



**Maharaja's
College
Ernakulam**



Re-Accredited by NAAC with 'A Grade'
Affiliated to Mahatma Gandhi University
Centre of Excellence under Govt. of Kerala
Identified by UGC as College with Potential for Excellence

POST GRADUATE AND RESEARCH DEPARTMENT OF ECONOMICS



Estd. 1875

**Under Graduate Curriculum and Syllabus
(Choice Based Credit Semester System)**

B. A. Economics (Honours)

For 2020 Admission Onwards

Undergraduate Programme in Economics Honours

CURRICULUM

(For 2020-21 admission onwards)

Under Choice Based Credit System (CBCS)



Department of Economics
Maharaja's College, Ernakulam
(A Government Autonomous College)
Affiliated to Mahatma Gandhi University, Kottayam

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Board of Studies in Economics

Sl. No.	Name of Member	Designation
1	Dr. Sunilkumar S. Menon	Chairman, BoS Economics
2	Dr. (Prof.) S. Muraleedharan, Associate Professor and Head (Rtd), Department of Economics, Maharaja's College, Ernakulam	External Member
3	Dr. Sindhu K., Associate Professor and Head, Department of Economics, The Cochin College, Kochi	External Member
4	Dr. V. K. Vijayakumar Investment Strategist Geojit Financial Services Limited	External Member [Industry]
5	Shri Arun S. Babu Designated Partner Republic Learning	External Member [Alumni]
6	Shri Santhosh T. Varghese	Internal Member
7	Smt. Mary Ushes James	Internal Member
8	Smt. Ratnakumari K.A.	Internal Member
9	Dr. Nishanthi P.U.	Internal Member
10	Shri Manikandan K.	Internal Member
11	Dr. Anna Abraham Pachayil	Internal Member
12	Shri Rejith R.L.	Internal Member
13	Smt. Shiji K.	Internal Member
14	Smt. Jeena Mariot Xavier	Internal Member
15	Shri Georgekutty Cherian	Internal Member

Regulations for Undergraduate Programmes

Under Choice Based Credit System 2020

1. Title

- 1.1. These regulations shall be called “**Maharaja's College (Autonomous) Regulations for Under Graduate Programmes under Choice Based Credit System 2020**”

2. Scope

- 2.1. Applicable to all regular Under Graduate Programmes conducted by the Maharaja's College with effect from 2020 admissions
- 2.2. Medium of instruction is English except in the case of language courses other than English unless otherwise stated therein.
- 2.3. The provisions herein supersede all the existing regulations for the undergraduate programmes to the extent herein prescribed.

3. Definitions

- 3.1. ‘**Academic Week**’ is a unit of five working days in which the distribution of work is organized from day one to day five, with five contact hours of one hour duration on each day.
- 3.2. ‘**Choice Based Course**’ means a course that enables the students to familiarize the advanced areas of core course.
- 3.3. ‘**College Coordinator**’ is a teacher nominated by the College Council to co-ordinate the continuous evaluation undertaken by various departments within the college. He/she shall be nominated to the college level monitoring committee.
- 3.4. ‘**Common Course I**’ means a course that comes under the category of courses for English.
- 3.5. ‘**Common Course II**’ means additional language.
- 3.6. ‘**Complementary Course**’ means a course which would enrich the study of core courses.
- 3.7. ‘**Core course**’ means a course in the subject of specialization within a degree programme. It includes a course on environmental studies and human rights.
- 3.8. ‘**Course**’ means a portion of a subject to be taught and evaluated in a semester (similar to a paper under annual scheme).
- 3.9. ‘**Credit**’ is the numerical value assigned to a paper according to the relative importance of the syllabus of the programme.
- 3.10. ‘**Department**’ means any teaching department in a college.

- 3.11. 'Department Coordinator'** is a teacher nominated by a Department Council to co-ordinate the continuous evaluation undertaken in that department.
- 3.12. 'Department Council'** means the body of all teachers of a department in a college.
- 3.13. 'Faculty Advisor'** means a teacher from the parent department nominated by the Department Council, who will advise the student on academic matters.
- 3.14. Grace Marks** shall be awarded to candidates as per the University Orders issued from time to time.
- 3.15. 'Grade'** means a letter symbol (A, B, C, etc.), which indicates the broad level of performance of a student in a Paper/Course/ Semester/Programme.
- 3.16. 'Grade Point' (GP)** is the numerical indicator of the percentage of marks awarded to a student in a course.
- 3.17. 'Parent Department'** means the department which offers core course/courses within an undergraduate programme.
- 3.18. 'Programme'** means a three year programme of study and examinations spread over six semesters, the successful completion of which would lead to the award of a degree.
- 3.19. 'Semester'** means a term consisting of a minimum 90 working days, inclusive of tutorials, examination days and other academic activities within a period of six months.
- 3.20. 'Vocational Course'** (Skill Enhancement Course) means a course that enables the students to enhance their practical skills and ability to pursue a vocation in their subject of specialization.
- 4. Eligibility for Admission and Reservation of Seats**
- 4.1.** Eligibility for admissions and reservation of seats for various Undergraduate Programmes shall be according to the rules framed by the University/ State Government in this regard, from time to time.
- 5. Duration**
- 5.1.** The duration of U.G. programmes shall be 6 semesters.
- 5.2.** There shall be two Semesters in an academic year, the "ODD" semester commences in June and on completion, the "EVEN" Semester commences. There shall be two months' vacation during April and May.
- 5.3.** No student shall be allowed to complete the programme by attending more than 12 continuous semesters.
- 6. Registration**
- 6.1.** The strength of students for each programme shall be as per the existing orders, as approved by the University.
- 6.2.** Those students who possess the required minimum attendance during a semester and could not register for the semester examination are permitted to apply for

Notional Registration to the examinations concerned enabling them to get promoted to the next class.

7. Scheme and Syllabus

- 7.1. The U.G. programmes shall include **(a)** Common Courses I and II, **(b)** Core Course(s), **(c)** Complementary/Vocational Courses, and **(d)** Choice based course.
- 7.2. There shall be Two Choice Based course (Elective Course) in the fifth and sixth semesters. In the case of B.Com Programme there shall be an elective stream from third semester onwards.
- 7.3. Credit Transfer and Accumulation system can be adopted in the programme. Transfer of Credit consists of acknowledging, recognizing and accepting credits by an institution for programmes or courses completed at another institution. The Credit Transfer Scheme shall allow students pursuing a programme in one college to continue their education in another college without break.
- 7.4. A separate minimum of 30% marks each for internal and external (for both theory and practical) and aggregate minimum of 35% are required for a pass for a course. For a pass in a programme, a separate minimum of Grade D is required for all the individual courses. If a candidate secures F Grade for any one of the courses offered in a Semester/Programme, only F grade will be awarded for that Semester/Programme until he/she improves this to D Grade or above within the permitted period. The college shall allow credit transfer, subject to the approval of the concerned board of studies and Academic Council.
- 7.5. Students discontinued from previous regulations CBCSS 2016, can pursue their studies under the new regulation “Regulations for Under Graduate Programmes under Choice Based Credit System 2020” after obtaining readmission.
- 7.6. The practical examinations (external/internal) will be conducted only at the end of even semesters for all programmes. Special sanction shall be given for those programmes which need to conduct practical examinations at the end of odd semesters.

8. Programme Structure

Model I / II - BA/B.Sc.

a	Programme Duration	6 Semesters
b	Total Credits required for successful completion of the Programme	120
c	Credits required from Common Course I	22
d	Credits required from Common Course II	16
e	Credits required from Core course and Complementary courses including Project	74
f	Choice Based Core Course	8
g	Minimum attendance required	75%

Model I or Model II - B.Com

a	Programme Duration	6 Semesters
b	Total Credits required for successful completion of the Programme	120
c	Credits required from Common Course I	14
d	Credits required from Common Course II	8
e	Credits required from Core and Complementary/Vocational courses including Project	90
f	Choice Based Core Course	8
g	Minimum attendance required	75%

Model III - BA/B.Sc./B.Com

a	Programme Duration	6 Semesters
b	Total Credits required for successful completion of the Programme	120
c	Credits required from Common Course I	8
d	Credits required from Core + Complementary + Vocational Courses including Project	109
e	Open Course	3
f	Minimum attendance required	75%

BA Honours

a	Programme Duration	6 Semesters
b	Total Credits required for successful completion of the Programme	120
c	Credits required from Common Course I	16
d	Credits required from Common Course II	8
e	Credits required from Core + Complementary + Vocational Courses including Project	93
f	Choice Based Core Course	8
g	Minimum attendance required	75%

9. Examinations

9.1. The evaluation of each paper shall contain two parts:

- i. Internal or In-Semester Assessment (ISA)
- ii. External or End-Semester Assessment (ESA)

9.2. The internal to external assessment ratio shall be 1:4. Both internal and external marks are to be rounded to the next integer.

All papers (theory & practical), grades are given **on a 7-point scale** based on the total percentage of marks, **(ISA+ESA)** as given below:-

Percentage of Marks	Grade	Grade Point
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 Satisfactory	5
35 to below 45	D Pass	4
Below 35	F Failure	0
	Ab Absent	0

10. Credit Point and Credit Point Average

Credit Point (CP) of a paper is calculated using the formula:- $CP = C \times GP$, where C is the Credit and GP is the Grade point.

Semester Grade Point Average (SGPA) of a Semester is calculated using the formula:- $SGPA = TCP \div TC$, where TCP is the Total Credit Point of that semester.

Cumulative Grade Point Average (CGPA) is calculated using the formula:- $CGPA = TCP \div TC$, where TCP is the Total Credit Point of that programme.

Grade Point Average (GPA) of different category of courses viz. Common Course I, Common Course II, Complementary Course I, Complementary Course II, Vocational course, Core Course is calculated using the formula:- $GPA = TCP \div TC$, where TCP is the Total Credit Point of a category of course. TC is the total credit of that category of course.

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

GPA	Grade
9.5 and above	S Outstanding
8.5 to below 9.5	A+ Excellent
7.5 to below 8.5	A Very Good
6.5 to below 7.5	B+ Good
5.5 to below 6.5	B Above Average
4.5 to below 5.5	C Satisfactory
3.5 to below 4.5	D Pass
Below 3.5	F Failure

11. Marks Distribution for External and Internal Evaluations

The external theory examination of all semesters shall be conducted by the college at the end of each semester. Internal evaluation is to be done by continuous assessment. For all courses without practical total marks of external examination is 80 and total marks of internal evaluation is 20. Marks distribution for external and internal assessments and the components for internal evaluation with their marks are shown below:

11.1. For all courses without practical

- a) Marks of external examination : 80
- b) Marks of internal evaluation : 20

Components of Internal Evaluation of theory	Marks
Attendance	5
Assignment /Seminar/Viva	5
Test papers (2 X 5 = 10)(Marks of test paper shall be average)	10
Total	20

11.2. For all courses with practical total marks for external evaluation is 60 and total marks for internal evaluation is 15.

For all courses with practical

- a) Marks of external Examination : 60
- b) Marks of internal evaluation : 15

Components of Internal Evaluation	Marks
Attendance	5
Seminar/Assignments/Viva	2
Test paper (2x4)	8
Total	15

- c) For practical examinations total marks for external evaluation is 40 for internal evaluation is 10

Components of Internal Evaluation (Practicals)	Marks
Attendance	2
Test (1x4)	4
Record*	4
Total	10

*Marks awarded for Record should be related to number of experiments recorded

11.3. Project Evaluation

Components of Project evaluation	Marks
Internal Evaluation*	20
Dissertation (end semester)	50
Viva Voce (end Semester)	30

Components of Project Internal evaluation *

Components of internal evaluation	Marks
Relevance and Contents	5
Analysis and Presentation	5
Pre-submission presentation and viva	10

*Marks awarded for Record should be related to number of experiments recorded and duly signed by the teacher concerned in charge. All three components of internal assessments are mandatory.

For projects

- a) Marks of external evaluation : 80

b) Marks of internal evaluation : 20

Components of External Evaluation of Project	Marks
Dissertation (External)	50
Viva-Voce (External)	30
Total	80

*Marks for dissertation may include study tour report if proposed in the syllabus.

Components of internal Evaluation of Project	Marks
Punctuality	5
Experimentation/data collection	5
Knowledge	5
Report	5
Total	20

12. Attendance Evaluation for all papers

% of attendance	Marks
90 and above	5
85 – 89	4
80-84	3
76-79	2
75	1

(Decimals are to be rounded to the next higher whole number)

13. Assignments

Assignments are to be done from 1st to 4th Semesters. At least one assignment should be done in each semester for all courses.

14. Seminar/Viva

A student shall present a seminar in the 5th semester for each paper and appear for Viva-voce in the 6th semester for each course.

15. Internal Assessment Test Papers

Two test papers are to be conducted in each semester for each course. The evaluations of all components are to be published and are to be acknowledged by the candidates. All documents of internal assessments are to be kept in the college for one year and shall be made available for verification. The responsibility of evaluating the internal assessment is vested on the teacher(s), who teach the course.

15.1. Grievance Redressal Mechanism

Internal assessment shall not be used as a tool for personal or other type of vengeance. A student has all rights to know, how the teacher arrived at the marks. In order to address the grievance of students, 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: Department Level:

The Department cell chaired by the HOD, Department Coordinator, Faculty Advisor and Teacher in-charge as members.

Level 2: College level

A committee with the Principal as Chairman, College Coordinator, HOD of concerned Department and Department Coordinator as members.

