

DEPARTMENT OF ECONOMICS

HIMACHAL PRADESH UNIVERSITY

[NAAC Accredited 'A' Grade University]

Summer Hill, Shimla-171005



Regulations and Syllabus
M.A. Programme in Economics

Annexure 'A'

[CBCS]

Approved by Board of Studies held on 17.11.2022

Approved by Faculty of Social Sciences

Department of Economics

Syllabus of Master of Arts in Economics (MA Economics)

The following Choice Based Credit System for M.A. in Economics to be offered by the PG Centre to regular students enrolled in the department only, prepared and proposed by the Department Council for implementation w.e.f. the academic session 2022-23 onwards was considered and approved by PG BoS on 17/11/2022 and by Faculty of Social Sciences on The scheme is placed before the Academic Council/ Executive Council for consideration and approval.

Table 1: Semester wise Courses with Codes, Credits, Contact Hours and Marks Scheme

Semester	Course Code	Nature of Course	Course Name	Credits	Theory Contact Hours (L-4Hrs/Tutorial -2 hour)		Marks Scheme	
					Lecture Credits	Tutorial (Seminar/ Assignment/GD/Q uiz) Credits	Theory	Internal Assessment
I	ECON111	DSC	Micro-Economics	6	4	2	80	20
	ECON112	DSC	Elementary Mathematics for Economics	6	4	2	80	20
	ECON113	DSC	International Economics	6	4	2	80	20
	ECON114	DSC	Labour Economics	6	4	2	80	20
	Sub Total -1			24	16	8	Marks=400	
II	ECON121	DSC	Macro-Economics	6	4	2	80	20
	ECON122	DSC	Basic Statistics	6	4	2	80	20
	ECON123	DSC	Money and Banking	6	4	2	80	20
	ECON124	DSC	History of Economic Thought	6	4	2	80	20
	ECON125	GE-I	Fundamental Concepts in Economics	4	3	1	80	20
	Sub Total -1			28	19	9	Marks=500	
III	ECON231	DSC	Agricultural Economics	6	4	2	80	20
	ECON232	DSC	Gender Economics	6	4	2	80	20
	ECON233	DSC	Research Methodology	6	4	2	80	20
	ECON234	DSE-I	Economics of Population	6	4	2	80	20
	ECON235	OR DSE-II	Econometrics					
	ECON236	AEC	Contemporary Economic Issues and data handling	4	3	1	80	20
	Sub Total - 3			24	16	8	Marks=400	
IV	ECON241	DSC	Indian Economy	6	4	2	80	20
	ECON242	DSC	Public Finance	6	4	2	80	20
	ECON243	DSC	Economics of Development and Planning	6	4	2	80	20
	ECON244	DSE-III OR	PG Dissertation	6	-	-	80	20
	ECON245	DSE-IV	Industrial Economics	6	4	2	80	20
	ECON246	GE-II	Economy of Himachal Pradesh	4	3	1	80	20
	Sub Total - 4			28	19	9	Marks=500	
Grand Total* (1+2+3+4) [* Grand Total includes only courses offered by the Department of Economics to students enrolled in MA Economics Course]			104	70	34	Total Marks = 1800		

Note: Course code number ECON236 is Non-CGPA Ability Enhancement Course (AEC).

NOTE: In Reference to Table 1 the Following Points A – E Are Relevant:

A) Course code descriptions: the codes for the four types of courses on offer are explained as follows:

1. Discipline Specific Core Courses (DSC), e.g.,ECON111
2. Discipline Specific Elective Courses (DSE) e.g.,ECON234
3. Generic Elective (GE) e.g.,ECON125 & ECON246
4. Ability Enhancement Course (AEC) ECON236

Here: ECON111 denotes Economics 1st year, 1st Semester and 1st Course. Similarly, ECON234 denotes Economics 2nd year, 3rd Semester and 4th Course.

B) Regarding DSE Courses

1. Semester III: Any one course to be opted from course-DSE-I and DSE-II.
2. Semester IV: Any one course to be opted from course-DSE-III and DSE-IV (except foreign national students as explained in III i) c) below.
3. In case of regular students, the Department will offer only one Elective Course in Semesters III and IV. A second Elective Course will be offered only if there are a minimum of 05 students opting for the same and will further depend upon the availability of faculty.
4. Evaluation of Dissertation and Viva Voce by External Examiner (i.e., from university other than HPU) specifically for ECON244 – i.e., PG Dissertation. Maximum 7 (seven) dissertations to be evaluated by one external examiner.

C) Regarding GE Courses

- i. Each student of the M.A. Programme in the subject of Economics will complete **two** GE courses during the duration of the degree programme, opting for **not** more than one GE course per semester from any other department of the Faculty of Social Sciences or other Faculties as permitted by this University.
- ii. This Department shall offer Generic Elective (GE) Courses in the II and IV Semesters.
- iii. GE Courses offered in the semesters II and IV respectively of the M.A. Programme in the subject of Economics will be opened as interdisciplinary courses to all full-time students registered in any regular master's programme of the Faculty of Social Sciences or other Faculties as permitted by this University.
- iv. Such GE Courses offered by the Department of Economics are:
 - Open to regular students of the PG Centre only in any regular master's programme of the Faculty of Social Sciences or other Faculties as permitted by this University.
- v. The total number of such students accepted in each semester will not exceed the student strength in respective semester of M.A. Economics programme.
- vi. The criterion admission to GE courses in the Department will be as determined by the Department Council or University guidelines that may be issued for this purpose.

vii. GE courses will be offered to private students only by ICDEOL.

II SCHEME OF COURSES

Four categories of Courses are on offer as follows:

Table 2: The number & type of courses to be completed in each semester

Courses	Semester				ALL Semesters I - IV
	I	II	III	IV	
Discipline Specific Core Courses (DSC) including PG Dissertation	04	04	03	03	14
Discipline Specific Elective Courses (DSE)	-	-	01	01	02
Generic Elective (GE)	-	01	-	01	02
Ability Enhancing Course (AEC)	-	-	01	-	01
Total Number of Courses	04	05	05	05	19

III SCHEME OF EXAMINATION

MARKS Allotted to each paper:

Each DSC, DSE and GE Course shall be of 100 marks and qualifying marks in each Course shall be 40 per cent. The break up is as follows: 32 marks out of 80 (i.e., 40 % of 80) and 8 marks out of 20 (i.e., 40 % of 20).

Each AEC shall be of 100 marks and qualifying marks in each Course shall be 40 marks. The break up is as follows: 32 marks out of 80 (i.e., 40 % of 80) and 8 marks out of 20 (i.e., 40 % of 20). The Internal Assessment of 20 marks shall comprise of 2.5 marks each for: i) Class Test(s)/Assignment(s) and ii) Presentation(s)/Seminar(s) and 5 marks for attendance.

Assessment (CCA) and End-Semester Examination (ESE), failing which the student shall be considered failed in the concerned course and shall have to take the exam for the said course again. In case the student fails the CCA, his form for ESE shall be withheld and a notice put up in the department to the effect. The student, then, shall have to again take a Mid-term (Minor) Test and submit an assignment in the concerned course and pass the same. If the student fails the ESE, he/she shall have to take the concerned end-semester examination again.

Question paper setting for AEC (Ability Enhancement Course) shall be external, under the aegis of the CoE, however the evaluation shall be internal, by the concerned Department.

NOTE: The pattern of assessment for Distance Education and Open Learning shall follow the same pattern as followed in the PG Dept. However, the component of attendance shall not be counted and the entire internal assessment shall be based on seminar/assignment/term paper. The pattern of assessment for Private candidates shall not have the component of internal assessment. They shall have an End-semester Examination, on the same pattern as Regular and ICDEOL, but of 100 marks.

- i) **For regular students** enrolled in MA Economics course in PG Centre, HPU, Regional Centre of HPU at Dharamsala and Centre for Evening

Studies, HPU.

- a) The distribution of 100 marks for DSC and DSE courses shall be 80 for Theory and 20 for Internal Assessment (except for PG Dissertation 4th Semester). The Internal Assessment of 20 marks shall comprise of 5 marks each for: i) Class Test(s), ii) Assignment(s) and iii) Presentation(s)/Seminar(s) and iv) attendance.

Marks for attendance are given as per following criteria:

>75% but < 80%	:	1 Mark
80% to 85%	:	2 Marks
>85% but <90%	:	3 Marks
90% to 95%	:	4 Marks
>95%	:	5 Marks

- b) PG Dissertation IV Semester will be:
- Supervised by faculty who are teaching PG classes of Economics.
 - Evaluation will be of 80 marks for Dissertation and 20 marks for Viva Voce by an External Examiner (i.e., from university other than HPU) duly recommended by the Department Council and approved by the competent authority, specifically for– i.e., PG Dissertation.
 - Not more than 7 (seven) dissertations to be evaluated by one external examiner.
 - Remuneration for Evaluation of PG Dissertation; viva-voce and TA/DA claim of External Examiner(s) are to be borne by this University.
- c) **For Foreign Nationals enrolled as regular students, PG Dissertation is compulsory and is to be designated as DSE(ECON244) in place of Industrial Economics. Also, there will be only ONE DSE on offer to foreign national regular students namely ECON 234 i.e., Economics of population.**
- d) The GE course *offered to students of other subjects/faculties* (as permitted by this University) will carry a total of 100 marks distributed as: 80 marks for Theory and 20 marks internal assessment. The Internal Assessment of 20 marks shall comprise of 5 marks each for: i) Class Test(s), ii) Assignment(s) and iii) Presentation(s)/Seminar(s) and iv) attendance.
- Marks for attendance are given as per criteria for DSC & DSE specified at a) above.

- ii) **For regular students** enrolled in MA (Economics) course in colleges affiliated to HP University, Shimla.
- a. The distribution of 100 marks for DSC and DSE courses shall be 80 for Theory and 20 for Internal Assessment (except for PG Dissertation 4th Semester). The Internal Assessment of 20 marks shall comprise of 5 marks each for: i) Class Test (s), ii) Assignment(s) and iii) Presentation(s)/Seminar(s) and iv) attendance.

Marks for attendance are given as per following criteria:

>75% but < 80%	:	1 Mark
----------------	---	--------

80% to 85%	:	2 Marks
>85% but <90%	:	3 Marks
90% to 95%	:	4 Marks
>95%	:	5 Marks

- b) PG Dissertation for regular students enrolled in the IV Semester in colleges will be:
- Supervised by faculty who are teaching PG Economics classes.
 - Evaluation will be of 80 marks for Dissertation and 20 marks for Viva Voce by an External Examiner from HP University, Shimla duly recommended by the Subject Department of the College and approved by the competent authority, specifically for ECON244 – i.e., PG Dissertation.
 - Not more than 7 (seven) dissertations to be evaluated by one external examiner.
 - Remuneration for Evaluation of PG Dissertation; viva-voce and TA/DA claim of External Examiner(s) are to be borne by the College concerned.
- c) **For Foreign Nationals enrolled as regular students, PG Dissertation is compulsory and is to be designated as DSE (ECON244) in place of Industrial Economics. Also, there will be only ONE DSE on offer to foreign national regular students namely ECON 234 i.e., Economics of population.**
- d) The GE course *offered to students of other subjects/faculties* (as permitted by this University) will carry a total of 100 marks distributed as: 80 marks for Theory and 20 marks internal assessment. The Internal Assessment of 20 marks shall comprise of 5 marks each for: i) Class Test(s), ii) Assignment(s) and iii) Presentation(s)/Seminar(s) and iv) attendance. Marks for attendance are given as per criteria for DSC & DSE specified at a) above.
- e) The distribution of 100 marks for each of the AEC shall be 80 for Theory and 20 for Internal Assessment. The Internal Assessment of 20 marks shall comprise of 2.5 marks each for: i) Class Test(s)/Assignment(s) and ii) Presentation(s)/Seminar(s) and 5 marks for attendance. Marks for attendance are given as per criteria for DSC & DSE specified at a) above.
- iii) **In case of students of distance education i.e., ICDEOL:**
- a) Each DSC & DSE paper will carry a total of 100 marks distributed as: 80 marks for Theory and 20 marks for Compulsory Assignment. Each Compulsory Assignment will comprise of five questions i.e., one question per Unit for each of the DSC & DSE courses Assessment (except for PG Dissertation IV Semester).
- b) PG Dissertation IV Semester, will be:
- Supervised by faculty of ICDEOL who are teaching PG Economics classes. If the number of students opting for the Dissertation is large, then supervisors from PG Centre, CES and Regional Centre

- may be allowed by following all rules/guidelines and seeking approval of competent authority.
 - evaluation of the dissertation will be of 80 marks for Dissertation and 20 marks for Viva Voce by an External Examiner (i.e., from university other than HPU) duly recommended by the Department Council and approved by the appropriate university authority, specifically for ECON244 – i.e., PG Dissertation.
 - Not more than 7 (seven) dissertations to be evaluated by one external examiner.
 - Remuneration for Evaluation of PG Dissertation; viva-voce and TA/DA claim of External Examiner(s) are to be borne by ICDEOL.
- c) **For Foreign Nationals enrolled as regular students, PG Dissertation is compulsory and is to be designated as DSE (ECON244) in place of Industrial Economics. Also, there will be only ONE DSE on offer to foreign national regular students namely ECON 234 i.e., Economics of population.**
- d) The GE course offered to *students of other subjects/faculties* (as permitted by ICDEOL) will carry a total of 100 marks distributed as: 80 marks for Theory and 20 marks for five compulsory assignments for each GE course.
- e) The distribution of 100 marks for each of the AEC shall be 80 for Theory and 20 for Internal Assessment. The Internal Assessment of 20 marks shall comprise of 2.5 marks each for: i) Class Test(s)/Assignment(s) and ii) Presentation(s)/Seminar(s) and 5 marks for attendance.

Marks for attendance are given as per criteria for DSC & DSE specified at a) above.

- iv) **If private students are allowed by this University:**
 - a) Each DSC, DSE and GE Course shall be of 100 marks and there will be no internal assessment/compulsory assignment.
 - b) Each AEC paper will carry a total of 100 marks and there will be no internal assessment/compulsory assignment.
 - c) GE courses to be offered to private students of MA (Economics) will be decided by ICDEOL.
 - d) GE Economics courses will be offered to private students of other subjects/faculties as allowed and offered by ICDEOL.
 - e) The Dissertation (IV Semester) i.e., ECON244 is *not* to be offered to private students.
 - f) If offered to private students, to ensure parity with Regular and ICDEOL students:
 - the evaluation of the dissertation will be of 80 marks for Dissertation and 20 marks for Viva Voce by External Examiner(s) (i.e., from university other than HPU) duly recommended by the Department Council and approved by the appropriate university authority, specifically for ECON244 – i.e., PG Dissertation.
 - Not more than 7 (seven) dissertations will be evaluated by one

external examiner.

- Remuneration for Evaluation of PG Dissertation; viva-voce and TA/DA claim of External Examiner(s) are to be borne by ICDEOL because private students are admitted to MA (Economics) through ICDEOL.

