8, 1995; (ii) delivered an invited lecture entitled "Dissecting the human genome", Sivatosh Mukherjee Science Centre, Calcutta, July 14, 1995; (iii) delivered a set of six invited lectures on Biostatistics in the Department of Statistics, Calcutta University, on August 4, 11 and 18, 1995; (iv) delivered the Foundation Day Lecture of Nodal Research Centre, Calcutta, entitled "Human Genetics : Recent Achievements and Ethical Dimensions" on August 25, 1995; (v) delivered an invited lecture entitled "Determination of allele frequency and heterozygosity from DNA fragment length polymorphisms", Bose Institute, Calcutta, 20 September, 1995; (vi) delivered an invited lecture entitled "Genomic Diversity in Indian Populations", Department of Biotechnology, New Delhi, 22 September, 1995; (vii) participated in a Discussion on "South North Cooperation in Human Genetics" during the UNESCO 3rd South-North Human Genome Conference, New Delhi, 4-7 December, 1995; (viii) delivered an invited lecture entitled "Evolutionary Paradigms", Saha Institute of Nuclear Physics, Calcutta, 13 December, 1995; (ix) delivered 4 invited lectues on "Neutral Theory of Evolution" in Workshop on Evolutionary Biology, Mangalore, December 23-28, 1995; (x) delivered a talk on "Family and non-familial factors in the predisposition to disruptive behaviours" in XXI Annual Conference of the Indian Society of Human Genetics, Calcutta, 16 January, 1996; (xi) delivered 3 invited lectures on "Estimation of matching probabilities, relatedness and evolutionary affinities from DNA fingerprint data" in Workshop on DNA Fingerprinting, Hyderabad, 29-31 January, 1996; (xii) delivered two invited lectures on "Genetic epidemiological methods" and "Segregation analysis" in Indo-U.S. Symposium on Psychiatric Genetics, 19-22 February, 1996; (xiii) delivered an invited lecture entitled "Genetic Epidemiology of Complex Human Disorders", Indian Institute of Science, Bangalore, 22 February, 1996; (xiv) delivered an invited lecture entitled "Distribution and evolution of CTG repeats at the DMPK gene in human populations", Indian Institute of Science, Bangalore, 22 February, 1996; (xv) delivered an invited lecture on "Genetic Epidemiology of Complex Human Disorders" in XIX All India Cell Biology Conference, Calcutta, 23-25 February, 1996.

Malhotra, K.C. (Anthropometry and Human Genetics Unit) continued to serve on various committees set up by Science and Society Division of DST, New Delhi.

Mukhopadhyay, Susmita (Anthropometry and Human Genetics Unit) participated in the Workshop on Health System Research (HSR) held during October 30 - November 8,, 1995 at Indian Institute of Health Management Research, Jaipur. She also participated in the Follow-up Workshop on Health System Research (HSR) during December 26-30, 1995 at IIHMR, Jaipur

Rakshit, M.K. (Economic Research Unit) presented a paper entitled "Money, Credit and Government Finance in a Developing Economy" in the Conference on Economic Theory held at the Indian Statistical Institute, Delhi, in December 1995. He also chaired a session on "General Theory After 60 years" at the Annual Conference of the Bengal Economic Association held at Jadavpur University, Calcutta, in February 1996.

Chakarabarti, S. (Economic Research Unit) presented a paper entitled "Management and Treatment of Solid Waste" in the seminar organised by the Nodal Research Centre, Calcutta, and the Indian Chamber of Commerce, Calcutta, during October 27-28, 1995.

Sarkar, N. (Economic Research Unit) participated in a workshop on "Identification of New Research Areas for IDBI", organized by the Industrial Development Bank of India, Bombay, on March 14, 1996.

Kabiraj, T. (Economic Research Unit) presented a paper entitled "To Protect or Not to Protect Foreign-Owned Patents - A Strategic Decision" in the Annual Conference of the Bengal Economic Association held at Jadavpur University, Calcutta, in February, 1996. He also presented the same paper in a seminar organized by the Ford Foundation at New Delhi, during November 6-7, 1995.

Mukherjee, D. (Economic Research Unit) presented a paper entitled "Deprivation Reducing Income Tax Function" at the Eleventh Annual Conference on Economic Theory and Policy at the Indian Statistical Institute, Delhi, during December 18-20, 1995. He also attended the 32nd Annual Indian Econometric Society Conference held at the Indian Statistical Institute, Bangalore, during March 21-23, 1996, and presented a paper entitled "Measures of Relative Deprivation and Their Meaning in Terms of Social Satisfaction".

Narayana, N.S.S. (Economic Analysis Unit, Bangalore) visited I.G.I.D.R., Mumbai, in July, August and December, 1995.

Krishna Kumar, T. (Economic Analysis Unit, Bangalore) visited Reserve Bank of India, Mumbai, in June, August and December, 1995. He also visited Institute of Economic Growth, Delhi, in March, 1996.

Sharada, N.S. Manjula (Economic Analysis Unit, Bangalore) visited I.G.I.D.R., Mumbai, in December, 1995.

Balakrishnan, P. (Planning Unit, Delhi) delivered an invited address in the Technical Session on "Stabilisation, adjustment and growth" at the Annual Meeting of the Indian Economic Association, Chandigarh, December 29-31, 1995. He also participated in the seminar on "Food Security" held at the Centre for Development Studies, Thiruvananthapuram, in December 1995, and presented a paper entitled "Price transmission in dual markets for grain".

Das, Satya P. (Planning Unit, Delhi) participated in (i) Conference of Economic Theory and Policy" held at the Delhi Centre of the Institute in December 1995 and presented a paper entitled "Growth-environment tradeoff", (ii) International Conference on Game Theory and Economic Applications" held at Bangalore in January 1996 and presented a paper entitled "On international joint venture II", (iii) Conference on the Relevance of Planning Models at the Institute of Economic Growth, New Delhi, in March 1996 and served as a discussant of papers, and (iv) Conference on Indo-Canadian Trade held at the South Campus of Delhi University in March 1996 and chaired the valedictory session.

Dasgupta, Dipankar (Planning Unit, Delhi) delivered an invited lecture entitled "Growth theore: An expository review" at the Special Plenary Session on Economic Theory held during the 78th Annual Conference of the Indian Economic Association, Chandigarh, in December 1995.

Sarma, Atul (Planning Unit, Delhi) participated in a Workshop on Regional Disparities sponsored by NCAER at Guwahati during February 16-17, 1996, and presented a paper entitled "Regional disparity and resource flows in India". He also served as a Visiting Professor at the North Eastern Hill University, Shillong, during 21 June - 22 July, 1995.

Bandyopadhyay, Debaprasad (Linguistic Research Unit) served as a Visiting Lecturer during 1995-1996 in the Department of Folklore, Kalyani University.

Choudhry, Amitav, Bandyopadhyay, Debaprasad, Sengupta, T.K. Ganguly; Subhashree and Majumder, Mousumi (Linguistic Research Unit) held discussions with linguists from Edinburgh University, U.K., on the "Scope for collaborative research" at the State Council of Educational Research and Training, West Bengal, on 26 March, 1996.

