

SOLAPUR UNIVERSITY, SOLAPUR

Rural Development

M. A. Part-I

(w. e. f. June 2013)

PAPER I

INDIAN ECONOMIC POLICY

Objective of this course:

- (i) To sharpen the understanding of integrated approach to the functional aspects of the Indian economy;
- (ii) To familiarize the students about its uniqueness and working;
- (iii) To make students to comprehend the ramifications that underlies most of the observed phenomena in the Indian economic set-up, in general, and Rural Economy, in particular.

MODULE I: Economic Planning in India:

- A) Economic Planning- Meaning, Need for Economic Planning, Objectives of Economic Planning, Necessary Conditions for the Success of Planning;
- B) Planning in India- Planning from Independence to the Establishment of Planning Commission, Administrative set up, and Process of Planning;
- C) Objectives and Strategy of Plan- Main Objectives, Overview of Achievements of Planning, Shortcomings of Planning, Strategy shift from First Five Year Plan to current Five Year Plan.

MODULE II: The Agricultural Sector:

Land reforms in India and technological change in agriculture – Green revolution, Pricing of agricultural inputs and outputs, farm subsidies on agricultural and production prices;

- A) Terms of trade between agriculture and industry; Policy of Agricultural finance; Agricultural Marketing and Warehousing;
- B) Issues in food security – Role of public distribution system, policies for sustainable agriculture.

MODULE III: Industrial Sector:

- A) Public Sector enterprises and their performance; Problem of sick units in India; Privatization and disinvestment debate;
- B) Growth and pattern of industrialization; Small-scale sector; Productivity in industrial sector; Exit policy.
- C) Issues in labour market reforms; approaches for employment generation.

MODULE IV: Public Finances and Financial Sector Reform :

Fiscal federalism – Centre-State financial relations; Finances of Central Government; Finances of State Governments; Parallel economy; Problems relating to fiscal policy; Fiscal sector reforms in India.

- A) Financial sector reforms; Interest rate policy; Review of monetary policy of RBI; Money and capital markets;
- B) Working of SEBI in India.

BASIC READING LIST

Ahluwalia, I. J. and I. M. D Little (Eds.) (1999), *India's Economic Reforms and Development (Essays in honour of Manmohan Singh)*, Oxford University Press, New Delhi.

Bardhan, P. K. (9th Edition) (1999), *The Political Economy of Development in India*, Oxford University Press, New Delhi.

Bawa, R. S. and P. S. Raikhy (Ed.) (1997), *Structural Changes in Indian Economy*, Guru Nanak Dev University Press, Amritsar.

Brahmananda, P. R. and V. R. Panchmukhi (Eds.) (2001), *Development Experience in the Indian Economy: Inter-State Perspectives*, Book well, Delhi.

Chakravarty, S. (1987), *Development Planning: The Indian Experience*, Oxford University Press, New Delhi.

Dantwala, M. L. (1996), *Dilemmas of Growth: The Indian Experience*, Sage Publications, New Delhi.

Datt, R. (Ed.) (2001), *Second Generation Economic Reforms in India*, Deep & Deep Publications, New Delhi.

Government of India, *Economic Survey (Annual)*, Ministry of Finance, New Delhi.

Jain, A. K. (1986), *Economic Planning in India*, Ashish Publishing House, New Delhi.

Jalan, B. (1996), *India's Economic Policy – Preparing for the Twenty First Century*, Viking, New Delhi.

