



### List of New Course(s) Introduced

**Department : Economics**

**Programme Name : B.A.Vth & VIth Semester.**

**Academic Year : 2017-18**

### List of New Course(s) Introduced

Sr. No.	Course Code	Name of the Course
01.	501	Economics of Development (B.A. Vth Sem.)
02.	502	International Economics-I (B.A. Vth Sem.)
03.	503	Statistical Methods for Economics-I (B.A. Vth Sem.)
04.	504	Mathematical Methods in Economics-I (B.A. Vth Sem.)
05.	511	Computer Fundamentals: Theory & Application- I (B.A. Vth Sem.)
06.	512	Industrial Economics -I (B.A. Vth Sem.)
07.	513	Agricultural Economics-I (B.A. Vth Sem.)
08.	514	History of Economic Thought-I (B.A. Vth Sem.)
09.	601	Environmental Economics (B.A. VIth Sem.)
10.	602	International Economics-II (B.A. VIth Sem.)
11.	603	Statistical Methods for Economics-II (B.A. VIth Sem.)
12.	604	Mathematical Methods in Economics-II (B.A. VIth Sem.)
13.	611	Computer Fundamentals: Theory & Application- II (B.A. VIth Sem.)
14.	612	Industrial Economics –II (B.A. VIth Sem.)
15.	613	Agricultural Economics-II (B.A. VIth Sem.)
16.	614	History of Economic Thought-II (B.A. VIth Sem.)



## Minutes of Meetings (MoM) of Board of Studies (BoS)

**Academic Year : 2017-18**

**School : School of Studies in Social Science**

**Department : Economics**

**Date and Time : December 15, 2017- 11:00 AM**

**Venue : Head's Room**

The scheduled meeting of member of Board of Studies (BoS) of Department of Economics, School of Studies of Social Science, Guru Ghasidas Vishwavidyalaya, Bilaspur was held to design and discuss the B. A.. Final year (Vth and VIth semesters) scheme and syllabi.

The following members were present in the meeting:

1. Prof. Vishwanatha, Professor and Chairperson (External Expert Member BoS, Dept. of Economics and Director, Center for Study for Social Exclusion and Inclusive Policy, Mangalore University, Mangalore, India)
2. Prof. Manisha Dubey (HOD cum Chairman, BOS, Dept. of Economics.)
3. Dr. Dilip Kumar Jha (Member BOS, Assistant Professor, Dept. of Economics)

Following points were discussed during the meeting

1. The syllabus of B.A. Vth & B.A. VIth Semester was formulated by all the faculty members of the department and sent to dr. Vishwanatha, external expert member of BOS through email. This syllabus has been approved by the external, expert through email and introduced in the session 2017-18 as per his guidelines.

**The following new courses were introduced in the B.A. Vth & B.A. VIth Semester:**

- ❖ Economics of Development (501) (B.A. Vth Sem.)
- ❖ International Economics-I (502) (B.A. Vth Sem.)
- ❖ Statistical Methods for Economics-I (503) (B.A. Vth Sem.)
- ❖ Mathematical Methods in Economics-I (504) (B.A. Vth Sem.)
- ❖ Computer Fundamentals: Theory & Application- I (511) (B.A. Vth Sem.)
- ❖ Industrial Economics –I (512) (B.A. Vth Sem.)
- ❖ Agricultural Economics-I (513) (B.A. Vth Sem.)
- ❖ History of Economic Thought-I (514) (B.A. Vth Sem.)



- ❖ Environmental Economics (601) (B.A. VIth Sem.)
- ❖ International Economics-II (602) (B.A. VIth Sem.)
- ❖ Statistical Methods for Economics-II (603) (B.A. VIth Sem.)
- ❖ Mathematical Methods in Economics-II (604) (B.A. VIth Sem.)
- ❖ Computer Fundamentals: Theory & Application- II (611) (B.A. VIth Sem.)
- ❖ Industrial Economics –II (612) (B.A. VIth Sem.)
- ❖ Agricultural Economics-II (613) (B.A. VIth Sem.)
- ❖ History of Economic Thought-II (614) (B.A. VIth Sem.)

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**Head**  
Dept. of Economics  
GURU GHASIDAS UNIVERSITY  
BILASPUR (C.G.)