The College Council shall nominate a Senior Teacher as coordinator of internal evaluations. This coordinator shall make arrangements for giving awareness of the internal evaluation components to students immediately after commencement of I semester

15.2. The internal evaluation marks/grades in the prescribed format should reach the Controller of Examination before the 4th week of October and March in every academic year.

16. External Examination

The external theory examination of all semesters shall be conducted by the Controller of Examinations at the end of each semester.

16.1. Students having a minimum of 75% average attendance for all the courses only can register for the examination. Condonation of shortage of attendance to a maximum of 10 days in a semester subject to a maximum of 2 times during the whole period of the programme may be granted by the subcommittee of the college council on valid grounds. This condonation shall not be counted for internal assessment. Benefit of attendance may be granted to students attending University/College union/Co-curricular activities by treating them as present for the days of absence, on production of participation/attendance certificates, within one week, from competent authorities and endorsed by the head of the institution. This is limited to a maximum of 10 days per semester and this benefit shall be considered for internal assessment also. Those students who are not eligible even with condonation of shortage of attendance shall repeat the **semester** along with the next batch after obtaining readmission upon the recommendations of the head of the department and college council

16.2. All students are to do a **project in the area of core course**. This project can be done individually or in groups (not more than three students) for all subjects which may be carried out in or outside the campus. The projects are to be identified during the V semester of the programme with the help of the supervising teacher. The report of the project in duplicate is to be submitted to the department at the sixth semester and are to be produced before the examiners appointed by the College.

16.3. There shall be supplementary exams only for fifth semester. Notionally registered candidates can also apply for the said supplementary examinations. For reappearance/ improvement for other semesters the students can appear along with the next batch.

16.4. A student who registers his/her name for the external exam for a semester will be eligible for promotion to the next semester.

- 16.5.** A student who has completed the entire curriculum requirement, but could not register for the Semester examination can register notionally, for getting eligibility for promotion to the next semester.
- 16.6.** A candidate who has not secured minimum marks/credits in internal examinations can re-do the same registering along with the external examination for the same semester, subsequently. **There shall be no improvement for internal evaluation.**
- 17. All courses shall have unique alphanumeric code.**
- 18. Pattern of Questions**

Questions shall be set to assess knowledge acquired, standard and 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. She/he 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 Papers

(a) Without practical

Sl. No.	Pattern	Marks	Choice of questions	Total marks
1	Short Answer/problem type	2	10/12	20
2	Short essay/problem	5	6/9	30
3	Essay/problem	15	2/4	30
Total				80

(b) With practical

Sl. No.	Pattern	Marks	Choice of questions	Total marks
1	Short Answer/problem type	1	10/12	10
2	Short essay/problem	5	6/9	30
3	Essay/problem	10	2/4	20
Total				60

Each BOS shall specify the length of the answers in terms of number of words. Pattern of questions for external examination of practical papers will be decided by the concerned Board of Studies/Expert Committees.

19. Mark Cum Grade Card

The College shall issue to the students a MARK CUM GRADE CARD on completion of the programme.

Note: A separate minimum of 30% marks each for internal and external (for both theory and practical) and aggregate minimum of 35% are required for a pass for a paper. For a pass in a programme, a separate minimum of **Grade D** is required for all the individual papers. If a candidate secures **F Grade** for any one of the paper offered

in a Semester/Programme **only F grade** will be awarded for that Semester/Programme until he/she improves this to **D GRADE** or above within the permitted period.

20. There shall be 2 level monitoring committees for the successful conduct of the scheme. They are -

- 1.** Department Level Monitoring Committee (DLMC), comprising HOD and two senior- most teachers as members.
- 2.** College Level Monitoring Committee (CLMC), comprising Principal, Secretary Academic Council, College Council secretary and A.A/Superintendent as members.

Programme Structure

	Course Code	Course Title	Credit	Marks			Weekly Contact Hours
				Int.	Ext.	Total	
Semester I		Common Course: English	5	20	80	100	5
	ECH1COR01	Microeconomics (Applied) I	5	20	80	100	6
	ECH1COR02	Macroeconomics (Applied) I	4	20	80	100	6
	ECH1COR03	Statistical Methods in Economics I	4	20	80	100	6
	ECH1COR04	Mathematics for Economics I	4	20	80	100	6
		TOTAL	22			500	29
Semester II		Common Course: English	5	20	80	100	5
	ECH2COR05	Microeconomics (Applied) II	5	20	80	100	6
	ECH2COR06	Macroeconomics (Applied) II	4	20	80	100	6
	ECH2COR07	Statistical Methods in Economics II	4	20	80	100	6
	ECH2COR08	Mathematics for Economics II	4	20	80	100	6
		TOTAL	22			500	29
Semester III	ECH3COR09	Introduction to Econometrics	4	20	80	100	6
	ECH3COR10	Development Economics	4	20	80	100	6
	ECH3COR11	International Trade: Theory and Policy	4	20	80	100	6
	ECH3COR12	Public Economics	4	20	80	100	6
	ECH3COR13	Monetary Economics	4	20	80	100	6
		TOTAL	20			500	30
Semester IV	ECH4COR14	Advanced Econometrics	4	20	80	100	6
	ECH4COR15	Operations Research	4	20	80	100	6
	ECH4COR16	Software Packages for Analysis of Data	4	20	80	100	6
	ECH4COR17	International Finance and Trade Regulatory System	4	20	80	100	6
	ECH4COR18	Analytical Indian Economy	4	20	80	100	6
		TOTAL	20			500	30
Semester V	ECH5COR19	Game Theory	4	20	80	100	6
	ECH5COR20	Research Methodology	4	20	80	100	6
	ECH5COR21	Introduction to Behavioral Economics	3	20	80	100	6
	ECH5COR22	Indian Financial System	3	20	80	100	6
	ECH5ELE01	Elective I	3	20	80	100	6
		Internship Programme (14 days)					
		TOTAL	17			500	30
Semester VI	ECH6COR23	General Equilibrium and Welfare Economics	4	20	80	100	6
	ECH6COR24	Fundamentals of Environmental Economics	4	20	80	100	5
	ECH6COR25	Health Economics	3	20	80	100	5
	ECH5ELE02	Elective II	3	20	80	100	5
	ECH5ELE03	Elective III	3	20	80	100	4
		Dissertation & Viva-voce	2				
		TOTAL	19			500	25

Programme Objectives

After the wide spread introduction of liberalisation and trade regime, it is imperative that a discipline like Economics has to undertake the challenges of the emerging global scenario. Many conventional tools in this discipline introduced to the students are unequipped or out of date. In this context, it is either necessary to restructure the existing programmes in arts & science colleges or to introduce new course so as to meet new challenges. It seems that an alloy of the new approaches in Economics plus certain courses of business schools is appropriate to enable the students to meet the changing demand in the labour market. This proposed programme, is designed to have a better coverage at UG level with a professional touch. Its duration is three years (six semesters) which is comparable with any professional programme in the country.

Syllabus - Semester I

Course Code	Course	Weekly Contact Hours
	Common Course: English	5
ECH1COR01	Microeconomics (Applied) I	6
ECH1COR02	Macroeconomics (Applied) I	6
ECH1COR03	Statistical Methods in Economics I	6
ECH1COR04	Mathematics for Economics I	6

ECH1COR01 – Microeconomics (Applied) I

No.of credits: 5

No.of Hours: 108

Learning objective

The course is intended to provide the students in an understanding of the concepts and methods of microeconomics. 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 and to introduce them to practical applications of microeconomics.

Course Outcome

Help students to make economic choices in a world of scarce resources.

Enable students to connect economic theories to their day today life.

Students learn to evaluate alternative economic policies.

Module I - Introduction

The Basic Micro- Economic Problem of Scarcity and Choice- Market and Price Mechanism - Constructing a Model, optimization and Equilibrium -The Demand Curve- The Supply Curve - Market Equilibrium (numerical problems) – Elasticity of demand- elasticity of supply- Comparative Statics - Disturbances to equilibrium- Applications of demand and supply: price rationing, price floors, consumer surplus.

Module II - Consumer Theory

Consumer choice- perfect substitutes- substitutes and complements- consumer preferences- cardinal utility- equilibrium- ordinal utility- indifference curves nature types - budget constraint – equilibrium- corner solutions- consumer's surplus. Price effect- decomposition of price effect into income effect and substitution effect- for normal goods, inferior goods and Giffen goods- Hicks's method – Slutsky's method- Revealed Preference theory- Consumer behavior under Risk and Uncertainty: Describing risk, preference towards risk, ways of reducing risk.

Module III - Production and Costs

Production: Behaviour of profit maximising firms, production process, production functions: Cobb Douglas, CES and Fixed coefficient type. Law of variable proportions, choice of technology, isoquant and isocost lines, cost minimizing equilibrium condition. Producer's surplus

Costs: costs in the short run, costs in the long run, revenue and profit maximizations, minimizing losses, short run industry supply curve, economies and diseconomies of scale, long run adjustments, modern theory of cost, excess capacity, reserve capacity.

Module IV - Markets

Classification of Markets. Various types of Markets.- Perfect competition- features equilibrium- **Monopoly:** Measurement of Monopoly power. Equilibrium of a Firm under Monopoly. - Price Discrimination under Monopoly, different types. Comparison of monopoly

and perfectly competitive market outcomes. Regulation of Monopoly Power. **Imperfect Competition:** Monopolistic Competition, Price and Non-price competition, Equilibrium.

Product Differentiation, Selling Costs and Excess Capacity.

References

1. Varian, Hal (1996), Intermediate Microeconomics, W.W. Norton and Company, New York.
2. Hirschleifer J and A. Glazer (1997), Price Theory and Applications, Prentice Hall of India, New Delhi.
3. Stigler, G (1996), Theory of Price, Prentice Hall of India, New Delhi.
4. Sen, A. (1999), Micro Economics: Theory and Applications, Oxford University Press, New Delhi.
5. Kreps, David, M (1990), A Course in Microeconomic Theory, Princeton University Press.
6. Koutsyannis A., Microeconomics
7. Andreu Mas Collé, Michael D. Whinston and Jerry R. Green, Micro Economic Theory, OUP

Blueprint

Module	Hours allotted	Part A 2 Mark 10/12	Part B 5 Marks 6/9	Part D 15 Marks 2/4	Total questions
I	24	3	2	1	6
II	24	3	2	1	6
III	30	3	2	1	6
IV	30	3	3	1	7
Total	108	12	9	4	25

ECH1COR02 - Macroeconomics (Applied) I

No.of credits : 5 No.of Hours : 108

Learning objective

The purpose of this paper is to provide an overview of the economy and to understand how an aggregate economy works. It explains the macroeconomic variables that are crucial for understanding the development of an economy.

Course Outcome

Using employment and national income statistics students will be able to describe and analyze the economy in quantitative terms.

Students will be able to describe the contemporary banking and monetary system, and analyze the role of money, credit, and Federal Reserve monetary policy.

Outline the role of comparative advantage in exchange. Describe the role of international trade and finance in domestic economic activity.

Module I - Introduction to macro economics

Introduction- subject matter – macroeconomic variables –static dynamic, equilibrium, disequilibrium stocks, flow- Ideological issues (concerning government intervention v/s free-market policies) (10 hours)

Module II - The National Accounts

National income concept- accounting procedure CSO estimation - concepts- Other macroeconomic aggregates-Identities in NI accounting-Real and nominal GDP-GDP, economic development and welfare-Green GNP-Gross National Happiness (15 hours)

Module III - Theoretical foundations of macroeconomics

The classical school – postulates of classical school- classical model with and without savings and dynamics in the model- Says Law- the quantity theory and its restatement by Friedman - The classical dichotomy-Homogeneity postulate-Say's Identity and Equality (25 hours)

Module IV - The simple Keynesian model

The simple Keynesian model-The principle of effective demand and Keynesian economics- - The Keynesian cross model of income determination up to four sectors-multiplier and its dynamism- Consumption function- its attributes - hypotheses- inter temporal choice (30 hours)

References

1. N. Gregory Mankiw, Macroeconomics, Worth Publishers 7th Edition 2010
2. Richard T. Froyen Macroeconomics, Pearson Publishers, 2nd edition 2005
3. Nicoli Nattrass and G. Visakh Varma —Macroeconomics Simplified- Understanding Keynesian and Neoclassical Macroeconomic systems|| , Sage Publishers, New Delhi
4. Vanitha Agarwal, Macro Economics, Pearson Publishers

Blueprint

Module	Hours allotted	Part A 2 Mark 10/12	Part B 5 Marks 6/9	Part D 15 Marks 2/4	Total questions
I	18	2	1	1	4
II	20	2	2	1	5
III	35	4	3	1	8
IV	35	4	3	1	8
Total	108	12	9	4	25

ECH1COR03 – Statistical Methods in Economics I**Course Outcome**

1. Students acquire an understanding about different kinds of data, their analysis and representation. They could also apply various sampling techniques in real life situations.
2. The students become acquainted with the fundamental properties of data like central tendency, dispersion, skewness and kurtosis. With these they could summarise a large mass of data to a meaningful form.
3. Students could understand the bivariate data, nature and degree of their relationship and their analysis. They become familiar with the method of curve fitting for the bivariate data, correlation and regression.
4. The students are exposed to statistical tools like index numbers which are very much useful to understand the general pulse of economy.