Dasgupta, Atis (Sociological Research Unit) delivered a course of lectures for the college teachers on "Tradition of religious tolerance in Bengal" at the Academic Staff College of Calcutta University in March 1996.

Dasgupta, Atis (Sociological Research Unit) addressed a lecture "Evolution of tenancy and role of peasants' movement" to the IAS/IPS/WBCS Officers on 21 December 1995, organised by the Directorate of Land Record and Surveys, Government of West Bengal.

12. GENERAL ADMINISTRATION

Administrative Services Division

The Administrative Services Division at the headquarters at Calcutta caters to the various needs of the scientific workers of the Institute engaged in various scientific research and academic activities and provides them with necessary infrastructural facilities in their pursuit of excellence. The centres at Delhi and Bangalore, each having a number of science units are, by and large, self-sufficient in providing administrative support to the scientific workers. The division has different units in Calcutta as mentioned below :

Accounts Section : The Accounts Section keeps the accounts of all financial transactions made by the Institute and admits claims including personal claims preferred by workers and outsiders after proper check. This section is responsible for final closure of accounts and preparation of Income and Expenditure Account and Balance Sheet of each financial year. They are also to interact with the Statutory Auditors in the course of audit of final accounts. The Provident Fund Unit (PF) under this section maintains the account of provident fund of individual workers of the Institute and deals with PF loans and withdrawal and final payment of PF balance.

Binding Unit : The Institute has a large library with books and journals which are required to be bound regularly. Besides, various research divisions bring out research proposals, administrative division brings out book-lets on budget for presentation to the Ministry. All such and many other documents are bound throughout the year in the Binding Unit.

Central Office : The Central Office is in charge of receipts and despatch/distribution of all correspondence, circulars/office orders etc. of the Institute. Arrangements for maintenance and services of all typewriters and duplicators of the Institute are centrally made by this unit.

Central Stores Unit : All stationery and stores articles including furniture required for use in various divisions of the Institute are procured through Central Stores Unit. They also procure and store materials required for day to day maintenance of building, water and electric supply. A small Tailoring Unit is attached to it.

Council Section : The Institute is a registered society with a large number of Ordinary and Life members. The Section maintains liaison with the members and satisfies their requirements including sending of Sankhyā, the Indian Journal of Statistics, published by the Institute, to the members of the Institute. The Section arranges holding of meetings of General Body, the Council, Finance Committee, Section 8(1) Committee etc. This section is attached to CAO's Office.

Director's Office and CAO's Office : Director is the principal executive officer of the Institute and the head of all its academic and administrative activities whereas Chief Administrative Officer (CAO) is in over-all charge of General Administration, Financial and Personnel Management in respect of Administrative Services Division. Both the offices are entrusted with the task of providing all help and support to these two very important functionaries of the Institute. They are required to maintain confidential records, issue circulars, interact with various research and administrative divisions and maintain liaison with outside centres and branches of the Institute.

Engineering and Electrical Maintenance Unit : The Unit is responsible for day to day maintenance besides supply of electricity and water in the buildings housing various divisions and staff quarters. This unit also takes up new constructions.

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Estate Office : The Institute has a very big campus comprising buildings, ponds and vacant space. The Estate Office looks after all the estates and properties of the Institute and also maintains regular conservancy services.

Medical Welfare and Reimbursement Unit : The workers of the Institute are entitled to medical claims as per CSMA rules of the Government of India. Besides there is a small dispensary with facilities of consulting general physicians and specialists for the campus residents and also for the workers residing nearby. The medicines are supplied free. At present there are three regular doctors and several part-time specialist doctors attached to the dispensary. The Medical Reimbursement Unit is entrusted with the payment of all medical claims submitted by workers as per CSMA rules and the Medical Welfare Unit looks after the functioning of the dispensary with all attendant activities.

Personnel Unit : The Personnel Unit deals with all service matters like appointments, promotions, transfers, disciplinary action, redressal of grievances, retirements etc. in respect of all the workers of the Institute and maintains all records in connection thereto. The Retirement Benefit Cell attached to the Unit deals with the payment of retirement benefits to workers like pension, death-cum-retirement gratuity etc.

Public Relations Unit : All sorts of public relations activities are being carried out by the Unit on behalf of the Institute. During the year, the Unit arranged elaborate media coverage of (i) the special seminar on "Quality Engineering for Technology Development - How to reduce Cycle Time" on 18.4.95 (ii) Seminar on "Taguchi Technique in Quality Engineering" by Dr. Genichi Taguchi on 19.4.95 (iii) Seminar on "Dinosaur Extinction - A Tale of Two Crates" by Prof. Shankar Chatterjee on 17.5.95 (iv) Seminar on "Problems of Hindu Muslims Relations in Bengal" by Dr. Nazrul. Islam on 24.5.95 (v) Seminar on "History of Development of Science and Technology in India" by Prof. Irfan Habib on 6.11.95 (vi) Regional Mathematical Olympiad held on 3.12.95 (vii) International Conference on "70 years of Quantum Mechanics and Recent Trends in Theoretical Physics" during 29.1..96 - 2.2.96 (viii) Annual Convocation of the Institute held on 15.2.96 (ix) Seminar on "Transformation of Religious Sensibilities in Bengal in the 19th Century" by Prof. Tapan Roychowdhury, Emeritus Fellow, St. Antoni's College, University of Oxford on 23.2.96 (x) Annual Convocation of International Statistical Education Centre (ISEC), held on 28.3.96.

The Unit arranged telecast of exclusive interviews with Dr. Genichi Taguchi, the internationally renowned author and consultant in Quality Engineering and Prof. Shankar Chatterjee, world famous dinosaur expert, through DD1 and DD7 of Doordarshan Kendra Calcutta under "Guest in the City" programme in the month of April and May 1995 respectively, during their visit to the Institute. Arrangements were also made by the unit to broadcast exclusive interviews with them through All India Radio, Calcutta, under the national programme. The Unit, took the initiative to telecast the documentary film on the Institute produced by Doordarshan Kendra Calcutta, four times during the year.

The Unit issued a number of press releases during the year in connection with various scientific programmes/research activities. The Unit also introduced POPULAR LECTURE during the year. Dr. R. Sreedher, Director, Doordarshan Kendra, Calcutta delivered the inaugural lecture entitled "Role of Doordarshan in projecting scientific research and education programme in India" on 10 January 1996. City tour for ISEC trainees and Institute visit for the students of Intensive Course were also arranged by the Unit on 15.7.95 and 11.9.95 respectively.

Another important job of the Unit is to prepare and publish the Annual Report each year under the guidance of an Editorial Board and arrange for its distribution to different Universities in India and abroad and also to the Government department. Distribution of ISI News Letter is also done by the Unit.

Publication and Printing Unit : The Unit was formed in August 1991 when the Statistical Publishing Society was formally taken over by the Institute. It undertakes printing and binding of all materials, including Sankhyā (Series A & B). It also looks after the distribution of Sankhyā world wide. It also undertakes printing and binding works of special nature from outside agencies like State Planning Board, Government of West Bengal and Jagadish Bose Science Talent Search (JBNSTS). Steps are being taken to modernise the existing press by converting the existing old Printing Press to an offset one. In fact, the Council in its meeting held on 14 February 1996 decided to constitute a committee by Director to prepare a comprehensive plan for modernisation of the existing letter press of the unit as suggested by a Policy Advisory Committee set up for the purpose.