IV FORMAT OF QUESTION PAPERS

a) For: i) Regular students of PG Centre/Regional Centre; Dharamsala/Centre for Evening Studies HPU; ii) Regular students enrolled in colleges affiliated to HPU & iii) ICDEOL

- i. For DSC & DSE papers: Compulsory question consists of 10 short answer questions of 2 marks each i.e., total 20 marks. Five long answers questions carrying 12 marks each per unit i.e., total 60 marks.
- ii. For GE papers: Compulsory question consists of 10 short answer questions of 2 marks each i.e., total 20 marks. Five long answers questions carry 12 marks per unit i.e., total 60 marks.
- iii. For AEC papers: Compulsory question consists of 10 short answer questions of 2 marks each i.e., total 20 marks. Five long answers questions carry 12 marks each, per unit i.e., total 60 marks.
- iv. Duration of DSC, DSE & GE Papers will be three (3) hours.

b) For Private Students

(If Private students are allowed by this University)

- i. For DSC & DSE papers: Compulsory question consists of 10 short answer questions of 2 marks each i.e., total 20 marks. Five long answers questions carrying 16 marks each per unit i.e., total 80 marks.
- ii. For GE papers: Compulsory question consists of 10 short answer questions of 2 marks each i.e., total 20 marks. Five long answers questions carry 16 marks per unit i.e., total 80 marks.
- iii. For AEC papers: Compulsory question consists of 10 short answer questions of 2 marks each i.e., total 20 marks. Five long answers questions carry 16 marks each, per unit i.e., total 80 marks.
- iv. Duration of DSC, DSE & GE Papers will be three (3) hours.

V General Information

1. Number of seats, eligibility, basis of admission, age limit, reservation, fee structure, scheme of examination and qualifying marks will be as per the University rules as prescribed in the Himachal Pradesh University Ordinance and Handbook of Information from time to time.

2. In case of ambiguity or conflict in provisions, the HP University Ordinance shall prevail.
3. The content not covered herein will be covered as per HPU regulations 2022 onwards Choice Based Credit System (CBCS) for Post-Graduate (PG) Classes

Master of Arts in Economics (MA Economics)

Programme Outcome

Over the duration of study, students are expected to acquire:

-) **Economic reasoning** to view and analyze the working of the world by evaluating the cost of an action with the benefits generated.
-) **Ability to identify and solve of economic problems** so as to contribute to the development of the subject through creative analysis and evaluation.
-) **Critical and creative thinking** to analyze everyday problems faced by society, evaluate specific policy proposals, compare arguments with different conclusions to a specific societal issue and assess the role played by assumptions in such arguments.
-) **Scientific temperament** of logical and rational thinking.
-) **Ethically** articulate and apply values and ideals that demonstrate awareness of ongoing socio-economic challenges.
-) **Analytical tools** for application of appropriate quantitative/qualitative techniques used in economics along with ICT, software etc.
-) **Resource management** to plan usage of resources at different levels.
-) **Ability of research and development** to apply principles of economics to analyze and evaluate issues of relevance.
-) **Specialization and employability** through development of a deeper understanding, creativity, originality, analytical and critical skills.
-) **Research temperament** through the use statistical and econometric tools and techniques that help in drawing inferences about various issues of economics importance and thereby contribute to the development of the subject.

Programme Specific Outcome

Upon completion of this Master's degree programme the students are expected to attain:

-) An understanding of the theoretical and practical dimensions of economics;
-) A scientific temperament through provisioning of concurrent input;
-) Exposure to a wide range of economic specializations and familiarization with different branches of economics.

DSC Course Code: ECON-111
MICRO-ECONOMICS

Credit	Lecture	Tutorial	Practical
6	4	2	0

Course Outcomes

By the end of the course, students will be able to:

-) Comprehend consumer behaviour in all its ramifications.
-) Locate optimum products and factors combinations.
-) Describe different market conditions so as to understand equilibrium in price and output combinations.
-) Examine various factors of production and their price determination.
-) Discuss welfare economics and various criteria to determine the society's welfare.

Unit-I

Role and significance of assumption in economic models, Empirical testing of economic models.: The Slutsky theorem; Compensated demand curves; The revealed preference theory. Duality theory, Dual properties of utility and expenditure function, Shepard's Lemma inter-temporal choice in consumption.

Unit-II

Recent developments in the theory of limit pricing; Models of Sylos-Labini. F, Modigliani and Bhagwati; Baumol's theory of contestable markets; Public utility pricing; inter-temporal and intra temporal equity.

Unit-III

Markets with Asymmetric information: Hidden Characteristics adverse selection and Moral hazards in insurance, Banking, Labour market & second-hand product markets. Pricing and output behaviour under oligopoly: Collusive and non-collusive models: Extensions of the oligopoly: models: Models of Baumol, Marris and Williamson,

Unit-IV

Theory of Distribution: The adding up Problem and Euler's theorem. Modern theory of distribution. Theory of Rent: Ricardian and Modern. IS-LM curve theory of interest, Modern theory of wages; wage determination under trade unionism., Marxian and Kalecki's theories of profit.

Unit-V

Welfare Economics: Marshallian and Robbinsian concepts Pigouvian Welfare Economics. New Welfare Economics: Pareto's optimum and externalities; Compensation principle.

SUGGESTED READINGS

- American Economic Association (1979). Readings in Welfare Economics,
- American Economic Association (1950), Readings in the Theory of Income Distribution, George Allen and Unwin, London.
- Archibald, G.C., Ed. (1971), Theory of the Firm, Penguin Books, Harmondsworth.
- Baumol, W.J. (1982) Economic Theory and Operations Analysis, 4th ed, Prentice Hall of India, New Delhi.
- Bronfenbrenner, M. (1971). Income Distribution: Theory Macmillan, London.
- Bruce, N. and R. Boadway (1984). Welfare Economics, Basil Blackwell, Oxford.
- DaCosta, G.C. (1980). Production, Prices and distribution, Tata McGraw Hill, New Delhi
- Deaton, A.S. & J. Muehlhauser (1980). Economics and Consumer Behaviour, Cambridge University Press, Cambridge.
- Ferguson, R. (1968). Microeconomic Theory. Cambridge University Press, London.
- Friedman, R. Price Theory. Kalyani Publishers, Ludhiana.
- Friedman, M. (1953). Essays in Positive Economics, Chicago University Press, Chicago.
- Gould, J. P. and C.E. Ferguson. Micro-Economic Theory. Irwin, Homewood, Illinois.
- Graaff, J. De V. (1957). Theoretical Welfare Economics. (Cambridge University Press.) Vikas Publishing House, New Delhi
- Gravel H. and R. Rees (1981). Microeconomics, Longman, London
- Green, H.A.J. Consumer Theory. Philips L. Applied Consumption Analysis.
- Guirk J. and R. Saposnick (1963). Introduction of General Equilibrium and Welfare Economic, McGraw-Hill, New York.
- Henderson, R. and Quandt, R. Microeconomics Theory. McGraw Hill.
- Hirshleifer, J. (1976). Price Theory and Applications., Prentice Hall, New Delhi.
- Jones, H. G. (1976). An Introduction to the Modern Theories of Economic Growth, McGraw Hill Koga-Kusha, Tokyo.
- Kamerschen, D.R. (Ed), (1969). Readings in Microeconomics, John Wiley and Sons, New York.
- Kogiku, K.C. (1971). Microeconomics Models, Harper and Row, New York.
- Koutsoyiannis, A. (1985). Modern Microeconomics, Macmillan, London.
- Koutsoyiannis, A. (1986). Modern Microeconomics, Macmillan, London.
- Kreps, D.M. (1992). A Course in Micro Economic Theory., Prentice Hall of India, New Delhi.
- Layard P.R.G. and A.A. Wallers, Micro Economics Theory, McGraw-Hill, New York. R.D. Irwin and Co., Homewood, IL.
- Mishan, E.J. (1969). Welfare Economics: An Assessment, North-Holland, Amsterdam.
- Stigler, G. (1966), The Theory of Price, 3e, Macmillan Co., New York.
- Varian, H. (1978). Microeconomic Analysis, W.W. Norton, New York.
-

DSC Course Code: ECON-112
ELEMENTARY MATHEMATICS FOR ECONOMICS

Credit	Lecture	Tutorial	Practical
6	4	2	0

Course Outcomes

By the end of the course, students will be able to:

-) understand the basic rules of matrix algebra and apply the same to solve mathematical models containing systems of simultaneous equations.
-) understand and extend the techniques of differential calculus to compute values of variables etc.
-) solve the differential and difference equations along with their economic applications to economic models.
-) compute the consumer's surplus and producer's surplus by utilising the tools of integral calculus.
-) apply linear programming and input-output model to analyse behaviour of economic agents.

Unit –I MATRICES AND DETERMINANTS

Their properties, addition, subtraction, and multiplication of matrices. Transpose of a Matrix. Some special forms of square matrices-Trace, Idempotent matrix, Sub-matrix of a matrix. Inverse of a matrix and solution of equations using both the inverse of a matrix and Cramer's rule. Rank of a Matrix (Numericals relating to inverse of a matrix and Cramer's rule should to be confined to matrix of order 3x3).

Unit-II DIFFERENTIATION

Derivatives: differentiations of functions of a single variable. Derivative of a composite function, Parametric function, logarithmic function, Exponential, and inverse functions. Concave and convex functions. Derivative of higher order. Partial Derivatives and total derivative Homogenous functions and Euler's Theorem. Maxima and Minima of functions of single variable. Profit maximization and cost minimization. Constrained optimization of function with two variables. Constrained utility maximization, constrained minimization, and the interpretation of the Lagrange multiplier.

Unit –III DIFFERENTIAL AND DIFFERENCE EQUATIONS

Introduction, non-linear and linear differential equations of the first order and first degree. Solutions of differential equations when variables are separable, homogenous equations and non-homogenous equations, exact differential equations and linear equations. Solution of linear differential equations of second with constant coefficient. Finite difference, difference equations. Solutions of homogeneous linear difference equation with constant

coefficients, linear first-order difference equations, Linear second order difference equations with constant coefficients.

Application of differential and difference equations in economic models (dynamics of market price, Solow growth model, cob-web model, multiplier-accelerator interaction model, Domar growth model).

Unit –IV ANALYTIC GEOMETRY

Introduction of a Straight Line, section formula, the gradient of a straight line, the equation of a straight line in intercept form, two-point form. Circle: The general equation of a circle, Parabola: equation of a parabola, the points of intersection of line and a parabola. Equation of a rectangular hyperbola. Problems based on applications of analytic geometry in economics.

Integration of function of one variable by parts and substitution. Integration of logarithmic and exponential functions. Definite integral and area between two curves. Simple applications of integration to the relationship between marginal functions and total functions, Consumer's surplus and producer's surplus. Investment and capital formation and the present value of a continuous flow.

Unit-V THE INPUT-OUTPUT MODEL

Its assumptions, technological coefficient matrix, closed and open input –output model, the Hawkins-Simon conditions. Solving the input-output models both open and closed using the inverse matrix.

An Introduction to Linear Programming, Linear equations, slack variables. Feasible and basic solutions. Degeneracy. Solving the primal and Dual with simplex method. Interpretation of the linear programming results.

SUGGESTED READINGS

- Allen.R.G.D. Mathematical Analysis for Economists, MacMillan, India Limited, Delhi.
- Baumol, W.J., Economic theory and Operations Analysis, Prentice Hall, New Delhi
- Berchenhal Chris and Paul Grount, Mathematics for Modern
- Budniek, Applied Mathematics for Business economics and social Sciences, 2nd Ed., McGraw Hill.
- Burmeister, E., and R Dobell, Mathematical Theories of Economic Growth.
- Chiang Alpha C. Fundamental Methods of Mathematical Economic Analysis, McGraw-Hill Bank Company London.
- D. Bose, An Introduction to Mathematical Economics, Himkya Publishing House, Delhi.
- Dorfman, R., Linear Programming and Economic Analysis, McGraw
- Dowling. Mathematics for Economists, McGraw Hill Economics, Heritage Publishers, New Delhi.
- Hadley, G. Linear Programming, Narosa Publishing House, New Hill
- Mukherji Badal and V. Pandit. Mathematical Methods for Economic Analysis, Allied Publishers Pvt.Ltd., New Delhi.

- Nicholson. Mathematics for Business Economics, McGraw Hill. Prentice Hall of India, New Delhi.
- Yamane Taro, Mathematics for Economists: An Elementary Survey.

DSC Course Code: ECON113
INTERNATIONAL ECONOMICS

Credit	Lecture	Tutorial	Practical
6	4	2	0

Course Outcomes

By the end of the course, students will be able to:

-) explain theories of international trade and their applications.
-) outline the impact of dynamic factors on international trade.
-) analyse various policies and role of international organizations to international trade.
-) illustrate balance of payment and explain determination of exchange rates.
-) identify long and short run capital requirements of developing countries.
-) discuss the role of financial institutions like IMF, ADB, IFC and IDA.

Unit-I

Need for a separate theory of international trade. Theories of international trade classical, Neo-classical, Heckscher-Ohlin and Factor price equalization theories. Empirical verification of Classical and Heckscher-Ohlin theories, Factors reversal and Leontief paradox. Emmanuel's theory of unequal exchange.

Unit-II

Impact of dynamic factors on international trade changes in tastes, technology, factor endowments. Rybeznski theorem and transportation costs. Derivation of offer curves-Marshall-Edgeworth, Mill and Meade. Terms of trade and measurement of gains from trade. Secular deterioration in the terms of trade of developing countries. Aid versus trade controversy.

Unit-III

Commercial Policy: Free trade versus protection. Theory of tariffs; partial effects and effects on income distribution. Stolpher-Samuelson theorem. Optimum tariff, nominal and effective tariffs, infant industry tariff. Quotas and other quantitative restrictions. State trading. Multiple exchange rates. Trade policies of developing countries. Theory of custom union –trade creation and trade diversion. The SAARC, NAFTA, BRICS, G8, EU and the WTO framework. The WTO's and the developing countries.

Unit-IV

International Monetary Theory: Balance of payments and its adjustment. Maintenance of internal balance-Elasticities and absorption approaches. Exchange rate determination and adjustments. Foreign trade multiplier. Foreign repercussions and stability problem. Flexible versus fixed exchange rate system.

Unit-V

- Roy. P. N. (1986). International Trade Theory and Practice, Willy Eastern Limited, New Delhi.
- Salvatore, D. (1987). International economics, 2/e, Macmillan, New York
- Scammell, W.M. (1975), International Monetary Policy, Bretton wood and Alter, MacMillen, London.
- Sodersten, B., (1980), International Economics, 2nd Edition, Macmillian, London.

DSC Course Code: ECON114
LABOUR ECONOMICS

Credit	Lecture	Tutorial	Practical
6	4	2	0

Course Outcomes

By the end of the course, students will be able to:

-) examine various factors affecting demand and supply of labour.
-) explain unemployment as a source of human capital.
-) illustrate wage rate determination in different sectors of the economy.
-) classify various methods of the settlement of industrial disputes.
-) evaluate the govt. labour policies for the socio-economic upliftment of labour.

