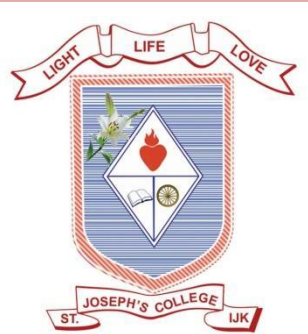




# **ST. JOSEPH'S COLLEGE (AUTONOMOUS)**

**IRINJALAKUDA**



**CURRICULA AND SYLLABI FOR**

**2019-2020**

Under Choice Based Credit & Semester System

**2019 Admissions**

# St. Joseph's College (Autonomous), Irinjalakuda

## Department of Economics

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## **FOREWORD**

The future of the credibility of the higher education system depends on the success of the implementation of autonomy. The anticipated outcome of the whole exercise depends, in particular, on the mainstay of any educational institution- the curricular aspects. As an autonomous college since 2016, St. Joseph's has the mandate to visualize appropriate curricula for particular programmes, update and revise them periodically, and make sure that the expected outcomes are successfully achieved.

A wide range of course options that are in tune with the emerging national and global trends and relevant to the local needs were considered by the institution prior to the P.G. restructuring exercise. Diversity and flexibility, career orientation, skill acquisition, and research enhancement were considered and a structured feedback system established to gather the opinions and suggestions of all the stakeholders including the students, the faculty, the staff, the industry experts, the alumnae, the parents and the employers.

Curricula evolved also took into account the attainment of program, program specific and course outcomes. Evaluation of the curricular intake and delivery is done at the year end to find suggestions for change.

I Sincerely acknowledge the members on the various Boards of Studies and on the Academic Council for their time and expertise in helping us come to a decision regarding Curricula and Syllabi restructuring and redesigning. Thanks are also due to the team IQAC for their relentless endeavours in enhancing quality of education delivery, and in particular, for their efforts to organize workshops and invited talks to orient the faculty and students towards the necessities implied in the restructuring process. I would also like to thank the Heads of Departments and faculty and staff who co-operated with the same.

Principal

## **ACKNOWLEDGEMENT**

The Board of Studies in Economics proceeded with the task of restructuring the postgraduate course in Economics of St Joseph's college as per the terms of reference and guidelines given by the UGC, Calicut University and Kerala State Higher Education Council. The restructuring is attempted in such a way as to lay emphasis on student choice and self learning. The new syllabus would ultimately pave the way for a qualitative transformation from rote/ rule based learning to application oriented knowledge of the principles of economics. While attempting the reforms, the existing conditions relating to infrastructure, work load and staff pattern have been properly taken care of and provision for full utilization of the existing faculty is proposed. Since all the programmes within the same stream should have the same number of credits, we have chosen 80 credits. Total number of courses in MA Economics programme is stipulated as 16 which is spread over 4 semesters. Apart from this we have a dissertation and viva-voce which will enable the students to have an on the field learning experience. The task of restructuring was done through a series of discussions from May 2019 to December 2019. Members of the Board of Studies, reputed experts, research guides, retired faculty of the department and other resource persons from various universities, colleges did a commendable work to accomplish the task. I acknowledge that without the valuable help, guidance and co-operation we have received from various quarters, we would not have been able to function smoothly. The guidance of Dr. Chacko Jose, Associate Professor and head and research guide, Department of Economics, S H College Chalakudy, Dr. Vimala Associate Professor and head and research guide, Department of Economics Vimala College Thrissur, and IQAC Co-ordinator and Dr. Najil George Assistant Professor, Department of Bio- technology and member of the Governing Council helped give shape to the overall structure. I also wish to express my sincere thanks to Dr. K X Joseph ret'd. Professor, and P G Board Chairman of Calicut university, and Dr. Rajan Gurukul, Former Vice-Chancellor, M.G. University, currently Visiting Professor, Centre for Contemporary Studies, Indian Institute of Science, for their selfless and timely advice and for giving us all the help and guidance we needed. I also extend my gratitude to Dr.K.P.Mani (Ret'd.Professor, Dr.John Mathai Centre, Thrissur) Ms. Jessy John K ( Assistant professor St. Aloysius College Elthuruthu) Dr. Nirmala Padmanaban (Associate Professor & Head, Dept. of Economics, St. Tresa's College, Ernakulam) for their invaluable suggestions. I am greatly indebted to the members of the Board of Studies who, from the very beginning, did a marvellous work in coordinating all activities leading to successful culmination of the restructuring. I express my gratitude to all those who gave valuable suggestions and whole-hearted co-operation in making this restructuring a memorable intellectual exercise.

**Daisy P K**

**H O D, Dept. of Economics**

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# **St. Joseph's College, (Autonomous), Irinjalakuda**

## **Department of Economics**

**(2019 Admission)**

### **Preface**

The Master of Arts (M A) in Economics is a two-year full-time programme, with each year comprising of two semesters. Regular updation of both curriculum and syllabus in economics is unavoidable because the subject of economics has a rapid growth compared to most of the other fields in social sciences. Accordingly, timely modifications and updations are to be made in the curriculum in tune with the latest developments in economic theories, techniques and methods of analysis and the rapidly changing global economic environment.

The present syllabus is designed after making a thorough review of the existing curriculum and as per the CBCSS PG Regulations 2019. It incorporates a wide range of electives for the students. Thoroughly revised contents, evaluation schemes, model question papers and a format to prepare the dissertation are the major components of the new syllabus. The revised syllabus is the outcome of a series of sittings of the members of the board of studies and consultations with the faculty members handling various papers and experts in the respective areas. The draft syllabus has been sent to the faculty in different colleges for their expert opinion and suggestions.

Valuable comments and suggestions given by them have been incorporated in the syllabi before finalizing it. I express my deep sense of gratitude to the members of the Board of Studies in Economics (PG), experts from different fields and economics faculty of various colleges for the help and support extended by them in materializing it.

**Daisy P K**

**H O D Dept. of Economics**

# St. Joseph's College, (Autonomous), Irinjalakuda

## STUDENT ATTRIBUTES



The motto of the institution is “Light, Life, Love”

**Light** for the illumination of the heart and mind

**Life** for the fullness of growth – physical, mental, intellectual and spiritual

**Love** for fellowship with the Supreme & with one another

The motto enshrines the vision of the Founders for the students and constitutes the foundation for the acquisition of the following student attributes envisioned by the institution.

- Empowerment
- Life Long Learning
- Holistic Development
- Value Orientation
- Social Responsibility
- Nation Building Capacity
- Green Thinking
- Creativity & Innovation
- Acquiring Life Skills
- Discipline
- Leadership / Team skills
- Problem solving skills
- Communicability

The above Student Attributes will be attained in the span of their student life at St. Joseph's College through various activities such as

- Curricular, Co-curricular & extra-curricular
- Sports, games, fine arts and cultural
- Enrichment / certificate courses
- Extension / outreach programmes
- Healthy / Best practices

## **PROGRAMME OUTCOMES**

At the end of a postgraduate programme, the student would have :

1. Acquired the ability for critical thinking and problem solving
2. Attained life skills and communication skills
3. Inculcated moral and ethical values
4. Become a promoter of unpolluted environs and proactive society
5. Developed a culture of research and lifelong learning
6. Become an empowered woman aware of global perspectives and national realities

## **PROGRAMME SPECIFIC OUTCOME**

	<b>Program Specific Outcomes</b>
<b>PSO1</b>	<b>Understanding the basic theories and concepts of economics and financial services</b>
<b>PSO2</b>	<b>Empirically evaluate the validity of an economic argument</b>
<b>PSO3</b>	<b>Analyses economic problems that have economic implications on different sectors of national economy</b>
<b>PSO4</b>	<b>Apply economic analysis to everyday problems in real world situations and evaluate critically various policy proposals.</b>

## AIMS AND OBJECTIVES

### First Semester

#### **Develop the ability to explain core economic terms, concepts, and theories.**

- Explain the function of market and prices as allocative mechanisms.
- Apply the concept of equilibrium to both microeconomics and macroeconomics.
- Identify key macroeconomic indicators and measures of economics change, growth, and development.
- Identify and discuss the key concepts underlying comparative advantage.
- Identify and explain major types of market failures

### Second Semester

#### **Demonstrate quantitative reasoning skills and the ability to employ the “economic way of thinking.”**

- Present an economic argument in quantitative terms.
- Demonstrate ability to solve systems of equations.
- Be able to conduct economic analysis using equations and graphs
- Explain the contribution of economics to the analysis of non-market social issues.

### Third Semester

#### **Apply economic theories and concepts to contemporary social issues, as well as formulation and analysis of policy.**

- Describe how economic trade-offs and social values impact public/private social policy, and the success or failure of policies to achieve intended outcomes.
- Assess the role of domestic and international institutions and norms in shaping economies.

### Fourth Semester

#### **Recognize the role of ethical values in economic decisions and apply the ability to collect, process, and interpret data, including statistical inference**

- Identify the limits of economic analysis.
- Compare and contrast efficiency and equity.
- Recognize how to use scientific method in economics.
- Formulate empirically testable hypotheses
- Critically assess the statistical analysis of other researchers.

## **COURSE DESIGN**

The M A Economics programme includes

- i. Core courses
- ii. Elective Courses
- iii. Project Work / Dissertation
- iv. Comprehensive Viva-voce
- v. Audit Courses

The M A Economics programme contains 15 compulsory Core courses, 3 Elective Courses, 1 Project Work / Dissertation, 1 Comprehensive Viva-voce and 2 Audit Courses. (write about credit distribution of courses) No course carries more than 4 credits. The student can select any Choice based elective course offered by the department which offers the core courses, depending on the availability of teachers and infrastructure facilities, in the institution.

### **Duration of the programme**

The minimum duration for completion of a four semester PG Programme is 2 years. The maximum period for completion is 4 years. The duration of each semester will be 90 working days, inclusive of examinations, spread over five months. Odd semesters will be held from June to October and even semesters from November to March subject to the academic calendar of St. Joseph's College (Autonomous) Irinjalakuda.

### **Programme structure**

The M A Economics programme include three types of courses: Core courses, Elective courses and Audit Courses. Project Work and Comprehensive Viva-voce are mandatory for all regular programmes and these shall be done in the end semester. Total credit for the M A Economics programme is 80 (eighty), this describes the weightage of the course concerned and the pattern of distribution is as detailed below:

<b>Programme Duration</b>	<b>4 Semester</b>
Core courses	(13)
Elective Courses	(3)
Project Work / Dissertation	(1)
Comprehensive Viva-voce	(1)

Minimum attendance required	(75%)
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Elective courses shall be spread over either in the Third & Fourth Semesters combined or in any one of these Semesters (III / IV). Study Tour / Field visit / Industrial visit / Trip for specimen collection may be conducted as a part of the Programme.

Semester	Course Title	Suggested Area
I	Ability Enhancement Course (AEC)	Internship / Seminar presentation / Publications / Case study analysis / Industrial or Practical Training/Community linkage programme /Book reviews etc.
II	Professional Competency Course (PCC)	To test the skill level of students like testing the application level of different softwares such as SPSS/R/ Econometrics / Pythan/Any software relevant to the programme of study / Translations etc.

### Courses and Credit distribution

The required number of credits as specified in the syllabus/regulations must be acquired by the student to qualify for the degree. A student shall accumulate a minimum of 80 credits for the successful completion of the M A Economics programmes.

Semester	Course	Teaching Hours	Credit
I	Core Courses (Theory/Practical)	290	19
II	Core Courses (Theory/Practical)	290	20
III	Core Courses (Theory/Practical) Elective Courses (Theory/Practical)	220+70	19
IV	Core Courses (Theory / Practical) Including: <ul style="list-style-type: none"> <li>● Comprehensive Viva-voce (Optional)</li> <li>● Project Work / Dissertation</li> </ul>	280+12=292	22

	Elective Courses (Theory/ Practical)		
<b>Total credit</b>		<b>80</b>	

***Audit Courses:***

In addition to the above courses there will be two Audit Courses (*Ability Enhancement Course & Professional Competency Course*) with 4 credits each. The college will conduct examinations for these courses in respective semesters and intimate /upload the results of the same to the Controller of Examinations of St. Joseph's College (Autonomous) Irinjalakuda. The College will intimate/upload the results of the same to the University on the stipulated date during the third semester. The credits will not be counted for evaluating the overall SGPA & CGPA. The details of Audit courses are given below.

<b>Semester</b>	<b>Course</b>	<b>Teaching Hours</b>	<b>Credit</b>
	<b><i>Audit Course I :</i></b>		
I	<i>Ability Enhancement Course (AEC)</i>	0	4
	<b><i>Audit Course II :</i></b>		
II	<i>Professional Competency Course (PCC)</i>	0	4

**Project Work / Dissertation & Comprehensive Viva-Voce**

There is a Project work with dissertation and Comprehensive Viva-Voce as separate courses relating to the core area under study in the end Semester and included in the Core Courses. Viva-voce related to Project work is one of the criteria for Project Work evaluation. Students have to submit a Project Report / Dissertation in the prescribed structure and format as a part of the Project Work undertaken. There will be External and Internal evaluation for Project Work/ Comprehensive Viva-Voce and these shall be combined in the proportion of 4:1.

**COURSE CODE FORMAT**

The following are the common guidelines for coding various courses in order to get a uniform

identification. It is advisable to assign a nine Digit Code (combination of Alpha Numerical) for various courses as detailed below:

1. **First two digits** indicate the code of college SJ
2. **Next three digits** indicate the Programme/discipline code (ENG for English, MCM for M.Com, CHE for chemistry, PHY for physics, MLM for Malayalam, SKT for Sanskrit, HTY for History etc.)
3. **Sixth digit** is the Semester indicator which can be given as 1, 2, 3 & 4 respectively for I, II, III & IV Semester (MCM1, CHE2 Etc).
4. **Seventh digit** will be the Course Category indicator as detailed below :

Sl No	Nature of Course	Course Code
1	Core Courses	<b>C</b>
2	Elective Courses	<b>E</b>
3	Project	<b>P</b>
4	Comprehensive Viva	<b>V</b>
5	Practical / Lab	<b>L</b>
6	Audit Courses	<b>A</b>

5. **Last two digits** indicate the serial number of the respective courses. If there is one digit it should be prefixed by '0'(Zero). (01, 02, etc)
6. If the number of courses in one category is only one (eg : Viva, Project etc.), assign the course serial number as 01.
7. Examples :

Sl. No	Code	Details
1	SJMCM 1C01	M.Com I Sem Core Course No1
2	SJCHE 2 A 02	Chemistry II Sem Audit Course No.2
3	SJENG 4 V01	English IV Sem Viva No. 1
4	SJMLM 3 E02	Malayalam III Sem Elective No. 2
5	SJPHY 4 P 01	Physics IV Sem Project Work No. 1

6	SJ BGY 2 L 02	Biology II Sem Practical No. 2
7	SJPSY 3 C 02	Psychology III Sem Core Course No. 2
8	SJHTR 2 E 01	History II Sem Elective Course No. 1

## STRUCTURE OF THE PROGRAMME

### Scheme- Core Course

The following table shows the structure of the programme which indicates course code, course title, instructional hours and credits.

<b>Semester I</b>						
<b>Course Code</b>	<b>Title of the course</b>	<b>Number of hours per week</b>	<b>Total Credits</b>	<b>Total hours/ semester</b>	<b>Marks</b>	
					<b>SA</b>	<b>ESA</b>
SJECO1 C01	Microeconomics: Theory and Applications I	7	5	90		150
SJECO1 C02	Macroeconomics: Theories and Policies I	6	5	90		150
SJECO1 C03	Indian Economy: Problems and Policies	6	5	90		150
SJECO1 C04	Quantitative Methods for Economic Analysis I	6	4	90		150
SJECO1 A01	Ability Enhancement Course		4			
<b>Semester II</b>						
SJECO2 C05	Microeconomics: Theory and Applications II	6	5	90		150

SJECO2 C06	Macroeconomics: Theories and Policies II	6	5	90		150
SJECO2 C07	Public Finance: Theory and Practice	7	5	90		150
SJECO2 C08	Quantitative Methods for Economic Analysis II	6	5	90		150
SJECO2 A02	-Professional Competency Course		4			
<b>Semester III</b>						
SJECO3 C09	International Trade	6	5	90		150
SJECO3 C10	Growth and Development	6	5	90		150
SJECO3 C11	Basic Econometrics	7	5	90		150
<b>SJECO3E01</b>	Elective I- Banking: Theory and Practice	6	4	90		150
<b>Semester IV</b>						
SJECO4 C12	International Finance	6	3	90		150
SJECO3 C13	Financial Markets	6	3	90		150
<b>SJECO4 E06</b>	Agricultural Economics	6	4	90		150
<b>SJECO4 E10</b>	Elective II-Research Methodology and Computer Applications	6	4	90		150
SJECO4 P01	Project	1	4			

SJECO4 V01	Comprehensive Viva Voce		4			
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### Scheme- Elective Courses

<b>Semester III</b>						
<b>Course Code</b>	<b>Title of the course</b>	<b>Number of hours per week</b>	<b>Total Credits</b>	<b>Total hours/ semester</b>	<b>Marks</b>	
					<b>SA</b>	<b>ESA</b>
<b>SJECO3E01</b>	Elective I- Banking: Theory and Practice	6	4	90		150
<b>Semester IV</b>						
<b>Course Code</b>	<b>Title of the course</b>	<b>Number of hours per week</b>	<b>Total Credits</b>	<b>Total hours/ semester</b>	<b>Marks</b>	
					<b>SA</b>	<b>ESA</b>
<b>SJECO4 E06</b>	Elective II Agricultural Economics	6	4	90		150
<b>SJECO4 E10</b>	Elective III-Research Methodology and Computer Applications	6	4	90		150

## Scheme- Project work / dissertation and comprehensive viva-voce

Semester I						
Course Code	Title of the course	Number of hours per week	Total Credits	Total hours/ semester	Marks	
					CA	ESA
SJECO4 P01	Project	1	4	15	5	150
SJECO4 V01	Comprehensive Viva Voce		4			

### EVALUATION AND GRADING

The evaluation scheme for each course will contain two parts; (a) Internal/Continuous Assessment (CA) and (b) External / End Semester Evaluation (ESE). Of the total, 20% weightage will be given to Internal evaluation/Continuous assessment and the remaining 80% to External/ESE and the ratio and weightage between Internal and External is 1:4.

a) Internal/Continuous Assessment (CA) : 5 weightage

b) External / End Semester Evaluation (ESE) : 30weightage

Primary evaluation for Internal and External shall be based on 6 letter grades (A+, A, B, C, D and E ) with numerical values (Grade Points) of 5, 4, 3, 2, 1 & 0 respectively. Grade Point Average: Internal and External components are separately graded and the combined grade point with weightage 1 for Internal and 4 for external shall be applied to calculate the Grade Point Average (GPA) of each course. Letter grade shall be assigned to each course based on the categorization based on Ten-point Scale. There is no revaluation for PG Programme (due to double valuation)

#### *Evaluation of Audit Courses:*

The examination and evaluation will be conducted by the college either in the normal structure or MCQ model from the Question Bank and other guidelines provided by the University/BoS. The Question paper will be for minimum 30 weightage and a minimum of 3-hour duration for the examination. The marks of audit courses one and two will be forwarded to Controller of Examinations of St. Joseph's

College (Autonomous) Irinjalakuda in time of respective semesters. The result will be intimated / uploaded to the University during the Third Semester.

### **Phases for Evaluation:**

*I Phase: To be done by the concerned Teacher/Examiner based on 6 Point Scale*

1. Evaluation of all individual External Theory courses and Internal evaluation
2. Evaluation of Project Work External and Internal
3. Evaluation of External and Internal Practical Courses
4. Evaluation of External and Internal Comprehensive Viva-voce

*II Phase - GPA Calculation - To be done by St. Joseph's College (Autonomous)*

1. Consolidation of External and Internal for Theory Courses (Calculation of GPA)
2. Consolidation of External and Internal for Project Work (Calculation of GPA)
3. Consolidation of External and Internal for Practical Courses (Calculation of GPA)
4. Consolidation of External and Internal for Comprehensive Viva-voce (Calculation of GPA)

*III Phase - SGPA Calculation - To be done by St. Joseph's College (Autonomous) Irinjalakuda*

- Calculation of Semester Grade Point Average. This is the consolidated net result (Grade) in a particular Semester.

*IV Phase - CGPA Calculation - To be done by St. Joseph's College (Autonomous) Irinjalakuda*

- Calculation of Consolidated Grade Point Average. This is the consolidated net result (Grade) of a Programme.

### **Internal Evaluation / Continuous Assessment (CA)**

Continuous Assessment will be based on a predetermined transparent system involving periodic two written tests, assignments, seminars and attendance in respect of theory courses and based on tests, lab skill and records/viva in respect of practical courses. The criteria and percentage of weightage assigned to various components for internal evaluation are as follows:

<b>Theory:</b>			
<b>Sl. No</b>	<b>Component</b>	<b>Percentage</b>	<b>Weightage</b>
1	Examination /Test	40%	2
2	Seminars / Presentation	20%	1
3	Assignment	20%	1
4	Attendance	20%	1

Attendance weightage 1 can be distributed as follows

<b>Attendance</b>	<b>Internal weightage</b>	<b>Marks</b>
Above 90%	1	5
85–89%	0.8	4
80–84%	0.6	3
76–79%	0.4	2
75%	0.2	1

Grades given for the internal evaluation are based on the grades A+, A, B, C, D& E with grade points 5, 4, 3, 2, 1 & 0 respectively. The overall grades will be as per the Ten Point scale. There shall be no separate minimum Grade Point for internal evaluation. To ensure transparency of the evaluation process, the internal assessment marks awarded to the students in each course in a semester will be published on the notice board before 5 days of commencement of external examination. There will not be any chance for improvement of internal marks. The course teacher will maintain the academic record of each student registered for the course.

*Examination /Test:* For each course there shall be class test/s during a semester. Grades should be displayed on the notice board. Valued answer scripts shall be made available to the students for perusal.

*Seminars / Presentation:* Every student should deliver Seminar/Presentation as an internal built –in component of the curriculum transaction for every course and must be evaluated by the respective course teacher in terms of structure, content, presentation and interaction. The soft and hard copies of the seminar report are to be submitted to the course teacher.

*Assignment:* Each student will be required to do assignment/s as an internal built – in component of the curriculum transaction for each course. Assignments after valuation must be returned to the students. The teacher shall define the expected quality of the above in terms of structure, content, presentation etc. and inform the same to the students. Punctuality in submission is to be considered.

