

॥अंतरी पेटवू ज्ञानज्योत॥

**KAVAYITRI BAHINABAI CHAUDHARI
NORTH MAHARASHTRA UNIVERSITY, JALGAON**



**Syllabus for
M.A. ECONOMICS**

First Year (SEMESTER I and II)

FACULTY OF HUMANITIES

With effect from Academic Year – 2021-2022 for Ist Year

(Syllabus Structure under revised CBCS Pattern for PG Course in the
Subject of Economics)

Syllabus submitted by Board of Study, Economics

Syllabus Restructuring Committee

For M.A. Economics Part -I

Professor (Dr.) N. L. Chavhan (Chairman)	
Professor (Dr.) N.S. Borase (Member)	Professor (Dr.) A. D. Goswami (Member)
Dr. Jagatrao U. Dhangar (Member)	Dr. Jitendra D. Talware (Member)
Dr. S. H. Kadekar (Member)	Prof. Manisha Chaudhari (Member)
Prof. S. D. Bhamare (Member)	Prof. V. H. Patil (Member)

Summary of Distribution of Credits under CBCS Pattern Scheme For M.A. Economics

Sr.No	Type of course	Sem I	Sem II	Sem III	Sem IV
01	Core	12	12	12	12
02	Skill based/ Elective	04	04	04	04
03	School Elective	-	-	-	-
04	Project	-	-	-	-
05	Audit	02	02	02	02
06	Total Credits	18	18	18	18

Subject Type	Core	Skill Based/ Elective	School Elective	Project	Audit	Total
Credits	48	16	00	00	08	72

Total Credits = 72

Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon
M. A. Economics (w. e. f. A. Y. 2021 -2022)

Course credit scheme

Semester	(A) Core Courses			(B) Skill Based / Elective Course			(C) Audit Course (No weightage in CGPA)			Total Credits (A+B+C)
	No. of Courses	Credits (T+P)	Total Credits	No. of Courses	Credits (T+P)	Total Credits	No. of Courses	Credits (Th.)	Total Credits	
I	3	4 + 0	12	1	4 + 0	4	1	2	2	18
II	3	4 + 0	12	1	4 + 0	4	1	2	2	18
III	3	4 + 0	12	1	4 + 0	4	1	2	2	18
IV	3	4 + 0	12	1	4 + 0	4	1	2	2	18
Total Credits	48			16			8			72

(T, Theory; P, Practical)

Structure of Curriculum

		First Year				Second Year				Total Credit Value
		Semester I		Semester II		Semester III		Semester IV		
		Credit	Course	Credit	Course	Credit	Course	Credit	Course	
(A)	Prerequisite and Core Courses									
	Theory	4	3	4	3	4	3	4	3	48
	Practical	0	0	0	0	0	0	0	0	0
(B)	Skill Based / Subject Elective Courses									
1	Theory /Practical	4	1	4	1	4	1	4	1	16
(C)	Audit Course (No weightage in CGPA calculations)									
1	Practicing Cleanliness	2	1							2
2	Personality & and Cultural Development Related Course			2	1					2
3	Technology Related + Value Added Course					2	1			
4	Professional and Social + Value Added Course							2	1	2
	Total Credit Value	18	5	18	5	18	5	18	5	72

List of Audit Courses (Select any ONE course of Choice from Semester II; Semester III and Semester IV)

Semester I (Compulsory)		Semester II (Choose One)		Semester III (Choose One)		Semester IV (Choose One)	
		Personality and Cultural Development		Technology + Value Added Course		Professional and Social + Value Added Course	
Course Code	Course Title	Course Code	Course Title	Course Code	Course Title	Course Code	Course Title
AC-101	Practicing Cleanliness	AC-201 (A)	Soft Skills	AC-301(A)	Computer Skills	AC-401(A)	Human Rights
		AC-201 (B)	Sport Activities	AC-301(B)	Cyber Security	AC-401 (B)	Current Affairs
		AC-201 (C)	Practicing Yoga	AC-301(C)	Use of SPSS in Social Sciences	AC-401(C)	Economy of Maharashtra
		AC-201 (D)	Introduction to Indian Music	AC-301(D)	Application of E-Learning	AC-401(D)	Economy of Khandesh Region

Semester-wise Course Structure of M. A. I Economics (w.e.f. A Y 2021-2022)

Semester I

Course Code	Course Type	Title of the Course	Contact Hour/Week	Distribution of Marks for Examination					Credits
				Internal		External		Total	
				Th.	Pr.	Th.	Pr.		
PG-ECO- 101	Core	Advanced Macroeconomic Analysis-I	04	40	--	60	--	100	04
PG-ECO- 102	Core	Public Finance-I	04	40	--	60	--	100	04
PG-ECO -103	Core	Statistics -I	04	40	--	60	--	100	04
PG-ECO -104	Skill Based/ Elective	Choose one of the following A. Agricultural Economics-I B. Industrial Economics C. Environment Economics	04	40	--	60	--	100	04
PG-AC- 101	Audit Course	Practical Cleanliness	02	--	100	--	--	100	02
Total Credit for Semester I: 18 (T = Theory: 04; P = Practical: 0; Skill Based: 4; Audit Course:2)									

Semester II

Course Code	Course Type	Title of the Course	Contact Hour/Week	Distribution of Marks for Examination					Credits
				Internal		External		Total	
				Th.	Pr.	Th.	Pr.		
PG-ECO-201	Core	Advanced Macroeconomic Analysis -II	04	40	--	60	--	100	04
PG-ECO -202	Core	Public Finance-II	04	40	--	60	--	100	04
PG-ECO -203	Core	Statistics -II	04	40	--	60	--	100	04
PG-ECO -204	Skill Based/ Elective	Choose one of the following A. Agricultural Economics-II B. Rural Development C. Demographic Economics	04	40	--	60	--	100	04
PG-AC- 201	Elective Audit Course	Choose one out of Four AC-201 (A/B/C/D)	02	100	--	--	--	100	02
Total Credit for Semester I: 18 (T = Theory: 04; P = Practical: 0; Skill Based: 4; Audit Course:2)									

Semester-wise Course Structure of M.A. II Economics (w.e.f. A Y 2022-2023)

Semester III

Course Code	Course Type	Title of the Course	Contact Hour/Week	Distribution of Marks for Examination					Credits
				Internal		External		Total	
				Th.	Pr.	Th.	Pr.		
PG-ECO -301	Core	Monetary Economics-I	04	40	--	60	--	100	04
PG-ECO -302	Core	Economics Development and Growth-I	04	40	--	60	--	100	04
PG-ECO -303	Core	International Economics-I	04	40	--	60	--	100	04
PG-ECO -304	Skill Based/ Elective	Choose one of the following A. Econometrics-I B. Research Methodology for Economics C. Principles of banking and finance D. Urban Economics	04	40	--	60	--	100	04
PG-AC- 301	Audit Course	Choose one out of Four AC-301 (A/B/C/D)	02	100	--	--	--	100	02
Total Credit for Semester I: 18 (T = Theory: 04; P = Practical: 0; Skill Based: 4; Audit Course:2)									

Semester IV

Course Code	Course Type	Title of the Course	Contact Hour/Week	Distribution of Marks for Examination					Credits
				Internal		External		Total	
				Th.	Pr.	Th.	Pr.		
PG-ECO -401	Core	Monetary Economics-II	04	40	--	60	--	100	04
PG-ECO -402	Core	Economics Development and Growth-II	04	40	--	60	--	100	04
PG-ECO -403	Core	International Economics-II	04	40	--	60	--	100	04
PG-ECO -404	Skill Based/ Elective	Choose one of the following A. Econometrics-II B. Research Methodology for Economics-II With Project C. Indian financial market D. Labour Economics	04	40	--	60	--	100	04
PG-AC- 401	Audit Course	Choose one out of Four AC-401 (A/B/C/D)	02	100	--	--	--	100	02
Total Credit for Semester I: 18 (T = Theory: 04; P = Practical: 0; Skill Based: 4; Audit Course:2)									

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M.A.Economics

Equivalence of M.A. Economics: Part – I : Semester: I

OLD PATTERN (W.E.F ACADEMIC YEAR:2017-18)				NEW PATTERN (W.E.F ACADEMIC YEAR: 2021-22)			
Sr.	Paper Code	Nature of Paper	Title Of The Paper	Sr. No.	Paper Code	Nature of Paper	Title Of The Paper
1	Eco:111	Core Compulsory	Advanced MicroEconomics: I	1	PG-ECO-101	Core	Advanced Microeconomic Analysis-I
2	Eco:112	Core Compulsory	Modern Public Economics : I	2	PG-ECO-102	Core	Public Finance-I
3	Eco:113(A)	Optional Paper	Statistics For Economics	3	PG-ECO-103	Core	Statistics-I
4	Eco:113 (B)	Optional Paper	Schools of Economic Thoughts				
5	Eco:114 (A)	Optional Paper	Economics of Agriculture & Rural Development	4	PG-ECO-104 (A)	Optional	Agricultural Economics-I
6	Eco:233(B)*	Optional Paper	Economics of Labor-I	5	PG-ECO-104 (B)	Optional	Industrial Economics
7	Eco:114 (C)	Optional Paper	Economics of Environment	6	PG-ECO-104 (C)	Optional	Environment Economics

