

**KRISHNA KANTA HANDIQUI STATE OPEN UNIVERSITY
(KKHSOU)**

**PROGRAMME PROJECT REPORT
ON
MASTER OF ARTS IN ECONOMICS**

**Submitted to
UNIVERSITY GRANTS COMMISSION
BAHADUR SHAH ZAFAR MARG
NEW DELHI – 110 002**

**Submitted by
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KRISHNA KANTA HANDIQUI STATE OPEN UNIVERSITY

PROGRAMME PROJECT REPORT

MASTER OF ARTS IN ECONOMICS

1.1 PROGRAMME'S MISSION AND OBJECTIVES:

Master of Arts in Economics would be offered by the Department of Economics, under the Surya Kumar Bhuyan School of Social Sciences, KKHSOU. This Master's programme in Economics has been designed in accordance with the UGC Regulations on Open and Distance Learning, 2017. Syllabi of this Programme have been finalized after a series of deliberations and discussions with academic experts in the respective field from Universities of repute, viz., Gauhati University and Dibrugarh University. The quality of Curriculum and Syllabus of this programme has been so designed to accommodate the recent developments in the field of Higher Education in general and the subject in particular.

The overall mission of this programme is to create a pool of human resources that would have the capability of critically analyzing the socio-economic issues in the society and by applying their acquired skills can positively contribute towards betterment of the society. More specifically, the MA in Economics programme aims at creating an academically sound pool of human resources who can undertake either serious academic or research activities the field of Economics and Developmental studies. To achieve this overall mission statement, the following specific objectives have been framed:

- a) Educate and train individuals from different walks of life, who are desirous to study Economics.
- b) Provide both the theoretical and applied knowledge in the field of Economics to the learners, so that their skill level and employability are developed.
- c) Disseminate different information that emerges in the domestic as well as global economy.
- d) Exchange knowledge and experiences gained from important past economic phenomenon.
- e) Strengthen the regional development by putting importance on regional issues.
- f) Motivate the learners to undertake teaching or research activities in the field of Economics or Developmental studies.

1.2 RELEVANCE OF THE PROGRAMME WITH THE UNIVERSITY'S MISSION AND GOAL

The MA in Economics programme offered by KKHSOU has been prepared conforming the mission and goals of KKHSOU. This programme follows the following mission and goals of HEIs:

- a) To expand higher education to cover the maximum number of population.
- b) To maintain equity and justice in the field of higher education.


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- c) To ensure the quality and excellence in higher education.
- d) To create a pool of human resources that can undertake research on important social issues.
- e) To contribute towards growth and development of the country.

1.3 NATURE OF THE PROSPECTIVE TARGET GROUP OF LEARNERS

The nature of the prospective target groups of learners of this programme are as follows:

- a) The students who are desirous to obtain a Master's Degree in Economics.
- b) All the stakeholders of the society like-development agents, government officials, policy makers, industrialists, farmers, grassroots workers, who are interested in ensuring a better standard of living for the people of the society.
- c) Persons unable to complete higher education in the normal course of time and who are interested in Economics.
- d) People engaged in different avenues who wish to develop their professional skill.
- e) People living in rural and remote area and other disadvantageous conditions but desirous of higher education in Economics.
- f) People willing to earn for a living and learning at the same time.
- g) Persons deprived of higher education in conventional system for variety of reasons.
- h) Denied and deprived sections of people who need education of Economics to uplift their economic conditions.

1.4 APPROPRIATENESS OF THE PROGRAMME TO BE CONDUCTED IN ODL MODE TO ACQUIRE SPECIFIC SKILLS AND COMPETENCE

The MA programme in Economics is basically theoretical and therefore, is, in general, suitable for the ODL mode. The entire programme has been so designed that the learners can learn the different courses though undergoing the Self Learning Materials designed for the specific programme. Certain add-on resources, like CDs, community radio programme and counselling sessions conducted in the study centres, are expected to help the learners clarify their doubts, if any.

1.5 INSTRUCTIONAL DESIGN

1.5.1 Curriculum Design: The MA in Economics programme in KKHSOU has the following pattern of courses:

Semester-wise Course Distribution:

Semester I	Semester II	Semester III	Semester IV
Microeconomics – I	Microeconomics – II	International Economics	Economics of Insurance
Macroeconomics – I	Macroeconomics – II	Issues in Indian Economy	Research Methodology
Mathematical	Statistical	Environmental	Optional 1*

Methods for Economic Analysis	Methods	Economics	(Group – I/Group II)
Development Economics	Public Finance and Policy	Financial Systems	Optional 2* (Group – I/Group II)

Group I

- a) Econometrics
- b) Demography

Group II

- a) Agricultural Economics
- b) Economics of Social Sector

**Learner has to choose one optional course from each group. No two courses from the same group are allowed.*

1.5.2 Duration of the programme: The MA programme in Economics has four semesters and is of minimum 2 years. However, the maximum duration of the programme is 6 years.

1.5.3 Credit Distribution: Each course of the programme has been assigned 4 credits. As such, the semester-wise credit distribution of the programme is as follows:

Semester	Credit per course	Total credit in the semester
I	4	4 x 4 = 16
II	4	4 x 4 = 16
III	4	4 x 4 = 16
IV	4	4 x 4 = 16
Total Credits in the programme		64

Definition of Credit/Study Hours: The University follows the system of assigning 30 hours of study per credit of a course. Thus, following this norm, a 4 credit course constitutes a total of 120 hours of study. Out of the total study hours, a minimum of 10 percent, i.e., minimum 12 hours of counselling per course is offered to the learners at their respective study centres.

Preparation of Syllabi: The Syllabi of the MA programme in Economics has been prepared by taking help of experts in the subject from other reputed Universities in the region, like Gauhati University, Guwahati and Cotton University, Guwahati. The contents of the syllabi are updated. While preparing the syllabi, UGC Model Syllabi and syllabi of other Universities have been consulted.

The structure of the MA Programme in Economics and detailed course wise syllabus are presented in Annexure I and Annexure II.

1.5.4 Faculty and Support Staff Requirement: The University currently has 3 faculty members in the Department of Economics, viz., one Associate Professor and two Assistant Professors.

1.5.5 Instructional Delivery Mechanisms: The Self Learning Materials has been prepared keeping in view of the above definition of instructional design. Particular attention has been given so that the basic three domains of knowledge, viz., behavioural domain, cognitive domain, and constructive domain can be addressed. A few examples have been mentioned in the following table.

Domain of Knowledge	General Learning Tasks generally used	Contents in Self Learning Materials
Behavioural	<ul style="list-style-type: none"> • Memorising • Undertaking Routine Tasks • Learning arbitrary information • Learning rule systems • Invariable (Routine) learning procedures 	<ul style="list-style-type: none"> • Economics is a theoretical subject. As such, certain theoretical propositions, for examples, certain definitions are to be memorised.
Cognitive	<ul style="list-style-type: none"> • Classifying • Concept learning • Problem-solving • Procedures • Reasoning and argument • Rules 	<ul style="list-style-type: none"> • There is ample scope in this domain of knowledge. Most of the theories in the Economics are conceptual. • Certain portion of the syllabi is also quantitative based, and hence offers scope for the development of problem solving abilities.
Constructive	<ul style="list-style-type: none"> • Case Studies • Complex Situations • Real-world Problem-solving 	<ul style="list-style-type: none"> • Certain real-world situations are included in the course. For example, in the discussion of theories related to market, development policies etc., students are advised to draw evidences from real world situations.

1.5.6 Identification of Media –print, audio or video, online, computer aided: All the learners are provided with Self Learning Materials, which is comprehensive in terms of contents in the syllabi. These learning resources are prepared with the help of resource persons across the country. Senior Professors from different Universities of the region are engaged as Editors of the SLMs.

Apart from the Print Self Learning Materials, audio and video materials on certain modules are also offered to the learners. In addition, certain topics are also covered through community radio programmes broadcast through the *90.4 Jnan Taranga* Community Service Station of the University.

Eklavya, a radio programme broadcasted from All India Radio Station, Guwahati and simultaneously broadcasted by All India Radio Station, Dibrugarh.

Live Phone-in-programme is broadcasted by All India Radio, Guwahati every Thursday (9.15 am – 10.15 am). In this programme, learners get live support to their queries, while the general public can also interact with officials/faculty members of the University on varied issues.

Most of the Audio-Video programmes are also made available online through YouTube videos.

All the Study centres of the University are connected with free phone services to enable the study centres to interact among themselves as well as, with the University in any matters.

1.5.7 Student Support Services: The student support services available in the MA programme in Economics include the following:

- a) Self Learning Materials covering the entire syllabi,

- b) Counselling sessions at study centres,
- c) Access to library services at study centres,
- d) Audio-Video materials on selected modules, available at study centres,
- e) Community Radio programmes on selected topics.
- f) *Eklavya*, a radio programme broadcasted from All India Radio Station, Guwahati and simultaneously broadcasted by All India Radio Station, Dibrugarh.
- g) Live Phone-in-programme is broadcasted by All India Radio, Guwahati every Thursday (9.15 am – 10.15 am). In this programme, learners get live support to their queries, while the general public in general can also interact with officials/faculty members of the University on varied issues.
- h) Most of the Audio-Video programmes are also made available online through YouTube videos.
- i) Learners can also write emails to any officials/faculty members of the University. For this a general email ID: info@kkhsou.in has been created. Queries raised through email to this email id is redressed by concerned official/faculty members of the University.
- j) A Facebook Account is also available where the learners can communicate with their issues. The System Analyst of the University has been assigned as Administrator of the account.
- k) An Android App “KKHSOU” has also been designed. This Android App can be downloaded free of cost from Google Play Store. Through this App, the learners can get detail information of academic programmes available, district-wise and course-wise list of study centres, contact information of the study centres, University etc. This Android App of the University has also been widely recognised and has received an Excellence Award from IGNOU.
- l) Learners can register for a free SMS service. This SMS services keeps the learner updated on the schedule of Examination, Declaration of results, Admission schedule and other important events.

1.6 PROCEDURE FOR ADMISSION, CURRICULUM TRANSACTION AND EVALUATION

1.6.1 Admission: The procedure for admission is as follows:

- a) Admission to the MA programme in Economics for the session 2018-19 will be done online.
- b) For Admission to a programme, course fee is to be paid online. Link to the payment is made available through online portal of the University.
- c) Students have to upload the relevant documents in proof of their educational qualification at the time of admission.
- d) After scrutiny the eligible applicants will be provisionally admitted by the University.
- e) Intending learners with incomplete application may be given conditional admission at the University’s discretion with the condition that required eligibility documents are to be submitted latest by the dates prescribed for the purpose. Their enrolments will be confirmed on fulfillment of the eligibility requirements. To appear in the examinations, confirmation of enrolment will be necessary.
- f) All the enrolled learners will be provided with the registration number, programme guidelines and identity cards.
- g) Those learners who are unable to complete the programme within the specified validity period will be required to register themselves afresh by paying the requisite fee as per the University regulations.