### **External / End Semester Evaluation (ESE)**

The semester-end examinations in theory courses will be conducted by the Controller of Examination St. Joseph’s College (Autonomous) Irinjalakuda with question papers set by external experts. The evaluation of the answer scripts will be done by examiners based on a well-defined scheme of valuation. The external evaluation will be done immediately after the internal valuation. The language of writing the examination should be English .

### **Pattern of Questions For External/ESE:**

Questions will be set to assess the knowledge acquired, standard, and application of knowledge, application of knowledge in new situations, critical evaluation of knowledge and the ability to synthesize knowledge. Due weightage will be given to each module based on content/teaching hours allotted to each module. The question will be prepared in such a way that the answers can be awarded A+, A, B, C, D, E Grades. Different types of questions shall be given different weightages to quantify their range given in the following model:

<b>Sl. No.</b>	<b>Type of Questions</b>	<b>Individual weightage</b>	<b>Total Weightage</b>	<b>Number of questions to be answered</b>
1	Multiple choice questions	1/5	$1/5 \times 15 = 3$	15
2	Short Answer type questions	1	$1 \times 5 = 5$	4 out of 8
3	Short essay/ problem solving type	2	$2 \times 7 = 14$	4 out of 10
4	Long Essay type questions	4	$4 \times 2 = 8$	2 out of 4

<b>Total</b>		<b>30</b>	<b>37</b>
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### **Evaluation of project work / dissertation**

There will be External and Internal evaluation with the same criteria for Project Work done and the grading system shall be followed. One component among the Project Work evaluation criteria will be Viva-voce (Project Work related) and the respective weightage will be 40%. Consolidated Grade for Project Work is calculated by combining both the External and Internal in the Ratio of 4:1 (80% & 20%). For a pass in Project Work, a student has to secure a minimum of P Grade in External and Internal examination combined. If the students could not secure minimum P Grade in the Project work, they will be treated as failed in that attempt and the students may be allowed to rework and resubmit the same in accordance with the University exam stipulations. There shall be no improvement chance for Project Work. The External and Internal evaluation of the Project Work shall be done based on the following criteria and weightages as detailed below:

<b>Sl. No</b>	<b>Criteria</b>	<b>% of weightage</b>	<b>Weightage External</b>	<b>Weightage Internal</b>
1	Relevance of the topic and Statement of problem	20%	8	2
2	Methodology & Analysis	20%	8	2
3	Quality of Report & Presentation	20%	8	2
4	Viva-Voce	(40%)	16	4
<b>Total Weightage</b>		<b>100%</b>	<b>40</b>	<b>10</b>

### **Conduct of comprehensive viva-voce**

There will be External and Internal Comprehensive Viva-voce; the External Conduct and internal Conduct of the Viva-voce are mandatory.

General Viva- Voce is the fifteenth core paper of the M A Economics course. Both dissertation and subject viva were conducted by the same viva board. All students have to attend the general viva voice to obtain their respective masters degree in economics.

For a pass in Comprehensive viva-voce, a student has to secure a minimum of P Grade in External and Internal examination combined. If the students could not secure minimum P Grade in the Comprehensive

viva-voce, they will be treated as failed in that attempt and the student may reappear for the same next time in accordance with the University exam stipulations. There shall be no improvement chance for Comprehensive viva-voce.

## DIRECT GRADING SYSTEM

Direct Grading System based on a 10 – Point scale is used to evaluate the performance (External and Internal Examination of students). For all courses (Theory & Practical)/Semester/Overall Programme, Letter grades and **GPA/SGPA/CGPA** are given on the following way:

- a) First Stage Evaluation for both Internal and External done by the Teachers concerned in the following Scale :

<b>Grade</b>	<b>Grade Points</b>
<b>A+</b>	<b>5</b>
<b>A</b>	<b>4</b>
<b>B</b>	<b>3</b>
<b>C</b>	<b>2</b>
<b>D</b>	<b>1</b>
<b>E</b>	<b>0</b>

- b) The Grade Range for both Internal & External shall be :

Letter Grade	Grade Range	Range of Percentage (%)	Merit / Indicator
O	4.25 – 5.00	85.00 – 100.00	Outstanding
A+	3.75 – 4.24	75.00 – 84.99	Excellent
A	3.25 – 3.74	65.00 – 74.99	Very Good
B+	2.75 – 3.24	55.00 – 64.99	Good
B	2.50 – 2.74	50.00 – 54.99	Above

			Average
C	2.25 – 2.49	45.00 – 49.99	Average
P	2.00 -2.24	40.00 – 44.99	Pass
F	< 2.00	Below 40	Fail
I	0	-	Incomplete
Ab	0	-	Absent

*'B' Grade lower limit is 50% and 'B+' Grade lower limit is 55%*

No separate minimum is required for internal evaluation for a pass, but a minimum P Grade is required for a pass in the external evaluation. However, a minimum P grade is required for pass in a course. A student who fails to secure a minimum grade for a pass in a course will be permitted to write the examination along with the next batch.

Improvement of Course – The candidates who wish to improve the grade / grade point of the external examination of a course/s they have passed already can do the same by appearing in the external examination of the concerned semester along with the immediate junior batch.

Betterment Programme One time- A candidate will be permitted to improve the CGPA of the Programme within a continuous period of four semesters immediately following the completion of the programme allowing only once for a particular semester. The CGPA for the betterment appearance will be computed based on the SGPA secured in the original or betterment appearance of each semester whichever is higher.

### **Semester Grade Point Average (SGPA) – Calculation**

The SGPA is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses taken by a student. After the successful completion of a semester, Semester Grade Point Average (SGPA) of a student in that semester is calculated using the formula given below.

$\text{Semester Grade Point Average - SGPA (S}_j\text{)} = \frac{\sum(C_i \times G_i)}{Cr}$ (SGPA= Total Credit Points awarded in a semester / Total credits of the semester )
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Where ‘S<sub>j</sub>’ is the j<sup>th</sup> semester , ‘G<sub>i</sub> ‘ is the grade point scored by the student in the i<sup>th</sup> course 'c<sub>i</sub> ‘ is the credit

of the  $i^{\text{th}}$  course, 'Cr ' is the total credits of the semester .

### **Cumulative Grade Point Average (CGPA) – Calculation**

$$\text{Cumulative Grade Point Average (CGPA)} = \frac{\sum(C_i \times S_i)}{\text{Cr}} \quad (\text{CGPA} = \text{Total Credit points awarded in all semesters} / \text{Total credits of the programme})$$

Where  $C_1$  is the credit of the  $I^{\text{st}}$  semester  $S_1$  is the SGPA of the  $I^{\text{st}}$  semester and Cr is the total number of credits in the programme. The CGPA is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a programme. The SGPA and CGPA shall be rounded off to 2 decimal points. For the successful completion of a semester, a student should pass all courses and score a minimum SGPA of 2.0. However, the students are permitted to move to the next semester irrespective of their SGPA.

## CONSOLIDATED SCHEME FOR I TO VI SEMESTERS

### PROGRAMME STRUCTURE

#### SEMESTER I

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>HOURS</b>	<b>CREDIT</b>
SJECO1 C01	Microeconomics: Theory and Applications I	7	5
SJECO1 C02	Macroeconomics: Theories and Policies I	6	5
SJECO1 C03	Indian Economy: Problems and Policies	6	5
SJECO1 C04	Quantitative Methods for Economic Analysis I	6	4
SJECO1 A01	Ability Enhancement Course		4*

\*The credits will not be counted for evaluating the overall SGPA & CGPA

## SYLLABI FOR CORE COURSES

**Course Code: SJECO1 C01**

**Name of the Course: MICROECONOMICS: THEORY AND APPLICATIONS-I**

	Course Outcome	POs/ PSO	CL	KC	Class Sessions (appr.)	Lab (Hrs)
CO1	understand the basic principles of micro economics	PO 1/PSO1	U	C	8	0
CO2	identify the basic problems of an economy	PO1/ PSO2	U	C	8	0
CO3	understand the types of demand and its determinants	PO1/PSO 1	U	C	12	0
CO4	Describe the concept supply	PO1/PSO 4	A	C	8	0
CO5	measure the elasticity of demand and supply	PO2/PSO 2	A	P	9	0
CO6	Evaluate the indifference curve with real life situations	PO7&PO2 /PSO2	E	p	10	0
CO7	Distinguish between long run and short run production function	po1/ps01 &ps04	A	c	12	0
CO8	Compare traditional and modern theory of cost	po1&po2/ ps01	A	C	11	0

**\*R-remember, U-understand, A-apply, Z-analyze, E-evaluate, C-create**

**\*F-factual, C-conceptual, P-practical/procedural**

# **SJECO1 C01 - MICROECONOMICS: THEORY AND APPLICATIONS-I**

**(Credit 5)**

## **Module I Consumer Behaviour under Uncertainty and Risk**

Choice under uncertainty- Representing uncertainty by Probability distributions- Expected Value and Variability- Maximising expected utility- Fair gambles and expected utility hypothesis- St. Petersburg paradox-Neumann-Morgenstern utility index- Friedman Savage hypothesis-Markowitz hypothesis- Utility functions and attitudes towards risk- risk neutrality, risk aversion, risk preference, certainty equivalent, demand for risky assets- reducing risks- diversification, insurance, flexibility, information- The state preference approach to choice under uncertainty.

## **Module II Market Demand for Commodities**

Deriving market demand- Network externalities- Bandwagon effect, Snob effect and Veblen effect- Empirical estimation of demand- Linear demand curve, Constant elasticity demand function- Dynamic versions of demand functions-Nerlove, Houthakker and Taylor-Linear expenditure system- Characteristic approach to demand function.

## **Module III Theory of Production and Costs**

Short run and long run production function- returns to scale- elasticity of substitution- Homogeneous production function- Linear homogeneous production function- Fixed proportion production function- Cobb Douglas production function and CES production function- Technological progress and production function- Cost function- Cost minimising input choices- properties of cost functions- Economies of scope- The Learning curve – Estimating and Predicting cost- Short run and long run distinction.

## **Module IV Theory of Imperfect Markets**

Oligopoly- Characteristics- Collusive versus non-collusive oligopoly- Non-collusive models- Cournot model- Bertrand model- Chamberlin's model-Kinked demand curve model of Sweezy- Stackelberg's model- Welfare properties of duopolistic markets- Collusive models- Cartels and Price leadership

## **Module V Theory of Games**

Basic concepts-Cooperative versus non-cooperative game- Zero sum versus non- zero sum game- Prisoner's dilemma- Dominant strategies- Nash equilibrium- Prisoner's dilemma- Pure strategies- Mixed strategies- repeated games- Sequential games- Threats, commitments and credibility.

## **References**

1. Walter Nicholson and Christopher Snyder (2017): Microeconomic Theory- Basic Concepts and Extensions, 12<sup>th</sup> edition, Cengage Learning India Private Limited.
2. Andrew Schotter (2009): Microeconomics: A Modern Approach- 1<sup>st</sup> edition, South Western Cengage Learning.
3. Michael E Wetzstein (2013): Microeconomic Theory- Concepts and Connections, 2<sup>nd</sup> edition, Routledge.
4. Robert S Pindyck and Daniel L Rubinfeld (2017): Microeconomics- 8<sup>th</sup> edition, Pearson.
5. Thomas J Nechyba (2010): Microeconomics: An Intuitive Approach with Calculus- 1<sup>st</sup> edition, South Western Cengage Learning.
6. Andreu Mas-Colell, Michael D Whinston and Jerry R Greene (1995): Microeconomic Theory- 1<sup>st</sup> edition, Oxford University Press.
7. Geoffrey A Jehle (2010): Advanced Microeconomic Theory- 3<sup>rd</sup> edition, Prentice Hall

8. Hall R Varian (2014): Intermediate Microeconomics- A Modern Approach, WW Norton and Co.
9. Jeffrey M Perloff (2019): Microeconomics -7<sup>th</sup>edition,Pearson
10. Hugh Gravelle and Ray Rees (2007): Microeconomics- 3<sup>rd</sup> edition, Pearson Education
11. Edgar K Browning and Mark Zupan (2011): Microeconomics: Theory and Applications- 3<sup>rd</sup> edition.
12. Dominick Salvatore (2009): Microeconomics – 5<sup>th</sup> edition, Oxford University Press.
13. A Koutsoyiannis (1979): Modern Microeconomics- 2<sup>nd</sup>edition,Macmillan.
14. Robert Y Awh (1976): Microeconomics: Theory and Applications- John Wiley & Sons
15. Watson and Getz (2004): Price Theory and its Uses- 5<sup>th</sup> edition, AITBS Publishers and Distributors.
16. James H Henderson and Richard E Quandt (1980): Microeconomic Theory: A Mathematical Approach- 8<sup>th</sup>edition,McGraw-Hill
17. G S Madalla and Ellen Miller (1989): Microeconomics: Theory and Applications- 1<sup>st</sup> Edition, TataMcGraw-Hill.

## **MODEL QUESTION PAPER**

### **FIRST SEMESTER M A ECONOMICS DEGREE EXAMINATION (CBCSS)**

#### **SJECO1 C01-MICROECONOMICS: THEORY AND APPLICATIONS I**

Time:3 Hours

Maximum Weightage:30

#### **Part A**

Answer **all** questions

Each bunch of **5** questions carries a weightage of **1**

Multiple Choices:

1. Cournot duopoly leadsto:
  - (a) stable equilibrium (b) unstable equilibrium (c) disequilibrium (d) neutral equilibrium
2. Labour deepening technical progress increases theMP<sub>L</sub>:
  - (a) faster than MP<sub>K</sub> (b) slower than MP<sub>K</sub> (c) at the same rate as MP<sub>K</sub> (d) none of the above
3. If the LAC curve falls as output expands, this is dueto:
  - (a) economies of scale (b) the law of diminishing returns
  - (c) diseconomies of scale (d) any of the above
4. Linearly homogeneous production function represents the caseof:
  - (a) constant returns to scale (b) increasing returns to scale (c) decreasing returns to scale (d) none
5. Neumann-Morgenstern hypothesis deals with consumer behaviour in respectof:
  - (a) risk (b) preference (c) introspection (d) indifference
6. Oligopoly is characterisedby:
  - (a) two sellers (b) one seller (c) few sellers (d) few buyers
7. Bernoulli hypothesis holds that individual takes decision under risky and uncertain decisions on the basis of:
  - (a) expected monetary value (b) expected utility (c) marginal utility of money
  - (d) both expected monetary value and expected utility
8. Kinked demand curve model is associated with the nameof:
  - (a) Stackelberg (b) Sweezy (c) Samuelson (d) Sen
9. If an oligopolist incurs losses in the short run, then in the longrun:
  - (a) theoligopolist will go out of business (b) the oligopolist will stay in business
  - (c) theoligopolist will break even (d) any of the above is possible
10. In both the Chamberlin and the kinked demand curve models, the oligopolists:
  - (a) recognize their interdependence (b) do not collude

- (c) tend to keep prices constant (d) all of the above
11. The strategy of maximizing the minimum gain is called:  
(a) minimax (b) maximin (c) pure strategy (d) mixed strategy
12. All the following curves are U-shaped except:  
(a) AVC curve (b) AFC curve (c) AC curve (d) MC curve
13. The concept of bandwagon effect was introduced by:  
(a) Stackelberg (b) Sweezy (c) Samuelson (d) Harvey Leibenstein
14. Games in which the gains of one player equal the losses of the other are called:  
(a) zero-sum games (b) non-zero sum games (c) prisoner's dilemma (d) pure strategy
15. At the point of producer equilibrium:  
(a) the isoquant is tangent to the isocost line (b) the  $MRTS_{LK}$  equals  $P_L/P_K$   
(c)  $MP_L/P_L = MP_K/P_K$  (d) all of the above

(15 x 1/5 = 3 weightage)

**Part B (Very Short Answer Questions)**

Answer any **5** questions

Each question carries a weightage of **1**

16. What is Veblen effect?

17. Distinguish between risk aversion and risk preference.
18. What is a learning curve?
19. What is meant by elasticity of substitution?
20. What is a cartel?
21. What is a linearly homogeneous production function?
22. Explain non-collusive oligopoly.
23. What is meant by saddlepoint?

(5 x 1 = 5 weightage)

**Part C (Short Answer Questions)**

Answer any 7 questions

Each question carries a weightage of 2

24. Explain the properties of CES production function.
25. Write a note on price leadership.
26. Explain expected utility hypothesis.
27. What is meant by constant elasticity demand function?
28. Explain prisoner's dilemma.
29. Explain returns to scale.
30. Explain Paul Sweezy's model.
31. Explain different concepts of technical progress.
32. Explain Friedman-Savage hypothesis.
33. Explain the characteristic approach to demand function.

**Part D (Essay Questions)**

Answer any 2 questions

Each question carries a weightage of 4

34. Explain the basic concepts of the theory of games.
35. Critically examine the Neumann-Morgenstern hypothesis.
36. Critically examine Chamberlin's model of oligopoly.
37. Critically examine the Cobb-Douglas production function.

**Course Code: SJECO1 C02**

**Name of the Course: MACROECONOMICS: THEORIES AND POLICIES I**

	Course Outcome	POs/ PSOs	CL	KC	Class Sessions (appr.)	Lab (Hrs)
CO1	the meaning of consumption function, relationship between APC and MPC, consumption and income, concept of multiplier	PSO1/PSO4	U	A	20	0
CO2	analyse the theories of absolute and relative income hypotheses	PSO4	U	A	10	0
CO3	analyse the income determination through classical and Keynesian economics	PSO2 /PSO4	U	A	10	0
CO4	understand the impact of cyclical fluctuation on the growth of business, and lay policies to control trade cycle	PSO1	U	A	10	0
CO5	Analyze different phases of trade cycle, demonstrate various trade cycle theories,	PSO4	A	E	10	0
CO6	Identify appropriate macro policy options in response to the state of the economy	PSO1/PSO4	U	E	10	0
CO7	understand the effectiveness	PSO1/PSO	U	E	10	0

	and limitations of fiscal and/or monetary policy for a given state of the economy	4				
CO8	choose an appropriate fiscal and monetary policy for a given state of the economy	PSO2/PSO4	U	E	10	0

**\*R-remember, U-understand, A-apply, Z-analyze, E-evaluate, C-create**

**\*F-factual, C-conceptual, P-practical/procedural**

## **Core Course-II**

### **SJECO1 C02 - MACROECONOMICS: THEORIES AND POLICIES I**

**(Credit 5)**

#### **Module I: Aggregate Demand**

**Consumption Function:** Keynes' psychological law- Absolute income hypothesis- Kuznet's consumption puzzle - Relative income hypothesis - Fisher's inter-temporal choice model – Permanent income hypothesis- Life cycle hypothesis.

**Investment Function** - MEC and MEI approaches -user cost and Neo-classical theory of investment- Tobin's q-ratio- Accelerator theory of investment (simple and flexible acceleration models).

**Demand for Money-** Classical approach to demand for money- Quantity theory approaches, Fisher's equation, Cambridge quantity theory, Keynes's liquidity preference approach - Post-Keynesian approaches to demand for money : Friedman's restatement of Quantity theory of money, Approaches of Baumol and Tobin.

**Supply of Money** - Measures of money supply (RBI definition) - The H theory of money supply- Money multiplier process-Behavioural and endogenous money supply models- Fisher effect.

#### **Module II: Theories of Inflation and Unemployment**

Keynesian and monetarist approach to inflation- Structuralist theory of inflation- Inflation unemployment trade off-Phillips Curve- Short run and long run Phillips curve -The natural rate of unemployment hypothesis- Modified Phillips curve- Adaptive expectation hypothesis- Augmented Phillips curve- NAIRU- Okun's Law-The new microeconomics of the labour market and search theory-Rational expectations.

#### **Module III: Theories of Business Cycles**

Business cycles- Monetary theory of Hawtrey- Over investment theory of Hayek- Innovation theory of Schumpeter-Models of Samuelson, Hicks and Kaldor-Keynesian theory of business cycle-The real business cycle theory- Political business cycle theory

## **Module IV: Neo-Classical and Keynesian Synthesis**

The IS-LM model-equilibrium in goods and money market - ISLM model with government sector; Relative effectiveness of monetary and fiscal policies; Extension of IS-LM models with labour market and flexible prices. The three sector macro model with Keynesian and Neoclassical versions.

## **Module V: Macroeconomic Policy**

Macroeconomic policies- Objectives of macroeconomic policies- Target variable and instrument variable-Monetary policy-Instruments- The issue of central bank autonomy-Rules versus discretion- The Taylor rule-Time inconsistency of policy- Fiscal policy- Instruments- Policy lags - Inside and outside lags- Fiscal policy and budget deficit- Crowding out effect and government budget- The Ricardian Equivalence- Income policy- Stabilization policy.

## **REFERENCES**

1. Gregory Mankiw (2008): Macroeconomics- Worth Publishers NY, 6th ed.
2. Richard T Froyen (2005): Macroeconomics: Theories and Policies- Pearson (LPE), Seventh ed.
3. Rosalind Levacic and Alexander Rebman (1982): Macroeconomics: An Introduction to Keynesian-Neoclassical Controversies- 2nd ed. Macmillan.
4. Eric Pentacost: Macroeconomics-An Open Economy Approach-Macmillan.
5. Rudiger Dornbusch, Stanley Fisher and Richard Startz (2004): Macroeconomics- Tata McGraw Hill, 9th ed.
6. Errol D'Souza (2008): Macroeconomics- Pearson Education.
7. P.N Junankar (1972): Investment: Theories and Evidence-Macmillan.
8. Fred R Glahe (1985): Macroeconomics: Theory and Policy- Harcourt Publishers, New Delhi.
9. Veneries and Sebold (1977): Macroeconomics: Models and Policies- John Wiley & Sons.
10. Gurley J and Shaw E S (1960): Money in a Theory of Finance- Washington: Brookings Institution.
11. Samuelson and Nordhaus (1998): Macroeconomics- 16th ed. Irwin McGraw Hill.
12. Robert J Gordon: Macroeconomics- Eastern Economy Edition.
13. Edward Shapiro: Macroeconomics- Galgotia Publications, New Delhi.
14. Mervyn K. Lewis and Paul D Mizen (2000): Monetary Economics- Oxford University Press.
15. Jagdish Handa (2000): Monetary Economics-Routledge.