Equivalence OF M.A. Economics: Part – I : Semester: II

OLD PATTERN (W.E.F ACADEMIC YEAR : 2017-18)				NEW PATTERN (W.E.F ACADEMIC YEAR:2021-22)			
Sr. No	Paper Code	Nature of Paper	Title of The Paper	Sr. No	Paper Code	Nature of Paper	Title of The Paper
1	Eco:121	Core Paper	Advanced MicroEconomics: II	1	PG-ECO-201	Core Paper	Advanced Microeconomic Analysis-II
2	Eco:122	Core Paper	Modern Public Economics : II	2	PG-ECO-202	Core Paper	Public Finance-II
3	Eco:123 (A)	Optional Paper	Research Methodology for Economics	3	PG-ECO-203	Core Paper	Statistics-II
4	Eco:123 (B)	Optional Paper	Comparative Economic Systems in the World				
5	Eco:124 (A)	Optional Paper	Economics of Agriculture & Rural Development	4	PG-ECO-204 (A)	Optional Paper	Agricultural Economics-II
6	Eco:243(B)*	Optional Paper	Economics of Labor-II	5	PG-ECO-204 (B)	Optional Paper	Rural development
7	Eco:124(C)	Optional Paper	Economics Of Population	6	PG-ECO-204 (C)	Optional Paper	Demographic Economics

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M.A.Economics

Equivalence of M.A. Economics: Part – II : Semester: III

OLD PATTERN (W.E.F ACADEMIC YEAR:2018-19)				NEW PATTERN (W.E.F ACADEMIC YEAR: 2022-23)			
Sr.	Paper Code	Nature of Paper	Title Of The Paper	Sr. No.	Paper Code	Nature of Paper	Title Of The Paper
1	Eco:231	Core Compulsory	Advanced Monetary Economics: I	1	PG-ECO 301	Core	Monetary Economics-II
2	Eco:232	Core Compulsory	Theories of Economic Development	2	PG-ECO 302	Core	Economics Development and Growth-II
3	Eco:233(A)	Choose any One	International Economics-I	3	PG-ECO 303	Core	International Economics-II
4	Eco:233 (B)		Economics Of Labor - I				
5	Eco:234 (A)	Choose any One	Computer Applications in Economics Analysis-I	4	PG-ECO 304 (A)	Choose any One	Econometrics-II
6	Eco:234(B)*		Modern Banking System in India	5	PG-ECO 304 (B)		Research Methodology for Economics-II
7	Eco:234 (C)		Mathematical Economics	6	PG-ECO 304 (C)		Principles of banking and finance
				7	PG-ECO 304 (D)		Urban Economics

Equivalence OF M.A. Economics: Part – II : Semester: IV

OLD PATTERN (W.E.F ACADEMIC YEAR : 2018-19)				NEW PATTERN (W.E.F ACADEMIC YEAR:2022-23)			
Sr. No	Paper Code	Nature Of Paper	Title Of The Paper	Sr. No	Paper Code	Nature Of Paper	Title Of The Paper
1	Eco:241	Core Paper	Advanced Monetary Economics: II	1	PG-ECO 401	Core Paper	Monetary Economics-II
2	Eco:242	Core Paper	Theories Of Economic Growth	2	PG-ECO 402	Core Paper	Economics Development and Growth-II
3	Eco:243 (A)	Optional Paper	International Economics-II	3	PG-ECO 403	Core Paper	International Economics-II
4	Eco:243 (B)	Optional Paper	Economics Of Labor - II				
5	Eco:244 (A)	Optional Paper	Computer Applications in Economics Analysis-II	4	PG-ECO 404 (A)	Choose any One	Econometrics-II
6	Eco:244 (B) *	Optional Paper	Financial Markets in India	5	PG-ECO 404 (B)		Research Methodology for Economics-II
7	Eco:244 (C)	Optional Paper	Econometrics	6	PG-ECO 404 (C)		Indian financial market
					PG-ECO 404 (D)		Labour Economics

Programme at a Glance

Name of the programme (Degree)	: M. A. (Economics)
Faculty	: Humanities
Duration of the Programme	: Two years (four semesters)
Medium of Instruction and Examination	: English, Marathi
Exam Pattern	: 60: 40 (60 marks University exam and 40 marks continuous internal departmental exam/assessment)
Passing standards	: 40% in each exam separately (separate head of passing)
Evaluation mode	: CGPA
Total Credits of the programme	: 72 (48 core credits + 16 Skill based or Elective credit + 08 audit course credits)

Programme Objectives for M.A. Programme:

1. To understand history, human behavior and social interactions, translating into many different career paths down the road.
2. To relate roles and impact of information policies, practices, and information itself on diverse populations, including under-served groups, in a rapidly changing technological and global information society.
3. To evaluate Communication and networking for personal and professional growth, leadership, collaboration, policy development, and change management.
4. To develop Teaching, research, and service, including interdisciplinary activities that contribute to the advancement of the field.
5. To express the philosophy, principles, and legal and ethical responsibilities of the field.

Programme Outcomes (PO) for M.A. Programme:

Upon successful completion of the M.A. programme, student will be able to:

PO No.	Programme Outcomes	Cognitive level
PO1	Student will be understood history, human behavior and social interactions, translating into many different career paths down the road.	2
PO2	Student will able to relate roles and impact of information policies, practices, and information itself on diverse populations, including under-served groups, in a rapidly changing technological and global information society	2
PO3	Student will able to evaluate Communication and networking for personal and professional growth, leadership, collaboration, policy development, and change management.	4
PO4	Student will be develop Teaching, research, and service, including interdisciplinary activities that contribute to the advancement of the field.	6
PO5	Student will able to express the philosophy, principles, and legal and ethical responsibilities of the field.	2

Programme Specific Objectives (PSOs): M. A. Economics

- To teach the latest developments in the principles of economic theory.
- To teach applications of theories in analyzing current economic problems.
- To inculcate effective communication, written and oral, about the field of Economics.
- To impart substantive knowledge of core areas in Economics and the ability to think critically about them.
- To acquaint about the history and evolution of the discipline of Economics.

Programme Specific Outcomes for M. A. Economics

After completion of the M. A. Economics programme, the students should be able to:

Programme Specific Outcome (PSO) No.	Programme Specific Outcome	Cognitive Level
PSO1	Students will be able to understand the latest developments in the principles of economic theory.	2
PSO2	Students will be able to understand applications of theories in analyzing current economic problems.	2
PSO3	Students will be able to develop effective communication, written and oral, about the field of Economics.	3
PSO4	Students will be able to evaluate substantive knowledge of core areas in Economics and the ability to think critically about them.	4
PSO5	Students will be able to connect themselves about the history and evolution of the discipline of Economics.	4

PG-ECO-101: Advanced Microeconomic Analysis-I

Course Objectives (CObs):

- To explain economic concepts and theories related to the behaviour of economic agents, markets, and industry structures.
- To integrate theoretical knowledge in order to explain past economic events and to formulate predictions on future ones.
- To evaluate the consequences of economic activities and institutions for individual and social welfare.

Unit 1 Basic Concepts of Economics

Hrs: 15

- 1.1 Basic Economic Problems, Society's Production Possibilities/ Production Possibility Curve, Circulation flow of Economic Activity.
- 1.2 Economic Model: Meaning, Nature, Concepts in Model Building, Building a Micro-static model, testing of economic model, choice of economic model, Limitations and uses of economic model.
- 1.3 Micro and Macroeconomics: meaning, scope and Importance of Both, Distinctions, problems of interrelation and integration of the two approaches.
- 1.4 Equilibrium Meaning, Static, Dynamic, Neutral, Partial and General Equilibrium.

Unit 2 Theory of Demand Analysis

Hrs: 15

- 2.1 Marshallian Theory of Demand
- 2.2 Hicksian Ordinal Utility Approach: Assumptions, Indifference curve, MRS, Indifference curve Map and Price Line, Consumer Equilibrium by Indifference Curve Analysis, Price, Income & substitution effects, Methods of Hicks and Slutsky to Bifurcate Price Effects, Applicability of Indifference curve analysis
- 2.3 Modern Utility Analysis of choices involving risk or uncertainty (Bernoulli's Hypothesis, N-M Methods, Friedman-Savage hypothesis, Markowitz hypothesis, Asset Portfolio selection) Critical Appraisal of Modern Utility Analysis
- 2.4 Recent Development in Demand Theory: Pragmatic Approach of demand theory, Lancaster's Attributes, Bandwagon Effect, Snob Effect, Veblen Effect.

