

DEPARTMENT OF ECONOMICS
SACRED HEART COLLEGE (Autonomous) THEVARA, KOCHI

CURRICULUM AND SYLLABI
CHOICE BASED CREDIT SYSTEM
(CBCS – PG)

MASTER OF ARTS (M.A) IN ECONOMICS

(INTRODUCED FROM 2016 ADMISSION ONWARDS)

BOARD OF STUDIES IN ECONOMICS
Sacred Heart College, Thevara, Kochi, Kerala

**SACRED HEART COLLEGE (AUTONOMOUS)
THEVARA KOCHI -13
MA ECONOMICS PROGRAMME: REGULATIONS FOR
CHOICE BASED CREDIT SYSTEM 2016**

CHAPTER I

1. SCOPE

- 1.1. These regulations provided herein shall apply to post-graduate programme in Economics, conducted by Sacred Heart College (S.H.college), Thevara with effect from the academic year 2016-2017 admission onwards.

2. DEFINITIONS

- 2.1. ‘Academic **Committee**’ means the Committee constituted by the principal under this regulation to monitor the running of the Post-Graduate programmes under the Choice Based Credit System (CBCS-PG).
- 2.2. ‘Programme’ means the entire course of study and examinations.
- 2.3. ‘Duration of **Programme**’ means the period of time required for the conduct of the programme. The duration of post-graduate programme shall be of 4 semesters.
- 2.4. ‘**Semester**’ means a term consisting of a minimum of 90 working days, inclusive of examination, distributed over a minimum of 18 weeks of 5 working days, each with 5 contact hours of one hour duration
- 2.5. ‘**Course**’ means a segment of subject matter to be covered in a semester. Each Course is to be designed variously under lectures / tutorials / laboratory or fieldwork / seminar / project / practical training / assignments/evaluation etc., to meet effective teaching and learning needs.
- 2.6. ‘**Credit**’ (Cr) of a course is the numerical value assigned to a paper according to the relative importance of the content of the syllabus of the programme.
- 2.7. ‘**Programme Credit**’ means the total credit of the PG Programmes, ie; **80 credits**.
- 2.8. ‘**Programme Core course**’ Programme Core course means a course that the student admitted to a particular programme must successfully complete to receive the Degree and which cannot be substituted by any other course.
- 2.9. ‘**Programme Elective course**’ Programme Elective course means a course, which can be chosen from a list of electives and a minimum number of courses is required to complete

the programme.

- 2.10 **Programme Project** Programme Project means a regular project work with stated credits on which the student undergo a project under the supervision of a teacher in the parent department / any appropriate Institute in order to submit a dissertation on the project work as specified.
- 2.11 **Plagiarism** Plagiarism is the unreferenced use of other authors' material in dissertations and is a serious academic offence.
- 2.12 **Tutorial** Tutorial means a class to provide an opportunity to interact with students at their individual level to identify the strength and weakness of individual students.
- 2.13 **Seminar** seminar means a lecture expected to train the student in self-study, collection of relevant matter from the books and Internet resources, editing, document writing, typing and presentation.
- 2.14 **Evaluation** means every course shall be evaluated by 25% internal assessment and 75% external assessment.
- 2.15 **Repeat course** is a course that is repeated by a student for having failed in that course in an earlier registration.
- 2.16 **Audit Course** is a course for which no credits are awarded.
- 2.17 **Department** means any teaching Department offering a course of study approved by the college / Institute as per the Act or Statute of the University.
- 2.18 **Parent Department** means the Department which offers a particular Post graduate programme.
- 2.19 **Department Council** means the body of all teachers of a Department in a College.
- 2.20 **Faculty Advisor** is a teacher nominated by a Department Council to coordinate the continuous evaluation and other academic activities undertaken in the Department.
- 2.21 **College Co-ordinator** means a teacher from the college nominated by the College Council to look into the matters relating to CBCS-PG System
- 2.22 **Letter Grade** or simply **Grade** in a course is a letter symbol (S, A, B, C, D, etc.) which indicates the broad level of performance of a student in a course.
- 2.23 Each letter grade is assigned a **Grade point** (GP) which is an integer indicating the numerical equivalent of the broad level of performance of a student in a course.
- 2.24 **Credit point** (CP) of a course is the value obtained by multiplying the grade point (GP) by the Credit (Cr) of the course $CP=GP \times Cr$.
- 2.25 **Extra credits** are additional credits awarded to a student over and above the minimum

credits required for a programme for achievements in co-curricular activities carried out outside the regular class hours as directed by the College.

- 2.26 **‘Semester Grade point average’** (SGPA) is the value obtained by dividing the sum of credit points (CP) obtained by a student in the various courses taken in a semester by the total number of credits taken by him/her in that semester . The grade points shall be rounded off to two decimal places. SGPA determines the overall performance of a student at the end of a semester.
- 2.27 **Cumulative Grade point average’** (CGPA) is the value obtained by dividing the sum of credit points in all the courses taken by the student for the entire programme by the total number of credits and shall be rounded off to two decimal places.
- 2.28 **Grace Marks’** means marks awarded to course/s, as per the orders issued by the college from time to time, in recognition of meritorious achievements in NCC/NSS/Sports/Arts and cultural activities.
- 2.29 **‘Words and expressions’** used and not defined in this regulation but defined in the Mahatma Gandhi University Act and Statutes shall have the meaning assigned to them in the Act and Statute.

3. ACADEMIC COMMITTEE

- 3.1 There shall be an Academic Committee constituted by the principal to manage and monitor the working of (CBCS-PG) 2016.
- 3.2 The Committee consists of
- a. The principal
 - b. The vice principal
 - c. Deans of the faculties of science, arts and commerce
 - d. The Controller of Examinations
 - e. The superintendent of the college

4. PROGRAMME STRUCTURE

- 4.1 Students shall be admitted into post graduate programmes under the various faculties.
- 4.2 The programme shall include two types of courses, Program Core (C) courses and Program Elective (E) Courses. There shall be a Program Project (D) with dissertation to be undertaken by all students. The Programme will also include assignments, seminars, practical (P), viva (V)etc., if they are specified in the Curriculum
- 4.3 There shall be various groups of four Programme Elective courses for a programme such as

Group A, Group B etc. for the choice of students subject to the availability of facility and infrastructure in the institution and the selected group shall be the subject of specialization of the programme.

4.4 Project work

- 4.4.1 Project work shall be completed by working outside the regular teaching hours.
- 4.4.2 Project work shall be carried out under the supervision of a teacher in the concerned department.
- 4.4.3 A candidate may, however, in certain cases be permitted to work on the project in an industrial / Research Organization/ Institute on the recommendation of the Supervisor.
- 4.4.4 There should be an internal assessment and external assessment for the project work in the ratio 1:3
- 4.4.5 The external evaluation of the Project work is followed by presentation of work including dissertation and Viva-Voce.
- 4.4.6 The mark and credit with grade awarded for the program project should be entered in the grade card issued by the college.
- 4.5 **Assignments:** Every student shall submit one assignment as an internal component for every course.
- 4.6 **Seminar Lecture:** Every PG student may deliver one seminar lecture as an internal component for every course. The seminar lecture is expected to train the student in self-study, collection of relevant matter from the books and Internet resources, editing, document writing, typing and presentation.
- 4.7 Every student shall undergo **two class tests** as an internal component for every course.
- 4.8 The attendance of students for each course shall be another component of internal assessment.
- 4.9 Comprehensive Viva-voce shall be conducted at the end semester of the programme which covers questions from all courses in the programme.

5. ATTENDANCE

- 5.1 The minimum requirement of aggregate attendance during a semester for appearing the end semester examination shall be 75%. Condonation of shortage of attendance to a maximum of 10 days in a semester subject to a maximum of two times during the whole period of Post Graduate programme may be granted by the University.

5.2 If a student represents the college in University, State or Nation in Sports, NCC, NSS or Cultural or any other officially sponsored activities such as College union / University union activities, he/she shall be eligible to claim the attendance for the actual number of days participated subject to a maximum of 10 days in a Semester based on the specific recommendations of the Head of the concerned Department and Principal of the College.

5.3 A student who does not satisfy the requirements of attendance shall not be permitted to take the end Semester examinations.

5.4 Those students who are not eligible even with condonation of shortage of attendance shall repeat the course along with the next batch

6 BOARD OF STUDIES AND COURSES.

6.1 The PG Board of Studies concerned shall design all the courses offered in the PG programme. The Boards shall design and introduce new courses, modify or re-design existing courses and replace any existing courses with new/modified courses to facilitate better exposures and training for the students.

6.2 The syllabus of a course shall include the title of the course, contact hours, the number of credits and reference materials.

6.3 Each course shall have an alpha numeric code number which includes abbreviation of the subject in two letters, the semester number, the code of the course and the serial number of the course ('C' for Program Core course, 'E' for Program Elective course, 'O' for Open Elective course, 'P' for Practical and 'D' for Project/ Dissertation and 'V' for Comprehensive Viva voce).

6.4 Every Programme conducted under Choice Based Credit System shall be monitored by the College Council.

7 REGISTRATION.

7.1 A student shall be permitted to register for the programme at the time of admission. The duration of the PG Programme shall be 4 semesters.

7.2 A student who registered for the course shall complete the course within a period of 8 continuous semesters from the date of commencement of the programme.

8. ADMISSION

8.1 The admission to all PG programmes shall be as per the rules and regulations of the college.

8.2 The eligibility criteria for admission shall be as announced by the college from time to time.

- 8.3 There shall be provision for inter collegiate and inter University transfer within a period of two weeks from the date of commencement of the semester.
- 8.4 There shall be provision for credit transfer subject to the conditions specified by the Board of Studies concerned.

9 ADMISSION REQUIREMENTS

- 9.1 Candidates for admission to the first semester of the PG programme through CBCS shall be required to have passed an appropriate Degree Examination of Mahatma Gandhi University as specified or any other examination of any recognized University or authority accepted by the Academic council of the college as equivalent thereto.
- 9.2 The candidate must forward the enrolment form to the Controller of Examinations of the college through the Head of the Institution.
- 9.3 The candidate has to register all the courses prescribed for the particular semester. Cancellation of registration is applicable only when the request is made within two weeks from the time of admission.
- 9.4 Students admitted under this programme are governed by the Regulations in force.

- 10 PROMOTION:** A student who registers for the end semester examination shall be promoted to the next semester

11 EXAMINATIONS

There shall be an external examination at the end of each semester.

- a. The answers must be written in **English** except for those coming under Faculty of languages.
- b. Practical examinations shall be conducted by the college at the end of the semesters as per the syllabus.
- c. Project evaluation and Comprehensive Viva -Voce shall be conducted at the end of the programme only. Practical examination, Project evaluation and Comprehensive Viva-Voce shall be conducted by two external examiners.(For professional courses, one examiner can be opted from the same college itself)
- d. There shall be one end-semester examination of 3 hours duration in each lecture based course (Theory).
- e. A question paper may contain short answer type/annotation, short essay type questions/problems and long essay type questions. Different types of questions shall

have different marks, but a general pattern may be followed by the Board of Studies.

12 EVALUATION AND GRADING

12.1 Evaluation: The evaluation scheme for each course shall contain two parts; (a) internal evaluation (ISA) and (b) external evaluation (ESA). 25 marks shall be given to internal evaluation and 75 marks to external evaluation so that the ratio between internal and external mark is 1:3. Both internal and external evaluation shall be carried out in mark system. Both internal and external marks are to be mathematically rounded to the nearest integer.

12.2 Internal evaluation: The internal evaluation shall be based on predetermined transparent system involving periodic written tests, assignments, seminars and attendance in respect of theory courses and based on written tests, lab skill/records/viva and attendance in respect of practical courses. The marks assigned to various components for internal evaluation is a follows.

12.3 Components of Internal Evaluation

All the components of the internal evaluation are mandatory

a) For Theory

| | Components | Marks |
|-----|--------------------------------|-----------|
| i. | Assignment | 5 |
| ii | Seminar/Quiz/Field survey etc. | 5 |
| iii | Attendance | 5 |
| iv | Two Test papers(2x4) | 10 |
| | Total | 25 |

b) For Project

| Components | Marks |
|---------------------------------|-----------|
| Topic/Area selected | 2 |
| Experimentation/Data collection | 5 |
| Punctuality | 3 |
| Compilation | 5 |
| Content | 5 |
| Presentation | 5 |
| Total | 25 |
| | |

12.4 Evaluation of Attendance

| % of attendance | Mark |
|-------------------------|------|
| Above 90% | 5 |
| Between 85 and < 90 | 4 |
| Between 80 and below 85 | 3 |
| Between 76 and below 80 | 2 |
| 75 | 1 |

Assignment

| Components | Marks |
|------------------|----------|
| Punctuality | 1 |
| Content | 2 |
| Conclusion | 1 |
| Reference/Review | 1 |
| Total | 5 |

Seminar

| Components | Marks |
|------------------|----------|
| Content | 2 |
| Presentation | 2 |
| Reference/Review | 1 |
| Total | 5 |

- 12.5 To ensure transparency of the evaluation process, the internal assessment marks awarded to the students in each course in a semester shall be published on the notice board at least one week before the commencement of external examination. There shall not be any chance for improvement for internal mark.
- 12.6 The course teacher and the faculty advisor shall maintain the academic record of each student registered for the course which shall be forwarded to the controller of examinations through the Principal and a copy should be kept in the college for at least two years for verification.
- 12.6 **External Evaluation:** The external examination in theory courses shall be conducted by the college with question papers set by external experts. The evaluation of the answer scripts shall be done by the examiners based on a well defined scheme of evaluation given by the

question paper setters. The external evaluation shall be done immediately after the examination preferably through the centralised valuation.

12.7 The question paper should be strictly on the basis of model question paper set by BoS and there shall be a combined meeting of the question paper setters for scrutiny and finalisation of question paper. Each set of question should be accompanied by its scheme of valuation.

12.8 For all courses (theory & practical), Letter grades and grade point are given on a 10-point scale based on the total percentage of marks, (ISA+ESA) as given below:-

| Percentage of Marks | Grade | Grade Point (GP) |
|---------------------|-----------------|------------------|
| 95 and above | S Outstanding | 10 |
| 85 to below 95 | A+ Excellent | 9 |
| 75 to below 85 | A Very Good | 8 |
| 65 to below 75 | B+ Good | 7 |
| 55 to below 65 | B Above Average | 6 |
| 45 to below 55 | C Average | 5 |
| 40 to below 45 | D Pass | 4 |
| Below 40 | F Fail | 0 |
| | Ab Absent | 0 |

Grades for the different semesters and overall programme are given based on the corresponding GPA as shown below:

| GPA | Grade |
|----------------------------|------------------------|
| Equal to 9.5 and above | <i>S Outstanding</i> |
| Equal to 8.5 and below 9.5 | <i>A+ Excellent</i> |
| Equal to 7.5 and below 8.5 | <i>A Very Good</i> |
| Equal to 6.5 and below 7.5 | <i>B+ Good</i> |
| Equal to 5.5 and below 6.5 | <i>B Above Average</i> |
| Equal to 4.5 and below 5.5 | <i>C Average</i> |
| Equal to 4.0 and below 4.5 | <i>D Pass</i> |
| Below 4.0 | <i>F Failure</i> |

12.9 A **separate minimum of 40% marks** (D grade) required for a pass for both internal evaluation and external evaluation for every course.

12.10 A candidate who has not secured minimum marks/credits in internal examinations can re-do the same registering along with the end semester examination for the same semester,

subsequently.

12.11 A student who fails to secure a minimum marks/grade for a pass in a course will be permitted to write the examination along with the next batch.

12.13 **There will be no supplementary/improvement examinations**

12.14 After the successful completion of a semester, Semester Grade Point Average (SGPA) of a student in that semester is calculated using the formula given below. For the successful completion of semester, a student should pass all courses and score a minimum SGPA of 4.0. However, a student is permitted to move to the next semester irrespective of her/his SGPA.

Credit Point (CP) of a course is calculated using the formula

$CP = Cr \times GP$, where Cr = Credit; GP = Grade point

Semester Grade Point Average (SGPA) of a Semester is calculated using the formula

$SGPA = TCP/TCr$, where

$TCP = \text{Total Credit Point of that semester} = \sum_1^n CP_i$;

$TCr = \text{Total Credit of that semester} = \sum_1^n Cr_i$

Where n is the number of courses in that semester

Cumulative Grade Point Average (CGPA) of a Programme is calculated using the formula

$CGPA = \frac{\sum(TCP \times TCr)}{\sum TCr}$ **GPA shall be round off to two decimal places**

12.15 PATTERN OF QUESTIONS

Questions shall be set to assess knowledge acquired, standard, application of knowledge, application of knowledge in new situations, critical evaluation of knowledge and the ability to synthesize knowledge. The question setter shall ensure that questions covering all skills are set. He/She shall also submit a detailed scheme of evaluation along with the question paper.

A question paper shall be a judicious mix of, short answer type, short essay type /problem solving type and long essay type questions.

Pattern of questions for external examination for theory paper

| Type of Questions | Total no. of questions | Number of questions to be answered | Marks of each question | Total marks |
|----------------------------------|------------------------|------------------------------------|------------------------|-------------|
| Section A – Short Answer | 12 | 8 | 2 | 16 |
| Section B- Short essay/ Problems | 10 | 7 | 5 | 35 |
| Section C- Long essay | 4 | 2 | 12 | 24 |
| | 26 | 17 | | 75 |

Pattern of questions for external examination of practical papers will be decided by Practical exam board chairman as per the guidelines of Board of Studies.

13 GRADE CARD

The colleges under its seal shall issue to the students, a grade card on completion of each semester, which shall contain the following information.