**MODEL PAPER**  
**FIRST SEMESTER M A ECONOMICS DEGREE EXAMINATION**  
(CBCSS)

**SJECO1 C02-MACROECONOMICS: THEORIES AND POLICIES I**

Time:3 Hours

Maximum Weightage:30

**Part A**

Answer **all** questions

Each bunch of **5** questions carries a weightage of **1**

Multiple Choices:

1. Permanent income hypothesis is related to:  
(a) income (b) saving (c) consumption (d) investment
2. Innovation theory of business cycle was developed by:  
(a) Hayek (b) Hawtrey (c) Schumpeter (d) Samuelson
3. Ratchet effect is related to:  
(a) absolute income hypothesis (b) life cycle hypothesis  
(c) relative income hypothesis  
(d) permanent income hypothesis
4. The trade off between inflation and unemployment is explained by:  
(a) quantity theory of money (b) Phillips curve (c) Q ratio (d) H theory
5. The level of output cannot be increased by using the monetary policy, if the LM curve is:  
(a) perfectly elastic (b) perfectly inelastic  
(c) relatively elastic (d) relatively inelastic
6. Consumption puzzle was introduced by:  
(a) Tobin (b) Kuznet (c) Fisher (d) Pigou
7. The number of assets in the Keynesian liquidity preference theory:  
(a) three (b) four (c) two (d) five
8. The curve showing the equilibrium in the money market:  
(a) IS (b) LM (c) BP (d) none of these
9. If MPC falls as income rises, then the consumption function is said to be:  
(a) proportional (b) non-proportional (c) linear (d) non-linear
10. Which of the following is not a monetary policy instrument?  
(a) bank rate (b) reverse repo rate  
(c) cash reserve ratio (d) tax
11. The slope of the IS curve is:  
(a) negative (b) positive (c) zero (d) none of these
12. The economist who wrote the book 'Money, Interest and Prices':  
(a) James Tobin (b) Baumol (c) Radcliff (d) Don Patinkin
13. Q ratio was introduced by:  
(a) James Tobin (b) William Baumol (c) Radcliff (d) Don Patinkin
14. Who is associated with rational expectations?  
(a) Keynes (b) Robert Lucas (c) Milton Friedman (d) Don Patinkin
15. Which of the following is not a fiscal policy instrument?  
(a) bank rate (b) tax (c) savings (d) government spending

(15 x 1/5 = 3 weightage)

**Part B (Very Short Answer Questions)**

Answer any 5 questions

Each question carries a weightage of 1

16. What is marginal efficiency of investment?
17. Define Fisher effect.
18. What are the motives for holding money according to Keynes?
19. What is an LM curve?
20. What is meant by natural rate of unemployment?
21. Distinguish between  $M_1$  and  $M_3$  measures of money supply?
22. Explain the Taylor rule.
23. Explain crowding out effect.

(5 x 1 = 5 weightage)

**Part C (Short Answer Questions)**

Answer any 7 questions

Each question carries a weightage of 2

24. What are the instruments of fiscal policy?
25. Explain the accelerator theory of investment.
26. Explain the relative income hypothesis.
27. Explain Kuznet's consumption puzzle.
28. Explain general equilibrium using IS-LM analysis.
29. Briefly explain the structuralist theory of inflation.
30. Explain the behavioural model of money supply.
31. Write a note on central bank autonomy.
32. Explain the H theory of money supply.
33. Explain the permanent income hypothesis.

(7 x 2 = 14 weightage)

**Part D (Essay Questions)**

Answer any 2 questions

Each question carries a weightage of 4

34. Critically examine the absolute income hypothesis.
35. Explain the relative effectiveness of monetary and fiscal policy using IS-LM framework.
36. Explain the objectives and instruments of monetary policy.
37. Examine Friedman's restatement of the quantity theory of money.

(2 x 4 = 8 weightage)

**Course Code: SJECO1 C03**

**Name of the Course: INDIAN ECONOMY: PROBLEMS AND POLICIES**

	Course Outcome	POs/ PSOs	CL	KC	Class Sessions (appr.)	La b (H rs)
CO1	Describe the challenges in Indian economy	PO1/ PSO3	U	C	10	0
CO2	Enumerate the relationship between poverty, unemployment and inequality	PO1/ PSO3 &PSO 4	A	F	15	0
CO3	Find the role of agriculture in economic development	PO1/ PSO3	R	C	8	0
CO4	Construct WPI and CRI	PO1/ PSO2	C	C	2	0
CO5	Identify the new initiatives made by the government on Indian economy	PO1/ PSO4	U	F	5	0
CO6	Critical verification of economic planning in India	PO1/ PSO3 &PSO 4	E	F	15	0
CO7	Cite economic reforms since 1991	PO1/ PSO3	R	F	20	0
CO8	Assess the importance of kerala model of development and decentralized planning	PO1/ PSO2	E	F	15	0

**\*R-remember, U-understand, A-apply, Z-analyze, E-evaluate, C-create**

**\*F-factual, C-conceptual, P-practical/procedural**

**Module I: Growth, Structural Changes and Challenges of the Indian Economy**

Economic growth in India- CSO and national income related aggregates- Contribution of different sectors to GVA, GDP and Employment- Trends in savings and investment since reforms- Migration, diaspora and remittance - Regional disparity in growth and development- Analysis of poverty, unemployment and inequality in India

**Module II: Review of Economic Development**

Assessment of Indian agriculture sector and recent initiatives by the government for its growth-Inter regional dimensions of industrial growth in India- Make in India initiative- Service sector: growth rate, share in exports and imports, software exports- Infrastructure at cross roads -Prices: Headline inflation-Inflation based on WPI and CPI combined, food inflation, core inflation- Monetary management in India prior to1990 and position after 1990s-New initiatives of the government towards black money-Inclusive policies of the government-A global deal on climate change: possible role for India.

**Module III: Economic Planning in India**

Planning and economic development-Objectives of planning-Techniques of planning- Achievements of planning- Bottom up and Step down approaches in planning- Evaluation of Five Year Plans-NITI Aayog and its Vision Documents- Welfare programmes announced in the last two Union Budgets.

**Module IV: Economic Reforms Since 1991**

Background of economic reforms- Washington Consensus- Industrial policy reforms- Trade policy reforms- Fiscal policy reforms- Financial sector reforms- Foreign investment policy reforms- Second generation economic reforms-An appraisal of India's economic reforms- Post reform Infrastructure Investment Models-PPP- Cooperative federalism with special reference to GST.

**Module V: Kerala Economy**

Economic liberalization and economic growth in Kerala- Kerala model of development- Agricultural performance-Industrial backwardness- Health and education - Migration of casual workers to Kerala- Decentralization-Achievements of decentralization-Poverty and unemployment in Kerala - State finances of Kerala- Causes of acute fiscal crisis of Kerala.

## REFERENCES

1. Vijay Joshi and IMD Little: India: Macroeconomics and Political Economy: 1964-1991- Oxford University Press, New Delhi 1994.
2. Uma Kapila (ed): Indian Economy Since Independence- Academic Foundation, New Delhi 2004.
3. Vijay Joshi and I. M.D Little: India's Economic Reforms: 1991- 2001- Oxford University Press, New Delhi, 1996.
4. VM Dandekar and NilakantRath: Poverty in India- Indian School of Political Economy, Pune, 1971.
5. JagdishBhagwati: India in Transition- Oxford University Press, Delhi, 1994.
6. Dr. S Murthy: Structural Reforms of Indian Economy- Atlantic Publishers, 1995.
7. H W Singer, NeelambarHatti and RameshwarTandon (eds): Trade Liberalisation in the 1990's- Indus Publishing Company, New Delhi, 1990.
8. JagdishBhagwati and TN Srinivasn: Foreign Trade Regimes and Economic Development: India- NBER, New York, 1986.
9. Isher Judge Ahluwalia and IMD Little (ed): India's Economic Reforms and Development: Essays for Manmohan Singh- Oxford University Press, Delhi, 1998.
10. KR Gupta (Ed): Liberalization and Globalization of Indian Economy- Atlantic Publishers, New Delhi 1995.
11. Deepak Lal: India in the World Economy- Oxford University Press, 1999.
12. Datt. R. (2001): Second Generation Economic Reforms in India- Deep and Deep Publications, NewDelhi.
13. Mahendra K Premi (2009): India's Changing Population Profile- National Book Trust, NewDelhi.
14. B A Prakash (Ed): Indian Economy Since 1991-PearsonEducation.
15. ShankerAcharya and Rakesh Mohan (Eds) (2011): India's Economy: Performance and Challenges- Oxford University Press, NewDelhi.
16. Jayaraj D and Subramanian S (2010): Poverty, Inequality and Population- Oxford University Press, NewDelhi.
17. Mahendradev S (2010): Inclusive Growth in India- Oxford University Press, NewDelhi.
18. CT Kurien: Poverty, Planning and Social Transformation in India- Allied Publishers, Delhi, 1978.
19. BA Prakash (Ed): Kerala's Economic Development: Issues and Problems- Sage publishers, New Delhi, 1999.
20. ET Mathew (1997): Employment and Unemployment in Kerala- Sagepublishers.
21. George K K (1999): Limits to Kerala Model of Development- CDS, Trivandrum.
22. Sunil Mani, AnjiiKochar, Arun M Kumar: Crouching Tiger Sacred Cows- D C Books, Kottayam.
23. K Rajan: Kerala Economy: Trends during the Post-reform Period-Serial Publishers, New Delhi.
24. CDS (1975): Poverty Unemployment and Development Policy: A Case Study of Selected Issues with Reference to Kerala- CDS, Trivandrum.
25. K.K. George and K.K. Krishnakumar (2012): Trends in Kerala State Finances-1991-92 to 2012-13: A Study in the Backdrop of Economic Reforms in India-Working Paper N0.28- Centre for Socio-economic & Environmental Studies-Kochi (available online).
26. K R Guptha, Indian Economy in 3 volumes: AtlanticPublishers.
27. BA Prakas and Jerry Alwin, Kerala's Economic Development: Emerging Issues and Challenges, Sagepublishers, 2018.
28. RBI AnnualReports.
29. Ministry of Finance: Economic Survey-VariouIssues

**MODEL PAPER**

**FIRST SEMESTER M A ECONOMICS DEGREE EXAMINATION  
(CBCSS)**

**SJECO1 C03-INDIAN ECONOMY: PROBLEMS AND POLICIES**

Time:3 Hours

Maximum Weightage:30

**Part A**

Answer **all** questions

Each bunch of **5** questions carries a weightage of **1**

Multiple Choices:

1. Which of the following replaces the Planning Commission of India?  
(a) SEBI (b) CIBIL (c) CRISIL (d) NITI Aayog
2. Which sector contributes the maximum to India's GDP?  
(a) primary (b) secondary (c) tertiary (d) agriculture
3. The study of population is known as:  
(a) NITI Aayog (b) demography (c) perestroika (d) glasnost
4. Which of the following is an indicator of poverty?  
(a) head count index (b) poverty gap ratio (c) poverty square gap ratio (d) all of the above
5. The most populous state in India according to 2011 census is:  
(a) Madhya Pradesh (b) Uttar Pradesh (c) Andhra Pradesh (d) Himachal Pradesh
6. Inclusive growth objective is given in the plan document of:  
(a) Ninth Five Year Plan (b) Tenth Five Year Plan (c) Eleventh Five Year Plan  
(d) Twelfth Five Year Plan
7. Five Year Plans are finally approved by:  
(a) President (b) Prime Minister (c) National Development Council (d) Planning Commission
8. The period of 'plan holiday' in India was:  
(a) 1962-65 (b) 1966-69 (c) 1969-72 (d) 1972-75
9. Which among the following coined the term 'second generation reforms'?  
(a) World Bank (b) IMF (c) RBI (d) None of the above
10. What is the crux of Kerala model of development?  
(a) low level of economic development and low level of social development  
(b) high level of economic development and high level of social development  
(c) low level of economic development and high level of social development  
(d) high level of economic development and low level of social development
11. Which of the following is the most important expenditure item of Kerala government?  
(a) salary and pensions (b) interest payments (c) repayment of debt (d) road construction
12. Estimates of national income in India are prepared by:  
(a) RBI (b) NITI Aayog (c) Ministry of Finance (d) CSO
13. From which nation India adopted Five Year Plans?  
(a) USA (b) Germany (c) China (d) USSR
14. The best indicator of economic growth of a nation is:  
(a) PCI (b) GDP (c) Index of Industrial Production (d) WPI
15. GST was launched on:  
(a) July 1, 2017 (b) March 5, 2009 (c) March 10, 2011 (d) October 2, 2015

(15 x 1/5 = 3 weightage)

**Part B (Very Short Answer Questions)**

Answer any 5 questions

Each question carries a weightage of 1

16. What is meant by headline inflation?
17. Explain the concept of inclusive growth.
18. Explain the concept of decentralization.
19. What are the objectives of planning?
20. Write a note on Make in India initiative.
21. Write a note on GST.
22. Explain the concept black money.
23. What is NITI Aayog?

(5 x 1 = 5 weightage)

**Part C (Short Answer Questions)**

Answer any 7 questions

Each question carries a weightage of 2

24. Explain the features of decentralized planning in Kerala.
25. Examine the demographic changes in India under the plans.
26. What are the causes of industrial backwardness of Kerala?
27. What are the important poverty eradication measures in India?
28. Critically analyze the second generation reforms in India.
29. Critically examine the Kerala model of development.
30. Explain the economic impact of Gulf emigration on Kerala Economy.
31. Explain the important policy reforms connected to foreign investment.
32. What are Millennium Development Goals?
33. Write a note on the state of unemployment in Kerala.

(7 x 2 = 14 weightage)

**Part D (Essay Questions)**

Answer any 2 questions

Each question carries a weightage of 4

34. Critically examine the impact of financial sector reforms in India since 1991.
35. Explain the trends in savings and investment in India since reforms.
36. Explain the causes and consequences of fiscal crisis of Kerala.
37. What were the major structural changes in Indian economy since 1951?

(2 x 4 = 8 weightage)

**Course Code: SJECO1 C04**

**Name of the Course: QUANTITATIVE METHODS FOR ECONOMIC ANALYSIS I**

	Course Outcome	POs/ PSOs	CL	KC	Class Sessions (appr.)	Lab (Hrs)
CO1	Understand functions and graphs	PO1/PSO 3	U	C	12	0
CO2	Find out characteristic equations and characteristic roots	PO1/PSO3	E	P	8	0
CO3	Apply differentiation and integration in economics	PO1/PSO3	A	P	16	0
CO4	Estimate consumer and producer surplus	PO1/PSO3	E	P	10	0
CO5	Analyse differential equations in economics	PO1/PSO3	Z	U	20	0
CO6	Estimate interest	PO1/PSO3	E	P	8	0
CO7	Evaluate the relation between bond price and interest	PO1/PSO3	E	P	8	0
CO8	Create debit repayment options	PO1,PO5/PSO 3, PSO4	C	P	8	0

**\*R-remember, U-understand, A-apply, Z-analyze, E-evaluate, C-create**

**\*F-factual, C-conceptual, P-practical/procedural**

## Core Course-IV

### **SJECO1 C04 - QUANTITATIVE METHODS FOR ECONOMIC ANALYSIS I**

**(Credit 4)**

#### **Module I: Linear Algebra**

Different types of functions and its graphs, Constant Linear, Quadratic, Cubic, Polynomial, Exponential and logarithmic functions. Applications of linear functions in Economics- Vectors and Matrices, determinants, solution of a system of equations - Inverse method and Cramer's rule- Rank of a matrix-characteristic equations and characteristic roots and vectors.

#### **Module II: Differential Calculus**

Functions, limit of a function, continuity of a function, Derivative of a function - Rules of Differentiation, Higher order derivatives, differentiation of logarithmic functions, exponential functions and implicit functions- Application of Derivatives- Meaning of a Derivative- rate of change- slope of a curve- Marginal concepts related to demand, supply, cost, revenue and production functions. Maxima and minima- Economic applications.

#### **Module III: Functions of Several Variables**

Functions of several variables - Partial differentiation- Optimisation of Multivariable functions- constrained optimization with Lagrangian multipliers-Consumers and producers equilibrium using constrained optimization Differentials- Total and Partial derivatives- Total derivatives- Rules of integration- Definite integral, area under a curve-estimation of producers and consumers surplus.

#### **Module IV: Differential and Difference Equations**

First order Differential equations -Definitions and concepts, general formula for Differential equations – Economic applications-Differential equations for limited and unlimited growth - First order Difference equations- Solution of first order difference equations - General formula for First order Linear Difference equations, applications - stability conditions, Cobb Web model.

#### **Module V: Financial Mathematics**

Arithmetic and geometric sequence and series- Simple interest, compound interest and annual percentage rates- Depreciation- Net present value and internal rate of return- Annuities, debt repayments, sinking funds- The relationship between interest rates and the price of bonds.

## **References**

1. Essential Mathematics for Economics and Business, Teresa Bradley and Paul Patton, Revised by Teresa Bradley, Wiley Student Edition Chapter- 2 andChapter-4.
2. Introduction to Mathematical Economics Edward T. Dowling Third EditionChapter-8.
3. Taro Yamane: Statistics - An Introductory Analysis, Harper & Row, Edition3.
4. Hoel PG: Introduction to Mathematical Statistics, John Wiley & Sons, Edition.

5. RGD Allen Mathematical Analysis for Economics.
6. Tulsian, P.C and Vishal Pandey: Quantitative Techniques, Pearson Education, New Delhi.
7. S.P. Gupta: Statistical Methods, Sultan Chand and Sons, New Delhi.
8. Hooda R.P. Statistics for Business and Economics, Macmillan, New Delhi.
9. Alpha C Chiang: Fundamental Methods of Mathematical Economics, 2nd Ed. Inter National Student Edition, McGrawhill.
10. Edward T Dowling: Introduction to Mathematical Economics, Third Edition, Schaum's Outlines, Tata McGrawhill Publishing Co. Ltd, New Delhi.
11. Sreenath Baruah: Basic Mathematics and its Applications in Economics, Macmillan India Ltd.
12. Joseph K.X, Quantitative Techniques, CUCCS Ltd, Calicut University.

**MODEL PAPER**

**FIRST SEMESTER MA ECONOMICS DEGREE EXAMINATION  
(CBCSS)**

**SJECO1 C04-QUANTITATIVE METHODS FOR ECONOMIC ANALYSIS I**

**Time:3hours**

**Maximum Weightage:30**

**Part A**

**Answer all Questions**

Each bunch of 5 questions carries a weightage of 1

**Multiple Choice**

1. The function  $2x^2 + 4x - 2$  is:  
a. Quadratic                      b. Linear                      c. Cubic                      d. Reciprocal
2. In a matrix the number of rows and columns are called:  
a. order                      b. size                      c. degree                      d. all the above
3. Trace of a matrix is:  
a. Largest column sum                      b. Sum of principal diagonal elements  
c. Sum of off diagonal elements                      d. None of these
4. The derivative of  $\sqrt{x}$   
a.  $2\sqrt{x}$                       b.  $1/2\sqrt{x}$                       c.  $\sqrt{x}$                       d. 1
5. The total utility function is  $q^2$ , then the marginal utility function is:  
a.  $2q$                       b.  $3q$                       c.  $4q$                       d.  $q$
6.  $\int e^x dx$  is:  
a. 1                      b.  $e^x$                       c. 0                      d.  $x$
7. The cost function of a firm is  $x^3 + 3x$ . the value of average cost is  
a.  $x^2 + 3$                       b. 3                      c.  $x + 3x^2$                       d. None of these.
8. The elasticity of demand for the demand function  $x = 27/p^3$  is:  
a. 1                      b. 2                      c. 3                      d. 4
9. The point of intersection of the demand and supply curves is known as  
a. Break even point                      b. Equilibrium point                      c. iso quants                      d. None of these
10. The differential equation is:-  
a. Linear                      b. Non-linear                      c. exact                      d. None of these
11. Which of the following area where difference equation can be applied:  
a. Cob-web Model                      c. Both a and b  
b. Harrod-Domar model                      d. None of these
12. The difference between present value of benefits and costs is called:  
a. Internal rate of return                      c. Nominal present value  
b. Net present value                      d. Profitability index

13. An amount of Rs.2000/- is invested for 2 years at an interest rate of 6%. Then the compound interest is:  
 a. Rs.250/-  
 b. Rs.247.20  
 c. Rs.247/-  
 d. Rs.248/-
14. The formulae for depreciation is:  
 a.  $A = P(1+r)^t$     b.  $A = P(1-r)^t$     c.  $P = A(+r)^t$     d.  $P = A(1-r)^t$
15. The equilibrium price for a commodity whose supply and demand functions are  $Q_s = -9 + p$  and  $Q_d = -3 - p$   
 a. 4      b. 6      c. 3      d. 10

(15 x 1/5 = 3 weightage)

### PART B (Very Short Answer Questions)

Answer any 5 questions

Each question carries a weightage of 1

16. Define odd and even function.  
 17. What is a singular matrix?  
 18. State quotient rule on differentiation.  
 19. What do you mean by points of inflexion?  
 20. State Euler's theorem.  
 21. Give one example of a second degree first order differential equation.  
 22. What do you mean by annuities?  
 23. What do you mean by sinking fund?

(5 x 1 = 5 weightage)

### Part C (Short Answer Questions)

Answer any 7 questions

Each question carries a weightage of 2

24. Draw the graph of the function  $y = 3x^2 + 2x + 7$   
 25. Find the maximum profit that a company can make if the profit function is given by:  $P(x) = 41 - 24x - 18x^2$   
 26. Evaluate  $\int x^2 e^x dx$   
 27. Determine the elasticity of demand when price falls from 136 to 119, given the demand function  $P = 200 - Q^2$   
 28. A monopolist has inverse demand function  $P = 150 - 2x$ . His total cost is  $c = 1.1x^3 - 3x^2 + 5x + 100$ . What is the profit maximizing price and output?  
 28. Examine whether  $u = 3x^2 + 2xy + y^2$  satisfies Euler's theorem.  
 29. What is meant by consumer's surplus? Calculate the consumer's surplus given to the demand function  $p = 35 - 2q - q^2$  and the demand  $q_0 = 3$   
 30. Solve  $(1-x)dy - (1-y)dx = 0$ .

31. Solve  $y_{t+1} + 3y_t = 4$  given  $y_0 = 4$ .
32. Discuss the merits and demerits of NPV method.
33. Establish the relationship between interest rates and price of bonds.

(7 x 2 = 14 weightage)

**Part D (Essay Questions)**

Answer any 2 questions

Each question carries a weightage of 4

34. Solve the system of equations by Cramer's rule

$$2x - 3y + 5z = 11,$$

$$5x + 2y - 7z = -12;$$

$$-4x + 3y + z = 5$$

35. For a firm each unit of capital and labour cost Rs.10 and Rs.20 respectively. The total output costs are fixed at Rs.1600/-. If the firm faces a production function given by  $Q = 4LK + L^2$ , find the levels of K and L when the firm maximizes its output. Also find maximum output.
36. Obtain the optimum value of the function  $z = xy + 2x$  subject to the constraint  $20 - x - 2y = 0$ , using Lagrange multiplier method.
37. What is time value of money? Discuss the IRR method used for measuring investment worth. Compare and contrast NPV and IRR method.