Module I

Introduction to Statistics, Population and Sample, Collection of Data, Various methods of data collection, Census and Sampling, Methods of Sampling- Simple Random Sampling; Stratified Sampling, Systematic Sampling. Types of data, Classification and Tabulation, Diagrams and Graphs - Bar diagram, Pie diagram, histogram and ogives, Lorenz curve.

Module II

Measures of Central Tendency – Mean; Median; Mode, Partition values (Concepts only), Measures of dispersion – Range; Standard deviation, Coefficient of variation, Moments, Skewness-Pearson and Moment measures, Kurtosis-Moment measure.

Module III

Correlation – Scatter diagram, Types of correlation, Coefficient of correlation – Karl Pearson's and Spearman's rank correlation, Regression – regression lines and regression coefficients. Use of Computer for the computation of correlation and regression.

Module IV

Index Numbers – Definition and uses, Simple Index Numbers; Weighted Index Numbers – Laspeyres's, Paasche's and Fisher's Ideal Index Numbers, Cost of Living Index Numbers- Family Budget Method, Aggregate Expenditure Method. Time series analysis – components of time series, Measurement of trend using graphical, semi-average, moving average, least-square methods.

Note: Review exercises should be based on the recommended books. Each module should have at least two assignments.

References

1. David Freedman, Robert Pisani, Roger Purves and Ani Adhikari: Statistics, (Second Edition) Norton.
2. Astana : Statistics (With The Use Of SPSS)

3. Gupta, S P : Statistics Methods, Sultan Chand & Sons
4. Douglas A. Lind, William G. Marchal, Samuel A. Wathen: Statistical Techniques in Business and Economics (15th Edition), McGraw Hill.

Blue Print

Module	Hrs Allotted	Part A 2 Mark 10/12	Part B 5 Marks 6/9	Part C 15 Marks 2/4	Total questions
I	30	3	3	1	7
II	30	3	3	1	7
III	20	3	2	1	6
IV	18	3	1	1	5

ECH1COR04– Mathematics for Economics I**Course Objectives**

To prepare students to use a wide range of mathematical techniques used in economic analysis, to impart an initial understanding of economic modelling to develop necessary problem solving and analytical and essential mathematical skills to read and understand current journals and articles in economics.

Module 1

Elementary aspects of logic-propositions, implications, necessary and sufficient conditions. Mathematical proofs-direct, indirect and proof by contradiction. Deductive and inductive reasoning (concepts only). Set theory-set membership-set operations-Venn diagrams. Mathematical modeling in economics-two dimensional model of consumer choice and multi-dimensional model of consumer choice

Module II

Calculus- functions-increasing and decreasing functions-linear functions-slope of a linear function-economic interpretation of the slope- non-linear functions. Differentiable and non-differentiable functions-continuous and discontinuous functions. Limits and continuity. Derivatives-rules-product rule-quotient rule-chain rule- differentiation of exponential, logarithmic and implicit functions.

Module III

Second order derivatives-convex, concave, point of inflexion, maxima-minima-partial differentiation-first order-second order –applications -production functions-MRTS-cost functions. Integration-power rule- exponential function-by algebraic substitution-definite integral-area under a curve-consumer and producer surplus-income distribution-integration by parts

Module IV

Linear algebra-systems of linear equations-vectors- geometric representation- vector operations- scalar product- matrix operations-multiplication-transpose-determinants of order 2 and 3- cofactors-inverse-cramers rule- input-output model -IS-LM model.

References

1. R G D Allen, Mathematical Analysis for Economics
2. Chiang A C ,Fundamental methods of mathematical economics, Mcgraw Hill
3. Henderson and Quandt, Micro economic theory: a mathematical approach
4. Simon and Blume, Mathematics for Economists :Viva –Norton student edition
5. Sydsaeter and Hammond, Mathematics for Economic Analysis, Pearson
6. Hamdy Taha, Operations Research
7. Dowling, Mathematical Economics, Schaum Series.
8. Avinash Dixit, (1990), Optimization in Economic Theory, (2nd edition)

Additional Readings

1. Bertrand Russel (2012), Principles of Mathematics, Rutledge (Special Indian edition)
2. Davis and Hersh (1998), The Mathematical Experience, Mariner Books.

Syllabus - Semester II

Course Code	Course	Weekly Contact Hours
	Common Course: English	5
ECH2COR05	Microeconomics (Applied) II	6
ECH2COR06	Macroeconomics (Applied) II	6
ECH2COR07	Statistical Methods in Economics II	6
ECH2COR08	Mathematics for Economics II	6

ECH2COR05 - Microeconomics (Applied) II

No.of credits: 5, No.of Hours: 108

Learning objective

The course is intended to provide the students in an understanding of the concepts and methods of microeconomics. 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 and to introduce them to practical applications of microeconomics.

Course Outcome

Students will understand the working and pricing in factor markets

Students can critically analyse the theoretical development in welfare economics and information asymmetries

Students can understand the economics of public sector

Module I - Oligopoly

Basic market structure, Non-collusive oligopoly (Models of Cournot, Bertrand, Stackelberg, Chamberlin and Sweezy) Collusive oligopoly, Cartels: Price and Output Determination, Simple games of complete information, Concept of Nash equilibrium.

Module II - Theory of Distribution and factor pricing

Theory of Distribution and factor pricing - demand supply approach- perfect competition, Imperfect competition- Monopsony – bilateral monopoly – Unionised labour - Product Exhaustion theorem. (Euler's Theorem) - Modern theory of rent – quasi-rent - wage differentials - collective bargaining-interest - classical theory of profit - risk & uncertainty - innovation.

Module III - Welfare Economics

Welfare economics –Criteria of social welfare -Pigou's Welfare Theorem - Pareto Optimality - Social Welfare Function, Compensation Criteria. Arrow's Impossibility Theorem.- Sen's capability index

Module IV - Market Failure

Concept of externalities- Unintended consequences – shadow pricing – Role of Government – Theory of Second Best – Information asymmetry – Moral hazard – Adverse selection – signaling - Principal agent problem – market for lemons - Property rights - Production Externalities.

References

1. Varian, Hal (1996): Intermediate Microeconomics, W.W. Norton and Company, New York.
2. Hirschleifer J and A. Glazer (1997): Price Theory and Applications, Prentice Hall of India, New Delhi.
3. Stigler, G (1996): Theory of Price, Prentice Hall of India, New Delhi.

4. Sen, A. (1999): Micro Economics: Theory and Applications, Oxford University Press, New Delhi.
5. Kreps, David, M (1990): A Course in Microeconomic Theory, Princeton University Press.
6. Koutsyannis, A., Microeconomics
7. Andreu Mas Collé, Michael D. Whinston and Jerry R. Green Micro Economic Theory OUP
8. Microeconomics principles and policy, Baumol and Blinder

Blueprint

Module	Hours Allotted	Part A (2 mark 10/12)	Part B (5 marks 6/9)	Part C (15 marks 2/4)	Total Questions
I	30	3	3	1	7
II	30	3	2	1	6
III	24	3	2	1	6
IV	24	3	2	1	6
Total	108	12	9	4	25

ECH2COR06 – Macroeconomics (Applied) II**Learning outcome**

After a careful study of this course the student should get a clear understanding of the theoretical ideas behind Keynesian Economics, it will help them to understand the working of an economy and to understand the post Keynesian developments in macroeconomics

Module I - Investment

Investment – determinants of investment- accelerator theory of investment- investment theories- classical, neoclassical and Keynesian theory of investment -Inflation and interest rates-The structure of interest rates-Inflation-indexed bonds

Module II - ISLM Model

The ISLM model up to three sectors - Fiscal and monetary policy in the ISLM model - Numerical exercises.

Module III - Inflation and Unemployment

Inflation- inflationary gap – inflation and unemployment- Phillips curve- Long run Phillips curve- modified Phillips curve by Tobin- Okun's law- sacrifice ratio - -Business cycle- multiplier accelerator theory – political business cycle theories.

Module IV - Macroeconomics after Keynes

Monetarism- New classical macroeconomics-Supply side economics-Real business cycle theory- Neo-Keynesianism- New Keynesian macroeconomics- -Endogenous growth model (main postulates alone may be discussed)

References

1. N. Gregory Mankiw, Macroeconomics, Worth Publishers 7th edition 2010
2. Richard T. Froyen, Macroeconomics, Pearson Publishers, 2nd edition 2005
3. Nicoli Nattrass and G. Visakh Varma, Macroeconomics Simplified -Understanding Keynesian and Neoclassical Macroeconomic systems, Sage Publishers, New Delhi
4. Vanitha Agarwal, Macro Economics, Pearson Publishers

Blueprint

Module	Hours Allotted	Part A (2 mark 10/12)	Part B (5 marks 6/9)	Part C (15 marks 2/4)	Total Questions
I	25	3	2	1	6
II	30	2	3	1	6
III	28	4	2	1	7
IV	25	3	2	1	6
Total	108	12	9	4	25

ECH2COR07 – Statistical Methods in Economics II**Course Outcome**

Apart from the general objective stated in statistics-I, this course enables students to know the various aspects of probability distributions and tests of significance.

Module I

Probability Concepts, Approaches to Probability - Classical, Statistical and Axiomatic, Addition theorem, Conditional Probability, Independence of events, Multiplication theorem, Baye's Theorem and its applications.

Module II

Random Variables -Discrete and Continuous, Probability Distributions, Expected value, Theoretical Distributions: Binominal, Poisson and Normal. Central limit theorem and its applications.

Module III

Testing of hypothesis -null and alternative hypothesis, Type I and Type II errors, Critical Region, Significance level, P-value, One sample Tests – test concerning population mean and proportion, Two sample Tests – test concerning population means (dependent and independent samples).

Module IV

F-test and Analysis of Variance (one-way ANOVA, concept only), Test for significance of correlation coefficient, Chi-Square test for independence of attributes.

References

1. Douglas A. Lind, William G. Marchal, Samuel A. Wathen: Statistical Techniques in Business and Economics (15th Edition), McGraw Hill.
2. David Freedman, Robert Pisani, Roger Purves and Ani Adhikari: Statistics, (Second Edition) Norton.
3. Gupta, S P : Statistics Methods, Sultan Chand & Sons

Blue Print

Module	Hrs Allotted	Part A 2 Mark 10/12	Part B 5 Marks 6/9	Part C 10 Marks 2/4	Total questions
I	30	3	3	1	7
II	30	3	3	1	7
III	20	3	2	1	6
IV	18	3	1	1	5

ECH2COR08 - Mathematics for Economics II**Module I**

Linear algebra-linear independence-rank of a matrix-Eigen values-diagonalization

Module II

Functions with two or more variables-geometric representation-Surfaces in 3D space-budget plane –partial derivatives with two variables-applications-production functions

Module III

Optimization –convex and concave functions-quasi convex and quasi concavity (concepts only) - unconstrained optimization-constrained optimization-Lagrange multiplier method-envelope theorem (idea only)

Module IV

Difference equations- first order and second order equation with constant coefficients and differential equations-first order and second order equations-separable- with constant coefficients-applications-growth model-multiplier-accelerator interaction. Theory of games-simple and mixed strategy-saddle point-zero sum game-Nash equilibrium

References

1. R G D Allen, Mathematical Analysis for Economics
2. Chiang A C ,Fundamental methods of mathematical economics, Mcgraw Hill
3. Henderson and Quandt, Micro economic theory: a mathematical approach
4. Simon and Blume, Mathematics for Economists :Viva –Norton student edition
5. Sydsaeter and Hammond, Mathematics for Economic Analysis, Pearson
6. Hamdy Taha, Operations Research
7. Dowling, Mathematical Economics, Schaum Series.
8. Avinash Dixit, (1990), Optimization in Economic Theory, (2nd edition)

Additional Readings

1. Bertrand Russel (2012), Principles of Mathematics, Rutledge (special Indian edition)
2. Davis and Hersh (1998), The Mathematical Experience, Mariner Books.

Syllabus - Semester III

Course Code	Course	Weekly Contact Hours
ECH3COR09	Introduction to Econometrics	6
ECH3COR10	Development Economics	6
ECH3COR11	International Trade: Theory and Policy	6
ECH3COR12	Public Economics	6
ECH3COR13	Monetary Economics	6

ECH3COR09 - Introduction to Econometrics

Learning objectives

To give the students an understanding of the meaning and methodology of econometrics

To enable to students to understand and apply the technique of linear regression

To enable to students to understand hypothesis testing, estimation, of and the importance of distribution of error term

Course Outcome

Students will be able to understand the meaning and methodology of Econometrics

Students will understand and acquire skills to apply linear regression technique

Students will understand hypothesis testing, estimation and importance of distribution of error term

Students will understand the issues in regression analysis while relaxing the CLRM assumptions

Module I - Introduction and Two Variable Regression Analysis

Econometrics -Meaning, methodology and applications CLRM – PRF – Concept of linearity - Stochastic specification - Significance of stochastic disturbance term Estimation of PRF: SRF – method of OLS – Deviation form - properties of estimators – CLRM assumptions – Gauss-Markov theorem - Goodness of fit-ANOVA. Hypothesis testing approaches: Confidence interval-Test of Significance-Problem of prediction: Mean and Individual-Reporting and evaluation of regression results.

Module II - Multiple Regression Analysis

Matrix approach: General k variable model-Estimation and assumptions-Variance-Covariance matrix-Gauss-Markov Theorem Proofs- R^2 , R and Adjusted R^2 .