- a) Name of the College
- b) Title of the Postgraduate Programme
- c) Name of the Semester
- d) Name and Register Number of the student
- e) Code, Title, Credits and Max. Marks (Internal, External & Total) of each course (theory & Practical) in the semester.
- f) Internal, External and Total Marks awarded, Grade, Grade point and Credit point in each course in the semester
- g) The total credits, total marks (Max. & Awarded) and total credit points in the semester
- h) Semester Grade Point Average (SGPA) and corresponding Grade.
- i) Cumulative Grade Point Average (CGPA)
- j) The final Mark cum Grade Card issued at the end of the final semester shall contain the details of all courses (theory & practical) taken during the final semester examination and shall include the final grade/marks scored by the candidate from 1st to 3rd semester, and the overall grade/marks for the total programme.

14 AWARD OF DEGREE

The successful completion of all the courses with 'D' grade (40%) shall be the minimum requirement for the award of the degree

15 MONITORING COMMITTEE

There shall be a Monitoring Committee constituted by the principal to monitor the internal evaluations conducted by college. The Course teacher, Faculty Advisor, and the College Coordinator should keep all the records of the internal evaluation, for at least a period of two years, for verification.

16 GRIEVANCE REDRESSAL MECHANISM

In order to address the grievance of students regarding Continuous internal assessment (CIA) a three-level Grievance Redressal mechanism is envisaged. A student can approach the upper level only if grievance is not addressed at the lower level.

Level 1: At the level of the concerned course teacher

Level 2: At the level of a department committee consisting of the Head of the Department, a coordinator of internal assessment for each programme nominated by the HoD and the course teacher concerned.

Level 3: A committee with the Principal as Chairman, Dean of the concerned Faculty, HOD of concerned department and one member of the Academic council nominated by the principal every year as members.

17 TRANSITORY PROVISION

Notwithstanding anything contained in these regulations, the Vice-Chancellor shall, for a period of three year from the date of coming into force of these regulations, have the power to provide by order that these regulations shall be applied to any programme with such modifications as may be necessary

18 REPEAL

The Regulations now in force in so far as they are applicable to programmes offered by the college and to the extent they are inconsistent with these regulations are hereby repealed. In the case of any inconsistency between the existing regulations and these regulations relating to the Choice Based Credit System in their application to any course offered in a College, the latter shall prevail.

CHAPTER 2

SYLLAUS: MASTER OF ARTS (M.A) IN ECONOMICS

Introduction

As individuals, families, and nations, we confront difficult choices about how to use limited resources to meet our needs and wants. Economists study how these choices are made in various settings, evaluate the outcomes in terms of criteria such as efficiency, equity, and stability, and search for alternative forms of economic organization that might produce higher living standards or a more desirable distribution of material well-being. In this context, master's program in economics at a higher level assumes much significance.

The Master of Arts in Economics is a 2-year fulltime master's program with each year comparing two semesters that equips graduates with the advanced knowledge and skills required for an economic analyst in the world of business and finance, the consulting industry, academic institutions or a bank. The training provides a thorough understanding of fundamental economic principles, application of mathematical / statistical methods and modeling, and the use of computer software for large-scale data analysis. This is accomplished through the economics core and elective courses and a dissertation. The M.A. in Economics prepares the student to understand contemporary economic theory and its application to problems arising in agriculture, industry, business, finance and government. The program is primarily dedicated to producing well-trained researchers and managers and academicians in the field of Economics and prepares students for a career in economics, and finance, industry, banking, academics and government policy departments and services etc.

The Board of Studies in Economics resolved to restructure the curriculum and syllabi of M A Economics programme under credit and semester system (PGCSS). While attempting restructuring, the existing conditions relating to infrastructure, work load and staff pattern have been properly taken care of and provision for full utilization of the existing faculty is proposed.

The present syllabus is an outcome serious academic and intellectual efforts made by expert committees constituted by Economics department for each course for restructuring and revising the syllabus. Endeavors were made seriously to review the existing curriculum and to incorporate current trends for formulating a fresh one. Thus the existing syllabus was revamped taking into account the broader perspective of Curriculum. Besides introducing courses in the newer areas and modernizing existing courses where necessary. The aim of the dissertation is to provide experiential learning through active participation that enables the student to develop and demonstrate analytical, judgmental, presentation and communication skills. A model format given along with the syllabus provides guidelines to write a thesis scientifically. The task of restructuring was done after considering proposals and suggestions of the members of Board of Studies in Economics for course restructuring. The proposals and suggestions of members of Board of Studies in Economics were consolidated at its meeting held on 1st November 2015. The members of the expert committees for course restructuring and Board of Studies in Economics did a commendable work to accomplish the task of course restructuring and syllabus revision.

I acknowledge that without the valuable help, guidance and co-operation we have received from various quarters, we would not have been able to function smoothly. Therefore, before I conclude, I wish to express my sincere thanks to Rev. Fr. (Dr) Johnson Palackkappilli, Principal, Sacred Heart College (Autonomous), Thevara, who gave all the help, motivation and support in

accomplishing this task. I am greatly indebted to members of board of studies: Dr. K V Raju, Associate Professor, Department of Economics, Sacred Heart College, Thevara, Dr. Dr. S. Harikumar, Professor, Dept. of Applied Economics, Cochin University of Science and Technology, Dr. Beena P.L, Associate professor in Economics, Centre for Development Studies, Thiruvananthapuram, Dr (Rev.Fr). Gilson John (Principal) Associate Professor in Economics, St. Joseph's College, Moolamattam, Dr. Sunil Menon (HOD) Dept. of Economics, Maharaja's College, Ernakulam, Mr. Alex K Baby, Chairman, and Managing Director of the Hedge Group of Companies (Hedge Equities) for their invaluable suggestions, advice and support. I express my sincere gratitude to all the faculty of Economics Department of College: Dr. K V Raju, Associate Professor, Department of Economics, Sacred Heart College, Thevara, Mr. M.S. Madhusoodhanan Nair, Associate Professor, Mr.Sibi Abraham, Assistant Professor, Ms.Agile Joy, Assistant Professor and Mr. Vinil K.V, Assistant Professor who, from the very beginning, did a marvelous work in course restructuring and syllabus revision process.

January, 2016

Dr. Cherian P.E

Chairman, PG Board of Studies in Economics &

Head of Department of Economics

Sacred Heart College (Autonomous) Thevara

Board of Studies in Economics

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Educational Aims of M A Programme in Economics

This programme will involve study of Economics and Psychology at an advanced, research-led level. Students will gain an understanding of how knowledge is created, advanced and renewed. The programme will encourage in all students a desire to pursue learning with curiosity, integrity, tolerance and intellectual rigor.

Programme Outcomes / Student Attributes

In the course of this programme students will develop programme-specific skills. On completing the programme students should be able to demonstrate the graduate attributes outlined below.

- Deep discipline knowledge sufficient enough to succeed in national level competitive examinations
- Ability to apply the principles of economics and a knowledge of the working of the economy to a range of problems and in a variety of contexts
- Research aptitude and ability to go on to further study at the M.Phil and Ph.D levels
- Ability to clear competitive examinations like SET/ NET / JRF.
- Ability to get placements/ employment in field of business, finance, industry, academic / research institutions, government departments, banks etc.
- Ability to make use of statistical and econometric software in order to investigate real world issues
- Critical thinking and problem solving
- Creativity and originality and clarity of goals
- Curiosity and an enquiring mind
- Direct engagement with current research and developments in the subject
- Respect for ethical values
- Team work and communication skills, initiative and leadership
- Intercultural and ethical competency
- Self- awareness and emotional intelligence

Teaching, Learning and Assessment strategies

The student attributes listed above will be accomplished through delivery of the following teaching, learning and assessment strategies appropriate to the programme aims.

a) Teaching and Learning

Students will engage with independent and group study in a supportive framework of teaching and learning. The strategy is to use methods of teaching and assessment that will facilitate learning appropriate to the aims of for the joint honours degree programme. The following methods will be employed where appropriate to the level of study and the particular content of each module in the programme.

- Autonomous learning groups
- Demonstrations
- Dissertation
- Independent study activities (supervised and unsupervised)
- Lectures – ICT based teaching
- One-to-one discussion
- Practical work

- Project work
- Regular practice exercises
- Research project
- Student – student interactions
- Seminars and assignments
- Small group discussion and group learning
- Tutorials
- Internship / field survey
- Study tour
- Remedial teaching
- Community engagements

b) Material submitted for assessment

Assessment can be a blend of diagnostic work to determine student needs, formative work submitted for assessment and feedback (but not necessarily for academic credit) or summative work submitted for academic credit.

Continuous assessment

- AV (Audio Visual) media presentations
- Class tests
- Data analysis exercises
- Essays, dissertations (short and long)
- Oral presentations
- Poster presentations
- Project reports
- Research project
- Review essay
- End semester examinations

a. Learning and Teaching Support

Students' scholarship skills (in, for example, academic writing, information gathering and academic conduct) will be supported and developed through this programme. The following will be available, where appropriate to the level of study and the particular content of each module in the programme.

- Access to standard libraries in the state
- Class handouts/handbooks
- eLearning - web-based and via the virtual learning environment (VLE)
- Feedback on work submitted (in accordance with School and University policies)
- Guidelines for good scholarship
- Recommended reading lists and booklets (for the programme and specific modules and courses)

BASIC FRAMEWORK (Program Structure)

CORE PAPERS

In order to get post graduate degree in economics, students must acquire 80 credits. To acquire these credits, they are required to study core and elective (optional) papers in the PG Economics programme. The Board of Studies in Economics identified 16 Core and 4 Elective papers in line with the Report of the Curriculum Development Committee of UGC, New Delhi. All the Compulsory papers and Elective papers are related to socially relevant and emerging areas. A module on “The Economy of the Kerala State” has been incorporated in the revised syllabus of Indian Economy: Issues and Policies II (Paper 08, Semester 2). A short Dissertation cum Viva is introduced as Twenty-First Paper and General Viva- Voce as the Twenty- Second paper of the PG Course Structure

ELECTIVE PAPERS

The proposed Elective Courses have been categorized into two groups of nine papers. The elective papers are mainly aimed to give specialization in various sub- disciplines of Economics courses of contemporary relevance. Students are required to opt any one elective paper in the third semester from Group A and any three elective papers in the fourth semester from Group B.

FIELD SURVEY / INTERNSHIP

PG programme in Economics will have a guided field survey / Internship during two –month vacation (April-May) after second semester of the PG programme. It is an optional / desirable course and students doing any one of these courses will be awarded two additional credits. Students are required to prepare a short report on the topic and outcome of the survey / elements and outcome of internship. Students undertaking study tour will also be awarded additional credit.

Notes:

1. Students must take 16 compulsory papers, 1 elective paper from Group A and 3 elective papers from Group B, a Dissertation comprising an Evaluation and a Viva- Voce.
2. Total Credit of the Programme shall be 80
3. Questions shall be set to assess knowledge acquired, standard application of knowledge, application of knowledge in new situations, critical evaluation of knowledge and ability to synthesize knowledge.

SYLLABUS: MASTER OF ARTS (M.A) IN ECONOMICS

| SEMESTER 1 | Course Title | Teaching Hrs | Credit |
|-------------------|--|---------------------|---------------|
| 16P1ECOT01 | Microeconomic Theory - I | 5 | 4 |
| 16P1ECOT02 | Macroeconomic Theory and Policy | 5 | 4 |
| 16P1ECOT03 | Indian Economy: Issues and Policies-I | 5 | 4 |
| 16P1ECOT04 | Economics of Development and Growth-I | 5 | 4 |
| 16P1ECOT05 | Quantitative Tools for Economic Analysis | 5 | 4 |
| SEMESTER 2 | | | |
| 16P2ECOT06 | Microeconomic Theory - II | 5 | 4 |
| 16P2ECOT07 | Advanced Macroeconomic Theory and Policy | 5 | 4 |
| 16P2ECOT08 | Indian Economy: Issues and Policies- II | 5 | 4 |
| 16P2ECOT09 | Economics of Development and Growth- II | 5 | 4 |
| 16P2ECOT10 | Statistical Tools for Economic Analysis | 5 | 4 |
| SEMESTER 3 | | | |
| 16P3ECOT11 | International Trade Theory and Policy | 5 | 4 |
| 16P3ECOT12 | Public Economics I | 5 | 4 |
| 16P3ECOT13 | Research Methods in Economics | 5 | 4 |
| 16P3ECOT14 | Basic Econometrics | 5 | 4 |
| 16P3ECOT15EL | Monetary Economics (Optional) | 5 | 3 |
| SEMESTER 4 | | | |
| 16P4ECOT16 | International Financial System and Economic Policy | 5 | 4 |
| 16P4ECOT17 | Public Economics II | 5 | 4 |
| 16P4ECOT18EL | Environmental Economics (Optional) | 5 | 3 |
| 16P4ECOT19EL | Capital Market (Optional) | 5 | 3 |
| 16P4ECOT20EL | Economics of Social Sector (Optional) | 5 | 3 |
| 16P4ECOPJ | Project / Dissertation-cum-Viva | | 2 |
| 16P4ECOCV | Comprehensive Viva | | 2 |
| | Total Credits | | 80 |

ELECTIVE PAPERS

| GROUP 1 | Course Title –Optional |
|--------------------|-----------------------------------|
| 16P3ECOTELA | Monetary Economics |
| 16P3ECOTELB | Industrial Economics |
| GROUP 2 | |
| 16P4ECOTELC | Environmental Economics |
| 16P4ECOTELD | Capital Market |
| 16P4ECOTELE | Economics of Social Sector |
| 16P4ECOTELF | Advanced Econometrics |
| 16P4ECOTELG | Agricultural Economics |
| 16P4ECOTELH | An Independent study |

Desirable Course:

| Desirable Course | Hours | Credit |
|--|--------------|---------------|
| Filed Survey/ Internship <i>(During summer vacation after second semester)</i> | | 2 |

SEMESTER 1

| Course No. | Course code | Course Title |
|-------------------|--------------------|---|
| 01 | 16P1ECOT01 | Microeconomic Theory - I |
| 02 | 16P1ECOT02 | Macroeconomic Theory and Policy |
| 03 | 16P1ECOT03 | Indian Economy: Issues and Policies-I |
| 04 | 16P1ECOT04 | Economics of Development and Growth-I |
| 05 | 16P1ECOT05 | Quantitative Tools for Economic Analysis |

| Core Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|-----------------|-------------|-------------------------|----------------|-----------------------|
| 01 | 16P1ECOT01 | MICROECONOMIC THEORY- 1 | 4 | 90 |

Objectives: The course is intended to provide a good understanding and base to the students in applying the concepts and methods of microeconomics in the practical field. The broad objectives of the course is to equip the students themselves in a comprehensive manner with the various aspects of the traditional Microeconomic theory as well as the latest developments in this field and the applications of theories in analyzing current economic problems and to develop the ability to synthesize knowledge . The course is divided into four modules which cover recent developments of the theory of consumer behavior, Choice under uncertainty, theory of production and costs, theory of firm and Asymmetric Information.

Learning Outcomes

- The knowledge of consumer behaviour enables the student in taking rational buying decisions and also help a firm to design suitable marketing strategies
- The student gets equipped with the knowledge and skill in effective decision making under uncertain market situations, and also understands the importance of time allocation and household management
- The understanding of economies of scope and learning curves and help in analyzing the nature and functioning of modern multiproduct firms
- Develops the skill in analyzing business phenomena in terms of transaction cost saving.
- The student develops the understanding of the economic level of information search possible under different situations and the concept of bounded rationality

Module 1. Recent Developments of the Theory of the Consumer Behaviour: (30 Hours).

Demand functions: Cobb-Douglas preferences, Quasilinear preferences, Hicksian revision of demand theory-Recent developments in the theory of market demand: Pragmatic approach and Linear expenditure system (constant elasticity demand function, dynamic versions of demand, Linear expenditure system), Duality theory: Expenditure function, the indirect utility function, Roy's identity and the Slutsky Equation– Homothetic utility functions, Household Time Allocation model of Garry S. Becker-Characteristics model of Kelvin Lancaster, Network externalities: positive and negative Network externalities: Bandwagon, Snob and Veblen effects.

Module II. Choice under uncertainty: (22 hours)

The St. Petersburg Paradox and Bernoullian Hypothesis, Neumann and Morgenstern theory (Expected utility function), Attitudes (Preferences) towards risk: Risk averse, risk loving & risk

neutral, gambling and insurance, risk aversion and insurance, Friedman and Savage hypothesis, Markowitz hypothesis, Armstrong's theory of marginal preference, Behavioural economics.

Module 11I. Theory of Production and Costs (23 Hours)

Homogeneous and non-homogeneous production function, Technical progress and production function, Cobb Douglas, CES and VES (Variable Elasticity Substitution) and Translog Production functions and their properties, Equilibrium of a single product firm: choice of optimum combination of factors, equilibrium of a multiproduct firm.

Traditional and Modern theory of cost, Derivation of cost functions from production functions, Engineering cost- multiproduct firms, Economics of scale and economics of scope, learning curve (Dominic Salvatore), Empirical evidence on cost.

Module 1V Theory of firm and Asymmetric Information (15 Hours)

Nature of the firm and boundaries of the firm (Ronald Coase)-Transaction cost approach of Williamson- Team production approach by Armen Alchian and Harold Demsetz.