- Joshi, V. and I. M. D. Little (1999), *India: Macro Economics and Political Economy, 1964-1991*, Oxford University Press, New Delhi.
- Parikh, K. S. (1999), *India Development Report – 1999-2000*, Oxford University Press, New Delhi-8.
- Sandesara, J. c. (1992), *Industrial Policy and Planning, 1947-1991: Tendencies, Interpretations and Issues*, Sage Publications, New Delhi.
- Haq, M. (1996), *Reflections on Human Development*, Oxford University Press, New Delhi.
- Byres, t. J. (Ed.) (1998), *The Indian Economy: Major Debates Since Independence*, Oxford University Press, New Delhi.
- Chatopadhyaya, M., P. Matiti and M. Rakshit (Eds.) (1996), *Planning and Economic Policy in India – Evaluation and Lessons for the Future*, Sage Publications, New Delhi.
- Kabra, K. N. (1997), *Development Planning in India*, Sage Publications, New Delhi.
- Chelliah, Raja J. and R. Sudarshan (1999), *Income, Poverty and Beyond: Human Development in India*, Social Science Press, New Delhi.
- Dandekar, V. M. (1996), *The Indian Economy, 1947-92, Vol. II*, Sage Publications, New Delhi.
- Hanumantha Rao, C. H. and H. Linnemann (Eds.): (1996), *Economic Reforms and Poverty Alleviation in India*, Sage Publications, New Delhi.
- Subramanian, S. (Ed.) (1997), *Measurement of Inequality and Poverty*, Oxford University Press, Calcutta.
- World Bank (2000), *India: Reducing Poverty, Accelerating Economic Development*, Oxford University Press, New Delhi.
- Joshi P. C. (1975), *Land Reforms in India*, Allied Publishers Pvt. Ltd., New Delhi.
- Narain, D. (1988), *Studies on Indian Agriculture*, Oxford University Press, New Delhi.
- Mookherjee, D. (Ed.) (1997), *Indian Industry: Policies and Performance*, Oxford University Press, New Delhi.
- Swamy, D. s. (1994), *The Political Economy of Industrialization: from Self-reliance to Globalization*, Sage Publications, New Delhi.
- Bhargava, P. K. (1991), *India's Fiscal Crisis*, Ashish Publishing House, New Delhi.
- Chelliah, Raja J. (1996), *Towards Sustainable Growth – Essays in Fiscal and Financial Sector Reforms in India*, Oxford University Press, New Delhi.
- Rangarajan, C. (1998), *Indian Economy: Essays on Money and Finance*, UBS, New Delhi.

- Martinussen, J. (1988), Transnational Corporations in a Developing Country – The Indian Experience, Sage Publications, New Delhi.
- Nayyar, D. (Ed.) (1997), Trade and Industrialization, Oxford University Press, New Delhi.
- Sen, S. (2000), Trade and Dependence: Essays on the Indian Economy, Sage Publications, New Delhi.
- Byers, T. J. (Ed.) (1997), The State, Development Planning and Liberalization in India, Oxford University Press, New Delhi.
- Dhameeja, N. and K. S. Sastry (1998), Privatization: Theory and Practice, A. H. Wheeler, New Delhi.
- Srinivasan, T. N. (Ed.) (2000), Eight Lectures on India's Economic Reforms, Oxford University Press, Oxford.

Paper-II
RURAL SOCIETY IN INDIA

Objectives of the course:

- (i) To understand agrarian structure and development in India which are two principal sources of approach to study the rural society in India;
- (ii) To develop among students the Social Science skills on peasant society and social structure; and
- (iii) To make the students to understand issues concerning rural local governance; its institutions and mechanisms.

MODULE I: Rural Society in India: Agrarian and peasant social structure; Characteristics of peasant and agrarian society; an overview of major concepts and contributions by A. R. Desai, Daniel Thorner, M. N. Shrinivas, S.C. Dube. Facets of Rural Transformation.

MODULE II: Debate of modes of production and agrarian relations; Primitive mode of production to Communist mode of production and their characterization.

MODULE III: Rural Local Self Governance: Evolution of Panchayat Raj in India; Organization, structure and functions of Panchayat Raj System in India with special reference to Maharashtra.

MODULE IV: Constitutional Framework for Panchayat Raj System: Constitutional Amendments 73rd and 74th; Panchayat Raj Act.

MODULE V: Democratic Accountability and Governance: Social Audit: Meaning, characteristics and importance; Citizen's Charter: Concepts, formulation and significance. Right to Information Act: Meaning and features.

Selected case studies on each module.

BASIC READING LIST:

Andre Bettle, 1974: Six Essays in Comparative Sociology, OUP, New Delhi; (Relevant Chapter: Agrarian Social Structure).