Security Unit : Security Unit is entrusted with the important task of maintaining security of the vast campus of the Institute and its properties. An ex-army man of the rank of Major has joined the Institute as Senior Security Officer.

Telephone Unit : Two new electronic exchanges have been installed by Crompton & Greaves Ltd. in the Institute's premises at a cost of around Rs.20 lakhs. The main one (NE-1100) is housed at 202, B.T. Road and a small one (NE 20M) is housed at 205 B.T. Road. The two are interconnected. The NE 1100 is manned by operation during working hours and works in automatic mode otherwise. NE (20M) operates in automatic mode.

Transport Unit : Besides a fleet of vehicles, the Institute has four buses and an ambulance. The vehicles are for use by the visiting scientists and dignitaries and by the workers in carrying out the activities of the Institute. The buses are used for transporting worker from eastern and southern part of Calcutta and its suburbs. The ambulance is used to carry ailing workers or members of their families to and from hospital for emergency treatment on recommendation of the doctors attached to Medical Welfare Unit. The Transport Unit looks after the use and maintenance of the vehicles. One retired army officer is presently in charge of this Unit.

Apart from the Units mentioned above, there are some small cells dealing with Internal Audit, Budget, Import, Travel and House Building Advance and take care of the specific needs of the Institute.

The Administrative Services division also looks after the running of hostels for students, research scholars and International Statistical Education Centre (ISEC) trainees and also the running of Canteen for the workers and students of the Institute. It also maintains the Guest House to accommodate scientists and academicians, both from inside and outside the country, who visit the Institute for various academic pursuits. As mentioned earlier, the Division has two main Centres located at Delhi and Bangalore. The other outlying Units numbering eight are controlled directly by the headquarter at Calcutta. The Administrative Services Division takes the responsibility for all new construction activity of the Institute at its headquarter and also at outlying centres/branches. A brief report on the construction activity in the current year is given later.

The activities of the Administrative Services in the two Centres, namely Delhi and Bangalore, and in other outlying branches of the Institute are more or less the same but in a much smaller scale. Depending on the needs of the branches/centres the number of Units have been truncated and merged into fewer units.

2.   **Staff of the Institute**

The Government of India agreed that ISI might continue with the staff strength, the various of posts, scales of pay, promotional policies and other service condition as was existing in the past before imposing embargo. They also allowed revision of the payscales as approved by the Council for all categories including categories of posts for non faculty workers where certain anomalies existed. As a result of the clearance from the Government, the Institute has undertaken measures to recruit workers in various categories where there are acute shortages.

The following senior members of the staff worked in the posts indicated against their names during the year.

Director

1.   J.K. Ghosh upto 30.6.95
S.B. Rao from 1.7.95

Dean of Studies

2.   Joseph Mathew

3. Head, Delhi Centre
    Atul Sarma

4. In-Charge, (Administration and Accounts), Bangalore
    T.S. Arthanari

5. Chief Administrative Officer
    G.H. Mandal

New Appointments

List of workers (Scientific/Technical/Administrative) who joined the Institute during the year :

1. R.R. Ghosh, Sr. Security Officer
2. Ashish Ghosh, Lecturer
3. Deba Prasad Mandal, Lecturer
4. Dipti Prasad Mukherjee, Computer Engineer
5. Satya P. Das, Professor
6. Sanghamitra Das, Associate Professor
7. M.R. Srinivasan, Associate Professor
8. Banasri Basu, Lecturer
9. Abhay Gopal Bhatt, Associate Professor
10. Bidyut Roy, Lecturer
11. Sharmila Sengupta, Lecturer
12. Krishna Kumar, Lecturer
13. Ayanendranath Basu, Lecturer
14. Tarun Kabiraj, Lecturer
15. Nibedita Gariguly, Deputy Librarian
16. K.H. Paranjape, Professor
17. C. Mahesh, Technical Officer Gr.III

Retirements/Resignations

List of workers (Scientific/Technical/Administrative) who retired/resigned from the services of the Institute during the year :

1. Jagdish Chandra Gupta, Associate Professor
2. Jyotirmoy Sengupta, Associate Professor
3. Subrato Kumar Bardhan, Accountant
4. Somesh Dasgupta, Professor
5. Samir Guha Roy, Professor
6. K. Chattopadhyay, Associate Professor
7. Bimalendu Mahalanobis, Input-Output Controller
8. Animesh Singhaw, Executive Officer
9. Ramendranath Kar, Input-Output Controller
10. Kamal Kumar Banerjee, Sr. Technical Officer (SQC)
11. Pratul Bandyopadhyay, Professor

Numbers of workers in various groups as on 31 March, 1996 :

(i)	Scientific and Technical Group -	508
(ii)	Non-Scientific Group -	1060
	Total :	1568

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Budget and Finance

For the year 1995-96, the Institute's budget was estimated to be Rs.1642.85 lakhs and Rs.670.336 lakhs towards Non-Plan and Plan respectively at the BE stage. The Govt. after considering the report of the Section 8(1) Committee approved a sum of Rs.1503.89 lakhs including internal receipts and Rs.400.00 lakhs for Non-Plan and Plan expenditure respectively. At the Revised Estimate stage, the Institute sought for a grant of Rs.1746.50 lakhs and Rs.450.340 lakhs in Non-Plan and Plan estimates respectively. The Govt. after considering the additional requirement at RE stage approved a sum of Rs.1650.00lakhs on Non-Plan, the Plan RE allocation was fixed at Rs.400.00 lakhs. The expenditure during the year under report was well within the budget allocation sanctioned by the Government. The Audited Annual Accounts of the Institute for the year 1995-96 have been furnished in part IV of this report.

Land and Construction

The following major activities were undertaken by the Institute during 1995-96.

Calcutta

New Guest House

The work was resumed in June 1995. The work is in progress. The civil work is expected to be completed by June 1996 and the electrical works by September 1996.

Construction of quarters

Construction of 16 'D' type quarters has been completed except some electrical works. The quarters are expected to be allotted during 2nd Qtr. of 1996-97.

Roads/Drains/Boundary walls.

Premix carpeting of road, Saucer drain and culvert were constructed at ISI Campus (205 B.T. Road) and a portion of boundary wall was constructed [at Gupta Niwas premises.

Water purification plant

A new water purification plant was installed in the premises of Deluxe Garden. Workers residing in 64 Quarters and 10 Hutments are getting purified water.

Museum and Archive of Anirapali

The civil works for restoration of the inside of the building have been completed.

Delhi

During the year under report, construction of roads and boundary walls and airconditioning of Library have been done.

Bangalore

An additional floor on the existing academic building has been constructed.

SOCIETY TYPE ACTIVITIES

Membership : April 1995-March 1996

During the period 135 persons were elected as Ordinary Members of the Institute and 8 Ordinary Members became Life Members.