Signature & Seal of HoD



## Scheme and Syllabus

### SEMESTER-V (Core Papers)

Paper	Semester-V	No of Credits	Total Classes
IX	Economics of Development	3	45
X	International Economics-I	3	45
XI	Statistical Methods for Economics-I	3	45
XII	Mathematical Methods in Economics-I	3	45

### SEMESTER-V (Optional Papers) (Any Two)

Paper	Semester-V	No of Credits	Total Classes
XIII	Optional Paper I	4	45
XIV	Optional Paper II	4	45

Paper	Semester-V	No of Credits	Total Classes
1	Computer Fundamentals: Theory & Application - I	4	45
2	Industrial Economics-I	4	45
3	Agricultural Economics-I	4	45
4	History of Economic Thought-I	4	45

### Paper-IX

### ECONOMICS OF DEVELOPMENT

#### Unit 1

Economic growth and development — Factors affecting economic growth — Capital, labour and technology; Growth models — Harrod and Domar; Instability of equilibrium — Neo-classical growth model —, Mrs. Joan Robinson's growth model;

#### Unit 2

Economic Development, Population and Institutions Development and underdevelopment — Perpetuation of underdevelopment; Measuring development and development gap — per capita income, Human development index and other indices of development and quality of life;— Theory of demographic transition; Population, environment; Economic development and institutions;

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### Unit 3

Theories of Economic Development Theories of development — Classical theory of development; Karl Marx in the theory of development — theory of social change, Schumpeter and capitalistic development

### Unit 4

Approaches to Economic Development Partial theories of growth and development — Vicious circle of poverty, circular causation, unlimited supply of labour, big push, balanced growth, unbalanced growth, critical minimum effort thesis;

### Unit 5

Choice and Pattern of Investment Need for investment criteria in LDCs; Present vs. future growth; Alternative investment criteria; Cost-benefit analysis.

### BASIC READING LIST

- Adelman, I. (1961), Theories of Economic Growth and Development, Stanford University Press, Stanford.
- Behrman, S. and T.N. Srinivasan (1995), Handbook of Development Economics, Vol. 1 to 3, Elsevier, Amsterdam.
- Economics 31
- Ghatak, S. (1986), An Introduction to Development Economics, Allen and Unwin, London.
- Hayami, Y. (1997), Development Economics, Oxford University Press, New York.
- Higgins, B. (1959), Economic Development, Norton, New York.
- Kindleberger, C.P. (1977), Economic Development, 3e, McGraw Hill, New York.
- Meier, G.M. (1995), Leading Issues in Economic Development, 6e, Oxford University Press, New Delhi.
- Myint, Hla (1965), The Economics of Underdeveloped Countries, Preager, New York.
- Myint, Hla (1971), Economic Theory and Under Developed Countries, Oxford University Press, New York.

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Paper - XI

STATISTICAL METHODS FOR ECONOMICS-I

Unit I:

Introduction to Statistics Basic concepts: Population, Sample, Parameter, primary and secondary data.

Unit II:

Techniques of data collection; Questionnaire, schedule, observation and interview method

Unit III:

Central Tendency: Measures of central tendency; Mean, Median, Mode,

Unit IV:

Measures of dispersion; Range, Quartile deviation, Mean Deviation, Standard deviation, Coefficient of variation

Unit V:

Correlation; Simple, Coefficient of correlation — Karl Pearson, Calculation of Correlation coefficient in a bivariate frequency distribution, Spearman's Rank Correlation,

BASIC READING LIST

Shukla & Sahay (2016), Statistical Analysis ; Sahitya Bhawan Publications

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

□ □ Black, J. and J.F. Bradley (1973), Essential Mathematics for Economists, John Wiley and Sons.

□ □ Chiang, A.C. (1986), Fundamental Methods of Mathematical Economics (3rd Edition), McGraw

Hill, New Delhi.

□ □ Croxton, F.E., D.J. Cowden and S. Klein (1973), Applied General Statistics, Prentice Hall, New Delhi.

□ □ Gupta, S.C. and V.K. Kapoor (1993), Fundamentals of Applied Statistics, S. Chand and Sons, New Delhi.

□ □ Speigal, M.R. (1992), Theory and Problems of Statistics, McGraw Hill Book, London.