Ashish Nandy: 1999, Ambiguous Journey to the City, New Delhi: OUP.

Ashok Mehta Committee Report, 1957

Balwant Rai Mehta Committee Report, 1978.

Berch, Barbarous, Ed, 1992: Class, State and Development in India 1, 2,3 and 4 Chapters, Sage, New Delhi.

Citizen's Charter: A Handbook, 2004.

Desai A.R., 1977, Rural Sociology in India, Mumbai: Popular, pp.269-336,425- 527.

Desai A.R., 1986, Agrarian Struggles in India after Independence: Oxford University Press , 1986 pp.129-189.

Janzsany, Indus,et al., 1992, The State of World Rural Poverty: An Inquiry Into its causes and consequences: New York, University Press, pp-1-50.

Khanna B.S: 1994, Panchayat Raj in India: National Perspectives and state studies, New Delhi, Deep and Deep.

Kumar Girish: 2006, Local Democracy in India: Interpreting Decentralization.

Meenakshisundaram S.S: 1994, Decentralization in Developing Countries, New Delhi, Concept Publicating Co.

Mencher, J.P., 1983: Social Anthropology of Peasantry Part III, OUP.

Omvedt, Gail, 1987, Land Caste & Politics, Delhi: Department of Political Science, Delhi Univ. 1987

Shanin T., 1971, Peasantry: Delineation of a Sociological Concept. 180-200.

Thorner, A., 1982, Semi-Feudalism or Capitalism, Contemporary Debate on Classes and Mode of Production in Economic and Political Weekly, Vol.X911, nos.49-51, Dec.11,23.

Thorner, Daniel and Thorner Alice, 1962: Land and Labour in India, Asia Publications, Bombay.

World Bank: 2000, Decentralization and Panchayat Raj Institutions, Washington DC.

PAPER III: QUANTITATIVE TECHNIQUES

QUANTITATIVE TECHNIQUES FOR ECONOMIC ANALYSIS - I

Preamble

The main objective of this paper is to train the students to use the techniques of mathematical and statistical analysis, which are commonly applied to understand and analyze economic problems. The paper deals with simple tools and techniques, which will help a student in data collection, presentation, analysis and drawing inferences about various statistical hypotheses.

Module 1: Introduction:

- A. Meaning and significance of Quantitative Techniques
- B. Types of Quantitative Techniques
- C. Limitations of Quantitative Techniques

Module 2: Measures of Central Tendency:

- A. Mean,
- B. Median,
- C. Mode,

Module 3: Dispersion Analysis:

- A. Range,
- B. Standard Deviation
- C. Coefficient of Variation.

Module 4: Correlation Analysis:

- A. Type of Correlation
- B. Karl Pearson's coefficient of correlation,
- C. Spearman's rank coefficient of correlation.

Module 5: Regression Analysis:

- A. Importance of regression techniques.
- B. Regression line of Y on X
- C. Regression line of X on Y