The membership position as on 31st March 1996 is as follows :

Ordinary Members	-	1282
Life members	-	418
Institutional members	-	14
Total :		**1714**

Finance Committee Meeting : The Finance Committee met twice, on 20 September 1995 and 16 November 1995, during the period under report. Apart from taking various decisions on financial matters, the committee recommended RE 1995-96 and BE 1996-97 (Plan and Non-Plan) in their meeting on 20 September 1995 and considered and recommended the Annual Report including Audited Statement of Accounts for the year 1994-54 in their meeting held on 16 November 1995.

Council Meeting : The Council met four times during the period under report to take decisions on administrative and scientific matters. In the meeting dated 25 September 1995, the Council considered and approved the recommendation of the Finance Committee on RE for 1995-96 and BE for 1996-97 in respect of both Plan and Non-Plan estimates. In the meeting dated 20 November 1995 the Annual Report including the Audited Statement of Accounts for the year 1994-95 were considered by the Council and was approved.

A list containing the names of the President of the Institute, Chairman and members of the Council of the Institute and also a list of members of different committees constituted by the Council are given elsewhere in the report.

Annual General Meeting : The general body of the Institute met on 29 November 1995 during the period under report. The Annual Report of the Institute for the year 1994-95 was adopted and Audited Statement of Accounts for the Year 1994-95 together with the Auditor's comments and replies of the Administration thereto were also adopted in that meeting.

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13. LIST OF MEMBERS OF THE ACADEMIC COUNCIL AND OF DIFFERENT COMMITTEES OF THE INSTITUTE AS ON 31 MARCH 1996

List of Members of the Academic Council of the Institute

1. S.B. Rao, Director   - Chairman

2. J. Mathew, Dean of Studies   - Convener

Theoretical Statistics and Mathematics Division

3. J.K. Ghosh, 4. T.K. Chandra, 5. A. Goswami (El. Rep.) 6. T.J. Rao, 7. B.V. Rao, 8. A.R. Rao, 9. A.K. Roy, 10. G.M. Saha, 11. Bikash Sinha, 12. Y.R. Sarma, 13. T.P. Tripathi, 14. R.B. Bapat, 15. R. Bhatia, 16. Aloke De, 17. R.L. Karandikar, 18. K.R. Parthasarathy, 19. T. Parthasarathy, 20. K.B. Sinha, 21. G. Misra, 22. K.P.S.B. Rao, 23. A. Sitaram, 24. V.S. Sunder (on lien), 25. S. Thangavelu, 26. T.V. Hanurav, 27. B.L.S. Prakasa Rao, 28. H. Sarbadhikari, 29. S.M. Srivastava, 30. K.H. Paranjape, 31. N.S.N. Sastry, 32. S. Ramasubramaniam.

Applied Statistics, Surveys and Computing Division

33. Ajoy Kr. Adhikari, 34. Shibdas Bandyopadhyay, 35. S.R. Chakraborti, 36. Arijit Chaudhury, 37. P. Pal Chowdhury (El. Rep.), 38. T. Krishnan, 39. A.C. Mukhopadhyay, 40. Sunil K. Pal, 41. Sanjib Gupta (El. Rep).

Computer and Statistical Services Centre (CSSC)

42. Aditya Bagchi, 43. S.C. Kundu.

Physical and Earth Sciences Division

44. P. Bandyopadhyay, 45. B.S. Dandapat, 46. B.N. Mandal, 47. B.S. Mazumdar, 48. Rajkumar Roychowdhury, 49. C.A. Murthy (El. Rep.), 50. Sankar. K. Pal, 51. B.B. Bhattacharya, 52. M.K. Chakrabarti, 53. B.P. Sinha, 54. B. Chanda (El. Rep.), 55. J. Das, 56. B. B. Chaudhuri, 57. A.K. Chaudhuri, 58. D.N. Ghosal.

Biological Sciences Division

59. A. Basu, 60. P.P. Majumder, 61. K.C. Malhotra, 62. B.M. Reddy (El. Rep.), 63. Asit K. Saha, (El. Rep.), 64. P.K. Tapaswi, 65. S. Matai, 66. D.K. Bagchi.

Social Sciences Division

67. Sanjit Bose, 68. Satya R. Chakraborty, 69. D. Coondoo, 70. Pradip Maiti, 71. Robin Mukherjee, 72 Abhirup Sarkar, 73. Manoranjan Pal (El. Rep.), 74. Mihir Kr. Rakshit, 75. Sugata Marjit, 76. B. N. Bhattacharya, 77. P. K. Majumdar (El. Rep.), 78. Anjali Ghosh (El. Rep.), 79. Parkash Chander, 80. D. Dasgupta, 81. Bhaskar Dutta, 82. Subhasish Gangopadhyay, 83. Dilip Mukherjee, 84. P.N. Mukherjee (on lien), 85. Atul Sarma, 86. Satya Prakash Das, 87. N.S.S. Narayana, 88. T. Krishna Kumar.

Statistical Quality Control and Operations Research Division

89. T.K. Chakrabarti, 90. S.K. Majumder, 91. S.P. Mukherjee, 93. R.J. Pandey, 93. Anup Majumder, 94. S. Sengupta, 95. Sadhan Chakraborty, 96. S.S. Handa, 97. S.R. Mohan, 98. Arvind Seth, 99. K.N. Anand, 100. T.S. Arthanari, 101. A.K. Chaudhuri, ·102. B.K. Pal, 103. Somnath Ray (El. Rep.), 104. Y.R. Rau, 105. N.T.V. Ranga Rao, 106. J. Venkatappaiah, 107. A.K. Chakraborty (El. Rep.), 108. P. Lakshmanan, 109. C.Y. Krishnamurthy, 110. V. Gopalan, 111. D.T. Ghosh.

Library Documentation and Information Sciences Division

112. Chitta Bhattacharya, 113. M.A. Gopinath, 114. I.K. Ravi Chandra Rao, 115. S. Seetharama.

Member-Secretary, ISEC

116. Parimal Mukhopadhyay

Head, SQC T and P Unit

117. S.P. Mukherjee

Secretary, Examination Committee

118. P. Bhimasankaram

List of Members of different Committees of the Institute

(A)   **Finance Committee**

(1) Director (Ex-officio Chairman), (2) Shri A.K. Adhikari, (3) Dr. D.K. Bose, (4) Shri P.K. Chatterjee, (5) Dr. Rajkumar Roy Chowdhury (6) Dr. T. Krishnan, (7) Shri Sashi Kanta Mishra, (8) Dr. Robin Mukherjee, (9) Dr. P.N. Roy, (10) Dr. S.B. Rao, (11) Shri Dilip Sengupta, (12) Chief Administrative Officer, (13) Head, Delhi Centre or his nominee, (14) In-Charge, Bangalore Centre, (15) Govt. Representative (Deptt. of Statistics), (16) Govt. Representative (Ministry of Finance), (17) Head, SQC & OR Division, (18) Shri S.S. Panja (Non-Member Secretary).

(B)   **Journal Committee**

Editors : Sankhyā A and B

Dr. B.L.S. Prakasa Rao, Dr. C.R. Rao, Dr. G. Kallianpur, Dr. K.R. Parthasarathy, Dr. S. Dasgupta.