Markets with asymmetric information- market for lemons – Adverse selection- moral hazard- market signaling- principal agent problem (agency theory)

Basic Reading

1. Koutsoyiannis A. (1979), *Microeconomic Theory* (2nd edition), Macmillan, London (Chapter 2, 3, 4)
2. Hal R. Varian- *Intermediate microeconomics – A Modern Approach*, East-West Press Pvt.Ltd, New Delhi, 2010
3. Pindyck and Rubinfeld(2006) *Microeconomics*, Prentice Hall of India Ltd, New Delhi, (Chapter 4,5,7)
4. Gravelle H and R.Rees (2004), *Microeconomic s*, Pearson London (Chapter 4, 13) 7th edition
5. Maria Moschandreas(1994)*Business Economics*, Routledge Publisher(Chapter 4,6)
6. Martin Patrick and VisakhaVarma G.(2007), *An Economic Approach to Social Interactions*, Educational Publishers and Distributors, Ernakulam(Chapter 4,5)
7. Dominic Salvatore (2009), *Principles of Microeconomics*, OUP, New Delhi (Chapter 6)
8. PRG Layard & AA Wallters, “*Microeconomic Theory*”, McGRAW-HILL International Editions. 1987.
9. Watson and Getz (1996), *Price Theory and its Uses* (revised fifth edition), AITBS Publishers, Delhi
10. Baumol W.J.(1985),*Economic Theory and Operations Analysis*, Prentice Hall(Chapter 22)
11. Watson and Getz (1996), *Price Theory and its Uses*(revised fifth edition),AITBS Publishers, Delhi,
12. Robert M.Frank (1991), *Microeconomics and Behaviour*,McGraw Hill International Editions
13. AlchianA.andDemsetz H.(1972), *Production, Information costs and economic organization*, *American Economic Review*, LX11(5) 777-95
14. John M.Gowdy (2011), *Micro Theory Old and New: A students' Guide*, Orient BlackswanPvt Ltd New Delhi

15. G.C Da Costa(2004),Value and Distribution in Neoclassical and Classical Systems, Himalaya Publishing House,Mumbai(Chapter 2)
16. B.DouglasBernhem and Michael D.Whinston(2009), Microeconomics, Tata McGraw-Hill, New Delhi(Chapter 11,13)
17. Hicks John R.(1956),A Revision of Demand Theory, Oxford: Clarendon Press
18. Walter Nicholson – Christopher Snyder -, “Microeconomic Theory- Basic Principles and Extensions”, South Western, USA.
19. Andrew Schotter, “Microeconomics – Modern Approach”, South Western, USA.

| Core Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|-----------------|-------------|---------------------------------|----------------|-----------------------|
| 02 | 16P1ECOT02 | MACROECONOMIC THEORY AND POLICY | 4 | 90 |

The syllabus for macroeconomics is divided into two courses Macroeconomics Theory and policy in the First semester and Advanced Macroeconomics in the second semester. It gives a broad idea about the contemporary macroeconomic policy debates concerning national income, inflation, interest rates, investment, fiscal and monetary policy. The course is designed to make a systematic coverage of fundamental concepts and relationships among various macroeconomic entities.

The main objectives the course is to focus on the interaction of markets in an economy to understand the fluctuations in unemployment, inflation and growth. Besides the course provides a basic understanding of the theories and principles relating to the macroeconomic policy and debates concerning the behaviour of output, employment, money supply, interest rate, and other economic aggregates that affect business environment. The focus lies primarily in understanding how an economy functions, the reasons for macroeconomic fluctuations and the corrective measures taken from various spheres such as monetary, fiscal and international trade.

Module-I: Macroeconomic frameworks.

- A. Keynesian Income - Expenditure Model up to four sectors
 - B. IS-LM Model up to four sectors - Monetary and Fiscal Policy using IS-LM, AD-AS Curves framework with Price and income axes, Mundell-Flemming Open Economy model.
 - C. Keynes Effect – Pigou Effect and Real Balance Effect, Ricardian Equivalence.
- (30 Hours)

Module-II: Behavioural Foundations of Macro Economics

Consumption Functions – Kuznet’s Consumption Puzzle – Fisher’s Model of Inter-temporal Choice- Relative Income Hypothesis – Permanent Income Hypothesis, Life Cycle Hypothesis, Consumption Under Uncertainty- Modern Approach.

(20 Hours)

Module III: Investment Function Labour Market

- A. Investment Function – Neo Classical, Keynesian, Post Keynesian and Neo-Keynesian Theories of Investment-- MEC and MEI- Accelerator theory-Capital Stock Adjustment Principles- – Tobin’s q-ratio.
 - B. Labour Market -Classical and Keynesian Views - Search Theories – DMP (Diamond, Mortenson, Pissarides model.)
- (20 Hours)

Module-IV: Trade Cycle Theories

Trade Cycles Theories – Multiplier- Accelerator Interactions Models- Samuelson- Hicks- Kaldor- Political Business Cycle (William Nordhaus) . Economic recession of 2008-12. Policy measures.

(20 Hours)

References:-

1. Lefteris Tsoulfidis: (2010), Competing Schools of Economic Thought, Springer, London
2. Gregory Mankiw, N (2010): Macroeconomics, 7th Ed, Worth Publishers, Duffield, U.K
3. Kamran Dadkhah (2010): The Evolution of Macroeconomic Theory and Policy, Springer, London

3. Brian Snowdon and Howard R.Vane (*Ed*) (2003): A Macroeconomics Reader, Routledge, London
4. Brendan Sheehan (2009) Understanding Keynes' General Theory, Palgrave, London.
5. Rudiger Dornbusch, Stanley Fisher and Richard Startz (2007) 7th Ed: Macroeconomics, TMH, New Delhi
6. Brian Snowdon, Howard Vane and Peter Wynarczyk (2002): A Modern Guide to Macroeconomics: An Introduction to Competing Schools of Thought, Aldershot, England.
7. Rosalind Levacic and Alexander Rebmann (2006): Macroeconomics: An Introduction to Keynesian-Neoclassical Controversies, MacMillan, New York.
- 8 Richard T. Froyen (2008): Macroeconomics- Theories and Policies, Pearson, Singapore.
- 9 Garner Ackley (1989): Macroeconomics: Theory and Policy, Collier MacMillan, New York.
- 10 A.J. Westaway and T.G.Weyman Johns (1978): Macroeconomics, Theory, Evidence and Policy, Longman, London.
- 11 James K. Galbrith and William Darity, Jr (1994): Macroeconomics-Houghton, Boston, USA.
12. Errol D'Souza (2008): Macroeconomics, Pearson, Singapore.
- 13 Andrew B. Abel and Ben S. Bernanke (2010): Macroeconomics, Pearson, New Delhi
- 14 Farrokh K. Langdana: (2009): Macroeconomic Policy: Demystifying Monetary and Fiscal Policy Second edition, Springer, Langdana, Farookh.
- 15 Olivier Blanchard (2011): Macroeconomics 4th Ed- Pearson, Singapore.
16. M G Mueller Ed (1988): Reading in Macroeconomics. Surjeet Publications, New Delhi.
17. Samuelson and Nordhaus William.D: Macroeconomics, TMH, New Delhi
18. Stanley Bober (1979 and Digital edition 2010): Economics of Cycles and Growth, Wiley, Orient Blackswan, New Delhi.

Supplementary Readings

1. William H. Branson (2005): Macroeconomic Theory and Policy: East West Press, New York.
2. Robert J. Barro (1984): Macroeconomics, John Wiley & sons, New York.
3. The Palgrave Dictionary of Economics 2^{Rev}.Ed (2010) –Edited by Steven N. Darlauf and Lawrence E Blume Vol.1-8 (Online Edition)
4. Jagadeh Handa (2011) : Macroeconomics, World Scientific, New York.
5. Eric J. Pentacoste (2002): Macroeconomics: An Open Economy Approach. Mcmillan, New York.
6. Edmund S. Phelps (1990) : Seven Schools of Macroeconomic Thought:-Arne Ryde. Memorial lectures , Clarendon Press , Oxford.
7. Federeic S. Mishkin (2011) : Macroeconomics: Policy and Practice , Addison Wesley , Old Tappan, New Jersey.
8. O. F. Hamuda (2009) : Money, investment and Consumption: Keynes' Macroeconomic Re-thoughts) Edward Elgar , Cheltenham.
- 9 J.E.King(Ed) (2003): Elgar Companion to Post Keynesian Economics, EE , Cheltenham.
10. Breden Shehan (2009) : Understanding Keynes' General Theory , Palgrave, New York.
11. Horld R William and John Huffnagle (Ed) (1969): Macroeconomic Theory : Selected Readings, ACC, NY
12. M.G. Mueller (1978) : Readings in Macroeconomics , Surjeeth Publications , New Delhi
13. Carl Julian Poinexter (1982), Macroeconomics, Pearson, New Delhi.

| Core Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|-----------------|-------------|---|----------------|-----------------------|
| 03 | 16P1ECOT03 | INDIAN ECONOMY: ISSUES AND POLICIES – 1 | 4 | 90 |

This paper will be taught as two half courses in semesters 1 and 2 .Whilst there could be project assignments and student seminar components, the main mode of teaching will be the lecture method.

Learning objectives

1. To provide the students with a critical understanding of the Indian economy so that they may be able to engage meaningfully in debates regarding the country's economy.
2. To enable the students to have an excellent understanding about the growth experience of the India in the pre as well as post reform years, keeping the colonial experience at the background.
3. To help them to analyse the sectoral transformation that has taken place in the Indian Economy.

Module-1 Economic Growth, Structure and Reforms

Database on Indian Economy – Sources & methods.

Economic Growth in the Post- Independence Era - Emerging Structure – Contribution of Different Sectors to Output , Employment and Income- Growth across Regions/ States - National Income, Methodological Issues in Estimation- Saving and Investment, Trend and Pattern

Institutions in India's Economic Growth Process, Role and Significance- State v/s Markets, Planning: objectives & strategies, failures & achievements- NITI Aayog –Economic Reforms in the early 90s- Globalisation- Second Generation Economic Reforms – Inclusive Growth, Recent Policy Initiatives- India in a Globalized world. (35 hours)

Module -2 Agriculture

Performance since Independence, across Crops and Zones- Farm Size and Productivity- Agriculture Inputs- Technological Change in Agriculture – New agricultural policy, Sustenance of Agriculture Growth, - Agriculture Finance, Credit, Role of Co-operatives, Agriculture Marketing, Pricing – WTO , Impact on Agriculture- Agrarian Crisis- Food Security- Terms of Trade between agriculture & industry. (20 hours)

Module -3 Industry

Growth and Pattern of Industrial Development- Industrial Stagnation, Old and New, Debates- Trends in Industrial Productivity—Industrial Financing -Industrial Policies – Privatization and Disinvestment- Cottage and Small Scale – Globalisation and Technology Transfer- SEZ (20 hours)

Module -4 Service

Sources of Service Sector Growth- Infrastructure, Physical and Social, Status and Policies -
-Transport - Energy – Telecommunication – Technology– Information Technology - Research and
Development- - Health and Education. (15 hours)

REFERENCES

1. C. P. Chandrasekhar, Jandhyala B. G. Tilak (2001) India's Socio-economic Database: Surveys of Selected Areas, Tulika Print Communication.
2. Chakravarty S, (1987), Development Planning: The Indian Experience, Oxford University Press, New Delhi.
3. Arvind Panagariya, (2008) India: The Emerging Giant, Oxford University Press, USA
4. Datt. R. (2001), Second Generation Economic Reforms in India, Deep and Deep Publications, New Delhi
5. Gaurav Datt & Ashwini Mahajan, (2013) Indian Economy, 70th edition, S Chand Publishers, New Delhi.
6. Deepak Nayyar (2013) Catch Up: Developing Countries in the World Economy, Oxford University Press, United Kingdom
7. Acharya Shanker, Mohan Rakesh (Eds) (2011), India's Economy: Performance and Challenges, Oxford University Press, New Delhi
8. Basu Kausihik, Martens Annemie (Eds) (2011) the New Oxford Companion to Economics in India, Oxford University Press, New Delhi
9. Balakrishnan Pulpure (Eds) (2011) Economic Growth in India, History and Prospects, Oxford University Press, New Delhi
10. Srinivasan T N (Eds) (2011) Growth Sustainability and India's Economic reforms, Oxford University Press, New Delhi
11. Vaidyanathan A (2009) Agricultural Growth in India Oxford University Press, New Delhi.
12. Narasimha Reddy, Srijit Mishra, (Eds) (2010), Agrarian Crisis in India Oxford University Press, New Delhi
13. Yogesh M Kelkharni (2011) Performance of Indian Industrial sector, Shree Niwas Publications, New Delhi.
14. Gajendra Haldea (2011) Infrastructure at Crossroads, Oxford University Press, New Delhi.
15. Collection of Essays from EPW, Global Economic and Financial Crisis, Orient Blackswan, New Delhi.
16. Shankar Acharya, (2012) India After the Global Crisis, Orient Blackswan, New Delhi.

17. Aluvalia , I J and IMD Little (Eds) (1999),India's Economic reforms and Development , Oxford University Press , New Delhi
18. Byres, Trence J (1998), The Indian Economy, Major Debates Since Independence, Oxford University Press, New Delhi.
19. Bardhan, P .K. (1999), The Political Economy of Development in India, Oxford University Press, New Delhi.

| Core Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|-----------------|-------------|--|----------------|-----------------------|
| 04 | 16P1ECOT04 | ECONOMICS OF DEVELOPMENT AND GROWTH- 1 | 4 | 90 |

Preamble

Development Economics has gained importance because of sustained interest of the developing countries in uplifting their economic conditions by restructuring their economies to acquire greater diversity, efficiency and equity in consonance with their priorities. This paper is devoted to the policies and programmes required to empower the people to make development more sustainable and equitable.

Learning objectives

- 1 To develop conceptual clarity on the various dimensions of development and to identify the strategic factors in the development of the less developed countries.
- 2 Enable the student to evolve new strategies for achieving sustainable development and inclusive growth.
- 3 Equip the student community with the theoretical and empirical material for enhancing their capability to address the basic problems confronted by the society.

Module I

Economic Development and Economic Growth-Perpetuation of underdevelopment-vicious circle of poverty-Sustainable development-Current trends in Development Economics- international interdependence and globalization-dimensions of development gap- Human Development Index- Human Poverty Index- Multi-dimensional Poverty Index- Gender related Development Indices- Capability and Entitlement approach-Development as freedom-Basic needs approach.

(30 hours)

Module II

Stages of development and structural changes-Rostow's stages of growth-Kaldor's growth laws-Influence of dualism and process of structural transformation- cumulative causation-International inequality - Centre-periphery thesis - Regional growth differences -measures of Poverty and inequality.

(20 hours)

Module III

Classical theories of Development: Smith, Ricardo -Marx and Schumpeter on development and future of capitalism (10 hours)

Module IV

Human capital and development- Population Growth and development-demographic dividend- the concept of optimum population- Education and investment in human capital- gender gap in

development – Development of social and economic infrastructure - Strategies for improving education and employment- social engineering and inclusive growth. (30 hours)

REFERENCES

Ray Debraj: Development Economics, Oxford, University Press 1999

Meier M. Gerald and Rauch: Leading issues in Economic Development Oxford University Press. (2000)

Thirlwall. A.: Growth and Development with special Reference to developing economies Palgrave Macmillan (2009)

Todaro M.P. D. Smith S.C: Economic development (8th Edition 2005) Person Education, Indian branch, Delhi

Ghatak, S. (1986), An Introduction to Development Economics, Allen and Unwin, London.

Adelman, I. (1961), Theories of Economic Growth and Development, Stanford University Press, Stanford.

Dev. Mahendra. S: Inclusive growth in India-collected essays. Oxford University press, New Delhi (2010)

Chauduri Ray, Jayasri: An introduction to Development and Regional planning with special reference to India. Orient Longman Kolkata (2001)

UNDP : Human Development Report, 2010

| Core Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|-----------------|-------------|--|----------------|-----------------------|
| 05 | 16P1ECOT05 | QUANTITATIVE TOOLS FOR ECONOMIC ANALYSIS | 4 | 90 |

Module I

Matrices and their applications. Mathematical operations on matrices, determinants, minors, cofactors and inverse of matrices, Rank of a matrix, solution of simultaneous equations using inverse and Cramer's rule.

Module II

Partial differentiation and its applications, first and second order partial derivatives – total differentiation of functions of two independent variables - Economic applications of Partial differentiation on elasticity, demand. Maxima and minima of functions involving two variables, Lagrange multiplier method. Marginal rate of substitution. Homogeneous functions, Euler's theorem and its applications in economics. Cobb Douglas production function.

Module III

Integral calculus – rules of integration, Methods of integration- integration by substitution, integration by parts, and integration by partial fractions. Indefinite and definite integrals. Applications of integration – derivation of revenue and cost functions from marginal functions – consumer's and producer's surplus. Numerical integration - Trapezoidal rule, Simpson's One-third rule

Module IV

Input –Output analysis. Linear Programming problems – formulation of LPP, Solution of LPP using graphical and simplex method. Duality in LPP its properties and its interpretation.

Reference Books

- 1 Chiang, Alpha C: Fundamental Methods in Mathematical Economics, 3rd Edition, McGraw Hill, New York, 1984
- 2 Chiang, Alpha C., and Wainwright Kevin: Fundamental Methods of Mathematical Economics, 4th Edition, McGraw Hill, New York, 2005
- 3 Henderson, J. M., and R. E Quant: Microeconomic Theory; A Mathematical Approach, 3rd edition, McGraw Hill, New York, 1980
- 4 Bradley, Teresa. And Patton Paul: Essential Mathematics for Economics and Business, 2nd edition, Wiley India

- 5 Dowling, E.T: Introduction to Mathematical Economics, 2nd edition, Schaum's Outline Series, McGraw Hill, New York, 1992
- 6 Geoff Renshaw: Maths for Economics, 2nd edition, Oxford University Press, 2009
- 7 Kandoi, Balwant: Mathematics for Business and Economics (Volume I), 1st edition, Himalaya Publishing House, Bombay, 2011

SEMESTER 2

| Course No. | Course code | Course Title |
|-------------------|--------------------|---|
| 06 | 16P2ECOT06 | Microeconomic Theory - II |
| 07 | 16P2ECOT07 | Advanced Macroeconomic Theory and Policy |
| 08 | 16P2ECOT08 | Indian Economy: Issues and Policies- II |
| 09 | 16P2ECOT09 | Economics of Development and Growth- II |
| 10 | 16P2ECOT10 | Statistical Tools for Economic Analysis |

| Core Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|-----------------|-------------|--------------------------|----------------|-----------------------|
| 06 | 16P2ECOT06 | MICROECONOMIC THEORY- II | 4 | 90 |

Objectives: This course is intended to acquaint the student in decision making in the context of market interdependence, complexity, uncertainty and informational asymmetry; give insights into developments in the areas of general equilibrium and welfare economics; and to equip the student to apply microeconomic principles in the areas of exchange and welfare.