(2 x 4 = 8 weightage)

## SEMESTER II

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>HOURS</b>	<b>CREDIT</b>
SJECO2 C05	Microeconomics: Theory and Applications II	6	5
SJECO2 C06	Macroeconomics: Theories and Policies II	6	5
SJECO2 C07	Public Finance: Theory and Practice	7	5
SJECO2 C08	Quantitative Methods for Economic Analysis II	6	5
<b>SJECO2 A02</b>	Professional Competency Course		4*

\*The credits will not be counted for evaluating the overall SGPA & CGPA

**Course Code: SJECO2 C05**

**Name of the Course: MICROECONOMICS: THEORY AND APPLICATIONS-II**

	Course Outcome	POs/ PSOs	CL	KC	Class Sessions (appr.)	Lab (Hrs)
CO1	Recognize the ideas of the basic features of capital decisions	PO1/PSO1	R	C	10	0
CO2	Enumerate the criteria of individual decision making	PO1/PSO1& PSO3	Z	F	15	0
CO3	Demonstrate various welfare conditions and social welfare criteria	PO1/PSO4	A	F	15	0
CO4	synthesize social welfare functions	PO1/PSO2	C	F	5	0
CO5	Locate the features of public goods and market failure	PO1/PSO1	U	C	10	0
CO6	Describe the solutions of market failure	PO1/PSO1& PSO4	U	C	10	0
CO7	Illustrate asymmetric information in various markets and how it works	PO1/PSO4& PSO3	E	F	15	0
CO8	Cite the components of behavioural economics	PO1/PSO2	U	C	10	0

**\*R-remember, U-understand, A-apply, Z-analyze, E-evaluate, C-create**

**\*F-factual, C-conceptual, P-practical/procedural**

## CoreCourse-V

### MA ECONOMICS (CBCSS) II SEMESTER

#### SJECO2 C05 - MICROECONOMICS: THEORY AND APPLICATIONS-II

(Credit 5)

##### **Module I: Intertemporal Choice and Capital Decisions**

Capital and the rate of return- Determining the rate of return- Demand for future goods- Utility maximisation- Effects of changes in  $r$ - Supply of future goods- Equilibrium price of future goods- Rate of return- Real interest rates and nominal interest rates- Pricing of risky assets- The firm's demand for capital- The net present value criterion for capital investment decisions- Adjustment for risks- Diversification versus non-diversifiable risks- The capital assets pricing model.

##### **Module II: General Equilibrium and Welfare Economics**

Elements of general equilibrium analysis-General equilibrium of exchange- General equilibrium of production- Efficiency of competitive markets- Welfare economics- Criteria of social welfare-Pareto optimality-Kaldor-Hicks compensation criterion- Scitovsky criterion- Deriving a Social welfare function- Theory of second best- Arrow's impossibility theorem- Rawls theory of justice- First Theorem of welfare economics- Second Theorem of welfare economics.

##### **Module III: Externalities and Public Goods**

Externalities-Negative externalities in consumption and production-Positive externalities in consumption and production-Externalities and inefficiency-Ways of correcting market failure- Externalities and property rights-Coase theorem- Common property resources-Tragedy of commons-Public goods-Characteristics- Public goods and market failure-Provision of public goods- Free rider problem- Lindahl pricing.

##### **Module IV: Asymmetric information**

Asymmetric information- Implications of asymmetric information- The lemons problem- Adverse selection- Hidden information- Moral hazard (hidden action)- Insurance markets- Market signalling- Principal-agent problem- The efficiency wage theory.

##### **Module V: Behavioural Economics**

Behavioural economics- Reference points and consumer preferences- Rules of thumb and biases in decision making.

##### **References**

1. Walter Nicholson and Christopher Snyder (2017): Microeconomic Theory- Basic Concepts and Extensions, 12<sup>th</sup> edition, Cengage Learning India Private Limited.
2. Andrew Schotter (2009): Microeconomics: A Modern Approach- 1<sup>st</sup> edition, South Western Cengage Learning.
3. Michael E Wetzstein (2013): Micro economic Theory- Concepts and Connections, 2<sup>nd</sup> edition, Routledge.
4. Robert S Pindyck and Daniel L Rubinfeld (2017): Microeconomics- 8<sup>th</sup> edition, Pearson.
5. Thomas J Nechyba (2010): Microeconomics: An Intuitive Approach with Calculus- 1<sup>st</sup> edition, South Western Cengage Learning.

6. Andreu Mas-Colell, Michael D Whinston and Jerry R Greene (1995): Microeconomic Theory- 1<sup>st</sup> edition, Oxford University Press.
7. Geoffrey A Jehle (2010): Advanced Microeconomic Theory- 3<sup>rd</sup> edition, Prentice Hall
8. Hall R Varian (2014): Intermediate Microeconomics- A Modern Approach, WW Norton and Co.
9. Jeffrey M Perloff (2019): Microeconomics -7<sup>th</sup> edition, Pearson
10. Hugh Gravelle and Ray Rees (2007): Microeconomics- 3<sup>rd</sup> edition, Pearson Education
11. Edgar K Browning and Mark Zupan (2011): Microeconomics: Theory and Applications- 3<sup>rd</sup> edition.
12. Dominick Salvatore (2009): Principles of Microeconomics – 5<sup>th</sup> edition, Oxford University Press.
13. A Koutsoyiannis (1979): Modern Microeconomics- 2<sup>nd</sup> edition, Macmillan.
14. Robert Y Awh (1976): Microeconomics: Theory and Applications- John Wiley & Sons
15. Watson and Getz (2004): Price Theory and its Uses- 5<sup>th</sup> edition, AITBS Publishers and Distributors.
16. James H Henderson and Richard E Quandt (1980): Microeconomic Theory: A Mathematical Approach- 8<sup>th</sup> edition, McGraw-Hill
17. G S Madalla and Ellen Miller (1989): Microeconomics: Theory and Applications- 1<sup>st</sup> edition, Tata McGraw-Hill.

## SECOND SEMESTER M A DEGREE EXAMINATION

### PROGRAMME – M. A ECONOMICS (CBCSS) SJECO2 C05 – MICRO ECONOMICS: THEORY AND APPLICATIONS II

**Time: 3 Hours**

**Max. Weightage: 30**

#### **Part A**

**(Answer all questions)**

**Each bunch of five questions carries a weight of one**

1. The theory of second best is associated with  
a) Arrow b) Pareto c) Lipsey d) Lancaster
2. Who wrote the book “social choice and individual values”  
(a) Arrow (b) Walras (c) Kaldor (d) Hicks,
3. Asymmetric information is absent under:  
(a) Perfect competition (b) Monopoly (c) duopoly (d) oligopoly
4. The possibility that an individual’s behaviour may change because she/he has insurance is called  
(a) adverse selection (b) moral hazard (c) market signalling (d) none of these
5. Economist associated with Market signalling is:  
(a) Arrow (b) Hicks (c) M. Spencer (d) none of these
6. Free rider problem exists under:  
a) private good b) public good c) both private and public good d) none of these
7. Arrow has suggested that a social welfare function should have the following attributes:  
a) Condition of unrestricted domain b) non-dictatorship c) Pareto principal d) all the above
8. Externalities are otherwise called as:  
(a) social cost (b) Social benefit (c) Effluents (d) Neighbourhood effect
9. The Pareto optimum condition will hold good in:  
a) Monopoly b) perfect competition c) Oligopoly d) all the above
10. Efficiency wage theory is associated with:  
(a) Spencer b) Edgeworth c) Stiglitz d) Akerlof

11. Lindahl pricing is associated with
  - a) Public goods b) property rights c) externality d) None of these
12. Non diversifiable risk are
  - a) Market or systematic b) Non market or nonsystematic c) Uncertain risk d) Insurable risk
13. Reference points related to
  - a) Consumption decision b) production decision c) Financial Decision d) None of these
14. Rule of thumb is -----
  - a) Practical advice in most situation b) Theoretical advice in few situation c) Combination of both theoretical and practical in rare situation d) All the above
15. Behavioral economics is combination of
  - a) Economics and Experimental research on behavior b) Economics and Research on psychology c) Economics and Social behavior d) None of these

**(15x1/5=3w)**

**Part B**

**Very short answer questions  
Answer any five questions  
(each carries one weightage)**

16. Define capital and rate of return
17. Explain Welfare economics
18. What do you mean by Externalities
19. Define public goods
20. Explain Moral Hazard
21. What is Market signaling ?
22. Write a very short note on reference points.
23. What is hidden information.

**(5x1=5w)**

**Part C**

**short answer questions  
Answer any 7 questions  
(each carries two weightage)**

24. Explain Capital assets pricing model.
25. What is Pareto optimality ?
26. What do you mean by efficiency wage theory?
27. Discuss Coase theorem
28. Explain Arrow's impossibility theorem
29. Give an account of Tragedy of commons
30. Describe briefly Principal agent problem
31. Analyse Rawl's Theory of justice
32. Explain behavioural economics
33. Describe briefly Lemon's problem.

**(7x2=14w)**

**Part D**

**ESSAY questions**

**Answer any 2 questions**

**Each question carries a weightage of 4**

34. Discuss on externalities, inefficiency and ways of correcting market failure and externalities
35. Analyse general equilibrium of exchange and production
36. Explain criteria for capital investment decision
37. Examine the rules of thumb and biases in decision making.

**(2x4=8w)**

**Course Code: SJECO2 C06**

**Name of the Course: MACROECONOMICS: THEORIES AND POLICIES II**

	Course Outcome	POs/ PSOs	CL	KC	Class Sessions (appr.)	Lab (Hrs)
CO1	Understand Say's law of market, classical theory of employment and Keynes objection to the classical theory,	PSO1	C	U	20	0
CO2	demonstrate the principle of effective demand and income determination	PSO1	U	A	10	0
CO3	Identify the mechanism by which market operations affect the money supply and interest rates	PSO1/PS O2	C	U	10	0
CO4	Understand supply-side economics and Identify the types of lag times that often occur when solving economic problems;	PSO1/PS O2	U	A	10	0
CO5	understand and describe the emergence of New Classical Economics, along with its main tenets	PSO1/PS O2	U	A	10	0
CO6	Analyze the neoclassical long-run aggregate supply curve;	PSO4	A	Z	10	0
CO7	Analyze the impact of cyclical fluctuation on the growth of Political business cycle	PSO4	A	Z	10	0
CO8	Evaluate the policies to control trade cycle Fluctuations	PSO1/ PSO4	A	E	10	0

**\*R-remember, U-understand, A-apply, Z-analyze, E-evaluate, C-create**

**\*F-factual, C-conceptual, P-practical/procedural**

**SJECO2 C06 - MACROECONOMICS: THEORIES AND POLICIES II**

**(Credit 5)**

**Module I: Classical vs Keynes**

**Classical Macroeconomics** -Classical revolution, production, employment, equilibrium output and employment, quantity theory of money, classical aggregate demand curve, classical theory of interest rate, policy implications of the classical equilibrium model. Classical model of output and employment

**Keynes's General Theory:** Keynes' main propositions, Keynes's analysis of the labour market, Keynes's rejection of Say's Law, Keynes and the quantity theory of money, Keynesian aggregate demand and supply schedules, Keynes and international macroeconomics- How to pay for the war, Causes and consequences of the Great Depression, Keynesian policy conclusions.

**Module II: Monetarism**

The quantity theory of money approach, The expectations-augmented Phillips curve analysis, The monetary approach to balance of payments theory and exchange rate determination, The monetarist view of great depression, fiscal and monetary policy effectiveness.

**Module III: New Classical Macroeconomics, Real Business Cycle School and Supply Side Economics**

**The new classical macroeconomics:** Rational expectations hypothesis, Lucas' surprise supply function, The inter-temporal substitution model, Policy ineffectiveness argument, The Lucas critique- **Real business cycle school:** central features of real business cycle models, a simple real business cycle model, macroeconomic policy in a real business cycle model - **Supply-side macroeconomics:** Supply shocks and stagflation, Laffer curve, Policy implications

**Module IV: New Keynesian Economics**

The fall and rise of Keynesian economics- A Keynesian resurgence, New Keynesian economics, Core propositions and features of new Keynesian economics, Nominal rigidities, Real rigidities, Small menu cost model, Implicit wage contract model- Efficiency wage theories-Insider-outsider model, New Keynesian business cycle theory, Hysteresis and the NAIRU, Policy implications

**Module V: The New Political Macroeconomics**

Political distortions and macroeconomic performance, Political influences on policy choice, The role of government, Politicians and stabilization policy, Alternative approaches to the political business cycle, The Nordhaus opportunistic model, The Hibbs partisan model, The decline and renaissance of opportunistic and partisan models, Rational political business cycles, Policy implications of politico-economic models: an independent central bank?, The political economy of debt and deficits, Political and economic instability.

## References

1. Gregory Mankiw (2008): *Macroeconomics*- Worth Publishers NY, 6th ed.
2. Richard T Froyen (2008): *Macroeconomics: Theories and Policies*- Pearson (LPE), Seventh ed.
3. Brian Snowdown and Howard Vane (2005): *Modern Macroeconomics: Its Origin, Development and Current State*- Edward Elgar Cheltenham, UK. Northampton, USA.
4. Levacic, Rosalind and Rebman, Alexander (1982): *Macroeconomics: An Introduction to Keynesian-Neoclassical Controversies*- 2nd ed. Macmillan.
5. Eric Pentacost: *Macroeconomics-An Open Economy Approach*-Macmillan.
6. Rudiger Dornbusch: Stanley Fisher and Richard Startz (2004) *Macroeconomics*- Tata McGraw Hill, 9th ed.
7. Hargreaves Heap S.P (1992): *The New Keynesian Macroeconomics: Time, Belief and Social Independence* Edward Elgar Publishing.
8. D'Souza, Errol (2008): *Macroeconomics*- Pearson Education.
9. Fred R Glahe, (1985): *Macroeconomics: Theory and Policy*- Harcourt Publishers, New Delhi.
10. Veneries and Sebold, (1977): *Macroeconomics: Models and Policies*- John Wiley & Sons.
11. Samuelson and Nordhaus (1998): *Macroeconomics*- 16th ed. Irwin McGrawHill.
12. Robert J Gordon: *Macroeconomics*- Eastern Economy Edition.
13. Edward Shapiro: *Macroeconomics*- Golgotha Publications, New Delhi.
14. Brian Showdown, Howard Vane and Peter Wynarczyk (2001): *A Modern Guide to Macroeconomics: An Introduction to Competing Schools of Thought*- Edward Elgar.
15. Mervyn K. Lewis and Paul D Mizen (2000): *Monetary Economics*- Oxford University Press.
16. Jagdish Handa (2000): *Monetary Economics*-Routledge

**ST. JOSEPH COLLEGE IRINJALAKUDA (AUTONOMOUS)**  
**M A ECONOMICS (CBCSS)**  
**II SEMESTER**  
**SJECO2C06-MACRO ECONOMICS: THEORIES AND POLICIES II**  
**2019 ADMISSION ONWARDS**

**Time: 3 Hours**

**Maximum: 30 Weightage**

**Part A**

**Answer all Questions**

**Each bunch of four questions carries a weightage of 1**

**Multiple Choice Questions**

1. Small menu cost insists on  
a) Price flexibility b) price rigidity c) both d) none of these
2. RBC model was developed by  
a) Malinvaud b) Clower c) Edward Prescott d) Robert Lucas
3. According to second generation new classical model, business cycle occurs due to  
a) Monetary surprise b) shocks to technology c) both d) none of these
4. The term Rational expectation was coined by  
a) Robert Lucas b) Milton Friedman c) John Muth d) None of these
5. The Laffer curve was initially drawn with reference to the  
a) US Economy b) UK economy c) General Economy d) Canadian Economy
6. The concept of wage-price flexibility in labour market equilibrium was mentioned  
a) Friedman b) Keynes c) Neo-classicals d) None of these
7. The origin of Monetarism lies in  
a) Principle of Effective Demand b) Quantity theory of money c) Monetary policy d) Fiscal policy
8. Ronald Reagan and Margaret Thatcher are strong supporters  
a) Classical Economics b) Keynesian Economics c) Supply Side Economics  
d) Post Keynesian Economics
9. The NAIRU is associated with  
a) Otto Eckstein b) Roger Brinner c) Milton Friedman d) Thomas F. Dernburg
10. According to New Classical economists individuals hold money or demand Money primarily for  
a) Transaction purpose b) Speculative purpose c) Precautionary purpose  
d) Portfolio purpose
11. Keynes contribution is essentially  
a) Long run growth problem b) Relative price determination theory c) Short run Theory of income and employment d) Long run theory of income and Employment
12. The counter revolution to the Keynesian revolution is  
a) Mercantilism b) Physiocracy c) Modern monetarism d) Laissez faire policy
13. Long run Philips curve as stated by Friedman is  
a) Sloping Downwards b) Sloping upwards towards right c) Vertical straight line  
d) Horizontal straight line
14. Which of the following was not considered as wealth in Friedman's demand Function for money?

- a) Money b) bonds c) Human capital d) Real Estate
15. New Classical economists assert that markets clear instantaneously because
- a) There is disequilibrium in the short run only b) There is no disequilibrium in the short run c) Output and employment change in response to changes in price level d) Output is affected by changes in monetary policy

**(15x1/5=3weightage)**

**Part B (Very Short Answer Questions)**  
**Answer any 5 Questions**  
**Each question carries a weightage of 1**

16. Nominal rigidities and real rigidities
17. Stagflation
18. Laffer curve
19. Small Menu cost model
20. Supply Shocks
21. insider-outsider model
22. What is Monetarism
23. NAIRU

**(5x1 = 5 weightage)**

**Part C (Short Answer Questions)**  
**Answer any 7 Questions**  
**Each question carries a weightage of 2**

24. Explain The Inter Temporal substitution Model
25. Explain the Efficiency wage theory
26. Explain the Real business cycle theory
27. Narrate the main difference between the Monetarists and Keynesians on monetary policy
28. Explain Lucas Surprise supply function
29. Bring out the importance of Keynes contribution towards Business cycle
30. Critically explain Nordhaus opportunistic model
31. Examine the policy implications of Politico- economic models
32. Explain Implicit Wage contract model

33. Indicate the Basic Propositions of Rational Expectations hypothesis

**(7x2 = 14 weightage)**

**Part D (Essay Questions)**  
**Answer any 2 Questions**  
**Each question carries a weightage of 4**

34. Explain the main tenets of New Classical Macroeconomics. Discuss policy Implications.

35. Explain the Keynes main propositions and his analysis of the labour Market

36. Discuss the new Keynesian developments in macro economics.

37. Critically examine the supply side macro economics and its applicability to economies facing the problem of recession and unemployment.

**(2x4 = 8 weightage)**

**Course Code: SJECO2 C07**

**Name of the Course: PUBLIC FINANCE: THEORY AND PRACTICE**

	Course Outcome	POs/ PSO3	CL	KC	Class Sessions (appr.)	Lab (Hrs)
CO1	Understand the role of government in the economy	PO1/PSO3	U	C	9	0
CO2	Identify the possible burden, benefits and distribution of various types of taxes	PO1/PSO1 &PSO4	U	C	15	0
CO3	Analyze the role of public expenditure in developing country	PO1/PSO4	Z	C	16	0
CO4	Explain the types of public debt and how debt is repaid	PO1/PSO1 &PSO4	U		13	0
CO5	Problems of centre-state financial relations	PO1/PSO3	Z	P	11	0
CO6	Understand the Welfare schemes in india	PO1/PSO4	U	P	17	0
CO7	Analyse the latest union budget of the government	PO1/PSO4	E	P	11	0
CO8	Compare GST & VAT in India	PO1/PSO1 &PSO4	A	C	9	0

**\*R-remember, U-understand, A-apply, Z-analyze, E-evaluate, C-create**

**\*F-factual, C-conceptual, P-practical/procedural**

## Core Course-VII

### SJECO2 C07 - PUBLIC FINANCE: THEORY AND PRACTICE

(Credit 5)

#### Module I: The Case for Public Sector

The role of government in the national economy-Concepts of club goods, public goods-Tiebout hypothesis, merit goods, externalities, Pigovian tax.

#### Module II: Public Revenue and Policy

Theory of tax- Partial and general equilibrium analysis- Shifting and incidence of tax- Theory of optimal taxation- Distributional considerations in public finance- Fiscal and monetary policies -Comparative analysis- Balanced budget multiplier- Zero based budgeting.

#### Module III: Public Expenditure and Debt

Pure theory of public expenditure-Pricing of public utilities-Public choice theory-The Median Voter theorem- Concept of subsidy-Macroeconomic impacts of deficits- Debt burden and inter-generational equity- Sustainability of public debt and Domar stability condition.

#### Module IV: Fiscal Federalism

Theory of fiscal federalism- Theory of inter-governmental transfers- fiscal decentralisation- Problems of centre-state financial relations in India-Vertical and horizontal imbalance in inter-governmental transfers in India.

#### Module V: Indian Public Finance

Trend and sources of revenue in the union, states and local bodies in India-Trends in public expenditure and public debt in India- VAT and GST in federal set-up- The FRBM Act- Federalism and issues of Centrally Sponsored Schemes- Finance Commissions and the changing centre- state relations during the reform period-Analysis of the latest union budget.