- h) The duration of the MA programme in Economics offered by the University is as follows:
- Minimum Duration : 4 semesters (2 years).
 - Maximum Duration : 6 years.

In case, a learner is not able to qualify a course in its first attempt, he/she has to qualify in the particular course within the next four attempts, subject to maximum duration of the study.

1.6.2 Eligibility Criteria of Admission: Any Graduate from KKHSOU or any other University recognised by University Grants Commission.

1.6.3 Continuous Admission:

- a) After completion of a particular semester, a learner is required to apply for next semester simply by paying the necessary fees within one month of the last examination day of the previous semester. Admission in subsequent semester does not depend upon the results of the earlier semester. One may take admission in the next semester even without appearing in previous semester examination. Admission should be taken without any break. A learner will be allowed to appear in all the examinations including back papers within the stipulated time of a programme.
- b) Learners are required to pay a fine of Rs. 300/- if he or she applies for admission to the next semester after expiry of one month but within two months from the last day of examination of the previous semester.
- c) Under special circumstances and on special consideration, a learner may be allowed to take admission in the next semester even beyond two months but before the issue of notification of the examination of that semester by the University on valid grounds and on payment of a fine of Rs 500/-.
- d) A learner, however, may be allowed to take admission even after that period without fine, but such learners will be allowed to appear in examination of that semester in the next year only. A learner is not charged any fine on such admission.

1.6.4 Fee Structure: The fee structure of the MA in Economics programme is as follows:

(All Figures are in India Rupee)

Sem	Enrolment Fee	Course Fee	Exam Fee	Exam Centre Fee	Marksheet Fee	Total Fee to be paid*	Arear subject
First	300.00	3200.00	800.00	300.00	50.00	4650.00	Rs. 200.00 per paper + Centre Fee + Marksheet Fee Rs 50.00 + Consolidated Marksheet Rs 100.00.
Second	--	3200.00	800.00	300.00	50.00	4350.00	
Third	--	3200.00	800.00	300.00	50.00	4350.00	
Fourth	--	3200.00	800.00	300.00	150.00	4450.00	

* An additional amount of Rs. 500.00 is required to be paid by the learners of the Master's programme, if they fill up admission forms through offline mode.

1.6.5 Financial Assistance: The University offers free education to jail inmates and differently abled learners. At present, the University offers free of cost education to jail inmates in 13 district jails of the state.

The University also offers subsidised education to the learners living below the poverty line. On production of BPL certificate from competent authority, the University offers 50% discount on course fee.

1.6.6 Curriculum Transaction and Activity Planner: An activity planner, that guides the overall academic activities in the MA programme in Economics shall be made available prior to the admission schedule of the University.

1.6.7 The Evaluation System of the Programme: The University adopts both ongoing and term end evaluation. Ongoing evaluation is conducted in two ways: internal and external. The internal evaluation is to be undertaken by the learner himself. For this, the University has designed some self-check “Check Your Progress” questions, which would help the learners to self check their progress of study. However, this is undertaken at the learners’ end themselves and is non-credit based. For overall evaluation of a course, the University follows two types of evaluation:

Continuous Evaluation (Assignments) : Weightage assigned 20%.

Term End Evaluation (Semester-end Examinations) : Weightage assigned 80%.

The learners have to submit the assignments within the schedule of a semester at the respective study centres. The counsellors at the study centres evaluate the assignments and return them to the learners with feedback.

Term end examinations are conducted on scheduled dates at select examinations centres. Evaluations are done by the external examiners at zonal centres. After evaluation, further scrutiny is done, followed by moderation. Results are declared within scheduled dates as laid down in the Activity Planner.

Learners can opt for re-evaluation of their answer script (within a stipulated time) if they are not satisfied with the evaluation outcome.

1.7 REQUIREMENT OF LABORATORY SUPPORT AND LIBRARY RESOURCES

Economics being a theoretical discipline requires no laboratory services. Library services are offered to the learners through physical library facilities set up by the University at the respective study centres. Reference books are suggested by the faculty members of the University, and are supplied to the libraries located at the study centres.

1.8 COST ESTIMATE OF THE PROGRAMME AND THE PROVISIONS

The office of the Finance Officer of KKHSOU keeps all the records of finances regarding print of SLMs, honorarium paid to the members of the Expert Committee, honorarium to be paid to Content Writers, Content Editors, Language Editors, Translators, Proof Readers and also the expenditure

related with organizing counsellors' workshops, meeting of the co-ordinators of the study centres etc. Moreover, the finance office also maintains records of purchase of computers, online space, books, journals etc. The accounts are maintained as per the laid down procedures of government. As regards, the cost of programme development, programme delivery, and programme maintenance, the finance office conducted an exercise based on historical costing method to arrive at indicative figures of cost. The findings are presented below in respect of the MA in Economics programme of KKHSOU.

1.8.1 Programme Development Cost:

a) SLM Development Cost for Master Degree Programme

English medium per Unit Rs. 7,300/-

b) Printing Cost per SLM Rs. 56/-

c) Cost of CD per unit Rs. 23/-

1.8.2 Programme Delivery Cost:

The SLMs prepared have to be delivered to various study centres located at the far flung remote areas. On an average, the University delivers about 15 kgs of study materials per student. The cost of delivery of 1 kg of such material is Rs.10. Accordingly, depending upon the number of candidates, the cost for the MA in Economics programme will be provisioned by the University. The office of the Finance Officer has calculated the delivery cost of SLM per student at Rs. 150.00.

1.8.3 Programme Maintenance Cost:

The University will keep financial provision for organizing stakeholders' meetings, counselling workshops etc. as per the Academic Plan and Academic Calendar approved by the Academic Council of the University. The workshops conducted by the University will not only benefit the learners of the programme, but will also benefit the learners of other programmes. The University will also bear the cost of organizing the meeting of Syllabus Revision Committee etc. and also for supply of additional study materials if required for improving the quality of the programme. Moreover, the University will keep on investing in developing the IT infrastructure so that the learners can benefit from the ICT enabled programme. The cost calculated by the office of Finance Officer as regards maintenance of Master Degree programmes is Rs. 1,600.00.

The figures as indicated above will be applicable for the MSW programme of the University. The University will keep adequate financial provision for development, delivery, and maintenance of the programme presented as per the Programme Project Report.

1.9 QUALITY ASSURANCE MECHANISM AND EXPECTED PROGRAMME OUTCOMES

1.9.1 Quality Assurance Mechanism: With regard to the quality concerns of the course materials, the department is involved in the following activities:

- a) The programme design and structure is decided upon after a series of discussions and deliberations with a team of a few carefully chosen subject experts, who are mostly eminent scholars and professionals from the reputed institutions of higher education. Formed with due approval from the University authority, this expert Committee is helped by the in-house department faculties while preparing the framework of the programme.
- b) The next step after the completion of the framework preparation is the allotment of the assigned papers (which is again composed of 14 units) to the assigned authors. The in-house faculties prepare a carefully chosen list of authors for the task. The in-house faculties also contribute their writings, besides the outsourced authors, who are mostly faculty members of the PG programmes from higher educational institutions.
- c) The content editors are then roped in for the next round. The content editors, who are mostly academics from reputed higher educational institutions, look into the contents of the units and provide their suggestions and feedbacks to be included by the coordinator of the programme.
- d) The SLMs of the MA in Economics programme is prepared in English only. However, learners are allowed to write answers in the Examinations in Assamese as well.
- e) The newly constituted CIQA Office is planning to conduct stakeholders meeting; SLM and Counselling Workshops which is expected to provide the University and the Department with required inputs for quality enhancement.
- f) In order to keep the programme updated, the programme is revised and necessary changes are incorporated for the benefit of the learners.

1.9.2 Expected Programme Outcomes: The outcomes of the programme are manifold:

- a) It will enable the learners to acquire knowledge enabling them to articulate well the condition around them.
- b) The programme will also help the learners to seek avenues in the development sector and/or other upcoming sectors like banking, insurance and other service sectors.
- c) The programme will also encourage the learners to go for research in the field of Economics and Developmental Studies.
- d) The programme will enable the learners to undertake a teaching job up to the Post Graduation level subject to fulfilment of other eligibility criteria.
- e) The programme will enable the learners to engage with the society in a fruitful manner leading to the welfare of all and thus contribute to the betterment of the society.

ANNEXURE I

STRUCTURE OF THE MA IN ECONOMICS PROGRAMME

PROGRAMME STRUCTURE

SEM	MASTER OF ARTS IN ECONOMICS						
SEMESTER-WISE COURSES							
I	1. Microeconomics –I 2. Macroeconomics – I 3. Mathematical Methods for Economic Analysis 4. Economics of Development						
II	5. Microeconomics –II 6. Macroeconomics – II 7. Statistical Methods 8. International Economics						
III	9. Public Finance & Policy 10. Economics of Social Sector 11. Financial Systems 12. Issues in Indian Economy						
IV	13. Environmental Economics 14. Research Methodology in Economics 15/16. Optional – I from Group I/II 15/16. Optional – II from Group I/II						
Optional for Semester IV: Any one optional from each group. (No two optional from same group will be allowed):							
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; text-align: center;">Group I</td> <td style="width: 50%; text-align: center;">Group II</td> </tr> <tr> <td style="text-align: center;">1. Econometrics</td> <td style="text-align: center;">1. Agricultural Economics</td> </tr> <tr> <td style="text-align: center;">2. Demography</td> <td style="text-align: center;">2. Economics of Insurance</td> </tr> </table>		Group I	Group II	1. Econometrics	1. Agricultural Economics	2. Demography	2. Economics of Insurance
Group I	Group II						
1. Econometrics	1. Agricultural Economics						
2. Demography	2. Economics of Insurance						

Total courses in the programme	: 16
Total compulsory courses	: 14
Total optional courses	: 2(out of 4 optional offered in 4 th semester)
Total Credits	: 16 courses x 4 credits = 64 credits.