Learning Outcome

- Develops skill in formulating business strategy in the context of market imperfections and in using game theory models in decision making
- Understands the basic theory of distribution and the source of income generation.
- The study of the general equilibrium framework and equips the student to analyze the impact of micro decisions on macro instability.
- Develops skill in applying compensation principle under situations where a proposed change causes damage to someone but gains to others
- The students will be taken to the philosophical level of equity and justice
- To understand different welfare criteria

Module 1 Oligopoly (25 Hours)

Non collusive oligopoly models: Cournot, Bertrand, Chamberlin, Kinked demand curve model, Straceklberg) – Collusive oligopoly models: cartel and mergers, price leadership.

Game theory (Two person zero sum game –non zero sum game- Nash equilibrium, Prisoner’s dilemma, dominant, Maximin-Mnimax and mixed - pure strategies, saddle point solution, cooperative versus Non-cooperative games, repeated games.

Module 2 Alternate Theories of the firm (20 hours)

Critical evaluation of marginal analysis,– Full-cost pricing Principle, Different models of objective of the firm: (Managerial theories of the firm): Baumol’s sales revenue maximization model, Marris’s Model of managerial enterprises, Williamson’s model of managerial discretion, Behavioural theory of Cyert and March, Limit pricing theory: Bains model.

Module 3 Theory of Distribution (20 hours)

Marginal Productivity theory of distribution, product exhaustion theorem-Euler’s theorem, Elasticity of input substitution (technical) and technological progress and factor shares (income distribution) - Macro theories of distribution-Ricardo-Marx- Kalecki – Kaldor.

Module 4 General Equilibrium and Welfare Economics (25 Hours)

Partial and general equilibrium -2x2x2 model of general equilibrium (Walrasian system)-Existence, Uniqueness and stability of equilibrium, New Welfare Economics -Kaldor-Hicks Compensation

Criterion, Scitovsky criterion- Social welfare function of Bergson and Samuelson -theory of second best-Arrow's impossibility theorem-Sen's theory of welfare, Rawls theory of justice.

Basic Reading

1. Pindyck and Rubinfeld(2006), Microeconomics, Prentice Hall of India Ltd, New Delhi(Chapter12,13,16,17)
2. Koutsoyiannis A. (1979), Microeconomic Theory (2nd edition), Macmillan(Chapter 9 to 19, 22, 23) Varian H. (2000), Intermediate Microeconomics: A modern Approach (5th Edition) Affiliated East West Press Private Limited (Chapter, 27, 28, 36)
3. Gravelle H. and R.Rees (2004), Microeconomic s, Pearson London (Chapter13, 22)
4. Ferguson and Goulds (2000), Microeconomic Theory (6th edition), Richard Irvin, All India Traveller Delhi (Chapter 19)
5. Stigler G. (1996), Theory of Price (4th Edition), Prentice Hall India, New Delhi
6. G.C da Costa (2004), Value and Distribution in Neoclassical and Classical Systems, Himalaya Publishing House,Mumbai (Chapter 5)
7. N.G.Mankiw (2009), Economics Principles and Application, Cengage Learning, Printed in India (Chapter 1)
8. B.DouglasBernheimAand Michael D.Whinston (2009), Microeconomics, Tata McGraw-Hill New Delhi (Chapter19, 20, 21)
9. Baumol W.J. (1985), Economic Theory and Operations Analysis (4th edition), Prentice Hall, New Delhi (Chapter 24)
10. SenAmartya (1982),Choice Welfare and Measurement, OUP, New Delhi
11. Mishan E.J (1969), Welfare Economics: An Assessment, North Holland, Amsterdam Little I.M.D.(1957),Critique of Welfare Economics(2nd edition) OUP, Oxford
12. Thomas J. Nechyba(2011), Microeconomics: An Intuitive Approach, South Western Cengage Learning(Chapter 29)
13. Maria Moschandreas (1994), Business Economics, Routledge Publishers (1994)(Chapter 3,4,10)
14. Robert M.Frank (1991), Microeconomics and Behaviour, McGraw Hill International Editions (Chapter 14, 16, 19, 20)
15. John M.Gowdy (2011), Micro Theory Old and New: A students' Guide, Orient BlackswanPvt Ltd, New Delhi (Chapter 7)
16. Walter Nicholson – Christopher Snyder -, “Microeconomic Theory- Basic Principles and Extensions”, South Western, USA.
17. Andrew Schotter, “Microeconomics – Modern Approach”, South Western, USA.

| Core Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|-----------------|-------------|--|----------------|-----------------------|
| 07 | 16P2ECOT07 | ADVANCED MACROECONOMIC THEORY AND POLICY | 4 | 90 |

Module-I: Theory of Inflation and Unemployment

A. Classical, Keynesian and Monetarist Approach to Inflation – Structuralist Theory of Inflation – Inflation targeting.

B. Phillips Curve – Short run and Long run Phillips Curve – The Natural Rate of Unemployment– Adaptive Expectation Hypothesis – Augmented Phillips Curve- – Tobin’s Modified Phillips Curve – NAIRU-Cost of Inflation- Anti-inflationary Measures.

(20 Hours)

Module-II: Modern developments in Macroeconomics – Classical School.

The New Classical Macroeconomics- Monetarism –Monetarist-Fiscalist debate on Policy Activism (Rules versus discretion) -Taylor’s Rule .

(10 Hours)

Module III: Modern Developments in Macroeconomics- New Classical School

NEew Classical Macroeconomics:

i. Rational Expectations Hypothesis – Monetary surprise model – Inter-temporal substitution model – Ineffectiveness proposition – Lucas critique.

ii. Supply Side Economics- Supply Shocks and Stagflation- Laffer Curve - Policy Implications.

iii. Real Business Cycle Theory.

iv. The Dynamically Stochastic General Equilibrium model.

(25 Hours)

Module-IV: Modern developments in Macroeconomics – Keynesian School.

A. Neo-Keynesianism - Disequilibrium Models - R. W. Clower and Leijonhufvud – Dual Decision Hypothesis–Quantity Constrained Model of Malinvaud and Barro - Co-Ordination Failure.

B. Fundamental arguments of Post – Keynesians – Kalecki’s Pricing Model – Financial Instability model of Hymn Minsky.

C. New Keynesian Macroeconomics- Nominal Rigidities- Real Rigidities- Sticky Price(Menu Cost) Model- Efficiency Wage Hypothesis - Insider- outsider Model and Hysteresis - Policy Implications.

(35 Hours)

References:-

1. Gregory Mankiw, N (2010): Macroeconomics, 7th Ed, Worth Publishers, Dufield, U.K.
2. Kamran Dadkhah (2010): The Evolution of Macroeconomic Theory and Policy, Springer, London.
3. RudigerDornbusch, Stanley Fisher and Richard Startz (2007) 7th Ed: Macroeconomics, TMH, New Delhi
4. Rosalind Levacic and Alexander Rebmann (2006): Macroeconomics: An Introduction to Keynesian-Neoclassical Controversies, MacMillan, New York.
5. Richard T. Froyen (2008) L: Macroeconomics- Theories and Policies, Pearson, Singapore.
6. Garner Ackley (1989): Macroeconomics: Theory and Policy, Collier MacMillan, New York.

7. A.J. Westaway and T.G.WeymanJohnes (1978): *Macroeconomics, Theory, Evidence and Policy*, Longman, New York.
8. Andrew B. Abel and Ben S. Bernanke (2010): *Macroeconomics* 4th Ed. Pearson, Singapore.
9. Olivier Blanchard (2011): *Macroeconomics* 4th Ed- Pearson, Singapore.
10. Errol D'Souza (2008): *Macroeconomics*, Pearson, Singapore.
11. LefterisTsoulfidis : (2010), *Competing Schools of Economic Thought*, Springer, London.
12. Brian Snowdon and Howard R.Vane (*Ed*) (2003): *A Macroeconomics Reader*, Routledge, London.
13. Brian Snowdon, Howard Vane and Peter Wynarczyk (2002): *A Modern Guide to Macroeconomics: An Introduction to Competing Schools of Thought*, Aldershot, England.
- 14..Farrokh K. Langdana:(2009):*Macroeconomic Policy: Demystifying Monetary and Fiscal Policy* . Second edition, Springer, Langdana, Farookh
15. James K. Galbrith and William Darity,Jr (1994): *Macroeconomics-Houghton* , Boston, USA.
16. Ben J. Heijdra Frederick van der Ploeg(2002): *Macroeconomics* OUP, London.
17. Rosalind Levacic and Alexander Rebmann (2006): *Macroeconomics: An Introduction to Keynesian-Neoclassical Controversies*, MacMillan, New York.
18. Garner Ackley (1989): *Macroeconomics: Theory and Policy*, Collier MacMillan, New York.
19. A.J. Westaway and T.G.WeymanJohnes (1978): *Macroeconomics, Theory, Evidence and Policy*, Longman
20. Ben J. Heijdra Frederick van der Ploeg(2002): *Macroeconomics*, OUP, London..
- 21.Ott, D.J, Ott, A.E and Yoo J.H (1975): *Macroeconomic theor*, McGrawHill, New York.
22. M.J.C. Surrey (1976): *Macroeconomic Themes*, Wiley Eastern, Singapore.

Supplementary Readings:-

1. William H .Branson (2005): *Macroeconomic Theory and Policy: EWP*, New York
2. Robert J. Barro (1984): *Macroeconomics*, John Wiley, New York.
3. The Palgrave Dictionary of Economics 2Rev.Ed (2010) –Edited by Steven N.Darlauf and Lawrence E Blume Vol.1-8 (Online Edition)
4. JagadeshHanda (2011): *Macroeconomics*, World Scientific, New York.
5. Eric J. Pentacoste (2002): *Macroeconomics: An Open Economy Approach*, Mcmillan, London
6. Edmund S. Phelps (1990) : *Seven Schools of Macroeconomic Thought:-Arne Ryde Memorial lectures* , Clarendon Press , Oxford.
7. Federeic S. Mishkin (2011) : *Macroeconomics: Policy and Practice* , Addison Wesley , Old Tappan, New Jersey.
8. O. F. Hamuda (2009) : *Money, investment and Consumption: Keynes' Macroeconomic Re-thoughts*, Edward Elgar , Cheltenham.
9. J.E.King (Ed) (2003): *Elgar Companion to Post Keynesian Economics*, EE ,Cheltenham.
10. BredenShehan (2009): *Understanding Keynes' General Theory*, Palgrave , New York.
11. Horld R William and John Huffnagle (Ed) (1969): *Macroeconomic Theory: Selected Readings*, ACC, NY
12. M.G. Mueller (1978): *Readings in Macroeconomics*, SurjeethPublications , New Delhi.

| Core Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|-----------------|-------------|---|----------------|-----------------------|
| 08 | 16P2ECOT08 | INDIAN ECONOMY: ISSUES AND POLICIES- II | 4 | 90 |

1. To help students contribute to the formulation of its policies. in order to achieve this,
2. To introduces the students to broad contours like the status, issues and policies of the Indian economy at the aggregated (macro) as well as sectoral levels.

Module -1 Population and Employment

Population- Growth Pattern, Implications- Demographic dividend - Rural Urban Migration –Population Policies, Trends in Employment – Unemployment, Nature and Policies- Recent Employment Guarantee Programmes- Changing Nature of Labour Market, Reforms- Minimum wages Act- Cooperative movement in India.

Module -2 Social Aspects

Recent Trends in the State of Social Aspects, their Implications and Policies -Poverty- Inequality-Regional imbalances- Migration - Child Labour- Gender- Caste-- Governance, Corruption- Environment- Natural Resources -Adivasis, Rights to Forests- Issues in competition and safety nets.

Module -3 Fiscal, Financial and External Sector/ Issues

Fiscal Deficit, Trend and Significance- Fiscal Policies- Critical Appreciation –Parallel Economy-- Financial System – Role of RBI - Banking and Insurance – Capital markets -Critical Appraisal of Monetary and Financial Sector Reforms – Financial Inclusion- Analysis of Price Behavior, Inflationary Trends- Petroleum Product Pricing.

Structure and Direction of India’s Foreign Trade- Export Import policy- FEMA- Balance of Payments, Post 90 Trends- Exchange Rates, Trends – Policies, MNC’s India.

Module – 4 Kerala economy

Growth and Structure- Globalisation (WTO, ASEAN) and Kerala’s Agriculture-Industrial Backwardness- Hypotheses - Policies- Service Sector, Sources of Growth- Construction, Tourism, Trade, Transport, Energy- Information Technology- Migration, Dimension, Impact –Human Resources Development- Emerging Issues & Policies- Unemployment- Environment Degradation- Fiscal crisis- IT- Human Development – Migrant labourers (DML)- Kerala in a globalized environment.

REFERENCES

1. Mahendra K Premi (2009), India's Changing Population Profile, National Book Trust, New Delhi
2. Jagdish N. Bhagwati, Arvind Panagariya, (2013) Why Growth Matters: How Economic Growth in India Reduced Poverty and the Lessons for Other Developing Countries, Public Affairs, New Delhi.
3. Radhakrishna R , Shovan Roy (Eds)(2005) Handbook of Poverty in India, Oxford University Press , New Delhi
4. Uma Kapila, (2015) Indian Economy Performance And Policies, 15th edition, Academic Foundation-New Delhi
5. Jayaraj D, Subramanian S (2010) Poverty, Inequality and Population, Oxford University Press , New Delhi
6. Reethika Khera (2011) The Battle for Employment Guarantee, Oxford University Press , New Delhi
7. Gaurav Datt & Ashwini Mahajan, (2013) Indian Economy, 70th edition, S Chand Publishers, New Delhi.
8. Nagaraj R. (ed.) (2012) Growth, Inequality and Social Development in India: Is Inclusive Growth Possible?, Geneva: Palgrave MacMillan
9. Amartya Sen (2001) Development as Freedom, Oxford University Press , New Delhi
10. Amartya Sen, Jean Dreze (2005) India – Development and participation Oxford University Press , New Delhi
11. Aswini Deshpande (2011) The Grammar of Caste, Oxford University Press , New Delhi
12. Sivaramakrishnan KC, Amitabh Kundu, (2005) Handbook of Urbanisation, Oxford University Press, New Delhi
13. Y V Reddy (2011) Global Crisis, Recession and Uneven Recovery, Orient Blackswan, New Delhi
14. Mahendradev S (2010) Inclusive Growth in India, Oxford University Press , New Delhi.
15. Bhavani T A, Bhanumurthy N R,(2011), Financial Access in Post Reform India, Oxford University Press , New Delhi
16. Mohan Rakesh (Eds) (2011), Growth with Financial Stability, Oxford University Press , New Delhi
17. Mihir Rakshit (2010) Money and Finance in the Indian Economy, Oxford University Press, New Delhi
18. George K K (1999), Limits to Kerala Model of Development, CDS, Trivandrum.

19. Sunil Mani, Anjii Kochar, Arun M Kumar, (2006) *Crouching Tiger, Sacred Cows*, D C Books, Kottayam .
20. B A Prakash (1999) *Kerala's Economy: Performance, Problems, Prospects*, SAGE Publications,
21. M. A. Oommen (2008) *Reforms and the Kerala Model*, *Economic and Political Weekly*, Vol. 43, No. 2 (Jan. 12 - 18, 2008), pp. 22-25.
22. K. T. Rammohan, (2000) *Assessing Reassessment of Kerala Model*, *Economic and Political Weekly*, Vol. 35, No. 15 (Apr. 8-14, 2000), pp. 1234-1236.
23. K. N. Harilal, K. J. Joseph, (2003) *Stagnation and Revival of Kerala Economy: An Open Economy Perspective*, *Economic and Political Weekly*, Vol. 38, No. 23 (Jun. 7-13, 2003), pp. 2286-2294.
24. Thomas Isaac T. M., Michael Tharakan P. K (1995), *Kerala: The Emerging Perspectives: Overview of the International Congress on Kerala Studies*, *Social Scientist*, Vol. 23, No. 1/3 (Jan. - Mar., 1995), pp. 3-36.

| Core Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|-----------------|-------------|---|----------------|-----------------------|
| 09 | 16P2ECOT09 | ECONOMICS OF DEVELOPMENT AND GROWTH- II | 4 | 90 |

Module I

Balanced and unbalanced growth - Lewis and Fei- Ranis models- internal and international migration- Todaro model- Choice of technique- Intermediate technology- Embodied and disembodied technological change- Capital output ratio.

(20 hours)

Module II

Growth models: Joan Robinson, Kaldor -Harrod- Domar and Solow models of growth- New endogenous growth theory and macroeconomic determinants of growth-mechanisms of catch up.

(15 hours)

Module III

Trade and development- Trade liberalization- Exports and growth-Alternative approaches to trade in developing countries- Prebisch-Singer theses-Models of export led growth- Neo Classical supply side model- BOP constrained growth model and virtuous circle model- Trade liberalization and poverty reduction – WTO and developing countries.

(30 hours)

Module IV

Investment criteria-Cost- benefits analysis- shadow prices and project evaluation- Objectives and role of monetary and fiscal policies in economic development. Uses of input-output analysis and linear programming in development planning.

(25 hours)

REFERENCES

Ray Debraj : Development Economics, Oxford, University Press 1999

Meier M. Gerald and Rauch : Leading issues in Economic Development Oxford University Press. (2000)

Thirlwall. A. : Growth and Development with special Reference to developing economies Palgrave Macmillan (2009)

Todaro M.P. D. Smith S.C : Economic development (8th Edition Person Education, Indian branch, Delhi

Todaro M.P. : Economic development in the third World. (4th Edition 1991) Longman, Singapore.