Unit 3 The Firm & Its Technology: Supply Analysis

Hrs: 15

- 3.1 Technology & Inputs
- 3.2 Long Run & Short Run
- 3.3 The Production Function: Short and Long Run Production Function: Diminishing Return & Isoquant Approach, Minimum Cost Combination of Inputs.
- 3.4 Technical Progress and Production Function
- 3.5 The Traditional and Modern Theories of Cost: Short Run and Long Run Costs Curves, Relationship between Costs and Production Functions.

Unit 4 Output and Price Determination in Market-I

Hrs: 15

- 4.1 Theory of Perfect Competition: Short Run and Long Run Equilibrium of the Firm and Industry, Dynamic Changes and Its Effects on the Equilibrium.
- 4.2 Theory of Monopoly: Short Run and Long Run Equilibrium of the Firm, Price Discrimination and Dumping, Measurement of Degree of Monopoly Power, Control/ Regulation of Monopoly.

4.3 The Theory of Monopolistic Competition: Short And Long Run Equilibrium Of The Firm and Group; Under The Condition of Free Entry and Price Competition, Equilibrium Under Product Differentiation and Selling Cost, Excess Capacity, Product Diversity & Social Value Of Advertising.

References: -

1. G.J.Stigler, Theory Of Price : Prentice-Hall Of India Private Limited
2. Jackhirshlefer, Price Theory &Its Application: Prentice-Hall of India Private Limited.
3. Samulson P.A. and W.O. Nordhaus (1998) Economics 16th Edition Tata Mc Gram Hill, New Delhi
4. A. Koutsoyiannis, Modern Microeconomics 2nd Ed. Macmillan Press
5. R.G.Lipsey & K.A.Chistal, Economics: Latest Edition . E.L.B.S. Oxford University Press
6. Dewett K.K. Modern Economic Theory, Revised Edition 2005 S. Chand & Company Ltd.,
7. Ahuja H.L. Advanced Micro Economics 13th Edition, 2008, S. Chand and Company Ltd.,
8. N. Gregory Mankiw, Principles of Microeconomics
9. Bhave, Kelkar, Mulya Siddhant, Maharashtra Granth Nirmitti Mandal, Pune.
10. Khandewale, Kimmat Siddhant, Nagpur.
11. Patil Krushnarao, Ucchattar aarthik siddhant, Nagpur.
12. Chavhan N.L., Pragat sukshm lakshi arthshastra, Prashant Publication, Jalgaon.
13. Chavhan N. L. (2021) Advanced Microeconomic Analysis, Prashant Publications, Jalgaon.

Course Outcomes (COs):

After completion of this course students will be able to-

Course Outcome	Course Outcome	Cognitive Level
PG-ECO-101.1	Students will be able to identify and explain economic concepts and theories related to the behaviour of economic agents, markets, and industry structures.	2
PG-ECO-101.2	Students will able to integrate theoretical knowledge in order to explain past economic events and to formulate predictions on future ones.	3
PG-ECO-101.3	Students will evaluate the consequences of economic activities and institutions for individual and social welfare.	5

PG-ECO -102: Public Finance- I

Course Objectives (CObs):

- To understanding social welfare expenditure schemes, the growth and economic development.
- Discuss on varies theories related to tax, public expenditure.
- To understand changes in Tax system.

Unit 1 Introduction to Public Finance and Role of Government Hrs: 15

- 1.1 Meaning, Subject Matter and Importance of Public Finance.
- 1.2 Role of Public Finance in National Economy.
- 1.3 Economic Rational of Government.
- 1.4 Fiscal and other Functions of the Modern Government.
- 1.5 Market Failures; Imperfection, Decreasing costs, Externalities and Public goods; Concepts of Private goods, Pure Public goods, mixed goods and merit goods.
- 1.6 Theory of Public goods: The optional provision of Public goods, Free Riders problem, Lindahl equilibrium; The Public choice and Fiscal decision making, voting systems, Majority voting.

Unit 2 Theory of Public Revenue Hrs: 15

- 2.1 Meaning of Tax, Canons of Taxation.
- 2.2 Sources of Public Revenue- Tax Sources and Non Tax Sources.
- 2.3 Ability to pay Principle.
- 2.4 Principle of Bowen and Samuelson Models.
- 2.5 Application of Taxation Principles in Developing Countries.
- 2.6 Meaning, Types and Measurement of Taxable Capacity.

Unit 3 Impact and Incidence of Taxes Hrs: 15

- 3.1 Types of taxes and its Impact and Incidence
- 3.2 Distinction between Impact and Incidence
- 3.3 Theories of Shifting Tax Incidence
- 3.4 Types of Taxes: VAT, MODVAT, GST: Impact of GST on Indian economy.

Unit 4 Theory of Public Expenditure Hrs: 15

- 4.1 Meaning and Principles of Public expenditure
- 4.2 Revenue and Capital Expenditure
- 4.3 Wagner's Law
- 4.4 Wiseman – Peacock Hypothesis
- 4.5 Pure Theory of Public Expenditure
- 4.6 Social Cost- Benefit Analysis

References:

1. Richard A. Musgrave (1989), Public Finance in Theory and Practice McGraw Hill Book Company, New York.
2. Jhingan M.L., Public finance and international Trade, Vrunda Publication Pvt. Ltd. Delhi.
3. Jha H. (1998), Modern Public Economics, Routledge, London.
4. Singh S.K. (1986) Public Finance in Developed and Developing Countries, S. Chand and Company Ltd, New Delhi.
5. Chelliah R.J. (1971), Fiscal Policy in Underdeveloped Countries.
6. Patil J.F., Sarvajanic Arthkaran, Fadake Publication, Kolhapur.
7. Tripathy R.N. Public Finance in Underdeveloped Countries.
8. Dr. Joshi P.L. Zero Base Budgeting Technology in Government, Dhruv and Deep Books, Bombay.
9. Dr. Tyagi B.P., Public Finance, Jai Prakash Nath Pub.Meerat (UP).
10. Mithani D.M. Principles of Public Finance and Fiscal Policy Himalaya Publishing House, New Delhi.
11. RuddarDatt and K.P.M. Sundharam (2006), Indian Economy, S. C. Chand and Company Ltd, New Delhi.
12. Ashutosh Ravavikar, Fiscal Deficit and Inflation in India, Macmillan India Ltd. New Delhi.
13. Chavhan N. L Gaikwad Manoj, Public Finance, Prashant Publication, Jalgaon.
14. Bhatiya H.L.; Public Finance, Vikas Publishing House Private Ltd. New Delhi.
15. Chavhan N. L. ; Public Economics,(2021) Prashant Prakashans, Jalgaon.

Course Outcomes (COs):

After completion of this course students will be able to-

Course Outcome	Course Outcome	Cognitive Level
PG-ECO-102.1	Student will understand social welfare expenditure schemes, the growth and economic development	2
PG-ECO-102.2	Student will understand and will be able to discuss on varies theories related to tax, public expenditure.	2
PG-ECO-102.3	Students will be able to understand changes in Tax system.	2

PG-ECO -103: Statistics-I

Course Objectives (CObs):

- To make student familiar with nature of statistics and central tendency.
- To equip students with concrete knowledge of dispersion and skewness.
- To develop competencies in learners to construct index number.
- To develop an understanding for uses of time series

Unit 1 Introduction to Statistics and Measures of Central Tendency Hrs: 15

- 1.1 Statistics – Meaning, Importance, Scope and Limitations
- 1.2 Data for Empirical Analysis- Time Series, Cross Section and Pooled Data
- 1.3 Measures of Central tendency- Meaning, Merits, Demerits and Calculation
- 1.4 Arithmetic Mean, Weighted Mean, Median, Mode
- 1.5 Geometric Mean, Harmonic Mean

Unit 2 Measures of Dispersion and Skewness Hrs: 15

- 2.1 Dispersion and Skewness - Meaning, Importance and Uses
- 2.2 Measurement of Dispersion- Range, Quartile Deviation
- 2.3 Mean Deviation, Standard Deviation
- 2.4 Lorenz curve Analysis
- 2.5 Measures of Skewness-Karl Pearson's, Bowley's and Kelly's Coefficient of Skewness

Unit 3 Index Number Hrs: 15

- 3.1 Meaning and Uses of Index Number; Problems in Construction of Index number
- 3.2 Methods of Constructing Index Number- Unweighted and Weighted Index Numbers
- 3.3 Types of Weighted Indices- Laspeyres Methods, Paasche Method, Bowley's Method, Fishers Ideal Method
- 3.4 Quantity or Volume Index numbers
- 3.5 Tests of Adequacy- Time Reversal Test, Factor Reversal Test; Chain Index Numbers

Unit 4 Analysis of Time Series Hrs: 15

- 4.1 Meaning and Components of Time Series
- 4.2 Measurement of Trend- Graphical Method, Semi-Average Method, Moving Average Method and Method of Least Squares
- 4.3 Measurement of Seasonal Variations and Cyclical Variations
- 4.4 Fitting Trend Curves
- 4.5 Calculation of Correlation in Time Series.