Unit – 1 Labour Market

Nature and characteristics of labour markets in developing economics like India. Paradigms of labour market – classical, neo-classical and dualistic; Analysis of demand and supply forces, Demand for labour relating to choose of technology. Supply of labour in relation to growth of labour force. Labour force participation rates.

Unit – II Employment

Employment and development relationship Importance of full employment in the context of poverty in the developing countries. Unemployment – concept and measures. Causes of unemployment, Issues relating to employment rationalization, technological change and modernization. Rural unemployment and educated unemployment. Planning of Human capital.

Unit – III Wage Determination

Various classical, neo-classical and bargaining theories of wage determination. Various concepts of minimum wages and fair living. Problems of implementation of minimum wages. Wage determination by sectors – Urban and Rural, organized and unorganized. Wage and inflation. Productivity and wage relationship. Profit sharing schemes. Causes of wage differentials in terms of firm, industry, occupation and region.

Unit – IV Industrial Relations and Trade Unions

Industrialization and emergence of trade unionism. Growth, structure and pattern of trade unionism. Achievements and failures of trade union movement. Determinants of industrial disputes. Steps to achieve industrial peace. Methods of settlement of industrial disputes: collective bargaining, conciliation, arbitration and labour participation in management.

Unit – V State and Labour in India

Increasing role of State in labour matters. Labour policy of the Government. Social Security and Legislative Measures adopted for Socio-economic upliftment of labour. Social security measures for organized visa-vis unorganized sector of labour. Important labour legislations (industrial dispute act), trade unions act, factories act and employees state insurance act. Problems of rural labour. Government policy towards rural labour and women and child labour. Evaluation of recent employment policy in India.

SUGGESTED READINGS

- Bellante, D. and M. Jackson, (1983). Labour Economics, McGraw-Hill, New York.
- Das, N. (1960). Unemployment Full Employment and India, Asia publishing House, Bombay.
- Deshpande, L. K. & J. C. Sandersara, eds. (1970). Wage Policy and wage determination in India. Bombay University Press, Bombay.
- Deshpandey, I. K., P. K. Employment Policy in a Developing Economy, Vol. I & II, Macmillan, London.
- Dunlop, J. T., eds. (1932). Theory of Wage Determination, Macmillan, London.
- Hicks, J. R. (1932). The Theory of Wages Clarendon Press, Oxford.
- Jolly, R. Etal, Eds (1973). Third World Employment: Problems and Strategy, Penguin, Harmondsworth.
- Kannapoo, S. (1983). Employment Problems and Urban Labour Markets In Developing Nations, University of Michigan, Ann Arbor, Michigan.
- Lester, R. A. (1964). Economics of Labour; 2/e Macmillan, New York.
- Madan, B. K. (1977). The Real Wages of Industrial Labour in India. Management Development Institute, New Delhi.
- Memoria, C. B. (1966), Labour Problems and Social Welfare in India, Kitab Mahal, Allahabad.
- McConnel, C. R. and S. L. Brue (1986). Contemporary Labour Economics, McGraw-Hill, New York.
- McCormick, B. & Smith Eds. (1969). The Structure of Labour Markets, Harper and Brothers, New York.
- Myres, C. A. (1958). Industrial Relations in India. Asia Publishing House, Bombay.
- Punekar, S. D. (1978). Labour Welfare, Trade Unionism and Industrial Relations, Himalaya Publishing House, Bombay.
- Ramaswamy, E.A. & U. Ramaswamy (1978). Industrial Relations in India, Macmillan, Delhi.
- Ramaswamy, F. A. & U. Ramaswamy, (1981). Industry and Labour; Oxford University Press, New Delhi.
- Rees, A. (1962), Economics of Trade unions, J. Nisbet and Company, Digswell.
- Rees, A. (1973). Economics of Work and Pay, Harper and Row New York.
- Sen, A. R. (1975). Employment, Technology and Development. Oxford, University Press, Delhi.
- Singh, V. R. ed. (1970), Industrial Labour in India, Popular Prakashan, Bombay.
- Thakur Dalip S. (1986). Poverty, Inequality and Unemployment in Rural India. B. R. Publishing Corporation, New Delhi.

- Turner, H. A. (1965). Wage Trends, Wage Policies and collective Bargaining, Cambridge University Press, Cambridge.
- Vaid, K. N. (1970), Labour Welfare in India, Centre for Industrial Relations, Delhi.

DSC Course Code: ECON121

MACRO-ECONOMICS

Credit	Lecture	Tutorial	Practical
6	4	2	0

Course Outcomes

By the end of the course, students will be able to:

-) discuss the classical viewpoint about income, output and employment determination and explain various macroeconomic theories of consumer behaviour.
-) distinguish between Keynesian and post Keynesian views regarding the income, output and employment.
-) understand Money market and related concepts.
-) explain various macro-economic growth models elaborate stabilisation policies.

Unit-I

Micro Foundations of Macro Economics. The basic classical model of income and employment determination. The basic Keynesian model; equilibrium in product and money markets. Multiplier process and the different concepts of multiplier; balanced budget theorem. Macro-Economic Theories of Consumption: Keynesian theory; Relative income, Permanent income, and Life cycle income hypotheses. Pigou effect and real balance effect on consumption demand.

Unit-II

Macro-Economic Theories of Investment: The Keynesian Post-Keynesian, New-Keynesian, and the financial theory of investment determination. Lags in investment. Portfolio disequilibrium and the transmission mechanism. The Demand for Money; The classical, Keynesian and Post-Keynesian approaches.

Unit-III

The supply of Money and Definitions of Money Supply: Inside and outside money, the neutrality of money Equilibrium in money market. The classical and Keynesian dichotomies and their resolution by Patinkin's real balance effect and through IS-LM model respectively. Keynesian and post Keynesian theories of rate of interest.

Unit-IV

Growth Models: Harrod-Domar model; Neo – classical model; Golden rule of accumulation; Optimal growth turnpikes. Theories of Trade Cycles: Multiplier-Accelerator interaction model, Kaldor and Hicks' models. Determination of General Price Level; Classical and Keynesian approaches. Theories of Inflation; Demand – pull and cost-push inflation; short and long-run Phillips's curve analysis; The Keynesian, the monetarist and the rational expectations analysis.

Unit-V

Keynesian and monetarist perspectives on monetary, fiscal and income policies. Stabilisation policies: Rules Discretion: lagged effects of policies and role of expectations. Crowding out effect and government budget constraint. Rational expectations and effectiveness of stabilisation policies.

SUGGESTED READINGS

- Aernogl V. (2019), Macroeconomics, Anamika Pub.& Dis. (P) Ltd.
- Altug S. (2003), Dynamic Macroeconomic Analysis, Cambridge Publishers.
- Bronson, W.H., (1985). Macro-Economic Theory and Policy, Universal Book Stall, New Delhi.
- Chakravarty, S. (1985). Report of the Reserve Bank of India Committee to Review the Monetary System, Reserve Bank of India,
- Dornbusch, R. and S. Fischer (1987). Macroeconomic, 4ed. McGraw-Hill Kogakusha, Tokyo.
- Dornbusch, R. and S. Fischer (1987), Macroeconomics, 4e, McGraw Hill Kogaku Sha Tokyo.
- Edmond, M.R. (1983), Macroeconomics: Theory and Policy, Prentice Hall of India, New Delhi.
- Evans, M.K. (1960), Macroeconomic Activity. Harper and Row. New York.
- Goyal A. (2017), Macroeconomics and Markets, Routledge Publishers.
- Gupta, S.B. (1983). Monetary Economics, S. Chand & Co, Delhi.
- Hall, R.E. and J.B. Tayler (1986) . Tayler (1986). Macroeconomics, W. W. Norton New York.
- Jones, H.G. (1976). An Introduction in Modern Theories of Economic Growth, McGraw Hill Kogaku Sha Tokyo.
- Kotwal, O.P. (1987). Theories of Inflation. A critical Survey. Tata McGraw-Hill publishing Co. New Delhi.
- Laidler, D. (1972), Demand for Money Theory and Evidence, Allied Publishers, New Delhi.
- Lipschitz. (2019), Macroeconomics for Professionals, 1st Edition, Cambridge Publishers.
- McConnell, C.R. and H.C. Gupta (1987), Introduction to Macro Economics, Tata-McGraw Hill, Delhi.
- Roy (2012), Economics of Macro Issues, PEA Publishers.
- Scarfe, B.L. (1977). Cycles, Growth and inflation, McGraw Hill, New York.
- Sen, A.K. (Ed.) (1970), Growth Economics, Penguin. Harmondsworth.
- Shapiro, Edward (1984), Macroeconomic Analysis, Galgotia Publication, New Delhi.
- Surrey, M. J.C. ed. (1976). Macroeconomic Themes, Oxford University Press, Oxford.
- Tumandar, P.N. (1972), Investment: Theories and Evidence, McMillion, London.
- Turnovsky, S.J. (1977). Macroeconomic Analysis and Stabilisation Policy. Cambridge University Press, Cambridge.

DSC Course Code: ECON122
BASIC STATISTICS

Credit	Lecture	Tutorial	Practical
6	4	2	0

Course Outcomes

By the end of the course, students will be able to:

-) acquire and apply statistical techniques in the empirical analysis of economic relationships.
-) understand and infer from the process of data collection and various sampling methods.
-) construct and interpret index numbers for economic variables. Measure and evaluate components of time series.
-) apply, solve and prove various probability theorems using appropriate probability distributions.
-) understand, explain, solve and apply hypothesis testing and selection of appropriate techniques for testing hypotheses.

Unit: I

Measure of Central Tendency, Dispersion, Skewness and Kurtosis. Correlation; Meaning and methods of measuring correlation, Karl Pearson's method, Spearman's Rank Correlation coefficient, Limitations of Correlation analysis. Linear Regression; relation between correlation coefficient and regression coefficients, Fitting of regression equations, Standard error of estimates.

Unit: II

The General Linear Regression Model

An Introduction to the matrix formulation and solution of the general linear regression Model. Solution for a model with one dependent and two independent variables. Prediction for simple regression models of demand, supply, production and cost. Multiple and partial correlations and regressions. Relationship between the measures of multiple correlation and measures of partial correlation, Beta coefficients.

Unit III

Elements of Probability Theory

The Concept of Probability Distribution and a Density function. Mathematical expectation, Binomial distribution, the Normal distribution, Some properties of the normal distribution. Sampling and sample designs: simple random sampling, stratified random sampling, systematic sampling and cluster sampling. Large samples. Tests of significance. Limitation of sampling; procedure of testing hypothesis: Region of acceptance and rejection, two tailed and one tailed tests,

Type I and Type II errors. Non-Parametric Tests: The sign test, rank sum test, the Mann-Whitney U test, advantages and limitations of non-parametric tests.

Unit IV

Tests of Significance

Standard error of the mean, Student's "t" distribution and its properties, Use of the "t" distribution to test hypothesis of the population means. Chi Square: general features of Chi Square (χ^2), chi square as a test of goodness of fit, chi square as a test of independence. Contingency table and Yate's correction for continuity, testing homogeneity of several independent estimates of population variance. Analysis of variance; meaning, assumptions and techniques of analysis of variance, one way and two-way analysis of variance problem. Inter relationship between "t", Chi square and F tests.

Unit V

Analysis of Time Series

Meaning and components of time series, Methods of estimating trend – the semi average method, the moving average method and the least squares method. Fitting of straight line, second- and third-degree equations. Fitting of the modified exponential curve, Gompertz curve and the logistic curve. Measurement of Seasonal, Cyclical and irregular variations.

Index numbers: Meaning, problems in construction of index numbers. Classification of index numbers, unweighted price index numbers, relative of aggregate method and average of price relatives, Weighted price index numbers: Laspeyre's, Paasche's and Fisher's ideal index numbers. Time reversal test and factor reversal test and chain-based index numbers. Uses and limitations of index numbers.

SUGGESTED READINGS

- Cochran, William G., (1977), Sampling Techniques, 3rd edition, Wiley Eastern Limited, New Delhi.
- Croxton F.E., D.J. Cowden and Sidney Klein, (), Applied General Statistics, Prentice Hall of Indian, New Delhi.
- Gujarati Damodar., (), Basic Econometrics, Second Edition, L.R. Klein.
- Nagar A.L. and R.K. Das, (), Basic Statistics, Oxford University Press, New Delhi.
- Snedecar George and W.G. Chockrane, (), Statistical Methods. Oxford & IBH, New Delhi.
- Spiegel, Murray R., (1982), Probability and Statistics, SI (metric) edition, Schaum's Outline Series, McGraw Hill Book Company, New York.
- Walker H.M. and J. Lev. (1953). Statistical Inference, Holt, Rime hart and Winston, Oxford and IBH Publishing Company, Calcutta.
- Yamane Taro, (), Statistics, Harper International.

DSC Course Code: ECON-123

MONEY AND BANKING

Credit	Lecture	Tutorial	Practical
6	4	2	0

Course Outcomes

By the end of the course, students will be able to:

-) understand the concept of money and various approaches related to money.
-) explain the functioning of money and capital markets, process of credit creation, role of NBFCs etc.
-) interpret demand and supply of money, money multiplier and its determinants and role of RBI.
-) analyse the working of monetary policy.
-) summarize the role of national and international financial institutions.

Unit – 1

Basic Concepts: Different approaches to the definition of money; Types, role and functions of money inside money and outside money; Measures of Money supply. Traditional quantity theory of money Fisher's equation of exchange; Cambridge cash balance approach; Keynes reformulation of quantity theory of money; Modern quantity theory; Friedman's approach.

Unit – II

Theory of Commercial and Central Banking: Money markets and capital markets; commercial banks. Theories of commercial banking; Process of credit creation; non-bank financial intermediaries (NBFI's); Objectives and role of central banks in economic development; The currency and credit schools; Quantitative and qualitative methods of credit-controls. Review of Narsimham committee report (1991 & 1998 Reports), Digitalisation of Indian Banking system.

Unit – III

The Theories of Demand and Supply of Money: Theories of demand for money; Classical Keynesian and Monetarist. Theories of money supply; The 'H' Theory of money Supply; Money multiplier process and its determinants; Commercial banks and the money multiplier; Factors affecting 'H' RBI analysis of money supply; Control of the money stock; Money stock and interest rates; monetary equilibrium: money in equilibrium and non-equilibrium states; Neutrality of money. Demonetization: concept, logic, impact.

Unit – IV

Principles of Monetary Policy: Monetary Policy: Its meaning, objectives, framework, targets and indicators of monetary policy; Transmission mechanism of monetary. Policy; Restrictive Vs. accommodating monetary policy; Need and effectiveness of monetary policy; Lags in monetary policy; Role of monetary policy in developing countries; Monetary and credit planning; Monetarist and Keynesian views on monetary policy.

Unit – V

Indian Money Market and International Financial Institutions: India and NBARD. Reserve Bank of India (RBI); Its working, functions, performance and role in the economic development of India; RBI's monetary policy; International Financial Institutions IMF, IBRD (World Bank), Asian Development Bank (ADB). International Development Association (IDA).