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- □ Thirlwal, A.P. (1999). (6th Edition). Growth and Development. Macmillan. London.
- □ Arestis, P. (Ed.) (1993), Employment, Economic Growth and the Tyranny of the Market, Edward Elgar, Aldershot.
- □ Bhagwati, J. and P. Desai (1970), India : Planning for Industrialization, Oxford University Press, London.
- □ Boserup, E. (1991), Population and Technological Change : A Study of Long Term Change,

Paper-X

INTERNATIONAL ECONOMICS-I

Unit1

Importance of the study of international economics; Inter-regional and international trade; Theories of absolute advantage, comparative advantage and opportunity cost;

Unit 2

Doctrine of reciprocal demand — its importance and limitations in the theory of trade

Unit3

Heckscher-Ohlin theory of trade — its main features, assumptions and limitations, Leontief Paradox

Unit4

Gains from trade — their measurement and distribution; Concepts of terms of trade and their importance in the theory of trade

Unit5

Type of tariffs and quotas; their impact in partial equilibrium analysis; Free trade and Protection; Concept of optimum tariff

BASIC READING LIST

- □ Kenan, P.B. (1994), The International Economy, Cambridge University Press, London.
- □ Kindlberger, C.P. (1973), International Economics, R.D. Irwin, Homewood.

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Paper-XII

**MATHEMATICAL METHODS IN ECONOMICS-I**

**Unit 1**

Nature of Mathematical Economics; Basic Concepts, Variables & Constants; Types of equations, Identities; Solution of simultaneous equations

**Unit 2**

Derivative and slope of a curve; Process of Differentiation; Rules of Differentiation of a function; Derivatives of higher order; I and II order conditions for Maxima and Minima.

**Unit 3**

Application of Calculus in Economics: Consumer's equilibrium, Elasticity of demand; Average and marginal cost Curves and their relation. Average and Marginal Revenue Curves and their relation, Conditions for profit maximization under different market conditions.

**Unit 4**

Integration of a function, Application of Integration in Economic Problems. Consumer's and Producer's Surplus

**Unit 5**

Game theory: Introduction and concepts — simple and mixed strategy; saddle point solution; Prisoner's dilemma; Payoff matrix of a game — two-person-two-commodity and zero-sum game.

**BASIC READING LIST**

1. Mehta & Madhani (2014), Mathematics for Economists, Sultan chand & Sons, New Delhi.
2. Sancheti and V.K. Kapoor (2007). Business Mathematics, Sultan & Chand Sons, New Delhi.
3. Allen, R.G.D. (2002), Mathematical Analysis for Economists, Macmillan Press, London.
4. Black, J. and J.F. Bradley (1973), Essential Mathematics for Economists, John Wiley and Sons.
5. Chiang, A.C. (2005), Fundamental Methods of Mathematical Economics (4<sup>th</sup> Edition), McGraw Hill, New Delhi.
6. Agarwal D.R (2001), Mathematics for Economists, Vrinda Publications Pvt, Ltd.,
7. Sundaresan. V and Jeyaseelan. S .D (1993), An Introduction to Business Mathematics, S.Chand and Company Limited, New Delhi
8. Vittal P.R (2003), Business Mathematics, Margham Publication, Chennai.

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Paper-XIII and Paper-XIV (Any Two)

COMPUTER FUNDAMENTALS: THEORY & APPLICATION - I

**Unit -1:** Basics of Computers-Computer fundamentals; Organization and components of computer; Capabilities and Limitation, Importance of Computer Literacy, Various Generations of Computer system, classifications of Computer.

**Unit 2:** Use of Computer for Office Automation Text editors and word processor software packages, (Conceptual); Operative familiarization with MS-word.

**Unit-3:** Computer Application -Use of computer in book publication, Desktop publication, Application of computer for data analysis, Application in the field of Education, Medical, Industrial, Bank and Design and Research work. database Management & project Management, Real time or online Application, point of sale terminals, Financial Transition Terminals, Some other application of Computers, Computer with visions problems.

**Unit-4:** Use of Power Point - Power point Terminology, Views, Cresting Presentation using wizard and design templates, masters adding slide, Editing and moving text, spell checking, Finding and replacing text, formatting text. aligning text. Insert Picture in Slide, Present Animation.

**Unit-5:** Applications- Service Providers, E-Mail Tips, Text and mail communication using computers; E-mail; Choice mail; Document transfer and delivery; Internet; World Wide Web (WWW)

BASIC READING LIST

□□ Kerns (1993), Essentials of Microsoft windows, Word and Excell, Prentice Hall of India, New Delhi.

□□ Rajaraman, V. (1996), Fundamentals of Computers, Prentice Hall (Ind.) New Delhi.

□□ Schied, F. (1983), Theory and Problems of Computers and Programming, Schaum's Outline Series, McGraw Hill, New Delhi.

ADDITIONAL READING LIST

□□ Intrilligator, M.D. (1978), Econometric Models, Techniques & Applications, Prentice Hall, Englewood Cliffs, N.J.