Hypothesis testing: Testing the significance of individual regression co-efficients: t test- Testing the overall significance: F test-Testing the equality of two regression co-efficients- Testing linear equality restrictions-Restricted least squares-Prediction.

Module III - Extensions to Two Variable Regression Model

Regression through origin-Scaling and units of measurement-Regression on standardized variables-Functional forms of regression models-Log-linear, semi-log and reciprocal-Choice of functional form-Additive versus multiplicative error term.

Module IV - Relaxing assumptions of CLRM

Multicollinearity, Heteroscedasticity, Autocorrelation, Specification bias: Causes, Consequences, Detection and Remedies

References

1. Gujarathi, D (2003) Basic Econometrics, 4th Edition, New York: McGraw Hill
2. Wooldridge, Jeffrey M, Introductory Econometrics, (2002) Thomson, South Western, USA

Additional Readings

1. Gujarati, Damodar (2011), Econometrics by example, I edition, Palgrave- McMillan.
2. Stock, James and Watson, mark(2012) Introduction to econometrics, II edition, Pearson, Addison Wesley
3. Brooks, Chris (2012), Introductory Econometrics for finance II edition, Cambridge
4. Koutsoyiannis A (1977), Theory of Econometrics, Palgrave, New York.
5. Maddala G S (2002), Introduction to Econometrics, 3rd edition, John Wiley & Sons, New York`
6. Ramanathan, Ramu (2002), Introductory Econometrics with Applications, Thomson Learning Inc, Singapore.
7. Intrilligator, M. D (1980)Econometric Methods, Techniques and Applications Prentice Hall,
8. Engle wood Cliffs, N. J Klein LR (1974) A Text Book of Econometrics 2nd Ed., Prentice Hall, Engle wood Cliffs, N. J
9. Kmenta, Jan (1976), Elements of Econometrics, 2nd ed. Macmillian, New York.
10. Mukherijee, Chandan, Howard white and Marcwuyts (1998) Econometrics and Data Analysis for Developing Countries, Rutledge New York.

Blueprint

Module	Hours allotted	Part A 2 Mark 10/12	Part B 5 Marks 6/9	Part D 15 Marks 2/4	Total questions
I	35	3	3	1	7
II	35	3	2	1	6
III	20	3	2	1	6
IV	18	3	2	1	6
Total	108	12	9	4	25

ECH3COR10 - Development Economics**Learning objectives**

To enable the students to understand the theories and strategies of growth and development

To impart knowledge about the issues relating to sustainable development, environmental protection and pollution control measures

Course Outcome

Demonstrate the central themes and issues of economic development.

Analyse empirical evidence on the patterns of economic development

Module I - Economic Growth and Development

Meaning and indicators of economic growth and development- GNP- Per capita income- PQLI-HDI-HPI- Gender Related Development Indices - Sen's capabilities approach- Features of underdevelopment- Factors affecting economic development (capital, labour and technology)- Inequality in income distribution – Kuznets Inverted U hypothesis – Lorenz Curve – Gini Coefficient - Development Gap –Development as Freedom - Measuring poverty – Characteristics of underdevelopment – Challenges of development

Module II - Theories of Economic Growth and Development - I

Classical Theories: Adam Smith, Ricardo and Malthus – Theories of Marx, Schumpeter - Stage theory of Rostow – Harrod –Domar model – Lewis theory – Fei-Ranis model – Todaro model -

Module III - Theories of Economic Growth and Development - II

The vicious circle of poverty, Low level equilibrium trap, Critical minimum effort thesis, Balanced versus unbalanced growth strategy, Big push – Concept of dualism – Social, Technological, Financial and Geographical – Myrdal – Backwash and spread effect – Circular and cumulative causation – International inequality – Centre Periphery thesis – Theories of dependence.

Module IV - Human Resources and Development

Malthusian theory of population- Theory of demographic transition- Concept of intellectual capital - Population growth and economic development- – Demographic dividend – Concept of optimum population – Cost and benefits of population growth – education and investment in human capital – gender gap in development.

References

1. Todaro and Smith Economic Development, Pearson Education, New Delhi (recent edition)
2. Thirlwall, Growth and Development with special reference to Developing Countries. (recent edition) Palgrave Mc Millan, New Delhi.
3. Benjamin Higgins (1968), Economic Development, (recent edition) Universal book stall, New Delhi

4. Meir, G.M. (2007), Leading Issues in Economic Development, Oxford University press, New Delhi.

Blueprint

Module	Hours allotted	Part A 2 Mark 10/12	Part B 5 Marks 6/9	Part D 15 Marks 2/4	Total questions
I	24	3	2	1	6
II	30	3	3	1	7
III	30	4	2	1	7
IV	24	2	2	1	5
Total	108	12	9	4	25

ECH3COR11 - International Trade: Theory & Policy**Learning objectives**

Economic relationship among the countries is increasing day by day, especially in terms of trade. There are many theoretical and practical explanations for this phenomenon. The students after studying this Programme, will get better comprehension about why trade, what are the gains from trade and what are the major policy instruments executed in controlling trade.

Course Outcome

Students develop a better understanding the about the causes, importance, of international trade

Students get an idea about the gains from trade and the major policy instruments used in International Trade

Students also learned the impact of International Trade on Domestic income distribution

Module I

What is international economics about? -overview of world trade, Current international economic problems, Sovereignty and trade- mercantilist and classical views on trade in a single commodity, Trade based on absolute advantage and comparative advantage model-gains from trade, Comparative advantage and opportunity costs-opportunity cost theory, Modified Ricardian model — offer curves and Terms of trade -Partial and general equilibrium analysis.

Module II

The HO Theorem: Production and Trade in HO Model- Factors price equalisation Theorem – Leontief paradox--- many countries and goods – Natural resources, skills and human capital-modified HO model, PPF with increasing cost-community indifference curve-equilibrium in isolation- basis of trade and gains from trade with increasing cost- Factor growth and output-The Rybczynsky Theorem, Stolper-Samuelson Theorem – Metzlers paradox.

Module III

Intra industry trade, Trade between Monopolised National Markets – Trade with Monopolistic competition –Innovation and trade- Technical progress- Technology gap model and product cycle model – factors movement, capital movement in the modified Ricardian model– Outsourcing and Multinational enterprises.

Module IV

Trade Policy: Evolution of trade policy-instruments of Trade Policy in partial and general equilibrium – Nominal and effective tariff – tariff and the distribution of the gain from trade – tariffs and the distribution of domestic Income – Tariffs & domestic Distribution – Non – Tariff barriers –India's trade policy.

References

1. Dominick Salvatore : International Economics Eighth Edition Wiley & Sons , 2004)

2. Peter B Kenen: The international Economy (3rd Edition) 1996, Cambridge University Press.
3. BO Sodersten and Geogffrey Reed: International Economics (3rd Edition) 1994, The Macmillan Press Ltd.
4. Paul Krugman, International Economics Mourice Obstfeld (Second Edition) Harper Collin Publishes, 1981

Blueprint

Module	Hours allotted	Part A 2 Mark 10/12	Part B 5 Marks 6/9	Part D 15 Marks 2/4	Total questions
I	30	2	2	2	6
II	30	3	2	2	7
III	24	4	2	0	6
IV	24	3	3	0	6
Total	108	12	9	4	25

ECH3COR12 – Public Economics**Learning objectives**

The purpose of this course is to give an understanding of the role of state in fostering the economic activities via budget and fiscal policies. The course enables the students to have a basic understanding about the important theories and concepts involved in public expenditure, public revenue, public debt and budgets. This course enables the students to understand the various financial relations between Central and State governments.

Course Outcome

This course helps students to understand the rationale and the role of the Government in an economy

Helps students to understand the structure as well as theories underlying public expenditure and public revenue

Students can identify the basics and dynamics of the Centre-State fiscal relations

Module I - Introduction to Public Economics

Nature and scope of Public Economics- Comparison of public and private finance- Public goods, private goods, club goods, open access, merit goods, mixed goods (Concepts only)- Role of state in economic activities- Property rights – Coase Theorem - Market failure and role of government- Principle of maximum social advantage- The role of fiscal policy (18 hrs)

Module II - Public Revenue

Public Revenue - Tax and non-tax revenue – Taxes – Types and canons – Principles of taxation – Benefit principle and ability to pay theory – Impact and incidence of taxation – Effects of taxation – Concept of taxable capacity – The Laffer curve – Public Revenue in India -- Budget and its role – Deficit concepts – FRBM Act. (18hrs)

Module III - Public expenditure and Public Debt

Meaning- Wagner's Law – Wiseman- Peacock Hypothesis – Canons of public expenditure – Pattern and Growth of public expenditure – Effects - Public expenditure in India --- Public debt – Types – Debt redemption – Burden of public debt –Public debt in India. (18 hrs)

Module IV - Fiscal federalism

Meaning and importance- Vertical and horizontal equity in fiscal federalism – Fiscal federalism in India – Finance commission - Theory of grants- Resource transfer from union to states – Criteria for transfer of resources –Recommendations of the latest three Finance commissions -- State finance commission and Panchayati Raj institutions. (18 hrs)

References

1. Harvey Rosen, (2008) Public finance, Mc Graw Hill, New York
2. Bernard P Harbar, Modern Public Finance (Richard Irwin Inc.)
3. H.L Bhatia, Public finance (recent edition) Vikas publishing house, New Delhi
4. B.P. Tyagi, Public finance, (recent edition) Jai Prakash Nath and co., Meerut

5. Musgrave and Musgrave (1984) Public finance in theory and practice, McGraw hill, New Delhi (reprint edition)
6. Joseph Stiglitz, Economics of public sector, (recent edition) Norton, New York

Blueprint

Module	Hours allotted	Part A 2 Mark 10/12	Part B 5 Marks 6/9	Part D 15 Marks 2/4	Total questions
I	28	3	3	1	7
II	28	3	2	1	6
III	24	3	2	1	6
IV	28	3	2	1	6
Total	108	12	9	4	25

ECH3COR13 - Monetary Economics

Learning outcome

The course provides an introduction to monetary theory, to the effects of monetary variables on the macroeconomic system, the role of the Central Bank and the conduct of monetary policy. This course will enable to students of economics to understand theory, practice and analyse the interconnection between the monetary forces and real forces, their developmental role and limitations in shaping and influencing the monetary and related policies both at the national and international levels.

Course Outcome

To understand the economic principles underlying the operation of financial System and intermediaries.

To understand how central banks conduct monetary policy.

To use models to think about monetary and macroeconomic issues.

To conduct a theoretical analysis of real-world issues and phenomena.

Module 1 - Introduction to Money and Institutions

The nature of Money and Payment System, Credit and Financial system, Financial Markets, Commercial Banks: Classification of Commercial Banks-Private and Public, Regional Rural banks, Liabilities and assets of banks, Cooperative Banks, Development Banks, Non-Bank Financial Intermediaries, Global Financial Institutions, Unregulated Credit Markets. 10 hours

Module II - Theory Demand for Money

Demand for Money: Nominal vs. Real Cash Balances, Neoclassical Theory, Keynes' Theory, Friedman's Theory, Money and Prices: Fishers' Transaction Approaches to Quantity Theory of Money (QTM), Cambridge Cash Balance Approach, Modern Quantity of Theory of Money, Money, Interest and Income: Keynes' Monetary Theory, Keynes' Theory of Rate of interest, Rate of Interest and Investment. 10 Hours

Module III - Theory of Supply of Money

Theory of Money Supply: High Power (H) Theory of Money Supply, Money Multiplier Process, Determinants of the Money Multiplier, Factors affecting H, Adjusted H, Reserve Bank Analysis of Money supply; Supply of Credit and its Allocation: Interest Rates: Loanable Fund Theory. 10 Hours

Module IV - Monetary Policy and Central Banking

Meaning and functions of Central bank; Objectives and methods of credit control-quantitative and qualitative methods; Role and functions of Reserve Bank of India; Monetary Policy: Objectives, Targets and indicators, Current monetary policy of India-Inflation: Demand push Inflation and cost push Inflation -Inflation targeting. 10 Hours

References

1. Gupta, Suraj B. (2016): Monetary Economics: Institutions, Theory and Policy, S.

Chand and Company Private Limited, New Delhi.

2. Jagdish Handa, (2009): Monetary Economics, 2nd Edition, Routledge, London
3. Walsh, Carl E (2010): Monetary Theory and Policy, Third Edition, The MIT Press Cambridge Massachusetts
4. Nachene, Dilip and Bhalchandra Mungekar (2003): Indian Economy in the New Millennium, Himalaya Publication, Mumbai. Journal of Monetary Economics

Blueprint

Module	Hours allotted	Part A 2 Mark 10/12	Part B 5 Marks 6/9	Part D 15 Marks 2/4	Total questions
I	24	3	2	1	6
II	30	4	2	1	7
III	30	4	3	1	8
IV	24	1	2	1	4
Total	108	12	9	4	25

Syllabus - Semester IV

Course Code	Course Title	Weekly Contact Hours
ECH4COR14	Advanced Econometrics	6
ECH4COR15	Operations Research	6
ECH4COR16	Software Packages for Analysis of Data	6
ECH4COR17	International Finance and Trade Regulatory System	6
ECH4COR18	Analytical Indian Economy	6

ECH4COR14 - Advanced Econometrics

Learning objectives

To build on the basic understanding of Econometrics; To introduce commonly used econometric methods; To introduce regression models with dummy variables and endogenous regressors.