SUGGESTED READINGS

- Chandlar, L. V. and S. N. Goldfield (1977). Economics of Money & Banking, 7/e, Harpar and Row, New York.
- Chick, V. (1977). The Theory of Monetary Policy, 2/e, Basil Blackwell, Oxford.
- Culbertson, J. M. (1971). Macro-Economic Theory and Stabilization Policy, McGraw-Hill, New York.
- Friedman, M. (Ed.) (1956). Studies in the Quantity Theory of Money, University of Chicago Press, Chicago.
- Gibson, W. E. and G. Kaufman, (Ed.) (1975). Monetary Economics, 2/e, Tata McGraw-Hill, Delhi.
- Gibson, W. E. and G. Kaufman, (Ed.) (1975). Monetary Economics, 2/e, Tata McGraw-Hill, New Delhi.
- Gibson, W. E. and G. Kaufman, (Ed.) (1975). Monetary Economics: Readings on current Issues, 2/e, Tata McGraw-Hill, New Delhi.
- Gupta, S. B. (1979). Monetary Planning for India, Oxford University Press, Delhi.
- Gupta, S. B. (1983). Monetary Economics, 2/e, S. Chand & Co., New Delhi.
- Harris, L. (1985). Monetary Theory, McGraw-Hill, New York, Goodhart, C. (1977). Money Information & Uncertainty, 2/e, Macmillan, London.
- Laidler, d. (1977). Demand for Money, 2/e., Dun-Donnelly, New York.
- Mitra, S. (Ed.) (1970). Money and Banking, Random House, New York.
- Mitra, S. (Ed.) (1970). Money and Banking, Random House, New York.
- Radcliffe Committee (1959). Report of the Committee on the Working of the monetary System. Macmillan, London.
- Reserve Bank of India (1977). Money Supply: Concepts Compilation and Analysis, RBI Bulletin, January, Bombay.
- Savors, R. S. (1978). Modern Banking, 7/e, Oxford University Press, Delhi.

DSC Course Code: ECON-124
HISTORY OF ECONOMIC THOUGHT

Credit	Lecture	Tutorial	Practical
6	4	2	0

Course Outcomes

By the end of the course, students will be able to:

-) trace the evolution of the subject matter of economics starting with mercantilists.
-) draw inferences about the relevance of classical economics, socialist economic thoughts, historical critiques and Marx in the present context.
-) demonstrate the relevance of neo-classical economics and identify contribution of Austrian School.
-) explain and interpret Keynesian and Post Keynesian Economics.
-) understand basic Indian economic thought.

Unit – I

Mercantilism: Main Principles. Theory of economic development; Views of Keynes, Petty, Hume and Cantillon on Mercantilism: Physiocracy: Natural Order, Agriculture and Product net, social classes. *TableauEconomique*.

Unit – II

The Classical Period: Economic Thought of Adam Smith, David Ricardo, and J. S. Mill with special reference to their views on value, distribution international trade and economic development; Malthus theory of population; Says law of market. Ricardo Malthus controversy on Say's law of market.

Unit – III

Socialistic Economic Thought: Socialist critique of classical economic thought with special references to the views of Saint Simon, Sirmondi and Proudhan. The Historical critics of Classicism, Karl Marx method of Economic analysis. Marx analysis of economic crises. Transformation Problem.

Unit – IV

The Neo-Classical Period: Similarity and differences between classical and neo-classical thought; The Marginal Revolution with special reference to the contribution of the Austrian School, Leon Walras, Jevons, Wickshell and Marshall.

Unit – V

Post Marshalling Development in Economic Theory: Contribution of Joan Robinson, E. H. Chamberlin; J. M. Keynes and Post Keynesian developments in economic theory.

Introduction to Indian economic thought: Economic ideas of Kautilya, Thiruvalluvar, BR Ambedkar, Mahatma Gandhi, JL Nehru, VKRV Rao and Amartya K. Sen.

Note:

Special instructions to paper setter: While setting question(s) out of Indian economic thought (Unit – V) care must be taken to set questions to test basic knowledge of candidate w.r.t Indian economic thought.

SUGGESTED READINGS

- Backhouse. R. (1985). A History of Modern Economic Analysis, Basil Blackwell, Oxford.
- Blaug, M. (1988). Economic Theory in Retrospect, 3/e; Cambridge University Press Cambridge.
- Brue Stanley, The History of Economic Thought.
- Dantawala, M.L., (1964), “Economic Ideology of Jawaharlal Nehru”, *EPW*, Special Number, July 1964, pp: 1209 – 1211.
- Dasgupta, A. K. (1985). Epochs of Economic Theory, Oxford University
- Eakelund R. B. and R. Rebert (1983). A History of Economic Theory and Method, 2e, McGraw-Hill, New York.
- Gary, A. and A. E. Thompson (1980). The Development of Economic Doctrines, 2e Longman Group, London.
- Gide. C. and G. Rist, (1956). A History of Economic Doctrines, 2e, George Harrop and company, London.
Press, Delhi.
- Rima, I. (1978). Development of Economic Analysis, 3e, R. D. Irwin, Homewood.
- Roll, E., (1973). A History of Economic Thought, Faber, London.
- Schumpeter, J. A. (1954). History of Economic Analysis, Oxford University Press, New York.

GE Course Code: ECON125
FUNDAMENTAL CONCEPTS IN ECONOMICS

Credit	Lecture	Tutorial	Practical
4	3	1	0

Course Outcome

By the end of the course student will be able to:

-) understand basic concepts of economics.
-) understand the budget document.
-) evaluate the performance of the Indian economy.
-) identify and discuss national and global economic issues.

Unit - I

Definition of economics, nature of economic problem, Concepts and measurement of utility, law of diminishing marginal utility-its practical applications and importance Law of demand, elasticity of demand (price, income and cross)-Measurement, practical importance and applications. Law of supply, elasticity of supply and its practical applications.

Unit - II

Theory of Production: Stages of production function; Returns to factor proportions; Return to scale; Elasticity of substitution; Technical progress and production function; Cost and Revenue Analysis (traditional and modern theories of cost).

Unit - III

Equilibrium of the firm-marginal analysis: Optimum factor combination and product combination. Meaning of market, types-Perfect, Monopoly, Oligopoly, Monopolistic (Main features only).

Unit - IV

Concept of Gross Domestic Product, Gross National Product, National Income and Disposable Income. Aggregate demand and supply (Both open and closed economies) Basic concepts of inflation, deflation, stagflation, business cycles and Balance of Payment (with special reference to India's BOP). Reserve Bank of India (RBI); Its working, functions, performance and role in the economic development of India; RBI's monetary policy

Unit - V

Growth and Structure of Indian Economy Since 1950. Growth of Indian economy since 1950. Trends in the nature and magnitude of poverty, inequality and unemployment. Trends in agricultural and industrial production and productivity. India's developmental pattern-Successes and failures.; India's engagement with International Financial Institutions IMF, IBRD (World Bank),

Asian Development Bank (ADB). International Development Association (IDA).

SUGGESTED READINGS

- J Baumol. W.J. (1982) Economic Theory and Operations Analysis, 4ed, Prentice Hall of India, New Delhi.
- J Bronson, W.H., (1985). Macro-Economic Theory and Policy, Universal Book Stall, New Delhi.
- J Da Costa, G.C. (1980) . Production, Prices and distribution, Tata Mc Graw Hill, New Delhi
- J Deaton, A. S. & J. Muehlhauser(1980). Economics and Consumer Behaviour, Cambridge University Press, Cambridge3.
- J Dornbusch, R. and S. Fischer (1987). Macroeconomics, 4e, McGrawHill Kogakusha Tokyo.
- J Edgmand, M.R. (1983). Macroeconomics: Theory and Policy, Prentice Hall of India, New Delhi.
- J Ferguson, C.E. (1968). Microeconomic Theory. Cambridge University Press, London.
- J Friedman. M. (1953). Essays in Positive Economics, Chicago University Press, Chicago.
- J Gold, J.P. and C.E. Ferguson. Micro Economic Theory, Irwin Homewood.
- J Gould, J.P. and C.E. Ferguson. Micro-Economic Theory. Irwin, Homewood, Illinois.
- J Gravel H. and R. Rees (1981). Microeconomics, Longman, London
- J Green, H.A.J. Consumer Theory. Philips L. Applied Consumption Analysis.
- J Henderson, R. and Quandt, R. Micro Economics Theory. McGraw Hill.
- J Hirshleifer, J. (1976). Price Theory and Applications., Prentice Hall, New Delhi.
- J Jones, H. G. (1976). An Introduction to the Modern Theories of Economic Growth, Mc Grow Hill Koga-Kusha, Tokyo.
- J Kapila, U., (Ed.) (1988). Indian Economy Since Independence, Vol. – I, Academic foundation, New Delhi.
- J Koutsoyiannis, A. (1985). Modern Microeconomics, Macmillan, London
- J Koutsoyiannis, A. (1985). Modern Microeconomics, Macmillan, London.
- J Koutsoyiannis, A. (1986). Modern Microeconomics, Macmillan, London.
- J Kreps, D.M. (1992). A Course in Micro Economic Theory., Prentice Hall of India, New Delhi.
- J McConnell, C.R. and H.C. Gupta (1987). Introduction to Macroeconomics, Tata-McGraw Hill, Delhi.
- J Misra S. K. and Puri V. K. (1993). Indian Economy-its Development Experience, Hinday Publishing House (latest Edition).
- J Mitra, S. (Ed.) (1970). Money and Banking, Random House, New York.
- J N. Aggarwal (1995). Indian Economy Problems of Development and Planning, WishwaParkashan, New Delhi.

-) Rudder Dutt & K.P.M. Sundaram – Indian Economy, S. Chand Publications (latest Edition).
 -) Shapiro, Edward (1984). Macroeconomic Analysis, Galgotia Publication, New Delhi.
- Varian, H. (1978). Microeconomic Analysis, W.W. Norton, New York.

DSC Course Code: ECON231
AGRICULTURAL ECONOMICS

Credit	Lecture	Tutorial	Practical
6	4	2	0

Course Outcomes

By the end of the course, students will be able to:

-) develop the understanding of the interdependence between agriculture and industrial development.
-) make use of agriculture production functions, identify and solve risk and uncertainty in agriculture.
-) understand and build models for India's agricultural development.
-) evaluate Agricultural policies in lieu of their effectiveness.
-) compare and contrast the traditional and modern sources of agricultural finance.

Unit-I

Nature and scope of agricultural economics. Role of agriculture in economic development. Interdependence between agriculture and industrial development. Systems of farming Farm size and productivity debate. Land reforms in India.

Unit-II

Agricultural production functions. Input output relationships; factor-factor relationships and product-product relationships. Measures of farm efficiency. Risk and uncertainty in agriculture.

Unit-III

Models of agricultural development (Lewis, Fei-Ranis, Jorgenson, Mellor, Schultz, and Boserup. Modals). Technological change and new agricultural strategy (green revolution) in India, Agro-climatic zonal planning in India.

Unit-IV

Agricultural price policy in India. Criteria to fix agricultural prices. Intersectoral terms of trade. Measures to increase marketable surplus. Functions of agricultural marketing. Efficiency criteria for agricultural marketing. Problems of Indian agricultural marketing. Measures to improve the efficiency of agricultural marketing in India.

Unit-V

Importance of agricultural finance. Source of agricultural finance, Defects of rural money lending system. Problems of agricultural cooperative societies. Government policy for agricultural credit. Problems and suggestions to improve agricultural finance. Causes of rural indebtedness. Measures to reduce rural

indebtedness. Objective and impact of integrated rural development programme.
Resource mobilisation from agricultural sector.

SUGGESTED READINGS

- Acharya S.S. & N.L. Agrawal (1987). *Agricultural Marketing in India*, Oxford & IBH, New Delhi.
- Bishop, C.E. & W. D. Toussaint (1958). *Agricultural Economic Analysis* John Wiley and sons, New York.
- Dehrman, J.R. (1968). *Supply Response in Under-Developed Agriculture*, North-Holland, Publishing Co., Amsterdam.
- Dole J.P., V.J. Rhodes & J. F. West (1968). *Economics of Agricultural Production, Markets and Policy* Richard D. Irwin, Homewood.
- Eicher, C.K. & L.W. Witt. *Agriculture in Economic Development* Vora & Co., Bombay.
- Ghatak S. and K. Inseigent. (1984). *Agriculture and Economic Development*, Select Book Service, New Delhi.
- Harris J. (1989). *Rural Development: Theories of Peasant Economy and Agrarian Change*, Hutchinson, London.
- Hayami, Y. and V. Ruttan (1971) *Agricultural Development: An International Perspective*, Johns Hopkins, Baltimore.
- Heady, E.O. (1968). *Economics of Agricultural Production and Resource Use*, Prentice Hall of India, New Delhi.
- Heady, E.O. and J. Dillon. (1969). *Agricultural Production Function*, Kalyani Publishers, Ludhiana.
- Johl. S.S. and T.R. Kapoor (1970). *Fundamentals of Farm Business Management*, Lalyani Publishers, Ludhiana.
- Kahlon, A.S. and M.V. George (1985). *Agricultural Marketing and Price Policies*, Allied Publishers, New Delhi.
- Kohls. R.L. & J.N. Vhl. (1980). *Marketing of Agricultural Products*, Macmillan, New York.
- Lee, W.F., M.D. Boehlke, A.G. Nelson & M.G. Murray (1986). *Agricultural Finance*, Kalyani Publishers, New Delhi, Ludhiana.
- Lekhi, R.K. and Jogender Singh (1969). *Agricultural Economics*, Kalyani Publishers, Ludhiana & New Delhi.
- Mellor, J. W. (1969), *The Economics of Agricultural Development* Vora & Co., Bombay.
- Reserve Bank of India. *All India Debt and Investment Survey, 1981-82*, Bombay.
- Sankhyan, P.L. (1968). *Introduction to the Economics of Agricultural Production*, Prentice Hall, New Delhi.
- Schultz, T. W. (1984), *Transforming Traditional Agriculture*, Yale University Press, New Haven.
- Singh. I.J. (1977). *Elements of Farm Management Economics*, Affiliated East-West Press, New Delhi.
- Soni. R.N. (1995). *Leading issues in Agricultural Economics*, Shoban Lal NaginChand & Co. Jalandhar & Delhi.
- Southworth. H.M. and B. Jofinston (ed) (1967). *Agricultural Development and Economic Growth* Cornell University Press. Ithaca (USA).
- Subbarao. K. & Dejenvry (1966). *Agriculture Prices, Polices and Income Distribution in India*, Oxford University Press Delhi.

DSC Course Code: ECON232
GENDER ECONOMICS

Credit	Lecture	Tutorial	Practical
6	4	2	0

Course Outcomes

Upon completion of the course students will be able to:

-) Describe and critically discuss how incorporating the gender dimension influences economic development and how economic development also impacts the gender discourse.
-) Understand gender inequalities that exist in many spheres of the economy and how they become an obstacle to development.
-) The feminist economics project tries to overcome these limitations of mainstream economic theory
-) Develop an understanding of theory on feminist economics and the challenges it poses to theories of economic development and therefore to raise new questions in economics along with exploring different ways in which questions can be answered.
-) Thoroughly understand common economic problems in developing and developed countries and how they affect different groups in society.
-) Know and be able to work out and interpret different measures and indicators of gender and development and eliminate restricting standards.
-) Develop competence to assess different development/economic policy measures from a theoretical and empirical perspective through a gender lens.