Co-Editors : Sankhyā A

Dr. Arup Bose, Dr. Bimal Kumar Sinha, Dr. Mohan Delampadi, Dr. Probal Chaudhuri, Dr. R.L. Karandikar, Dr. Kesar Singh, Prof. P.K. Bhattacharya.

Co-Editors : Sankhyā B

Dr. Bikas Kumar Sinha, Dr. Dipankar Coondoo, Dr. Probal Chaudhuri, Dr. S.R. Mohan, Dr. T.J. Rao.

Advisory Members

Prof. Aman Ullah, Prof. D. Dasgupta, Prof. G. Jogesh Babu, Prof. J.K. Ghosh, Prof. J. Sethuraman, Prof. N. Bhattacharyya, Prof. R.R. Bahadur, Prof. S.K. Chatterjee, Prof. S.K. Mitra, Prof. S.R.S. Varadhan, Prof. P.K. Sen, Prof. Malay Ghosh.

Managing Editors

Prof. R.L. Karandikar (*Sankhyā* A); Prof. T.J. Rao (*Sankhyā* B)

(C)   **Examinations Committee**

1. Prof. S.K. Chatterjee (Chairman), 2. Shri Subhas C. Kundu, 3. Dr. A.C. Mukhopadhyay, 4. Prof. B. K. Sinha, 5. Dean of Studies, 6. Prof. Y.R.K. Sarma, 7. Officer-in-Charge, Training Division, CSO, 8. Dr. Pradip Maiti, 9. Dr. Rahul Mukherjee, 10. Dr. V.N. Reddy, 11. Dr. P. Bhimasankaram (Secretary-Convener).

(D)   **Works Advisory Committees**

(a)   **Calcutta**

1. Dr. P.N.Roy (Chairman), 2. Prof. Mihir Chakrabarti (Vice-Chairman), 3. Dr. Bhabani P. Sinha, 4. Dr. S.B. Rao, 5. Chief Administrative Officer, 6. Shri Sanjay Sinha, 7. Dr. Somesh Bagchi, 8. Dr. T.S. Kutty, 9. Shri Sashi Kanta Mishra, 10. Dr. Partha P. Majumder, 11. Shri Dilip Sengupta, 12. Shri.C.H. Sastry, 13. Outside Experts, 14. Outside Architects, 15. Shri Anjan Mookherjee (Convener).

(b)   **Delhi**

1. Shri S.C. Bose Mullick (Chairman), 2. Shri B. Majumder, 3. Shri C.B. Gupta, 4. Chief Administrative Officer, 5. Prof. Dipankar Dasgupta, 6. Head, Delhi Centre, 7. Shri Om Prakash (upto 25.9.95), 8. Shri A.P. Jain (from 26.9.95), 9. Shri S.S. Handa, 10. Dr. S.C. Kochar, 11. Prof. T. Parthasarathy, 12. Shri D.N. Sabharwal (Convener).

(c)   **Bangalore**

1. Shri T.R. Satish Chandran (Chairman), 2. In-Charge, Administration and Finance, 3. Head, DRTC, 4. Head, Stat-Math Unit, 5. Head, Economic Analysis Unit, 6. Head, SQC & OR Unit, 7. Chief Administrative Officer, 8. Chief Engineer (C & B) or his nominee, 9. Shri H.V. Anantharamaiah (Convener).

(E)   **Ph.D./D.Sc.Committee**

1. Director (Chairman), 2. Prof. P. Bhimasankaram, 3. Prof. A. Sitaram, 4. Prof. B.V. Rao, 5. Prof. Bhaskar Dutta, 6. Prof. Partha P. Majumder, 7. Dean of Studies, 8. Prof. B. B. Chaudhuri, 9. Prof. B.P. Sinha, 10. Prof. Somesh Dasgupta, 11. Prof. Mihir Rakshit, 12. Prof. K.B. Sinha, 13. Prof. A.R. Rao (Convener).

(F)   **Technical Advisory Committees of different Divisions**

I.   **Theoretical Statistics and Mathematics Division**

1. Director (Chairman), 2. Prof.   M.G. Nadkarni, Centre for Advanced Study in Mathematics, University of Bombay, Vidyanagari Marg, Vidyanagari, Bombay-400098, 3. Prof. S.K. Basu, Indian Institute of Management, Diamond Harbour Road, Joka, South 24 Parganas, 4. Prof. B.K. Kale, Department of Statistics, University of Poona, Pune-411007, 5. Prof. M. Sreehari, M.S. University of Baroda, Baroda, 6. Prof. R. Sridharan, Tata Institute of Fundamental Research, Bombay, 7. Prof. U.B. Tewari, Indian Institute of Technology, Kanpur, 8. Prof. K. Vishwanath University of Hyderabad, Hyderabad, 9. Prof. B.V. Rao, Professor-in-Charge (Convener).

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II. Applied Statistics, Surveys and Computing Division

1. Director (Chairman), 2. Prof. S.K. Basu, Indian Institute of Management, Diamond Harbour Road, Joka, South 24 Parganas, 3. Prof. S.P. Mukherjee, Centenary Professor, Department of Statistics, Calcutta University, 35, Ballygunge Circular Road, Calcutta-700019, 4. Prof. Samir Bhatacharya, Deptt. of Zoology, Viswa Bharati University, Santiniketan 731235, 5. Prof. N. Vijayaditya, Deputy Director General, National Informatics Centre, Planning Commission, C.G.O. Complex, Lodi Road, New Delhi-110003, 6. Prof. J.V. Deshpande, Department of Statistics, University of Poona, Pune 411072, 7. Dr. S.N. Ray, Director-General, Central Statistical Organisation & Ex-officio Additional Secretary, Department of Statistics, Government of India, Sardar Patel Bhavan, Parliament Street, New Delhi - 110001, 8. Dr. G.V. Satyavati, Director General, Indian Council of Medical Research, Post Bag No.4508, Ansari Nagar, New Delhi 110029, 9. Prof. C.H. Sastry, Professor-in-Charge (Convener).