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! A to Z Fundamental of Computer & Information Technology, Hemant Kumar Goyal, Ravi Publicaiton , Meerut (U.P.)

! A to Z Internet & E Commerce ,Hemant Kumar Goyal, Ravi Publicaiton , Meerut (U.P.)

! A to Z M.S. World, Hemant Kumar Goyal, Ravi Publicaiton , Meerut (U.P.)

### INDUSTRIAL ECONOMICS-I

#### Unit-I:

Concept and organization of a firm - Ownership control and objectives of a firm, Productivity, Efficiency and Capacity Utilization

#### Unit-II:

Role of Industrialization in Economic Development, Factors for and against industrial development

#### Unit-III:

Determinants of Industrial Location - Technical, economic, infrastructural and other factors, Theories of industrial location - Alfred Weber, Sargent Florence

#### Unit IV:

Development of Backward Regions - Government Policy and approach for the development of backward regions - Recent Programs for Development of Backward Regions

#### Unit-V:

Industrial Productivity in India - Labor Productivity - Factors influencing the labor productivity - Productivity Trends in India

#### BASIC READING LIST

1. Ahluwalia, L.J: Industrial Growth in India (Oxford University Press, New Delhi, 1985)
2. Barthwal, R.R: Industrial Economics (Wiley Eastern Ltd, New Delhi, 1985)
3. Cherunilam F: Industrial Economics: Indian Perspective (3rd Edition) (Himalaya Publishing House, Mumbai, 1994)
4. Desai B: Industrial Economy in India (3rd Edition) (Himalaya Publishing House, Mumbai, 1999)
5. Divine P.J & R.M Jones et. Al: An Introduction to Industrial Economics (George Allen and Unwin Ltd, London, 1976)
6. Hay D and D J Morris: Industrial Economics: Theory and Evidence (Oxford University Press, New Delhi, 1979)

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- Bhalla, G.S., 2007. Indian Agriculture since Independence, National Book Trust, India.
- Chadha, G.K.; S. Sen and H.R. Sharma, 2004. Land Resources, State of the Indian Farmer, Vol. 2, Academic Foundation, New
- Delhi. Dantwala, M. L. and Others, 1991, Indian Agricultural Development since Independence: A Collection of Essays. Oxford
- & IBH Publishing Co., New Delhi. Dhawan, B. D., 1988, Irrigation in India's Agricultural Development, Sage Publications Pvt. Ltd
- Report of the Working Group on Agricultural Marketing Infrastructure, Secondary Agriculture and Policy Required for
- Internal and External Trade for the XII Five Year Plan 2012-17, 2011, Agriculture Division, Planning Commission, GOI Report of The Research Study on Estimation of Marketing Efficiency of Horticultural Commodities under Different Supply
- Chains in India, 2010, NCAP, New Delhi State of Indian Agriculture: 2012-13. Ministry of Agriculture, Government of India, New Delhi
- Vaidyanathan, A., 1988, India's Agricultural Development in a Regional Perspective, Longman Limited.

### HISTORY OF ECONOMIC THOUGHT-I

#### Unit I

Early Period Economic thought of Plato and Aristotle — Doctrines of Just cost and Just price — Mercantilism: main characteristics; Physiocracy: natural order, Primacy of agriculture, social classes, Economic ideas of Petty, Locke and Hume

#### Unit II

Classical Period Adam Smith — division of labour, theory of value, distribution, views on trade, economic progress; David Ricardo — value, theory of rent, ideas on economic development and international trade;

#### Unit III

Thomas R. Malthus — theory of population. German romantics and socialists — Sismondi,

#### Unit IV

Karl Marx — dynamics of social change, theory of value, surplus value, profit, Economic ideas of J.B. Say, J.S. Mill;

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7. Kuchhal S.C.: Industrial Economy of India (5th Edition) (Chaitanya Publishing House, Allahabad, 1980)
8. Singh. A and A.N Sadhu: Industrial Economics (Himalaya Publishing House, Bombay, 1988)
9. Misra, S.K. and V.K. Puri (2001), Indian Economy — Its Development Experience. Himalaya Publishing House, Mumbai.
10. Datt, R. and K.P.M. Sundharam (2001). Indian Economy, S. Chand & Company Ltd., New Delhi.

### AGRICULTURAL ECONOMICS-I

#### UNIT I

Nature, scope and significance of agricultural production economics- Agricultural Production processes, character and dimensions-spatial, temporal - Centrality of production functions, assumptions of production functions.