Unit I

Concept of Gender and human development. Gender disaggregated data/gender statistics. From Women in Development to Gender and Development. Gender Inequality. Capability approaches. Perspectives on men and masculinities in economic development. Relationship between economic growth and gender equality, empowerment (emphasis on economic empowerment). Indicators of economic inequalities. Third gender and development: substance and indicators. Demographic changes and gender status. Gender interpretation of causes of demographic shift in birth rates. Child sex preferences and secondary sex ratio. Gender differences in mortality: concept and factors - biological, environment, discrimination and behavioural (lifestyle) factors. Socio-economic differences in mortality.

Unit II

Subject and methods of gender economics. Feminist economic critique of mainstream economics and alternatives. Feminist perspectives on economic

methods and arguments. Neoliberal economic policies, international trade and investment. Trade, feminization and international gender wage inequality. Gender effects on macroeconomic theory and instability. Globalization of the world economy and gender status: concepts such as feminization of poverty and multidimensional poverty. Women's contribution to GDP.

Unit III

Conceptualizing Women's Work: Productive/Reproductive Work and Formal/Informal work. Estimating Women's Work, Indian and International Debates. Issues in Participation; Occupations; Women and Globalization; Globalization and Economic Change; International Division of Labour.

Gender inequality in the labour market: entry into and exit from the labour market, careers, wages, skills training. Inequality and discrimination. Factors in wage disparities. Gender dimension of employment of youth and older persons.

Unit IV

Household economics: theoretical concepts and gender critique. Gender critique of the neo-Marxist approach. Gender critique of neo-classic household theory. The gender contract, negotiation models within families. Distribution of time: work in the labour market, work in the household, leisure time. Distribution of incomes (expenditures) in the household: inter-generational and gender aspect. Distribution of resources and decision-making mechanisms in households. Investments in human capital at household level and the sex factor. Accumulation of human capital over a life cycle. Household factors (reproductive, productive, structural, income-based, power-related) and employment of household members. Gender based marital and age-dependent migration.

Unit V

Gender policy: national, regional and global.

Practical policy solutions to the problem of gender inequality. Policies and strategies for reducing gender inequalities. Gender mainstreaming (including organizational mainstreaming), participatory approaches, gender budgeting, micro-credit. Welfare and Social Security Measures. Women in Planning and Social Policy.

SUGGESTED READINGS

-] Agarwal, Bina (1997). "'Bargaining' and Gender Relations: Within and Beyond the Household." *Feminist Economics*, Vol. 3(1), pp. 1-51.
-] Agarwal, Bina, Jane Humphries & Ingrid Robeyns, (eds), (2006), *Capabilities, Freedom and Equality: Amartya Sen's work from a gender perspective*, Oxford University Press, New Delhi.
-] Banerjee A, E Duflo, R Glennerster and C Kinnan (2009) *The miracle of microfinance? Evidence from a randomized evaluation*, MIT Working Paper.
-] Barker, Drucilla and Susan Feiner (2004). "Economics She Wrote" Ch. 1. in Barker and Feiner *Liberating Economics: Feminist Perspectives on Families, Work, and Globalization*, Ann Arbor: University of Michigan Press.
-] Barker, Drucilla and Susan Feiner (2004). "Family Matters: Reproducing the Gender Division of Labor" Ch. 2 in Barker and Feiner *Liberating Economics: Feminist*

- Perspectives on Families, Work, and Globalization, Ann Arbor: University of Michigan Press.
- J Barker, Drucilla K, (2005), “Beyond Women and Economics: Rereading “Women’s Work”.” *Signs* 30.4, pp: 2189-2209.
 - J Basu, K. (2006). Gender and Say: a Model of Household Behaviour with Endogenously Determined Balance of Power*. *The Economic Journal*,116(511), 558-580.
 - J Becker, Gary S. (1974). “A theory of marriage.” *Economics of the family: Marriage, children, and human capital*. UMI, pp. 299-351.
 - J Berik, Gunseli and Yana Rodgers, (2008), “Engendering Development Strategies and Macroeconomic Policies: What’s Sound and Sensible?” In *Social Justice and Gender Equality*, Routledge, pp. 16-30.
 - J Berik, Günseli, Yana van der Meulen Rodgers, and Joseph E. Zveglic, (2004) “International trade and gender wage discrimination: Evidence from East Asia.” *Review of Development Economics* 8.2, pp: 237-254.
 - J Blau, Francine D., Marianne A. Ferber and Anne E. Winkler, (2010), “Differences in Occupations and Earnings: The Role of Labor Market Discrimination,” Ch.7 in *The Economics of Women, Men, and Work* (6th Edition). Prentice Hall.
 - J Blecker, Robert A., and Stephanie Seguino, (2002), “Macroeconomic Effects of Reducing Gender Wage Inequality in an Export Oriented, Semi Industrialized Economy.” *Review of Development Economics* 6.1: 103-119.
 - J Bose, Christine E., (2012,) “Intersectionality and Global Gender Inequality”, *Gender and Society*, February 2012, Vol. 26, No. 1, pp. 67-72 Published by: Sage Publications, Inc.
 - J Boserup E, *Woman’s Role in Economic Development*, Chapters. 1 and 3
 - J Busse, M. and C. Spielman, (2006), “Gender Inequality and Trade.” *Review of International Economics*. Vol. 14(3), pp. 362-379.
 - J Cagatay, Nilufer, (2003), “Engendering Macroeconomics” in Martha Gutierrez, ed. *Macroeconomics: Making Gender Matter*, Zed Books, pp. 22-35.
 - J Caraway, Teri, (2007), *Assembling Women: The Feminization of Global Manufacturing*. Ithaca: Cornell University Press. Chapter 4 and 6.
 - J Chen, Sebesta and O’Connell (1999) *Counting the Invisible Workforce: The Case of Homebased Workers*, *World Development* Vol. 27, No. 3, pp. 603-610,
 - J Darity, William A., and Patrick L. Mason, (1998), “Evidence on discrimination in employment: codes of colour, codes of gender.” *Journal of Economic Perspectives* 12.2, pp: 63-90.
 - J Dimand, Robert W., Evelyn L. Forget and Chris Nyland, (2004), “Retrospectives: Gender in Classical Economics”, *The Journal of Economic Perspectives*, Winter 2004, Vol. 18, No. 1 (Winter 2004), pp. 229-240.
 - J Dolfsma Wilfred and Hella Hoppe, (2003), “On Feminist Economics”, *Feminist Review*, 2003, No. 75, *Identities* (2003), pp. 118-128 Published by: Sage Publications, Ltd.
 - J Ehrenreich B (2002) *Maid to Order* in Ehrenreich and Hochschild (eds) *Global woman: Nannies, Maids, and Sex Workers in the New Economy*.
 - J Elson, D (1995), *Male bias in macroeconomics: The case of structural adjustment*, in Diane Elson (ed.), *Male Bias in the Development Process*, pp. 164- 190, Manchester: Manchester University Press.
 - J Elson. D (1999), “Theories of Development” in Peterson, J. and Lewis, M. (eds) *The Elgar Companion to Feminist Economics*, Cheltenham: Edward Elgar.

- J Elson D. (2010), “Gender and the global economic crisis in developing countries: a framework for analysis”, *Gender and Development*, July 2010, Vol. 18, No. 2, The economic crisis (July 2010), pp. 201-212
- J FerrantGaëlle, (2015), “How Do Gender Inequalities Hinder Development? Cross-Country Evidence”, *Annals of Economics and Statistics*, No. 117/118, SPECIAL ISSUE ON THE ECONOMICS OF GENDER (June 2015), pp. 313-352.
- J Figart, Deborah M. (1997). “Gender as More Than a Dummy Variable.” *Review of Social Economy* 55(1); 1-32.
- J Folbre, Nancy, (2006), “Measuring care: gender, empowerment, and the care economy.” *Journal of human development* 7.2, pp: 183-199.
- J Folbre, Nancy, and Julie A. Nelson, (2000), “For Love or Money–Or Both?” *The Journal of Economic Perspectives*, pp: 123-140.
- J Forsythe Nancy, Roberto Patricio Korzeniewicz and Valerie Durrant Gender (2000), “Inequalities and Economic Growth: A Longitudinal Evaluation”, *Economic Development and Cultural Change*, Vol. 48, No. 3 pp. 573- 617 Published by: The University of Chicago Press.
- J Ghosh Jayati, (1994), “Gender Concerns in Macro-Economic Policy”, *Economic and Political Weekly*, Apr. 30, 1994, Vol. 29, No. 18, pp. WS2-WS4.
- J Goldin, Claudia, (1995), “The U-shaped Female Labor Force Function in Economic Development and Economic History,” in T.P. Schultz (ed.) *Investment in Women’s Human Capital and Economic Development*. Chicago, IL: University of Chicago Press.
- J Horrell, Sara, and Jane Humphries (1995). “Women’s labour force participation and the transition to the male breadwinner family, 1790 1865.” *The Economic History Review* 48 (1), pp. 89-117.
- J Iversen, V. (2003). Intra-household inequality: a challenge for the capability approach? *Feminist Economics*, 9(2-3), 93-115.
- J Jacobsen, Joyce (2003). “Some Implications of the Feminist Project in Economics for Empirical Methodology” in Barker and Kuiper eds., *Toward a Feminist Philosophy of Economics*, Routledge.
- J Johnston David W., Stefanie Schurer and Michael A. Shields, (2014), “Maternal gender role attitudes, human capital investment, and labour supply of sons and daughters”, *Oxford Economic Papers*, July 2014, Vol. 66, No. 3 (July 2014), pp. 631-659 Published by: Oxford University Press.
- J Kabeer N, *Reversed Realities, Treating Cancer with Bandaid? The Theoretical Underpinnings of WID*, Ch. 2 of *Reversed Realities: Gender Hierarchies in Development Thought*
- J Kabeer, N (2005) *Is Microfinance a ‘Magic Bullet’ for Women’s Empowerment? Analysis of Findings from South Asia*, *Economic and Political Weekly*, Vol. 40, No. 44/45, pp. 4709- 4718 4 6.8 Land and Agriculture
- J Klasen, Stephan and Francesca LaManna, (2009), “The Impact of Gender Inequality in Education and Employment on Economic Growth: New Evidence for a Panel of Countries.” *Feminist Economics*. Vol. 15(3), pp. 91-132.
- J Lim Siew, Cheryl Wachenheim, David Roberts, Linda Burbidge and Jeremy Jackson, (2014), “Gender Differences in Economics”, *NACTA Journal*, Vol. 58, No. 4 (December 2014), pp. 335-340 Published by: North American Colleges and Teachers of Agriculture (NACTA).

- J Lourdes Benería (2003), 'Markets, Globalization and Gender', in Gender, Development, and Globalization: Economics as if All People Mattered, Chapter 3, London and New York, NY: Routledge, 63–90.
- J McCall Leslie, (1998), "Spatial Routes to Gender Wage (In)equality: Regional Restructuring and Wage Differentials by Gender and Education", *Economic Geography*, Oct., 1998, Vol. 74, No. 4 (Oct., 1998), pp. 379-404 Published by: Taylor & Francis, Ltd.
- J Mies M, (1986), Social origins of sexual division of labor, Ch. 2 of Patriarchy and Accumulation on a World Scale: Women in the International Division of Labour
- J Overview to World Development Report 2012: Gender Equality and Development
- J Peter, Fabienne (2001). "Rhetoric vs. realism in economic methodology: a critical assessment of recent contributions." *Cambridge Journal of Economics* 25 (5), pp.571-589.
- J Ransom, Michael R., and Ronald L. Oaxaca, (2010), "New market power models and sex differences in pay." *Journal of Labor Economics* 28.2, pp: 267-289.
- J Ransom, Michael R., and Val E. Lambson, (2010), "Monopsony, Mobility, and Sex Differences in Pay: Missouri School Teachers." *American Economic Review* 101.3, pp: 454-59.
- J Robson Denise, (2001), "Women and Minorities in Economics Textbooks: Are They Being Adequately Represented?", *The Journal of Economic Education*, Spring, 2001, Vol. 32, No. 2 (Spring, 2001), pp. 186-191 Published by: Taylor & Francis, Ltd.
- J Roe, Emery M., (1988), 'Deconstructing Budgets', *Diacritics*, Vol. 18, No. 2, (Summer, 1988), pp. 61-68 The Johns Hopkins University Press
- J Schober, Thomas and Rudolf Winter-Ebmer, (2011), "Gender Wage Inequality and Economic Growth: Is There Really a Puzzle? —A Comment." *World Development*, Vol. 39(8), pp. 1476-84.
- J Seguino, Stephanie (2010). "Gender, Distribution, and Balance of Payments Constrained Growth in Developing Countries." *Review of Political Economy*, Vol. 22 (3), pp. 373-404.
- J Seiz, Janet A, (1995), "Bargaining models, feminism, and institutionalism." *Journal of Economic Issues* 29.2, pp: 609-618.
- J Sen A (1990), More than 100 million Women are Missing, *The New York Review of Books*
- J Sen A (1999) Women's Agency and Social Change, Ch.8 of *Development as Freedom*
- J Singh, Prabhash P., (1991), *Women in India: A Statistical Panorama*, Inter-India Publications, New Delhi.
- J Standing, Guy, (1989), "Global Feminization through Flexible Labor." *World development* 17.7, pp:1077-1095.
- J Standing, Guy, (1999), "Global Feminization through Flexible Labor: A Theme Revisited." *World Development*. Vol. 27(3), pp. 551-69.
- J Woolley, F. (1999), *Economics of the Family* in Peterson, J. and Lewis, M. (eds) *The Elgar Companion to Feminist Economics*, Cheltenham: Edward Elgar, pp 328-35 2.
- Wolf D, Daughter, *Decisions and Domination: an empirical and conceptual critique of household strategies*, WGDR Ch. 18

DSC Course Code: ECON233
RESEARCH METHODOLOGY

Credit	Lecture	Tutorial	Practical
6	4	2	0

Course Outcomes

By the end of the course, students will be able to:

-) Understand the scientific methods of research, research process and research design.
-) Understand the sampling techniques and sampling procedures.
-) Know the various methods of data collection, tools and techniques.
-) Know the reliability and validity of measurement of scaling.
-) Know the purpose of project proposal and project report.

Unit – I Scientific Methods of Research

Definition of research, assumptions, operations and aims of scientific research. The research process; conceptual, empirical and analytical phases of research. Essential criteria for scientific methods.

Research designs: observational Studies; descriptive, explanatory, exploratory and evaluative studies. Experimental studies; pre-test design, post-test design, follow-up or longitudinal design. Action research studies and panel studies.