III. Physical and Earth Sciences Division

1. Director (Chairman), 2. Prof. B.L. Deekshatulu, Director, National Remote Sensing Agency, Balanagar, Hyderabad-500037, 3. Prof. B.R. Nag, Institute of Radio Physics and Electronics, Calcutta University, 92, Acharya Prafulla Chandra Road, Calcutta, 4. Prof. Somnath Biswas, Department of Computer Science and Engineering, Indian Institute of Technology, Kanpur-208106, 5. Prof. Mohit Kr. Roy, Department of Computer Science and Engineering, Jadavpur University, Calcutta-700032, 6. Prof. Prem Kumar, Department of Mathematics, Indian Institute of Technology, Hauz Khas, New Delhi-110016, 7. Prof. P. Neyogi, Head, Department of Mathematics, Indian Institute of Technology, Kharagpur-721302, 8. Prof. A.N. Mitra, Department of Physics, University of Delhi, Delhi-7, 9. Prof. Brahmananda Das Gupta, Department of Theoretical Nuclear Physics, Saha Institute of Nuclear Physics, Salt Lake, Calcutta, 10. Prof. A.K. Saha, Department of Geology, Presidency College, Calcutta 700073, 11. Prof. S.N. Sen, Department of Geology, Calcutta University, 35, Ballygunge Circular Road, Calcutta 700019, 12. Prof. Mahadeb Adhikari, Acharya Prafulla Chandra Roy Professor of Agricultural Chemistry, Calcutta University, Ballygunge Science College, Calcutta, 13. Dr. B.M. Reddy, FNA, Distinguished Scientist, CSIR National Physical Laboratory, New Delhi 110012, 14. Prof. V.V.S. Sharma, Department of Computer Science and Automation, Bangalore 560012, 15. Prof. Ahok Sahni, FNA, FASC, Department of Geology, Centre for Advance Studies in Geology, Punjab University, Chandigarh 160014, 16. Prof. B. Yegnanarayana, Department of Computer Science and Engineering, Indian Institute of Technology, Madras 360006, 17. Prof. Raj Kumar Roy Chowdhury, Professor-in-Charge (Convener)

IV. Biological Sciences Division

1. Director (Chairman), 2. Prof. J.J. Ghosh, Ex-Centenary Professor of Bio-Chemistry, 219 Sri Arabinda Sarani (Formerly P10 Grey Street Extension) Calcutta-700004, 3. Prof. Anil Kumar Gupta, Chairperson, R.M. Centre for Educational Innovation,   Indian Institute of Management, Vastrapur, Ahmedabad, 4. Prof. T.M. Das, 24/A, Karl Marx Sarani, Calcutta-700023, 5. Prof. D.P. Mukherjee, 7, Nilambar Mukherjee Street, Calcutta-700004, 6. Prof. B.M. Das, U.G.C. Emeritus Fellow, Department of Anthropology, Dibrugarh University Dibrugarh, 7. Prof. Kamala Krishnaswamy, Deputy Director (Sr. Grade), National Institute of Nutrition (ICMR), Jamai-Osmania P.O., Hyderabad 500007, 8. Prof. S.P. Chatterjee, Department of Biological Chemistry, Indian Association for the Cultivation of Science, Jadavpur, Calcutta 700012, 9. Prof. A.B. Roy, Department of Mathematics, Jadavpur University, Calcutta-700032, 10. Prof. R.N. Joshi, Head, Department of Botany, Marathwada University, Aurangabad 431004, 11. Prof. R.K. Mandal, Department of Bio-chemistry, Bose Institute, P-1/12, C.I.T. Scheme VIIM, Calcutta 700054, 12. Prof. Dipika Mohanty, Director, Institute of Immunohaematology (ICMR), New Multistoreyed Building, 13th floor, K.E.M. Hospital Campus, Parel, Bombay 400012, 13. Prof. V. Nanjundiah, Developmental Biology and Genetics Laboratory and Centre for Theoretical Studies, Indian Institute of Science, Bangalore 560012, 14. Prof. Partha P. Majumder, Professor-in-Charge (Convener).

V. Social Sciences Division

1. Director (Chairman), 2. Prof. Ramprasad Sengupta, Centre for Economic Studies and Planning, Jawharlal Nehru University, New Meharuli Road, New Delhi-110067, 3. Prof. Ashish Bose, 1-1777, Chitta Ranjan Park, New Delhi-110019, 4. Prof. K.B. Pathak, Director, International Institute for Population Sciences

(IIPS), Govandi Station Road, Deonar, Bombay-400088, 5. Prof. Amitava Chatterjee, 35, Biswambhar Banerjee Lane, Konnagore 712235, Hooghly, 6. Prof. Barun De, Director, Maulana Abul Kalam Azad Institute for Central Asian Studies, 'Brojonandini' 55/2, Ballygunge Circular Road, Calcutta-700019, 7. Prof. K.L. Krishna, Managing Editor, Journal of Quantitative Economics, Delhi School of Economics, Delhi 110007, 8. Prof. L.M. Khubchandani, Director, Centre for Communication Studies, 270/212, Sind Society, Ganesh Khind, Pune 411007, 9. Prof. Ramkrishna Mukherjee, 17/3, Moore Avenue, Calcutta 700040, 10. Prof. Tarun Sen, Department of Psychology, Delhi University, Delhi, 11. Prof. Alok Roy, Indian Institute of Management, Joka, Diamond Harbour Road, P.O. Box 16757, Calcutta 700027, 12. Prof. P. Bhaskararao, Professor of Physics & Head, Department of Linguistics, Deccan College Post Graduate & Research Institute, Pune 411005, 13. Prof. Samir Guha Roy , Professor-in-Charge (Convener).

VI.   **Statistical Quality Control and Operations Research Division**

1. Director (Chairman), 2.   Shri K.R. Parameswaran, Ex- Director General, Bureau of Indian Standards, 8138, Sector B, Pocket 11, Nelson Mandela Road, Vasant Kunj, New Delhi - 110037, 3. Prof. S.P. Mukherjee, Department of Statistics, Calcutta University, 35, Ballygunge Circular Road, Calcutta 700019, 4. Shri B.P. Ghosh, General Manager, Union Carbide, Calcutta, 5. Shri V.S. Maini, Vice-President, Corporate Technical Asea Brown Boveri Ltd., Sona Towers, 71, Miller Road, Bangalore 560052, 6. Prof. C.K. Mustafi, Indian Institute of Management, Diamond Harbour Road, Joka, Calcutta 700019, 7. Shri N.S. Sreenivasan, (Retd. MD, IDL Chemical) No.2, Shanti Nivas, 7th Cross, Ashoka Nagar, Banashankari I Stage, Bangalore 560050, 8. Professor B.K. Pal, Head, SQC & OR Division (Convener).

VII.   **Library Documentation and Information Sciences Division**

1.   Director (Chairman), 2. Dr. Pulin Barua, Professor & Head, Department of Library and Information Science, Golapbag, Burdwan University, Burdwan., 3. Sm. Kalpana Dasgupta, Librarian, National Library, Belvedere, Alipore, Calcutta-700027, 4. Dr. P.K. Mahapatra, Professor and Head of the Department of Library and Information Science, University of Calcutta, College Street, Calcutta-700073, 5. Shri Chitrabhanu Sen, Librarian, Asiatic Society, 1, Park Street, Calcutta 700016, 6. Shri J.C. Chowdhury, Scientist-in-Charge, Indian National Scientific Documentation Centre, 4, Raja Subodh Mullick Road, Jadavpur, Calcutta 700032, 7. Shri Chitta Bhattacharya, Chief Librarian (Convener).'

INDIAN STATISTICAL INSTITUTE

SIXTYFOURTH ANNUAL REPORT : 1995-96

Part IV. Statement of Accounts and Auditors' Report for the year 1995-96

CONTENTS

INDIAN STATISTICAL INSTITUTE

Part IV. Statement of Accounts and Auditors' Report for the year 1995-96

AUDITORS' REPORT

We have audited the attached Balance Sheet of Indian Statistical Institute as at 31st. March, 1996, of (a) General Fund and (b) Other Funds and the annexed Income & Expenditure Account for the year ended on that date.