ANNEXURE II
DETAILED COURSE WISE SYLLABUS OF MA IN
ECONOMICS PROGRAMME

SEMESTER – I

COURSE I: MICROECONOMICS - I

Unit 1: Introduction to Demand Analysis

Elasticities: Concept of price, cross, income elasticities; Concept of Elasticities and their implications; Consumer's surplus; Engel's Law of Demand; Elementary theory of price formation — demand and supply equilibrium

Unit 2: Theories of Consumer Behaviour

Indifference curve (income and substitution effects, compensated demand curve) and their applications; linear expenditure system; Revealed preference theory

Unit 3: Recent Developments of the Theory of Consumer Behaviour-I

Hicksian revision of demand theory-Choice under uncertainty (Bernoulli, Neumann and Morgenstern theory, Friedman and Savage hypothesis, Markowitz hypothesis)

Unit 4: Recent Developments of the Theory of Consumer Behaviour-II

Recent developments in the theory of market demand (constant elasticity demand function, dynamic versions of demand, Linear expenditure system)

Unit 5: Recent Developments of the Theory of Consumer Behaviour-III

Household Time Allocation model of Garry S. Becker-Characteristics model of Kelvin Lancaster- positive and negative Network externalities (Bandwagon, Snob and Veblen effects)

Unit 6: Theory of Costs

Cost concepts: short-run and long-run costs, Average and Marginal costs; Derivation of cost functions from production functions; Derived demand for factors, Modern theory of cost- Engineering cost- multiproduct firms and dynamic changes in costs (economies of scope- learning curve)

Unit 7: Theory of Production

Production function: short-run and long-run; Law of variable proportions and returns to scale; Isoquants; Cobb-Douglas, CES; Returns to factors; Elasticity of substitution; Least cost combination of inputs;

Unit 8: Market and Market Structures

Types of Market - Perfect and Imperfect Markets; Perfect Competition, Imperfect Competition – Monopolistic Competition, Oligopoly without Product Differentiation, Oligopoly with Product Differentiation, Monopoly

Unit 9: Equilibrium of the Firm and Industry

Equilibrium of the Firm – Total Revenue and Total Cost Approach and Marginal Revenue and Marginal Cost Approach, Equilibrium of the Firm and Industry under Perfect Competition, , Equilibrium of the Firm and Industry under Monopoly

Unit 10: Price and Output Determination under Perfect Competition

Price and output determination: perfect competition — short run and long run equilibrium of the firm and industry, Supply curve

Unit 11: Price and Output Determination under Monopoly-I

Monopoly — short run and long run equilibrium, price discrimination- Meaning and Types, Price – Output Determination under Discriminating Monopoly, monopoly control and regulation

Unit 12: Price and Output Determination under Monopoly-II

Price and output determination under monopoly; Price and output determination under bilateral monopoly; Multi-product equilibrium; Equilibrium of multi-plant monopoly

Unit 13: Markets and Welfare - I

Competitive markets - First and Second Welfare Theorems – Concept of Social Optimum – Equity-efficiency trade-off.

Unit 14: Markets and Welfare - II

Market Failure - i. Market imperfection – Monopoly – Non-linear pricing.
ii. Externalities and Public Goods – Coase Theorem.

Unit 15: Introduction to Game Theory

Non-cooperative games; Normal form – pure vs. mixed strategies; Solution concepts – iterated deletion of dominated strategies, Nash equilibrium

Basic Reading List:

- 1) Ahuja, H.L.: Advanced Economic Theory – Micro Economic Analysis, S.Chand & Company Ltd
- 2) Baumol, W.J.: Economic Theory and Operations Analysis, Prentice Hall of India Private Limited
- 3) Henderson, J.M. & Quandt, and R.E.: Micro Economic Theory, McGraw Hill.
- 4) Koutsoyiannis, A: Modern Microeconomics, ELBS with Macmillan Publication.
- 5) Maddala, G.S. and Miller, E.: Microeconomics, Theory and Applications; McGraw Hill.
- 6) Pindyck, R.S., Rubinfeld, D.L. & Mehta: Micro Economics, Pearson Education.
- 7) Salvatore. D.: Micro Economics, Theory and Applications, Oxford University Press.

COURSE II: MACROECONOMICS – I

Unit1: National Income and related Totals

Concepts of Domestic and National Income; Related totals: GDP, NDP, GNP, NNP at factor cost and market price, Personal income and Disposable personal income

Unit 2: National Income and related Accounts

Circular Flow of Income in two-, three- and four-sector economy; Different forms of national income accounting: Social accounting, input-output accounting, flow of funds accounting and balance of payments accounting.

Unit 3: Classical Theory of National Income Determination

Say's Law of Market: Its Propositions and Implications; The classical theory of employment and income; Keynes' criticisms on full employment equilibrium

Unit 4: Keynesian Theory of National Income Determination

Keynes' Departure from Classical Theory; Basic Keynesian Framework; Keynes' theory of income determination; Relevance for Developing Countries; Criticisms.

Unit 5: Consumption Function

Keynes' psychological law of consumption; Implications of the law; Empirical evidence on consumption function

Unit 6: Theories of Consumption Function

Absolute income, Relative income, Life cycle and Permanent income hypotheses.

Unit 7: Investment Function

Marginal efficiency of investment and level of investment; Marginal efficiency of capital and investment: long run and short run; Factors Affecting MEC and MEI; Types of Investment

Unit 8: Keynesian Multiplier

Keynesian Multiplier: Concept, Working; Dynamic Multiplier; Relevance for Underdeveloped Countries; Criticisms

Unit 9: Multiplier-Accelerator Interaction

The accelerator and investment behaviour; Multiplier-Accelerator Interaction; Use of Super-Multiplier in Business Cycles

Unit 10: Further Topics on Multiplier

Concept of Static and Dynamic Multiplier; Dynamic Action of a Multiplier; Multi-sector Multiplier; Public Expenditure Multiplier and Balanced Budget Multiplier (Concepts only)

Unit 11: Demand for Money: Classical Approaches

Quantity theory of money: Fisher's and Cambridge version; Comparison between Fisher and Cambridge versions

Unit 12: Demand for Money: Keynes Approach

Keynes's liquidity preference approach: transaction, precautionary and speculative demand for money; Friedman's Restatement of Quantity Theory of Money; Comparison between Keynesian and Friedman's approach; Criticism

Unit 13: Neo-classical and Keynesian Synthesis

Neo-classical and Keynesian views on interest; The IS-LM model; Application of IS-LM Model; Extension of IS-LM model with government sector

Unit 14: IS-LM Extended Model (Foreign Sector Included)

The IS-LM Model including Foreign Sector; Balance of Payments Disequilibrium and Money Supply; Balance of Payments Disequilibrium and Adjustment Process; Balance of Payments Disequilibrium and Full Employment Equilibrium

Basic Reading List:

- 1) D'Souza, E.: "*Macroeconomics*"; Pearson Education, Delhi.
- 2) Dornbusch, R., Fischer, S. and Startz, R.: "*Macroeconomics*"; Tata McGraw-Hill Publishing Company Limited, New Delhi.
- 3) Gupta, R.D. & Rana, A. S. *Keynes Post-Keynesian Economics*. Kalyani Publisher
- 4) Hall, R.E. and Pappel, D.H.: "*Macroeconomics - Economic Growth, Fluctuations, and Policy*"; W.W. Norton & Company, Newyork.
- 5) Mankiw, N. G. *Principles of Macroeconomics*. Thomson South Western.
- 6) Rana, K. C. & Verma. K. N. *Macro Economic Analysis*. Vishal Publishing Co.
- 7) Shapiro, E. *Macroeconomic Analysis*. Galgotia Publications
- 8) Sikdar, S.: "*Principles of Macroeconomics*"; Oxford University Press, New Delhi.
- 9) Vaish, M. C. *Macroeconomic Theory*. Vikas Publishing House

COURSE III: MATHEMATICAL METHODS FOR ECONOMIC ANALYSIS

Unit 1: Matrix Algebra

General Notation, Basic Matrix Operations (Addition, Subtraction, Scalar Multiplication Matrix Multiplication), Types of Matrices, Transpose of a Matrix, System of Equations in Matrix Form

Unit 2: Determinants

Properties of Determinants, Expansion by Co-factors, The Inverse of a Matrix and Properties of Inverse, Technique of Finding Inverse of a Matrix, Solution by Cramer's Rule; Partial Equilibrium Market Model; A Simple National Income Model; Equilibrium of an Economy with a Goods Market and a Money Market

Unit 3: Differentiation

Rate of Change and Derivative; Economic Interpretation of Derivative; Basic Rules of Differentiation with single explanatory variable; Rules of differentiation involving two or more functions of the same

explanatory variable; Rules of differentiation involving functions of different variables; Second and higher order derivative

Unit 4: Economic Applications of Derivative

Economic Applications in: Elasticity of demand and supply, cost, revenue, consumption and production concepts; Tax, multiplier, utility etc.

Unit 5: Partial Differentiation

Partial Differentiation- Concept and Rules; Second order partial derivative; Differentials and total differentials; Total derivatives; Derivatives of implicit function

Unit 6: Economic Application of Partial and Total Differentiation

Comparative static analysis of market model; Comparative static analysis in a national income model; Determination of partial elasticities; Application of Euler's theorem; Derivation of shape of Indifference curve and Isoquants

Unit 7: Optimization Technique – I: Unconstrained Maxima and Minima with single explanatory variable

Relative and absolute extrema; Criteria for Relative Extrema

Unit 8: Economic applications of unconstrained maxima and minima with single explanatory variable

Cost minimization; Profit maximization; Maximization of tax revenue; Taxation and monopoly output

Unit 9: Optimization Technique – II: Unconstrained Maxima and Minima with more than one explanatory variable

Condition for Optimisation in Case of Three Explanatory Variables

Unit 10: Economic applications of unconstrained maxima and minima with more than one explanatory variable

Equilibrium of discriminating monopoly; Equilibrium of multi-product firm; Equilibrium of multi-plant firm

Unit 11: Optimization Technique – III: Optimization with equality constraint

Concept of constrained extrema; Lagrange multiplier method

Unit 12: Economic Applications of Constrained Optimisation

Utility Maximisation and Consumer Behaviour, Comparative Static Analysis of Utility Maximisation, Least Cost Combination of Inputs.

Unit 13: Integration

Concept of Integration and its basic rules; Definite integral; Definite integral

Unit 14: Integration and Economic Application

Economic Application of Integrals

Unit 15: Differential Equations and Economic Applications

First order linear differential equation with constant coefficient and constant term; First order Difference Equation, Economic Application of First Order Difference Equation

Basic Reading List

- 1) Allen, R.G.D. (1974), *Mathematical Analysis for Economists*, Macmillan Press and ELBS, London.
- 2) Baruah, S (2011), *Basic Mathematics and Its Applications in Economics*, Macmillan.
- 3) Chiang, A.C. (1986), *Fundamental Methods of Mathematical Economics*, McGraw Hill, New York.
- 4) Gupta, S.C. (1993), *Fundamentals of Applied Statistics*, S. Chand & Sons, New Delhi.
- 5) Handry, A.T. (1999), *Operations Research*, Prentice Hall of India, New Delhi.
- 6) Speigal, M.R. (1992), *Theory and Problems of Statistics*, McGraw Hill Book Co., London.
- 7) Taha, H.A. (1997), *Operations Research : An Introduction (6th Edition)*, Prentice Hall of India Pvt. Ltd., New Delhi.
- 8) Yamane, Taro (1975), *Mathematics for Economists*, Prentice Hall of India, New Delhi.