#### UNIT II

Factors of production, classification, interdependence, and factor substitution Determination of optimal levels of production and factor application –Optimal factor combination and least cost combination of production

#### UNIT III

Cost functions and cost curves, components, and cost minimization –Duality theory – cost and production functions and its applications –Derivation of firm's input demand and output supply functions –Economies and diseconomies of scale.

#### UNIT IV

Technology in agricultural production, nature and effects and measurement – Measuring efficiency in agricultural production; technical, allocative and economic efficiencies

#### Unit V

Determination of Food Grains- Administrative Prices, Public Distribution System in Rural Areas and Its Importance and Problems, Performance of Food Grains in India

#### BASIC READING LIST

- Agricultural Statistics at a Glance 2010, Directorate of Economics and Statistics, Ministry of Agriculture, Government of India, New Delhi.
- Bhalla, G. S. and Singh G., 2001, Indian Agriculture: Four Decades of Development, Sage Publications.

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Unit V

Economic Thought of Kautilya, Raja Ram Mohan roy, Gokhale, Naoroji, Ranadey

BASIC READING LIST

- Blackhouse, R. (1985), A History of Modern Economic Analysis. Basil Blackwell. Oxford.
- Ganguli, B.N. (1977), Indian Economic Thought: A 19th Century Perspective, Tata McGraw Hill, New Delhi.
- Gide, C. and G. Rist (1956), A History of Economic Doctrines. (2nd Edition), George Harrop & Co., London.
- Economics 42
- Grey, A. and A.E. Thomson (1980), The Development of Economic Doctrine, (2nd Edition), Longman Group, London.
- Kautilya (1992), The Arthashastra, Edited, Rearranged, Translated and Introduced by L.N. Rangaranjan, Penguin Books, New Delhi.
- Roll, E. (1973), A History of Economic Thought, Faber, London.
- Schumpeter, J.A. (1954), History of Economic Analysis, Oxford University Press, New York.

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**SEMESTER-VI (Core Papers)**

Paper	Semester-VI	No of Credits	Total Classes
XV	Environmental Economics	3	45
XVI	International Economics-II	3	45
XVII	Statistical Methods for Economics-II	3	45
XVIII	Mathematical Methods in Economics-II	3	45

**SEMESTER-VI (Optional Papers) (Any Two)**

Paper	Semester-VI	No of Credits	Total Classes
XIX	Optional Paper I	4	45
XX	Optional Paper II	4	45

Paper	Semester-VI	No of Credits	Total Classes
1	Computer Fundamentals: Theory & Application – II	4	45
2	Industrial Economics-II	4	45
3	Agricultural Economics-II	4	45
4	History of Economic Thought-II	4	45

**Paper-XV**

**ENVIRONMENTAL ECONOMICS**

**Unit I**

Nature of environmental economics; basic concepts-public good vs private goods, Externalities Positive & Negative

**Unit II**

Pareto optimality and market failure in the presence of externalities; property rights and the Coase theorem.

**Unit III**

Measurement of Environmental Values; Valuation methods — Market based methods; Surrogate market methods and Non-market based methods.

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#### Unit IV

The Theory of Environmental Policy; pigouvian taxes and subsidies, Command and control vs. market-based instruments- marketable pollution permits and mixed instruments (the charges and standards approach),

#### Unit V

Sustainable Development; concepts & theories of optimal use of exhaustible and renewable resources; Environmental and development trade off (Kuznet's hypothesis).

#### BASIC READING LIST

1. Charles Kolstad, Intermediate Environmental Economics, Oxford University Press, 2nd edition, 2010.
2. Bromely, D.W. (Ed.) (1995), Handbook of Environmental Economics, Blackwell, London.
3. Hanley, N., J.F. Shogren and B. White (1997), Environmental Economics in Theory and Practice, Macmillan.
4. Hussen, A.M. (1999), Principles of Environmental Economics, Routledge, London.
5. Roger Perman, Yue Ma, James McGilvray and Michael Common, Natural Resource and Environmental Economics, Pearson Education/Addison Wesley, 3rd edition, 2003.
6. Fisher, A.C. (1981), Resource and Environmental Economics, Cambridge University Press, Cambridge.
7. Jeroen, C.J.M. van den Bergh (1999), Handbook of Environmental and Resource Economics, Edward Elgar Publishing Ltd., U.K.
8. Robert N. Stavins (ed.), Economics of the Environment: Selected Readings, W.W. Norton, 5th edition, 2005.