BASIC READING LIST

1. Allen, R. G. D. (1974), Mathematical Analysis for Economists, Macmillan Press and ELBS, London.

2. Chiang, A. C. (1986), Fundamental Methods of Mathematical Economics, McGraw Hill, New York.
3. Gupta, S. C. (1993), Fundamentals of Applied Statistics, S. Chand & Sons., New Delhi.
4. Handry, A. T. (1999), Operations Research, Prentice Hall of India, New Delhi.
5. Speigal, M. R. (1992), Theory and Problems of Statistics, McGraw Hill Book Co., London.
6. Taha, H. A., (1997), Operations Research: An Introduction (6th Edition), Prentice Hall of India Pvt. Ltd., New Delhi.
7. Baumol, W. J. (1984), Economic Theory and Operations Analysis, Prentice Hall, Englewood Cliffs, New Jersey.
8. Monga, G. S. (1972), Mathematics and Statistics for Economists, Vikas Publishing House, New Delhi.
9. Mathur, P. N. and R. Bharadwaj (Eds.) (1967), Economic Analysis in Input-Output Research, Input-Output Research Association of India, Pune.
10. Kothari, C. R. (1992), An Introduction to Operations Research, Vikas Publishing House, New Delhi.
11. Mustafi, C. K. (1992), Operations Research: Methods and Practice, Wiley Eastern, New Delhi.
12. Millar, J. (1996), Statistics for Advanced Level, Cambridge University Press, Cambridge.
13. Nagar, A. L. and R. K. Das (1993), Basic Statistics, Oxford University Press, New Delhi.
14. Goon, A. M., M. K. Gupta and B. Dasgupta (1993), Fundamentals of Statistics, Vol. 1, The World Press Ltd., Calcutta.
15. Hogg, R. V. and A. T. Craig (1970), Introduction to Mathematical Statistics (3rd Edition), Macmillan Publishing Co., New York.
16. Sukhatme, P. V. and B. V. Sukhatme (1970), Sampling Theory of Survey with Applications, Iowa State University Press, Ames.

PAPER IV: RURAL ECONOMY OF INDIA

Objectives: This paper aims to orient students to the realities of rural India its economic strength and weaknesses, opportunities and threats in changing global context. The paper aims to analyze rural economic conditions from various perspectives and tries to develop conceptual framework for dealing with rural economy.

Module I: Features of Rural Economy: Characteristics and composition of Rural Economy; linkages of farm and non-farm sectors; Indicators of Rural Development. Rural Demography and its Transition. Rural-Urban Migration.

Module II: Rural Poverty and Dimensions of Development; Inequality and poverty syndrome; Problems of rural unemployment/disguised unemployment, causes and remedies; Measures of Rural Poverty.

Module III: India's Agricultural Economy: Role and Importance of Agriculture in Economic Development; Trends in Agriculture Growth and Productivity; Instability in Agriculture and Agricultural Pricing Policy; New Agricultural Strategy and Sustainable Agriculture.

Module IV: Rural Industrialization: Agro-industries, Agro-based Industries, Food Processing Industries; Dairying, Sugar Industries and Cotton Textiles; Small and Cottage Industries; Policy Scenario.

Module V: Rural Indebtedness: Emerging Trends in Indebtedness; Credit Needs and Institutional Framework for Access to Credit; Micro-Finance through SHGs-A Critical Assessment. Role of NABARD.

References: Internet Sources

Paper No: 5**Writing, Communication Skill & Current Affairs**

Objectives of the Course:

- (i) To impart minimum standards of writing and communication skills expected of a post graduate student; and
- (ii) To acquaint the students with the issues of topical interest and to develop aptitude to analyze and comment on the current events.

Writing skills: -

Importance of writing skills, news paper writing, understanding the subject, vocabulary of words, different forms of speech; collecting references.

Communication skills: -

Importance of communication skills, listening ability, barriers in effective listening, speech training, effective pronunciations, confidence, communication process, positive speaking, public speaking, Positive thinking, time management, stress management

Current Affairs: -

- The focus of contemporary social, political, economic issues, discussion on current topics-local, regional, national, international.
- Background information, statistical data, reference clipping etc. list of concerned journals (like India Today Outlook, Business World, The Week, Sports Star,)
- Some issues of Importance: UNO, World War I & II, Cold war, NAM, freedom struggle, Goa freedom struggle, Samyukta Maharashtra Movement, the Importance of panchyat raj & Zilla Parishad in Maharashtra, the role of legislative assembly
- New Economic Scenario after GATT, WTO, World Bank, International Monetary Fund, International Conference at Geneva, Uruguay, Doha, Seattle.
- Terrorism on International Level-Kashmir, Kandahar, Katmandu, World Trade Centre, Beslan Bail, Colombo, Mumbai. The mastermind organization behind these horrified incidents. Naxalism.