References:

1. Chou, Ya-Lun, Statistical Analysis, Rinehart & Winston, New York
2. Croxton & Cowden, Applied general Statistics, Prentice-Hall, London and India
3. Demming, W. Edward, Theory of Sampling, John Willey & Sons, New York
4. Elhance, D. N. Fundamentals of Statistics, Kitab Mahal, Allahabad
5. Elhance, D.N.: Fundamentals for Business and Economics
6. Elhance, D.N.Indian Statistics
7. Feller, W., An Introduction to Probability theory and its applications, John Wiley
8. Gaur Ajai S. & Gaur Sanjaya : Statistical Methods For Practice & Research, SAGE
9. Goon AM, M.K.Gupta and B.Dasgupta.: Fundamentals of Statistics, Vol.1, The World
10. Gupta, S.C. An Introduction to Statistic, Sultan Chand & co., New Delhi.
11. Gupta, S. P. fundamental of Statistic, H.P.H., Bombay
12. Mounsey J., Introduction to statistical calculations, English Universities Press, Press, Ltd, Calcutta.
13. London Richard i. Levine & David S. Rubin: Statistics For Management, Pearson Education,1998
14. Murray R Spigel and Larry J. Stephens: Statistics, Magraw Hill International, Ed.
15. Gupta S.C And Mrs. Indira Gupta: Business Statistics: Himalaya Publishing House; Delhi.

Course Outcomes (COs):

After completion of this course students will be able to-

Course Outcome	Course Outcome	Cognitive Level
PG-ECO-103.1	Students will be familiar with nature of statistics and central tendency	2
PG-ECO-103.2	Students will have concrete knowledge of dispersion and skewness	3
PG-ECO-103.3	Students will be competent to construct index number	3
PG-ECO-103.4	Students understanding for uses of time series will be developed	4

PG-ECO -104 A: Agricultural Economics-I

Course Objectives (CObs):

- To understand Indian Agricultural Sector.
- Discuss on various issues related to Indian Agriculture.
- To understand agriculture price in India, Impact of price on agricultural activities.

Unit 1 Introduction to Agricultural Economics

Hrs: 15

- 1.1 Agricultural Economics: Definition, Meaning, Subject Matter & Importance
- 1.2 Imperative of Agricultural Progress & Rural Development
- 1.3 Transition of Agricultural sector: Peasant Subsistence: Risk Aversion, Uncertainty & Survival, the Transition to Mixed & Diversified Farming, From Divergence to Specialization: Modern Commercial farming, Green Agriculture and Genetically Modified Crops.
- 1.4 Recent Issues of Climatically Changes and its effects.

Unit 2 Agricultural Sector in India

Hrs: 15

- 2.1 Nature of Indian Agriculture
- 2.2 Agricultural Inputs
- 2.3 Land: Agricultural Land by Use in India, Number and Area of Operational Holdings by Size Group, Reforms in Land Tenure System in India, Land Ceiling in India
- 2.4 Water: Irrigation-Need, Sources and Importance, Progress in Irrigation Since 1991 & Government Policy, Problems Related to Irrigation and Water Management, Water Management in Israel Economy.
- 2.5 Need of Fertilizers, Seeds and Pesticides.

Unit 3 Agricultural Prices in India

Hrs: 15

- 3.1 Price Behavior in agricultural product: Trends in Wholesale Price Index of Food Grains & Commercial Crops, Growth Rates of Wholesale Price Index of Food Grains & Commercial Crops, Causes of Price Fluctuation
- 3.2 Trade Cycle in Agriculture: Cob-web Theory - (Stable and Unstable)
- 3.3 Price Stabilization: Direct and Indirect Control.
- 3.4 Minimum Support Prices: Evolution of Price Policy in India, Determinants of MSP, Crops Covered under MSP Regime, Issues related to MSP.
- 3.5 Agricultural Bill: 2020 and E-NAM

Unit 4 Agricultural Marketing & Subsidies in India

Hrs: 15

- 4.1 Agricultural Market Structure & Problems of Agricultural Marketing in India
- 4.2 Agricultural Produce Marketing Committee (APMC) Act
- 4.3 Marketable Surplus: Nature, Scope, Causes and Measurement
- 4.4 Agriculture Subsidies in India, Power & irrigation subsidies, Fertilizer subsidy & others types of subsidies Advantages and Disadvantages
- 4.5 Indian Agricultural Policy: An Overview

References: -

1. Datt R. & K.P.M. Sundharm (2007) Indian Economy, S. Chand & Co. Ltd. New Delhi.
2. Kavimandan Vijay, Krushi Arthshastra.
3. Desai Bhalerao, Krushi arthashastra.
4. Wani Nita., Krushi Arthshastra, Prashant Publication, Jalgaon
5. Ramesh Singh, Indian Economy, Tata Mc-Graw Hill, Publication
5. Chavhan N.L., Bhartiya Arthvyavstha, Prashant Publications, Jalgaon.
6. Chavhan N.L., Gaikwad Manoj, (2019), Agricultural Economics, Prashant Publications, Jalgaon.

Course Outcomes (COs):

After completion of this course students will be able to-

Course Outcome	Course Outcome	Cognitive Level
PG-ECO-104A.1	Students will be able to understand Indian Agricultural Sector.	2
PG-ECO-104A.2	Students will be able to discuss on varies issues related to Indian Agriculture.	2
PG-ECO-104A.3	To understand agriculture price in India, Impact of price on agricultural activities.	2

PG-ECO -104 B: Industrial Economics

Course Objectives (CObs):

- The objective of this course is to provide basic knowledge of Industrial Economics.
- It also provides a detailed understanding of theory of industrial location.
- This course also provides knowledge regarding industrial productivity and efficiency.

Unit 1 Introduction to Industrial Economics

Hrs: 15

- 1.1 Meaning, Scope, Need & Significance of the Study of Industrial Economics.
- 1.2 Concepts of Private Sector, Large, Medium & Small Scale Industries
- 1.3 Public Sector: Role and Problems of Public Sector Industries.
- 1.4 Private Sector: Role and Problems of Private Sector Industries.

Unit 2 Theories of Industrial Location

Hrs: 15

- 2.1 Factors Influencing Location of Industries.
- 2.2 Theories of Industrial Location, Weber, Sargent Florence
- 2.3 Industrial Imbalance, Causes and Measures.
- 2.4 Need for Balanced Regional Development of Industries.

Unit 3 Industrial Productivity & Efficiency

Hrs: 15

- 3.1 Productivity - Norms and Measurement
- 3.2 Factors affecting Productivity and Capacity Utilization
- 3.3 Importance of Productivity in the Competitive Environment.
- 3.4 Measures required for Improving Productivity and Efficiency.

Unit 4 Industrial Finance

Hrs: 15

- 4.1 Meaning, Scope, Importance of Industrial Finance
- 4.2 Sources of Industrial Finance: Shares, Debentures, Bonds, Deposits, Loan etc.
- 4.3 Role of IDBI, SIDBI, ICICI, State finance corporations.
- 4.4 Foreign Capital: Need for Foreign Capital, Governments Policy towards Foreign Capital, Foreign Direct Investment, Foreign Institutional Investment, Euro Issues, GDR, ADR, External Commercial Borrowings.

References: -

1. Alhuwalia I.J. (1985), Industrial Growth in India, Oxford University Press New Delhi.
2. Barthwal R.R. (1985), Industrial Economics, Wiley Eastern Ltd., New Delhi.
3. Cherunilam, F. (1994), Industrial Economics: Indian Perspective (3rd Edition),
4. Singh, A and A.N. Sandhu (1988), Industrial Economics, Himalaya Publishing House, Bombay.
5. Jain S.C. Industrial Economics, (Edition: First, 2019), Publisher: Kailash Pustak Sadan, 30 Shah Building, Hamidia Road, Bhopal (M.P.)
6. Jangale Mangala, Industrial Economics (In Marathi) Prashant Publication, Jalgaon.

Course Outcomes (COs):

After completion of this course students will be able to-

Course Outcome	Course Outcome	Cognitive Level
PG-ECO-104B.1	Student will able to understand basic knowledge of Industrial Economics	2
PG-ECO-104B.2	Students will able understanding of theory of industrial location.	2
PG-ECO-104B.3	Student will able to understand knowledge regarding industrial productivity and efficiency.	2

PG-ECO -104 C: Economics of Environment

Course Objectives (CObs):

- The objective of this course is to provide basic knowledge of Environmental Economics.
- It also provides a detailed understanding the relation between population and environment.
- This course also provides knowledge regarding Environment Degradation Control Policies & Measures.
- This course gives knowledge about Pollution Control Policy on Global & Local Levels.