#### Paper-XVI

#### INTERNATIONAL ECONOMICS-II

#### Unit I

Concepts and components of Balance of Trade and Balance of Payments; Equilibrium and disequilibrium in Balance of Payments; Causes of disequilibrium in Balance of Payments;

#### Unit II

Various measures to correct deficit in the Balance of Payments; Devaluation; Dumping, Concept and implications of foreign trade multiplier;

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**Unit III**

IMF, World Bank and GATT/WTO;

**Unit IV**

Recent changes in the composition and direction of foreign trade; Measures adopted by the government to correct the deficit before and after 1991.

**Unit V**

Convertibility of Currency; Recent export and import policies of India; Role of multinational corporations in India

**BASIC READING LIST**

- Kenan, P.B. (1994), The International Economy, Cambridge University Press, London.
- Kindlberger, C.P. (1973), International Economics, R.D. Irwin, Homewood.
- Krugman, P.R. and M. Obstfeld (1994), International Economics : Theory and Policy, Glenview, Foresman.
- Economics 36
- Salvatore, D.L. (1997), International Economics, Prentice-Hall, Upper Saddle River, N.J.
- Sodersten, Bo (1991), International Economics, Macmillan Press Ltd., London.
- Aggarwal, M.R. (1979), Regional Economic Cooperation in South Asia, S. Chand and Co., New Delhi.
- Bhagwati, J. (Ed.) (1981), International Trade, Selected Readings, Cambridge University Press, Mass.
- Crockett, A. (1982), International Money: Issue and Analysis, ELBS and Nelson, London.
- Greenaway, D. (1983), International Trade Policy, Macmillan Publishers Ltd., London.
- Heller, H.R. (1968), International Monetary Economics, Prentice Hall, India.
- Joshi V. and I.M.D. Little (1998), India's Economic Reforms, 1999-2001, Oxford University Press, Delhi.

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Paper-XVII

**STATISTICAL METHODS FOR ECONOMICS-II**

**Unit I**

Regression analysis — Equations, Estimation of regression Coefficient in a bivariate grouped frequency distribution— Least squares method, interpretation of regression coefficients.

**Unit II**

Time series analysis — Concept and components — Determination of regular trend, seasonal indices, Cyclical fluctuations and Irregular or Random Variations

**Unit III**

Sampling: Principal steps in a sample survey; methods of sampling; the role of sampling theory; properties of random samples.

**Unit IV** Index numbers — Concept, price relative, quantity relative, value relative; Laspeyres's, Paasche's and Fisher, Family budget method; Problems in the construction and limitations of index numbers, Tests for ideal index number.

**Unit V**

Partial correlation coefficient of first order and second order, multiple correlations, Multiple regression analysis of first order

**Reading List:**

- Allen, R.G.D. (1974), Mathematical Analysis for Economists, Macmillan Press, London.
- Black, J. and J.F. Bradley (1973), Essential Mathematics for Economists, John Wiley and Sons.
- Chiang, A.C. (1986), Fundamental Methods of Mathematical Economics (3rd Edition), McGraw Hill, New Delhi.
- Croxton, F.E., D.J. Cowden and S. Klein (1973), Applied General Statistics, Prentice Hall, New Delhi.
- Gupta, S.C. and V.K. Kapoor (1993), Fundamentals of Applied Statistics, S. Chand and Sons, New Delhi.
- Speigal, M.R. (1992), Theory and Problems of Statistics, McGraw Hill Book, London. Economics

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Paper-XVIII

**MATHEMATICAL METHODS IN ECONOMICS-II**

**Unit I**

Progression: Arithmetic and Geometric Progression and their use in Economics.

**Unit II**

Linear Programming: Graphical Solution and its applications in Economics, Duality.

**Unit III**

Matrix : various types of matrices, addition & subtraction of matrix, multiplication of matrix and its applications in Economics

**Unit IV**

Determinants: solution of determinants, singular matrix, Inverse of a matrix, Cramer's rule and its applications in Economics, Input Output Analysis.

**Unit V**

Probability: Concept, Rules of probability (Addition and Multiplication);

**BASIC READING LIST**

1. Mehta & Madnani (2014), Mathematics for Economists, Sultan chand & Sons, New Delhi.
2. Sancheti and V.K. Kapoor (2007), Business Mathematics, Sultan & Chand Sons, New Delhi.
3. Allen, R.G.D. (2002), Mathematical Analysis for Economists, Macmillan Press, London.
4. Black, J. and J.F. Bradley (1973), Essential Mathematics for Economists, John Wiley and Sons.
5. Chiang, A.C. (2005), Fundamental Methods of Mathematical Economics (4<sup>th</sup> Edition), McGraw Hill, New Delhi.
6. Agarwal D.R (2001), Mathematics for Economists, Vrinda Publications Pvt, Ltd.,
7. Sundaresan. V and Jeyaseelan. S .D (1993), An Introduction to Business Mathematics, S.Chand and Company Limited, New Delhi.
8. Vittal P.R (2003), Business Mathematics, Margham Publication, Chennai.