COURSE IV: ECONOMICS OF DEVELOPMENT

Unit 1: The Paradigm of Development

Emergence of the development paradigm- Capital accumulation through planned industrialization in a traditional agrarian economy- The role of the developmental state- The role of international organizations: the IMF, the World Bank and the ILO- Alternative strategies for industrialization: import substitution and export promotion

Unit 2: Measurement of Development

Measuring development and development gap: Per capita income, inequality of income, Human development index, Gender Development Index, Gender Empowerment Index

Unit 3: Population and Human Resources in Development

Food security, education, health and nutrition; Human resource development; Population as limits to growth

Unit 4: Theories of Development: Classical, Marx and Schumpeter

Classical theory of development; Karl Marx and his theory of capitalist development; Schumpeter entrepreneur, innovation, role of credit, and degeneration of capitalism

Unit 5: Approaches to Development -I

Partial theories of growth and development: vicious circle of poverty; low-income equilibrium trap; Big push, balanced growth, unbalanced growth, critical minimum effort thesis

Unit 6: Approaches to Development -II

Dualism: Lewis model; Ranis and Fei model; Dependency theory of development; Myrdal's model of Circular and Cumulative Causation

Unit 7: Labour Market Distortion

Harris-Todaro (1970) migration mechanism and urban unemployment, wage efficiency and fair wage hypotheses and unemployment

Unit 8: Globalization and the Developing World

Globalization and inequality- Globalization and employment- Trade liberalization, dispersion of production and the international division of labor- WTO and the nation state- Trade liberalization

Unit 9: Globalization and Unemployment

Impact of investment and tariff reforms on unemployment, the growth of informal sector, international migration of labour and unemployment of unskilled labour

Unit 10: Agriculture and Development

Role of agriculture in economic development; Efficiency and productivity in agriculture, New technology and sustainable agriculture; Globalization and agricultural growth;

Unit 11: Industry and Development

Rationale and pattern of industrialization in developing countries; The choice of techniques and appropriate technology and employment; Terms of trade between agriculture and industry

Unit 12: Infrastructure and Development

Infrastructure and its importance; Role of Public-private partnership in infrastructure development

Unit 13: Planning in Development

Rationale for planning; Plan models: Aggregative and inter-sectoral; Project evaluation; Failure of planning; Planning in a market-oriented economy

Unit 14: Social Sector and Economic Development

Education and Health in Economic Development- Mortality and Morbidity- assessment of health status in terms of Disability-Adjusted-Life-Years (DALY)- Analysis of Disease Burden & Epidemiological Transition theory of Development

Unit 15: Environment and Development

The Environment and Development- Sustainable Development and Environmental Accounting- Gender, Environment and Poverty: the GEP-Index of Vulnerability

Basic Reading List

- Adelman, I. (1961), Theories of Economic Growth and Development, Stanford University Press, Stanford.
- Dasgupta, P. (1993), An Enquiry into Well-being and Destitution, Clarendon Press, Oxford.
- Ghatak, S. (1986), An Introduction to Development Economics, Allen and Unwin, London.
- Gillis, M., D.H. Perkins, M. Romer and D.R. Snodgrass (1992), Economics of Development, W.W. Norton, New York.
- Gimmell, N. (1987), Surveys in Development Economics, Blackwell, Oxford.
- Godo&Hayami (2007): Development Economics, Oxford.
- Higgins, B. (1959), Economic Development, W.W. Norton, New York.
- Hogendorn, J. (1996), Economic Development, Addison, Wesley, New York.
- Kindleberger, C.P. (1977), Economic Development, McGraw Hill, New York.

- Meier, G.M. (1995), *Leading Issues in Economic Development*, (6th Edition), Oxford University Press, New Delhi.
- Todaro, M.P. (1996), (6th Edition), *Economic Development*, Longman, London.
- Thirwal, A.P. (1999), (6th Edition), *Growth and Development*, Macmillan, U.K.
- Ray, Debraj, (1999), *Development Economics*, Oxford.

SEMESTER – II

COURSE V: MICROECONOMICS – II

Unit 1: Price and Output Determination under Monopolistic Competition

Monopolistic competition — Meaning and Nature, general and Chamberlin approaches to equilibrium, equilibrium of the firm and the group with product differentiation and selling costs, excess capacity under monopolistic and imperfect competition, criticism of monopolistic competition

Unit 2: Theory of Oligopoly - I

Non-collusive Oligopoly: Cournot, Bertrand, Stackelberg, Kinked demand curve

Unit 3: Theory of Oligopoly - II

Collusive Oligopoly: Cartels and mergers, price leadership, basing point price system

Unit 4: Theory of Factor Pricing

Importance of Factor Pricing, Marginal Productivity Theory of Distribution – Criticisms, Equilibrium under Perfect Competition in the Factor Market, Equilibrium under Imperfect Competition in the Factor Market, Modern Theory of Distribution, Product Exhaustion Problem

Unit 5: Inter-Temporal Choice

Discounting and present values; Choice of investment projects; Inter-temporal consumption decisions; Inter-temporal production decisions

Unit 6: Choice under Uncertainty

Individual behaviour towards risk: risk pro and risk aversion; Expected utility and certainty equivalence approaches; Mean-variance analysis and portfolio selection

Unit 7: Theory of Wages

Nominal Wages Versus Real Wages, Subsistence Theory of Wages, Marginal Productivity Theory of Wages- its Limitations, Wages under Imperfect Competition, Exploitation of Labour, Trade Union and Wage Differential.

Unit 8: Theory of Rent

Ricardian Theory of Rent- Differential Rent, Marginal or No Rent Land, Scarcity Rent, Criticism of the Ricardian Theory, The modern Theory of Rent – its Criticisms, Quasi Rent, Rent Elements in Other Factors of Production

Unit 9: Theory of Interest

Determination of the Rate of Interest – Classical Theory of Interest, Loanable Funds Theory of Interest, Liquidity Preference Theory, Comparison Of Keynesian Theory With Classical Theory And Loanable Funds Theory, Modern Theory of Interest- Hicks-Hansen Synthesis

Unit 10: Theory of Profit

Profits as a Dynamic Surplus, Clark's Dynamic Theory, Schumpeter's Innovation Theory of Profits, Knight's Theory of Profits

Unit 11: Economics of Insurance

Gambling and insurance; The economics of insurance: Risk pooling and risk spreading

Unit 12: Welfare Economics

Three Concepts of Social Welfare, Role of Value Judgments in Welfare Economics, Notion of Pareto Optimality and Economic Efficiency, Pareto Criterion of Social Welfare, Marginal Conditions of Pareto Optimality, Pareto Efficiency in Production, A Critical Evaluation

Unit 13: New Welfare Economics

Kaldor-Hicks Welfare Criterion, Compensation Principle, Scitovsky's Paradox, Scitovsky's Double Criterion of Welfare

Unit 14: Social Welfare Function

Bergson-Samuelson Social Welfare Function, Social Welfare Function and Value Judgements, Grand Utility Possibility Frontier and Point of Constrained Bliss

Unit 15: Economics of Information

Markets with Asymmetric Information, Quality Uncertainty and the Market for Lemons, Adverse Selection, Social Insurance

Basic Reading List:

- 1) Ahuja, H.L.: Advanced Economic Theory – Micro Economic Analysis, S.Chand & Company Ltd
- 2) Baumol, W.J.: Economic Theory and Operations Analysis, Prentice Hall of India Private Limited
- 3) Henderson, J.M. & Quandt, and R.E.: Micro Economic Theory, McGraw Hill.
- 4) Koutsoyiannis, A: Modern Microeconomics, ELBS with Macmillan Publication.
- 5) Maddala, G.S. and Miller, E.: Microeconomics, Theory and Applications; McGraw Hill
- 6) Pindyck, R.S., Rubinfeld, D.L. & Mehta: Micro Economics, Pearson Education
- 7) Salvatore. D.: Micro Economics, Theory and Applications, Oxford University Press.

COURSE VI: MACROECONOMICS – II**Unit 1: Supply of Money**

Money and near money, inside and outside money; High powered money and money multiplier

Unit 2: Post-Keynesian Theories of Demand for Money

Post-Keynesian approaches to demand for money: Patinkin and the Real Balance Effect, Approaches of Baumol and Tobin; Friedman and the modern quantity theory

Unit 3: Inflation

Demand pull inflation; Cost-push inflation; Effects of Inflation; Inflationary gap analysis; Policies to control inflation; Concept of Stagflation

Unit 4: Inflation and Unemployment

Philips curve analysis: Short run and long run Philips curve; Samuelson and Solow: the natural rate of unemployment hypothesis; Tobin's modified Philips curve; Adaptive expectations and rational expectations;

Unit 5: Business Cycles

Theories of Business cycles: Schumpeter, Kaldor, Samuelson and Hicks, Control of business cycles; Relative efficiency of monetary and fiscal policies.

Unit 6: Supply side Economics

Failure of Keynesianism, Features of Supply side Economics, Critical Evaluation

Unit 7: Monetarism vs Keynesianism

Monetarists vs Keynesian; Policy Implications of Monetarism vs Keynesianism; Crisis in Keynesian economics and the revival of monetarism; Reconciliation, Monetary-Fiscal Policy Mix and Growth

Unit 8: Macroeconomic Policy Instruments

Objectives of Macroeconomic Policies; Macroeconomic Policies for attaining Economic Stability, Full Employment, Economic Growth, Price Stability, Internal and External balances; Control of money supply.

Unit 9: Monetary Policy Formulation in India – I

The Reserve Bank of India and Its Monetary Policy Formulations prior to Economic Reform Period: Important Discussions

Unit 10: Monetary Policy Formulation in India – II

The Reserve Bank of India and Its Monetary Policy Formulations in the post-Economic Reform Period: Important Discussions

Unit 11: Macroeconomic Theory of the Open Economy

Supply and Demand for Loanable Funds and for Foreign Currency Exchange; Equilibrium in the Open Economy; Macroeconomic policies in an Open Economy for: Government Budget Deficits, Trade Policy.