#### References

1. Harvey, Rosen, and Ted Gayer. Public Finance (2013)- McGraw-Hill Higher Education,
2. Dalton, Hugh. Principles of Public Finance (2003) - Vol. 1. Psychology Press,
3. Pen, Jan. Income Distribution (1974)-Penguin(Non-Classics).
4. Musgrave, RA and Musgrave, PB (1989)- Public Finance in Theory and Practice, McGraw Hill, New York
5. Boadway, R. W. (1979) - Public sector economics Winthrop, Cambridge,MA.
6. Due, John F and Friedlaender, Ann F (1973)- Government Finance: Economics of the Public Sector, Richard Irwin
7. Brown, Charles Victor, and Peter McLeod Jackson (1990) Public Sector Economics. Vol. 76. Oxford: Basil Blackwell,
8. Hyman, David N (1973), Economics of Government Activity, Holt, Rinehart and Winston Inc
9. Browning, Edgar K., and Jacqueline M. Browning (1979) Public Finance and the Price System. Macmillan,
10. Mundle, Sudipto, ed. Public Finance: Policy Issues for India (1997) Oxford University Press, USA,
11. Dwivedi, D. N., ed. Readings in Indian Public Finance (1981) Chanakya Publications,
12. Laffont, Jean-Jacques. Fundamentals of Public Economics (1988) -MIT Press Books 1
13. Auerbach, Alan J. The Theory of Excess Burden and Optimal Taxation-Handbook of Public Economics 1 (1985):61-127

14. Atkinson, Anthony B., and Joseph E. Stiglitz (2015) - Lectures on Public Economics. Princeton University Press,
15. Alan T. Peacock, (1979) The Economic Analysis of Governments, and Related Themes, St Martin Press, New York.
16. Amaresh Bagchi, (2005) Readings in Public Finance, Oxford University Press, USA.
17. Jha, Raghendra (1998)-Modern Public Economics- Routledge, London.
18. Cullis, John, and Philip R. Jones (2009) - Public Finance and Public Choice: Analytical Perspectives- Oxford University Press.

## **MODEL QUESTION PAPER**

### **SECOND SEMESTER M.A ECONOMICS PROGRAMME**

#### **SJEC02 CO7 – PUBLIC FINANCE: THEORY AND PRACTICE**

**Time: 3 Hours**

**Weightage: 30**

#### **Part A**

**Answer all Questions  
(Multiple Choice)**

1. The tax levied by the union government on income of individuals is known as  
(a) Personal income tax (b) Interest tax (c) Wealth tax (d) Corporation tax
2. Tax shifted from seller to purchaser is called:  
(a) Side way shifting (b) horizontal shifting (c) backward shifting (d) forward shifting
3. Concept of concentration and displacement effect in public expenditure are attributed to:  
(a) Allen.T.Peacock & Jack Wiseman (b) A.C.Pigou & J.K.Mehta (c) Kenneth Arrow and Paul Samuelson (d) Adam Smith and Ricardo
4. Provision of public goods and services is termed as :  
(a) Fiscal function (b) distribution function (c) allocation function (d) stabilization function
5. The most important source of revenue of state governments in India :  
(a) Land revenue (b) State excise duties (c) sales tax (d) Stamp and registration fees
6. Transfers from Centre to states are known as  
(a) Horizontal devolution (b) parallel devolution (c) intersecting devolution (d) vertical devolution
7. Food and fertilizer subsidy are included in  
(a) Capital expenditure (b) Plan expenditure (c) Revenue expenditure (d) none of these
8. Zero based budgeting lays emphasis on:  
(a) unlimited deficit financing (b) preparing the budget neglecting the expenditure (c) preparing new budget right from the scratch (d) inflationary rise in prices

9. The ideal system of public finance is one where the net benefit is
  - (a) Maximum (b) zero (c) minimum (d) infinity
10. Method of repayment of public debt is
  - (a) Conversion (b) sinking fund (c) capital levy (d) all of these
11. The tax multiplier is the change in output divided by the changes in
  - (a) Price (b) tax (c) income (d) taste
12. Federal finance deals with
  - (a) State finances (b) finances of railways (c) local bodies (d) Centre-state financial relations
13. Externalities are also called
  - a) spill-over effects (b) neighborhood effects (c) third party effects (d) all of the these
14. The concept of merit good is given by
  - (a) Samuelsson (b) Dalton (c) Musgrave (d) none
15. The most acceptable theory of taxation
  - (a) Benefit theory (b) cost of service theory (c) ability to pay theory (d) welfare state theory

**(15x1/5 = 3weightage)**

### **Part B (Very Short Answer Questions)**

**Answer any 5 Questions**

**Each question carries a weightage of 1**

16. Fiscal decentralization
17. What is pigovian tax?
18. What is subsidy?
19. Explain compensatory finance
20. What you mean by revenue deficit?
21. Explain Tiebout hypothesis
22. What is club good?
23. Pricing of public utilities

**(5x1 = 5weightage)**

### **Part C (Short Answer Questions)**

**Answer any 7 Questions**

**Each question carries weightage of 2**

24. What is FRBM ACT?
25. Describe briefly Zero based budgeting.
26. Explain theory of optimal taxation
27. Explain the principles of public debt management.
28. Describe briefly Wagner's law of public expenditure
29. Macroeconomic impacts of deficits
30. Domar stability condition
31. Explain Median Voter Theorem.
32. Explain Externalities.
33. Write a note on GST

**(7x2 = 14weightage)**

### **Part D (Essay Questions)**

**Answer any 2 Questions**

**Each question carries a weightage of 4**

34. Briefly explain the latest Union budget

35. Examine the problems of Centre-state financial relations in India
36. Public expenditure has a tendency to grow fast in modern times. Briefly discuss the factors responsible for rapid growth of public expenditure
37. Explain partial and general equilibrium model of taxation  
**(2x4 = 8weightage)**

**Course Code: SJECO2 C08**

**Name of the Course: QUANTITATIVE METHODS FOR ECONOMIC ANALYSIS II**

	Course Outcome	POs/ PSOs	CL	KC	Class Sessions (appr.)	Lab (Hrs)
CO1	Understand permutation and combination	PO1/PO3	U	F	10	0
CO2	Calculate mathematical expectation	PO1/PO3	A	F	12	0
CO3	Identify joint marginal and conditional probability function	PO1,PO5/PSO3	Z	C	15	0
CO4	Illustrate discrete and continuous probability distribution	PO1/PSO3	Z	C	12	0
CO5	Analyse small and large sample properties of Z , t, chi square and f	PO1/PSO3	Z	F	15	0
CO6	Find out peculiar features of estimation methods	PO1/PSO3	U	C	10	0
CO7	Perform test of hypothesis	PO1/PSO2	A	C	8	0
CO8	Design ANOVA performance by hand	PO1,PO5/PSO2,PSO3	U	C	10	0

**\*R-remember, U-understand, A-apply, Z-analyze, E-evaluate, C-create**

**\*F-factual, C-conceptual, P-practical/procedural**

**Module I: Probability and Probability Distributions**

Concepts- Set theory- Permutations and Combinations, Definitions of Probability - classical, empirical and axiomatic approaches- Addition and multiplication laws, conditional probability- Bay's theorem, Random variables- probability distribution- Mathematical expectation- moments- Two random variables, joint, Marginal and conditional probability functions, expectation of two random variables.

**Module II: Discrete and Continuous Probability Distribution**

Probability Distributions - Discrete Probability Distributions, Binomial , Poisson, Uniform - simple applications-Continuous probability distributions- Normal, Lognormal and Exponential Distributions (Derivations are not expected), concept of law of large numbers and Central limittheorem.

**Module III: Theory of Estimation**

Statistical Inference, Concept of population, sample- Sampling distributions- Standard error- Distributions of sample mean, Sample variance - chi square Student's t, and F distributions- Small and large sample properties of Z, t, Chi Square and F- Estimations of populations parameters- point and interval estimation- Fisher's properties of estimators-Confidence interval for Mean and Proportion and variance- Methods of estimation-Methods of least squares, Method of maximum likelihood.

**Module IV: Testing of Hypothesis**

Parametric and Non-parametric tests of Hypothesis - Testing of hypothesis- simple and composite hypothesis- Null and alternative hypothesis- Type I and Type II error, Critical region- Level of significance, Power of a test- Test procedure - Test of significance in respect of Mean, Proportion, Variance and Correlation coefficient and their differences -Chi Square test of goodness of fit, and test for independence of attributes. Non parametric tests, sign test, Wilcoxon- Mann Whitney U Test, Signed rank test, Kruskal Wallis test, Wald-Wolfowitz test.

**Module V: Analysis of Variance**

Analysis of Variance- Meaning, assumptions-One way classification and Two way classifications, simple applications.

References

1. Taro Yamane, Statistics: An Introductory Analysis, Harper & Row, Edition 3,1973
2. Hoel PG: Introduction to Mathematical Statistics, John Wiley & Sons, Edition 4,1971
3. YP Agarwal: Statistical Methods: Concepts, Application and Computation, Sterling Publishers1986
4. Sidney Siegal, N. John Castellan: Non parametric Statistics for Behaviour Sciences, Edition 2, 1988, McGraw-Hill
5. Tulsian, P.C and Vishal Pandey: Quantitative Techniques, Pearson Education, NewDelhi

6. S.P. Gupta: Statistical Methods, Sulthan Chand and Sons, NewDelhi.
7. Hooda R.P: Statistics for Business and Economics , Mac Million, NewDelhi
8. Alpha C Chiang: Fundamental Methods of Mathematical Economics, 2<sup>nd</sup> Ed. -Inter National Student Edition, McGrawhill
9. Edward T Dowling: Introduction to Mathematical Economics, Third Edition, Shaum's Outlines, Tata McGrawhill Publishing Co. Ltd, NewDelhi.
10. SreenathBaruah: Basic Mathematics and its applications in Economics, Macmillan India Ltd.
11. Joseph K.X, Quantitative Techniques, CUCCS Ltd, CalicutUniversity.

## MODEL QUESTION PAPER

### SECOND SEMESTER M A DEGREE EXAMINATION PROGRAMME – M. A ECONOMICS(CBCSS) SJECO2 C08 – QUANTITATIVE METHODS FOR ECONOMIC ANALYSIS - II

**Time: 3 Hours**

**Max. Weightage: 30**

#### Part A

(Answer all questions)

**Each bunch of five questions carries a weight of one**

1. The value of  $nC_n =$   
a) 0    b) n    c) 1    d) 2
2. The value of  $nP_n =$   
a) 2    b) 0    c) n    d) 1
3. The theory of estimation was expounded by  
a) Helmert    b) Gosset    c) Fisher    d) Snedecor
4. The Chi-square test can be used to test :  
a) Significance of mean                      b) significance of variance  
c) Goodness of fit                              d) equality of variance
5. The error committed by rejecting a true null hypothesis is  
a) Type-I error    b) Type- II error    c) level of significance  
d) significance of variance
6. The idea of testing of hypothesis was first set forth by  
a) R.A. Fisher              (b) J. Neymann              (c) E. L. Lehman              (d) A. Wald
7. An example in a two – sided alternative hypothesis is  
a)  $H_1 : \mu < 0$     b)  $H_1 : \mu > 0$     c)  $H_1 : \mu \geq 0$     d)  $H_1 : \mu \neq 0$
8. An alternative hypothesis is also known as  
a) Statistical hypothesis                              b) null hypothesis                              c)  
Research hypothesis                              d) All of the above .
9. Critical value is depends on  
a) Degree of freedom                      b) level of significance                      c) both 'a' & 'b'                      d)  
None of these.
10. Power of a test is associated with  
a) Type –I error                      b) Type –II error                      c) both 'a' & 'b'                      d)  
None of these.

11. In which of these distributions, the variable is continuous?  
a) Poisson    b) Binomial    c) Normal    d) Bernoulli
12. The area under normal curve on either side of mean is  
a) 1    b) 0.5    c) -1    d) 2
13. If 'm' is the mean of Poisson Distribution, the P(0) is given by  
a)  $e^{-m}$     b)  $e^m$     c) e    d)  $m^{-e}$
14. The first moment about origin is called  
a) Mean    b) Variance    c) Skewness    d) Kurtosis
15. Which is not an example of non – parametric test is  
a) Sign test    b) Kruskal Wallis test    c) U test    d) None of these

**(15x1/5=3w)**

### Part B

**(Very short answer questions)**

**Answer any five questions**

**Each question carries a weightage of 2**

16. A random variable has binomial distribution with  $n=10$  and  $p=0.3$  find the variance
17. Write down the properties of Poisson distribution.
18. Define Log normal distribution.
19. Write down the skewness and Kurtosis of Binomial distribution
20. Define mathematical expectation
21. Define exponential distribution.
22. Define the following  
i) Level of significance    ii) Degree of freedom
23. What is ANOVA ?

**(5x1=5w)**

### Part C

**(Short answer questions)**

**Answer any seven questions.**

**Each question carries a weightage of 2**

24. Explain various definitions of probability.
25. Explain standard error . What are its uses ?
26. Explain important laws of Set Operations.
27. Briefly explain procedures of testing hypothesis.
28. A sample of 10 observations gives a mean equal to 38 and standard deviation 4. Can we conclude that the population mean is 40.
29. Write a note about the followings.  
i) Probability    ii) Probability functions    iii) Joint probability function    iv) Marginal probability functions    v) Conditional probability functions
30. In an aptitude test administered to 900 college students , the mean is 50 and the standard deviation is 20. Find  
i) the number of students securing between 30 and 70.  
ii) the number of students exceeding the score of 65.
31. Four dice are thrown 162 times. The occurrence of '2' or '3' is considered a success. In how many throws , do you expect i) exactly 2 success ii) at least one success.

32. Explain the properties of Normal distribution.
33. The average number of claims per day made to the Insurance Company for damage or losses is 3.1. What is the probability that in any given day (i) fewer than 2 claims will be made? (ii) exactly 2 claims will be made? (iii) 2 or more claims will be made? (iv) more than 2 claims will be made?

(7x2=14w)

**Part D**

**(Essay questions)**

**Answer any 2 questions**

**Each question carries a weightage of 4**

34. Fit a normal curve to the following data

Weights	:	40 - 44	44 - 48	48 - 52	52 - 56	56 - 60
No. of students	:	7	8	20	10	5

35. i) Define Chi – Square distribution.

ii) In an experiment on immunization of 22 human beings from cholera, the following results were obtained. Draw your inference in the efficiency of the vaccine at 5% level of significance .

	Died	Survived
Inoculated	2	10
Not Inoculated	6	4

36. What is estimation ? Explain different methods of estimation .

37. What is non – parametric test ? Briefly explain various types of non – parametric tests.

(2 X4=8w)

### SEMESTER III

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>HOURS</b>	<b>CREDIT</b>
SJECO3 C09	International Trade	6	5
SJECO3 C10	Growth and Development	6	5
SJECO3 C11	Basic Econometrics	7	5
<b>SJECO3E01</b>	Elective I- Banking: Theory and Practice	6	4

**Course Code: SJECO3 C09**

**Name of the Course: INTERNATIONAL TRADE**

	Course Outcome	POs/ PSOs	CL	KC	Class Session s (appr.)	Lab (Hr s)
CO1	Locate the concepts in international trade	PO1/ PSO1	U	C	10	0
CO2	Assess classical and modern theories of trade	PO1/ PSO2	E	C	15	0
CO3	Describe the concept economies of scale and international trade	PO1/ PSO2 &PS O3	U	F	10	0
CO4	Categorize the factors in imperfect competition and product differentiation and explain how it affects international trade	PO1/ PSO4	Z	C	8	0
CO5	Formulate the relationship between economic growth and international trade	PO1/ PSO3	C	F	12	0
CO6	List out various international trade policies	PO1/ PSO3	R	C	10	0
CO7	Compare different trade restrictions	PO1/ PSO2	Z	F	15	0
CO8	Evaluate the components of economic integration	PO1/ PSO4	E	F	10	0

**\*R-remember, U-understand, A-apply, Z-analyze, E-evaluate, C-create**

**\*F-factual, C-conceptual, P-practical/procedural**

## **CoreCourse-IX**

### **SJECO3 C09 - INTERNATIONAL TRADE**

**(Credit 5)**

#### **Module I: International Trade and Economic Development**

Importance of trade to development-Trade as an engine of growth-Contributions of trade to development- Terms of trade-Types.

#### **Module II: Developments in Trade Theories**

Offer Curves- Reciprocal demand theory- Opportunity cost analysis- Factor intensity-Factor abundance-Heckscher-Ohlin Theory- Leontief Paradox- Factor intensity reversal-Factor Price Equalization Theorem- Stolper Samuelson theorem- Metzler Paradox - Economies of scale and international trade- Imperfect competition and international trade-Product differentiation and international trade- Posner's Imitation gap- Vernon's Product Cycle Theory -Leamer's and Treffer's Theorem - Kravis theory of Availability- Linder's theory of Volume of Trade and Demand pattern- Transportation cost and international trade - Foreign trade multiplier.

#### **Module III: Economic Growth and International Trade**

Growth of labour and capital- Rybczynski theorem- The effect of growth on trade-Immiserising growth- Dutch disease- Prebisch - Singer Thesis-Myrdal's views-

#### **Module IV: International Trade Policies**

Import substitution versus export orientation - Trade restrictions-Tariffs- Effects of Tariffs - Partial and general equilibrium analysis-Optimum tariff-Effective rate of protection-Non tariff barriers -Import quotas-Effects of an import quota - New Protectionism - Exchange control- Export subsidies- Countervailing tariff- Voluntary export restraints- Technical standards- Administrative and other regulations- Dumping and anti-dumping duties-International Cartels -Trade inWastes.

#### **Module V: Economic Integration**

Economic Integration - Theories of customs union- Trade creating customs union-Trade diverting customs union-Static welfare effects of customs union-Dynamic benefits from customs union - Emerging issues in SAFTA, ASEAN and EU-Problems and prospects of WTO Agreement in present Global trading.

#### **REFERENCES**

1. Dominick Salvatore: International Economics-11th Edition John Wiley & Sons(2014).
2. Bo Sodersten and Geoffrey Reed: International Economics- Macmillan(2008).
3. Paul. R. Krugman and Maurice Obstfeld: International Economics- Pearson Education.
4. Kindleberger, C.P: International Economics- R.D. Irwin, Homewood.
5. Bhagwati, J.N(Ed): International Trade: Selected Readings- MIT Press, 1987.
6. Robert J Carbaugh (2011): Global Economics- Cengage Learning.
7. Giancarlo Gandolfo: International Trade- Spinger International Edition-2006.
8. Dennis R Appleyard and Alfred J Field: International Economics- McGrawHill.
9. Appleyard and Field: International Trade: Theory and Policy.
10. Richard .E. Caves and Harry G. Johnson: Readings in International Economics.

11. Corden .W.M: Recent Developments in the Theory of International Trade- Princeton University Press.
12. Thomas A. Pugel: International Economics-McGrawHill.
13. James C Ingram and Robert M Dunn: International Economics-John Wiley and Sons.
14. Richard Caves, Jeffrey Frankel and Ronald Jones: World Trade and Payments-Pearson Education.
15. Theo Eicher, John Mutti and Michelle Turnovsky (2009): International Economics-Routledge.
16. Jagdish Bhagwati, Arvind Panagariya and T.N. Srinivasan (1998) Lectures on International Trade, MIT Press, 2nd edition.
17. Robert C. Feenstra (2004) Advanced International Trade: Theory and Evidence, Princeton University Press, (Indian edition 2007).

## MODEL QUESTION PAPER

### M. A DEGREE THIRD SEMESTER EXAMINATION PROGRAMME- M. A. ECONOMICS

#### MEC309-INTERNATIONAL TRADE

Time: 3 Hours

Max. Weightage: 30

#### Part A

*Answer all questions*

*Each question carries 1/4 weightage*

1. How many countries are in the 2019 EU a)26 b)27 c)28 d)29
2. The theory which deals with the availability and non availability of goods that govern the pattern of trade a)H-O theorem b) opportunity cost c) Kravis theory d) none of the above
3. Who propounded comparative advantage theory of international trade  
a) Adam Smith (b) JS Mill (c) Chenery (d) David Ricardo
4. The ratio of nation's average export prices relative to its average import prices is the nation's :  
(a) Absolute advantage (b) comparative advantage (c) terms of trade (d) exchange rate
5. (X-M) denotes :  
(a) net export (b) net import (c) gross import (d) none of these
6. Leontief paradox is a criterion against:  
(a) Heckscher-Ohlin model (b) Stolper-Samuelson Theorem (c) Technology gap model (d) Theory of physiocrats
7. The earliest statement of the principle of comparative advantage is associated with:  
(a) Adam Smith (b) David Ricardo (c) Eli Heckscher (d) Bertil Ohlin
8. John Stuart Mill was the founder of the :  
(a) Theory of reciprocal demand (b) Theory of Absolute advantage (c) Theory of comparative Advantage (d) Theory of mercantilism
9. A situation which involves absence of tariff and quota  
(a) protection (b) trade restriction (c) free trade (d) Neo Mercantilism
10. Factor proportion theory is also known as the:  
(a) comparative advantage theory (b) Laissez faire Theorem (c) Heckscher-Ohlin Theorem (d) product cycle model
11. The best example of custom union is  
(a) OPEC (b) GATT (c) European union (d) WTO
12. Which among the following has the dead weight loss effect  
(a) Tariff (b) quota (c) Dumping (d) Export

13. Dutch Disease first drew attention in  
(a) 1950 (b) 1940 (c) 1959 (d) 1970
14. The theory relates to deterioration in terms of trade of the country experiencing growth is -----  
-----  
(a) The theory of immiserising growth (b) Absolute cost advantage theory (c) the theory of free trade (d) The theory of Mercantilism
15. The concept of Dual gap analysis is pioneered by  
(a) Adam Smith (b) JS Mill (c) Chenery (d) Stopler–Samuelson

(15x1/5=3 weightage)

**Part B (Very Short Answer Questions)**

*Answer any five questions*

*Each question carries 1 weightage*

16. Export subsidies
17. Economies of scale
18. Optimum tariff
19. Terms of trade
20. Factor abundance
21. Import substitution
22. Anti dumping duties
23. Exchange control

(5x1=5 weightage)

**Part C (Short essay Questions)**

*Answer any seven questions*

*Each question carries 2 weightage*

24. Briefly explain the effective rate of protection
25. Discuss E U problems
26. Explain voluntary export restraints
27. Explain Kravis theory of availability
28. Discuss on Metzler paradox
29. Examine Foreign trade multiplier.
30. What do you mean by Rybczynski theorem
31. Describe offer curves
32. Explain Leontief paradox
33. What is ASEAN ?