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Systems Analysis and Design, Written, Bently & Barlow

An Introduction to Data Base Systems, Date

Principles of Data Base Systems, Ullman

Data Base Systems, James Martin

MS office for Dummies, PustakMahal

Network Tips, Tricks and Techniques, Narang

! A to Z Microsoft Excel 2007, Hemant Kumar Goyal, Ravi Publication, Meerut (U.P.)

! Bangia, Ramesh, Learning Excel 2007, Khanna Book Publication, New Delhi.

A to Z Power Point 2007, Hemant Kumar Goyal, Ravi Publication, Meerut (U.P)

## INDUSTRIAL ECONOMICS-II

### Unit I

Industrial Development during Planning Period, Programmes of Industrial Development under the Plans, Trends in Industrial Production.

### Unit II:

Small Scale and Cottage Industries, The Role and Performance of Cottage and Small Industries in Indian Economy, Problems of Small Scale and Cottage Industries and Remedial Measures

### Unit III:

Industrial Policy: 1948, 1956, 1980, 1991

### Unit IV:

Industrial Sickness in India, Magnitude of Sickness, Causes of Industrial Sickness, Remedial Measures, Companies (Second Amendment) Act 2002

### Unit V:

Growth and Pattern of Industrialization during pre-reform and post reform period,

### BASIC READING LIST

1. Ahluwalia, I.J: Industrial Growth in India (Oxford University Press, New Delhi, 1985)
2. Barthwal, R.R: Industrial Economics (Wiley Eastern Ltd, New Delhi, 1985)
3. Cherunilam F: Industrial Economics: Indian Perspective (3rd Edition) (Himalaya Publishing House, Mumbai, 1994)

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Paper-XIX and Paper-XX

**COMPUTER FUNDAMENTALS: THEORY & APPLICATION – II**

**Unit-1** System Basic Elements of Computer System – Central Processing Unit (CPU), Memory; Disk drives; Input and output devices; Keyboard; Mouse and VDU; Computer, peripherals like printer, scanner, digitizer, etc.; Computer software — Operating system, application,

**Unit -2** Operating System: Introduction of Operating system, History of Operating System – First, Second, Third and Fourth Generation, Operating System Concepts –Memory Management, File Management, Process Management , Types of Operating system, Functions of Ms Dos, Dos commands Batch File, Feature of DOS. Input –Output Devices, Data Transfer Schemes.

**Unit-3** Excel- MS-excel; Basics of Database; Table; Records and fields; Data entry and query processing; Operative principles of Data Analysis and Trend Forecasting Basics of statistical functions and analysis — Mean, median, mode, standard deviation; Distribution, Excel feature, spreadsheet, part of a worksheet, creating and editing worksheets, Entering and formatting numbers, dates formulas, referencing cells, Order of evaluation in formula, coping entries, auto fill, protecting and Unprotecting documents and cells, Moving, copying cell, sorting cell data,

**Unit-4** Internet Application- Brief Overview of concept of Network. Introduction about internet. Search Engine Application, Electronic stock market and exchanges.

**Unit- 5** Electronic Commerce-The Scope of Electronic Commerce, Definition of Electronic Commerce, Electronic E-commerce and the Trade Cycle, Electronic Markets, Electronic Data Interchange, Internet Commerce, E-Commerce in Perspective. E-Commerce Implementation, E-Commerce Evaluation. Characteristics of B2B Ec, Models of B2C Ec, Procurement Management Using the Buyer's Internal Marketplace, Just in Time Delivery, Other B2B Models.

**Recommended books**

Computers and information Technology, puri and puri

Computers Today Sanders

Fundamentals of Computer, Diwan and Dumblekar

Fundamentals of Computers, P. K. Sinha

Fundamentals of Computers, Ashok Arora

Systems Analysis and Design, Awad

Systems Analysis and Design, Cliffton

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4. Desai B: Industrial Economy in India (3rd Edition) (Himalaya Publishing House, Mumbai, 1999)
5. Divine P.J & R.M Jones et. Al: An Introduction to Industrial Economics (George Allen and Unwin Ltd, London, 1976)
6. Hay D and D J Morris: Industrial Economics: Theory and Evidence (Oxford University Press, New Delhi, 1979)
7. Kuchhal S.C.: Industrial Economy of India (5th Edition) (Chaitanya Publishing House, Allahabad, 1980)
8. Singh. A and A.N Sadhu: Industrial Economics (Himalaya Publishing House, Bombay, 1988)
9. Misra, S.K. and V.K. Puri (2001), Indian Economy — Its Development Experience, Himalaya Publishing House, Mumbai.
10. Datt, R. and K.P.M. Sundharam (2001), Indian Economy, S. Chand & Company Ltd., New Delhi.