The Balance Sheet and the Income and Expenditure Account as referred to above and as produced before us for verification are in agreement with the books of accounts and records maintained by the Institute.

Special attention is invited to Schedule X, Note 1-Fixed Assets, Note 4-Loans and Advances, Note 5.1 Addl. D. A. Deposit, Note 7.1 Medical Reimbursement, Note 7.3 Bonus and a portion of D.A. and our observations in Annexure forming part of this Report.

Subject to the above, in our opinion and according to the information and explanations given to us, the said accounts read with the Notes on Accounts (Schedule X) give a true and fair view.

(i) in the case of Balance Sheet, of the state of affairs of the Institute as at 31st March, 1996 and

(ii) in the case of Income & Expenditure Account, of the excess of Income over expenditure and the excess of expenditure over income in respect of Plan revenue and Non Plan revenue respectively, of the Institute for the year ended on that date.

P-17, Mission Row Extn.   For B. C. KUNDU & Co.
Calcutta—700 013.   *Chartered Accountants*

The 23rd September, 1996   S. N. MUKHOPADHYAY
                                                           Partner

INDIAN STATISTICAL INSTITUTE

As at 31st March 1995 Rs. P.		Fund and Liabilities					As at 31st March 1996 Rs. P.	As at 31st March 1996 Rs. P.
29,20,73,077.87	1.	GENERAL FUND : As per Schedule VII	..	..	..	..		32,51,40,170.21
3,61,43,784.56	2.	OTHER FUNDS : As per Schedule IV Contra (excluding Directors Contribution Fund I.S.I. Cont. Provident Fund and General Provident Fund)	..	..	..			6,34,69,651.43
7,20,000.00	3.	GRANT-IN-AID FOR FLOOD ADVANCE TO STAFF : As per last account	..	..	..	..		7,20,000.00
58,50,000.00	3.1	GRANT-IN-AID FOR HOUSE BLDG. ADVANCE TO STAFF: As per last account Add : received during the year	.. ..	.. ..	.. ..	.. ..	58,50,000.00 5,00,000.00	
							63,50,000.00	
9,77,208.11	3.2	INTEREST ON HOUSE BUILDING ADVANCE REALISED FROM STAFF :	..	..	..	..	12,83,861.57	76,33,861.57
1,84,22,384.88	4.	DEPOSITS AND OTHER LIABILITIES : As per Schedule VIII	..	..	..	..		1,69,59,565.26
81,058.53	4.1	ADDITIONAL EMOLUMENTS COMPULSARY DEPOSIT :						81,068.53
2,46,871.50 87,190.00 1,81,145.00 9,25,085.00 21,10,300.00 —	5.	EXCESS OF RECEIPTS OVER EXPENDITURE IN RESPECT OF PLAN REVENUE GRANT : For the year 1987-88 For the year 1991-92 For the year 1992-93 For the year 1993-94 For the year 1994-95 For the year 1995-96	.. ..	.. ..	.. ..	.. ..	2,46,871.50 87,190.00 1,81,145.00 21,10,300.00 5,410.00	
							26,30,716.50	
9,25,085.00		Less : Recovered during the year	..	..	..		21,10,000.00	5,20,716.50
31,87,024.90	6.	EXCESS OF RECEIPTS OVER EXPENDITURE IN RESPECT OF MISC. PROJECT ACTIVITIES As per Schedule V	..	..	..	..		33,68,518.07
35,18,551.57	7.	EXCESS OF RECEIPTS OVER EXPENDITURE IN RESPECT OF GRANT RECEIVED FROM GOVERNMENT OF INDIA (NON-PLAN) For the year 1994-95	..	..	..	..	35,18,551.57	
		Less : Recoverd/Adjusted during the year					35,18,000.00	551.57
15,39,304.56	8.	EXCESS OF RECEIPTS OVER EXPENDITURE IN RESPECT OF PLAN CAPITAL As per Schedule IX	..	..	..	..		3,22,781.26
	9.	NOTES ON ACCOUNTS As per Schedule X enclosed						
36,51,37,699.48								41,82,16,374.40

P-17, Mission Row Extn.
Calcutta-700 013
23rd September, 1996

S. SENGUPTA
Accounts Officer

S. S. PANJA
Accounts Officer

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AS ON 31ST MARCH 1996

As at 31st March 1995 Rs. P.		Property and Assets				As at 31st March 1996 Rs. P.	Rs. P.
	1.	FIXED ASSETS:					
5,89,76,136.72		As per Schedule I	..	..	..	5,89,75,655.30	
12,32,63,714.22		As per Schedule IA	..	..	..	25,59,21,950.16	31,48,97,605.46
	2.	INVESTMENT AT COST :			..	34,20,000.00	
		Interest accrued on above ..		..	..	86,830.00	35,06,830.00
34,73,779.00		As per Schedule II	..	..	..		
8,32,467.41	3.	STOCK OF SUNDRY MATERIALS :		..	..		7,80,045.94
68,603.32	4.	REGIONAL PROVIDENT FUND COMMISSIONER		..			68,603.32
	5.	LOANS AND ADVANCES :					
		As Per Schedule III					
29,09,384.58		Statistical Publishing Society	..	..	..	29,09,384.58	
1,48,43,403.49		Others	..	..	..	..	1,74,17,807.15	2,03,27,191.73
63,21,554.00	5.1	HOUSE BLDG. ADVANCES TO STAFF :		..	..		64,88,441.88
	6.	NET ASSETS ON OTHER FUNDS :					
		As per Schedule IV Contra (excluding Director's Contributory					
3,61,43,784.58		Fund, I.S.I. Provident Fund (Both C.P.F. & G.P.F.)		..			6,34 69,651.43
	7.	EXCESS OF EXPENDITURE OVER RECEIPTS OF MISC.					
		PROJECT AND ACTIVITIES ON BEHALF OF THE					
		GOVERNMENT OF INDIA AND OTHER BODIES :					
19,68,939.42		As per Schedule V	..	..	..		12,10,962.71
	8.	EXCESS OF EXPENDITURE OVER RECEIPTS IN RES-					
		PECT OF NON-PLAN REVENUE EXPENDITURE					
		GRANT :					
29,76,872.64		As per Schedule IXA	..	..	..		30,56,420.93
	9.	EXCESS OF EXPENDITURE OVER RECEIPTS IN					
		RESPECT OF PLAN REVENUE :					
1,38,067.77		1986-87	..	..	..	1,38,067.77	
1,48,740.00		1988-89	..	..	..	1,48,740.00	
3,76,210.00		1989-90	..	..	..	3,76,210.00	
1,73,670.00		1990-91	..	..	..	1,73,670.00	8,36,687.77
	10.	CASH AND BANK BALANCE :					
		As per Schedule VI					
3,92,015.81		Cash in hand	..	..	..	3,13,760.53	
1,05,21,232.25		Cash at Bank	..	..	..	20,85,904.04	23,99,664.57
16,09,124.29	11.	ISI PRINTING AND PUBLICATION UNIT		..			11,74,768.66
26,51,37,699.48							41,82,16,874.40

This is the Balance Sheet referred to our Report of even date.