References

J. Lee and Tan Cheng, *Learning English Workbook*, Singapore Asian Publication, Singapore
Kamlesh Mohindra, *English Composition and Creative Writing*, Scholar Hub Publication, New Delhi
L. Smalley, Ruetten and Kozyrev, *Focus on Writing*, Learners Publication, Singapore
Suresh Kumar, Sreehari and Savithri, *Effective English*, Pearson Publication, Delhi
S.C. Gupta, *General English*, Arihant Publication, Meerut
P. C. Das, *Applied English Grammar and Composition*, NCBA Publication, London
Krishna Reddy and Laxmikant, *General Awareness and Current Affairs Digest*, Tata Mac Graw Hill, New Delhi
J.K. Chopra, *General Knowledge*, Unique Publication, New Delhi
Barry O' Brien's, *General Knowledge Manual 2011*, Cengage Learning Publication, UK
CSAT, *General Studies*, Concept Books, Dehradun

SEMESTER II

PAPER I SOCIAL MARKETING

Objectives of the course:

- (i) To instill knowledge about principles and relevance of Social Marketing in Rural Development; and
- (ii) To impart practical skills in applying concepts of Social Marketing in promoting Rural Development.

MODULE I: Market as a Social institution: from relations of production to market relations, social aspects of market, marketing social policies, programmers and causes, distinctive elements of social marketing, globalization and social Marketing.

Module II: Management principles for Marketing: Problem identification, cause formulation, planning, organizing, coordinating, directing, controlling.

MODULE III: Processes of Social Marketing: segmentation (social differentiation), target audience, positioning (STP). 4 Cs: cause, cost, channel communication; social marketing mix, life-cycle of cause.

MODULE IV: Strategies of Social Marketing: social market research, short-tem strategy (participative action), long-tem strategy (education), measures to overcome resistance; strength, weakness, opportunity and threat (SWOT) analysis, appraisal of cultural resources and constraints, social stratification and marketing, ethnic packaging-social packaging.

MODULE V: Agencies of Social marketing: state, corporate agencies, international donor agencies, non-governmental organizations (NGOs).

BASIC READING LIST

Andréa son, Alan R. And Alan A. Andréa son. Marketing Social change: Changing Behavior to Promote Heath, Social Development and the Environment (jossey Bass Nonprofit Sector Series).

Kotlet, Philip.1981.Marketing for Non-profit Organizations.
New Delhi: Prentice Hall of India.

Kotler, Phillip and Roberto l.Eduardo.1989.Social Marketing:
Strategies for changing Public Behavior. New York: The Free Press-A
division of Macmillan, INC.

McKenzie- Mohr, Doug and Willam Smith. Fostering Sustainable Behaviour: An introduction to Community-Based Social Marketing (Education for Sustainable Series)

Man off Richard K.1985.Social Marketing. New York: Praegar.

Packard Vance. The Status Seekers. Hammond worth: Penguing Books
Seabrook, John. No brow: The a culture of Marketing, the Marketing of Culture

Shewchuk, John. 1994. Social Marketing for Organizations. Ontario: Ministry of Agriculture, Food and Rural Affairs Office.

Social Marketing Institute's Working Papers: Alliance and Ethics in Social Marketing
Veblen, The theory of Leisure Class

Weber, Max.1947. The Theory of Social and Economic Organization. New York: The free Press

Paul N. Bloom, et.al. 2001 Hand book of Marketing and Society. Sage: India.

Rohit Deshpande, 2001: Using Market Knowledge. Sage

PAPER II **POLITICAL ECONOMY OF DEVELOPMENT**

Objectives of the course:

- (i) To familiarize students with the concepts of political Economy of Development; and
- (ii) To develop skills to apply those concepts in understanding and analyzing the dynamics of village society.

MODULE I: Introduction to political economy: Meaning of political economy; Significance of the study of political economy. Meaning and characteristics of development and under development; Universal values and objectives of development.

MODULE II: Socio-economic order and comparative economic systems: Capitalism, Socialism and Mixed economy, their features, merits and demerits; Marxian Political Economy.

MODULE III: Theories of economic development: Paul Baran, Wallerstain, A G Frank Gunnar Myrdal;

MODULE IV: Poverty in India-a structural problem: Causes, effects and implications; Entitlement approach to understanding poverty.