Unit 12: Introduction to Growth theory

Harrod-Domar Growth model and instability of equilibrium; Solow's Neo-classical growth models; Cambridge criticism of Neoclassical analysis of growth; Kaldor's model

Unit 13: Select Emerging Macroeconomic Issues

Globalisation and the Changing Environment of the World Economy; Global Financial Crisis of 2009: Lessons Learnt; Demonetisation and Digitalisation of the National Economy: Relevant Issues

Unit 14: Select Debates over Macroeconomic Policy

Should the policy makers try to stabilize the economy with the help of monetary and fiscal policies? How should monetary policies be framed: by rule or by discretion? Should the Central bank try to manage zero inflation? Do the Government need to balance its budget? Should tax laws be reformed to encourage savings?

Basic Reading List

- 1) Able, A. B., Bernanke, B.S., Croushore, D. Macroeconomics. Pearson.
- 2) D'Souza, E. Macroeconomics. Pearson.
- 3) Dwivedi, D. N. Macroeconomics: Theory and Policy. Tata McGraw Hill.
- 4) Goodwin, N., Nelson, J. A. & Harris, J. Macroeconomics in Context. Prentice-Hall-India.
- 5) Gupta, R.D. & Rana, A. S. Keynes Post-Keynesian Economics. Kalyani Publisher.
- 6) Gupta, S.B. Monetary Economics, Institutions and Policy.
- 7) Mankiw, N. G. Principles of Macroeconomics. Thomson South Western.
- 8) Rana, K. C. & Verma. K. N. Macro Economic Analysis. Vishal Publishing Co.
- 9) Shapiro, E. Macroeconomic Analysis. Galgotia Publications.
- 10) Vaish, M. C. Macroeconomic Theory. Vikas Publishing House.

COURSE VII: STATISTICAL METHODS

Unit 1: Measures of Central Tendency

Arithmetic Mean; Median; Mode; Geometric Mean; Harmonic Mean; Weighted Average

Unit 2: Measures of Dispersion

Quartile Deviation; Mean Deviation; Standard Deviation; Coefficient of Variation

Unit 3: Measurement of Economic Inequality

Pareto's Law of Income Distribution; Log normal Distribution (Concept only); Lorenz Curve; Gini Coefficient;

Unit 4: Correlation

Types of Correlation; Correlation and Causation; Properties with Proof; Methods of Measuring Correlation: Diagrammatical and Mathematical Method, Limitations

Unit 5: Regression Analysis

Linear and Non-linear Regression; Two-variable Regression Model; Estimation of Regression Parameter; Least Square Method; Correlation Vs Regression

Unit 6: Probability: Basic Ideas

Definitions; Concepts; Basic Probability Rules and Derivation; Conditional Probability, Baye's Theorem (Concept only)

Unit 7: Expectations and Moments

Random Variables; Discrete and Continuous Random Variables; Mathematical Expectation; Basic rules of Expectation; Moments, Skewness; Kurtosis (Concepts only)

Unit 8: Theoretical Probability Distributions (Discrete Variable)

Binomial and Poisson Distributions with Properties; Moment Generating Function

Unit 9: Theoretical Probability Distributions (Continuous Variable)

Normal Distribution and its Properties; The Central Limit Theorem and the law of large numbers (Statements and Concepts only)

Unit 10: Sampling and Population

Concept of Sampling; Advantages and Disadvantages of Sampling; Sampling over Complete Enumeration: Sampling and Non-sampling Errors; Parameters and Estimators; Sampling Methods: Simple Random Sampling, Stratified Random Sampling; Cluster Sampling, Systematic Random Sampling

Unit 11: Characteristics of a Good Estimator

Ideas of Unbiasedness, Efficiency and Consistency; Illustrations with Sample Mean, Variance and Related Estimators

Unit 12: Index Number

Index Numbers and their Uses; Retail and Whole Sale Index; Different Types of Weighted Index Number; Relation between Laspeyre's and Paasche's Index Number; Time Reversal, Factor Reversal, Circular Test of Index Number; Fisher's Index Number; Chain Base Index Number-Base Shifting, Splicing and Deflating; Index Number of Industrial Production

Unit 13: Testing of Hypothesis

Defining Statistical Hypothesis; Null and Alternative hypothesis; Errors in Hypothesis Testing; One Tailed and two Tailed Test; Level of Significance; Critical Region, Problems of Standard Normal Distribution

Unit 14: Test of Significance

Chi- Square Test; t- Test

Basic Reading list

- 1) Gupta, S.C. and Kapoor, U.K., "Fundamentals of Mathematical Statistics"
- 2) Hooda, P.R., "Statistics for Business and Economics", Macmillan.
- 3) Nagar, A.L. and Das, R.K., "Basic Statistics", Oxford.
- 4) Salvatore, Dominick and Reagle, Darrick, "Statistics and Econometrics", TMH
- 5) Yamane, Taro, "Statistics – An Introductory Analysis".

COURSE VIII: INTERNATIONAL ECONOMICS**Unit 1: Introduction to International Trade**

Internal Trade and International Trade; Distinguishing Features of International Trade; Need for a Separate Theory of International Trade; Importance of International Trade

Unit 2: Theories of International Trade-I

Classical Theory of International Trade — Theories of Absolute Advantage, Comparative Advantage and Opportunity Costs; Role of Dynamic Factors, i.e., Changes in Tastes, Technology and Factor Endowments in Explaining the Emergence of Trade

Unit 3: Theories of International Trade-II

Heckscher-Ohlin Theory of Trade; Leontief Paradox; Theorem of Factor Price Equalization; The Rybczynski Theorem; Stolper Samuelson Model

Unit 4: Theories of International Trade-III

Causes of Emergence and Measurement of Intra-Industry Trade and Its Impact on Developing Economies; Vent-For-Surplus Approach; Availability Approach; Product-Cycle Model; Technological Gap Model

Unit 5: Gains from Trade

Gains from Trade; Offer Curves; Distribution of Gains from Trade in Terms of Offer Curves; Trade as an Engine of Economic Growth

Unit 6: Terms of Trade

Concept and Uses; Factors Influencing Terms of Trade; Domestic Prices and National Income; Limitations

Unit 7: Trade, Growth and Immiserisation

Growth and Trade; Immiserising Growth: Concept and Policy Implications, Immiserising Growth and Small Country; The Prebisch-Singer Thesis

Unit 8: Theory of Interventions - I (Tariff)

Tariff: Meaning and Types; Partial Equilibrium Analysis of Tariff; Effects of Tariff on Economic Welfare; Optimal Tariff and its Determination

Unit 9: Theory of Interventions-II (Non-Tariff)

Import Quotas: Concept, Types and Effects of Import Quotas; Import Quotas Vs. Import Tariff; Tariff Quota Controversies in Less Developed Countries; Other Non-Tariff Quota Barriers to Trade: Export-Subsidy, Dumping-Multilateralism and WTO

Unit 10: Theory of Customs Unions

Concept; Trade Creation and Trade Diversion; Effects of Custom Unions on Production and Consumption; EEC; SAARC

Unit 11: Balance of Payments

Meaning and Components of Balance of Payments; Equilibrium and Disequilibrium in The Balance of Payments; The Process of Adjustment of BOP Under Systems of Gold Standard, Fixed Exchange Rates and Flexible Exchange Rates; A Critical Review of The Monetary Approach to The Theory of Balance of Payments Adjustment

Unit 12: Foreign Trade Multiplier

Foreign Trade Multiplier: Meaning and Concept; Foreign Trade Repercussion Effect of Increase in Investment; Foreign Trade Repercussion Effect of Increases In Exports; Deficiencies of Foreign Trade Multiplier

Unit 13: Determination of Exchange Rate

Meaning; Exchange Rate Determination: under Bretton Woods System, under Floating Rate Regime; Policies for Achieving Internal and External Equilibrium Simultaneously under Alternative Exchange Rate Regimes; Relative Merits and Demerits of Fixed and Flexible Exchange Rates in the Context of Growth and Development in Developing Countries

Unit 14: International Monetary Order

International Capital Movement; Direct and Portfolio Investment; International Monetary System, IMF, SDR; International Liquidity

Basic Reading List:

- 1) Hajela T. N. *Money Banking and International Trade*, Ane Books Pvt. Ltd.
- 2) Jhingan M.L.: *International Economics*, Vrinda Publishing Pvt. Ltd.
- 3) Mannur H. G. :*International Economics*, Vikash Publishing House Pvt. Ltd.
- 4) Mithani D.M. :*International Economics*, Himalaya Publishing House.
- 5) Paul R.R (2006):*Money, Banking And International Trade*, 6th Ed., Kalyani Publisher.
- 6) Rana K.C.; Verma K. N.: *International Economics*, Vishal Publishing Co.
- 7) Sodersten, B & Reed, G. *International Economics*, MacMillan.
- 8) Vaish, M.C. & Singh, S. (). *International Economics*, Oxford and IBH Publishing Co. Pvt. Ltd.

SEMESTER – III

COURSE IX: PUBLIC FINANCE AND POLICY

Unit 1: Introduction to Public Finance

Public Finance and its Scope; Role of Government in an economy: Allocation, Distribution and Stabilization Functions

Unit 2: Public Goods and Market Failure

Public Goods and Private Goods; Public goods and free riding; Public Goods and Market Failure; Common Resources and Tragedy of Commons; Determining the efficient output of Public Good; Club goods & local public finance; The Theory of Clubs and Tiebout Hypothesis

Unit 3: Public Choice

Theory of Public Choice: The Median Voter Model; Logrolling and its role.

Unit 4: Externalities and Market Inefficiency

Externalities and their nature; Inefficiency arising out of externalities and their corrective measures; Coase's Voluntary bargaining in small groups.

Unit 5: Theories of Public Expenditure

Lindahl's Voluntary Exchange Theory and Samuelson's Benefit Theory of Public Expenditure

Unit-6: Public Expenditure and Project Appraisal

Effects of Public Expenditure on production, distribution and economic stability; Role of Public Expenditure in developing economy; Government Investment and Social Cost- Benefit Analysis

Unit 7: Public Expenditure Analysis

Public Expenditures on non-marketed goods; Over-consumption and under-consumption of marketed goods under fixed quantity subsidy; The Allocative and Distributive effect of Excise Subsidy.

Unit 8: Public Receipts

Revenue and Capital receipts and their sources; Concepts in taxation: Tax ratio, Buoyancy and Elasticity of Taxation; Tax Credit and tax deduction; Neutral and Non-neutral taxes; Average and Marginal Tax rates and Tax rate Schedules.