## **AGRICULTURAL ECONOMICS-II**

### **UNIT I**

Review of Concepts in Agricultural Marketing - Characteristic of Agricultural product and Production – Problems in Agricultural Marketing from Demand and Supply and Institutions sides. Marketing Efficiency - Structure Conduct and Performance analysis - Vertical and Horizontal integration

### **UNIT II**

Marketing Co-operatives, Warehousing and other Government agencies – Performance and Strategies – Market infrastructure needs, performance and Government role - Value Chain Finance.

### **UNIT III**

Role of Information Technology and telecommunication in marketing of agricultural commodities – Market research-Market information service in various sector of economy in India, Ag-market and Domestic and Export market Intelligence Cell (DEMIC) – Market extension

### **UNIT IV**

Spatial and temporal price relationship – price forecasting – time series analysis – time series models – spectral analysis. Price policy and economic development – non-price instruments

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#### UNIT V

Theory of storage – Introduction to Commodities markets and future trading – Basics of commodity futures, Technical Analysis – Role of Government in promoting commodity trading and regulatory measures.

#### BASIC READING LIST

- Agricultural Statistics at a Glance 2010, Directorate of Economics and Statistics, Ministry of Agriculture, Government of India, New Delhi. Bhalla, G. S. and Singh G., 2001, Indian Agriculture: Four Decades of Development, Sage Publications.
- Bhalla, G.S., 2007, Indian Agriculture since Independence, National Book Trust, India.
- Chadha, G.K.; S. Sen and H.R. Sharma, 2004, Land Resources, State of the Indian Farmer, Vol. 2, Academic Foundation, New Delhi.
- Dantwala, M. L. and Others, 1991, Indian Agricultural Development since Independence: A Collection of Essays, Oxford
- IBH Publishing Co., New Delhi. Dhawan, B. D., 1988, Irrigation in India's Agricultural Development, Sage Publications Pvt. Ltd
- Report of the Working Group on Agricultural Marketing Infrastructure, Secondary Agriculture and Policy Required for
- Internal and External Trade for the XII Five Year Plan 2012-17, 2011, Agriculture Division, Planning Commission, GOI Report of The Research Study on Estimation of Marketing Efficiency of Horticultural Commodities under Different Supply

#### HISTORY OF ECONOMIC THOUGHT-II

##### Unit I

Alfred Marshall – Elasticity of Demand, Consumer's Surplus. J.S. Mill Theory of value.

##### Unit II

Pigou wealth and welfare, Pareto: social Optimum theory. Amartya Sen Poverty and Famines.

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**Unit III**

J.M. Keynes Liquidity Preference Theory Theory of Multiplier. Schumpeter\_ trade Cycle  
Innovation theory.

**Unit IV**

J.R. Hicks\_ Utility analysis, Trade cycle, R.G. Hawtrey, J.B.Clark. Ragner Nurkse Vicious circle  
of Poverty.

**Unit V**

Economic Thought of M.K. Gandhi, Jawaharlal Nehru, Dr. Ambedkar. Vinobha Bhave, J.K.  
Mehta.

**BASIC READING LIST**

- Blackhouse, R. (1985), A History of Modern Economic Analysis, Basil Blackwell, Oxford.
- Ganguli, B.N. (1977), Indian Economic Thought: A 19th Century Perspective, Tata McGraw  
Hill, New Delhi.
- Gide, C. and G. Rist (1956), A History of Economic Doctrines, (2nd Edition), George Harrop  
& Co., London.
- Economics 42
- Grey, A. and A.E. Thomson (1980), The Development of Economic Doctrine. (2nd Edition),  
Longman Group, London.
- Kautilya (1992), The Arthashastra, Edited, Rearranged, Translated and Introduced by L.N.  
Ranganarjan, Penguin Books, New Delhi.
- Roll, E. (1973), A History of Economic Thought, Faber, London.
- Schumpeter, J.A. (1954), History of Economic Analysis, Oxford University Press, New  
York.

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