MODULE V: Globalization and its impact on developing countries; Privatization, liberalization and structural adjustment programs and their implications on Rural Society.

BASIC READING LIST:

Agrawal; A.N. Lal kundan : 1989 Economics and development and planning, New Delhi: Vikas publishing House private limited.

Augushine, john S.(ed) : 1989: Strategies for Third World Development, New Delhi: Sage Publications.

Chakraborty, Bimal.1996 : The United Nations and Third World, New Delhi: Tata McGraw Hill Publishing Company Limited.

Descrochers, john.1977: Methods of social Analysis, Bangalore: Centre for Social Action.

Elsenhans, Hartmut.1991: Development and Underdevelopment: The History Economics and Politics of North South Relations, New Delhi: Sage publication.

Nagardra, S.P. 1994: Development and Change, New Delhi: Concept Publishing Company.

Nana Poku Lloyd. Pettiford(ed) 1998: Rebuilds up the Third World, London: Macmillan Press Limited.

Rao,D.Bhaskar.1998: World Summit for Social Development, New Delhi: Discovery Publications.

Rao, V.Lakshmana.1994: Essays on Indian Economy, New Delhi: Ashish Publishing House 8/81 Punjabi Bagh.

Reddy, D.V.1994: Development and New International Economic order, New Delhi: Deep and Deep Publications.

Rugman Alan.2000: Theory of Globalization, London: Random House.

Seltz, John L. 1990: The Political of Development, Bombay: Popular Prakashan.

Sharma S.L(ed) 1986: Development: Socio Cultural Dimensions, Jaipur: Rawat Publication.

Sing C.Chew, Robert A.Denemark (ed.) 1996: The under development of Development, New Delhi: Sage publications.

Tandon,B.B & K.K. Tandon: Indian Economy, New Delhi: Tata Mcgraw Hill Publishing Company Limited.

JOURNALS

Monthly commentary Indian institute of public opinion, New Delhi.

Economic and political weekly. EPW Research Foundations, Mumbai.

Journal of Indian School of Political Economy: Indian school of political economic Pune.

PAPER III

Rural Development Programs and Practices

Objectives of the paper:

- (i) To acquaint the students about various Rural Development initiatives in India; and
- (ii) To develop skills of critiquing development programs.

MODULE I: Evolution of Rural Development Programs: CDP, Sectoral and Area Development Programs, Target Group/Beneficiary Oriented Programs, NREGS , Land Reforms, SHGs: A Critical Overview.

MODULE II: Structure and Functions of Ministry of Rural Development and Panchayat Raj, NABARD, CAPART. Bilateral and Multilateral Organizations such as DFID, Ford Foundation, CIDA, SIDA, and SDC, working for Rural Development.

MODULE III: Development of Rural Women: Policies and Programs towards the empowerment of Rural Women; Education and Training; Health and Nutrition; Empowerment of Rural Women (Gender Perspective)

MODULE IV: Development of Scheduled Castes, Scheduled Tribes, Rural Artisans and Landless Laborers: Constitutional Obligations and Human Rights Perspective.

MODULE V: Case Studies of selected Flagship/Rights based programs.

BASIC READING LIST:

Dantwala M.L.(Ed), Indian Agricultural Development Since Independence Oxford & IBH Publication, Delhi Second Revised Ed. 1990.

Desai Vasant Rural Development. Vol I. Issues & Problems, Himalaya Publishing House,1988.
Desai Vasant Fundamentals of Rural Development A Systems Approach Himalaya Publishing House.1988.

Memoria C.B.Agricultural Problems of India. Kitab Mahal.1984

Mishra S.M. Rura Development and Panchavati Raj, Concept Publishing House. 1981.

Mishra R.P. & Sundarm K.P.M. Multilcycl Planning and Integrated Rural Development. Concept Publishing House. 1978.

Prasad Kamta, Planning at the Grass Roots.Sterling Publishers , 1988.

Singh Katar, Rural Development, Principles. Policies and Management Sage Publications, 1986.