(7x2=14 weightage)

**Part D (Essay Questions)**

*Answer any two questions*

*Each question carries 4 weightage*

34. What are the prospects of WTO agreement in present global trading?
35. Examine Heckscher-Ohlin theory an improvement over classical theory of international trade
36. Critically examine the role of WTO in liberalizing world trade
37. Critically examine the case for trade protection. Discuss the various tariff and non tariff barriers to international trade

(2x4=8 weightage)

**Course Code: SJECO3 C10**

**Name of the Course: GROWTH AND DEVELOPMENT**

	Course Outcome	POs/ PSOs	CL	KC	Class Sessions (appr.)	Lab (Hrs)
CO1	Understand various indicators of Economic Development and Growth	PO1/PS O1	C	U	8	0
CO2	Identify the important models and theories in economic development	PO3/PS O2	U	A	12	0
CO3	Analyze Policy of Development and its implications	PO4/PS O3/PS O4	U	A	12	0
CO4	Analyze and Apply Harrod-Domar and Solow's growth model	PO1/PS O3/PS O4	A	E	10	0
CO5	Analyze economic growth and technical progress	PO5/PS O3	A	E	8	0
CO6	Apply an analytical framework to understand the important structural characteristics of development	PSO4	A	E	10	0
CO7	Acquire skills in conducting research related to development issues.	PO6/PS O3	A	E	20	0
CO8	Acquire a basic understanding of the issues and on-going debates on development economics	PSO4	A	E	10	0

**\*R-remember, U-understand, A-apply, Z-analyze, E-evaluate, C-create**

**\*F-factual, C-conceptual, P-practical/procedural**

**SJECO3 C10 - GROWTH AND DEVELOPMENT**

**(Credit 5)**

**Module I: Concepts and Measurements of Economic Growth and Development**

Concepts of growth and development-Indicators of Economic Development: National Income, Per capita Income, PQLI, Human Development Index, Gender Development Index, Human Poverty Index and Deprivation Index. Measures of Inequality: Kuznets Inverted U hypothesis, Lorenz Curve and Gini-coefficient, Atkinson, Theil, Palmaratio.

**Module II: Theories of Economic Growth**

Harrod-Domar Growth Model- Contributions of Kaldor-Mirrlees and Joan Robinson, Hirofumi Uzawa model, Solow's Growth Model and the Convergence Hypothesis, Endogenous Growth Theory and the role of Human Capital; Indian Plan Models of Mahalanobis and Wage-goods model.

**Module III: Partial Theories of Economic Growth and Development**

Basic Features of Underdeveloped Countries, Population Growth and the Theory of Low-Level Equilibrium Trap, Critical Minimum Effort Thesis, Theory of Big-Push; Balanced Versus Unbalanced Growth Theories- Concepts of linkages.

**Module IV: Stage Theories**

Marxian Stage theory, Rostow's Stage Theory.Theory of Growth and Structural Change. Concept of Dualism: Technological, Social, Geographical and Financial. Myrdal and Circular Causation, Backwash and Spread Effect. Institutions and Economic Growth.

**Module V: Financing Economic Development**

Domestic Resource Mobilisation: Prior-Savings Approach, The Keynesian and Quantity Theory Approaches to the Financing of Economic Development. Foreign Resource: Dual GapAnalysis.

**REFERENCES**

1. Adelman, Irma (1961): 'Theories of Economic Growth and Development', Stanford University Press
2. Ahluwalia and I.M.D Little: India's Economic Reforms and Development: Essays for Manmohan Singh
3. Hollis, Chenery, and T. N. Srinivasan: "Handbook of Development Economics, Vol. 1." (1988).
4. Fortado (1964): Development and Underdevelopment', University of California Press, Berkley
5. Ghatak, Subrata: Introduction to Development Economics. Routledge (4<sup>th</sup>edn.)
6. Gill, Richard T: Economic Development: Past and Present. No. HD82 G52.1963.
7. Hagen, Everett (1975): The Economics of Development Richard D. Irwin Illinois
8. Higgins, Benjamin (1976): Principles of Economic Development, Universal Book Stall, New Delhi.

9. Jones, Hywel G: An Introduction to Modern Theories of Economic Growth. London: Nelson,1975
10. Kindleberger, C.P (1958): Economic Development, Tata McGraw-Hill, NY
11. Kuznets S (1972): Modern Economic Growth, Oxford and IBH, New Delhi.
12. Little, Ian Malcolm David: Economic Development: Theory, Policy, and International Relations.(1982).
13. Meier, Gerald M., and James E. Rauch: Leading Issues in Economic Development. 5th ed. New York: Oxford University Press,1989.
14. Ray, Debraj (2003): 'Development Economics', Oxford India Paperbacks,OUP
15. Sen, A. K: Introduction in Growth Economics: Selected Readings."(1970).
16. Skarstein, Rune. Development Theory: A Guide to Some Unfashionable Perspectives. Oxford University Press, USA,1997.
17. Stiglitz, Joseph E., and Hirofumi Uzawa, eds: Readings in the Modern Theory of Economic Growth. Mit Press,1969.
18. Thirlwall, A. P: Growth and Development: With Special Reference to Developing Economies: Palgrave Macmillan."(2003).

**ST. JOSEPH'S COLLEGE (AUTONOMOUS) IRINJALAKUDA**  
**M A ECONOMICS - SEMESTER III**  
**MODEL QUESTION PAPER**

**PAPER II SJECO3 C10 - GROWTH AND DEVELOPMENT**

**TIME : 3 HOURS**

**MAXIMUM WEIGHTAGE: 30**

**Part A**

**Answer all Questions**

**Each bunch of four questions carries a weightage of 1**

1. The economist who stressed the role of the entrepreneur in development was:
  - a) Hirschman (b) Nurkse (c) Rosenstein Rodan (d) Schumpeter
2. "Theory of Economic Development" was written by:
  - (a) David Ricardo (b) Paul Samuelson (c) Nicholas Kaldor (d) Joseph Schumpeter
3. If a country's saving rate is 20 % and the capital output ratio is 4 %, what is the warranted growth rate:
  - (a) 10 % (b) 80 % (c) 5 % (d) 20 %
4. Financial dualism theory was developed by
  - (a) Benjamin Higgins (b) Mynt (c) Boeke (d) none of the above
5. Rolling plan was suggested by
  - Galbraith (b) Myrdal (c) Samuelson (d) A.K.Sen
1. Critical minimum effort thesis is given by
  - a) Leibenstein (b) Rodan (c) Arthur Lewis (d) Marx
2. Earth summit was signed by:
  - a) 162 countries (b) 171 countries (c) 160 countries (d) 170 countries
3. The knife-edge equilibrium was given by
  - a) Kaldor (b) Harrod (c) Domar (d) Meade
4. The import substitution industrialization was suggested by

- a) Dependency theorists b) Structuralists c) Both d) None of these
5. The father of scientific socialism was  
Adam Smith b) Ricardo c) Karl Marx d) Malthus
6. Golden age is associated with:  
a) Brahmananda b) Schumpeter c) Solow d) Joan Robinson
7. Which of the five year plans in India was based on the Mahalanobis four sector model?  
(a) First five year plan (b) Second five year plan (c) third five year plan (d) None of these
8. Inverted U hypothesis by  
a) Kuznets b) Joan Robinson c) Solow d) Schumpeter
9. . Which of the following is not an important objective of development?  
a). increases in per capita income b). the expansion of available choices
15. If saving exceeds investment, the national income will :  
(a) fall (b) rise (c) fluctuate (d) remain constant

(15x1/5=3weightage)

**Part B (Very Short Answer Questions)**  
**Answer any 5 Questions**  
**Each question carries a weightage of 1**

16. Differentiate PQLI and HDI
17. What is development gap?
18. Linkage effect
19. What do you mean by industrial reserve army
20. What is knife edge equilibrium?
21. Write a note on Hirofumi Uzawa model
22. Differentiate Myrdal's backwash effect and spread effect
23. Write a note on warranted growth rate

(5x1 = 5 weightage)

**Part C (Short Answer Questions)**  
**Answer any 7 Questions**  
**Each question carries a weightage of 2**

24. Explain Prior-Savings Approach,
25. Briefly explain the characteristics of under developed countries
26. Explain Theory of Low- Level Equilibrium Trap
27. Critically examine the critical minimum effort thesis
28. Differentiate between economic growth and economic development.
29. Explain dependency theory of economic development
30. Examine endogenous growth theory
31. Discuss Marxian theory
32. Discuss different types of dualism
33. Explain the role played by institutions in economic growth

(7x2 = 14 weightage)

**Part D (Essay Questions)**

**Answer any 2 Questions**  
**Each question carries a weightage of 4**

- 34. Discuss the The Keynesian and Quantity Theory Approaches to the Financing of Economic Development
- 35. Discuss Harrod-Domar model of economic growth
- 36. Explain inequalities of income and examine the methods to assess the inequalities in income distribution
- 37. Critically examine Kaldor model of growth

**(2x4 = 8 weightage)**

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**Course Code: SJECO3C11**

**Name of the Course: BASIC ECONOMETRICS**

	Course Outcome	POs/ PSOs	CL	KC	Class Sessions (appr.)	Lab (Hrs)
CO1	Understand nature of econometrics	PO2,PSO 1,PSO2	U	C	10	0
CO2	Illustrate PRF and SRF from economic theory	PO1/PSO 1,PSO2	R,U	C	8	0
CO3	Understand CLRM assumptions	PO1/PSO 2	U	C	10	0
CO4	Analyse econometrics problems	PO1,PO2 /PSO2,P SO3	Z	C	15	0
CO5	Find out use of dummy variables	PO1,PO5 /PSO3,P SO2	R,Z	C,P	8	0
CO6	Explain model specification error	PO1/PSO 3	U	C	16	0
CO7	Apply qualitative response regression models	PO1,PO5 /PSO4	A	F	15	0
CO8	Practice in empirical analysis of economic laws.	PO1,PO5 PO6/PSO 4	C	C	18	0

**\*R-remember, U-understand, A-apply, Z-analyze, E-evaluate, C-create**

**\*F-factual, C-conceptual, P-practical/procedural**

**SJECO3 C11 - BASIC ECONOMETRICS**

**(Credit 5)**

**Module I: Simple Linear Regression Model**

Nature and scope of Econometrics-Economic theory and mathematical economics-Methodology of econometrics-Uses of econometrics-The concept of PRF -Significance of stochastic error term-The SRF-Problem of estimation- Method of ordinary least squares-Assumptions underlying the method of least squares-Properties of estimators- Gauss Markov theorem-Coefficient of determination,  $r^2$  -Normality assumption-Hypothesis testing- t and F tests-P value- Practical versus statistical significance-Prediction-Method of maximum likelihood-Maximum likelihood estimation of two variables model.

**Module II: Multiple Regression Analysis**

The three variable model-OLS estimation of partial regression coefficients-Multiple coefficient of determination  $R^2$  and adjusted  $R^2$ -Hypothesis testing-Testing the overall significance of the regression model-F test-Testing the equality of two regression coefficients-Restricted least squares-Chow test-General k variable regression model- Matrix approach to estimation and derivation of the properties of OLS estimators.

**Module III: Econometric Problems**

Multicollinearity-Nature, consequences, detection and remedial measures-Autocorrelation-Nature, consequences, detection, and remedial measures- Heteroskedasticity-Nature, consequences, detection and remedial measures.

**Module IV: Extensions of Two Variables and Dummy Variable Regression Model**

Regression through the origin-Functional forms of regression models, log-log, log-lin, lin-log and reciprocal models- Dummy variable-ANOVA models-ANCOVA models-Dummy variable trap-Dummy variables and seasonal analysis-Structural analysis-Piecewise linear regression.

**Module V: Model Specification and Diagnostic Testing**

Types of specification errors-Detection and consequences-RESET-Errors of measurement-Consequences, remedies-Qualitative response regression models-Linear probability model, Logit and Probit.

**REFERENCES**

1. Damodar N Gujarati and Dawn C Porter (2009): Basic Econometrics, Fifth Edition, McGraw Hill International Edition.
2. Damodar N Gujarati (2011): Econometrics by Example, First Edition, Palgrave, MacMillan.
3. James H Stock and Mark W Watson (2017): Introduction to Econometrics, Third Edition, Pearson, Addison Wesley.
4. Carter Hill, William Griffiths and Guay Lim (2011): Principles of Econometrics, 4<sup>th</sup> Edition, John Wiley & Sons.
5. Jeffrey M Wooldridge (2018): Introductory Econometrics: A Modern Approach, 7<sup>th</sup> Edition, Thomson South Western.
6. Robert S Pindyck and Daniel L Rubinfeld (1998): Econometric Models and Economic Forecasts, Fourth Edition, McGraw Hill International Edition.

7. Kerry Patterson (2000): An introduction to Applied Econometrics: A Time Series Approach, First Edition, Palgrave.
8. Walter Enders (2010): Applied Econometric Time Series, Third Edition, Wiley India Edition.
9. Richard Harris and Robert Sallis (2006): Applied Time Series Modeling and Forecasting, First Edition, Wiley Student Edition.
10. Dimitrios Asteriou and Robert Hall (2015): Applied Econometrics, 3<sup>rd</sup> Edition, Oxford University Press.
11. Jack Johnston and John Dinardo (1998): Econometrics Methods, Fourth Edition, The McGraw Hill Companies.
12. William H Greene (2018): Econometric Analysis, 8<sup>th</sup> Edition, Pearson Education.
13. Christopher Dougherty (2007): Introduction to Econometrics, Third Edition, Oxford University Press.
14. Chris Brooks (2012): Introductory Econometrics for Finance, 3<sup>rd</sup> Edition, Cambridge.
15. Hamid R Seddighi (2012): Introductory Econometrics- A Practical Approach, Routledge.
16. Chandan Mukherjee, Howard White and Marc Wuyts (1998)-Econometric and Data Analysis for Developing Countries, First Edition, Routledge.
17. Peter Kennedy (2013): A Guide to Econometrics, 6<sup>th</sup> Edition, Wiley-Blackwell.
18. AH Studenmund: Using Econometrics: A Practical Guide, Fifth Edition, Pearson Education.

**M. A DEGREE THIRD SEMESTER EXAMINATION  
PROGRAMME – M.A ECONOMICS  
SJECO3C11 - BASIC ECONOMETRICS**

Time: 3 Hours

Max. Weightage: 30

**Part A**

*Answer all questions*

*Each question carries 1/5 weightage*

1. The second stage in the Methodology of Econometrics Research is known as:
  - a) Estimation stage
  - b) Evaluation stage
  - c) Specification stage
  - d) None of the above
2. The appropriate model for the estimation of elasticity is:
  - a) Lin log
  - b) Double log
  - c) Loglin
  - d) None of these
3. Park test is a
  - a) one stage procedure
  - b) two stage procedure
  - c) three stage procedure
  - d) four stage procedure
4. Regression between Y and  $X_1, X_2$  assuming other variables constant is :
  - a) simple regression
  - b) Multiple regression
  - c) Partial regression
  - d) None of the above
5. the meaning of linearity in regression theory is that it is
  - a) linear in variables
  - b) linear in variables and non – linear in parameters
  - c) linear in parameters
  - d) linear in parameters and variables
6. Standard error test is also known as:
  - a) F test
  - b) ‘t’ test
  - c) Chi-square test
  - d) Z-test
7. ANCOVA models are the regression models containing
  - a) quantitative variables
  - b) Qualitative variables
  - c) Dependent variables
  - d) Both a and b
8. The coefficient of determination  $R^2$  lies between
  - a)  $-\alpha$  and  $+\alpha$
  - b) -1 and +1
  - c) 0 and 1
  - d) -1 and 0
9. In the case of Homoscedasticity the variance of u is
  - a) Constant
  - b) Not constant
  - c) Zero
  - d) None of the above
10. One of the graphical tool for detecting correlation is
  - a) Box plot
  - b) Scatter plot
  - c) Carpet plot
  - d) Biplot
11. The model  $y = \beta_1 + \beta_2 \log x + u$  is called
  - a) Reciprocal model
  - b) logarithmic model
  - c) semi – logarithmic model

- d) none of these
12. For  $H_0$ , of no autocorrelation to be not rejected the Durbin –Watson d statistic should be  
 a) equal to 2    b) equal to 0    c) equal to 4    d) equal to 1
13. Regression Specification Error Test is proposed by  
 a) Durbin    b) Watson    c) Ramsey    d) Engle
14. The test which is used to examine the structural stability of a regression model.  
 a) d- Test    b) t-test    c) H – test    d) Chow Test
15. Econometrics is concerned with the empirical determination of economic laws. Who said this?  
 a) G Tintner    b) Goldberger    c) Theil    d) Haavelmo

(15x1/5=3 weightage)

**Part B (Very Short Answer Questions)**

*Answer any five questions*

*Each question carries 1 weightage*

16. Define Econometrics
17. Write normality assumptions for  $u_i$
18. What is dummy variable trap ?
19. Convert the model  $y = \beta_1 X_1 + \beta_2$  to the model that is linear in parameters.
20. What do you mean by partial regression coefficient ?
21. Differentiate ANOVA and ANCOVA model
22. What is piecewise linear regression model?.
23. Explain the concept of omitted variable bias.

(5x1=5 weightage)

**Part C (Short essay Questions)**

*Answer any seven questions*

*Each question carries 2 weightage*

24. What is the role of the stochastic error term  $u_i$  in regression analysis ? .
25. State desirable properties of an econometric model?
26. Explain OLS estimation in the presence of Heteroscedasticity.
27. Write a note on dummy variable trap.
28. Briefly explain Logit and Probit models.
29. Estimate the regression line of sales on price and interpret the results.
30. Explain 'd' statistic.
31. What is the nature of auto correlation?
32. Explain the reasons for lag.
33. Distinguish between  $R^2$  and adjusted  $R^2$  .
34. Explain Gauss – Markov theorem .
35. Explain the procedures of hypothesis testing for F and t test.

(7x2=14 weightage)

**Part D (Essay Questions)**

*Answer any two questions*

*Each question carries 4 weightage*

36. Explain in detail the methodology of econometric research .
37. Discuss the sources, consequences and detection of Multicollinearity.
38. Discuss various functional forms of regression model.
39. What are the assumptions underlying OLS method ?.

(2x4=8 weightage)

**SEMESTER IV**

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>HOURS</b>	<b>CREDIT</b>
<b>SJECO4 C12</b>	International Finance	6	3
<b>SJECO3 C13</b>	Financial Markets	6	3
<b>SJECO4 E06</b>	Elective II – Agricultural economics	6	4
<b>SJCO4E10</b>	Elective III -Research Methodology and Computer Applications	6	4
<b>SJECO4 P01</b>	Project	1	4
<b>SJECO4 V01</b>	Comprehensive Viva Voce		4

**Course Code: SJECO4 C12**

**Name of the Course: INTERNATIONAL FINANCE**

	Course Outcome	POs/ PSOs	CL	KC	Class Sessions (approx.)	Lab (Hrs)
CO1	Describe the concept Balance of Payments.	PO1/PSO1	U	C	8	0
CO2	Understanding on foreign exchange Management in India	PO1/PSO4	U	C	14	0
CO3	Analyze the nature and functioning of foreign exchange markets, determination of exchange rates	PO1/PSO3	Z	P	13	0
CO4	Explain the techniques used to hedge foreign exchange risk	PO1/PSO1	A	C	12	0
CO5	Understand the motives and effects of international capital flows.	PO1/PSO4	U	C	10	0
CO6	Identify the exchange traded currency derivatives	PO1/PSO1	R	C	15	0
CO7	Understand the evolution of international monetary system	PO1/PSO3	U	C	10	0
CO8	Describe the concept	PO1/PSO1	A	C	8	0

dollarization, currency board & optimum currency area.						
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**\*R-remember, U-understand, A-apply, Z-analyze, E-evaluate, C-create**

**\*F-factual, C-conceptual, P-practical/procedural**

## **Core Course-XII**

### **SJECO4 C12 - INTERNATIONAL FINANCE**

**(Credit 3)**

#### **Module I: Balance of Payments**

Balance of payments- Components- Equilibrium and disequilibrium in BOP- Methods of correcting BOP deficit-Adjustment Mechanisms-Automatic, price and income adjustments- Elasticity approach- Marshall-Lerner condition- Absorption Approach-Monetary approach- J curve effect- Currency convertibility- Current and capital account convertibility-The Indian experience-FEMA.

#### **Module II: Exchange Rate and Theories of Exchange Rate**

Exchange rate-Nominal, Real, Effective, NEER, REER- Exchange rate systems- Relative merits and demerits of fixed and flexible exchange rates- Hybrid exchange rates- Purchasing power parity theory-Monetary approach- Asset market (portfolio balance) model- Exchange rate overshooting - Exchange rate in India- Indian Rupee and its fluctuations in international currency market.

#### **Module III: Foreign Exchange Market**

Foreign exchange market-Functions-Participants- Stability of foreign exchange markets-Spot and forward market- Currency futures and options- Swap market- Foreign exchange risk- Hedging- Speculation- Stabilizing and de-stabilizing- Currency arbitrage- Internal and external balance- Policy adjustments- Expenditure changing and expenditure switching policies-Assignment problem- Swan diagram- Mundell-Fleming model.

#### **Module IV International Capital Flows**

Portfolio investment and direct investments- Motives for capital flows- Effects of international capital flows- Multinational corporations- Advantages and disadvantages of MNCs- Foreign investment in India since 1991.

#### **Module V International Monetary System**

International monetary system-The gold standard and its breakdown-Bretton Woods system and its breakdown- Present international monetary system- European monetary union-Euro- Optimum currency areas- Currency boards- Dollarization- Brexit.

#### **REFERENCES**

1. Dominick Salvatore: International Economics- JohnWileyandSons.
2. Keith Pilbeam: InternationalFinance-Macmillan.
3. Bo Sodersten and Geoffrey Reed: International Economics- Macmillan,London.

4. Paul R Krugman and Maurice Obstfeld: International Economics: Theory and Practice- Pearson Education, Singapore.
5. Thomas A. Pugel: International Economics- TMH.
6. Michael Melvin: International Money and Finance- Pearson Education.
7. James C Ingram and Robert M Dunn: International Economics- John Wiley and Sons.
8. Keith Pilbeam: Finance and Financial Markets- Palgrave.
9. Dennis R Appleyard and Alfred J Field: International Economics- McGraw Hill.
10. Robert J Carbaugh (2011): Global Economics- Cengage Learning.
11. Giancarlo Gandolfo: International Finance and Open Economy Macroeconomics- Springer.
12. Van den Berg: International Finance and Open Economy Macroeconomics- World Scientific.
13. Lawrence Copeland: Exchange Rates and International Finance- Pearson Education.
14. M Levi: International Finance- McGraw Hill.
15. Richard Caves, Jeffrey Frankel and Ronald Jones: World Trade and Payments- Pearson.
17. Sumati Varma: Currency Convertibility: Indian and Global Experiences- New Century.
18. Theo Eicher, John Mutti and Michelle Turnovsky (2009): International Economics- Routledge.