Course Outcome

Students will have extended learning in the technique of classical regression model; Students will acquire skill even if some of the assumptions of the classical regression model is violated; Students will have a basic understanding on the theory and practice of multiple regression and free variable model

Module I - Dummy Variable Regression Analysis

Dummy Variable-ANOVA Models-ANCOVA Models-Interaction effects using dummy variable-Use of dummy variables in seasonal analysis-Piece-wise linear regression.

Module II - Advanced Regression analysis

Dynamic econometric models-Instrumental variable estimation-Measurement errors.

Module III - Panel data analysis

Panel data models and estimation: Pooled regression, Fixed and Random effect models

Module IV - Limited dependent variables

Logit, Probit and Tobit models for truncated data.

References

1. Gujarathi, D (2003) Basic Econometrics, 4th Edition, New York: McGraw Hill
2. Wooldridge, Jeffrey M, Introductory Econometrics, (2002) Thomson, South Western

Additional Readings

1. Gujarati, Damodar (2011), Econometrics by Example, I edition, Palgrave- McMillan.
2. Stock, James and Watson, mark(2012) Introduction to econometrics, Pearson

Blueprint

Module	Hours allotted	Part A 2 Mark 10/12	Part B 5 Marks 6/9	Part D 15 Marks 2/4	Total questions
I	30	3	3	1	7
II	30	3	2	1	6
III	24	3	2	1	6
IV	24	3	2	1	6
Total	108	12	9	4	25

ECH4COR15 - Operations Research**Objective**

Planning and decision making are very important in military operation research was initially developed in the context of defence strategy. This was later become popular in the academic world, especially in business and industry. Hence this course is introduced to empower students in the realms of planning and decision making.

Module I

Introduction: Meaning and scope of Operations research (OR) Applications in Business and economics-limitations of OR

Linear Programming problem (LPP) mathematical formulation of LPP- solution to the LPP using graphic method, simplex method and Big M method (up to 3 variables) duality in LPP- concept and interpretation

Module II

Transportation Problem: Description and Formulation of transportation problem –initial basic feasible solution by 1) North West Corner Rule 2) Least cost method 3) Vogel's Approximation method - Solution of balanced and unbalanced transportation problem. Assignment problem – Introduction balanced and unbalanced assignment problem, solution using Hungarian method. Travelling Salesman problem and its solution.

Module III

Inventory models, costs in inventory management deterministic inventory models- EOQ Model with instantaneous replenishments and constant rate of Demand.

Queuing models: Basic elements of queuing models, Probability distributions in Queuing models; M/M/1, M/M/c, M/M/ ∞ and M/E_k/1.

Module IV

Sequencing models: Solution of sequencing problem – Processing n jobs through 2 machines – Processing n jobs through 3 machines – Processing 2 jobs through m machines – Processing n jobs through m machines.

Replacement models: Replacement of items that deteriorate whose maintenance costs increase with time without change in the money value. Replacement of items that fail suddenly.

Module V

Theory of Games: Basic concepts and definitions, Two person zero sum game, saddle point pure and mixed strategies Optimal solution of the game with saddle point Reducing the size of the game using dominance property, optimal solution to a 2 x 2 game without saddle point, graphical solution to 2 x n and m x 2 games

References

1. Sharma J.K (2013) Operations research, Theory and Applications 5th Edition Laxmi Publications New Delhi

2. Taha H.A (2007) Operations research 8th Edition Pearson
3. Kanti Swarup, Gupta, P.K. and Man Mohan (2001) Operations Research, Ninth edition, Sultan Chand & Sons.
4. Hillier F.S and Lieberman G.J (2010) Introduction to Operations Research 9th Edition Mc Graw Hill

Blue Print

Module	Hrs Allotted	Part A 2 Mark 10/12	Part B 5 Marks 6/9	Part C 10 Marks 2/4	Total questions
I	25	3	3	1	7
II	25	3	2	1	6
III	18	2	1	0	3
IV	20	2	1	1	4
V	20	2	2	1	5

ECH4COR16 – Software Packages for Analysis of Data**Objective**

The paper attempts to provide a solid foundation of the use of computers among students and to prepare them to be equipped with the data entry and analysis. Preparation of project and analysis of the data using statistical packages can be mastered after successful completion of this paper.

Course Outcome

Students will understand how to use software packages for economics and statistics.

Students will learn data entry and analysis using different softwares

Module I - Spreadsheet

Basics of spreadsheets – MS Excel - features – menu and commands – Home, Insert, Page layout, Formula, Data, Review, View – Pivot Tables – Sort & Filter – Data tools – Find and Replace – Insertion of Charts Analytical tool pack – Data analysis Descriptive Statistics – Random number generation – Correlation and Regression.

Module II - ASCII Encoded Data

ASCII encoded data files and methods of data extraction – Extraction of unit level data of NSSO Surveys.

Module III - Gretl

Installation – Main window – Main menus – Keyboard shortcuts – Gretl toolbar – Data file formats – Creation of data sets – Structure of data sets – subsampling – Joining data sources – Gretl data type

Importing data files – Random variables – Selecting cases – Summary statistics – crosstabulation – Test of normality – Model fitting – Correlation and OLS

Graphs and Plots

Module IV – SPSS Statistics

SPSS Statistics – Managing data – Frequencies – Bar Charts – Histograms – Percentiles – Descriptive Statistics – Crosstabulation and Chi-Square Analysis – Bivariate Correlation – Simple Linear Regression

References

1. Excel Formulas and Functions: Step-By-Step Guide with Examples, Adam Ramirez, Caprioru (September 22, 2019)
2. Excel Formulas and Functions for dummies, Ken Bluttman, Wiley; Fourth edition
3. Excel Bible, John Walkenbach, John Wiley & Sons; Revised ed. edition
4. Gretl User's Guide, Allin Cottrel and Riccardo Lucchetti, <http://gretl.sourceforge.net/gretl-help/gretl-guide.pdf>
5. IBM SPSS Statistics Step by Step, Darren George and Paul Mallery, Routledge

6. Quantitative Analysis and IBM SPSS Statistics, Abdulkader Aljandali, Springer
7. Discovering Statistics Using SPSS, Andy Field, SAGE Publications Ltd; Fifth edition
8. SPSS for Intermediate Statistics, Nancy L. Leech, Karen C. Barret and George A. Morgan, Routledge; 5th edition
9. Excel Data Analysis, Paul McFedries, Visual; 4th edition

Blueprint

Module	Hours allotted	Part A 2 Mark 10/12	Part B 5 Marks 6/9	Part D 15 Marks 2/4	Total questions
I	30	4	3	1	8
II	24	2	2	1	5
III	26	3	2	1	6
IV	28	3	2	1	6
Total	108	12	9	4	25

ECH4COR17 - International Finance and Trade Regulatory System**Learning Objectives**

The course on international finance and trade regulatory system provides to show the monetary side of international economics. It explains how international accounts are maintained, how equilibrium is attained and how a regulatory system functions in international economy

Course Outcome

Students develop a better understanding on the monetary aspect of international economics

Students get an idea about major policy instruments used in international trade and how the regulatory system functions in an international system

Module I - Foreign exchange Rate and Policies

Foreign exchange market- functions of foreign exchange markets-foreign exchange rates- Exchange rate systems-Fixed-flexible –managed floating- determination of exchange rates- Gold standard- mint parity – purchasing power parity- monetary approach to BOP under fixed exchange system and flexible exchange system equilibrium rates- arbitrage- spot and forward risks- hedging -speculation -off shore financial markets.

Module II - Balance of Payments and Exchange Rate

BOP- Components -accounting principle-credits and debits- double entry book keeping- autonomous transaction and accommodating transactions- accounting balance and disequilibrium in BOP- Adjustments in BOP-Elasticity Approach- Marshall – Learner condition –J curve effect - the Absorption Approach-International transactions of India.

Module III - Open economy adjustment policies

Price adjustment mechanism under fixed and flexible exchange rate-IS-LM- BP models under fixed and flexible exchange system- The Assignment Problem – The Fleming- Mundell model- Interest rates and capital flows- capital mobility and exchange rate flexibility-capital mobility and optimal policy under a pegged exchange rate and capital mobility.

Module IV - Economic Integration and Monetary systems

Introduction-preferential trade arrangements-Customs Union- trade creating customs union – trade diverting customs union - dynamic benefits. The Evolution of Monetary System – Bretton Woods System – Collapse of Bretton Woods system –Current international economic issues -WTO Regime

References

1. Dominick Salvatore, International Economics, Eighth Edition Wiley Publishers
2. Peter B Kenen, The international Economy, (3rd Edition) 1996, Cambridge University Press.
3. BO Sodersten and Geogffrey Reed, International Economics (3rd Edition) 1994, The Macmillan Press Ltd.

4. Paul Krugman and Mourice Obstfeld, International Economics (Second Edition)
Harper Collin Publishes, 1981

Blueprint

Module	Hours allotted	Part A 2 Mark 10/12	Part B 5 Marks 6/9	Part D 15 Marks 2/4	Total questions
I	30	3	3	1	7
II	24	3	2	1	6
III	30	3	2	1	6
IV	24	3	2	1	6
Total	108	12	9	4	25

ECH4COR18 - Analytical Indian Economy**Learning objectives**

The paper on analytical Indian economy is an effort to introduce the different aspects of Indian economy, the development initiatives, the structure of Indian economy in terms of its sectors its progress, policy changes and reforms initiated. The last module attempts to assess the impact of reforms on poverty national income and inflation.

Course Outcome

Understand the development process in India after independence

Understand the importance, causes and impact of population growth and its distribution, translate and relate them with economic development.

Grasp the importance of planning undertaken by the government of India, have knowledge on the various objectives, failures and achievements as the foundation of the planning and economic reforms taken by the government.

Have requisite understanding of the basic structure of Indian Economy.

Analyze the reasons behind income inequality, regional imbalance etc.

Module I - Planning, Institutional Framework, Constraints and Role of the state

Colonialism and Under Development in India-Indian Economy at Independence-Planning in India-The problem of Development-Five Year Plans: Objectives, Targets and strategy-Political change and Intensification of controls of License-Permit Raj-The New Economic policy and the Role of the state- Demographic constraints: Integration between population change and Economic development-Highlights of recent census-Demographic aspects of development:

Module II - Agriculture and Industry

Developments in Indian Agriculture: some Issues-The problem of productivity-PDS and food security- Reforms in Land system in Post Independent India-Modernizing Indian Agriculture: A review of critical policy issues-Indian Agriculture and Globalisation -India's Agricultural development policy- WTO on Agriculture in India- Agreements on Agriculture and India.

Industrial development and policies since 1991-Public sector in Industrial development-Disinvestment: strategies and Issues-

Module III - External sector

Foreign Trade- direction composition and trends in India's trade policy- and BOP-Foreign Trade policies and India's Development- Impact analysis of Unilateral and Global changes in Trade-EXIM policy statement- -Liberalization and changing patterns of Foreign Direct Investments- WTO :Doha round- Global Financial crisis and measures adopted by India-Globalisation and Indian Economy.

Module IV - Growth, Employment and National Income

A. Growth and structural change since 1950: Inequality and equity in the rapid growth process-Indian economy since 1980: Assessment of the Growth Experience

B. Poverty and unemployment-Poverty and development policy-The Employment and

Unemployment situation: an assessment.

C. Development, Inflation and Monetary policy - Sustainability of Growth-Growth Accounting- National Income: Trends and Structural Transformation.

References

1. Uma Kapila : Indian Economy Since Independence Academic Publishers
2. Ashima Goyal (Ed) A Concise Handbook of the Indian Economy in the 21st Century, OUP, 2015
3. Misra and Puri: Indian Economy S. Chand Publishers

Blueprint

Module	Hours Allotted	Part A (2 mark 10/12)	Part B (5 marks 6/9)	Part C (15 marks 2/4)	Total Questions
I	30	3	2	1	6
II	30	4	2	1	7
III	25	3	3	1	7
IV	23	2	2	1	5
Total	108	12	9	4	25

Syllabus - Semester V

Course Code	Course Title	Weekly Contact Hours
ECH5COR19	Game Theory	6
ECH5COR20	Research Methodology	6
ECH5COR21	Introduction to Behavioral Economics	6
ECH5COR22	Indian Financial System	6
ECH5ELE01	Elective I	6
	Internship Programme (14 days)	

ECH5COR19 – Game Theory

Learning Objectives

The main objective of this course is to critically understand the various aspects of the strategic interaction and decision making between and among economic agents. In a strategic environment, individual decisions however small are not insignificant but have important consequences upon the final outcomes and economic benefits available. The course will help the student to comprehend such situations with the theoretical construct of games.

Course Outcomes

To examine strategic economic situations by representing them with the game theoretic framework

To identify prisoner's dilemma and Nash equilibria in various real world phenomena and its application to real world conflicts.

To analyse various types of games having different levels of information and to develop decision rules for selecting strategies

To evaluate the policy making process through mechanism design.

To appraise the game theoretic predictions in strategic situations against real world outcomes

Module I - Introduction to Game Theory

Strategic behaviour—Belief, strategy and expected payoff —Normal and extensive forms—Prisoner's dilemma—Nash equilibrium One time games—Dominant strategies and equilibrium—Three player games—Non dominant strategies—Multiple Nash equilibrium—Focal point equilibrium (Contact hours-20)

Module II - Non cooperative Static Games: Complete information

Evolutionary game theory—Infinitely and Finitely repeated games—Collusion—Trigger strategies—Cheating and threats—End of game problem—Folk theorem—Certain and uncertain end—Common enforcement mechanisms—N-person games—Simplifying assumptions—Proportional games.