G. H. MANDAL
Chief Administrative Officer

S. B. RAO
Director

For B. C. KUNDU & Co.
Chartered Accountants

S. N. MUKHOPADHYAY
Partner

Previous Year		Expenditure			Current Year	
Plan Rs. P.	Non-Plan Rs. P.				Plan Rs. P.	Non-Plan Rs. P.
			SALARY AND ALLOWANCES			
18,20,230.00	9,10,90,604.83	1.	Salary & Allowances	.. .. ..	24,10,630.00	10,69,27,229.41
———	1,17,58,236.60	1.1	Pension, graded relief & commuted value of Pension	.. ..	———	1,46,06,517.09
13,49,190.00	19,15,306.53	2.	Overtime Allowances	.. .. ..	11,75,330.00	13,65,909.85
———	49,992.00	3.	Children Education Allowance	.. ..	———	61,227.70
———	8,84,000.71	4.	Employer's Contribution to Provident Fund	..	———	9,47,584.83
———	26,55,981.03	5.	Gratuity Payment	.. .. ..	———	38,99,299.99
4,11,600.00	1,99,025.76	6.	Visiting Professors, Foreign Scientists, Fellows etc.	.. .. ..	3,98,450.00	1,94,011.64
90,190.00	57,42,584.75	7.	Scholarship, Stipend and other assistance to trainees	.. .. ..	2,30,620.00	61,80,832.36
			NON SALARY ITEMS			
———	11,11,750.50	8.	Leave Travel Concession	.. ..	———	6,35,406.05
1,01,220.00	22,06,865.65	9.	Medical Reimbursement and Welfare to Staff, Students, Research Scholars etc.	.. ..	1,32,105.00	20,39,056.04
11,46,480.00	15,60,645.38	10.	Travelling Expenses	.. .. ..	21,36,780.00	18,07,567.60
1,36,540.00	7,41,781.90	11.	Printing and Publication	.. ..	2,03,825.00	8,31,743.15
5,37,120.00	1,72,461.39	12.	Society type activities Saminar and Conference etc.	.. ..	4,62,100.00	2,91,450.99
47,98,780.00	77,62,764.87	13.	Books, Journals, etc.	.. .. ..	53,74,960.00	79,31,456.00
7,56,930.00	41,71,699.40	14.	Repairs, Replacement and Maintenance of Office Equipment, Computers and accessories etc.	..	15,87,120.00	36,18,151.60
16,25,710.00	32,79,389.13	15.	Stationeries Consumable Stores, Advertisement, Insurance, Labour charges, Conveyance, Examination expenses and petty expenses	..	17,25,780.00	38,84,253.13
7,53,329.00	21,13,831.31	16.	Postage and Telephone	.. ..	6,01,240.00	13,59,996.37
17,74,851.00	24,53,021.54	16.1	Electricity charges	.. .. ..	21,73,560.00	34,62,255.40
1,53,02,170.00	13,98,70,943.08				1,86,12,300.00	16,00,45,218.90

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FOR THE YEAR ENDED 31ST MARCH 1996

Previous Year		Income		Current Year	
Plan Rs. P.	Non-Plan Rs. P.			Plan Rs. P.	Non-Plan Rs. P.
		1. Grant-in-Aid from Govt. of India			
——	14,73,39,000.00	.1 For Non-Plan Current Expenditure	..		16,24,20,678.00
——	5,00,000.00	*Less :* Earmarked for House Bldg. Loan	..		5,00,000.00
——	12,00,000.00	*Less :* Grant to ISI PP Unit	..		12,00,000.00
	14,56,39,000.00				16,07,20,678.00
1,85,35,000.00		2. For Plan Current Expenditure	..	1,99,36,000.00	
		.1 In respect of SQC training fees etc. 39,88,686.46			
	7,00,000.00	*Less :* Transferred to SQC Dev. Fund 32,88,686.46			7,00,000.00
		.2 Internal Receipts :			
——	77,846.30	(a) Membership Fees	..		64,915.50
——	7,24,380.50	(b) Fees for training course and sale proceeds of Syllabus etc.	..		6,79,524.50
——	7,581.00	(c) Examination fees and other receipts	..		7,408.00
——	23,454.53	(d) Receipts from sale of farm products at Giridih	..		35,754.96
——	44,551.00	(e) Service charges for work done by Psychometry and Computer Science Unit etc.	..		78,790.00
——	22,10,489.85	(f) Miscellaneous Receipts	..		30,57,915.52
——		3. Excess of Expenditure over Income transferred to Balance Sheet	..		79,548.29

| 1,85,35,000.00 | 14,94,27,283.18 | | | 1,99,36,000.00 | 16,54,24,534.77 |

Carried Over..

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INCOME AND EXPENDITURE ACCOUNTS

Previous Year			Expenditure		Current Year	
Plan Rs. P.	Non-Plan Rs. P.				Plan Rs. P.	Non-Plan Rs. P.
1,53,02,170.00	13,98,70,943.08		Brought Forward	..	1,86,12,300.00	16,00,45,219.50
—	53,060.00	17.	Audit Fees and Expenses		—	49,952.00
—	98,319.73	18.	Interest and Bank Charges		—	1,00,235.50
—	22,22,764.72	19.	House Rent and Taxes		—	16,79,817.45
—	15,36,257.35	20.	Repair and Maintenance of Building, Land etc. Petty construction etc. ..		—	14,17,029.53
3,44,680.00	8,60,398.38	21.	Transport Expenses		3,53,830.00	9,61,033.67
1,91,560.00	6,91,810.80	22.	Workers' and Students' Welfare and amenities (excluding medical expenses)		2,03,080.00	7,21,192.54
5,39,520.00	3,36,127.38	23.	Laboratory and Reprography Stores, consumables, Tools and minor accessories ..		7,16,340.00	3,92,060.25
46,770.00	61,380.17	24.	Expenditure of Giridih Agricultural Farm		45,060.00	46,478.71
—	6,859.00	25.	Expenses for National Professor		—	11,515.50
—	1,70,811.00	26.	P. C. M. Birth Celebration		—	—
21,10,300.00	35,18,551.57	27.	Excess of Income over Expenditure transferred to Balance Sheet		5,410.00	—
1,85,35,000.00	14,94,27,283.36				1,99,36,000.00	16,54,24,534.7

S. SENGUPTA
Accounts Officer

S. S. PANJA
Accounts Officer

P-17, Mission Row Extn.
Calcutta-700 013
23rd September, 1996

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FOR THE YEAR ENDED 31ST MARCH 1996

Previous Year		Income	Current Year	
Plan Rs. P.	Non-Plan Rs. P.		Plan Rs. P.	Non-Plan P. Rs.
1,85,35,000.00	14,94,27,283.18	Brought Forward ..	1,99,36,000.00	16,54,24,534.77

1,85,35,000.00	14,94,27,283.18		1,99,36,000.00	16,54,24,534.77

This is the Income and Expenditure account referred to our Report of even date.

G. H. MANDAL
Chief Administrative Officer

S. B. RAO
Director

For B. C. KUNDU & Co.
Chartered Accountants

S. N. MUKHOPADHYAY
Partner

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