**MODEL QUESTION PAPER**  
**SJECO4 C12 - INTERNATIONAL FINANCE**

**Time: 3 hour**

**weightage: 30**

PART A

(Answer **all** questions)

Objective type questions

4. Which of the following institutions cannot be included in the international financial and monetary system?  
a) World Bank   b) IMF   c) Bank for International Settlements   d) WTO
5. In the Bretton Woods Agreement, one ounce of gold was set equal to  
a) 40 USD      b) 45 USD   c) 50 USD   d) 35 USD
6. Which of the following is not a major trading centre of foreign exchange?  
a) Hong Kong   b) London   c) Tokyo   d) Singapore
7. The Special Drawing Right is  
a) The same as gold   b) comprised of a basket of 16 currencies.   c) a unit of account based on the value of 5 currencies.   d) Designed to replace international reserves.
8. Euro came into existence in  
a) 1989   b) 1969   c) 1999   d) 1979
9. The policy of intervention in foreign exchange markets by monetary authorities to smooth out short run fluctuations without attempting to affect the long run trend in exchange rates:  
a) Managed floating exchange rate system   b) fixed exchange rate system   c) crawling peg exchange rate system   d) none of these
10. The price-specie-flow mechanism was introduced by

- a) Keynes b) Hume c) Ricardo d) none of these
11. Which of the following is a currency that is not used to value the Special Drawing Right (SDR)?  
a) The Japanese yen. b) The French franc c) The Swiss franc d) The British pound sterling.
  12. The absorption approach to BOP was formulated by:  
a) Sidney Alexander b) Marshall c) Lerner d) Friedman
  13. Foreign exchange management act was introduced in  
a) 1998 b) 1991 c) 1973 d) 1999
  14. In the balance of payment, unrequited receipts are entered as:  
a) Credit entry b) Debit entry c) Separate entry d) None of the above
  15. Suppose  $R=1.5\$:1\ \text{£}$ . if the exchange rate falls to  $R=1\ \$:1\ \text{£}$ , it means that  
a) Appreciation of \$ b) depreciation of \$ c) appreciation of £ d) none of these
  13. A person who agrees to buy an asset at a future date has gone  
(a) long. (b) short. (c) back. (d) none
  14. The advantage of forward contracts over future contracts is that they  
(a) are standardized (b) have lower default risk. (c) are more liquid. (d) none
  15. Exchange rate for currencies is determined by supply and demand in system of:  
(a) Fixed exchange rate (b) Flexible exchange rate (c) Constant (d) Govt. regulated

(15x1/5=3 w)

**Part B (Very short answer questions)**

(Answer any seven)

**Each question carries a weightage of 1**

16. Assignment problem
- 17 Dollarization
18. Portfolio investment and direct investment
- 19 Hybrid exchange rate
- 20 Optimum currency area
- 21 State Marshall-Lerner condition
- 22 J curve effect
- 23 Write a short note on arbitrage

(5x1=5w)

**Part C (Short Answer questions)**

(Answer any seven)

**Each carry 2 weightage**

- 24 Gold standard and its breakdown
- 25 European monetary union
- 26 Motives and effects of international capital flows
- 27 Distinguish between future and option
- 28 Explain Purchasing power parity theory
- 29 Explain different types of exchange rate
- 30 Discuss the merits and demerits of flexible exchange rate system
- 31 What are the methods of correcting BOP deficit
- 32 Absorption approach to BOP
- 33 What are the advantages of MNC's?

(7x2=14w)

**Part D (Essay questions)**

**(Answer any two)**

**Each carry 4 weightage**

- 34 Explain Mundell Fleming model
- 35 What do you mean by balance of payment disequilibrium? discuss expenditure switching policies and expenditure changing policies.
- 36 Examine foreign investment in India since 1991
- 37 Explain functions, participants, stability and types of foreign exchange market

(2x4=8w)

**Course Code: SJECO4 C13**

**Name of the Course: FINANCIAL MARKETS**

	Course Outcome	POs/ PSOs	CL	KC	Class Sessions (appr.)	Lab (Hrs)
CO1	Identify the functions of financial markets and intermediary institutions	PSO1	C	C	10	0
CO2	Assess and test the theoretical concepts underlying money and capital markets	PSO1	C	C	12	0
CO3	Critically evaluate the historical development of regulations and supervision of financial markets for both bank based and market based systems	PSO3/PSO2	U	C	14	0
CO4	Understand capital market operations in India.	PSO1	C	C	8	0
CO5	To create advanced knowledge in derivative instruments like forwards,	PSO2	A	C	16	0
CO6	analytical skills in students in pricing derivative instruments	PSO1/PSO4	U	C	10	0
CO7	understanding of commodity trading	PSO1	U	C	10	0
CO8	Assess information related to financial issues in a global context with an emphasizes on the advantages and complexity of being international	PSO1/PSO4	U	C	10	0

**\*R-remember, U-understand, A-apply, Z-analyze, E-evaluate, C-create**

**\*F-factual, C-conceptual, P-practical/procedural**

**SJECO4 C13 - FINANCIAL MARKETS**

**(Credit 3)**

**Module I: Financial Markets**

Functions of financial markets-Types of financial markets- Participants in financial markets- Role of financial intermediaries-Financial innovation-Financial inclusion and inclusive growth.

**Module II: Money Market**

Functions of money market-Instruments of the money market-Call money-Bill of exchange- Commercial bills-Treasury bills- Commercial paper-Interbank market-Federal funds- Negotiable certificate of deposits- Banker's acceptance-Repurchase agreements-Money market mutual funds- Features of a developed money market-Structure of Indian money market- Money market reforms in India since 1991.

**Module III: Capital Market**

Functions of capital market-Primary market-Instruments of the primary market- Secondary market-Functions- Instruments of the secondary market-Demutualisation of stock exchanges- Trading mechanism of the stock exchanges- Liquidity products (margin trading, short sales, securities lending and borrowing)-Foreign institutional investment-Participatory notes (P-notes)-Insider trading-Investor protection- Credit rating-Capital market institutions- Depositories-Discuss and Finance House of India-Stock Holding Corporation of India-Securities Trading Corporation of India-SEBI-Functions and powers- Capital market reforms in India since 1991.

**Module IV: Derivatives Market**

Types of derivatives-Participants in the derivative markets-Uses of derivatives- Options-Types of options-Uses of options-Platforms for options trade-Trading mechanics-Option premium-Profits and losses with options-Stock options and stock index options in India-Futures- Types of futures (stock index futures-foreign currency futures-interest rate futures-commodity futures)-Uses of futures-Market mechanics-Market participants- The clearing process- Stock futures and stock index futures in India-Difference between options and futures-Swaps-Interest rate swaps-Foreign currency swaps.

**Module V: Global Financial Markets**

Instruments- American Depository Receipts (ADR)-Global Depository Receipts (GDR)- Foreign Currency Convertible Bonds (FCCB)-External commercial borrowings-International bonds-Eurobonds-Euronotes-Euro commercial papers-Eurodollars-Eurocurrency market- Reasons for the growth-Features-Effects of the eurocurrency market.

References

1. Anthony Santomero and David Babbel (2001): Financial Markets, Instruments and Institutions- McGraw Hill HigherEducation.
2. Keith Pilbeam (1998): Finance and Financial Markets-Palgrave.
3. Anthony Saunders and Marcia Millon Cornett (2007): Financial Markets and Institutions: A Modern Perspective- TATA McGrawHill.
4. Fabozzi, Modigliani, Jones and Ferri (2002): Foundations of Financial Markets and Institutions- PearsonEducation.
5. Jeff Madura (2008): Financial Markets and Institutions-CengageLearning.

6. Stephen Valdez and Julian Wood (2003): An Introduction to Global Financial Markets- PalgraveMacmillan.
7. Robert A Strong (2002): Derivatives: An Introduction- ThomsonSouth-Western.
8. John C Hull (1995): Introduction to Futures and Options Markets -Prentice HallIndia.
9. Sunil K Parameswaran (2003): Futures Markets- Tata McGraw Hill.
10. Michael Durbin (2006): All About Derivatives -Tata McGrawHill.
11. Giancarlo Gandolfo: International Finance and Open Economy Macroeconomics- Springer.
12. Rajesh Chakrabarti and Sankar De (2010): Capital Markets in India-Response Sage New Delhi.
13. S Gurusamy (2009): Financial Markets and Institutions-McGraw Hill HigherEducation.
14. H R Machiraju (2010): Indian Financial System- Vikas Publishing House NewDelhi.
15. Y.V. Reddy: Monetary and Financial Sector Reforms in India- UBSPD, NewDelhi.
16. Bharati V Pathak (2011): The Indian Financial System- PearsonEducation.
17. National Stock Exchange of India (NSE): Indian Securities Market: A Review- Various Issues.

**ST. JOSEPH'S COLLEGE (AUTONOMOUS) IRINJALAKUDA**  
**M A ECONOMICS - SEMESTER IV**  
**MODEL QUESTION PAPER**

**PAPER II SJECO4 C13 - FINANCIAL MARKETS**

**TIME : 3 HOURS**

**MAXIMUM WEIGHTAGE: 30**

**Part A**

Answer **all** questions

Each bunch of **5** questions carries a weightage of **1**

Objective type questions

1. ----- is the major player in capital market  
 (a) brokers (b) financial intermediaries (c) NBFC (d) SEBI
2. Which among the following is a specialized institution to operate in the discount market in India:  
 (a) IDBI (b) DFHI (c) NABARD (d) EXIM bank
3. A person appointed by a stock broker to assist him in the business of securities trading is called :  
 (a) sub- broker (b) commission broker (c) authorized clerk (d) tarwaniwala
4. A contract which gives the buyer the right but not the obligation to buy or sell specified amount of securities is known as :  
 (a) future (b) option (c) swaps (d) none of these
5. STCI was established in the year:  
 (a) 2011 (b) 2008 (c) 2005 (d) 2001
6. Which of the following is the biggest NBFII  
 (a) LIC (b) GIC (c) UTI (d) none of these
7. SEBI is associated with :  
 (a) money market (b) capital market (c) discount market (d) none of these
8. Which among the following is a specialized institution to operate in the discount market in India:  
 (a) DFHI (b) NBFII (c) STCI (d) SHCIL
9. The following one is a financial asset:

- (a) gold (b) silver (c) land (d) share
10. Which among the following is not a characteristic of Treasury bill?  
(a) High liquidity (b) Readily available (c) High transaction cost (d) Negligible capital depreciation
11. The term denotes all those investors or investment companies that are not located within the territory of the country in which they are investing is :  
(a) FII (b) FDI (c) FPI (d) none of these
12. Process of converting physical certificates of Securities to electronic form is known as:  
a) Dematerialization (b) rematerialization, (c) materialization, (d) none of these
13. Depository under BSE is:  
a) NSDL (b) CDSL (c) all the above (d) none of these
14. Market deals with long term funds are called  
(a) Capital market (b) money market (c) debt market (d) equity market
15. A person appointed by a stock broker to assist him in the business of securities trading is called:  
(a) Sub-Broker (b) commission Broker (c) Authorized Clerk (d) TarawaniWala

(15x1/5=3weightage)

**Part B (Very Short Answer Questions)**

Answer any 5 questions

Each question carries a weightage of 1

16. What is Banker's acceptance
17. Define a depository participant
18. What are the advantages of treasury bill market
19. Define Demutualisation
20. Explain insider trading
21. Explain participatory note
22. Define hedging
23. What is a commercial bill

(5 x 1 = 5 weightage)

**Part C (Short Answer Questions)**

Answer any 7 questions

Each question carries a weightage of 2

24. Define credit rating. Bring out various credit rating agencies in India
25. Discuss on GDR and ADR
26. What do you mean by Eurocurrency market and its Effects
27. State the objectives of NBFIs
28. What are the features of FCCB
29. Distinguish between capital market and money market
30. Explain swaps. Bring out different types of swaps
31. What are the methods of raising capital in primary market
13. Distinguish between option and future

- 32. What are the objectives of BSE
- 33. What do you mean by financial inclusion

(7 x 2 = 14 weightage)

**Part D (Essay Questions)**

Answer any 2 questions

Each question carries a weightage of 4

- 34. Discuss various components of a money market. Bring out their features
- 35. Analyse Capital market reforms since 1991
- 36. Explain the various powers and functions of stock exchanges
- 37. Discuss on global financial market. Bring out various instruments of global financial market

(2 x 4 = 8 weightage)

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## **LIST OF ELECTIVE COURSES**

### SEMESTER III

<b>Elective Course</b>	<b>Title of Course</b>	<b>Hours / Week</b>	<b>Credit</b>
I	Banking: Theory and Practice	6	4
II	Industrial Economics	6	4
III	Labour Economics	6	4
IV	Regional Economics	6	4

**Course Code: SJECO3 E01****Name of the Course: BANKING: THEORY AND PRACTICE**

	Course Outcome	POs/ PSOs	CL	KC	Class Sessions (appr.)	Lab (Hrs)
CO1	Understand the broad functions of Central banks.	PO1/PSO1	U	C	8	0
CO2	Learn the functions of RBI and its policies	PO1/PSO1 &PSO3	Z	P	8	0
CO3	Understand the role of money and banks in the broader economy	PO1/PSO1 &PSO3	U	P	10	0
CO4	Understand the Credit creation in the economy	PO1/PSO1 &PSO3	U	C	10	0
CO5	Analyse the banking sector reforms in india	PO1/PSO3	Z	P	13	0
CO6	Evaluate the functions and operations of international financial institutions.	PO1/PSO1 &PSO4	E	P	12	0
CO7	Examine the operations of modern banking	PO1/PSO1	U	P	15	0
CO8	Analyse the role of the Bank of International Settlements and the functioning of international banking	PO1/PSO1 &PSO4	Z	P	14	0

**\*R-remember, U-understand, A-apply, Z-analyze, E-evaluate, C-create**

**\*F-factual, C-conceptual, P-practical/procedural**

## Elective Course I

### SJECO3 E01 - BANKING: THEORY AND PRACTICE

(Credit 4)

#### Module I Central Banking

Structure and functions of central banks-Federal Reserve System-Bank of England- European Central Bank-Reserve Bank of India- Monetary policy- Objectives and instruments- Liquidity management- Autonomy of the RBI-Monetary sector reforms in India since 1991- Recent monetary and credit policy of RBI-Impact of RBI's monetary policy on economic growth and inflation.

#### Module II Commercial Banks and Specialised Financial Institutions

Structure of commercial banks-Public sector banks-Private sector banks-New generation banks-Foreign banks-Functions of commercial banks-Commercial banks and credit creation-Branch expansion programme and policy-Deposit mobilization and sectoral allocation of bank credits- Priority sector lending- Social banking-Lead bank scheme- Land development banks- Regional rural banks-Development financial institutions (IFCI, IDBI, IIBI, SIDBI) - Specialized financial institutions (EXIM Bank-National Housing Bank-NABARD-MUDRA bank)-Specialized investment institutions (Pension funds-Hedge funds-Mutual funds-UTI)- Non Banking Financial Companies-Investment banks-Merchantbanks.

#### Module III Innovations in Banking Transactions

Mail transfer-Telegraphic transfer-MICR clearing-Automated clearing system-Electronic funds transfer-Digital payment system-E-banking-Virtual payments systems-Internet banking- Mobile banking-Home banking-Tele-banking-Corebanking.

#### Module IV Banking Sector Reforms in India

Banking sector reforms since 1991- Context, need and objectives-Implementations of the Narsimham Committee recommendations- Issues in banking sector reforms-Priority sector lending-Asset classification-Non-performing assets-Capital adequacy norms-Regulation of the banking sector-Board for Financial Supervision-Credit Information Bureau of India Limited (CIBIL)-Banking Ombudsman-SARFAESI Act.

#### Module V International Banking

International banking-Reasons for the growth of international banking-Offshore banking-Multinational banking-Bank for International Settlements (BIS)-World Bank-Asian Development Bank-New Development Bank (BRICS bank).

#### REFERENCES

1. M H de Kock: Central Banking-Universal Book Stall, New Delhi.
2. Meir Kohn (1996): Financial Institutions and Markets-Tata McGraw Hill.
3. Roger LeRoy Miller and David VanHoose (1993): Modern Money and Banking-McGraw-HillInternational.
4. Jawed Akhtar and ShabbirAlam: Banking System in India: Reforms and Performance Evaluation- New Century Publications, New Delhi.
5. Y.V. Reddy: Monetary and Financial Sector Reforms in India- UBSPD, NewDelhi.
6. Suraj.B. Gupta: Monetary Planning forIndia.
7. K. Rao: Management of Commercial Banks.
8. HarendraBadhav (ed): Challenges to Indian Banking: Competition, Globalisation and

Financial Markets-Macmillan.

9. N.S. Kher: Non-Performing Advances in Banks, Skylark, NewDelhi.
10. Hansen and Kathuria (ed.) A Financial Sector for the 21st Century OUP.
11. Muraleedharan (2009) Modern Banking: Theory and Practice- PHI Learning PvtLtd.
12. Shekhar and Shekhar: Banking Theory and Practice-Vikas Publishing House Limited.
13. Bharati V Pathak (2011): The Indian Financial System- Pearson Education.
14. RBI: Report on Trend and Progress of Banking in India.
15. Report of the Committee (Narsimham) on the Financial System Nov., 1991.
16. Raghuram Rajan Committee Report on Financial Sector Reforms- Planning Commission

**M. A DEGREE THIRD SEMESTER EXAMINATION –PROGRAMME**

**M. A ECONOMICS**

**SJECO3 E01 BANKING: THEORY AND PRACTICE**

Time: 3 Hours

Weightage: 30

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**Part A**

*Answer all questions*

1. World bank stands for:  
a) NABARD    b) GATT    c) IBRD    d) Bank of England
2. The services rendered by a bank as an agent of his customers are called:  
a) Principal services    b) agency services    c) general utility services    d) social services
3. Board for financial supervision formed in  
(a) 1984    b) 1974    c) 1994    d) 2004
4. In which year, RBI has issued guidelines for merger and amalgamation of private sector Banks  
a) 2001    b) 2003    c) 2005    d) 2007
5. Rate at which RBI lend money to the Banks for a short term is called as  
a) CRR    b) SLR    c) REPO    d) Reverse repo
6. Credit rationing is -----method of credit control  
a) Quantitative credit control    b) Qualitative credit control    c) direct credit control  
d) continuous credit control
7. Nationalization of the banks was held in the year  
a) 1967    b) 1969    c) 1991    d) 1999
8. Head quarters of National housing bank is at :  
a) Mumbai    b) chennai    c) kolkatta    d) delhi
9. Which provide opportunity to small and medium investors to make investment in those stocks in which they could not have made  
a) pension fund    b) hedge fund    c) UTI    d) commercial bank
10. In absolute terms which bank has the highest gross NPA in India  
a) UCO bank    b) Bank of India    c) SBI    d) Punjab National Bank
11. In private Banks th limit for FDI has been increased from 49% to  
a) 71%    b) 72%    c) 73%    d) 74%
12. The biggest NBFIs in India is  
a) LIC    b) GIC    c) UTI    d) IDBI
13. Which is the apex body co-operative banks  
a) PACS    b) central co-operative banks    c) State co-operative banks    d) none of these
14. Which among the following is the oldest central bank ?  
a) Bank of England    b) Federal reserve system    c) Riks Bank    d) none of these

15. India's first Credit Bureau is:  
a) CIBIL b) CRISIL c) CRIF d) EQUIFAX

(15x1/5=3 weightage)

**Part B (Very Short Answer Questions)**

*Answer any five questions*

*Each question carries 1 weightage*

16. Define Lead bank scheme
17. Explain credit creation
18. What do you mean by Hedge Fund?
19. Write a short note on Merchant bank
20. Write a note on banking ombudsman scheme
21. What is offshore banking?
22. What do you mean by electronic fund transfer?
23. What are the functions of CIBIL?

(5x1=5 weightage)

**Part C (Short essay Questions)**

*Answer any seven questions*

*Each question carries 2 weightage*

24. Discuss on mail transfer
25. What do you mean by Land Development Bank? What are its functions?
26. Explain the objectives and instruments of monetary policy
27. Discuss on EXIM bank
28. Explain the role and importance of central and state co-operative Banks
29. Discuss on MUDRA banks
30. Discuss on recent monetary and credit policy of RBI
31. Describe NABARD
32. Briefly explain different types of non-performing assets
33. What are the major functions of BFS (Bank for Financial Supervision)?

(7x2=14 weightage)

**Part D (Essay Questions)**

*Answer any two questions*

*Each question carries 4 weightage*

34. Discuss on the role and importance of development financial institutions
35. Examine the structure and functions of commercial banks in India
36. Examine innovations in banking transactions
37. Discuss banking sector reforms since 1991

(2x4=8 weightage)

Elective Course II  
**ECO3 E02 - INDUSTRIAL ECONOMICS**

	Course Outcome	POs/ PSOs	CL	KC	Class Sessions (appr.)	Lab (Hrs)
CO1	Understand the broad structure of market	PO1/PSO 1	U	C	8	0
CO2	Recognize industrial pattern in India	PO1/PSO 1&PSO3	R	P	8	0
CO3	Find out industrial sources of finance	PO1/PSO 1&PSO3	U	P	10	0
CO4	Analyses major industrial changes in India	PO1/PSO 1&PSO3	U	C	10	0
CO5	Analyse the banking sector reforms in india	PO1/PSO 3	Z	P	13	0
CO6	Evaluate the trends in total factor productivity in industry.	PO1/PSO 1&PSO4	E	P	12	0
CO7	Examine industrialization in India	PO1/PSO 1	U	P	15	0
CO8	Analyse the evolution of industrial policy in India	PO1/PSO 1&PSO4	Z	P	14	0

**R-remember, U-understand, A-apply, Z-analyze, E-evaluate, C-create**

**\*F-factual, C-conceptual, P-practical/procedural**

Elective Course II  
**MA ECONOMICS (CBCSS)**  
**III SEMESTER**

**ECO3 E02 - INDUSTRIAL ECONOMICS**

**(Credit 4)**

**Module I: A Prelude to Industrial Economics**

Market structure-conduct-performance paradigm-Alternative schools of thought- Market concentration and monopoly power-Causes and measurement-Market concentration and performance-Extent of market concentration in India-Recent trends-Vertical integration, diversification and merger (motives and measurement).

**Module II: Location Analysis**

Factors determining location-Approaches to industrial location analysis-Theoretical (geographical and economic theories) and operational approaches-Industrial location pattern in India.

**Module III: Industrial Finance**

Sources (internal and external)-Financial Statements- Analysis of financial ratios and their interrelatedness- Standards for comparison of financial ratios-Problems of financial analysis.

**Module IV: Technological Change and Industrial Efficiency**

Measurement-Trend and impact of technological change in Indian industries- Problems related to R & D and innovation- Trends in total factor productivity- Determinants of productive and economic efficiency- Measurement of the efficiency level.