Mixing pure strategies—Zero sum games—Minimax theorem—Mixed strategies—Optimal mixing rules—Randomising pure strategies—Bluffing

Static games with continuous strategies—Reaction functions—Shifting reaction functions (Contact hours-30)

Module III - Dynamic Games with Perfect Information and imperfect information

Game trees—Sub game perfect equilibrium—Backward induction—First mover advantage—Credible threats—Dynamic games with continuous strategies.

Pure strategies with uncertain payoffs—Static and dynamic games with uncertain payoffs—Harsanyi transformation—Static Bayesian game—Bayesian Nash equilibrium—Risk and uncertainty—Attitudes towards risk—Risk averse behaviour of consumer and firm -Dynamic games with imperfect information—Information sets—Bayesian updating—Separating

strategy—Pooling—Strategy screening (Contact hours-30)

Module IV - Application of Games

Models of Oligopoly— Cournot Nash Equilibrium—Bertrand Nash Equilibrium with Homogenous and Differentiated Products—Bertrand Paradox—Collusion Mechanism design—Social mechanism design—Liability Auctions—Auction types—Auctions with complete and perfect information, independent private values—Common value auctions and winner's curse—Efficiency of auctions—Design of Optimal Auctions—Revenue equivalence theorem (Contact hours-28)

References

1. Martin J. Osborne, An Introduction to Game Theory, Oxford University Press
2. Eric Rasmusen, "Games and Information: An Introduction to Game Theory", Wiley-Blackwell
3. Thomas J Webster, "Introduction to Game Theory in Business And Economics", Segment Books
4. H.Scott Bierman, Luis Fernandez, "Game Theory with Economic Applications", Addison Wesley
5. Joel Watson, "Strategy: An Introduction to Game Theory", WW Norton & Company
6. Roger A. McCain, "Game Theory: A Non-Technical Introduction to the Analysis of Strategy", Thomson-South Western
7. Jose Luis Ferreira (2020), Game Theory An Applied Introduction, Red Globe Press
8. Robert Gibbons (1992), A Primer in Game Theory, Prentice Hall
9. Hal R. Varian (2014), Intermediate Microeconomics: A Modern Approach, W. W. Norton & Company
10. Ken Binmore (2007), Playing for Real A Text on Game Theory, Oxford University Press
11. Morton D. Davis (1970), Game Theory: A Non-technical Introduction, Basic Books, Inc.
12. Prajit K. Dutta (1999), Strategies and Games Theory and Practice, The MIT Press

Blueprint

Module	Hours Allotted	Part A (2 mark 10/12)	Part B (5 marks 6/9)	Part C (15 marks 2/4)	Total Questions
I	20	3	2	1	6
II	30	4	3	1	8
III	30	3	2	1	6
IV	28	2	2	1	5
Total	108	12	9	4	25

ECH5COR20 - Research Methodology

No. of Credits – 4

No. of Contact hours – 108

Learning Objectives

The aim of the course is to provide students with an introduction to research methods and report writing. Upon successful completion of the course the students are expected to:

Develop understanding of various kinds of research, objectives of doing research, research process, research designs and sampling,

Secure basic knowledge of qualitative research techniques,

Obtain adequate knowledge of measurement and scaling techniques and quantitative data analysis, and have basic awareness about hypothesis testing procedures.

Course Outcome

To familiarise students with the basics of research and the research process.

To enable the students to conduct research work and formulate research synopsis and frame research report.

To help the students in developing data analytical skills and in meaningful interpretation of the data so as to solve the research problem.

To familiarise the students with Statistical packages such as SPSS/EXCEL.

Module I - Nature of Social and Business Research

Meaning and definition of research, Criteria of good research, Social Research - objectives and assumptions, Deductive and Inductive methods, Significance and difficulties of Social research, Business Research - research and business decisions, Classification of research, Methods and techniques of research - The Case Study, Survey Research, Inter disciplinary Research and its essentials. **(18 Hours)**

Module II - Research Problem and Research Design

Steps involved in the selection of a topic for research study, Components of Research Problem, Definition of the Problem, Evaluation of the Problem, Preliminary survey of literature for the topic selected, Review of relevant literature, Sources of literature, Note taking, Research Design - Meaning, definition, Factors of research design, Evaluation of Research Design and steps, Sampling and Sample Design - Meaning of Sample, Sampling Process, Essentials of good sampling, Methods, Random and Non random Sampling, Sampling and Non Sampling Errors. **(35 Hours)**

Module III - Methods and Tools of Data Collection

Sources of data - Primary data, Secondary data, Methods of Data Collection - Observation, Experimentation, Interviewing, Panel Method, Mail Survey, Simulations, Tools for Data Collection – Schedule: Meaning, Purpose, Type, Format and Layout, Steps of framing a Schedule, Contents of a Schedule, Questionnaire: Guidelines, Contents, Forms of Questionnaire, Advantages, and Limitations, Guidelines for a good Interview, Visual aids in an Interview, Limitations of Interview techniques. **(30 Hours)**

Module IV - Processing, Analysis and Interpretation of Data

Steps in data processing - Editing, Coding, Classification, Transcription, Analysis of data, Interpretation, Exposure to software packages (theory only), Report Writing - Introduction, Types of Report, Planning of Report Writing, Format of Research Report, Documentation: Foot notes and Bibliography, Briefing, Evaluation of Report Writing. **(25 Hours)**

References

1. Bagchi, Kanak Kanti (2007) Research Methodology in Social Sciences: A Practical Guide, Delhi, Abijeet Publications.
2. Sharma, B.A.V., et al., (2000) Research Methods in Social Sciences, New Delhi, Sterling Publishers.
3. B.A.V. Busha, C. H and Harter, S. D (1980 Research Methods in Librarianship, New York, Academic Press.
4. Cooper, R. Donald and Pamela S. Schindler (2003) Business Research Methods, Delhi, Tata McGraw-Hill.
5. Flyvbjerg, Bent (2001) Making Social Science Matter: Why Social Inquiry Fails and how it can succeed Again, United Kingdom, Cambridge University Press.
6. Gilbert, Nigel (1993) Researching Social life, New Delhi, Sage Publication.
7. Goode and Hatt (1952) Methods in Social Research, New York, McGraw – Hill.
8. Gopal, M.H (1970) An Introduction to Research Procedures in Social Sciences, Bombay, Asia Publishing House.
9. Henn, Matt; Mark Weinstein and Nick Foard (2006) A Short Introduction to Social Research, New Delhi, Vistaar Publications.
10. Hunt, Morton (1989) Profiles of Social Research: The Scientific Study of Human Interactions, Bombay, Popular Prakashan.
11. Kothari, C.R (2004) Research Methodology: An Introduction, Delhi, New Age.
12. Krishnaswami, O.R (2000) Research Methodology in Social Sciences, Delhi, Himalaya Publications.
13. Kumar, Renjith (2009) Research Methodology: A Step by Step Guide for Research, Delhi, Pearson Education.

Blueprint

Module	Hours Allotted	Part A (2 marks 10/12)	Part B (5 marks 6/9)	Part C (15 marks 2/4)	Total Questions
I	18	2	2	1	5
II	35	4	3	1	8
III	30	4	2	1	7
IV	25	2	2	1	5
Total	108	12	9	4	25

ECH5COR21 – Introduction to Behavioral Economics**Learning Objective**

To explain economic decision-making process and role of psychology in it and to elaborate the deviation in reality and standard economic theoretical predictions in the framework of behavioral economics

Module I - Introduction to Behavioral Economics

Origins of Behavioral Economics, Decision-making under Neo-classical economic framework- rationality, optimization Role of Intuition, Emotions, Beliefs in decision making Bounded Rationality Judgment under Risk & Uncertainty - Heuristics: Representativeness, Substitution, Availability, Affect, Anchoring, framing - Biases: Cognitive and emotional biases. (10 Hours)

Module II - Choice under Risk & Uncertainty

Expected Utility - Prospect Theory – Reference Points – Risk Concept and Understanding – Loss Aversion – Shape of Utility Function – Decision Weighting – Probabilistic Judgment. Mental Accounting Framing Mental Accounts Fungibility & Labels Hedonic Editing (10 Hours)

Module III -

Intertemporal Choice, Temporal Choice, Construal Level Theory, Valuation of Delayed Consumption Preferences for Sequences of Outcomes, Hyperbolic Discounting, Preference Reversal (10 Hours)

Module IV - Behavioral Game Theory

Social preferences: Fairness, trust, cooperation, reciprocity, Norms - Limited Strategic Thinking Choice architecture: Nudge, Nudge vs. boost, Behavioral public policy (10 Hours)

References

1. Erik Angner, "A Course in Behavioral Economics", Palgrave Macmillan
2. M. Altman, Handbook of Contemporary Behavioural Economics: Foundation and Developments (2007), Prentice Hall India
3. E. Cartwright, Behavioural Economics (2011), Routledge
4. D. Kahneman, Thinking Fast and Slow (2011), Allen Lane, Penguin Books
5. G. Loewenstein, Exotic Preferences: Behavioural Economics and Human Motivation (2007), Oxford University Press
6. Sanjit Dhami, "The Foundations of Behavioral Economic Analysis", Oxford University Press (2016)
7. Behavioral Economics: Toward a New Economics by Integration with Traditional Economics by Ogaki, Masao, Tanaka, Saori C. Published by Springer, ISBN 978-981-10-6439-5
8. Nick Wilkinson; Matthias Klaes(2012), An Introduction to Behavioral Economics, 2nd Edition, Palgrave Macmillan.

9. World Development Report 2015: Mind, Society, and Behavior**Blueprint**

Module	Hours allotted	Part A 2 Mark 10/12	Part B 5 Marks 6/9	Part D 15 Marks 2/4	Total questions
I	30	3	3	1	7
II	30	4	2	1	7
III	24	3	2	1	6
IV	24	2	2	1	5
Total	108	12	9	4	25

ECH5COR22 - Indian Financial System

Objective

The cost, availability and timing of financial resources play a very crucial role in the growth and development of an economy, both in short run and in the long run. This course is intended to train students on the structure and functioning of the Indian financial system.

Course Outcome

Students will have a detailed understanding on the structure and role of the financial system in general.

Students will acquire knowledge and skills to follow the reforms and changes in various financial markets and financial regulations in the right perspective.

Students can grasp and evaluate the innovations in financial instruments and financial services

Module I - Introduction

Introduction, functions of financial system, Structure of Indian financial system: institutions, markets, instruments and services.

Financial institutions:- Banking institutions. Organized sector - features, functions, types: Commercial banks, co-operative banks, Regional Rural Banks, foreign banks. Unorganized Sector-features, functions, types: indigenous bankers, Money lenders.

Non-Banking Institutions: features, functions, classification: Development Finance Institutions, Investment Institutions, Nonbanking Financial Companies, Hire Purchase Companies, Equipment Leasing Companies, Nidhis, Chit Funds.

Module II - Capital Market and Instruments

New Issue Market - Role - Methods of floating New Issues - Offer to Public Procedure - Intermediaries to the Issue - Trends in the New Issue Market. The Relationship of the New Issue Market and Stock Exchange.

The Secondary Market - Stock Exchanges in India: NSE, BSE, OTCEI. Developments in the Stock Market: Derivatives, Exchange Traded Funds, GDR, ADR, IDR – Indices - Circuit Breakers - Settlement and Clearing.

Bond Market – Corporate bonds, Government bonds – Primary Dealers. Regulation of capital market – Role and functions of RBI and SEBI

Module III - Money Market and Instruments

Functions, structure, features, components: call money market, collateral loan market, acceptance market, bill market. - Characteristics of a developed money market - Instruments: Commercial bills, Treasury bills, call and short notice money market, Certificate of Deposit, Commercial Paper, Repos. Regulation of money market - LAF.

Module IV - Financial Services

Stock Exchanges, Merchant Banking, Depository and custodial services, Credit rating, Insurance, Leasing, Hire Purchase, Factoring, Mutual Funds: Meaning, Concept, Types.

References

1. Preeti Singh: Dynamics of Indian Financial System Markets, Institutions & Services, Ane Books Pvt Ltd.
2. Bhole, L.M: Financial Institutions and Markets, Tata McGraw Hill Publishing Company Ltd.
3. Gordan and Natarajan, Indian Financial System, Himalaya Publishing House.
4. Khan M.Y., Indian Financial System, Pearson
5. Sriram Khanna, Financial Markets in India & Protection of Investors, New Century Publications, 2004.
6. Clifford Gomez. Financial Markets, Institutions, and Financial Services. Phi Learning Pvt. Ltd.
7. Mishkin, F. and S. Eakins Financial Markets and Institutions. (Addison Wesley)
8. Bayes and Jansen: Money, Banking and Financial Markets, AITBS

Blueprint

Module	Hours allotted	Part A 2 Mark 10/12	Part B 5 Marks 6/9	Part D 15 Marks 2/4	Total questions
I	30	4	3	1	8
II	30	4	2	1	7
III	24	2	2	1	5
IV	24	2	2	1	5
Total	108	12	9	4	25

Syllabus - Semester VI

Course Code	Course Title	Weekly Contact Hours
ECH6COR23	General Equilibrium and Welfare Economics	6
ECH6COR24	Fundamentals of Environmental Economics	5
ECH6COR25	Health Economics	5
ECH5ELE02	Elective II	5
ECH5ELE03	Elective III	4
	Dissertation & Viva-voce	

ECH6COR23 – General Equilibrium and Welfare Economics

Learning Objectives

The course is expected to expose the student to critically appreciate the problem of whether the independent decision making of economic agents in a competitive environment would lead to equilibrium to all. It would explore the interdependence among the constituent parts of an economic system and evaluate the alternative economic situations from the viewpoint of social welfare.