Unit 9: Principles of Taxation

Benefit Principle and the Ability to Pay Approach of Taxation; Theory of Shifting & Incidence of Tax

Unit 10: Public Debt

Public debt and its sources; Burden of public debt; *Pay-As-You-Use* & *Pay-As-You-Go*; Crowding out effect; Public Debt Redemption

Unit 11: Fiscal Policy

Fiscal policy: Meaning, Objectives and functions; Fiscal policy and the stabilization function, Balanced Budget Multiplier

Unit 12: The Public Budget

The Public Budget: Meaning, Kinds and components; Performance and Zero-Based Budgeting; Concepts of Revenue deficit, Fiscal deficit and Primary Deficit.

Unit 13: Federal finance

Concept of Fiscal Federalism; Principles of Federal Finance; Horizontal and Vertical Fiscal Balances; Instruments of Inter-governmental Resource Transfer

Unit 14: Finance Commissions of India

Finance Commission of India and its role; Recommendation of Current Finance Commission of India.

Basic Reading List:

- 1) Bhatia, H.L. *Public Finance*, Vikas Publishing House, New Delhi.
- 2) Browning E.K. & Browning J.M., *Public Finance and the Price System*, Pearson.
- 3) Cullis, John & Jones, Philip, *Public Finance and Public Choice*, McGraw Hill, Education. Singapore.
- 4) Hyman D N, *Public Finance: A Contemporary application of Theory to Policy*.
- 5) Musgrave & Musgrave., *Public Finance in Theory and Practice*, McGraw Hill, Singapore.
- 6) SudiptoMundle, *Public Finance*, 2000, Thommson South Western.
- 7) Ulbrich H *Public Finance in Theory and Practice*, Thompson South Western.

COURSE X: ECONOMICS OF SOCIAL SECTOR**Unit 1: Economics of Education**

Role of Education in Economic Development, Human Capital- Human Capital Vs Physical Capital, Components of Human Capital, Provision and Utilization of Educational Facilities

Unit 2: Demand for Education and Its Relationship with Employment

Private and Social Demand for Education, Relationship between Employment Opportunities and Educational Demand

Unit 3: Costs and Benefits of Education

Cost of Education – Expenditure on education, Private costs and social costs and wastage and stagnation; Benefits of education: Direct and indirect benefits, Private and social benefits

Unit 4: Returns of Education and Its Financing

Problems involved in measuring returns from investment in education; Educational financing- Resource mobilization and utilization.

Unit 5: Education and Labour Market - I

Education and labour market- Effects of educational financing on income distribution; Effects of education

Unit 6: Education and Labour Market - II

Ability and family background on earnings, Poverty and income distribution

Unit 7: Educational Planning and Development - I

Cost-benefit analysis of Education, production function models, Growth accounting equations of Schultz and Denison

Unit 8: Educational Planning and Development - II

Manpower requirements approach, Programming and input-output models; Educational Planning in developing countries with emphasis on India

Unit 9: Role of Public and Private Sectors in Education

Role of public and private sectors in Education; Public private partnerships in Education

Unit 10: Economics of Health-I

Nature and Scope of Health Economics; Interrelationship between health and development; Health and Productivity; Determinants of Health Status; Disease Burden and its Measurement, Global burden of disease

Unit 11: Economics of Health-II

Economic dimensions of health care – demand and supply of health care; Economics of Nutrition: Linkages with Morbidity, Mortality and Female Education, Concept of Missing Women, Consequences of Gender Bias in Health

Unit 12: Financing of Health

Financing health care and resource constraints; Economics of Health Insurance; Health policy in India; Financing health sector in India

Unit 13: Role of Public and Private Sectors in Health

Role of public and private sectors in Health; Public private partnerships in Health

Unit 14: Economic Appraisal of Health Programmes

Forms of economic appraisal of health programmes- cost minimization, cost benefit analysis, cost effectiveness analysis, cost utility analysis

Basic Reading List:

- 1) Baru, R.V. (1998), *Private Health Care in India's Health Care Social Characteristics*, Sage publications, New Delhi.
- 2) Becker, G.S. (1974), *Human Capital* (2nd Edition), National bureau of Economic Research, New York.
- 3) Berman, P. and M.E Khan (1993) *Paying for Indian's Health Care*, Sage Publications, New Delhi.
- 4) Berman, R.(Ed) (1995), *Health Sector Reform in Developing Countries: Making Health Development Sustainable*, Boston: Harvard Series on Population and International Health.
- 5) Blaug, M.(1972), *Introduction to Economics of Education*, Penguin, London.
- 6) Cohn, E. and T. Gaske (1989), *Economics of Education*, Pergamon Press, London.
- 7) McMohan, W.W. (1999), *Education and Development: Measuring the Social Benefits*, Oxford University Press, Oxford.
- 8) Meier & Rauch: *Leading Issues in Economic Development*, Oxford University Press.
- 9) Panchamukhi, P.R. (1980), *Economics of Health: A Trend Report in ICSSR*, A Survey of Research in Economics, Vol.VI, Infrastructure, Allied, Delhi.
- 10) Tilak, J.B.G. (1994), *Education for Development in Asia*, Sage Publications, New Delhi.

- 11) Todaro & Smith: *Economic Development*, Pearson Education Asia.
- 12) Vaizey, J. (1962), *Economics of Education*, Faber and Faber, London.
- 13) Woodhall, M.(1992), *Cost Benefit Analysis in Educational Planning*, UNESCO, Paris.
- 14) World Bank (1993), *The World Development Report, 1993: Investing in Health*, Oxford University Press, New York.

COURSE XI: FINANCIAL SYSTEM

Unit 1: Introduction to Financial System

Financial System: Its Nature and Role, Financial System and Economic Development

Unit 2: Constituents of the Financial System

Components of the Financial System: Financial Instruments, Financial Markets and Financial Institutions

Unit 3: The Money Market

The Money Market and its Functions, Instruments in the Money Market

Unit 4: Treasury and Commercial Papers

Treasury Bills and their Features, Role of Treasury Bills, Commercial Papers, Commercial Bills, Certificate of Deposit (Concepts only)

Unit 5: Call Money Market

Call Money Market, Call and Notice Money, Role of Call Money, Monetary Policy Intervention in the Money Market

Unit 6: The Capital Market

Functions of the Capital Market, Primary Capital Market, Participants in the Primary Capital Market, Instruments of Raising Funds

Unit 7: Price Determination in the Money Market

Determining Offer Price of IPO, Book Building Process- Its Merits and Limitations

Unit 8: The Secondary Market

Functions of the Secondary Market, Functioning of the Stock Market, Listing of Securities, Trading Arrangements and Settlement, Demutualization of Stock Exchanges, Stock Market Index

Unit 9: Mutual Funds

Mutual Funds- Nature and Functions, Types of Mutual Funds, NAV and their Calculations

Unit 10: The Debt Market

Participants and Instruments traded in the Debt Market, The Government Security Market

Unit 11: The Insurance Sector

Insurance- Its Nature and Role, Types of Insurance and their Functions

Unit 12: The Banking Sector

Banking Institutions- Types and their Role, Banking Sector reforms

Unit 13: Non-Banking Financial Companies

Nature and Size of NBFCs, Role of NBFCs

Unit 14: The Derivative Market

Functions of the Derivative Market, Participants in a derivative Market and their Role, Types of Financial Derivatives

Unit 15: Financial Asset Valuation

Financial Asset Valuation- Determining Present Value and Future Value, Valuation of Debt Instruments, Valuing Income and Growth Stocks

Basic Reading List

- 1) Gupta, S. B., Monetary Economics: Institutions, Theory and Policy, S. Chand & Co.
- 2) Hull J.C. & Baasu S. Options, Futures and Other Derivatives, Pearson Education.
- 3) L.M.Bhole, Financial Institutions and Markets, TMH, New Delhi, 2007.
- 4) Madura, Jeff Financial Institutions & Market, Thomson.
- 5) Pathak, Bharati V. Indian Financial System, Pearson Education.
- 6) Prasanna Chandra, Managing Investment, TMH, New Delhi, 2007.
- 7) SriramKhanna, Financial Markets in India & Protection of Investors, New Century Publications, 2004.

COURSE XII: ISSUES IN INDIAN ECONOMY

Unit 1: India as an Emerging Global Economy

Trends in National Income and Per capita Income, Sectoral Composition of National Income; Role of India in the Current Global Economy

Unit 2: India's Population: Growth and Policy

Population Growth, Age and Sex Composition of Population, National Population Policy, 2000.

Unit 3: Issues of Human Resource Development in India

Human Resource Development: Basic Issues and Problems; Poverty, Inequality and Unemployment: Causes and Magnitude; Progress of Human Resource Development in India

Unit 4: Indian Agriculture

Contribution of agriculture to economic development; Problem of Food Security, Public Distribution System

Unit 5: Changing Dynamics in Indian Agriculture

Diversification of Agriculture – Contract Farming – Subsidy to Farmers - Agriculture and Environment – WTO and Agriculture

Unit 6: Indian Industry

Growth and pattern of Industrialization; Problem of Global Competition – Identification of Industries Having India's Comparative Advantage: IT Industry – MSME sector; Industrial Sickness – Disinvestment

Unit 7: Social Sector

Performance of the social sector; social infrastructure- education, health and housing - Government policies

Unit 8: Service Sector

Growth pattern of the Service Sector since 1991: Banking, Insurance, Telecom and Information Technology; Changing Role of the Service Sector in the Indian Economy

Unit 9: Infrastructure Development in India

Growth of basic infrastructural facilities in India since 1991: Energy, Transport and Communication

Unit 10: Urbanisation in India

Concept; Trend of Growth in Urban population in India since 1991; Growth and Composition of Urban working population; Problems of Urbanisation; Growth of Urban Infrastructure in India

Unit 11: Inclusive Growth

Concept and Rationale; Major areas of exclusion: Regional and inter-community disparity; Emphasis to bring inclusiveness through Five Year Plans

Unit 12: Economic Reforms - I

An Overview of Macroeconomic Management Since 1991; Reform In Capital Market: Inflow Of FDI and FPI and its Implication for the Domestic Economy

Unit 13: Economic Reforms - II

Financial Sector Reform – Fiscal Reform: FRBM Act and its Implication; Second Generation Reform Measures

Unit 14: India's External Sector

Direction of Foreign Trade – Composition of Foreign Trade - Foreign Trade Policy - Balance of Payment: Role of Private Transfer, Software Services and Foreign Capital in BOP – Current and Capital Account Convertibility; WTO and its impact on the Indian economy.

Basic Reading List

- 1) Bardhan, P.K. (9th Edition) (1999), The Political Economy of Development in India, Oxford University Press, New Delhi.
- 2) Basu, Kausik (ed.), "India's Emerging Economy" OUP.
- 3) Brahmananda, P.R. and V.R. Panchmukhi (Eds.) (2001), Development Experience in the Indian Economy: Inter-State Perspectives, Bookwell, Delhi.
- 4) Chakravarty, S. (1987), Development Planning: The Indian Experience, Oxford University Press, New Delhi.
- 5) Dantwala, M.L. (1996), Dilemmas of Growth: The Indian Experience, Sage Publications, New Delhi.
- 6) Datt, R. (Ed.) (2001), Second Generation Economic Reforms in India, Deep & Deep Publications, New Delhi.