Dev. Mahendra. S : Inclusive growth in India-collected essays Oxford University press, New Delhi (2010)

Chauduri Ray, Jayasri : An introduction to Development and Regional planning with special reference to India. Orient Longman Kolkata (2001)

Yujiro Hayami : and Yoshihisa Godo: Development Economics (3rd Edn,2005) Oxford University Press (New Delhi)

Vandana Desai and Robert B Potter: The Companion to development studies -II edn.A hodder viva edn, Viva books Pvt Ltd. New Delhi.

UNDP : Human Development Report, 2010.

| Core Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|-----------------|-------------|---|----------------|-----------------------|
| 10 | 16P2ECOT10 | STATISTICAL TOOLS FOR ECONOMIC ANALYSIS | 4 | 90 |

Module I

Random variables - Discrete and continuous types, probability distribution functions and its properties, Mathematical Expectation, moments. Standard distributions –binomial, Poisson, normal and lognormal distributions

Module II

Central limit theorem (without proof) and its applications, Sampling distributions - Statistic, sampling distributions of sample mean, chi-square, t, F distributions – uses of these sampling distributions.

Module III

Estimation - point and interval estimation. Method of moments. Confidence interval for the mean of a population using small and large samples.

Module IV

Testing of hypothesis - null and alternative hypotheses, simple and composite hypotheses, one tailed and two tailed tests. Type I and Type II errors. Critical and acceptance regions of a test, significance level and power of a test. Testing the mean of a population (large and small sample), Testing the difference between two means of independent and paired samples, testing the proportion of a population, Chi-square test of independence. Analysis of variance (ANOVA) test.

Reference Books

1. Lind A Douglas., Marchal G William and Wathen A Samuel: Basic Statistics for Business and Economics, 5th Edition, McGraw Hill International Edn
2. Mendenhall William., Beaver J Robert and Beaver M Barbara: Introduction to Probability and Statistics, 12th Edition, Thomson Brooks/Cole Publishers
3. Gupta S C and Kapoor V K: Fundamentals of Mathematical Statistics, 11th Edition, Sulthan Chand and sons, New Delhi
4. Ross S: A first course in Probability, 3rd edition, Mac Millan New York 1985

SEMESTER 3

| Course No. | Course code | Course Title |
|-------------------|----------------------|--|
| 11 | 16P3ECOT11 | International Trade Theory and Policy |
| 12 | 16P3ECOT12 | Public Economics |
| 13 | 16P3ECOT13 | Research Methods in Economics |
| 14 | 16P3ECOT14 | Basic Econometrics |
| 15 | 16P3ECOT15ELA | Monetary Economics (Elective) |

| Core Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|-----------------|-------------|---------------------------------------|----------------|-----------------------|
| 11 | 16P3ECOT11 | INTERNATIONAL TRADE THEORY AND POLICY | 4 | 90 |

Objectives

The course provides a deep understanding about the broad principles and theories which tend to govern the free flow of trade in goods, services and capital both short term and long term, between nations. The course also enables the students to evaluate the effect of factor growth and technical progress on the volume of trade and on national welfare. The role of government in regulating and controlling trade flows and the consequence of these policies as well as the effects of regional integration efforts are also included for the critical evaluation of students.

Module – I

Classical theory of international trade (assignment only) Heckscher-Ohlin theorem – Factor-price equalization theory – Leontieff paradox- Neo Heckscher Ohlin Models – inter industry and intra industry trade Causes and measurement of intra industry trade. - Linder theory of trade- Kemp Model- Technology gap theory – Product Life cycle theory- Poter’s diamond model and firm specific advantages (25 hrs)

Module – II

The effect of growth on trade - Neutral growth– Consumption bias & Production Bias- immiserising growth – Rybczynski theorem – Technical progress and trade – neutral, capital saving, labour saving (20hrs)

Module – III

Free trade and protection- effects of tariff – Stolper-Samuelson theorem – Optimum tariff – Effective Rate of Protection – Quotas and other Non-Tariff Barriers to trade(20 hrs)

Module – IV

Economic Integration – Theory of Customs Union – Trade creation and trade diversion- General equilibrium analysis – dynamic effects – European Union – Integration among developing countries- South Asian Association of Regional Co-operation (SAARC), Association of South East Asian Nations (ASEAN) (25 Hours)

Reference

1. Dominic Salvatore. —International Economics Prentice Hall(1998)
2. Bo Sodersten and Geoffrey Reed, —International Economics. Macmillan(2008)
3. Paul. R. Krugman and Maurice Obstfeld —International Economics, Pearson Education (2009), Dorling Kindersley (India) Pvt. Ltd.
4. Kindleberger, C.P —International Economics R.D. Irwin, Homewood
5. Bhagwati, J.N(Ed), International Trade: Selected Readings’, MIT press, 1987.
7. Francis Cherunilam —International Economic McGraw-Hill Education (2008)
8. Appleyard and Field —International Economics
9. Appleyard and Field —International Trade Theory and Policy.

10. Richard .E.Caves and Harry .G.Johnson Readings in International economic
- 11 .Michael E Poter: Competitive Advantage of Nations, Harward Business Review , March- April 1990 issue.
12. Corden .W.M —Recent developments in the theory of international trade|| Princeton University press, Princeton.

| Core Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|-----------------|-------------|--------------------|----------------|-----------------------|
| 12 | 16P3ECOT12 | PUBLIC ECONOMICS I | 4 | 90 |

The objective of this paper is to impart to the students a thorough understanding of the role and functions of the Government in a modern economy. The Government performs functions different from those of earlier societies in the new liberalized era.

Learning Outcomes

1. To acquaint the students with the issues relating to the role of Government in the changing era and the justification for Government intervention.
2. To introduce to the students the nature and theories of Public Goods.
3. To familiarize the students with the various aspects of the theory of Public Choice
4. To make the students aware of the recent trends in taxations and budgetary policy.

1. Module-1

Role of Government and Rationale for Public policies

Role of Govt. in organized society - Changing perspectives - Public sector and private sector co-operation or competition - Budget as a means of operationalizing the planning process – Govt. failure, Pareto optimality - market failure (causes) and rationale for government intervention.

Contact hours -15

2. Module -II : Theory of Public goods

Public goods-Pure and Impure public goods, Merit goods, Club Goods, Local public goods - Provision of Public goods -Voluntary exchange models - Samuelson's contribution . Public goods and Market failure- the Free rider problem- Efficiency condition for public goods, Tiebout Model.

Contact hours- 20 hours

3. Module –III

Public choice

Private and Public mechanisms for allocating resources-problems of preference revelation and aggregation - Downs theory of democracy-Politico economic interactions, voting system - Arrows Impossibility Theorem – Pressure groups & Interest groups - bureaucracy - Rent seeking and Directly unproductive profit seeking (DUP)activities.

Contact hours- 20

4. Module –IV

Fiscal Policy and Taxation

A. Fiscal policy for Stabilization- Neutral and Compensatory Finance and Functional Finance-Balanced Budget Multiplier - Social goals: Poverty alleviation and infrastructure Development, correcting distributional inequalities and Regional imbalances- Fiscal policy in LDCS like India.

B. Theories of Taxation- Benefit and ability to pay approaches - Theory of optimal taxation -Trade-off between equity and efficiency. Modern Theory of incidence , Theory and measurement of dead weight losses, Taxable Capacity, Tax Reforms in India, Chelliah Committee Report – Kelkar committee report I &II -Recent-trends-DTC-Incidence of Major taxes in India - VAT - CENVAT-GST.

C. Issues of subsidies in India and problem of black money

Contact hours. - 35

References

1. J. E. Stiglitz(1986), Economics of Public Sector.W W Norton, New York.
2. Richard A. Musgrave (1989), Public Finance in Theory and Practice McGraw Hill Book Company, New York .
3. Duff L. (1997), Government and Market, Orient Longman, New Delhi.
4. R.Goode(1986), Govt. Finance in Developing countries, Tata Mc Graw Hill, New Delhi.
5. Atkinson A and J Stiglitz(1980), Lectures in Public Economics MC Graw Hill, New York.
6. Bailey, S.J (2004), Public Sector Economics, Macmillan, New York.
7. Pogu T F and L.G Sgontz(1989), Government and Economic Choice, an Introduction to Public Finance, Hengton Mul, Boston.
8. R Cornes and T, Sandler(1986), The Theory of externalities Public Goods and Club goods Cambridge University Press, Cambridge. U.K
9. Jha .R(1980), Modern Public Economics, Routledge, London.
10. Mishan E.J (1986), Introduction to Normative Economics, OUP, Oxford.
11. Quick.J and R.Sapanick (1968), Introduction to General Equilibrium theory and Welfare Economics, Mc Graw Hill, New York.
12. Singh S K (2008), Public Finance in Developed and Developing Countries, S. Chand and Company Ltd, New Delhi.
13. Rosan S Harvey(1985), Public Finance ,Irwin Publications in Economics, USA
14. Boadway R and Bruce (1984), Welfare Economics-Basil Black well, Oxford.
15. Richard A. Musgrave(1989), Public Finance in Theory and Practice McGraw Hill Book Company, New York.
16. A Downs (1957), An Economic Theory of Democracy. Harper and Row, New York.
17. D.C Muller(1979), Public Choice. Cambridge University Press, Cambridge.
18. Friedman A.(1986), Welfare Economics and Social Choice Theory,Martins Nighoff, Boston.
19. J M Buchanan(1970), The Public finance .Irwin, USA.
20. Niskanen William (1995) Bureaucracy and Public Economic, Edward Elgar, Cheltenham, U.K
21. Bhagawati. J.N(1982), Directly Unproductive Profit seeking (D UP) activities, *Journal of Political Economy*, Vol.90, No.5
22. Cullis J and P.Jones (1998), Public Finance and Public Choice, OUP, London .1998
23. Mohamed S and J Whalley (1984), Rent seeking activities in India: its cost policy &Significance – *Kyklos* 3, pp.387-413
24. R.Goode (1985), Govt. Finance in Developing countries, Tata Mc Graw Hill, New Delhi.
25. Kelkar, Vijiay L & V V Bhanoji Rao (1996), India- Development Policy Imperatives, Tata Mc Graw-Hill Publishing co. Ltd., New Delhi.
26. L J Ahluwalia and IMD Little (1998), India's Economic Reforms and development: (Ed.) Oxford University Press Delhi.
27. Chelliah, R J (Ed) (1997), Towards Sustainable Growth, Oxford University Press, New Delhi.
28. Bird, R. and O. Oldman (1967), Readings on Taxation in Developing Countries, the John Hopkins University Press Baltimore.
29. AEA Series(1981), Readings in Economics of Taxation.
30. Buiter , W. H (1990), Principles of Budget and Fiscal Policy,MIT Press, Boston.
31. David, N and Nicholas,S(1987), The Theory of Taxation for developing Countries. OUP (Eds), London.

| Core Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|-----------------|-------------|-------------------------------|----------------|-----------------------|
| 13 | 16P3ECOT13 | RESEARCH METHODS IN ECONOMICS | 4 | 90 |

Research in Economics is at once exciting and challenging because it is a living and breathing process of enquiry. The research methods guide the researcher to understand and appreciate the social and economic reality in an objective way. It is expected to generate the capability to develop a broader understanding and analysis of social and economic issues using appropriate methods tools and techniques.

Learning objectives

- 1 To provide the students basic knowledge about the social science research and its relevance in tackling real economic issues of the society
- 2 Create an enabling environment to identify research issues and to develop scientific approach in the analysis of Economic and social problems
- 3 Familiarize with the methods of collection analysis and interpretation of data
- 4 Acquire the ability to derive and organize conclusions from empirical works for offering concrete solutions to various socio-economic problems.

Module I –Introduction to Research Methodology

Meaning and definition of research- classification of research(pure, applied, exploratory, descriptive, historical, diagnostic, experimental, qualitative, quantitative) - importance, applications and limitations of social science research- interdisciplinary and trans-disciplinary approaches communication technology in research- Basic elements of the scientific method- theory and research- the meaning of methodology (Contact hours 30)

Module II- Research Problem and Design

An overview of the different steps in research process-selection of the topic and formulation of the research problem in Economics with illustrations- review of literature- Research design, features of a good design-different research designs for exploratory, descriptive, diagnostic and experimental research, case study method. (Contact hours 20)

Module III -Collection and Analysis of Data

Sample design- probability and non probability sampling- Sampling Errors,sources of hypothesis- Procedure for testing hypothesis-one tailed and two tailed tests – basics of the important parametric and non-parametric tests - Methods of collecting primary data- questionnaire and schedules- sources of secondary data on Indian economy- processing of data—Use of Internet in Research, INFLIBNET, basic awareness of SPSS and EXCEL

(Contact hours 30)

Module IV- Interpretation of data and Research report

Analysis and Interpretation of data, Methods of footnotes and referencing, Bibliography, Style Manuals (APA style, MLA style, ASA style etc.) drawing conclusions and reporting it-Structure of the research report- Types of reports (Contact hours 10)

REFERENCE

1. Gaqrg, B.L., Karadia, R., Agarwal, F. and Agarwal, U.K. (2002), An introduction to Research Methodology, RBSA Publishers, Jaipur.
2. Bagchi, KanakKanti (2007) Research Methodology in Social sciences: A practical Guide, ,Abijeet Publications,Delhi.
3. William J Goode and Paul K Hatt (1981), Methods in social Research, McGraw- Hill, New York.
4. Wilkinson and Bhandarkar(2002), Methodology and Techniques of Social Research, Himalaya Publishing House, Mumbai.
5. Marc Blaug (1992), The Methodology of Economics, or How Economics Explain, Cambridge University Press, New York.
6. C R Kothari(2008), Research Methodology, Methods and Techniques, New Age International, New Delhi
7. W Lawrence Neuman (2006), Social Research Methods, Quantitative and Qualitative Approaches, Pearson Education, Singapore.
8. Laxmi Devi (Edited),1997 Encyclopedia of Social Science Research, Anmol Publications, New Delhi.
9. Pauline V Young (1984) : Scientific Social Surveys and research Prentice Hall India PvtLtd,New Delhi.
10. SPSS-Operating manual and handbook – latest version.
11. Modern Language Association (2009), The MLA Handbook for Writers of Association of America, New York.
12. Henry C.Lucas, Jr.(2000) Information Technology for Management, Tata McGraw-Hill Publishing Company Ltd., New Delhi.
13. Brymann, Alan and Carmer, D.(1995) Qualitative data analysis for Social Scientist, , Routledge publication, New York.
14. Wilcox.R.Rand (2010), Fundamentals of modern statistical methods, Springer, Berlin.

| Core Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|-----------------|-------------|--------------------|----------------|-----------------------|
| 14 | 16P3ECOT14 | BASIC ECONOMETRICS | 4 | 90 |

The objective of this paper is to equip the students about the basic principles of Econometrics. This will help the students to apply econometric solutions to problems in economics.

The learning outcomes of the course are

1. To provide a basic understanding of the methodology of econometrics
2. To familiarize the students with the various problems in simple and multiple regression equations.
3. To acquaint the students about the applications of econometrics in various real world situations

Module –I

Introduction to Econometrics

Definition & Scope of Econometrics, Methodology of Econometrics-Simple Linear Regression Model- Assumptions- Estimation (through OLS) - Properties of Estimates- Gauss Markov Theorem- Normality Assumptions-Statistical Inference- Testing Hypothesis.

General Linear Regression Model- Assumptions –Estimation and Testing- Fitness of the Model: R^2 and Adjusted R^2 -Concept and Interpretation of Partial and Multiple Correlation

Contact hours -25

Module -II

Problems in Regression Analysis

Issues of Regression through Origin -Scaling and Units of Measurement- Different Functional Forms of Regression Models and their Uses - Nature, Tests, Consequences and Remedial Steps of Problems of Hetero-scedasticity, Auto-correlation and Multi-collinearity-Problems of Specification Error- Errors in Measurement.

Contact hours -20

Module – III

Regression with Qualitative Variables and Simultaneous Equations

Dummy Variable Regression–Techniques and Uses-Models with Qualitative Dependent Variables- Logit, Probit, and Tobit Models.

Simultaneous equation Methods: Structural and reduced forms, Endogenous and exogenous variables, Identification problems and conditions, TSLS and Indirect Least squares.