Unit 1 Environment & Economic Development

Hrs: 15

- 1.1 Economics & Environment
- 1.2 Interlink Ages Between The Economy & The Environment
- 1.3 Pollution & Environmental Degradation As An Economic Problem
- 1.4 Growth Verses Environment : The Basic Issues : Agricultural Development & Environment Degradation, Industrialization, Urban Development & Environment Degradation, Population & Environment
- 1.5 Environmental Degradation & Its Effect On Human Health, Bio-Diversity Of A Region
- 1.6 Greenhouse Effect, Global Warming & Climate Change
- 1.7 Need For Sustainable Development
- 1.8 Environment Movement: Evolution Of The Environmental Movement In The World, Environment Movement in India

Unit 2 Economics of Population

Hrs: 15

- 2.1 The Relation between Market & Environmental Assets: Privately Owned Resources Common Property Resources & Misallocation
- 2.2 Traditional Economic Models of Environmental Assets & Market Failure: Incomplete Markets, Externalities, Non - Exclusion & the Commons & the Free Rider Problem, Non-Rivalry & Public Goods, Non-Convexities, Asymmetric Information
- 2.3 Environment & Government Failure
- 2.4 Impact of Pollution Under Perfect Competition
- 2.5 Optimum Pollution/Zero Pollution: Costs of Pollution, Total Pollution Damage Costs & Total Pollution Abatement Costs, Marginal Damage Costs & Marginal Abatement Costs Optimum pollution

Unit 3 Pollution & Environment Degradation Control Policies & Measures

Hrs: 15

- 3.1 Alternative Policies & Measures for Pollution Control
- 3.2 Economic, Administrative & Political Considerations of Environmental Policy instruments
- 3.3 Command & Control and Standard Fixation: Setting the Standard, Uniform & Variable Standards, Merits & Limitations of Command & Control
- 3.4 Taxes & Subsidies: Market Based Solution, Pollution Charges and Taxes, Distributional Impact Of Pollution Tax, Limitation Of Pollution Tax
- 3.5 Subsidies: Types of Subsidies, Advantages & Limitations of Subsidies
- 3.6 Transferable Discharge Permits: Definition, Types & Working of Permits, Requirement of an Effective Permit System, Advantages Of Tradable Permit, Carbon Emission Trading Credit Trading.

Unit 4 Pollution Control Policy on Global & Local Levels

Hrs: 15

- 4.1 Policy Options in Developing Countries: Proper Resource Pricing, Community Involvement, Clearer Property Rights & Resource Ownership, Programmes To Improve the Economic Alternatives of the Poor, Raising the Economic Status of Women, Industrial Emission Abatement Policies
- 4.2 Policy Options in Developed Countries to Help LDCs: Trade Policies, Debt Relief, Development Assistance, Emission Control, Research & Development, Import

Restrictions

4.3 India’s Pollution Control Policy: A Brief Profile of India’s Environmental Issues, Pollution in Indian Urban and Rural Areas, Control of Industrial Pollution in India, Institutional Structure for Control of Pollution in India, Legislations to Prevent and Control of Various Types Pollution, Multilateral Environment Agreements.

References: -

1. Economic Rights and Environmental Wrongs: Property Rights for the Common Good By Rose Anne Devlin; R. Quentin Grafton Edward Elgar, 1999
2. Environmental Economics: A Critical Overview , Alan Gilpin, Wiley, 2000
3. Managing Environmental Pollution: Andrew Farmer, Routledge, 1997
4. Economic Development: Michael P. Todaro & Stephen C. Smith, Person Education Asia,2003
5. The Economic Theory Of Pollution Control: Paul Burrows Martin Robertson & Co.Ltd.,1979
6. Environment Economics: In Theory & Practice: Nick Hanley, Jason F Shogren & Ben White ,Macmiilan,1997
7. The Process of Business/Environmental Collaborations: Partnering for Sustainability : Alissa J. Stern; Tim Hicks Quorum Books, 2000
8. Environmental Economics: An Introduction, 6th edition, by Barry C. Field and Martha K. Field (McGraw-Hill, NewYork, 2015).
9. Environmental Economics, Kolstad (2000), Oxford University Press.
10. Natural Resource and Environmental Economics, Perman, Ma, McGilvray, Commons (2003), Third Edition, Pearson.
11. Economics of natural resources and the environment: Pearce D W & R K Turner. Harvester Wheatsheaf 1990.
12. Environmental and natural resource economics. Tietenberg T and Lynne Lewis: 9th Edition, Pearson, 2015.
13. Introduction To Positive Economics: R.G. Lipsey & K.A.Chistal,11th ed. E.L.B.S. Oxford University Press
14. Price Theory & Its Application : Jackhirshlefer, Prentice-Hall Of India Private Limited
15. Micro Economics: Robert S. Pindyck & Daniel Rubbinfield, Pearson education
16. Web site :Wikipedia

Course Outcomes (COs):

After completion of this course students will be able to-

Course Outcome	Course Outcome	Cognitive Level
PG-ECO-104 C.1	Student will able to understand basic knowledge of Environmental Economics	2
PG-ECO-104 C.2	Students will able understanding of theory of population and environment.	2
PG-ECO-104 C.3	Student will able to understand knowledge regarding Environment Degradation Control Policies & Measures.	2
PG-ECO-104 C.4	Students will able understanding Pollution Control Policy on Global & Local Levels	2

PG-ECO -201: Advanced Microeconomic Analysis - II

Course Objectives (COBs):

- Able to identify and explain economic concepts and theories related to the Market competition.
- Able to integrate theoretical knowledge in order to explain past economic events and to formulate predictions on future ones.
- To evaluate the consequences of economic activities and institutions for individual and social welfare.

Unit 1 Output and Price Determination in Market-II

Hrs: 15

- 2.1 Strategic Models of Duopoly: Cournot & Bertrand, Edgeworth and Stackelberg.
- 2.2 Oligopoly Models: Collusive Oligopoly, Price Leadership and Price War, Model of Kinked Demand Curve
- 2.3 Marginality Controversy

Unit 2 Alternative Theories of the Firm

Hrs: 15

- 2.1 Baumol's Model of Sales Revenue Maximization.
- 2.2 Marris's Managerial Model of the Firm.
- 2.3 Hall-Hitch full cost pricing Model
- 2.4 Bain's Limit Pricing Theory
- 2.5 Game Theory: two persons zero sum game, certainty Model, Non Zero Sum Model, Nash Equilibrium, Co-operative and Non Co-operative game.

Unit 3 Factor Pricing

Hrs: 15

- 3.1 Marginal Productivity Theory.
- 3.2 Quasi Rent and Modern Theory of Rent
- 3.3 Collective Bargaining and its effects on wages and employment.
- 3.4 Theory of Interest: Loanable fund theory, Liquidity preference theory.
- 3.5 Dynamic Theory of Profit, Innovation Theory, Risk and Uncertainty Theory.

Unit 4 Welfare Economics

Hrs: 15

- 4.1 Pigou's Theory of Welfare Economics
- 4.2 Conditions of Pareto Optimality.
- 4.3 Bergson – Samuelsson's Social Welfare Function.
- 4.4 Kaldor-Hick Compensation Principle
- 4.5 Arrow's Impossibility Theorem.
- 4.6 Theory of Second Best.

References: -

1. G. J. Stigler, Theory Of Price : Prentice-Hall Of India Private Limited
 2. A.Koutsoyiannis, Modern Microeconomics 2nd Ed. Macmillan Press
 3. R.G. Lipsey & K. A. Chistal, Economics: Latest Edition. E.L.B.S. Oxford University Press
 4. Dewett K.K. Modern Economic Theory, Revised Edition 2005 S. Chand & Company Ltd.,
 5. Ahuja H.L. Advanced Micro Economics 13th Edition, 2008, S. Chand and Company Ltd.,
 6. New Delhi.
 7. Principles of Microeconomics: by N. Gregory Mankiw
 8. Markanday R, Khurana KJS) Principles of Microeconomics 21st Revised Edition (English, Paperback,
 9. Bhave, Kelkar, Mulya Siddhant, Maharashtra Granth Nirmiti Mandal, Pune.
 10. Khandewale, Kimmat Siddhant, Nagpur.
 11. Patil Krushnarao, Ucchattar aarthik siddhant, Nagpur.
 12. Chavhan N.L., Pragat sukshmi lakshi arthshastra, Prashant Publication, Jalgaon.
 13. Chavhan N. L. (2021) Advanced Microeconomic Analysis, Prashant Publications, Jalgaon
-

Course Outcomes (COs):

After completion of this course students will be able to-

Course Outcome	Course Outcome	Cognitive Level
PG-ECO-201.1	Students will be able to identify and explain economic concepts and theories related to the Market competition.	1
PG-ECO-201.2	Students will be able to integrate theoretical knowledge in order to explain past economic events and to formulate predictions on future ones.	4
PG-ECO-201.3	Students will be able to evaluate the consequences of economic activities and institutions for individual and social welfare.	5

PG-ECO -202: Public Finance- II

Course Objectives (CObs):

- This course provides knowledge regarding Government Budgeting.
- To understanding Government Budget and Deficit Financing.
- Discuss on Trends of Public finance in India.
- To understand fiscal policy and federal finance.