- 7) Fouseca, A.J. (ed.), “Challenge of Poverty in India”, Vikas.
- 8) Jalan, B. (1992), *The Indian Economy — Problems and Prospects*, Viking, New Delhi.
- 9) Jalan, B. (1996), *India’s Economic Policy — Preparing for the Twenty First Century*, Viking, New Delhi.
- 10) Joshi, Vijay and Little, IMD, “India’s Economic Reforms 1991-2001”, Oxford University Press.
- 11) Kapila, Uma (ed.), “India’s Economic Reforms”, Academic Foundation.
- 12) Kapila, U.: *Indian Economy since Independence*, Academic Foundation
- 13) Parikh, K.S. (1999), *India Development Report — 1999-2000*, Oxford University Press, New Delhi.
- 14) Sandesara, J.C. (1992), *Industrial Policy and Planning, 1947-91: Tendencies, Interpretations and Issues*, Sage Publications, New Delhi.
- 15) Sen, A. and Dreeze, J., “Economic Development and Social Opportunities”, OUP.
- 16) Wadhwa, C. (ed.), “Some Problems of India’s Economic Policy”, Tata McGraw Hill.

SEMESTER – IV

COURSE XIII: ENVIRONMENTAL ECONOMICS

Unit 1: Basic Concepts

Environment, Ecology, Economy; Need to Study Environmental Economics, Environmental Economics vs. Resource Economics, Nature, Scope and Significance of Environmental Economics

Unit 2: Economics of Resources-I

Renewable Resources; Definition, Optimal Management of Renewable Resources;

Unit 3: Economics of Resources-II

Non Renewable Resources; Definition, Difference with Renewable Resources, Optimal Management of Non Renewable Resources

Unit 4: Property Rights and Environmental Resources

Various Types of Property Rights and Their Environmental Implication, Common Property Rights and Tragedy of Commons

Unit 5: Environment and Economic Development

Trade off Between Environment and Economic Development-Kuznets’ Analysis; Population and Environment; Poverty and Environment; Exogenous and Endogenous Poverty

Unit 6: International Trade and Environment

Impact of International Trade on Environment-Positive and Negative Impacts; Environment as a Source of Comparative Advantage; Pollution Haven Hypothesis; Empirical Evidence of Industrial Concentration among ‘North’ (Developed Countries) and ‘South’ (Developing Countries), Latest Development

Unit 7: Market Failure and Externalities

Concept of Market Failure, Environment and Market Failure; Concept of Externalities, Types of Externalities, Relationship between Environment and Externalities; Internalisation of Externalities- Solution by Pigou and Coase

Unit 8: Valuation of Environment

Various Types of Values of Environmental Goods-Use and Non Use Value; Methods of Valuation; Direct Methods-Contingent Valuation Method; Indirect Methods-Hedonic Pricing and Travel Cost Method;

Unit 9: Sustainable Development

Concept and Indicators of Sustainable Development; Significance and Importance; Policies for Sustainable Development; Related Concept of Sustainable Development

Unit 10: Environmental Accounting

Environmental Accounting, Auditing, Environmental Impact Assessment-Concept only

Unit 11: Instruments of Environmental Protection-I

Types of Instruments; Conventional Instruments-Command and Control (CAC) Measures; Importance of Conventional Instruments

Unit 12: Instruments of Environmental Protection- II

Non Conventional/Incentive Based Measures-Fees/Tax, Tradable Pollution Permit, Liability Rules

Unit 13: Environmental Protection and Economic Development- Indian Experience

Structure of Indian Environmental Regulatory Policies; Monitoring and Enforcement

Unit 14: Global Initiative towards Environmental Issues - I

Global Conventions for Environmental Conservation; Concept of ‘Common but Differentiated Responsibilities’; Cause of Non-Cooperative Behaviour among North and South

Unit 15: Global Initiative towards Environmental Issues -II

Global Environmental Issues, International Trade and Environment

Basic Reading List:

- 1) Bhattacharya, R.N. (2001). Environmental Economics-An Indian Perspective, Oxford University Press
- 2) Chopra, K and A. Agarwal (1999). Trade and Environment, Working Paper, Delhi-IEG
- 3) Hanley, Nick, J. Shrogen, and Ben White (1999). Environmental Economics, MacMillan
- 4) Titenberg, T. (1998). Environmental Economics and Policy, Addison-Wesley
- 5) World Commission on Environment and Development (1987). Our Common Future, Oxford University Press

COURSE XIV: RESEARCH METHODOLOGY

Unit 1: Basic Concepts of Research

Research: Meaning, Nature, Types and Importance, Elements of Scientific Methods

Unit 2: Objectives and Scope of Research

Objectives and Scope of Research in Social Science, Problems and Limitations of Social Science Research

Unit 3: Types of Research

Types of Research: Descriptive & Analytical, Fundamental & Applied, Qualitative & Quantitative, Conceptual & Empirical

Unit 4: Research in Economics

Economic Research- Nature, Importance and Scope

Unit 5: Review of literature

Review of literature - Need for reviewing literature, Sources of literature

Unit 6: Research Problem

The Research Problem: Identification of the Problem, Factors involved in the selection of problem

Unit 7: Research Design

Research Design: Meaning & Types, Conceptual Framework

Unit 8: Sampling Techniques - I

Meaning and Types of Sampling Methods - Random Sampling; Stratified Random Sampling, Systematic Sampling, Cluster Sampling

Unit 9: Sampling Techniques - II

Two Stage Sampling, Non-Random Sampling, Purposive Sampling, Quota Sampling (Meaning and Examples of each type of sampling)

Unit 10: Sampling Techniques – III

Meanings of Variables, Attributes, Population and Sampling, Census Method V/S Sampling Method

Unit 11: Collection of Data

Collection of Data: Meaning, importance and types of Data; Primary and Secondary Data: Merits and Demerits

Unit 12: Interview

Interview: Meaning, Process, Types, Merits and Demerits

Unit 13: Interview Techniques - I

Questionnaire: Meaning, Types, Merits and Demerits

Unit 14: Interview Techniques - II

Case Study: Meaning, Features, Merits & Demerits; Focus Group Discussion

Basic Reading List

- 1) Gosh B.N.– Scientific Method and Social Research – Sterling Publishers (P) Ltd., 1992.
- 2) Kothari- C.R. Research Methodology, Methods and Techniques – Willey Eastern Ltd., 1988.
- 3) Krishnaswamy, O.R. and Ranganathan, M. (2005) Methodology of Research in Social Research
- 4) Lundberg, George A. : Social Research, Long mans, Green and Co., New Delhi
- 5) Nachmias David & Nachmias Chava, (1981), Research Methods in the Social Sciences, New York,

- 6) Sharma, B A V and others (Ed) (1984) "Research Methods in Social Sciences" Sterling
- 7) Thanulingom, N. (2000), "Research Methodology" Himalaya Publishing House

COURSE XV/XVI: DEMOGRAPHY (OPTIONAL: GROUP I)

Unit 1: Introduction

Definition, Nature, Scope and Importance; Origin and Development; Relation with other Social Sciences

Unit 2: Basic Concepts

Fertility, Mortality (Maternal Mortality; Infant Mortality), Fecundity

Unit 3: Migration

Meaning of Migration, Types, Causes and Consequences of Migration

Unit 4: Sources of Demographic Data

Census; Registration Data; National Sample Survey; Recent Initiatives like Aadhaar, NRC; International Sources

Unit 5: Population Theories - I

Antiquity, Malthusian, Demographic transition

Unit 6 : Population Theories - II

Post-Malthusian, Neo-classical, Marxian, Biological Theories, Optimum Theory

Unit 7: Population Growth and Demographic Transition

Determinants of Population Growth, Consequences of Population Growth; Theory of Demographic Transition

Unit 8: Demography and Urbanization

Meaning; Methods of Measurement; Size of Urbanisation; Factors Responsible for Urbanisation; Problems of Urbanisation

Unit 9: Demographic Structure of India

Recent Trend in Indian Population Growth; Composition of Indian Population; Occupational Structure of Indian Population; Changing Characteristics of Indian Population

Unit 10: Population Policies in India

Population Policies, Programmes, Initiatives and their Critique

Unit 11: Demographic Structure in N.E India

Inter-state, Inter-community and gender Perspectives.

Unit 12: Demographic Problems in N.E India

Poverty; Unemployment; Child and Women Trafficking; Immigration; Inter Community feuds; Outmigration

Unit 13: Census 2011 (Major Features from National Data)

Introduction; Growth, Composition and Occupational Structure of Indian Population According to Census 2011; Major Demographic Changes Compared to Earlier Census

Unit 14: Census 2011 (Major Features from North East Region)

Introduction; Growth, Composition and Occupational Structure of the Population of North East Region of India According to Census 2011; Major Demographic Changes Compared to Earlier Census; Comparing the North East Region of India with All Indian Level with respect to Census 2011

Unit 15: Trends in World Population

Introduction; Distribution of World Population; Recent Trend of World Population

Basic Reading List:

- 1) Agarwala, S.N.: India's Population Problems, Tata Mc Graw Hill Publishing Company Limited, Bombay.
- 2) Bhende, A.A. & Kanitkar, T.: Principles of Population Studies, Himalaya Publishing House, Bombay.
- 3) Bose, A.: India's Basic Demographic Statistics, B.R. Publishing Corporation, New Delhi.
- 4) Davis, K.: The Population of India and Pakistan, Princeton University Press, Princeton.
- 5) Ghosh, B.N.: Population Theories and Demographic Analysis, Meenakshi Prakashan, Meerut.
- 6) Lee, Everett, "A Theory of Migration" in J.A. Jackson (ed.) Migration, Cambridge University Press, Cambridge.
- 7) Rama Kumar, R.: Technical Demography, Wiley Eastern Limited, New Delhi.
- 8) Shryock, H.S. et. al: Methods and Materials of Demography, Academic Press, New York.
- 9) Sinha, V.C. and Zacharia, E.: Elements of Demography, Allied Publishers Private Limited, New Delhi.
- 10) Srinivasan, K.: Basic Demographic Techniques & Application, Sage Publications, New Delhi.
- 11) Gilbert, Geoffrey, 2006, World Population, ABC-CLIO Inc.