Unit – II Methods of Data Collection:

Collection of primary data. Selection of appropriate method for data collection; interview schedule, questionnaire, case history and case study method. Tools of Data Collection: schedule and questionnaire, construction of schedule and questionnaire, qualities of a good schedule and questionnaire. Guidelines for successful interviewing.

Collection of secondary data - population (sex wise data) labour force, occupational, educational and vital statistics. Focus Group discussion (FGD), content analysis, social mapping, social networking and mystery client technique.

Unit – III Sampling Techniques

Complete enumeration versus sampling. Concept of Sampling unit, Sampling frame and sampling design. Sampling methods: simple random sampling, stratified sampling, Systematic sampling, cluster Sampling and purposive sampling. Multistage sampling in large-scale surveys, self- weighting

designs, stratification in multistage sampling. Sampling and non-sampling errors, calculation of weights, sample size determination.

Unit – IV Measurement

Reliability and validity of measurement: Face, Content, Construct, convergent, concurrent and predictive validity. Scaling techniques: attitude scales, point scales, ranking scales, rating scales, limitations of attitude scales. Techniques of scale construction: Bogardus, Guttman, Likert, Semantic and Thurstone Scale.

Data collection, processing and analysis: editing, coding, data entry, validation and analysis.

Unit – V Writing Research Proposal and Report

Purpose of a proposal/ report. Content of proposal/ report: introductory section, methodology adopted, analysis and inferences, summary, Conclusion and recommendations. References/ Bibliography, appendices, footnotes. Examples of some hypothetical proposals.

SUGGESTED READINGS

-) Cochran, W.G. (1963), Sampling Techniques, John Wiley & Sons, New York.
-) Edwards, Allen L. (1957), Techniques of Attitude Scale Construction, Appleton – Century – Crofts, New York.
-) Goode, W.J. and Hatt, P.K. (1952), Methods in Social Research, McGraw Hills, New York.
-) Mukherji, P.N. (1999), Methodologies in Social Sciences, Sage Publications, New Delhi.
-) Royce, A. Singleton and Bruce, C. Straits, (1999), Approaches to Social Research, Oxford University Press, Oxford.
-) Thurstone, L.L. (1959), The Measurement of Values, University of Chicago Press, Chicago.
-) Young, P.V. (1994) Scientific Social Surveys and Research, Prentice – Hill, New York.

DSE Course Code: ECON234
ECONOMICS OF POPULATION

Credit	Lecture	Tutorial	Practical
6	4	2	0

Course Outcomes

By the end of the course student will be able to:

-) apply general awareness of the relationship between economics and population
-) take part in analytical insights and knowledge population processes, structure and distribution
-) examine and analyze gross and per capital output.
-) identify plans development, policies and strategies of economic development.
-) identify facts of economic push and pulls in the causation of population growth.
-) analyse deep insights into economic inequalities.

Unit – I

Early theories of population (Malthus, Ricardo, Marx, J.M. Keynes and others). Effect of Pre- industrial technological and institutional changes on population. Demographic transition. The concept of optimum population.

Unit – II

Economic determinants of fertility: new household economics (Leibenstein theory and Gary Becker's Theory). Alternative economic approaches to fertility theory (Easterlin's and Caldwell's theories).

Unit – III

Cost and values of children and their effects on fertility, Supply of children and elements of uncertainty for the parents. economic determinants of Nuptiality (marriages and divorce), Gary Becker's model. Economic determinants of mortality.

Unit – IV

Economic determinants of migration (Regenstein's, Lee's and Todaro's Model). Economic consequences of population growth (General views of Malthus, Marx, Simon Kuznets). Economic consequences of population growth (Dual sector models of Lewis, Ranis Fei and Jorgenson's).

Unit – V

Effects of population growth on Savings and investment, population growth and Labour supply, population growth and distribution of income. Effects of

population growth on educational and human capital input facilities. Economic consequences of slowing population growth and population decline. Policy issues related to population and economic growth.

SUGGESTED READINGS

-) Agarwala, S. N. (1972). *India's Population Problem*, Tata McGraw – Hill, Bombay.
-) Bhende, A.A. and T. Kanitkar. *Principles of Population Studies*, Himalaya Publishing House, Bombay.
-) Boque, D. J. (1971). *Principles of Demography*, John Willey, New York.
-) Coale, A. J., and F.M. Hoover, (1958). *Population Growth and Economic Development in Low Income Countries: A Case Study of India's Prospectus*, Princeton University Press, Princeton.
-) Davis, K. (1972). *World Urbanization: 1950-70*. Vol. II, Population Monograph Series, No. 9. University of California, Barkley.
-) Everett S. Lee, *A Theory of Migration Demography*, February 1996.
-) Fred Arnold, et. al., *The Value of Children, A Cross-National Study*, Vol. 1 (East-West Population Institute, 1975).
-) Gary Becker, *An Economic Analysis of Fertility*, in National Bureau of Economic Research, *Demographic and Economic Change in Developed Countries*, (Princeton University Press, 1960), pp. 209-240.
-) Gary S. Becker, *A Theory of Marriage*, in T.W. Schultz, ed., *Economics of the Family* (University of Chicago, 1974), pp. 299-344.
-) John C. Caldwell, *Towards a Restatement of Demographic Transition Theory*, *Population and Development Review*, Vol. 2, Nos. 3-4, September and December 1976, pp. 321-366.
-) Registrar General of India, *Census of India*, Government of India, New Delhi.
-) Shrivastava, O.S. (1983). *A Textbook of Demography*, Vikas Publishing House, New Delhi.
-) Shrivastava, O.S. (1996). *Demography and Population Studies*, Vikas Publishing House Pvt. Ltd., 2nd Edition.
-) Shryock, H. Siegel, J.S. and Associates (1976). *The Methods and Material of Demography*, Academic Press, New York.
-) Simon Kuznets, *Modern Economic Growth* (Yale University Press, New Haven, 1966), Chapter 2, *Growth of Population and Product*, pp. 34-85.
-) Smith, P.C. (1983). *Trends and differentials in Nuptality in the Population of the Philippines*, Country Monograph Series No. 5 UNESCAP, Bangkok.
-) Thomas Malthus, *A Summary View of the Principles of Population*, in D.V. Glass, ed., *An Introduction to Malthus*, Watts and Co., London, 1953, pp. 117-181.
-) Thomas P. Espenshade, *The Value and Cost of Children*, *Population Bulletin*, Vol. 32, No. 1, 1977, pp. 3-32 only.
-) United Nations, (1973). *The Determinants and Consequences of Population Trends*, Vol. I, UN Publications, New York.
-) United Nations, *The Determinants and Consequences of Population Trends*, Vol. I, 1973, part of chapter 2, *Population Theory*, pp. 33-48.
-) Weeks, J.R. (1978). *Population: An Introduction to Concept and Issues*. Wadsworth Publishing Co., Belmont, California.

**DSE Course Code: ECON235
ECONOMETRICS**

Credit	Lecture	Tutorial	Practical
6	4	2	0

Course Outcomes

By the end of the course student will be able to:

-) estimate and interpret linear regression models
-) examine the problems that arise when the assumptions of linear regression model are not valid.
-) solve problems that results from violating the assumptions of linear regression model.
-) dissect various concepts of econometrics such as autocorrelation, homoscedasticity, multicollinearity etc., which have very wide significance in economic relations.
-) analyse tools of econometrics, econometric models and applying them in practice.

Unit – I

The Simple Linear Regression Model

Assumptions of ordinary Least Squares (OLS) method, Properties of OLS estimates. Assumption of normality and confidence intervals for the parameters. Tests of significance of the parameter estimates. Tests of hypotheses with parameter estimates, test of goodness of fit with R-square. Desirable properties of estimates. Prediction with a linear regression model. Proof of BLUE properties of estimates (Gauss-Markov theorem). Different types of variables (Dominant, proxy irrelevant and superfluous variables).

Unit – II

Extension of Linear Regression Model

General Linear regression Model and Analysis of Variance: general linear regression model. Extension of the linear regression model to non-linear relationships. Applications of analysis of variance and regression. Tests of restriction imposed on the relationship of two or more parameters. The Chow test. Specification errors and specification bias.

Unit – III

Violations of Assumptions of Linear Regression Model

The Problem of heteroscedasticity, its consequences and some methods to overcome the problem. Auto-correlation, its Sources, consequences and methods

to solve the problem. The Durbin-Watson test. Consequences and tests for detection of multicollinearity. The Farrar-Glauber test. Methods to solve the problem of multicollinearity. Errors in Variables: their consequences and solutions. Method of inverse least squares.

Unit – IV Dummy and Lagged Variables

Analysis with dummy variables as explanatory variables. Lagged variables and distributed lag models; The Koyck model, the adaptive expectation model, the Nerlovian partial adjustment model and the Almon scheme of polynomial lag. The method of instrumental variables. The method of maximum likelihood as applied to regression. The Cramer-Rao lower bound. Regression on dummy dependent variables. The linear probability and the Logit models.

Unit – V Identification and Simultaneous Equation Models

The Simultaneous equation bias. The problem of identification. Formal rules for identification and choice of econometric methods. Recursive models, Indirect Least Squares model. Two stage least squares (2SLS) and the method of Instrumental Variables.

SUGGESTED READINGS

- Gujarati, D., (), Basic Econometrics, McGraw-Hill, 2/e, New York.
- Johnston, J., (), Econometrics Methods, 2/e, McGraw-Hill, New York.
- Kennedy, Peter, (1985), A Guide to Econometrics, MIT Press Edition, Basil Blackwell Ltd., Oxford, UK.
- Kmenta. J., (), Elements of Econometrics, Prentice Hall, New Jersey.
- Koutsoyiannis, A., (1977), Theory of Econometrics, 2/e, Mac-Millan, London.
- Maddala, G. S., (), Econometrics, MacGraw-Hill, New York.
- Wooldridge, Jeffrey M., (2006), Introductory Econometrics – A Modern Approach, 3rd Edition, (First Indian Reprint 2007), Akash Press, New Delhi – 20.

AEC Course Code: ECON236
CONTEMPORARY ECONOMIC ISSUES AND DATA HANDLING

Credit	Lecture	Tutorial	Practical
4	3	1	0

Course Outcomes

By the end of this laboratory based hands-on practical training course, students will be able to:

-) handle data and solve basic algebraic problems using Excel.
-) use different logical and statistical functions in Excel to compute descriptive statistics of a univariate and multivariate data set.
-) present data using different types of graphs Using solver in excel student will be able to solve linear equation system and LPP and NLPP.
-) The course proposes to develop the capacity of students to analyse and appreciate contemporary economic issues and policy pronouncements. The course will start with an introduction to the basic principles of report writing. Subsequent modules will involve inter-active lectures, group discussions, and group presentations.
-) By the end of the course student will be able to present their analysis in the form of a written report.

Unit I

Basics of Microsoft Excel: Opening of Excel File-Workbook and worksheet-Rename of the workbook and worksheet. Brief history of Excel workbook-Advantages and disadvantages of the use of excel for statistical analysis. Location of heading/title bar- menu bar, tool bar- Formulae and function-formula space- cell-cell formatting- data entry-data clearing-copy-cut-paste, paste special – paste value-paste formula-paste transpose of the data set.

Unit II

Data Management: Data transformation: arithmetic operation- addition, subtraction, multiplication, log transformation, exponential, squaring and square root, indices. Use of 'If' function- nested if, sum, sum if, count, countifcountifs, average if, text to numeric and numeric to text using if function, max, min, large value of the data set, concatenate. Sort - ascending and descending, A-Z, sort row wise /column wise. Filter of the data set and create sub sample- filter according to text filter data according to numeric values or conditions, saving the filtered data in separate worksheet. Lookup functions.

Unit III

Descriptive Statistics: (i) Univariate Data: Measures of Central Tendency: mean, median, mode, Trim mean, geometric mean, harmonic mean, Measures of Dispersion: Range, quartile deviation, SD, CV, Gini coefficient, Moments and Order statistics: skewness, kurtosis, rank and percentile (ii) Multivariate Data: Covariance and correlation matrix, partial correlation, rank correlation. Graphical Presentation of Data: Different types of charts and their applications, Scatter diagram and Curve fitting.

Unit IV

Guidance for project writing: Identifying the topic, Review of Literature, Writing Project Report – Referencing Styles and use of referencing software.

Unit V

Analysing economics in the news Writing article about contemporary economic event (National &/or Global) using knowledge of economic theory, Analysis of contemporary Indian Economic Data and Policies Economic survey, budget, annual policy data, RBI, Monthly Economic Data - Ministry of Finance.

Suggested Readings:

-) Abbott Martin Lee, Understanding Educational Statistics Using Microsoft Excel and SPSS John Wiley & Sons, Inc. 2011.
-) Bal Guruswamy E.: Computer oriented statistical and numerical methods. Macmillan.
-) Carver Robert H. and Jane Gradwohl Nash, Doing Data Analysis with SPSS, Cengage Learning.
-) George Darren and Paul Mallery, SPSS for windows Step by Step, A simple guide and Reference, Pearson Education.
-) Levine David M., David F. Stephan, Timothy C. Krehbiel and Mark L. Berenson, Statistics for Managers Using Microsoft Excel, 5ed, Prentice Hall, Pearson 2008.
-) Mathew Johan: Numerical Methods, P-III.
-) Schmuller Joseph, Statistical Analysis with Excel for Dummies 3RD EDITION, John Wiley & Sons, Inc. 2013.
-) Whigham David, Business Data Analysis Using Excel, OUP 2007.
-) Economic and Social Classification of the Budget, available at <http://finmin.nic.in/reports/FunClass201415.pdf>.
-) Finance Commission Report - <http://finmin.nic.in>
-) <http://www.unionbudget.nic.in>
-) Mukherjee Pranab (2012), “Budget Making”, in K. Basu and A. Maertens (eds), The New Oxford Companion to Economics in India, OUP.
-) The Economists, <https://www.economist.com/> The Key to Budget Documents, Budget At A Glance, Macroeconomic Framework Statement, Medium Term Fiscal Policy Statement and Fiscal Policy Strategy Statement, all available at indiabudget.nic.in.

DSC Course Code: ECON241
INDIAN ECONOMY

Credit	Lecture	Tutorial	Practical
6	4	2	0

Course Outcomes

By the end of the course student will be able to:

-) evaluate the evolution of Indian economy and identify key issues in development of Indian economy.
-) dissect and examine sectoral development specifically agricultural and industrial development.
-) interpret and elaborate financial sector and related policies.
-) inspect and explain Indian economy in the context of India's foreign trade.
-) evaluate the performance of Indian economy's development trajectory.

Unit – 1

Growth and Structure of Indian Economy Since 1950. Growth of Indian economy since 1950. Measures for raising economic growth. Trends in the nature and magnitude of poverty, inequality and unemployment. The unorganized Sector and its implications for the economy, Changes in occupational pattern, Demographic trends and economic development. Rate and trend in saving, investment and growth rate.

Unit – II

Growth of Agricultural, Industrial and Tertiary Sectors

Trends in agricultural production and productivity. Impact of liberalization in agricultural sector. Industrial Growth performance and problems. Industrial concentration; its nature and extent. Cottage and small-scale and MSME industries. Impact of liberalization and privatization on the industrial sector. Tertiarization of the Indian economy.