Contact hours -15

Module –IV

Dynamic Econometric Model

Auto Regressive and Distributed Lag Models-Koyck Model, Partial Adjustment and Adaptive Expectations Model-Instrumental Variables- Problem of Auto- Correlation, Application- Almon Approach to Distributed Lag Models-Causality Test , Introduction to Time series, Granger Test, Unit Root and Random walk

Contact hours -15

Module -V

Econometric Applications

Economic Forecasting-Methods of Forecasting- Limitations-Estimation of Demand Equations- Engel Elasticity- Measurement of Short and Long Run Elasticities- Estimation of Production and Cost Functions

Contact hours -15

References

1. Gujarati, Damodar (2003), Basic Econometrics, 4th edition, McGraw Hill, New York.
2. Koutsoyiannis A (1977), Theory of Econometrics, Palgrave, New York.
3. Maddala G S (2002), Introduction to Econometrics, 3rd edition, John Wiley & Sons, New York.
4. Ramanathan, Ramu (2002), Introductory Econometrics with Applications, Thomson Learning Inc, Singapore.
5. Intriligator, M. D (1980) Econometric Methods, Techniques and Applications Prentice Hall, Englewood Cliffs, N. J
6. Klein LR (1974) A Text Book of Econometrics 2nd Ed., Prentice Hall, Englewood Cliffs, N. J
7. Kmenta, Jan (1976), Elements of Econometrics, 2nd ed. Macmillan, New York.
8. Mukherjee, Chandan, Howard White and Marcwuyts (1998) Econometrics and Data Analysis for Developing Countries, Rutledge New York.
9. Wooldridge, Jeffrey M, Introductory Econometrics, (2002) Thomson, South Western, USA.
10. Johnston, J (1984), Econometric Methods, McGraw Hill, New York.
11. Enders, Walter (2004), Applied Econometric Time Series, Wiley India Pvt. Ltd, New Delhi.
12. Hatakhar, Neeraj R (2010), Principles of Econometrics, Sage Publications, New Delhi.
13. Gujarati, Damodar (1992), Essentials of Econometrics, 4th edition, McGraw Hill, New York.
14. Greene, William H (2012), Econometric Analysis, 7th Edition, Pearson Education Ltd, Essex, England.
15. Salvatore, Dominic and Reagle Derrick (2011), 2nd Edition, Statistics and Econometrics, McGraw Hill, New York.

| Core Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|-----------------|---------------|----------------------------------|----------------|-----------------------|
| 15 | 16P3ECOT15ELA | MONETARY ECONOMICS (Elective) | 3 | 90 |

Learning objectives

- Enables the students to understand the basic concepts regarding money and the functioning of a pecuniary economy.
- Capacitates the students to have a thorough understanding of the various theoretical approaches to the determinants and measures of money supply and its role in causing the business cycles.
- Gives the students an insight in to the different schools of thought regarding the demand for money.
- Provide students an insight into interest rate differentials
- Gives the students awareness of the monetary policy formulations, its targets and objectives and to create an interest in the recent monetary reforms initiated in India.

Module 1. Concepts of Money

Money and near money (Basic concepts), classification of money-the static and dynamic functions of money- liquidity theory of money: the Radcliffe committee - the Gurley-Shaw – Newlyn, Concept of neutrality of money.

15 hours

Module 2. Supply of Money

Financial Intermediation- A mechanic model of bank deposit determination (High powered money and money multiplier / money multiplier theory – Mechanical approach)- behavioural model of money supply determination-, Money supply determination in an open economy- A demand determined view of the money supply process- methods of monetary control - measures of money supply in India- monetary business cycle theory of Hawtrey and Hayek.

20 hours

Module 3. Demand for Money

Theories of demand for money-classical approach- Fishers' equation, neo classical approach – Cambridge versions (Marshall, Pigou, Robertson), Keynes's liquidity preference approach, transaction, precautionary and speculative demand for money – aggregate demand for money, Liquidity trap - Friedman's restatement-Post Keynesian theories of the demand for money- James Tobin and William J. Baumol- classical dichotomy- real balance effect – Patinkin's integration of value theory and monetary theory.

20 hours

Module 4. Term Structure of Interest Rates

Dispersion (interest rate differentials) of interest rates: sources (reasons) - Yield curve- theories of term structure of interest rates: -segmented approach, expectations approach, and liquidity premium approach – monetary equilibrium criteria (Wicksell).

20 hours

Module 5. Monetary Policy

Monetary policy-Goals (objectives), targets, indicators and instruments of monetary policy- Transmission mechanism of monetary policy- classical, Keynesian, Friedman - rule versus discretion- lags in monetary policy -monetary reforms in India.

15 hours

References

1. Suraj B. Gupta, Monetary Economics, S Chand & Co Delhi
2. L M Bhole, Financial Institutions and Market
3. V M Avadhani, Studies in Indian Financial System
4. Levacic and Rebmann, Macro Economics, Macmillan
5. Laidler David E, The Demand for money: Theories and Evidence
6. S C Patnaik, Supply and Demand for money: An equilibrium Analysis
7. D G Pierce and D M Shaw, Monetary Economics
8. Don Patinkin, Money Interest and Prices
9. Myron B. Slovin and Marie Elisabeth Sushka- Money and Economic Activity, Lexington Books
10. Lewis, M.K. and P.D. Mizen, Monetary Economics. (Oxford; New York: Oxford University Press, 2000)
11. Goodhart, C.A.E. Money, Information and Uncertainty. (London: Macmillan, (1989).
12. Michael R Bayes and Denni S W Jansen, Money, Banking and Financial Markets All India Traveller Book Seller, New Delhi.
13. Mervyn K. Levis and Paul D. Mizen, Monetary Economics, OUP
14. Rakesh Mohan, Growth with Financial Stability, OUP
15. H R Suneja- Monetary Theory and Practice, Himalaya Publishing House
16. Shyamal Roy –Macroeconomic Policy Environment,
17. Thomas F Cargill, Money, The Financial System and Monetary Policy, Prentice Hall
18. Charles N. Henning, William Pigott and Robert Haney Scott, Financial Markets and The Economy, Prentice Hall, 1974.

SEMESTER 4

| Course No. | Course code | Course Title |
|-------------------|----------------------|--|
| 16 | 16P4ECOT16 | International Financial System and Economic Policy |
| 17 | 16P4ECOT17 | Public Economics II |
| 18 | 16P4ECOT18ELC | Environmental Economics (Elective) |
| 19 | 16P4ECOT19ELD | Capital Market (Elective) |
| 20 | 16P4ECOT20ELE | Economics of Social Sector (Elective) |
| 21 | 16P4ECOPJ | Project / Dissertation-cum-Viva / Independent Study |
| 22 | 16P4ECOCV | Comprehensive Viva |

| Core Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|-----------------|-------------|--|----------------|-----------------------|
| 16 | 16P4ECOT16 | INTERNATIONAL FINANCIAL SYSTEM AND ECONOMIC POLICY | 3 | 90 |

Objectives

The course is intended to make the students aware of the monetary and financial aspects of international economic transactions between nations. It covers areas like international monetary systems, exchange rate systems, foreign exchange markets, balance of payments and policy interventions by the governments to stabilize the domestic and external sectors of the economy.

Module I

International Monetary System, Past and present monetary arrangements – The gold standard – Bretton woods conference and afterwards – Present international monetary system. Optimum currency areas - European monetary union – Euro Currency Market.(20 hrs)

Module II

Foreign exchange market – Functions – Participants, Rate of exchange – types of exchange rates - Fixed- Flexible spot & forward market. Currency Futures and options. Swap market. Foreign exchange risk – Hedging, Arbitrage, Speculation – Currency convertibility – current and capital account.(20hrs)

Module III

Exchange rate determination – Purchasing power parity theory – Monetary and asset market (portfolio Balance) model. Exchange rate overshooting (15 hrs)

Module IV

Balance of payments – components – Equilibrium and disequilibrium in BOP Adjustment Mechanisms-automatic price and income adjustments. Elasticity and absorption approach. –J curve effect – Currency pass through. Policy adjustments – Expenditure changing and switching policies. Internal and external balance under alternative exchange rate regimes –Assignment problem – swan diagram – Mundel – Fleming Model. The policy mix underfixed and flexible exchange rates. (35 hrs)

Reference

1. Dominic Salvatore. —International Economics Prentice Hall(1998)
2. Bo Sodersten and Geoffrey Reed, —International Economics. Macmillan(2008)
3. Paul. R. Krugman and Maurice Obstfeld —International Economics, Pearson Education (2009), Dorling Kindersley (India) Pvt. Ltd.
4. Kindleberger, C.P —International Economics R.D. Irwin, Homewood
5. Bhagwati, J.N(Ed), International Trade: Selected Readings', MIT press, 1987.
7. Francis Cherunilam —International Economics McGraw-Hill Education (2008)
8. Appleyard and Field —International Economics McGraw-Hill
9. Appleyard and Field —International Trade Theory and Policy, McGraw-Hill
10. Giancarlo Gondolfo ; Elements of International Economics, Springer international Edition 2006.

| Core Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|-----------------|-------------|---------------------|----------------|-----------------------|
| 17 | 16P4ECOT17 | PUBLIC ECONOMICS II | 4 | 90 |

The learning objective of this paper Indian Public Finance is to acquaint the students with the recent developments in Public Expenditure and also in Budgeting and Public Debt in the Indian context. The Economics of Public Enterprises and the recent trends in Center State financial relations is a highlight of this paper.

Learning outcomes

1. To make the students aware of the emerging trends in public expenditure and the criteria for Public Investment
2. To familiarize the students with the various processes involved in the preparation and execution of the Budget and the problems and trends in Public Debt in India.
3. To make the students aware of the Economics of Public Enterprises and the current concepts like Public Private Participation (PPP).
4. To enable the students to have a thorough understanding of the Key Issues centering around Fiscal, Federal relations in India and to impart an advanced level knowledge of the emerging trends in local self-Government Institutions in the backdrop of the LPG process

1. Module-I Public Expenditure

Theories of Public Expenditure – Wagner’s Law – Wiseman- Peacock Hypothesis –Critical Limit Hypothesis-Structure and growth of Public expenditure of Centre and States - Developmental and non-developmental –Plan and Non Plan Expenditure, Principles of expenditure evaluation- Social cost - benefit analysis, Public expenditure decision making on Education in India.

Contact hours-15

2. Module-II Budgeting and Public Debt

A. Budget, Stages involved in the preparation, presentation and execution of government budget – Deficit concepts -Problem of fiscal deficit, Performance, Programme and Zero Based Budgeting –Corrective measures-FRBM Act-ERC.

B. Theories of public debt – Classical – Keynesian – Modern- Burden of Debt -Intergeneration equity – Buchanan Thesis – Growth and composition of public debt of the Central Govt. and State Govts- External debt of India. Management of Debt.

Contact hours-25

3. Module III Public Enterprises

A.Public Sector and its Role in Economic Development– Changing attitudes towards Public enterprises – Privatization of PSUs – Disinvestment of Indian PSUs– Experiences of other countries –Public Private Partnership(PPP) policy.

B. Pricing policies of PSU’s- Peak load pricing - Administered Price Mechanism (APM) - Public Pricing and environmental policy.

Contact hours-15

4. Module-IV Fiscal Federalism

A. Theories of Multilevel Finance – Principles of Federal Finance –Indian Fiscal Federalism- Fiscal imbalances- Intergovernmental transfers - Efficiency basis – Equity arrangements –Major issues in Centre – state financial relations in India – Vertical and horizontal imbalances, Liberalization, economic reforms and Centre state relations in India

- B. Finance commission and evaluation of its working. An evaluation of the current Finance Commission – Recent Trends -Criteria of devolution – Planning commission vs Finance commission – Modified Gadgil formula - Problem of Central loans to States in India
- C. Local Finance – Changing role of local self governments - State Finance Commission and financial resources of PRI, Problems of Local Finance.

Contact hours-35

References

1. J. Mishan(1982), Cost – Benefit Analysis, Allen Unwin, London.
2. Anuradha Basu (1995), Public Expenditure decision making The Indian Experience Sage Publications New Delhi.
3. Peacock, A. and D .J. Robertson(1963), Public Expenditure: Appraisal and Control, Oliver and Boyd, Edinburgh.
4. Musgrave and Musgrave (1973), Public Finance in Theory and Practice, Mcgrwhill, New York.
5. Government of India, Economic survey ,GOI , various Years
6. Reserve Bank of India, Handbook on Indian Economy, various Issues
7. Misra and Puri (2014), Indian Economy, Himalaya Publishers, Bombay.
8. Mishra D. K(1981), Public Debt and Economic Development in India, Print House, Lucknow.
9. Chelliah R .J. Growth of Indian Public Debt in Bimal Jalan (1992) The Indian,Economy, Problems and prospects, Viking, New Delhi.
10. Rangarajan, A Basu, Jadhve(1989) , Dynamics of Interaction between Govt deficit and Domesti debt in India. RBI occasional papers Vol. 10, No. 3
11. Sabu P J and Raju K V (2015), Higher Education in India- Towards Structural Transformation, Serials Publications, New Delhi.
12. J. M. Buchanan (1958), Public Principles of Public Debt, Irwin, Homewood, IL.
13. Barman K. (1986) Public Debt Management in India, Uppal Publishing house, New Delhi
14. Sreakantaradhya B. S.(1972), Public Debt and Economic Development in India, New Delhi.
15. Ferguson, J.M.(Ed.)(1964), Public Debt and Future Generations , North Carolina University Press Chapel Hill .
16. The Institute of Chartered Accountants of India(2002), Issues in Public Finance, Committee on Public Finance and Government Accounting, New Delhi .
17. Premchand A(1963), Control of Public Expenditure in India, Allied Publishers, New Delhi.
18. Jha H.Modern(1998), Public Economics, Routledge, London.
19. Goyal S.K,(1984), Public Enterprises, Indian Institute of public Administration New Delhi.
20. GOI(2000), Report on Disinvestment by the Disinvestment Commission, GOI, New Delhi.
21. I.S. Gulati and K.K. George(1988), Essays in Federal Finances Relations – Oxford and IBH Publishing Co. New Delhi.
22. Govinda Rao and R .J. Chelliah (1981), Survey of Research on Fiscal Federalism in India – NIPFP, New Delhi.
23. Hemalata Rao(2006),Fiscal Federalism – Issues and Policies, New Century Publications, New Delhi .
24. J Ahluwalia and IMDLittle(1998), India’s Economic Reforms and Development(Ed.), Oxford University Press ,New Delhi.

| Core Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|-----------------|---------------|------------------------------------|----------------|-----------------------|
| 18 | 16P4ECOT18ELC | ENVIRONMENTAL ECONOMICS (Elective) | 3 | 90 |

Learning Outcome

This course helps the students to understand the basic theories and tools of analysis in environmental economics along with a broad understanding of the policy instruments.

Module 1. Introduction to Environment and Economy

Scope and Definitions of Environmental Economics, Environmental Economics Vs. Traditional Economics- Environment – economy interaction - Material balance model - law of thermodynamics and entropy – Environmental input- output analysis – The Environmental Kuznets Curve Hypothesis – concept of sustainable development.

15 Hrs.

Module 2. Fundamental theories of environmental economics

Pareto Optimality and competitive equilibrium-Externality and market inefficiency – Externality as missing markets-property rights and externalities – environmental demand theory- Olson’s theory of Collective Action - Common property (pool) resources and environmental quality as a public good – Hardin’s thesis of the Tragedy of commons.

25 Hrs.

Module 3. Measurement of Environmental Values

Environmental Valuation- Total Economic value-use value, non-use value, option value, bequest value – Weak Complementarity-Production function based Techniques - Travel cost method - Hedonic Price Method (Hedonic Property Prices method), stated preference methods: Contingent Valuation Method, Choice modeling (Choice experiments and environmental valuation)- Benefits Transfer method, Environmental Accounting- Integration of Environmental Accounts with System of National Accounts - Green GNP–concept of Environmental Impact Assessment (EIA) –Social cost benefit analysis.

30 Hrs.

Module 4. Theory of Environmental Policy

Treating environment externalities – Polluter pay principle – Pigouvian taxes and subsidies - Marketable pollution permits –mixed instruments (the charges and standards approach) – taxable permits and tradable permits- international carbon tax – Eco –Labeling-Coase theorem and bargaining- The need for an environmental policy– domestic environmental policy- the Indian experience.

20 Hrs.

References:

1. Rbindra N Bhattacharya 2007, Environmental Economics an Indian Perspective, OUP, New Delhi. Ch.1, 4
2. Katar Singh and Anil Shishodia, 2007, Environmental Economics Theory and Practice2, Sage Publications, New Delhi. Ch. 1, 2, 3, 4, 5 and 6
3. Charles D Kolstad, 2006, Environmental Economics, OUP, New York. Ch.1, 3 to 7 and 15
4. Daniel D Chiras, 1998, Environmental Science, 5th edn., Wadsworth Publishing Company, New York. Ch. 5 to 8
5. MatthewEdel, 1973, Economies and the Environment, Prentice Hall, New Jersey, Ch.1.
6. Nirmal Chandra Sahu and AnithaKumariChoundhury, 2005, Dimensions of Environmental and Ecological Economics, University Press, Hyderabad. Articles. 1, 2, 4, 5, 14, 17 to 19.
8. PaulAekins, 2000, Economic Growth and Environmental Sustainability, Rroutledge, London. Ch.2, 5 and 6.
9. RogerPearman , et al., 1999, Natural Resources and Environmental Economics, Pearson Education, Limited Edin. Borough Gate, U.K. Ch. 1 and 4 to 6, 11, 12, 14 to 17.
10. Sharma P.D, 2002-03), Ecology and Environment, Rastogi Publications, Meerut. Ch. 10.
11. World Development Report 2003, Sustainable Development in a Dynamic World.
12. Nirmal Chandra Sahu and AnithaKumariChoundhury, 2005, Dimensions of Environmental and Ecological Economics, University Press, Hyderabad. Articles. 8,9 and 15.
13. Mary Ann Curran, 1996, Environmental life Cycle Assessment, MC. Graw Hill, New York. Ch.1.
14. Thomas and Callan, 2007, Environmental Economics, Thomas South-Western. Ch.6 and 8.
15. UlganathanSanker, 2009, Environmental Economics, OUP, New Delhi. Ch. 8 and 9.
16. Lester R Brown, 2003, Eco- Economy, Orient Longman, Hyderabad. **Ch.11**
17. 3.PaulAekins, 2000, Economic Growth and Environmental Sustainability, Rroutledge, London. Ch.3 and 8.
18. Thomas and Callan, 2007, Environmental Economics, Thomas South-Western. Ch. 6.

| Core Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|-----------------|---------------|------------------------------|----------------|-----------------------|
| 19 | 16P4ECOT19ELD | CAPITAL MARKET (Elective) | 3 | 90 |

The Objectives: The study of capital market assumes great significance in modern times. It provides an overview of what a capital market is and the students acquire a comprehensive knowledge of capital market operations in a dynamic economic environment.

The Outcomes: By the completion of the course, students will be able to understand the basics of savings and investment, capital market instruments, functions of stock exchanges, influence of interest rate and financial statement analysis.