Thaha M. & Prakash OM, Integrated Rual Development. Sterling Publishers Pvt. Ltd.

Maheshvari S.R. Rural Development in India.

Jain Ashok and Unni Saraswati : Development Administration. Sheth, Mumbai.1995.

Paper No: 4

AGRI-BUSINESS

PREAMBLE:

The purpose of this paper is to enable students to have an understanding various issues of agribusiness so that they would be able to comprehend and critically appraise current problem associated with agri-business in India.

Module 1: Introduction of agriculture and agri-business

- A) Nature of agriculture,
- B) Difference between farm and non-farm sector
- C) Meaning, Nature and scope of agri-business.

Module 2: Irrigation and Agricultural Technology:

- A) Green Revolution- White Revolution (Dairy) - Blue Revolution (Fisheries),
- B) Use of Biotechnology and Mechanical Technology
- C) Sources of Irrigation – Progress of Irrigation in India

Module 3: Agricultural Marketing and Prices:

- A) Regulated Marketing - Co-operatives Marketing -International Trade of Agricultural Produce - WTO and Agriculture.
- B) Agricultural Price Policy: its objectives, Price and Income Stabilization measures, minimum support price, CACP
- C) Terms of Trade between Agriculture and Non-agricultural sector.

Module 4: Agricultural Finance and Agro-industries:

- A) Source of Agricultural Finance- Institutional System of Agricultural Finance. NABARD and Co-operative Credit for Agriculture Sector.
- B) Agro-industries: Role of Agro-industries in rural area, Problems of rural industry, measures for development of rural industry
- C) Agro- processing industries in India:
 - (a) Sugar Industries
 - (b) Textile Industries
 - (c) Horticulture, and Floriculture,

BASIC READING LIST:

1. Agriculture in Economic Development (1964), Carl Eicher and Lawrence Wit, McGraw Hill Book Company, New York
2. Bilgram, S. A. R. (1996), Agricultural Economics, Himalaya Publishing House, Delhi.
3. Christopher Ritson (1977), Agricultural Economics – Principles and Policy, Czosby Luckwood Staples, London
4. Donald J. Epp & John W. Malone (1981), Introduction to Agricultural Economics, Mc-Million Publishing Company, Inc. New York.
5. Government of India (1976), Report of the National Commission on Agriculture, New Delhi.
6. Ghatak, S. and K. Ingerscent (1984), Agriculture and Economic Development, Select books, New Delhi.
7. Government of India, Five Year Plans, New Delhi.
8. Harold G. Halcrow, (1981), Economic of Agriculture, Mc-Graw Hill, International Book Company, Tokyo.
9. John W. Goodwin (1977), Agricultural Economics, Reston Publishing Company, Virginia.
10. John B. Penson, Oral Capps, C. Parr Rosson, (1999), Introduction to Agricultural Economics, Prentice Hall, New Jersey.

11. Martin Upton, (1976), Agriculture, Production Economics and Resource – Use, Oxford University Press, London
12. Meier, G. M. (1995), Leading Issues in Economic Development, Oxford University Press, New Delhi.
13. Peter Robb (ed), (1996), Meanings of Agriculture, Oxford University Press, Delhi.
14. Raj, K. N. et. al. (1988), Essays in Commercialization of Indian Agriculture, Oxford University Press, New Delhi.
15. Thamarajakshi, R. (1994), Intersectoral Relationship in a Developing Economy, Academic Foundation, Delhi.
16. Papola, T. S. (1982), rural Industrialization in India, Himalaya Publishing House, Bombay.
17. Sadhu A. N. & Singh Amarjit, Fundamentals of Agricultural Economics, (1996), Himalaya Publishing House, Bombay.
18. Soni, R. N. (1995), Leading Issues in Agricultural Economics, Arihant Press, Jalandhar.
19. Wanmali, S. and C. Ramasamy (Eds.) (1995), Developing Rural Infrastructure, Macmillan, New Delhi.
20. Vaidhanathan, A. (1995), The Indian Economy: Crisis, Response and Prospects, Orient Longmans, New Delhi.