Unit – III

Money Supply, Inflation and Public Policies

Factors determining interest rates. Money supply and inflation in India. Financial sector reforms during 1990's. recent tax reforms. Growth and structure of

subsidies in India. Macro-economic policies – fiscal policy, income policy and stabilization policy. Parallel economy and its implications.

Unit – IV

International Trade Policies

Composition and directions of India's foreign trade. Factors determining the balance of payment. Disequilibrium in the balance of payment. Causes, consequences and policy measure. India's policies towards foreign capital; collaboration, export promotion and import substitution. Exchange rate policy and the convertibility of Rupee.

Unit – V

Development Policies

India's planned development; Successes and failures. Policies for social justice (with special reference to the alleviation of poverty, inequality and unemployment). Food policy and public distribution system (PDS). Sectoral policies: Industrial and agrarian. Policies for liberalization and privatization.

SUGGESTED READINGS

- Ahluwalia, I. J. (1985). *Industrial Growth in India*, Oxford University Press, New Delhi.
- Bagchi, A. (1982). *The Political Economy of Underdevelopment in India*, Cambridge University Press, Cambridge.
- Banerji A., and Esther Duflo, (2013), (paperback edition), *Poor Economics – rethinking poverty and ways to end it*, Penguin Random House, India.
- Brahmada, P. R. (1980). *Growthless Inflation by Means of Stockless Money*, Himalayan Publishing House, Bombay.
- Bardhan, P. (1984). *The political Economy of Development in India*, Oxford University Press, New Delhi.
- Bhagwati, J. & P. Desai (1972). *India: Planning for industrialization*, Oxford University Press, London.
- Chakravarty, (1971). *Contribution to Indian Economic Analysis*, Lalvani Publishing House, Bombay.
- Bhagwati, J. N. & V. R. Panchmukhi (1976). *Foreign trade regimes and Economic Development*, Macmillan, Delhi.
- Brahma, P. R. and V. R. Panchmukhi, (Eds.) (1987). *The Development Process of the Indian Economy*, Himalaya Publishing House, Bombay.

- Chakravarty, S. (1987). *Development Planning: The Indian Experience*, Clarendon Press, Oxford.
- Chakravarty's (1985). *Report of the Reserve bank of India, Committee to review the Working of the Monetary System*, reserve bank of India, Bombay.
- Chelliah R. J., (1969). *Fiscal Policy in Under-Developed Economy*, 2e, George Alen and Unwin, London.
- Chelliah R., *et. al.*, (1981). *Trends and issues in Indian federal Finance*, Allied Publishers, New Delhi.
- Datta, Bhabatosh (1977). *The Contents of Economic Growth, and other essay*, Research India Publication, Calcutta.
- Gadgil, D. R. (1972). *Planning and Economic Policy in India*, Orient Longman, Poona.
- Gandhi, V. P. (1970). *Aspects of India's Tax Structure*, company, Bombay.
- Goldsmith, R. W. (1969). *Financial Structure and Development*, Yale University Press, New Haven.
- Jalan, Bimal, (1996), *Problems and Prospects of the Indian Economy*,
- Jha, L. K. (1980). *Economic Strategy for the 80's*, Allied Publishers, New Delhi.
- Jha, R. (1987). *Modern Theory of Public Finance*, Wiley Eastern New Delhi.
- Kapila, U. (Ed.) (1988). *Arrested Development in India*, Nabigar Publications, New Delhi.
- Kapila, U., (Ed.) (latest edition). *Indian Economy Since Independence*, Vols. 1 & 2, Academic foundation, New Delhi.
- Lakdawala, D. T. (1967). *Union-State financial relations*. Lalvani Publishers, Bombay.
- Little, J. M. D; T. Scitovsky & M. Scott (1970). *Industry and Trade in some Developing Countries: A Comparative Study*, Oxford University Press, London.
- Nayyar, D. (1976). *India's Exports and Export Policies in the 1960's*, Cambridge University Press, Cambridge.
- Panchmukhi, V. R. (1978). *Trade Policies of India, A Quantitative Analysis*, Concepts Publishing Company, New Delhi.
- Radjou, Navi, Jaideep Prabhu & Simone Ahuja, (2015), *Jugaad Innovation*, 16th impression, Random House, India.
- Rao, V. K. R. V. (1983). *India's National Income: 1950-1980*, Sage Publications, New Delhi.
- Rao, V. K. R. V. A. M. Khushro & C. M. Hanumantha Rao (1973). *Inflation and India's Economic Crisis*, Vikas publishing house, Delhi.
- Simha, S. L. N. (1974). *Inflation in India*, Vora and Co., Bombay.
- Thavaraj, M. J. K. (1978). *Financial Management of the Government*, S. Chand and Company, New Delhi.
- Wadhwa, C. (Ed.) *Some Problems of India's Economic Policy*, 2e, Tata McGraw-Hill, Publishing Company.

DSC Course Code: ECON242
PUBLIC FINANCE

Credit	Lecture	Tutorial	Practical
6	4	2	0

Course Outcomes

By the end of the course student will be able to:

-) examine the concept of maximum social advantage, keeping in view market failure and free riders' problem.
-) understand and make use of taxation system of India.
-) outline the theories, concepts and meaning of public debt and public expenditure in India.
-) interpret and elaborate classification of budget and fiscal policy for stability, growth and economic development.
-) evaluate the growth and composition of statutory and non- statutory financial resources in India.

Unit – 1

Principles of Public Finance

Principles of maximum Social Advantage. Role of public finance in the developing Economics. Fiscal economics: An overview. Of allocation, distribution and stabilization. Functions. Market failure. Public goods and externalities. Public goods and free-rider problem.

Unit –II

Principles of Taxation

Meaning and type of taxes; requirements of a good tax structure. Approaches to taxation: micro analysis of direct and indirect taxes; individual income tax, corporation income tax, sales tax including value-added tax, expenditure tax and Goods and service Tax. Incidence of taxes; nature of tax burden and principles of tax incidence. Theories and measures of tax incidence. Effects of taxes on work efforts, savings, investment, and growth. Trade-off between equity and efficiency. Taxable capacity.

Unit – III

Economics of Pubic Debt and Public Expenditure

Sources of public debt. Classical theory of public debt. Compensatory aspects of debt policy. Burden of public debt. Management of public debt. Growth of internal and external public debt. in India. Theories of growth of public

expenditure. Pattern of public expenditure. Pure theory of public expenditure. Growth of public expenditure in India.

Unit – IV

Reforms in Budgeting System and Stabilization Policies

Performance and programming budgeting. Classification of budgets. Fiscal policy: traditional and modern views on fiscal policy. Instruments of fiscal policy; built-in-stabilizers and compensatory fiscal policy. Fiscal policy for stability and growth. Fiscal policy and economic development.

Unit – V

Fiscal Federalism: Role of fiscal federalism. Allocation, distribution, and stabilization in a federation. Union-state-local financial relations in India. Growth and composition of statutory and non-statutory financial transfers in India. Nature and extent of deficits in central and State budgets. Policy measures to correct fiscal imbalances. Economic analysis of recent union budgets.

SUGGESTED READINGS

- Auerbach, A. J. and Feldstein, M. (Ed.) 1985. Handbook of Public Economics, Vol. I, North Holland, Amsterdam.
- Aura Movie, D. et. Al. (1964). Economic Growth and External debt, Johns Hopkins, Baltimore.
- Badway, R. W. and Bruce, N. (1984). Welfare Economics, Basil Blackwell, Oxford.
- Buchanan, J. M. (1958). Principles of Public Debt. AA Defence and Restatement, Richard Irwin, Homewood.
- Buchanan, J. M. (1968). The Demand and Supply of Public goods, Rand McNally-Chicago.
- Buchannan, J. M. (1960). Fiscal Theory and Political Economy, Selected essays, University of North Carolina, Press Chapel Hill.
- Chellaih. R. J. (1971). Fiscal Policy in Under Developed Countries, George Allen and Unwin, Bombay.
- Chelliah, R. S. (1996). Towards Sustainable Growth, Essays in fiscal and Financial Sector Reforms in India.
- Chelliah, R., et. Al. (1981). Trends and Issues in Indian federal Finance, National Institute of Public Finance and policy, New Delhi.
- Cornes, R. and T. Sandler (1986). The Theory of externalities, Public Goods and club-goods, Cambridge University Press, Cambridge.
- Dalaya, C. (1996). Internal Debt of Government of India, Vora and Co., Bombay.
- Durveyo D. N. Ed. (1981). Readings in Indian Public Finance, Chanakya Publications, Delhi.

- Gandhi, V. P. (1970). Some Aspect of Indian Tax Structure: An Economic Analysis, Vora and Co. Bombay.
- Gulati I. S. (Ed.) (1987). Centre State Budgetary Transforms, Oxford University Press, Bombay.
- Gulati, I. S. (1979). Center-State financial Relations. An assessment of the role of Finance Commission, M. a. University of Baroda.
- Hansen. A. N. (1951). Fiscal Policy and Business Cycles, Norton, New York.
- Houghton, R. W. (ed.). Public Finance, Selected Readings penguin, Harmondsworth.
- May, R. J. (1969). Federalism and Fiscal Adjustment, Oxford University Press.
- Mishan, E. J. (1986). Introduction to Normative Economics, Oxford University Press, New York.
- Musgrave, R. A. (1995). The Theory of Public Finance, McGraw-Hill, New York.
- Musgrave and Musgrave (1950). Public Finance in Theory and Practice, McGraw-Hill, New York.
- Musgrave, R. A. (1959). The Theory of Public Finance M. C. Graw Hill Kegakusha Tokyo.
- Musgrave, R. A. (1969). Fiscal System, Yale University Press, New Haven.
- Musgrave, R. A. (1984). Public Finance in Theory and Practice, McGraw-Hil, New York.
- Musgrave, R. A. 91977). Essays in Fiscal Federalism, Green Wood Press, Westport.
- Musgrave, R. A. and Shoup (Eds.) 1970. readings in the Economics of Taxation, George, Allen and Unwin, London.
- Musgrave. R. A. (1969). Fiscal System, Yale University Press, New Haven.
- Oates, W. E. (1972). Fiscal Federalism, Har court Brace and Jovanwich, New York.
- Oates, W. E. (1972). Fiscal Federalism, Harcourt Brace Jovanovich.
- Peacock Alan and Show, G. K. (1971). The Economic Theory of fiscal Policy.
- Phyrn, I. (1973). Zero Based Budgeting A Practical Management Tool for evaluation Expenses. Jean Wiley, New York.
- Purohit, Matresh C. (1993). Principles and Practices of Value Added Tax, Lessons for Developing Countries, gayatri Publications, Delhi.
- Seligmar, E. R. A. (1969). Essays in Taxation, Auguste M. Kelley, New York.
- Shaw, G. K. (1972). Fiscal Policy, Macmillan, London.
- Thavraj. M. I. R. (1978). Financial Administration in India, Sultan Chand, New Delhi.
- Williams, Alan (1963). Public Finance and Budgetary Policy George Allen Unwin Ltd. London.

DSC Course Code: ECON243
ECONOMICS OF DEVELOPMENT AND PLANNING

Credit	Lecture	Tutorial	Practical
6	4	2	0

Course Outcomes

By the end of the course, students will be able to:

-) explain the concepts of economic growth, structural change and economic development.
-) compare and contrast Classical, Marxian, Schumpeterian and other theories of economic development.
-) analyse state intervention under LPG and evaluate and construct development plans using appropriate techniques.
-) understand and evaluate development models.
-) critically examine the policy debate around India's development trajectory.

Unit – I

Economic growth, development and sustainable economy. Various traditional and modern criteria and measure of development, Major features of structural change and economic development. Measurement of absolute poverty and income inequality. Growth and equality trade –off.

Unit – II

Classical, Marxian and Schumpeterian theories of economic development. Stages of economic growth (Rostow and Marx). Approaches to the theory of underdevelopment and development underdevelopment. The big-push theory; Critical minimum effort thesis, Low level equilibrium trap. Lewis and Ranis- Fei models of economic development.

Unit – III

Planning and the market mechanism State intervention vs. liberalization, and privatization debate. The core areas of State intervention under liberalization. Process of plan formulation. Investment criteria for plan projects, cost-benefit analysis. Determination of size, growth rate and priorities in planning. Use of input-output and linear programming techniques in planning.

Unit – IV

Models in economic planning: policy models, projection models and development planning models. Models underlying various Indian Plans: Harrod Domar model; Mahalanobis model, and the model underlying current Five Years Plan. Resource mobilization for planning: Domestic resources; mobilization of resources through fiscal measures and monetary regulation. Savings and

inflationary finance. External resources-Dual gap analysis and foreign borrowings. Foreign borrowings v/s. foreign direct investment.

Unit – V

India's Five-Year Plans: Objectives, strategies, achievements and constraints. Decentralized planning and people's participation. Saving-investment rates-trends and problems. The policy debate in the post liberalization period debate-general down sizing of the public sector and disinvestments in public sector undertaking MNCs Vs. Swadeshi movement benefits and pitfalls of globalization and international finance.

SUGGESTED READINGS

- Ahluwalia M. S. et.al. (1979). Growth and Poverty in Development Countries, Journal of Development Economics, Vol. G, No.3.
- Baran, Paul, (1957). The Political Economy of Growth, Monthly Review Press, New York.
- Beacker G. (1975). Human Capital, Columbia University Press, New York.
- Bhatt, V. V. & J. Meceran (1978). Resource Mobilisation in Developing Countries: Financial Limitations and Policies, World Development Report _ 1
- Bilzer, C. R. et.al. Economy wide Models and Development Planning, Oxford University Press, Oxford.
- Blaug, Mark. (1974). Education and the Employment Problem in Developing Countries, International Labour Office, Geneva.
- Brahmananda. P. R. and C. N. Vakil (1956). Planning for Expanding Economy, Vora & Co., Bombay.
- Dasgupta, P. et. al. Guidelines for Project Evaluation, UNIDO, New York.
- Ghatak, S. (1986). An introduction to Development Economic, Allen & Unwin, London.
- Ghatak, S. (1986). An Introduction to Development Economics, Allen & Unwin, London.
- Tinbergen. J., (1967). Development Planning; McGraw-Hill, New York. Chenery H. B. et. al. Ed. (1971). Studies in Development Planning, Harvard Economic Studies, Vol. 136, Harvard University Press, Cambridge, Mas.
- Heller, Pater S., (1975). A Model of Fiscal Behaviour in American Economic Review, Vol. 65, NO. 3.
- Herberger, A. C. (1973). Project Evaluation: Collected Papers, Markham Economics Series, Markham, Chicago.
- Higgins, B. (1950). Economic Development, Norton, New York.
- Higgins, B. (1959). Economic Development, Norton, New York.
- Kapila, Uma, Ed. (1980). Indian Economy Since Independence, Vol.1, Academic Foundation, Delhi.
- Lewis. W. A. (1955). The Theory of Economic Growth, George Allen and Unwin, London.