Module I

Need for Saving and Investment – Characteristics of Investments - Investment Avenues – Investment versus Speculation — Individual Investors – Institutional Investors – Foreign Institutional Investors - Risks of Investment and Return on Investment (20 Hours)

Module II

Capital Market – Origin and Development – Functions – Capital Market Instruments – New Issue Market/IPO – Book Building – Listing – Rights issue - Trading processes – Online Trading- Securities Market in India – Role of S E B I – Stock Exchanges in India – Functions - N S E – B S E – MCX - Stock Market Indices – Derivatives - Futures and Options – Exchange Traded Funds – Bond Market – Yield Curve Analysis - N S D L – C D S L – Credit Rating.
(30 Hours)

Module III

Interest rates – Role of Interest rates in determining value of security – Investment and Time Value of Money – Net Present Values – Discounted Cash Flows – Practical Applications.
(20 Hours)

Module IV

Financial Statement Analysis– Balance Sheet of a Company – Profit and Loss Account Analysis – Equity Valuation – Value Concepts – Earnings Ratios (20 Hours)

References:

1. Prasanna Chandra – Investment Analysis and Portfolio Management – Tata McGraw-Hill
2. Fisher and Jordan – Security Analysis and Portfolio Management – Prentice - Hall
3. Bhole L M – Financial Institutions and Markets - Tata McGraw-Hill
4. Barua, Regunathan and Varma – Portfolio Management - Tata McGraw-Hill
5. Prasanna Chandra – Financial Management, Theory and Practice - Tata McGraw-Hill

6. Avadhani V A – Securities Markets – Himalaya Publishing House
7. Gupta L C – Rates of Return – Oxford University Press
8. Khan M Y – Indian Financial System - Tata McGraw-Hill
9. Yasaswy N J – Equity Investment - Tata McGraw-Hill
10. William J Baumol – Stock Market and Economic Efficiency
11. Thomas, Susan (Ed.) Derivatives Markets in India - Tata McGraw-Hill
12. RBI Bulletin, CMIE Reports, Prime Data Base, sebi.com, nseindia.com, bseindia.com

| Core Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|-----------------|---------------|---------------------------------------|----------------|-----------------------|
| 20 | 16P4ECOT20ELE | ECONOMICS OF SOCIAL SECTOR (Elective) | 3 | 90 |

Course Rationale

To impart necessary theoretical knowledge, which serves as a foundation for analysing the dynamics of social sector in the process of economic development.

Objectives

1. To provide a comprehensive theoretical outlook on important social sectors
2. To have a sound understanding of basic theoretical frameworks and be able to apply it in a practical setting
3. To develop a critical approach to evaluate the interplay of social sector in the development process

Module 1: Introduction to Social Sector (20 hrs)

Social sector – meaning and components - Role in economic development – Human resource development approach Vs Human development approach

Definition and scope of Economics of Education - Education as Consumption and Investment goods – Theoretical Framework: Contributions of Schultz, Becker, Roemer and Barro - Human capital - the concept - Components of Human capital - Human Capital vs. Physical Capital - Human capital and human development.

Module 2: Costs and Benefits of Education (30 hrs)

Cost of Education – Expenditure on Education – Public expenditure on education - Private Costs and Social Costs - Direct and Indirect / opportunity costs - Benefits of Education – Direct and Indirect Benefits - Private and Social Benefits - Problems in the Measurement of Costs and Benefits - Cost-Benefit Analysis in Education - Education, Employment and Income - Contribution of Education to economic growth - Education, Poverty and Income Distribution - Educational Planning and the problem of educated unemployment and brain drain - Role of financing in the development of education - Financing of education in India.

Module 3: Introduction to Economics of Health (20 hrs)

Definition and scope of Economics of Health - The concept of health and health care - Health as Consumption and an Investment goods - The role of health in economic development - Comparison of Education and Health - Health as human capital - Determinants of Health – Poverty and Malnutrition - Economic Dimensions of Health Care – Demand and Supply of Health Care.

Module 4: Financing and Institutional Issues in Health Care

(20 hrs)

Resource Mobilisation and Utilisation of health care in India - Pricing and subsidies to Health sector - Equity and Efficiency Effects of health care financing - Health Care and Resource Constraints - Inequalities in Health and health care in India - Institutional Issues in Health Care Delivery.

References

1. Baru, R.V., -Private Health Care in India
2. Blaug, Mark (1972) Introduction to Economics of Education. Penguin, London.
3. Becker, G.S.(1974) Human Capital. 2nd Edn., NBER, New York
4. Berman, P and M.E.Khan (1989) Paying for India's Health Care. Sage Publications. New Delhi.
5. Cohn, E and T.Gaske (1989) Economics of Education, Pergamon Press, London.
6. George Pascharopoulos (1985)- Education for Development, Oxford University press, N.Y
7. Henderson, J.W, -Health economics and Policy
8. Jaganathmohanty- Modern Trends in Education
9. Klarman, H.E. (1965) Economics of Health, Columbia University Press, New York.
10. Panchamukhi, P.R.(1980) Economics of Health: A Trend Report, ICSSR Survey, Allied, New Delhi.
11. Tilak. J.E.G.(1989) Economics of Inequality in Education, Sage, New Delhi.
12. Sabu, P.J. and Raju, K.V. (2015): Higher Education in India – Towards Structural Transformation, Serials Publications, New Delhi.
13. Schultz, T.W- Economic value of education
14. World Bank (1983) The World Development Report: Investing in Health. Oxford University Press, New York

21 PROJECT / DISSERTATION-CUM-VIVA

DISSERTATION FORMAT

Dissertation: Master of Arts (M.A.) in Economics

General Guidelines

1. Selection of a Topic
2. Pilot Survey, if needed
3. Significance of the Study
4. Review of Literature
5. Research Gap (Optional)
6. Conceptual Framework – Conceptualization & Operationalization (precise and specific meaning of the terms and concepts)
7. Theoretical framework (Optional)
8. Formulation of Research Questions /Issues
9. Research objectives
10. Hypotheses (Optional)
11. Coverage (Universe/ Sample & period of study)
12. Data source (Primary/Secondary)
13. Tools of analysis(Analytical Framework)
14. Social Relevance of the study
15. Limitations of the study
16. Chapter outlines
17. Introductory chapter
18. Result Chapter(s)
19. Conclusion Chapter
20. Appendices
21. Bibliography /References &Webliography

Structure of the Report

1.1 Title page 1 Cover Page

- a. Title page
- b. Title of the project
- c. Name of the candidate
- d. Name and designation of the supervisor.
- e. Degree for which project is submitted.
- f. Name of the College
- g. Month and year the project is presented
- h. Declaration of the student &supervisor

1.2Preface

1.3 Table of contents

- a. List of Tables
- b. List of Figures
- c. Glossary.
- d. List of abbreviations
- e. Acknowledgment

1.4. Abstract / Executive Summary (One Page)

1.5. The Main Test

- a. Introductory Chapters: Items 3 to 16 mentioned above
- b. Other Chapters: Analysis, Results & Interpretation
- c. Conclusion Chapter: Conclusions, Recommendations & Summary

1.6. End Notes (After each chapter)

1.7. Bibliography or References (At the end of the thesis)

1.8. Appendices

- a. Questionnaire
- b. Interview schedule
- c. Observation schedule (optional)
- d. Coding frame (Optional)
- e. Letters sent to sample members (optional)
- f. Any other

Length of the Project

Note

- a. Report length 40 to 50 pages excluding Appendix and Certificates
- b. Alignment: Justify
- c. Font: Times New roman
- d. Font size: 12
- e. Line spacing: 1.5
- f. Double line Page Border

ELECTIVE PAPERS**Group A**

| Elective Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|----------------------------|--------------------|--|-----------------------|------------------------------|
| 01 | 16P3ECOTELA | MONETARY ECONOMICS (Elective) | 3 | 90 |

Learning objectives

- Enables the students to understand the basic concepts regarding money and the functioning of a pecuniary economy.
- Capacitates the students to have a thorough understanding of the various theoretical approaches to the determinants and measures of money supply and its role in causing the business cycles.
- Gives the students an insight in to the different schools of thought regarding the demand for money.
- Provide students an insight into interest rate differentials
- Gives the students awareness of the monetary policy formulations, its targets and objectives and to create an interest in the recent monetary reforms initiated in India.

Module 1 Concepts of Money

Money and near money (Basic concepts), classification of money-the static and dynamic functions of money- liquidity theory of money: the Radcliffe committee - the Gurley-Shaw – Newlyn, Concept of neutrality of money.

15 hours**Module 2. Supply of Money**

Financial Intermediation- A mechanic model of bank deposit determination (High powered money and money multiplier / money multiplier theory – Mechanical approach)- behavioural model of money supply determination-, Money supply determination in an open economy- A demand determined view of the money supply process- methods of monetary control - measures of money supply in India- monetary business cycle theory of Hawtrey and Hayek.

20 hours**Module 3. Demand for Money**

Theories of demand for money-classical approach- Fishers' equation, neo classical approach – Cambridge versions (Marshall, Pigou, Robertson), Keynes's liquidity preference approach, transaction, precautionary and speculative demand for money – aggregate demand for money, Liquidity trap - Friedman's restatement-Post Keynesian theories of the demand for money-

James Tobin and William J. Baumol- classical dichotomy- real balance effect – Patinkin’s integration of value theory and monetary theory.

20 hours

Module 4. Term Structure of Interest Rates

Dispersion (interest rate differentials) of interest rates: sources (reasons) - Yield curve- theories of term structure of interest rates: -segmented approach, expectations approach, and liquidity premium approach – monetary equilibrium criteria (Wicksell).

20 hours

Module 5: Monetary Policy

Monetary policy-Goals (objectives), targets, indicators and instruments of monetary policy- Transmission mechanism of monetary policy- classical, Keynesian, Friedman - rule versus discretion- lags in monetary policy -monetary reforms in India.

15 hours

References

1. Suraj B. Gupta, Monetary Economics, S Chand & Co Delhi
2. L M Bhole, Financial Institutions and Market
3. V M Avadhani, Studies in Indian Financial System
4. Levacic and Rebmann, Macro Economics, Macmillan
5. Laidler David E, The Demand for money: Theories and Evidence
6. S C Patnaik, Supply and Demand for money: An equilibrium Analysis
7. D G Pierce and D M Shaw, Monetary Economics
8. Don Patinkin, Money Interest and Prices
9. Myron B. Slovin and Marie Elisabeth Sushka- Money and Economic Activity, Lexington Books
10. Lewis, M.K. and P.D. Mizen, Monetary Economics. (Oxford; New York: Oxford University Press, 2000)
11. Goodhart, C.A.E. Money, Information and Uncertainty. (London: Macmillan, (1989).
12. Michael R Bayes and Denni S W Jansen, Money, Banking and Financial Markets All India Traveller Book Seller, New Delhi.
13. Mervyn K. Levis and Paul D. Mizen, Monetary Economics, OUP
14. Rakesh Mohan, Growth with Financial Stability, OUP
15. H R Suneja- Monetary Theory and Practice, Himalaya Publishing House
16. Shyamal Roy –Macroeconomic Policy Environment,
17. Thomas F Cargill, Money, The Financial System and Monetary Policy, Prentice Hall
18. Charles N. Henning, William Pigott and Robert Haney Scott, Financial Markets and The Economy, Prentice Hall, 1974.

| Elective Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|----------------------------|--------------------|--|-----------------------|------------------------------|
| 02 | 16P3ECOTELB | INDUSTRIAL ECONOMICS (Elective) | 3 | 90 |

PREAMBLE

In the contemporary world with globalization and liberalization more and more attention is being given to industry. This course intends to provide knowledge to the students on the basic issues such as productivity, efficiency, capacity utilization and debates involved in the industrial development of India. The objective is to provide a thorough knowledge about the economics of industry in a cogent and analytical manner, particularly in the Indian context.

Module 1: Framework and Problems of Industrial Economics

Concept and organization of a firm — ownership, control and objectives of the firm; Passive and active behaviour of the firm

Module 2: Market Structure

Sellers' concentration; Product differentiation; Entry conditions; Economies of scale; Market structure and profitability; Market structure and innovation; Theories of industrial location — Weber and Sargent Florence; Factors affecting location

Module 3: Market Performance and Industrial Finance

Growth of the firm — Size and growth of a firm; Growth and profitability of the firm; Constraints on growth; Productivity, efficiency and capacity utilization — Concept and measurement, Indian Situation, Financial statement — Balance sheet, Profit and loss account; assessment of financial soundness, ratio analysis

Module 4: Indian Industrial Growth and Pattern

Classification of industries; Industrial policy in India — Role of Public and private sectors; Recent trends in Indian industrial growth; MNCs and transfer of technology; Liberalization and privatization; Regional industrial growth in India; Industrial economic concentration and remedial measures

BASIC READING LIST

1. Ahluwalia, I.J. (1985), Industrial Growth in India, Oxford University Press, New Delhi.
2. Barthwal, R.R. (1985), Industrial Economics, Wiley Eastern Ltd., New Delhi.
3. Cherunilam, F. (1994), Industrial Economics: Indian Perspective (3rd Edition), Himalaya Publishing House, Mumbai
4. Desai, B. (1999), Industrial Economy in India (3rd Edition), Himalaya Publishing House, Mumbai.
5. Divine, P.J. and R.M. Jones et. al. (1976), An Introduction to Industrial Economics, George Allen and Unwin Ltd., London.
6. Government of India, Economic Survey (Annual)
7. Hay, D. and D.J. Morris (1979), Industrial Economics: Theory and Evidence, Oxford University Press, New Delhi.
8. Kuchhal, S.C. (1980), Industrial Economy of India (5th Edition), Chaitanya Publishing House, Allahabad.
9. Reserve Bank of India, Report on Currency and Finance (Annual)

10. Singh, A. and A.N. Sadhu (1988), *Industrial Economics*, Himalaya Publishing House, Bombay
11. Gupta, L.C. (1969), *The Changing Structure of Industrial Finance in India*, Oxford University Press, New Delhi.
12. Khan, M.Y. (1981), *Indian Financial Systems*, Allied Publishers, New Delhi.
13. Sen, R. and B. Chatterjee (2001), *Indian Economy: Agenda for the 21st Century* (Essays in honour of Professor P.R. Brahmananda), Deep and Deep Publications Pvt. Ltd., New Delhi.
14. Brahmananda, P.R. and V.R. Panchamukhi (Eds.) (1987), *The Development Process of the Indian Economy*, Himalaya Publishing House, Bombay.
15. Chakravarty, S. (1987), *Development Planning : The Indian Experience*, Oxford University Press, New Delhi.
16. Datta, B. (1992), *Indian Planning at the Crossroads*, Oxford University Press, New Delhi.
17. Dhameeja, N. and K.S. Sastry (1998), *Privatization : Theory and Practice*, A.H. Wheeler, New Delhi.
18. Jalan, B. (1996), *India's Economic Policy*, Viking, New Delhi.
19. Joshi, V. and I.M.D. Little (1999), *India : Macro Economics and Political Economy : 1964-1991*, Oxford University Press, New Delhi.
20. Kelkar, V.L. and V.V. Bhanoji Rao (Eds.) (1996), *India Development Policy Imperatives*, Tata McGraw Hill, New Delhi.
21. Rama Murti, R. and R. Vernan (Eds.) (1991), *Privatization and Control of State-owned Enterprises*, The World Bank, Washington.
22. Sandesara, J.C. (1992), *Industrial Policy and Planning — 1947-1991 : Tendencies, Interpretations and Issues*, Sage Publications, India Pvt. Ltd., New Delhi.
23. Bhagwati J. and P. Desai (1972), *India: Planning for Industrialization*, Oxford University Press, London.

ELECTIVE PAPERS**Group B**

| Core Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|------------------------|--------------------|---|-----------------------|------------------------------|
| 01 | 16P4ECOTELC | ENVIRONMENTAL ECONOMICS (Elective) | 3 | 90 |

Learning Outcome

This course helps the students to understand the basic theories and tools of analysis in environmental economics along with a broad understanding of the policy instruments.

Module 1. Introduction to Environment and Economy

Scope and Definitions of Environmental Economics, Environmental Economics Vs. Traditional Economics- Environment – economy interaction - Material balance model - law of thermodynamics and entropy – Environmental input- output analysis – The Environmental Kuznets Curve Hypothesis – concept of sustainable development.

15 Hrs.

Module 2. Fundamental theories of environmental economics

Pareto Optimality and competitive equilibrium-Externality and market inefficiency – Externality as missing markets-property rights and externalities – environmental demand theory- Olson’s theory of Collective Action - Common property (pool) resources and environmental quality as a public good – Hardin’s thesis of the Tragedy of commons.

25 Hrs.

Module 3. Measurement of Environmental Values

Environmental Valuation- Total Economic value-use value, non-use value, option value, bequest value – Weak Complimentarity-Production function based Techniques - Travel cost method - Hedonic Price Method (Hedonic Property Prices method), stated preference methods: Contingent Valuation Method, Choice modeling (Choice experiments and environmental valuation)- Benefits Transfer method, Environmental Accounting- Integration of Environmental Accounts with System of National Accounts - Green GNP–concept of Environmental Impact Assessment (EIA) –Social cost benefit analysis.

30 Hrs.

Module 4. Theory of Environmental Policy

Treating environment externalities – Polluter pay principle – Pigouvian taxes and subsidies – Marketable pollution permits –mixed instruments (the charges and standards approach) – taxable permits and tradable permits- international carbon tax – Eco –Labeling-Coase theorem and bargaining- The need for an environmental policy– domestic environmental policy- the Indian experience.