PAPER V
COMPUTER APPLICATIONS IN RURAL DEVELOPMENT

Objectives of the course:

- (i) To introduce students to the logic of functioning of computers; and
- (ii) To equip them with the skills of data analysis and presentation.

MODULE I: Introduction to Computer System, Input and Output Devices:

- (a) Basic components of computer – CPU, Hardware and Software,
- (b) Input Devices, Output Devices, Secondary Storage Devices,
- (c) Operating System and Internet.

MODULE II: Application of Software:

- (a) Microsoft Excel: Excel Main menu, Worksheet structure, rows and columns, , Excel Commands, Data Analysis.
- (b) SPSS: Data Entry, Define variable, Frequency Distribution, Cross tabulation, Descriptive Statistics, Correlation Analysis, Linear Regression .

MODULE III: Descriptive Statistics, Correlation and Regression:

- (a) Measures of Central Tendency: Arithmetic Mean, Median, Mode, Geometric Mean and Harmonic Mean
- (b) Dispersion Analysis: Range, Quartile Deviation, Mean Deviation, Standard Deviation and Coefficient of Variation
- (c) Correlation Analysis: (i) Karl Pearson's Coefficient of Correlation (ii) Spearman's Rank Coefficient of Correlation.
- (d) Regression Analysis: Types of regression, Two lines of Regression Equations, Multiple Regression Analysis.

MODULE IV: Time Series Analysis, Growth Rates and Graphical Presentation:

- (a) Time Series Analysis: measurement of trend: Free hand / Graphic Method, Semi-Average Method, Moving – Average Method, and Method of Least Square-fitting a straight line trend.
- (b) Growth Rates: Simple Growth Rate, Compound Growth Rate
- (c) Diagrammatic Presentation of Data : (i) Line Graph, (ii) Bar Diagram, (iii) Pie Chart, (iv) Histogram (v) Frequency Polygon, (vi) Ogive Curve

BASIC READING LIST:

- Allen, R. G. D. (1974), *Mathematical Analysis for Economists*, Macmillan Press and ELBS, London.
- Baumol, W. J. (1984), *Economic Theory and Operations Analysis*, Prentice Hall, Englewood Cliffs, New Jersey.
- Chiang, A. C. (1986), *Fundamental Methods of Mathematical Economics*, McGraw Hill, New York.
- Enhance, D. N. (1962), *Fundamentals of Statistics*, Kitab Mahal, Allahabad.
- Gupta, S. C. (1981), *Fundamentals of Statistics*, Himalaya Publishing House, Bombay.
- Gupta, S. C. (1993), *Fundamentals of Applied Statistics*, S. Chand & Sons., New Delhi.
- Hadley, G. (1962), *Linear Programming*, Addison Wesley Publishing Co., Massachusetts.
- Handry, A. T. (1999), *Operations Research*, Prentice Hall of India, New Delhi.
- Kothari, C. R. (1992), *An Introduction to Operations Research*, Vikas Publishing House, New Delhi.
- Mathur, P. N. and R. Bharadwaj (Eds.) (1967), *Economic Analysis in Input-Output Research*, Input-Output Research Association of India, Pune.
- Monga, G. S. (1972), *Mathematics and Statistics for Economists*, Vikas Publishing House, New Delhi.
- N. M. Downie and R. W. Heath (1970), *Basic Statistical Methods*, Harper and Row, New York.
- Rajaram, V. (1996), *Fundamentals of Computers*, Prentice Hall of India, New Delhi.
- Sanders, D. H. (1988), *Computer Today*, McGraw Hill, New York.
- Sinha, P. K. (1992), *Computer Fundamentals*, BPB Publications, New Delhi.
- Speigal, M. R. (1992), *Theory and Problems of Statistics*, McGraw Hill Book Co., London.
- Taha, H. A., (1997), *Operations Research: An Introduction* (6th Edition), Prentice Hall of India Pvt. Ltd., New Delhi.
- Vygodsky, G. S. (1971), *Mathematics Handbook (Higher Mathematics)*, Mir Publishers, Moscow.