Unit 1 Public Debt

Hrs: 15

- 1.1 Classical, Keynesian and Post – Keynesian Approaches of Public Debt.
- 1.2 Classification of Public Debt
- 1.3 Burden of Public Debt and Effect
- 1.4 Management of Public Debt.

Unit 2 Government Budget and Deficit Financing

Hrs: 15

- 2.1 Budget – Meaning and Components.
- 2.2 Preparation, Presentation and Execution of Budget.
- 2.3 Economic Classification of Budget
- 2.4 Meaning and Objectives of Deficit Financing.
- 2.5 Types of Deficit Financing
- 2.6 Deficit Financing in India

Unit 3 Fiscal Federalism

Hrs: 15

- 3.1 Principles of Federal Finance.
- 3.2 Vertical and Horizontal Imbalance.
- 3.3 Transfer of Resources from Union to States.
- 3.4 Recommendations of Fifteenth Finance Commissions.
- 3.5 Centre – States conflicts on Finances.

Unit 4 Fiscal Policy

Hrs: 15

- 4.1 Meaning and Objectives.
- 4.2 Interdependency of Monetary and Fiscal Policies.
- 4.3 Automatic vs. Discretionary Stabilizers.
- 4.4 Balanced Budget Multiplier & Crowding Out Effects.
- 4.5 India's recent fiscal policy.

References:

1. Richard A. Musgrave (1989), Public Finance in Theory and Practice McGraw Hill Book Company, New York.
2. Jhingan M.L., Public finance and international Trade, Vrunda Publication Pvt. Ltd. Delhi.
3. Jha H. (1998), Modern Public Economics, Routledge, London.
4. Singh S.K. (1986) Public Finance in Developed and Developing Countries, S. Chand and Company Ltd, New Delhi.
5. Chelliah R.J. (1971), Fiscal Policy in Underdeveloped Countries.
6. Patil J.F., Sarvajanic Arthkaran, Fadake Publication, Kolhapur.
7. Tripathy R.N. Public Finance in Underdeveloped Countries.
8. Dr. Joshi P.L. Zero Base Budgeting Technology in Government, Dhruv and Deep Books, Bombay.
9. Dr. Tyagi B.P., Public Finance, Jai Prakash Nath Pub. Meerat (UP).
10. Mithani D.M. Principles of Public Finance and Fiscal Policy Himalaya Publishing House, New Delhi.
11. Ruddar Datt and K.P.M. Sundharam (2006), Indian Economy, S.C. Chand and Company Ltd, New Delhi.
12. Bhatiya H. L., Public Fiance, Vikas Publishing House Private Ltd., New Delhi.
13. Ashutosh Raravikar, Fiscal Deficit and Inflation in India, Macmillan India Ltd. New Delhi.
14. Chavhan N. L., Gaikwad Manoj, Public Finance, Prashant Publication, Jalgaon.
15. Chavhan N. L., (2021) Public Economics, Prashant publications, Jalgaon.

Course Outcomes (COs):

After completion of this course students will be able to-

Course Outcome	Course Outcome	Cognitive Level
PG-ECO-202.1	Students will understand knowledge regarding Government Budgeting.	2
PG-ECO-202.2	To understanding Government Budget and Deficit Financing.	2
PG-ECO-202.3	Discuss on Trends of Public finance in India.	2
PG-ECO-202.4	To understand fiscal policy and federal finance.	2

PG-ECO -203: Statistics-II

Course Objectives (CObs):

- To make student familiar with correlation of economic variables.
- To equip students with concrete knowledge of regression analysis.
- To develop capability in students to use the hypothesis tests.
- To acquaint student with the knowledge of probability

Unit 1 Correlation Analysis

Hrs: 15

1.1 Meaning, Types and Significance of Correlation

1.2 Correlation and Causation

1.3 Methods of Studying Correlation-Scatter Diagram Method, Graphic Methods

1.4 Karl Pearson's Coefficient of Correlation

1.5 Spearman's Rank Correlation Coefficient

Unit 2 Regression Analysis

Hrs: 15

2.1 Meaning, Significance and Uses of Regression

2.2 Difference between Correlation and Regression

2.3 Regression Lines and Equations

2.4 Partial and Multiple Regressions-Theory and Problems

2.5 Standard Error of Estimate

Unit 3 Hypothesis Testing

Hrs: 15

3.1 Meaning, Importance and Procedure of testing Hypothesis

3.2 Two Types of Error in Hypothesis testing

3.3 Two Tailed and One Tailed Tests

3.4 Standard Error and Sampling Distribution; Estimation

3.5 Hypothesis Tests: t-Test, Z-Test, Chi-square Test, F-Test

Unit 4: Probability and Theoretical Distributions

Hrs: 15

4.1 Definition, Classical or a Priori Probability

4.2 Relative Frequency Theory of Probability, Subjective & Axiomatic Approach to Probability

4.3 Types of Events, Theorems of Probability; Conditional Probability, Bayes' Theorem

4.4 Binomial Distribution and Poisson Distribution- Concept, Properties and Importance

4.5 Normal Distribution-Graph, Area under Normal Distribution, Properties and Conditions for Normality, Significance of Normal Distribution.

References:

1. Chou, Ya-Lun, Statistical Analysis, Rinehart & Winston, New York
2. Croxton & Cowden, Applied general Statistics, Prentice-Hall, London and India
3. Demming, W. Edward, Theory of Sampling, John Willey & Sons, New York
4. Elhance, D. N. Fundamentals of Statistics, Kitab Mahal, Allahabad
5. Elhance, D.N.: Fundamentals for Business and Economics Kitab Mahal, Allahabad
6. Elhance, D.N. Indian Statistics Kitab Mahal, Allahabad
7. Feller, W., An Introduction to Probability theory and its applications, John Wiley
8. Gaur Ajai S. & Gaur Sanjaya : Statistical Methods For Practice & Research, SAGE
9. Goon AM, M.K.Gupta and B.Dasgupta.: Fundamentals of Statistics, Vol.1, The World
10. Gupta, S.C. An Introduction to Statistic, Sultan Chand & co., New Delhi.
11. Gupta, S. P. fundamental of Statistic, H.P.H., Bombay
12. Mounsey J., Introduction to statistical calculations, English Universities Press, Press, Ltd, Calcutta.
13. London Richard i. Levine & David S. Rubin: Statistics For Management, Pearson Education,1998
14. Murray R Spigel and Larry J. Stephens: Statistics, Magraw Hill International, Ed.
15. Gupta S.C And Mrs. Indira Gupta: Business Statistics: Himalaya Publishing House; Delhi

Course Outcomes (COs):

After completion of this course students will be able to-

Course Outcome	Course Outcome	Cognitive Level
PG-ECO-203.1	Students will be familiar with correlation of economic variables	2
PG-ECO-203.2	Students will have concrete knowledge of regression analysis.	4
PG-ECO-203.3	Students will be capable to use the hypothesis tests.	5
PG-ECO-203.4	Students would be acquainted with knowledge of probability.	5

PG-ECO -204 A: Agricultural Economics -II

Course Objectives (CObs):

- To understand Economics of Agricultural Production.
- Discuss on various issues related to Indian Agriculture labour and technology.
- To understand relation between WTO and Indian Agricultural.

Unit 1 Economics of Agricultural Production Hrs: 15

- 1.1 Nature of India's Agriculture.
- 1.2 Risk and Uncertainty: Nature, Effects and Measurement
- 1.3 The Impact of Risk Measuring Risk
- 1.4 Farm Management: Nature, Scope and Features.

Unit 2 Technology in Agriculture Hrs: 15

- 2.1 Technology in Agriculture - Meaning, Objectives and Limitations
- 2.2 Factors in new technology in Agriculture
- 2.3 Impact of technological changes on Agricultural Production
- 2.4 Recent Strategy of Agricultural Development.
- 2.5 Green House Technology.
- 2.6 Genetically-Modified Seeds in India
- 2.7 An introduction to Israel's Agriculture

Unit 3 Agricultural labour Hrs: 15

- 3.1 Problems of Agricultural labour.
- 3.2 Efficiency of Agriculture labour.
- 3.3 Wages & Income
- 3.4 Employment & Working Condition
- 3.5 Impact of mechanization on Agricultural labour
- 3.6 Problems & government measurements for improvement.

Unit 4 Indian Agricultural in World Economy Hrs: 15

- 4.1 World agriculture Production
- 4.2 India's Share of World Agriculture Production
- 4.3 Impact of World Agriculture Production on Indian Agriculture.
- 4.4 India's Agricultural exports – imports.