(20 Hrs)

References:

1. Rbindra N Bhattacharya 2007, Environmental Economics an Indian Perspective, OUP, New Delhi.Ch.1, 4
2. Katar Singh and Anil Shishodia, 2007, Environmental Economics Theory and Practice2, Sage Publications, New Delhi. Ch. 1, 2, 3, 4, 5 and 6
3. Charles D Kolstad, 2006, Environmental Economics, OUP, New York. Ch.1, 3 to 7 and 15
4. Daniel D Chiras, 1998, Environmental Science, 5th edn., Wadsworth Publishing Company, New York. Ch. 5 to 8
5. MatthewEdel, 1973, Economies and the Environment, Prentice Hall, New Jersey, Ch.1.
6. Nirmal Chandra Sahu and AnithaKumariChoundhury, 2005, Dimensions of Environmental and Ecological Economics, University Press, Hyderabad. Articles. 1, 2, 4, 5, 14, 17 to 19.
8. PaulAekins, 2000, Economic Growth and Environmental Sustainability, Rroutledge, London. Ch.2, 5 and 6.
9. RogerPearman , et al., 1999, Natural Resources and Environmental Economics, Pearson Education, Limited Edin. Borough Gate, U.K. Ch. 1 and 4 to 6, 11, 12, 14 to 17.
10. Sharma P.D, 2002-03), Ecology and Environment, Rastogi Publications, Meerut. Ch. 10.
11. World Development Report 2003, Sustainable Development in a Dynamic World.
12. Nirmal Chandra Sahu and AnithaKumariChoundhury, 2005, Dimensions of Environmental and Ecological Economics, University Press, Hyderabad. Articles. 8,9 and 15.
13. Mary Ann Curran, 1996, Environmental life Cycle Assessment, MC. Graw Hill, New York. Ch.1.
14. Thomas and Callan, 2007, Environmental Economics, Thomas South-Western. Ch.6 and 8.
15. UlganathanSanker, 2009, Environmental Economics, OUP, New Delhi. Ch. 8 and 9.
16. Lester R Brown, 2003, Eco- Economy, Orient Longman, Hyderabad. **Ch.11**
17. 3.PaulAekins, 2000, Economic Growth and Environmental Sustainability, Rroutledge, London. Ch.3 and 8.
18. Thomas and Callan, 2007, Environmental Economics, Thomas South-Western. Ch. 6.

| Elective Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|---------------------|--------------|----------------|----------------|-----------------------|
| 02 | 16P4ECOTELED | CAPITAL MARKET | 3 | 90 |

The Objectives: The study of capital market assumes great significance in modern times. It provides an overview of what a capital market is and the students acquire a comprehensive knowledge of capital market operations in a dynamic economic environment.

The Outcomes: By the completion of the course, students will be able to understand the basics of savings and investment, capital market instruments, functions of stock exchanges, influence of interest rate and financial statement analysis.

Module I

Need for Saving and Investment – Characteristics of Investments - Investment Avenues – Investment versus Speculation — Individual Investors – Institutional Investors – Foreign Institutional Investors - Risks of Investment and Return on Investment (20 Hours)

Module II

Capital Market – Origin and Development – Functions – Capital Market Instruments – New Issue Market/IPO – Book Building – Listing – Rights issue - Trading processes – Online Trading- Securities Market in India – Role of S E B I – Stock Exchanges in India – Functions - N S E – B S E – MCX - Stock Market Indices – Derivatives - Futures and Options – Exchange Traded Funds – Bond Market – Yield Curve Analysis - N S D L – C D S L – Credit Rating.
(30 Hours)

Module III

Interest rates – Role of Interest rates in determining value of security – Investment and Time Value of Money – Net Present Values – Discounted Cash Flows – Practical Applications.
(20 Hours)

Module IV

Financial Statement Analysis– Balance Sheet of a Company – Profit and Loss Account Analysis – Equity Valuation – Value Concepts – Earnings Ratios (20 Hours)

References:

1. Prasanna Chandra – Investment Analysis and Portfolio Management – Tata McGraw-Hill
2. Fisher and Jordan – Security Analysis and Portfolio Management – Prentice - Hall
3. Bhole L M – Financial Institutions and Markets - Tata McGraw-Hill
4. Barua, Regunathan and Varma – Portfolio Management - Tata McGraw-Hill
5. Prasanna Chandra – Financial Management, Theory and Practice - Tata McGraw-Hill

6. Avadhani V A – Securities Markets – Himalaya Publishing House
7. Gupta L C – Rates of Return – Oxford University Press
8. Khan M Y – Indian Financial System - Tata McGraw-Hill
9. Yasaswy N J – Equity Investment - Tata McGraw-Hill
10. William J Baumol – Stock Market and Economic Efficiency
11. Thomas, Susan (Ed.) Derivatives Markets in India - Tata McGraw-Hill
12. RBI Bulletin, CMIE Reports, Prime Data Base, sebi.com, nseindia.com, bseindia.com

| Core Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|-----------------|-------------|---------------------------------------|----------------|-----------------------|
| 03 | 16P4ECOTELE | ECONOMICS OF SOCIAL SECTOR (Elective) | 3 | 90 |

Course Rationale

To impart necessary theoretical knowledge, which serves as a foundation for analysing the dynamics of social sector in the process of economic development.

Objectives

1. To provide a comprehensive theoretical outlook on important social sectors
2. To have a sound understanding of basic theoretical frameworks and be able to apply it in a practical setting
3. To develop a critical approach to evaluate the interplay of social sector in the development process

Module 1: Introduction to Social Sector (20 hrs)

Social sector – meaning and components - Role in economic development – Human resource development approach Vs Human development approach

Definition and scope of Economics of Education - Education as Consumption and Investment goods – Theoretical Framework: Contributions of Schultz, Becker, Roemer and Barro - Human capital - the concept - Components of Human capital - Human Capital vs. Physical Capital - Human capital and human development.

Module 2: Costs and Benefits of Education (30 hrs)

Cost of Education – Expenditure on Education – Public expenditure on education - Private Costs and Social Costs - Direct and Indirect / opportunity costs - Benefits of Education – Direct and Indirect Benefits - Private and Social Benefits - Problems in the Measurement of Costs and Benefits - Cost-Benefit Analysis in Education - Education, Employment and Income - Contribution of Education to economic growth - Education, Poverty and Income Distribution - Educational Planning and the problem of educated unemployment and brain drain - Role of financing in the development of education - Financing of education in India.

Module 3: Introduction to Economics of Health (20 hrs)

Definition and scope of Economics of Health - The concept of health and health care - Health as Consumption and an Investment goods - The role of health in economic development - Comparison of Education and Health - Health as human capital - Determinants of Health – Poverty and Malnutrition - Economic Dimensions of Health Care – Demand and Supply of Health Care.

Module 4: Financing and Institutional Issues in Health Care

(20 hrs)

Resource Mobilisation and Utilisation of health care in India - Pricing and subsidies to Health sector - Equity and Efficiency Effects of health care financing - Health Care and Resource Constraints - Inequalities in Health and health care in India - Institutional Issues in Health Care Delivery.

Basic Reading List:

1. Baru, R.V., -Private Health Care in India
2. Blaug, Mark (1972) Introduction to Economics of Education. Penguin, London.
3. Becker, G.S.(1974) Human Capital. 2nd Edn., NBER, New York
4. Berman, P and M.E.Khan (1989) Paying for India's Health Care. Sage Publications. New Delhi.
5. Cohn, E and T.Gaske (1989) Economics of Education, Pergamon Press, London.
6. George Pascharopoulos (1985)- Education for Development, Oxford University press, N.Y
7. Henderson, J.W, -Health economics and Policy
8. Jaganathmohanty- Modern Trends in Education
9. Klarman, H.E. (1965) Economics of Health, Columbia University Press, New York.
10. Panchamukhi, P.R.(1980) Economics of Health: A Trend Report, ICSSR Survey, Allied, New Delhi.
11. Tilak. J.E.G.(1989) Economics of Inequality in Education, Sage, New Delhi.
12. Sabu, P.J. and Raju, K.V. (2015): Higher Education in India – Towards Structural Transformation, Serials Publications, New Delhi.
13. Schultz, T.W- Economic value of education
14. World Bank (1983) The World Development Report: Investing in Health. Oxford University Press, New York

| Elective Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|----------------------------|--------------------|------------------------------|-----------------------|------------------------------|
| 04 | 16P4ECOTELF | ADVANCED ECONOMETRICS | 4 | 90 |

This course is designed to teach students econometric estimation and inference methods at an advanced level. At the end of this course, students will be able to apply modern econometric methods to economic problems and to follow theoretical and applied econometrics literature. This course also aims to equip students with skills to carry out independent applied research as well as to develop new econometric methods and software skills.

Module 1 Simultaneous Equation Models

The Nature of Simultaneous Equation Models- Problems of Simultaneous Equation Model- Bias of OLS Estimators (Inconsistency and Simultaneity bias.) –The Identification Problem- Rules of Identification- Order and Rank Conditions – Hausman Specification Test-Methods of Estimating Simultaneous Equation System- Structural, Reduced Form and Recursive Models -Estimation of Simultaneous Equation Model- Single Equation Model; Indirect Least Squares (ILS) – Instrumental Variable (IV); 2SLS, 3SLS, ML Methods

(Contact Hours: 30)

Module II- Time Series Econometrics

Stationarity, Basic Concepts- Unit Root,- Trend Stationary and Difference Stationary Process- Tests of Stationary- Dickey Fuller Test, Engle- Granger Test, Random Walk Model- Cointegration- Economic Application -Approaches to Economic Forecasting- AR, MR and ARIMA Modeling of Time Series Data- The Box Jenkin's Methodology- Vector Auto Regression- Problems with VAR Modeling- Applications

(Contact Hours: 25)

Module III- Panel data Regression Models

Panel Data- Estimation of Panel Data Regression Models Using the Fixed Effect Model, and the Random Effect Approach-Hausman Test

(Contact Hours: 15)

Module IV- Applications of Econometrics and Statistical Packages

Discriminate and Principal Component Analysis, Econometric Applications in India, Computer Software Operating System- Application Software and Packages- Data Entry and Statistical Analysis- using SPSS & STATA

(Contact Hours: 20)

References

1. Intrilligator, M. D (1980) *Econometric Methods, Techniques and Applications* Prentice Hall, Engle wood Cliffs, N. J
2. Dilip.M.Nachane (2006), *Econometrics: Theoretical Foundations and empirical Perspective*, Oxford University Press, New Delhi.
3. Gujarati, Damodar (2003), *Basic Econometrics*, 4th edition, McGraw Hill, New York.

4. Koutsoyiannis A (1977), *Theory of Economics*, Palgrave, New York.
5. Maddala G S (2002), *Introduction to Econometrics*, 3rd edition, John Wiley & Sons.
6. Ramanathan, Ramu(2002), *Introductory Econometrics with Applications*, Thomson Learning Inc, Singapore.
7. Johnston J(1984), *Econometric Methods*,3rd edition, McGraw Hill, New York.
8. Klein LR (1974) *A Text Book of Econometrics 2nd Ed.*, Prentice Hall , Engle wood Cliffs,
9. Kmenta, Jan(1976), *Elements of Econometrics*, 2nd ed. Macmillian, New York.
10. Mukherjee, Chandan, Howard white and Marc wuyts (1998) *Econometrics and Data Analysis for Developing Countries*, Rutledge New York.
11. Wooldridge, Jeffrey M(2002), *Introductory Econometrics*, Thomson, South Western, USA
12. Greene, William H(2004),, *Econometric Analysis*, 4thed,Prentice Hall , Engle wood Cliffs, N.
13. K.L.Krishna (Ed.) (1997), *Econometric Applications in India*, Oxford University Press, New Delhi.
14. Pindyck ,Robert S. and Daniel L. Rubinfeld (1997) *Econometric Models and Economic Forecasts*, M cGrawHill, 3-d Edition, Singapore.
15. Baltagi, B.H. (2005): *Econometric analysis of panel data* , John Wiley and Sons Ltd, New York.
16. Patricia E Gaynor and Rickey C Kirk Patrick (1994) : *Introduction to Time Series and Forecasting in Business and Economics*, Magraw Hill, New York
17. Amemiya T. (1985), *Advanced Econometrics*, Harvard University Press, Cambridge, Mass.

| Elective Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|---------------------|-------------|------------------------|----------------|-----------------------|
| 05 | 16P4ECOTELG | AGRICULTURAL ECONOMICS | 3 | 90 |

Objectives

1. To provide a detailed idea regarding the role and importance of agricultural economic development.
2. To provide a detailed treatment of issues in agricultural economics.
3. To familiarize students with policy issues relevant to agricultural economics.
4. To enable the students to analyze the agricultural issues using basic micro and macroeconomics concepts.

Module I- Agriculture and Economic Development

Nature and scope of agricultural economics- Role of agriculture in economic development - interdependence of agriculture and industry – Agricultural development, poverty and environment. (15 hrs)

Module II: Land Reforms and Land Policy

Cropping pattern - factors affecting cropping pattern. Land reforms in India - Green Revolution - experience in Mexico and India - Farm size and productivity debate in India -mechanization in Indian agriculture (13 hrs)

Module III: Agricultural Marketing and Credit

Agricultural marketing in India - regulated markets and cooperative marketing. Marketed and marketable surplus - food security in India – PDS - Revamped PDS and targeted PDS - Need and objectives of agricultural price policy.

Agricultural financing- rural savings and capital formation - Sources of agricultural credit – Institutional and non-institutional- Role of NABARD (18 hrs)

Module IV: Agricultural Production and Productivity

Farm management – Principles - Farm management decisions - principles of factor substitution - cost principles - opportunity cost principle - principles of comparative advantage -limitations of farm management. Agricultural production functions - Factor-product relationships, product-product relationships, Factor-factor relationships - supply response models (Cobweb and Nerlove models). (20 hrs)

Module V: Agricultural Growth in India

Recent trends in agricultural growth - Inter-regional variations in output and productivity, Shifts in cropping pattern; supply of inputs; irrigation, power, seed and fertilizers and the role of subsidies. Role and need for agro-based industries. Strategy of agricultural development and technological progress- Indigenous & Bio-technological practices and growth potential. Globalisation and problems and prospects of Indian agriculture; Impact of WTO on Indian agriculture. (25 hrs)

References

1. Bhaduri, A. (1984), *The Economic Structure of Backward Agriculture*, Macmillan, Delhi.
2. Bilgrami, S.A.R. (1996), *Agricultural Economics*, Himalaya Publishing House, Delhi.
3. Dantwala, M.L. et.al (1991), *Indian Agricultural Development Since Independence*, Oxford & IBH, New Delhi.
4. Government of India, *Economic Survey (Annual)*, New Delhi.
5. Gulati, A. and T. Kelly (1999), *Trade Liberalisation and Indian Agriculture*, Oxford University Press, New Delhi.
6. Kahlon, A.S. and Tyagi D.S. (1983), *Agriculture Price Policy in India*, Allied Publishers, New Delhi.
7. Reserve Bank of India, *Report on Currency and Finance (Annual)*, Mumbai.
8. Rudra, A. (1982), *Indian Agricultural Economics : Myths and Reality*, Allied Publishers, New Delhi.
9. Saini, G.R. (1979), *Farm Size, Resource Use Efficiency and Income Distribution*, Allied Publishers, New Delhi.
10. M Bazlul Karim, (1986) *The Green Revolution: An International Bibliography*, Greenwood Press
11. Rudra A, (1982) *Indian Agricultural Economics-Myth and realities*, Allied publishers, New Delhi.
12. Kent D Olson, (2003) *Farm Management: Principles and Strategies*, , Wiley-Blackwell.
13. Heady E O., Dillon, J.L. (1961) *Agricultural Production Function*, Iowa Iowa State University Press
14. Rao C Hanumantha, (1965) *Agricultural Production Function costs and returns in India* Bombay Asia Publishing House
15. Anwarul Hoda, (2002) *WTO agreement in Indian Agriculture*, Social Science Press.
16. Preeti R. Singh, (1998) *Management of Public Distribution System*, Anmol Publications, New Delhi.
17. S. S. Acharya (1987) *Agricultural Marketing in India*, Oxford and IBH Publishing Company.

| Core Course No. | Course Code | Course Title | No. of Credits | No. of Teaching hours |
|-----------------|-------------|--|----------------|-----------------------|
| 06 | 16P4ECOTELG | INDEPENDENT STUDY (Elective) | 3 | 90 |

Guidelines for Independent Study

Independent study is intended for students who have in mind a clearly defined area of study. Starting from this place of intention, students are encouraged to learn about our faculty's research interests in an effort to find a mentor who is currently working in that same area.

Prerequisites

To register in an independent study, students must have:

1. a cumulative GPA of 3.3 or higher,
2. a student of the fourth semester programme in Economics
3. Written consent of the faculty member who is supervising the study.

The procedures for undertaking an independent study are as follows:

Independent study is considered advanced research, going beyond the material presented in our elective economics offerings. Students should not view independent study projects as substituting for an existing offering. The students must submit a viable proposal to the faculty mentor and should get his approval before starting the project. The purpose of an independent study should be (a) to investigate topics not covered by regular courses in the curriculum, or (b) to explore the subject matter of regular courses in greater depth, or (c) to conduct an independent research project. Before approaching a faculty member to request an independent study, you should prepare a proposal that indicates the topic, describes your preparation for pursuing the topic, lists tentative readings that you expect to cover, and describes the nature of written work you plan to complete. With regard to preparation, you should have taken all of the courses that provide background for the topic you have chosen. The study proposal must define the focus of the independent study, specify the academic requirements, and outline the criteria that will be used to assign the student's grade. Generally, the student's academic requirement may consist of any of the following: a final paper, a compiled dataset and/or results of data analysis, computational output, an exam, or other output as agreed to with the faculty advisor of the independent study. Students are expected to write a major research report of approximately 30 - 40 pages in length.

The course is a 3 credit course consisting of 90 hours. The total marks for the course is 100. Out of 100, 50 marks is for project report or exam. The student is expected to prepare an article or paper for publication in a peer reviewed journal and 25 marks are assigned for the paper.

After assessing the performance of the student 25 marks will be given by the faculty supervisor as internal mark.