COURSE XV/XVI: BASIC ECONOMETRICS (OPTIONAL: GROUP I)

Unit 1: Sampling and Estimation

Concept of Sampling Distribution and Standard Error of a Statistic; Principles of Estimation; Methods of Moments and Maximum Likelihood

Unit 2: Statistical Inference-I

Testing of Hypothesis: Type I and Type II Errors; Test based on Standard Normal Distributions

Unit 3: Statistical Inference-II

Small Sample Tests based on t and Chi-Square Distributions

Unit 4: Linear Regression Model and Its Estimation

Two-variable Linear Regression Model – interpretations of the coefficients, the constant term and the random disturbance - OLS Estimation

Unit 5: Classical Assumptions and the OLS Estimators

Classical Assumptions and their implications– Mean and Variance of OLS Estimators under the Classical Assumptions – the Best Linear Unbiased character

Unit 6: Multiple Linear Regression Model and Its Estimation

Multiple Regression Model and Its Estimation

Unit 7: Inference from Linear Regression Estimation

The Coefficient of Determination – Adjusted R square - Test of Hypothesis about Regression Coefficients

Unit 8: Forecasting with the Linear Regression Equation

Point and Interval Prediction with the Linear Regression Model

Unit 9: Specification Errors and their Consequences

Specification Errors and their Consequences

Unit 10: Problem of Multicollinearity

Multicollinearity: Effects, Detection and Remedies

Unit 11: Qualitative Factors as Regressors

Nature of qualitative factors - use of Dummy Variables for capturing the effect of qualitative factors – interpretation of coefficients of dummy variables

Unit 12: Introduction to Time Series

Components of a time series – Estimation of trend – Moving Average and Curve Fitting methods

Unit 13: Stochastic Time Series

Idea of a stochastic time Series - Stationary and Non-stationary Time Series – Autocorrelation Function and

Unit 14: Introduction to Simultaneous Equation Model

Structural and Reduced Forms – Simultaneity, Indirect Least Squares and Two Stage least Squares

Basic Reading List:

- 1) Daugherty 'Introduction to Econometrics', OUP
- 2) Gujarathi, D., "Basic Econometrics", McGraw Hill.
- 3) Johnston and Dinardo, "Econometric Methods", McGraw Hill
- 4) Pindyck, R.S. and Rubinfeld, D.L.: "Econometric Models and Economic Forecasts", McGraw Hill, New York.
- 5) Salvatore, Dominick and Reagle, Darrick, "Statistics and Econometrics", Tata McGraw Hill

**COURSE XV/XVI: AGRICULTURAL ECONOMICS (OPTIONAL:
GROUP II)**

Unit 1: Basic Concepts of Agricultural Economics

Definition of Agricultural Economics; Scope, Nature and Importance of Agricultural Economics; Need for a Separate Study of Agricultural Economics

Unit 2: Agriculture and Economic Development

Role of Agriculture in Economic Development; Changing Importance of Agriculture to Economic Development; Development of Agriculture during the Five Year Plans; Inter Dependence of Agriculture and Industry

Unit 3: Farm Organisation

Various types of Farm Organisation- Peasant Farming, Capitalist Farming, State Farming, Collective Farming, Co-operative Farming; Most Suitable Farm Organisation in Indian Agriculture

Unit 4: Land Reforms

Objective of Land Reforms; Need of Land Reforms in Indian Agriculture; Ownership vs. Tenancy Cultivation; Large Farms vs. Small Farms; Critical Evolution of Land Reforms

Unit 5: Risk and Uncertainty in Agriculture

Difference between Risk and Uncertainty in Agriculture; Types of Risk and Uncertainty in Agriculture; Measures for Reducing Risk and Uncertainty in Agriculture

Unit 6: Agricultural Price Policy

Objective of Agricultural Price Policy; Main Elements-Fixation of Product Prices, Price Policy for Agricultural Inputs, Consumer's Protection, Ancillary Policies; Agricultural Price Policy in India

Unit 7: Agricultural Marketing

Objective of Agricultural Marketing; Need and Importance of Agricultural Marketing; Status of Agricultural Marketing in India

Unit 8: Agricultural Finance

Need and Importance of Agricultural Finance; Sources of credit: Co-Operative-Rural Bank-NABARD- Micro Finance-SHG-NGOs-Problems of Capital Formation

Unit 9: New Technologies in Agriculture

Green Revolution and Mechanization, Irrigation, HYV of crops, Food processing

Unit 10: Agricultural Labour

Agricultural labour-Employment-Disguised unemployment- seasonal unemployment-Landless labour-Income and Labour Wages-State Policy for Agricultural labour

Unit 11: Economics of Agricultural Production

Production function in agriculture- conventional isoquant and iso-cost approach; Cobb-Douglas production function; laws of returns and return to scale; Cost functions and cost curves in agricultural production decisions; Supply response in agriculture; Size of farm and productivity debate.

Unit 12: Theories of Agricultural Economics

Transforming Traditional Agriculture-The Scultzian Thesis; Lewis Model of Economic Development

Unit 13: Food Security

Food security and nutrition policy analysis - concepts and definition of food security and malnutrition, impact analysis of production oriented policies.

Unit 14: Public Distribution System in India

PDS, food price policies in India, food subsidies, food safety net, food for work programme

Unit 15: Agriculture in North Eastern Region

Importance of Agriculture in NE Region; Status of Agricultural Development in NE Region; Problems and Challenges faced by Agriculture Sector in NE Region; Agricultural policies in the NE State

Basic Reading List

- 1) Christopher, Ritson: Agricultural Economics, Crosby Lockwood Staples, London
- 2) Lekhi, R.K. & J. Singh: Agricultural Economics, Kalyani Publishers, Ludhiana.
- 3) Martin, A Economics of Agriculture, Routledge & Kegan Paul, London.
- 4) Mellor, J.M.: Economics of Agricultural Development, Cornell University press, New York.
- 5) Sadhu, A.N. & A. Singh: Fundamentals of Agricultural Economics, Himalayan publishing House, Bombay.
- 6) Soni, R.N.: Leading Issues in Agricultural Economics, Sobhanlal Nagin Chand & Co. Jalandhar.
- 7) Tousley, R.D. & E. Clark: Principles of Marketing, The Macmillan Company, London.

COURSE XV/XVI: ECONOMICS OF INSURANCE (OPTIONAL: GROUP II)

Unit 1: Introduction to Insurance

Economic security; Human quest for economic security through time; Exposure to losses; Role of insurance; Definition of insurance; Risk pooling and risk transfer; Economic and legal perspectives.

Unit 2: Types of Insurance

Social vs. private insurance; Life vs. non-life insurance; Classification of life, health and general insurance policies.

Unit 3: Risk and Insurance

Fundamentals of uncertainty and risk; Pure risk and speculative risk; Expected utility and the demand for insurance; Moral hazard and insurance demand.

Unit 4: Risk Management and Risk Sharing

Concept of risk management; Essentials of risk management; Elements of risk management — Risk assessment; Risk control and risk financing; World-wide risk sharing.

Unit 5: Reinsurance

Concept of reinsurance, Fundamentals of reinsurance, Reinsurance markets in developing countries.

Unit 6: Insurance and Economic Development

Risk management and insurance in economic development, Insurance institutions as financial intermediaries; Insurance institutions as investment institutions.

Unit 7: Essentials of Life Insurance - I

Fundamentals of life and health insurance; Functions of life and health insurance; Plans of life insurance; Legal aspects of life insurance;

Unit 8: Essentials of Life Insurance - II

Provisions of policies; Selection and classification of risks; Basics of premium construction.

Unit 9: Essentials of Health Insurance - I

Individual health insurance; A Model Health Insurance Format and Explanation of the Items.

Unit 10: Essentials of Health Insurance - II

Uses, Types of evaluation; Principles of underwriting of life and health insurance; Group insurance.

Unit 11: Essentials of General Insurance- I

Definition of general insurance; Types of general insurance; Importance of general insurance; Importance of general insurance in a country's economic development; Concept of short-term risk; Fundamentals of the following concepts — Common law, Equity, Proposal/Accedence, Indemnity, Insurable interest, Contribution subrogation, Representation; Utmost good faith, Material fact, Physical hazard, Moral hazard.

Unit 12: Essentials of General Insurance-II

Policy endorsements conditions/warranties; Selection of risks; Inspection of risks; Rating and calculation of premiums; Tariffs and non-tariffs; Marketing of general insurance; Technology development and general insurance.

Unit 13: Planning for Wealth Accumulation and Retirement Needs

Wealth accumulation planning; Life cycle planning; Planning for accumulation, objectives; Purchase of insurance and accumulation planning; Investments — Tax-advantaged and tax non-advantaged; Essentials of individual retirement planning; Analysis of retirement; Income needs; Retirement planning strategies; Investing for retirement, Pension plans; Basic principles of pension plans.

Unit 14: The Insurance Market in Indian Context

Insurance institutions in Indian capital market; Regulations governing investments of insurance institutions in India; Purpose of government intervention in markets; Relevant IRDA rules.

Basic Reading List

- 1) Arnold, A. S. *General Insurance Principles*. University Press of America. 1983
- 2) Arunajatesan, S. and T.R. Viswanathan. *Risk Management and Insurance: Concepts and Practices of Life and General Insurance*. New Delhi: Macmillan Publishers India Ltd. 2009.
- 3) Forgia, Gerard La and Somil Nagpal. *Government Sponsored Health Insurance in India*. Washington D.C. The World Bank. 2012.
- 4) Neil.A.Doherty. *Integrated Risk Management*, First edition, McGraw Hill Companies, USA. 2000.

- 5) Palande, P.S., R.S. Shah and M.L. Lunawat. *Insurance in India: Changing Policies and Emerging Opportunities*. New Delhi: Response Books. 2003.
- 6) Rejda, George E. *Principles of Risk Management and Insurance*. Addison-Wesley Longman, 2007.
- 7) Sadhak, H. *Life Insurance in India: Opportunities, Challenges and Strategic Perspective*. New Delhi: Sage Publications. 2009.
- 8) Skipper, Harold D., Harold D. Skipper Jr and Kenneth Black. *Life and Health Insurance*. Prentice-Hall, 1999.
- 9) Srivastava, D.C. and Shashank Srivastava. *Indian Insurance Industry: Transition and Prospects*. New Delhi: New Century Publications. 2001.
- 10) Trieschmann, James S. and Sandra G. Gustavson. *Risk Management and Insurance*. Cincinnati, OH: South-Western College Publishing. 1998.
- 11) Tripathy, Nalini Prava. *Insurance: Theory and Practice*. New Delhi: Prentice-Hall of India Pvt. Ltd. 2006.
- 12) Vijayakumar, A. *Indian Insurance Sector in 21st Century: An Outlook*. New Delhi: Kalpaz Publications. 2009.