- Little, I. M. D. & J. E. Mirrlees (1974). Project Appraisal and Planning for Developing Countries, Basic Books, New York.
- Little, I. M. D. (1982). Economic Development: Theory Policy and International Relations, Basic Books, New York.
- Meier, G. M. (1984). Leading Issues in Economic Development, 4e., Oxford University Press, New York.
- Meier, G. M., Ed. (1988). Leading Issues in Economic Development, 4e, Oxford University Press, New York.
- Meler, G. M. (Ed.) (1984). Leading Issues in Economic Development, Oxford University Press, New York.
- Mishan, E. J. (1975). Cost-Benefit Analysis, 2e, Allen & Unwin, London.
- Myrdal, G. (1957). Economic Theory and Underdeveloped regions, Duckworth, London.
- Rostow, W. W. (1956). The Stages of Economic Growth, A Non-communist Manifesto, Cambridge University Press, London.
- Sen, A. K. (1962). Choice of Techniques, Basil Blackwell, Oxford.
- Thirlwall, A. P. (1978). Growth and Development, Macmillan, London.
- Thirlwall, A. P. (1976) Financing Economic Development, Macmillan, London.
- Todaro, M. P. (1971). Development Planning: Models and Methods, Oxford University Press, New York.
- Todaro, M. P. (1971). Development Planning: Essentials of Economic Policy,
- Todaro, M., (1981), Economic Development in the Third World Longman, London.
- United Nations (1978). A Guide to Practical Project Appraisal: Social Benefits/Cost Analysis in Developing Countries, United Nations Industrial Development Organization, (UNIDO) and New York.
- Waterston, A. (1972). Development Planning: Lessons of Experience, John Hopkins University Press, Baltimore.

DSE Course Code: ECON244
PG DISSERTATION
Course Credits: 6

Course Outcomes

By the end of the course student will be able to:

-) develop the ability to critically examine economic issues.
-) use basic analytical tools.
-) present arguments/findings logically.
-) evaluate policies and strategies of economic development

Guidelines for PG Dissertation

Students are encouraged to undertake PG Dissertation work based on a combination of primary and secondary data/information.

1. Dissertation

- a) Each student will undertake an **individual** dissertation ideally of 60 -80 pages. It will be reported in on A4 size paper in Times New Roman Font. Font size: Main Heading =16; Subheading=14 & Text 12. Line spacing 1.5 and margins 1” top, bottom & right margin and 1.5” on left margin. Font size for tables/figures may be suitably adjusted. The dissertation is to be printed on both sides of the paper using mirror margins. **IMPORTANT:** A dissertation of less than 50 pages in this specified format *will not* be accepted for evaluation.
 - b) The dissertation work will be carried out in consultation with the supervisor allotted to each student for the purpose.
 - c) A seminar of the research proposal will be presented to the Department Council and Students to help finalize the topic & methodology and latest version of style sheet (APA/MLA etc) of the proposed study prior to its commencement.
 - d) Pre submission seminar will be presented to the Department Council and only upon approval will the Dissertation be submitted for evaluation.
- 2. Dissertation:** will be as per APA/MLA/any other standard stylesheet to be specified at the time of Seminar presentation at 1c) above.

Chapter Scheme

- i) Introduction
- ii) Review of Literature
- iii) Research Methodology
IMPORTANT: At the time of Seminar [1c) above], in place of “Limitations”, “Expected Outcome” will be reported.
- iv) Data Analysis & Findings
- v) –do-
- vi) Summary and Conclusion
References/Bibliography
Annexure (Annexure I will be the Questionnaire/Interview schedule).

NOTE: The number of Chapters pertaining to data analysis may vary in accordance with the objectives. Here Chapters iv, & v are shown as an example.

DSE Course Code: ECON245
INDUSTRIAL ECONOMICS

Credit	Lecture	Tutorial	Practical
6	4	2	0

Course Outcomes

By the end of the course, students will be able to:

-) have the knowledge of different theories of international trade and their applications.
-) to know about impact of dynamic factors on international trade.
-) have the knowledge of various policies related to international trade besides, role of international trade organizations.
-) attain the knowledge of balance of payment and determination of exchange rates.
-) have the knowledge of capital requirements of developing countries both in short and long run.
-) have the knowledge of Financial institutions like IMF, ADB, IFC and IDA.

Unit – 1

Scope of industrial Economics. Organization of industry. Changing forms of industrial organization. Process of industrialization: Rationale, objectives, strategies and policies. Employment implications of industrialization. Appropriate industrial technology for LDSLs. Industrialization and economic development. Patterns and phases of industrial growth and changes in industrial structure. Environment pollution on (its types, sources and effects), Public goods and bads, unmarketed goods, externalities. Resource depletion, problem of social cost.

Unit – II

Theory of firm and pricing. Objectives of the firm: profit and non-profit maximizing models of the firm. Bais theory of limit pricing; Marginal cost versus full cost pricing; Allocation of costs in case of joint products; Welfare implications of monopoly pricing. Investment decision; conventional and modern approaches; risk, uncertainty and investment decision. Economic Evaluation of Environmental Resources Measuring environmental damage (Valuation Methodologies). Irreversibility and the optimal use of natural environments (irreversibility in economic processes, irreversible Decisions and exhaustible resources, irreversible investment and project evaluation, determining the discount rate, inter-generational transfers determining the discount rate, inter-generational transfers and uncertainty). Divergence between social cost and private and uncertainty.

Unit – III

Market structure, conduct and performance and interrelations among them. Industrial concentration: concepts and measurement; Extent, causes and likely effects of concentration. Analysis of diversification, Vertical integration and mergers in industry. Extent of monopoly and concentration in India; Public policy towards industrial concentration and monopoly power in India. Environmental Management Models: Environmental control under uncertainty. Economics of pollution control. Economics of renewable resource harvesting (Optimal policies of fisheries, optimal rotating forest). Efficient allocation of renewable resources through time.

Unit – IV

Industrial location: Theories and factors affecting location; infrastructure for industrialization; Regional growth of industry in India. Tools of public policy. Indian policy for backward areas. Industrial finance in India. Role of term-leading institutions in industrial development of India. Indian capital market. Environmental costs of economic growth. Problems of rural and urban environmental planning. Resource management to fulfil environmental, social and economic objectives. Dilemma in environmental planning (poverty Vs. Environmental quality, social aspects, legal aspects, financial aspects).

Unit – V

Issues in Indian industry: Phases of industrial growth and changes in industrial structure India. Public sector rationale and organization; Public sector pricing policies. The question of efficiency in the context of special constraints; Overall performance of public sector in India. The concept of joint-sector in India. The problems of industrial sickness; Capacity utilization. Foreign collaborations; Multinationals in Indian joint ventures abroad. The recent liberalization trends. Large versus small scale industry debate in India. Policies for Environmental Planning, Role of voluntary organizations. People's participation in environmental management, Resource conservation (conserving soils, protecting forests, materials substitution, product life extension. Recycling materials conservation.

SUGGESTED READINGS

- Ahluwalia, I. J. (1980). Industrial Growth in India. Oxford University Press, Delhi.
- Andrews, P. and T. Wilson, Eds, (1951). Studies in the Price Mechanism, Oxford University Press, London.
- Bagchi, A. and M. Banerjee, eds. (1979). Change and Choice in Indian. Industry. BagchiPublications Calcutta.
- Bain, Joe (1967). Industrial Organization, 2e, John Wiley, New York.
- Barthwal, R. (1984). Industrial Economics, 2e, Wiley Eastern Ltd., New Delhi.
- Bhagwati J. and P. Desai (1972). India: Planning for Industrialization. Oxford University Press, London.
- Brahmananda, P. R. & V. R. Panchmukhi (Eds.), (1987). The Development Process of Indian Economy. Himalaya Publishing House, Bombay.

- Byrce D. Marray (1960). Industrial development. A Guide for Accelerating Economic Growth, McGraw Hill Book Company, New York.
- Clarkson., K. W. and R. Miller (1985). Industrial organization, Theory Evidence and Public Policy, McGraw-Hill, Kogakusha, Tokyo.
- Das, N. (1969). The Public Sector in India, Vora & Company, Bombay.
- Devine, P. J. et. Al. (1978). An Introduction to Industrial Economics, 3e, George Allen and Unwin, London.
- Friedrich, S. (1929). Weber's Theory of Location of Industry, Chicago University Press, Chicago.
- Ghosh, P. K. (1977). Government and Industry. Oxford University. Press, Delhi.
- Godbole, M. D. (1973). Industrial Dispersal Policies, Allied Publishers, Bombay.
- Gupta, L. C. (1969). The Changing Structure of Industrial Finance in India, Oxford University Press, Delhi.
- Hannah, L. & Kay, J. (1977). Concentration of Modern Industry, Macmillan, London.
- Hay, D. H. and D. J. Morris, (1979). Industrial Economics': Theory and Evidence, Oxford University Pres, Oxford.
- Isard, W. (1956). Location and Space Economy, John Wiley, New York.
- Khan M. I. (1981). Indian Financial Systems. Allied publishers, New Delhi.
- Khan, M. V. (1980). Trends in Industrial Production 1951-77 and Onwards in R. B.I. Occasional Papers R. B. I. Bombay.
- Koutsoyiannis, A. (1979). Modern Microeconomics, 2e, Macmillan, New York.
- Menou, KSV (1979). Development of Backward Areas Through Incentives, Asia Publishing House, Bombay.
- Reserve Bank of India (1985). Foreign Collaboration in Indian Industry. R. B. Bombay.
- Sandersara, J. C. (1982). Industrial Growth in India: Performance and Prospects; Lala Lajpatrai College Bombay.
- Sbaïn, Joe (1967). Industrial Organization, 2e, John Wiley, New York.
- Scharer, F. M. (1971). Industrial Market Structure and Economic Performance, Chicago University Press, Chicago.
- Smith, D. M. (1971). Industrial Location: An Economic and Geographic Analysis, John Wiley, New York.
- Thakur, Srinivas V. (1985). Industrialization and Economic Development, Popular Parkashan, Bombay.
- UNIDO (1972). Guidelines for Project Evaluation, UNIDO, Publication, New York.
- Wiles, P. J. D. (1963). Price-cost and Output, F. Praeger, New York.
- Barbier, E. B. (1997). The Economics of Environment and Development. Edward Elgar, Cheltenham, U. K.
- Baumol, W. J. & W. E. Dates, (19750. the Theory of Environmental policy. Prentice Hall Engle Weed.
- Brown, I. R., et. Al. State of the World, (A World-Watch institute Report, Prentice Hall of India New Delhi.
- Clark, C. W. (1976). Mathematical Bioeconomic: Optimal management of Renewable Resources, John Willey & Sons, New York.
- Cooper, Charles (1980). Economic Evaluation and the Environment, Hodder and Stoughton, London.
- Dasgupta, P. (1982). The Control of Resources, Oxford University Press, Delhi.
- Dorfman, R. and N. S. Dorfman (Eds.) (1977). Economics of the Environment, W. W. Norton, New York.
- Faber, M. And R. Manstetton, (1996). Ecological Economics Edward Elgar, Cheltenham, U.K.
- Folmer, H., H. L. Gabel and H. Opschoor (eds.) (1996). Principles of Environmental and Resource Economics. Edward Elgar, Cheltenham, U. K.

- Kolstadt, Charles D., (1999), Environmental Economics, McGraw Hill.
- Krutilla, J. V. and A. C. Fisher (1975). The Economics of Natural Environment, Johns Hopkins University Press, Baltimore.
- Maeler, K. G. (1974). Environmental Economics A Theoretical Enquiry, Johns Hopkins University Press, Baltimore.
- Nijkamp, P. (1977). Theory and Application of Environmental Economics, North-Holland Publishing Co., Amsterdam.
- Nijkamp, P. (1980). Environmental Policy Analysis; Operational Methods and Models, John Wiley & Sons, New York.
- Pearce, D. W. and Turner, R. K. (1990). Economics of Natural Resources and the Environment. Harvester Wheatsheaf, New York.
- Pearce, P. W. (1976). Environmental Economics, Longman London.
- Squire, L & Vander Tak, H. (1975). Economic Analysis of Projects, Johns Hopkins University Baltimore.
- World Bank, (1992). World Bank Development Report, 1992; Environment and Development. Oxford University Press, Oxford.

GE Course Code: ECON246
ECONOMY OF HIMACHAL PRADESH

Credit	Lecture	Tutorial	Practical
4	3	1	0

Course Outcomes

By the end of the course student will be able to:

-) To understand the various socio-economics issues of the economy of Himachal Pradesh
-) To examine the problems and prospects of agricultural and horticultural activities of Himachal Pradesh.
-) To know the industrial, power, labour welfare and skill development issues related to the Himachal Economy.
-) To analyse the role infrastructural and tourism in the economic development of the Himachal Pradesh

Unit I

Features of Himachal Pradesh Economy: Resource endowment - Land, Water, Minerals, Forests, Demographic Trends, Human Development Index. Trends in State income – Structural growth before and after reforms, Sources of State Finances. Targets and Achievements of Plans, Budget. Growth trends in GSDP.

Unit II

Agriculture and Horticulture of Himachal Pradesh: Role of Agriculture and Horticulture in State Domestic Product Cropping pattern, Productivity and yield of major crops, Agricultural marketing, Agricultural finance, Marginalization and Agricultural Diversification in Himachal Pradesh. Trends in Fruit and vegetable Production and Productivity. Critical evaluation of government policies on agriculture and horticulture sector.

Unit III

Industrial and Power Sector of Himachal Pradesh: Trends and patterns in industrial growth, large scale and MSME industries in Himachal Pradesh, Labour Welfare measures and skill development programmes. Trends in hydro power generation in Himachal Pradesh. Environmental issues related to Industrialization and power projects in Himachal Pradesh.

Unit IV

Infrastructure and Tourism of Himachal Pradesh: Transport: road, rail and air. Banking, Housing, Social Welfare, Education and health programmes of the State Government. Role of Tourism in the economic development of Himachal Pradesh. Spillover effect of tourism development.

Unit V

Himachal as a model for hill development. Successes and pitfalls of planned development in Himachal Pradesh. Resource mobilization for this special category state. Growth potential and possibilities of rural modernization. Gender dimension of human capital formation in Himachal Pradesh.

SUGGESTED READINGS

- Balokhra, JM (2021), The Wonderland Himachal Pradesh: An Encyclopedia on a tiny state of Western Himalaya, Vols. I & II, HG Publication, New Delhi
- Economic Survey, Various Issues, Department of Economics and Statistics, GoHP.
- Himachal Pradesh Development Report, Planning Commission. GoI.
- Parmar, Y.S., Years of Challenge and Growth, Rubicon Publishing House.
- Sharma L.R., (2005), Quality of Life in Himalayan Region, Indus Publishing.
- Sharma, L.R. (1987), The Economy of Himachal Pradesh: Growth and Structure: A Study in Development Performance, Mittal Publishing.
- Singh, Mian Govardhan, History, Culture and Economy of Himachal Pradesh, Minerva Book House.
- Tiwari, Ashok Kumar, (2000), Infrastructure and Economic Development in Himachal Pradesh, Indus Publishing.