References: -

1. Datt R. & K.P.M. Sundharm (2007) Indian Economy, S. Chand & Co. Ltd. New Delhi.
2. Misra S.K. & V.K.Puri (2007) Indian Economy – Himalaya Publication house Mumbai.
3. Kavimandan Vijay, Krushi Arthshastra.
4. Desai, Bhalerao, Krushi arthashastra.
3. Wani Nita., Krushi Arthshastra, Prashant Publication, Jalgaon
4. Ramesh Singh, Indian Economy, Tata Mc-Graw Hill, Publication
5. Chavhan N.L., Bhartiya Arthvyavstha, Prashant Publications, Jalgaon.
6. Chavhan N.L., Gaikwad Manoj, (2019), Agricultural Economics, Prashant Publications, Jalgaon.
7. Annual Report department of agriculture cooperation and farmer's welfare.
8. Department of Agriculture, Govt. of India, Annual Reports.

Course Outcomes (COs):

After completion of this course students will be able to-

Course Outcome	Course Outcome	Cognitive Level
PG-ECO-204A.1	To understand Economics of Agricultural Production.	2
PG-ECO-204A.2	Discuss on varies issues related to Indian Agriculture labour and technology.	2
PG-ECO-204A.3	To understand relation between WTO and Indian Agricultural.	2

PG-ECO -204 B: Rural Development

Course Objectives (CObs):

- Discuss on Dimensions of Rural Development.
- To understand relation between Poverty and Unemployment.
- Discuss on Recent Rural Problems and Recent Programmes of Rural Development.

Unit 1 Introduction to Rural Economy

Hrs: 15

- 1.1 Concept of Rural Development.
- 1.2 Nature of Rural Economy
- 1.3 Structure of Rural Economy
- 1.4 Scope and Importance of Rural Development
- 1.5 V.M. Dandekar's Approach to Rural Development

Unit 2 Dimensions of Rural Development

Hrs: 15

- 2.1 Agricultural Growth in India
- 2.2 Irrigation
- 2.3 Green Revolution
- 2.4 Agrarian Reforms
- 2.5 Rural Electrification
- 2.6 Rural Transport

Unit 3 Recent Rural Problems in India

Hrs: 15

- 3.1 Rural Poverty – Nature, Causes and Remedies
- 3.2 Rural Unemployment - Nature, Causes and Remedies
- 3.3 Rural Indebtedness – Magnitude, Causes
- 3.4 Role of SHGs and Micro Finance in this context.
- 3.5 Rural Industrialization.
- 3.6 Agriculture Distress

Unit 4 Recent Programmes of Rural Development

Hrs: 15

- 4.1 Deen Dayal Upadhyay Grameen Kaushal Yojana:
- 4.2 Roshni: Skill Development Scheme for Tribals:
- 4.3 Heritage Development and Augmentation Yojana (HRIDAY)
- 4.4 Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)
- 4.5 Skill India and Start Up India Programme.

References: -

- 1) Dandekar V.M. and Rath N. – Poverty in India
- 2) Sharma Anju – Dynamics of Cropping Pattern
- 3) Government of India – Evolution of Community Development Programmeme in India
- 4) Desai, Vasant - Study of Rural Economics, Himalaya Publishing Company, New Delhi.
- 5) Krishnamurthy V.T. – Community Development in India
- 6) Krishanaswamy D.R. – Fundamentals of Co-operation.

Course Outcomes (COs):

After completion of this course students will be able to-

Course Outcome	Course Outcome	Cognitive Level
PG-ECO-204B.1	Students will able to understand dimensions of Rural Development.	2
PG-ECO-204B.2	Will understand relation between Poverty and Unemployment.	2
PG-ECO-204B.3	Will acquire knowledge on Recent Rural Problems and Recent Programmemes of Rural Development.	3

PG-ECO -204 C: Demographic Economics

Course Objectives (CObs):

- Discuss on Dimensions of Demographic Economics.
- To understand Theory of Population.
- Discuss on Recent Trends in World Population.

Unit 1 Demography

Hrs: 15

- 1.1 Demography - Meaning, Nature, Scope and Importance.
- 1.2 Malthus Theory of Population
- 1.3 Optimum Theory of Population.
- 1.4 Theory of Demographic Transition
- 1.5 Components of Population Growth and their Interdependence, Population and Economic Development.

Unit 2 Measures and Quality of Population

Hrs.15

- 2.1 The Concept of Quality of Population
- 2.2 Factors affecting Quality of Population
- 2.3 Measures of Crude Birth Rate, General Fertility Rate, Total Fertility Rate, Reproduction Rate, Gross Reproduction Rate and Net Reproduction Rate
- 2.4 Crude Death Rate – Infant Mortality, Life expectancy

Unit 3 Population in India

Hrs.15

- 3.1 Population Trends in Recent Years in India.
- 3.2 Evolution of Population Policy
- 3.3 Woman Empowerment, Family Planning Programmes and its Consequences
- 3.4 Policies related to Health, Nutrition, Education, Training.

Unit 4: Trends in World Population

Hrs.15

- 4.1 Population Trends in Recent Years.
- 4.2. Population Explosion
- 4.3 Growth of World Population - Developed and Developing Nations.
- 4.4 Pattern of age and Sex Structure in Developed and Developing Nations.
- 4.5 Determinants of Age and Sex Structure – Age Pyramids and Projections.
- 4.6 Human Development Index, Gender Equality.

Recommended Books:

1. Agarwal S.N. (1972), India's Population Problem, Tata McGraw- Hill, Co., Bombay
2. Bose, A (1996) India's Basic Demographic Statistics, B.A. Publishing Corporation, New Delhi.
3. Bogue, D.J. (1971), Principles of Demography, John Wiley , New York.
4. Chenery H. and T.N. Srinivasan (Eds.) (1989), Hand Book of Development Economics, Vol. 1 & 2 Elsevier, Amsterdam , et. 5. Choubey,P.K. (2000), Population Policy in India, Kanishka Publications, New Delhi.
6. Coale A. J. and L.M. Hoover (1958) , Population Growth and Economic Development in Low Income Countries : A Case Study of India's Prospects, Princeton University Press, Princeton.
7. Gulati , S.C. (1988), Fertility in India ; An Econometric Study of a Metropolis, Sage, New Delhi.
8. Simon, J.L. (1992) Population and Development in Poor Countries, Princeton University Press.
9. Srinivasan, K. (1998), Basic Demographic Techniques and Applications Sage, New Delhi.
10. Srinivasan K and A. Shariff (1998), India: Towards Population and Demographic Goals, Oxford University Press, New Delhi.
11. Sryrock, H.et. al (1973), The Methods and Materials of Demography, US Department of Commerce, Washington D.C.

Course Outcomes (COs):

After completion of this course students will be able to-

Course Outcome	Course Outcome	Cognitive Level
PG-ECO-204C.1	Students will able to understand dimensions of Demographic Economics.	2
PG-ECO-204C.2	Will understand relation population and economic development.	2
PG-ECO-204C.3	Will acquire knowledge on Recent Trends in India's population and World Population.	3

AUDIT COURSES
SEMESTER-I
(Compulsory Course: Campus-level)
PG-AC-101: Practicing Cleanliness

Course Objectives (CObs):

To make students aware of Clean India Mission and inculcate cleanliness practices among them

-
- Awareness programme on
 - Swachh Bharat Abhiyan (Clean India Mission)
 - Clean Campus Mission
 - Role of youth in Clean India Mission
 - Cleaning activities inside and surroundings of Department buildings.
 - Tree plantation and further care of planted trees
 - Waste(Liquid/Solid/e-waste) Management, Japanese 5-S practices
 - Planning and execution of collection of Garbage from different sections of University campus
 - Role of youth in power saving, pollution control, control of global warming, preservation of ground water and many more issues of national importance.
 - Cleanest School/Department and Cleanest Hostel contests
 - Painting and Essay writing competitions
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Course Outcomes (COts):

After the completion of the course, students will be able to;

Course Outcome	Course Outcome	Cognitive Level
PG-AC101.1	Identify need at of cleanliness at home/office and other public places.	02
PG-AC101.2	Plan and observe cleanliness programmes at home and other places.	02
PG-AC101.3	Practice Japanese 5-S practices in regular life	03

SEMESTER-II
(Optional: Campus-level)
(Personality and Cultural Development Related)

PG-AC-201(A): Soft Skills

Course Objectives (CObs):

To inculcate different soft skills among students

Unit 1. Introduction to soft skills (02 Hrs)

Formal definition, Elements of soft skills, Soft vs. Hard skills, Emotional quotient, Goal setting, life skills, Need for soft skills, Communication skills, Etiquettes & Mannerism.