Course Outcomes

To employ the simple general equilibrium model to appreciate the positive economic questions posed from the viewpoint of economy as a whole.

To appreciate the complexity of the real world with respect to the economic activities of the mutually interdependent economic agents.

To identify and critically analyse the various criteria used to deal with the normative questions regarding the evaluation of different economic situations.

To evaluate the conditions that lead to the highest possible levels of social welfare in an economy.

Module I - Simple General Equilibrium Model

Introduction to General Equilibrium—Interdependence in the Economy—Walrasian system—Existence, Uniqueness and Stability of an Equilibrium—Graphical Representation of General Equilibrium—Properties of General Equilibrium

General Equilibrium and Allocation of Resources—Prices of Commodities and Factors—Factor Ownership and Income Distribution (Contact hours-20)

Module II - H x M x N General Equilibrium Model

General Equilibrium—Extension of General Equilibrium Model: Any Number of Household, Commodities and Factor of Production —Redundant Equation

Arrow –Debreu Model (without formal proof) —First and Second Fundamental Theorem of Welfare Economics—Efficiency-Equity Trade-Off

Stability of General Equilibrium—Money and General Equilibrium—Patinikin's System—Keynesian Counter Revolution (Contact hours-35)

Module III - Welfare Economics

Criteria of Social Welfare—Growth of GNP as a Welfare Criterion—Bentham's Criterion—Cardinalist Criterion—Pareto Optimality Criterion—Kaldor Hicks Compensation Criterion—Bergson Criterion Social Welfare Function—Maximization of Social Welfare—Derivation of the Grand Utility Possibility Frontier—Determination of the Welfare Maximizing State—Determination of the Welfare Maximizing Output Mix, Commodity Distribution and Resource Allocation—Welfare Maximization and Perfect Competition

Critique and Extension—Extension to Many Factors, Products and Consumers—Corner Solution—Existence of Commodity Indifference Curve—Elastic Supply of Factors—Joint and Intermediate Products—Decreasing Returns to Scale—Externalities in Production and

Consumption—Kinked Isoquants—Convex Isoquants—Increasing Returns to Scale—Indivisibilities in the Production Process.(Contact hours-35)

Module IV - Review of General Equilibrium

Critical Aspects of General Equilibrium—Anything Goes

Sonnenschein–Mantel–Debreu Theorem (without formal proof)—Limits of General Equilibrium Theory—Explanations for the Failure—Alternatives of General Equilibrium (Contact hours-18)

References

1. Koutsoyiannis, Modern Microeconomics, Palgrave Macmillan
2. Walter Nicholson and Christopher M. Snyder, Microeconomic Theory: Basic Principles and Extensions, Cengage Learning
3. Andreu Mas-Colell, Michael Whinston and Jerry Green, (2012), Micro Economic Theory, OUP
4. David Autor, "General Equilibrium in a Pure Exchange Economy", MIT Open Course Ware
5. GC da Costa (2005), Value and Distribution in Neo Classical and Classical Systems, Himalaya Publishing House
6. Frank Ackerman, "Still Dead After All These Years: Interpreting the Failure of General Equilibrium" in Frank Ackerman and Alejandro Nadal, (2004), "The Flawed Foundations of General Equilibrium", Routledge, London
7. William David Anthony Bryant (2009), General Equilibrium: Theory and Evidence, World Scientific Publishing Company
8. Alan Kirman, "General equilibrium: problems, prospects and alternatives An attempt at synthesis" in Fabio Petri and Frank Hahn, (2003) "General Equilibrium Problems and Prospects", Routledge
9. Douglas Bernheim and Michael D. Whinston (2008), Microeconomics, McGraw Hill Irwin
10. Blaug, M. (1968). Economic Theory in Retrospect. Homewood, Irwin
11. Weintraub, E. R. (1983). "On the existence of competitive equilibrium: 1930–1954." Journal of Economic Literature, XXI, 1–39.
12. Duffie, D. and H. Sonnenschein (1989). "Arrow and General Equilibrium Theory," Journal of Economic Literature. Vol. 27 (2), (June), p. 565–98

Blueprint

Module	Hours Allotted	Part A (2 mark 10/12)	Part B (5 marks 6/9)	Part C (15 marks 2/4)	Total Questions
I	20	3	2	1	6
II	35	3	3	1	7
III	35	4	2	1	7
IV	18	2	2	1	5
Total	108	12	9	4	25

ECH6COR24 - Fundamentals of Environmental Economics**Objective**

Development and environment are inter related. The students are expected to train to know the inter relationship between the two. They would be able to understand the magnitude of negative impacts of growth and the ways to mitigate it.

Course Outcome

Students get an understanding of interlinkages between economy and environment

Students will understand the impacts of growth on environment

Students will get an overview of the global strategies for solving environment issues

Module I - Basic Issues on Environment

The basics of Environmental Economics – Environment- Economy linkage- environment as a necessity and a luxury - Environment as a public good - Positive Vs Normative analysis on environment – Environmental degradation – Efficiency and Equity market and Government Failures - future environmental challenges – climate change – water accessibility – environmental perspectives – pessimism optimism – outrages.

Assignment: Identify the nature of Environmental Degradation and types of Externalities in your local area.

Module II - Environmental Valuation

Valuing the environment – types of values – classification of valuation methods – measuring of economic values – valuation of intangible benefits of the environment - Monetary and alternatives valuing life and health. – Environmental accounting and Environmental Impact Assessment (EIA)

Assignment: Apply valuation Techniques (preliminary approach) in the environmental issues in your native places.

Module III - Environmental Public Policy

Environmental public policies – Policy options – market vs regulatory approach – social choice – property rights approach efficient property rights structures Externalities - - control versus market based instruments. Efficient and emission taxes versus tradable permits – Tragedy of Commons – regulation with adverse selection. Audits, Enforcement, and moral Hazard – Risk and Uncertainty – benefits of environmental regulation – Green Politics – Green Plants – The Earth Charter

Assignment: Tools in practice in your local body as state.

Module IV - Trade and Environment

International and interregional competition – trade and Environment – Trade rules relating to environment under GATT and WTO – Growth development relationships – Conventional measures- alternative measures- strategic Behaviour in trade and environment policy – Sustainable Development - public private partnership in sustainable development – The Kalundborg Experience.

Assignment: Some cases of trade and environment, Empirical studies on Trade and

Environment (Assignment must be based on reference given)

References

1. Charles D Kolstad: Environmental Economics, OUP, 2000, New York
2. Anil Shishodia and Katar Singh Pearson: Environmental Economics: Theory and Application
3. Tom Tietenberg and Lynne Lewis, Environmental and Natural Resource Economics, Routledge, 2018
4. William P. Cunningham and Barbara Woodworth Saigo, Environmental Science, WCB McGraw Hill, 1999

Blueprint

Module	Hours allotted	Part A 2 Mark 10/12	Part B 5 Marks 6/9	Part D 15 Marks 2/4	Total questions
I	28	3	3	1	7
II	28	4	2	1	7
III	26	3	2	1	6
IV	26	2	2	1	5
Total	108	12	9	4	25

ECH6COR25: Health Economics**Objective**

Health is an important issue in developing country like India. It is a major determinant of labour productivity, which is crucial to industry and business. This course is helpful to understand the theoretical and practical aspects of Health Economics in the context of India.

Course Outcome

Students can evaluate health as a basic determinant of labour productivity

Students can critically analyse the importance of health in industrial and business development

Students get an overview of the practical and theoretical aspects of health economics in India

Module I

Definition and scope- Health, good health and quality of life- Determinants of good health- Measurement of health status- Mortality, morbidity and —HALY family of summary measures- QUALY.

Module II

Demand for health and demand for medical care. Supplier induced demand. Production of health care- providers- physicians, hospitals and pharmaceuticals. Role of technological change in health care Sustainability, equity-efficiency trade off

Module III

Health Cost concepts – opportunity cost. Fixed and variable costs- Incremental and Marginal cost. Direct and indirect medical costs time costs and travel cost.

Economics of health insurance- Information asymmetry – adverse selection. Risk aversion. Moral hazard. Health insurance- challenges. Insurance concepts. Co-payments. Co-insurance rates, deductibles, group insurance.

Module IV

Economic evaluation, cost benefit analysis. Cost effectiveness analysis. Cost Utility analysis. Methodologies, issues. Manpower planning in health sector-The health work force. Medical education. Physician supply. Physician incentives. Manpower planning –models. Health Scenario in India- Indian Medicine: WTO, the pharmaceutical industry and its implications.

References

1. Charles Phelps - Health economics
2. Clewer, Ann and David Perkins 1998 - Economics for health care management
3. Economic Survey, Government of India
4. V A Kutty, A Premier of Health Economics
5. Shanmugasundaram Yashodha Health Economics

6. Zweifel Health Economics

Blueprint

Module	Hours allotted	Part A 2 Mark 10/12	Part B 5 Marks 6/9	Part D 15 Marks 2/4	Total questions
I	26	3	2	1	6
II	26	3	2	1	6
III	28	3	3	1	7
IV	28	3	2	1	6
Total	108	12	9	4	25

Electives

- 1. Principles of Management & Organisation Behaviour**
- 2. Foreign Trade Management: Documentation, Financing and Procedures**
- 3. Principles of Accounting**
- 4. Investment & Portfolio analysis**
- 5. Foreign Trade Policy and Law**
- 6. Management of Specific Products**
- 7. Kerala Economy**

Elective 1: Principles of Management and Organisation Behaviour

Course Outcome

Students gain understanding of the functions and responsibilities of managers.

Students will acquire tools and techniques to be used in the performance of the managerial job.

Students analyze and understand the environment of the organization.

Students will develop cognizance of the importance of management principles.

Module I - Management

Science, Theory and Practice - The Evolution of Management Thought - Early contributors- Management and Society: Social Responsibility and Ethics –Difference in managerial life and work in organization- Functions of Management. Managing change & Innovation –Manager as a decision maker- models and simulation –case studies, management in non-industrial organization – Management in other countries –case studies.

Assignment: Case studies in the referred books.

Module II - Planning

The Nature and Purpose of Planning - Objectives, significance, Strategies, Policies, types, and Planning Premises - Decision Making. Organizing: The Nature of Organizing - Organizational Structure and design- job design - Formal and informal organisation - Co-ordination functions in Organisation.

Assignment: Map the structure of an organization in your local area.

Module III - Managing Human Resources

Leading – Leadership: Concept-Leadership styles- Managerial Grid by Blake and Mouton- Likert's four level model - Motivation – Process of motivation; Theories of motivation(Maslow's, Herberg's, Mc Gregor's, William Ouchi's)- Interpersonal & Organisational Communications-work groups and teams-Controlling: Elements of controlling: Production, Operation and Financial controls.

Assignment:

Qualities of a leader and an actual leadership in your local area.

The process of control in an industrial organization.

Module IV - Organisational Behaviour

History - evolution, Challenges & opportunities, contributing disciplines-Relationship between management and Organisation Behaviour. Organizational Behaviour responses to Global and Cultural diversity –Organisational change and learning.

Assignment: Innovative management in a non-industrial organization.

References

1. Koontz & Weirich, Essentials of Management, Tata McGraw Hill Publishing Company, New Delhi.

2. Stoner, Freeman & Gilbert, Management, PHI, 6th Edition.
3. Robbins S.P., Fundamentals of Management, Pearson, 2003.
4. Robbins S., Organisational Behaviour, X edn., Prentice-Hall, India.
5. VSP Rao, V Hari Krishna – Management: Text and Cases, Excel Books, I Edition, 2004
6. Joseph A. Litterer :An introduction to Management, Wiley/Hamilton
7. John B. Miner: The Management process, Macmillan, 1973, New York.
8. Tripathy & Reddy: Principles of Management, Tata McGraw-Hill Publications, New Delhi.
9. Thomas N Duening & John M. Ivamceovich: Management: Principles and Guidelines, Biztantra.2003.
10. Griffin, Ricky W: Organisational Behaviour, Houghton Mifflin Co., Boston.
11. Hersey, Paul, Kenneth H. Blanchard and Dewey E. Johnson: Management of Organisational Behaviour: Utilising Human Resources, Prentice Hall, New Delhi.
12. Newstrom, John W. and Keith Davis: Organizational Behavior: Human Behavior at Work, Tata McGraw-Hill, New Delhi

Blueprint

Module	Hours Allotted	Part A (2 mark 10/12)	Part B (5 marks 6/9)	Part C (15 marks 2/4)	Total Questions
I	30	3	2	1	6
II	24	3	2	1	6
III	30	4	3	1	8
IV	24	2	2	1	5
Total	108	12	9	4	25

Elective 2: Foreign Trade Management: Documentation, Financing and Procedures

Course Outcome

Students well aware about the formalities associated with International trade

Students aware of the documentation of International Trade and

Students aware of the FOREX Management and Export Promotion Schemes.

Understand the need for and method of trade credit

Module I - Export-Import Documentation and Government policy

Introduction-Export-Import policy-Customs act-allied acts related to Foreign Trade- Customs formalities-Export Documentation- Import Documentation-Clearance of Import goods-Cent percent Export oriented units-Export processing zones-Special Economic Zones-Import/export incentives-Import Licenses- Export of projects and services.