Unit 2. Self-Assessment (04 Hrs)

Goal setting, SWOT analysis, attitude, moral values, self-confidence, etiquettes, non-verbal skills, achievements, positive attitude, positive thinking and self-esteem. Activity: The teacher should prepare a questionnaire which evaluate students in all the above areas and make them aware about these aspects.

Unit 3. Communication Skills (08 Hrs)

Types of communication: Verbal, Non-verbal, body language, gestures, postures, gait, dressing sense, facial expressions, peculiarity of speaker (habits).

Rhetoric speech: Prepared speech (topics are given in advance, students get 10 minutes to prepare the speech and 5 minutes to deliver, Extempore speech (students deliver speeches spontaneously for 5 minutes each on a given topic), Storytelling (Each student narrates a fictional or real life story for 5 minutes each), Oral review (Each student orally presents a review on a story or a book read by them)

Drafting skills: Letter, Report & Resume writing, business letters, reading & listening skills

Activity: The teacher should teach the students how to write the letter, report and build resume. The teacher should give proper format and layouts. Each student will write one formal letter, one report and a resume.

Unit 4. Formal Group Discussion, Personal Interview & Presentation skills (04 Hrs)

Topic comprehension, Content organization, Group speaking etiquettes, driving the discussion & skills.

Preparation for personal interview: dress code, greeting the panel, crisp self-introduction, neatness, etiquettes, language tone, handling embarrassing & tricky questions, graceful closing.

Activity: Each batch is divided into two groups of 15 to 14 students each. Two rounds of a GD for each group should be conducted and teacher should give them feedback. Mock interview are to be conducted.

Unit 5. Aptitude and analytical skills (08 Hrs)

Quantitative aptitude, Numerical reasoning, verbal reasoning, diagrammatic test, situational tests, logical thinking.

Analytical skills: Definition, Types, problem solving

Unit 6. Life skills(04 Hrs)

Time management, critical thinking, sound and practical decision making by dealing with conflicts, stress management, leadership qualities

Activity: The teacher can conduct a case study activity to train students for decision making skills. The teacher should conduct a session on stress management and guide students on how to manage stress. The teacher may conduct a stress relieving activity in the class. He/she may counsel students individually to know their problems and guide them on dealing with them effectively.

Books:

1. Basics of Communication in English: Francis Sounderaj, MacMillan India Ltd.
 2. English for Business Communication: Simon Sweeney, Cambridge University Press
 3. An Introduction to Professional English and Soft Skills: Das, Cambridge University Press
 4. Quantitative Aptitude: R.S. Agrawal
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Course Outcomes (COs):

After the completion of the course, students will be able to;

Course Outcome	Course Outcome	Cognitive Level
PG-AC 201A.1	Identify their lacunas about some soft skills and try to overcome the same.	02
PG-AC 201A.2	Practice learned soft skills in real life and do their jobs more effectively	03
PG-AC 201A.3	Identify their lacunas about some soft skills and try to overcome the same.	02

PG-AC-201(B): Practicing Sports Activities

Course Objectives (CObs):

To motivate students towards sports and provide them required training

SR NO.	NAME OF THE SPORT/GAME (Select ONE of the Following)	SYLLABUS OF THE COURSE	TIMING (02 Hours in a Week)	SEMESTER
1	Volleyball	<ul style="list-style-type: none">• General Fitness• Basic Fitness• Specific Fitness• History of the Game• Basic Skill of the Game• Major Skill of the Game• Technique & Tactics of the Game• Game Practice	Morning: 07 to 09 AM OR Evening: 05 to 07 PM	Total 30 Hours in Each Semester
2	Athletics			
3	Badminton			
4	Cricket			
5	Basketball			
6	Handball			
7	Kabaddi			
8	Kho-Kho			
9	Table-Tennis			
10	Swimming			

Course Outcomes (COts):

After the completion of the course, students will be able to;

Course Outcome	Course Outcome	Cognitive Level
PG-AC201B.1	Identify one or more sports of their choice and develop more interest to participate at University/National level sport events.	02
PG-AC201B.2	Practice the learned sports activities regularly in real life	03

PG-AC-201(C): Practicing Yoga

Course Objectives (COBs):

To motivate students towards yoga and provide them required training

- Yog :Meaning, Definition & Introduction, Objectives
 - Primary Introduction of Ashtanga Yoga
 - Preparation of Yogabhyas
 - Omkar Sadhana, Prayer, Guru Vandana
 - Sukshma Vyayamas
 - Suryanamaskar(15 Postures)
 - Asanas :
 - Sitting (Baithaksthiti) - Vajrasana, Padmasan, Vakrasan, Ardha-Pashchimotanasanan
 - Supine (Shayansthiti) - Uttan Padaasan(Ekpad/Dwipad), Pavanmuktasana, Viparitakarani Aasan, Khandarasan, Shavasana
 - Prone (Viparitshayansthiti) - Vakrahasta, Bhujangasana, Saralhasta Bhujangasana, Shalabhasana(Ekpad/Dwipad), Makarasana
 - Standing (Dhandsthiti) - Tadasana , TiryakTadasana, Virasana, Ardh Chakrasana
 - Primary Study of Swasana: Dirghaswasana, Santhaswasana, JaladSwasana - 6 Types
 - Pranayama : Anuloma-viloma, Bhramari
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Course Outcomes (COs):

After the completion of the course, students will be able to;

Course Outcome	Course Outcome	Cognitive Level
PG-AC 201C.1	Identify and practice some Yoga asanas regularly in their life to remain healthy.	02
PG-AC 201C.2	Provide guidance and practice about Yoga to their friends, parents and relatives.	02

PG-AC-201(D): Introduction to Indian Music

Course Objectives (CObs):

To motivate students towards Indian music and provide them minimum required training

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- Definition and brief about generation of Swar, Saptak, Thaata, Raag, Aavartan, Meend, Khatka, Murkee, Taal, Aalaap etc.
 - Taal and its uses - Treetaal, Daadraa, Zaptaal, Kervaa.
 - Information of Badaakhyaal, Chhotaakhyaal (one), Sargam, Lakshangeet (information)
 - Detailed information of Tambora
 - Detailed information of Harmonium and Tablaa.
 - Five filmy songs based on Indian Classical Music (Theory and Presentation)
 - Sound Management - Basic information of Sound Recording (including Practicals)
 - Composition of Music as per the Story
 - Preparing news write-ups of the Seminars, Library Musical Programmes held at the nearest Akashwani, by personal visits.
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Course Outcomes (COs):

After the completion of the course, students will be able to;

Course Outcome	Course Outcome	Cognitive Level
PG-AC 201D.1	Identify different types of music.	02
PG-AC 201D.2	Develop more interest to learn and practice Indian music.	05

Carrier Opportunity in Economics

Economists work as consultants, public policy analysts, financial managers, health insurance analysts and much more. One thing most of these career paths have in common, however, is the need for a master's degree to get your foot in the door and/or work your way through the ranks. Types of careers in economics that typically either require or benefit from a master's degree include:

- Economist
- IES (Indian Economic Service)
- Reserve Bank of India Special Officers (Grade B)
- Consultant
- Professor
- Policy Analyst
- Budget Analyst
- Market Researcher
- Data Scientist
- Statistician

WORK AS A GOVERNMENT ECONOMIST

According to the most recent statistics from the Bureau of Labor Statistics, 36 percent of economists work for the government at the local, state and federal levels. Government economists serve in a wide variety of positions involving policy research and analysis. Economists play an important role at each level of the government as policymakers use their insights when drafting, reviewing and implementing policies and programmes. Working in the public sector, while not always the highest-paying option for master's degree holders, provides an opportunity to work on important societal problems, potentially improving the lives of others. Public sector jobs can also offer more security than some private sector jobs.

WORK AS A PRIVATE SECTOR ECONOMIST

Jobs in the private sector often require a Master's in Economics in order to gain even entry-level employment. For those who wish to enter the private sector, the knowledge and skills obtained in pursuit of a master's degree will be valuable for a wide range of careers. Economic consultants, for example, provide expert insight into complex financial and economic situations and offer expert testimony in major litigation cases. Consultants also apply economic analysis to help businesses evaluate and implement strategic decisions. Master's programmes that specialize in applied economics are particularly beneficial for students who wish to enter the private sector, as this discipline focuses on the application of economic principles in the real world.

OTHER OPPORTUNITIES WITH A MASTER'S IN ECONOMICS

There are many other career paths and job opportunities for students of economics. For instance, you may want to assume a consulting or research role at one of the many economic "think tanks" in the country that help shape public policy decisions. Or if you have an interest in international development, a Master's in Economics can give you the skills to help solve global problems and prop up economically under-developed regions to the benefit of the people living there. Of course, there's also the academic route for economists. A Master's Degree in Economics is often the minimum requirement to teach economics at most two-year colleges; the Doctor of Philosophy degree is necessary for a faculty position in economics at most four-year colleges and universities. One of the best ways to set you up for a successful career in economics is to complete a master's degree.