Module II - Marketing

Introduction-Marketing terms-Global marketing Environment-Entry to Foreign market Strategies-Support Institutes to facilitate Exports-Market Research and its Design-Destination of Exports-IMF-World Bank-WTO-Export correspondence and pricing-E-trade-Channels of distribution.

Module III - Export Finance

Basic concept of Foreign Exchange-Methods of International payment settlement-International commercial terms-Letter of credit-Exchange control regulation for imports and exports-Export Financing-Pre-shipment Finance-EXIM Bank of India-ECGC-Demand guarantees and standby letter of Credit –Forfeiting and factoring –case studies

Module IV - Shipping and Packaging

Shipping and Marine Insurance- Terminology-General information on shipping-Types of containers and ships-Containerization-Marine Insurance –Air Transportation-Bill of Exchange, Air way Bill/Sea Way Bill-Maritime Fraud-Packaging Introduction-Mechanical tests-stretch wrapping-cushioning materials-shrunk packaging-packaging cost-Lab testing-International care labeling code

References

1. Justin Paul and Rajiv Aserkar (2008), Export Import Management, Oxford University Press
2. Francis Cherunilam (2015), International Trade and Export Management, Himalaya Publishing House.
3. Usha Kiran Rai (2012) Export Import and Logistic Management, PHI India
4. Ministry of Commerce, Handbook of Import and Export Procedures, Government of India.
5. Francis Cherunilam (2007), International Business Environment, Himalaya Publishing House, Bombay.

6. Aswathappa, International Business, Tata McGraw Hill
7. IIBF (2011), International Banking, Indian institute of Banking and Finance
8. Rupnarayan Bose (2015), Fundamentals of International Banking, McMillan India
9. B. Srinivasan (2005), Foreign Exchange Simplified, Tata McGraw Hill
10. Vyuptakesh Sharan (2012), International Financial Management, Prentice Hall India
11. P.G. Apte (2012), International Finance, Tata McGraw Hill.
12. Francis Cherunilam (2009), International Marketing, Himalaya Publishing House.
13. Varshney and Bhattacharya (2005), International Marketing Management: Text and Cases, Sultan Chand and Co., Delhi.
14. Acharya Jain (2007), Export Marketing, Himalaya Publishing House.

Blueprint

Module	Hours Allotted	Part A (2 mark 10/12)	Part B (5 marks 6/9)	Part C (15 marks 2/4)	Total Questions
I	30	3	2	1	6
II	20	2	2	1	5
III	30	4	3	1	8
IV	28	3	2	1	6
Total	108	12	9	4	25

Elective 3 - Principles of Accounting

Module I

Elements of financial reporting - the income statement ;revenues and expenses- ratio analysis- Fund flow analysis – analysis of financial transaction- bank reconciliation statement- trial balance and errors.

Module II

Balance sheet: Current assets and current liabilities; long term investments; property, plant and equipment; deferred income taxes, long term debt; ratio analysis.

Module III

Standard costs and variance analysis – cost price volume relationships- activity based costing (service industry)- cost of capital and capital structure -planning : cost of debt of Tata tea capital structure planning- capital budgeting- working capital planning and financing – budgetary control.

Module IV

Indian Accounting Standards – Analysis of Profit and Loss Account of Asian Paints (India). Cash- Flow Analysis of Reliance Industries (2002-03). Economic Value Added: the case of Reliance – Farm Accounting in India.

References

1. Klearence B. Nickerson: Accounting Hand Book for Non-Accountants, second edition, CBI Publishing Co. 1979, Boston.
2. Ghosh, T.P.G: Accounting and Finance for Managers, Tax Mann's allied services, 2004, New Delhi.
3. Pramanik, Alok Kumar: Accounting and Management, Deep & Deep Publications, New Delhi.

Blueprint

Module	Hours Allotted	Part A (2 mark 10/12)	Part B (5 marks 6/9)	Part C (15 marks 2/4)	Total Questions
I	28	3	2	1	6
II	28	3	2	1	6
III	26	3	3	1	7
IV	26	3	2	1	6
Total	108	12	9	4	25

Elective 4 - Investment & Portfolio analysis

Objective

The contents of this course are expected to bring students to the real world. Capital market has become the most dynamic system after the emergence of neo-liberal system. This course enables the students to understand the structure, instruments, operations and mechanisms of capital market both from theoretical and practical point of view. This suggests the study of case studies and practical training. One module is exclusively recommended for bond market.

Module I

Exchange traded markets and Types of Traders- Mechanics of futures markets- Hedging strategies using futures- Interest rates: Types and Term Structure- Determination of forward and futures prices - Interest rate futures- Swaps

Module II

Mechanics of option markets- Properties of stock options- Trading strategies- Binomial trees - The Markov property- The Black –Scholes-Merton model- Options on stock indices, currencies, and futures - The Greek letters & Stock Market Volatility - Volatility smiles

Module III

Basic numerical procedures- Binomial trees-Using the binomial tree for options on indices, currencies and futures contracts-Binomial model for a dividend paying stock-Alternative procedure for constructing trees-Time dependent parameters-Monte Carlo simulation- Variance reduction procedure-Finite difference methods -Value at risk- Estimating volatilities and correlations

Module IV

Credit risk - Credit derivatives - Exotic options- Weather ,Energy and insurance derivatives - More on models and numerical procedures- Martingales and measures - Interest rates derivatives :the standard market models - Convexity ,timing and quanto adjustments - Interest rate derivatives: models of the short rate- Interest rate derivatives :HJM and LMM - Swaps revisited & Real options - Derivatives mishaps and what we can learn from them Lessons for all users of derivatives-Lessons for financial institutions –Lessons for non financial corporations

Module V

Bonds: the better investment -Adopting the all-Bond portfolio: a case study -The evolution of a bond : from verbal IOU to Electronic entry - -The life of a bond - US Bond System- Options for purchasing bonds –How to buy individual bonds : a tool kit -Choosing a bond fund - Bond investment strategies - Financial planning with bonds : case studies

References

1. John C Hull Options, futures and other derivatives, Pearsons prentice hall Sixth edition

2. Hildy Richelson : Bonds: the unbeaten path to secure investment growth
3. Stan Richelson

Blueprint

Module	Hours Allotted	Part A (2 mark 10/12)	Part B (5 marks 6/9)	Part C (15 marks 2/4)	Total Questions
I	24	2	1	1	4
II	25	2	2	1	5
III	30	3	3	0	6
IV	30	3	2	1	6
V	24	2	1	1	4
Total	109	12	9	4	25

Elective 5 - Foreign Trade Policy and Law

Module I

Preamble- Legal Framework- Special Focus Initiative- Board of Trade- General Provisions Regarding- Export & Import- Promotional Measures- Duty Exemption /Remission Schemes.

Module II

Export promotion Capital Goods Scheme- Export oriented Units (EOUs)- Electronics Hardware Technology Parks (EHTPs) - Software Technology Parks (STPs) - Bio-technology Parks (BTPs) - Special Economic Zones (SEZs) - Free Trade & Ware Housing Zones - Deemed Exports - Central Excise Act, 1944- Central Excise Rules, 2002- Service Tax.

Module III

State control over import and export of goods –from rigidity to liberalization - Impact of regulation on economy- The Basic Needs of Export and Import Trade- Goods, Services, Transportation –International Regime: WTO agreement- WTO and tariff restrictions- WTO and non-tariff restrictions- Investment and transfer of technology- Quota restriction and anti-dumping - - permissible regulations- Quarantine regulation- Dumping of discarded technology and goods in International market - Reduction of subsidies and counter measures.

Module IV

General Law on Control of Imports and Exports:

General scheme- Legislative control- Power of control: Central Government and RBI: Foreign Trade Development and Regulation Act 199, Restrictions under customs law, Prohibition and penalties- Export-Import formulation : guiding features, Control under FEMA, Foreign exchange and currency, Import of goods- Export promotion councils- Export oriented units and export possessing zones- Control of Exports : Quality control, Regulation on goods.

Module V

Exim policy: Changing Dimensions: Investment policy: NRIs. FII, Joint venture, Promotion of foreign trade, - Law Relating to Customs: Prohibition on importation and exportation of goods, Control of smuggling activities in export-import trade, Levy, of and exemption from, customs duties, Clearance of imported goods and export goods, Conveyance and warehousing of goods.

Module VI

Regulation of investment: Conservation of foreign exchange- Foreign exchange management, Currency transfer, Investment in foreign countries, Borrowing and Lending of money and foreign currency, Securities abroad – issue of Immovable property – purchase abroad, Establishment of business outside, Issue of derivatives and foreign securities – GDR (global depositories receipts), ADR (American depository receipts) and Uro, Investment in Indian banks, Repatriation and surrender of foreign securities. Technology transfer: Collaboration Agreement for Technology Transfer, restrictive terms in technology transfer agreements- Automatic approval scheme.

Elective 6 - Management of Specific Products

Module I

Agriculture Exports-Forms of Agriculture-Product catalog-Export statistics of agricultural products-Pricing of Agricultural products-EU regulation of Imports-Quality standards-Role of Export promotion councils and development programmes-Technology advancement on agricultural products-Inland and Overseas Trade Fairs-Import policy-Business opportunities

Module II - Floriculture Exports

Introduction to Floriculture - Kinds of Floriculture - Product Catalogue - Marketing of Floriculture Products - Export Statistics - Plant Quarantine and other control procedures - EU regulation - Export Promotion Council - Quality Standards - Recent advancements-

- (a) Buyer Seller meets
- (b) Import policy abstracts.

Module III - Gem and Jewelry Exports

Introduction - Scope of study - Statistics of Gem & Jewellery export - Markets – Global Competition - Export Promotion schemes - product development - Technical aspects of gold jewellery - Role of export Promotion Council.

Appendix to group B:

1. Export-Import: Subject Introduction.
2. Foreign Trade Policy & Handbook of Procedures 2004-09.
3. Standard Input-Output Norms (SSION) and ITC (HS) Classification of Goods.
4. Export Incentives: Duty Exemption & Duty Remission Schemes. Advance License/DFRC/DEPB/DFIA/Duty.
5. Formation of Export Firm/Company: Important Tips.
6. Importer-Exporter code Number. Take it yourself.
7. Export Documentation: General.
8. Commercial Documents
9. Regulatory Documents.
10. Export Documentation: Preparing Proforma Invoice.

Elective 7 - Kerala Economy

Module I - Structure of Kerala Economy

Kerala economy-Basic features-recent trends in macroeconomic aggregates- structural change- Demographic profile- 2011 census – ageing problem- Demographic Aspects (birth rate, death rate, infant mortality rate, sex ratio, age distribution)- why sex ratio is in favour of women in Kerala –need for women empowerment- poverty and unemployment scenario- Self Help Groups-Kudumbashree- HDI- Kerala model of development-sustainability debates

Module II - Sectors of Kerala Economy 1

Agriculture and industry – cropping pattern-production and productivity trends of major crops- organic farming-land reforms- agriculture credit-indebtedness-industrial backwardness- reasons- measures and performance- role of small scale and cottage industries- problems- scope of small industries in Kerala.

Module III - Services

Service sectors performance- features-trade- tourism and development- IT-social and economic infrastructure- education and health- energy crisis- Kerala Bank-KIIFB- migration- internal and international- remittances- recent trends

Module IV – State Public Finance

Sources of revenue and expenditure for the state- Recent trends in budget- (as per the Budget data) deficits of the state - fiscal crisis-current challenges-local governments and decentralised planning- impact on growth performance of Kerala

References

1. Oommen, M.A. (1993): Essays on Kerala Economy, Oxford & IBH.
2. Prakash, B.A (ed) (2004): Kerala's economic development: Performance and prospects in the post liberalization period, Sage Publications, New Delhi.
3. Prakash, B.A (ed) (1999): Kerala's Economic Development: Issues and Problems, Sage Publication, New Delhi.
4. State Planning Board , Economic Review, Various Issues, Thiruvananthapuram
5. Zachariah, K.C. and S. Irudaya Rajan (2012):Kerala's Demographic Future: Issues and Policy Options, Academic Foundation, New Delhi
6. Zachariah K.C. and S. Irudaya Rajan (2012):Kerala's Gulf Connection 1998-2011:Economic and Social Impacts of Migration, Orient Black swan, New Delhi
7. Zachariah, K C et al (2003): Dynamics of Migration in Kerala, Orient Longman, India.
8. Rajasenan, D. and Gerard De Groot (ed) (2005): Kerala Economy: Trajectories, Challenges and Implications, CUSAT, Kochi.
9. Harilal, K.N. & K.J. Joseph(2000): "Stagnation and revival of Kerala economy: An open economy perspective," Centre for Development Studies, Trivandrum Working Papers 305, Centre for Development Studies, Trivandrum, India.
10. Rajan, K(ed)(2009): Kerala Economy :Trends during the post reform period, Serials Publications, New Delhi.

11. Oommen, M.A. (1960): Financing of Small-Scale Industries in Kerala sponsored by the Banking Commission, Reserve Bank of India, Bombay.
12. Oommen, M.A. (1999): Rethinking Development: Kerala's Development Experience (in two volumes), Concept, New Delhi.
13. Oommen, M.A. (1979): Kerala Economy since Independence (ed.) Oxford & IBH, New Delhi.

Blueprint

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