**Module V: Industrial Development Government Regulation of Industries**

Pattern of industrialization since independence-Changing structure of industries- Debates on industrial stagnation-Issues in industrial development in the context of globalization- Evolution of industrial policy- Performance of licensing policy-Rationale of delicensing- Regulation of monopolies.

**References**

1. Roger Clarke: Industrial Economics- Basil Blackwell, New York, 1985.
2. Hay D A and Morns D J: Industrial Economics: Theory and Evidence- Oxford,1979.
3. Barthwal R R: Industrial Economics- New Age International Pvt. Ltd., New Delhi,1995.
4. Smith D M: Industrial Location: An Economic and Geographic Analysis- John Wiley, New York,1971.
5. Lave L B: Technological Change: Its Conception and Measurement- Wiley,1966.
6. CDS: Balakrishnan P and Pushpangadan K: Total Factor Productivity Growth in Indian Manufacturing: A Fresh Look- Working Paper No. 259, Thiruvananthapuram,1994.
7. Ahluwalia I J: Industrial Growth in India- Oxford University Press,1985.
8. Prasanna Chandra: Financial Management-Theory and Practice- Tata McGraw Hill, New Delhi,1995.
9. Harvey Leibenstein: Allocative Efficiency vs. X-Efficiency- American Economic Review, 1966, pp.392-415
10. Uma Kapila: Indian Economy Since Independence- Academic Foundation, NewDelhi,
11. Buleshkar A V, Mithani D M (Ed.): Structural Changes and Issues of Indian Economy- Himala Publishing House, New Delhi,1990.
12. Sach S J and Varshney A (Eds.): India in the Era of Economic Reforms: A Political Economy- Oxford University Press,2000.
13. Ahluwalia I J and Little I M D (Eds.): India's Economic Reforms and Development- Oxford University Press,2000.

Elective Course III  
**ECO3 E03 - LABOUR ECONOMICS**

	Course Outcome	POs/ PSOs	CL	KC	Class Sessions (appr.)	Lab (Hrs)
CO1	Understand the broad structure of labour market	PO1/PSO 1	U	C	8	0
CO2	Analysis of demand and supply forces of Labour	PO1/PSO 1&PSO3	Z	P	8	0
CO3	Find out Relationship between employment and development	PO1/PSO 1&PSO3	U	P	10	0
CO4	Analyses major theories of wage determination	PO1/PSO 1&PSO3	Z	C	10	0
CO5	Evaluate wage policy in India	PO1/PSO 3	E	P	13	0
CO6	Evaluate Employment policy in India	PO1/PSO 1&PSO4	E	P	12	0
CO7	Analyse Trade unionism in India	PO1/PSO 1	A	P	15	0
CO8	Create new labour policy	PO1/PSO 1&PSO4	C	P	14	0

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**\*F-factual, C-conceptual, P-practical/procedural**

Elective Course III  
**MA ECONOMICS (CBCSS)**  
**III SEMESTER**

**ECO3 E03 - LABOUR ECONOMICS**

**(Credit 4)**

**Module I: Labour Market**

Nature and characteristics of labour markets in developing countries like India- Paradigms of labour market-Classical, neo-classical and dualistic- Analysis of demand and supply forces- Demand for labour relating to size and pattern of investment, choice of technology and government labour policies and their orientation- Supply of labour in relation to growth of labour force- Labour market process.

**Module II: Employment**

Employment and development relationship-Importance of employment in the context of poverty in the developing countries- Concept and measurement of unemployment- Causes-Issues relating to employment, rationalization, technological, change and modernization-Rural unemployment and educated unemployment-Employment policy under the five year plans- Evaluation of employment policy in India.

**Module III: Wage Determination: Theory and Practice**

Classical, neo-classical and bargaining theories of wage determination- Concepts of wages-Fair living- Minimum wages- Problems of implementation of minimum wages –Wage determination by sectors- Urban and rural organized and unorganized sectors- Wage and nonwage components of labour remuneration-Wage and productivity and wage and inflation relationship-Productivity and profit sharing schemes- Wage differentials in terms of firm, industry, occupation, region, sex and skills-Wage standardization - Wage policy in India.

**Module IV: Industrial Relations and Trade Unions**

Growth of industrialization and emergence of unionism- Theories of labour movement-Growth, structure and pattern of trade unions in India- Achievements and failures of trade union movements- Determinants of industrial disputes- Steps to achieve peace- Methods of present and settle industrial disputes-Collective bargaining, conciliation, arbitration adjudication- Grievance settlement- Labour participation in management.

**Module V: State and Labour**

Increasing role of state in the determination of labour matters- Labour policy of the government in the past-Social security and labour welfare measures adopted by governments-Important labour legislation in India and their implications- Impact of ILO- Government policy towards labour and trade unions- Agricultural labour-Child labour- Labour in the unorganized sector-VRS policy.

**References**

1. Hunter and Mulvey: Economics of Labour- Macmillan,1983.
2. A Freeman: Labour Economics- 1982.
3. R A Lester: Economics of Labour- Macmillan,1964.
4. C R Mc Connell and S L Brue: Contemporary Labour Economics- McGraw Hill,1986.
5. B Mc Cormic and Smith (Ed): The Labour Market- Penguin,1968.
6. L Reynolds: The Structure of Labour Markets- Harper,1951.

7. E B Jakubauskas and N A Palomba: Manpower Economics-1973.
8. A Rees: Economics of Work and Pay-1978.
9. N Das: Unemployment, Full Employment and India- Asia,1960.
10. L K Deshpande, P R Brahmanand and E A G Robinson (Ed.): Employment Policy in Developing Economy- Macmillan,1983.
11. R Jolley et al. (Eds): Third World Employment: Problems and Strategy- Penguin,1973.
12. S Kannappan: Employment Problems and Urban Labour Markets in Developing Nations- University of Michigan,1983.
13. A K Sen: Employment, Technology and Development- Oxford University Press,1975.
14. L K Deshpande and J C Jandesara (Ed): Wage Policy and Wage Determination in India- Bombay University,1970.
15. J T Dunlop (Ed): Theory of Wage Determination- Macmillan,1957.
16. J R Hicks: The Theory of Wages- Oxford,1932.
17. Subrahmaniam: Wages in India- Tata McGraw Hill,1977.
18. T S Papola: Principles of Wages Determination- 1975.
19. B K Madan- The Real Wages of Industrial Labour in India- Management Development Institute, New Delhi,1977.
20. Sandesara and Deshpande: Wage Policy and Wage Determination in India
21. S Palekar: Wage Policy and Economic Development- Asia,1978.
22. C A Myers: Industrial Relations in India- Asia,1958.
23. S D Punekar: Labour Welfare, Trade Unionism and Industrial Relations- Himalaya,1978.
24. E A Ramaswamy and U Ramaswamy: Industrial and Labour- Oxford University Press, 1981.
25. A Rees: Economics of Trade Unionism- Nisbet,1962.
26. H A Turner: Wage Trends, Wage Policies and Collective Bargaining- Cambridge,1965.
27. C B Mamoria: Labour Problems and Social Welfare in India- Kitab Mahal,1966.
28. E A Ramaswamy and U Ramaswamy: Industrial Relations in India- Macmillan,1978.
29. V B Singh (Ed): Industrial Labour in India- Popular Prakasham,1970.
30. K N Vaid: Labour Welfare in India- Centre for Industrial Relations, Delhi,1970.
31. E Boserup: Women's Role in Economic Development-1971.
32. Ray Marshall and Richards (Ed): An Anthology of Labour Economics: Readings and Commentaries- Wiley,1972.

Elective Course IV  
**ECO3 E04 - REGIONAL ECONOMICS**

	Course Outcome	POs/ PSOs	CL	KC	Class Sessions (appr.)	Lab (Hrs)
CO1	Understand the Region	PO1/PSO 1	U	C	8	0
CO2	Analysis of locational interdependence of firms	PO1/PSO 1&PSO3	Z	P	8	0
CO3	Understand spatial macroeconomic theory	PO1/PSO 1&PSO3	U	P	10	0
CO4	Analyses major theories of regional planning	PO1/PSO 1&PSO3	Z	C	10	0
CO5	Evaluate interregional disparity in India	PO1/PSO 3	E	P	13	0
CO6	Evaluate policies to reduce regional imbalance in India	PO1/PSO 1&PSO4	E	P	12	0
CO7	Analyse Kerala model of development	PO1/PSO 1	Z	P	15	0
CO8	Create a model of development	PO1/PSO 1&PSO4	C	P	14	0

**R-remember, U-understand, A-apply, Z-analyze, E-evaluate, C-create**

**\*F-factual, C-conceptual, P-practical/procedural**

Elective Course IV  
**MAECONOMICS (CBCSS)**

**III SEMESTER**

**ECO3 E04 - REGIONAL ECONOMICS**

**(Credit 4)**

**Module I: Regional and Spatial Microeconomic Theory**

Concept of region- Time and space as variables in economic analysis of a region –Spatial microeconomic theory- Theory of location- Price equilibrium in geographically separated and interlinked markets- Spatial monopolistic competitions-Spatial price discrimination- Alternative objectives of the firm with regard to locational choice- Locational interdependence- Hotelling's formulation and its critique- Economies and diseconomies of agglomeration- Transport cost on location- Views of Weber, Sargent Florence, E M Hoover, Colin Clark.

**Module II: Spatial Macroeconomic Theory**

Spatial macroeconomics- Regional social accounting theory- Short run regional income determination -Interregional income-Multiple income determination in a multi regional economic system-Marginal growth theories-Difference in regional income trends in per capita income-Survey of recent techniques for regional analysis-Views of Christaller, Losch, Perroux, Isard -Dynamic theory of regions.

**Module III: Regional Economic Policy**

Regional income accounts-Regional planning and development- Views of Perloff, Dunn, Lampard and Muth-Regional growth of income-Long term tendencies-Spread effects and backwash effects-Regional economic policy-Formulation of interregional objectives-Channalisation approach towards backward regions-Level of inter regional disparities- Role of finance commission in regional financial allocation.

**Module IV: Regional Imbalances and Policies**

Regional characteristics in India and imbalances- Regional development programs to reduce imbalances in India-Policies to reduce regional imbalances in India -Dandekar Committee on regional imbalances.

**Module V: Kerala Economy: Past, Present and Future**

Overview of social, political and economic situation in Travancore, Cochin and Malabar before the formation of Kerala-Migration to Malabar- Emergence of indigenous capitalist class-Commercialization of agriculture-The rise of plantation sector- Economic development policies of the state of Travancore-Structural characteristics of Kerala economy and changes in them since 1956-Strength and weakness.

**Agriculture:** Land reforms- Co-operative movement-Institutional and informal credit system-Food crops/cash crops sector- Area, production, productivity and price trends- Cost structure-Rural employment/ unemployment and wages- Food security.

**Industry:** Structural characteristics-Strength and weaknesses-Formal/informal sectors-Growth of unorganized sector-Modernization of traditional industries- the case of coir-Industrial productivity and wage rates-Industrial relations-Trade union movement-

Infrastructure-Power energy-Transport and communications-Banking-Education, Healthcare-Development issues.

**External Sector:** Exports, imports and balance of trade-Gulf migration and remittances-Implications of Government of India's policies on Kerala economy-Kerala Model of Development-Strength and weaknesses-Major issues in Kerala's development-Problems and prospects.

#### References

1. H W Richardson: Regional Economics-1969.
2. H W Richardson: Regional Economics -A Reader- 1969.
3. H W Richardson: Elements on Regional Economics-1969.
4. T Wilson (Ed.): Papers on Regional Development-1965.
5. L Needlemana (Ed.): Regional Analysis-1968.
6. H S Perloff, E S Lampard and R F Muth: Region's Resources and Economic Growth.
7. J R Myer: Regional Economics: A Survey in Economic Theory- Vol. II,1968.
8. L S Bhat: Regional Planning in India- Statistical Publishing Society,1972

## **LIST OF ELECTIVE COURSES**

### SEMESTER IV

<b>Elective Course</b>	<b>Title of Course</b>	<b>Hours/Week</b>	<b>Credit</b>
V	Advanced Econometrics	6	4
VI	Business Economics	6	4
VII	Demography	6	4
VIII	Environmental Economics	6	4
IX	Political Economy of Development	6	4
X	Agricultural Economics	6	4
XI	Gender Economics	6	4
XII	Health Economics	6	4
XIII	Mathematical Economics	6	4
XIV	Research Methodology & Computer Applications	6	4

**Course Code: SJECO4 E06**

**Name of the Course: AGRICULTURAL ECONOMICS**

	Course Outcome	POs/ PSOs	CL	KC	Class Sessions (appr.)	Lab (Hrs)
CO1	Understand basic economic principles used in agricultural production	PO1/PSO 1,PSO2	U	C	6	0
CO2	Identify farmersbehaviour in supply decisions.	PO1,PO3 /PSO4	Z	C	8	0
CO3	Understand theoretical explanation of agricultural development	PO1/PO2	U	C	20	0
CO4	Identify issues related to the agricultural sector	PO1,PO2 /PSO3,P SO4	Z	C	18	0
CO5	Identify farmer support schemes in India	PO1,PO2 ,PO5/PS O4	Z	C	10	0
CO6	Analyse production trends in Indian agriculture	PO5/ PSO4	A	C	12	0
CO7	Evaluate present PDS working	PO2,PO5 /PSO4	E	F	8	0
CO8	Evaluate food inflation	PO1,PO5 /PSO4	E	F	8	0

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Elective Course X  
**SJECO4 E06- AGRICULTURAL ECONOMICS**

**(Credit4)**

**Module I: Agriculture in Economic Development**

Nature and scope of agricultural economics- Agriculture and economic development, Models of agricultural development (Schultz, Lewis, Fei & Ranis, Jorgenson, Todaro, Mellor, and Boserup) - Interdependence between agriculture and industry- Terms of trade between agriculture and industry.

**Module II: Economic Decisions in Agriculture**

Production- Factor-product relationship - Production functions- Cobb Douglas, CES & Spillman- Factor-factor relationship- Product-product relationship- Resource-use efficiency- Farm-size productivity debate- Capital formation in agriculture- Public versus private investment- Complementarity versus substitutability debate- Classification of costs- Farm planning and farm budgeting- Systems of farm organization.

**Module III: Behaviour of Demand, Supply and Agricultural Prices**

Price determination of agricultural commodities- Elasticity of demand and supply of agricultural commodities- Cob-web theorem- Nerlovian supply response model- Prices instability- Role of public intervention in price determination and distribution of agricultural commodities- Agricultural price policy in India- Instruments of price policy- Crop insurance- CACP- Output subsidy- PDS- Food inflation.

**Module IV: Agricultural Marketing**

Agribusiness- Market structure of agricultural commodities- Marketed and marketable surplus- Distress sales- Defects of markets- Regulated markets- Co-operative markets- Market intelligence- Future trading.

**Module V: Structural and Institutional Changes in Indian Agriculture**

Area, production & productivity trends- Changing cropping pattern- Factors affecting cropping pattern- Agricultural development under five year plans- Green revolution- Agricultural inputs- HYV seeds- Farm mechanization- Fertilizer use efficiency- Crop irrigation technology- Input subsidies- Second green revolution- Ever green revolution- ICAR- Land reforms- Institutional and non-institutional sources of agricultural credit- NABARD- Co-operative credit, Rural indebtedness- Agricultural labour and wages- National Agricultural Policy 2000- National Commission on Farmers- WTO and Indian agriculture- DOHA Agreement.

**REFERENCES**

1. Drummond and Goodwin: Agricultural Economics- Pearson, New Delhi, Ed.2,2004.
2. Christopher Ritson: Agricultural Economics- Gosby Lockwood Staples, London,1977.
3. Mellor J.W: The Economics of Agriculture Development- Vora & Co Bombay.
4. Bishop C.E. & Toussiant W.D: Introduction to Agricultural Economic Analysis- John Wiley & Sons, New York,1958.
5. Heady E.O: Economics of Agricultural Production and Resource Use- Prentice Hall, N Y, 1961.
6. Hanumantha Rao C.H: Agricultural Production Function, Costs and Returns in India- Tata McGraw Hill 1965.

7. Joshi P.C: Land Reforms in India: Trends and Prospects- Allied Publishers, New Delhi, 1975.
8. Majumdar N A and Kapila Uma: Indian Agriculture in the New Millennium- Changing Perspective and Development Policy- Vol. I & II, Academic Foundation, New Delhi,2006.
9. Mohammed, Munir, Rehman (Ed): Fifty Years of Indian Agriculture- Concept, New Delhi, 2007.
10. Vyas V Y: India's Agriculture Structure, Economic Policies and Sustainable Development- Academic Foundation, New Delhi,2003.
11. C A Robertson: Introduction to Agricultural Production Economics and Farm Management.
12. Kapila Uma: Indian Economy- Academic Foundation, New Delhi,2005.
13. Karl Eicher&Lawrence Witt: Agriculture in Economic Development- Vora& Co., Bombay,1970.
14. Soni R N: Leading Issues in Agricultural Economics- ShobanLalNagin Chand, Jalandar, 1998.
15. Singh & Sadhu: Agricultural Problems in India- Himalaya, Bombay,1986.
16. S. Ghatak. & K. Ingersent: Agriculture and Economic Development- New Delhi. Select Book ServiceSyndicate.
17. Shultz T.W: Transforming Traditional Agriculture- New Haven, London Yale University Press1965.
18. Vaidyanathan A (2010): Agricultural Growth in India: The Role of Technology, Incentives and Institutions- Oxford University Press, NewDelhi.
19. C. H. HanumanthaRao (2005): Agriculture, Food Security, Poverty and Environment: Essays on Post-reform India- Oxford University Press, NewDelhi.
20. Subba Reddy, P. Raghu Ram, T. V. NeelakantaSastry and I. Bhavani Devi (2004): Agricultural Economics- Oxford & IBH Publishing Co. Pvt. Ltd., NewDelhi.
21. Bhalla G.S (2007): Indian Agriculture Since Independence- National Book Trust, New Delhi.

## MODEL QUESTION PAPER

### M. A DEGREE FOURTH SEMESTER EXAMINATION PROGRAMME – M.A ECONOMICS AGRICULTURAL ECONOMICS

Time: 3 Hours

Max. Weightage: 30

#### Part A

*Answer all questions*

*Each questions carries 1/5weightage*

#### Objective type questions

1. Spill man production function is commonly used for the analysis of :  
a)Technological development b) Industrial production c) agricultural production d) all the above
2. “Agricultural economics is the study of relationship arising out of wealth getting and wealth using activity of man in agriculture”. Who says this? :  
a)Ashby b) Gray c) Hibbard d) None of these.
3. Industry depends on agriculture for :  
a)Labour b) Capital c) Raw material d) Land
4. The objective of Factor-Factor relationship analysis is :  
a)Minimise factor use. b)Minimise cost of production. c) MaximiseFactor use  
d)Maximise output.
5. The second green revolution isstarted in India in the year

- a)1967 – 68   b) 2000- 01   c) 1990 – 91   d) 1983- 84
6. Agricultural price policy is related to  
a)Support price   b) Procurement Price   c) Fair Price   d)All of these.
  7. Mutton - Wool relation is the example of :  
a)Competitive enterprise   b) joint enterprise   c) supplementary enterprise   d) None of these.
  8. The current share of agriculture and allied activities in India's GDP at 2011-12 prices is ;  
a)17.8%   b) 20%   c) 7%   d) 10%
  9. Supporter of inverse relationship between farm size and productivity is  
a)Ashok Rudra   b) Bhardwaj   c) Singh   d) Rao
  10. Stages of agricultural development explained by  
a)Nelson   b) Boserup   c) Mellor   d) Lewis
  11. Comprehensive crop insurance scheme was introduced in the year :  
a)1985   b) 2000   c) 1990   d) 1995
  12. PradhanMantriFasalBhimaYojana launched in  
a) January 13<sup>th</sup> 2014   b) January 13<sup>th</sup> 2015   c) January 13<sup>th</sup> 2016   d) January 13<sup>th</sup> 2017
  13. Partial adjustment model is associated with  
a)Koyck   b) Nerlove   c) Cobweb   d) none of these
  14. Black revolution is associated with  
a) Oil seed   b) Fish products   c) Petroleum   d) None of these
  15. Which among the following is a measure to deal with farm level uncertainty.  
a)Diversification   b) Flexibility   c) Contract farming   d) All the above

(15 x1/5=3 W)

### **Part B (Very short answer questions)**

**(Answer any five)**

**Each question carries a weightage of 1**

16. Define agricultural economics.
17. What is meant by farm budgeting?
18. Explain resource use efficiency in agriculture..
19. Define food security.
20. Define crop insurance.
21. What are futurestrading?
22. Define distress sale.
23. What is administered price?

(5x1 = 5W)

### **Part C (Short Answer questions)**

**( Answer any Seven )**

**Each carry 2 weightage**

24. Explain the inter dependence between agriculture and industry.
25. Explain factor – factor relationship in agriculture.
26. Explain various cost concepts used in agricultural economics.
27. What are the factors influencing marketed and marketable surplus?
28. Explain the significance of co-operative marketing in India.
29. Examine the significance of regulated markets

30. How far market intelligence helpful for farmers?
31. What are the factors influencing agricultural supply?
32. Distinguish between support price and Procurement price.
33. What is buffer stock operation?

(7x2= 14 W)

**Part D**

**Essay (Answer any two)**

**Each carry 4 weightage**

34. Compare and contrast Schultzian and Mellor's theory agricultural development
35. Elucidates the methods of Agricultural price determination in India.
36. What is agricultural marketing ? Describe its problems and suggestions for its improvement.
37. Critically examine the role of WTO in Indian Agriculture.

(2x4=8 W)

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**Course Code: SJECO4 E10**

**Name of the Course: RESEARCH METHODOLOGY AND COMPUTER APPLICATIONS**

	Course Outcome	POs/ PSOs	CL	KC	Class Sessions (appr.)	Lab (Hrs)
CO1	Understand the fundamental concepts in research	PO5/ PSO1	U	C	10	
CO2	Differentiate scientific and social science research	PO5/ PSO1&P SO2	A	F	10	
CO3	Construct the steps in the formulation of research problems	PO5/ PSO3	C	F	15	
CO4	Formulate sources of data and data collection techniques	PO5/ PSO1	C	F	15	
CO5	Sort out various research design methods	PO5/ PSO1	U	C	15	
CO6	Describe sampling methods	PO5/ PSO1	R		10	
CO7	Evaluate how computer applications is changing the research analysis	PO5/ PSO4	E	F	10	
CO8	Categorize the procedures of report writing	PO5/ PSO1	Z	C	10	

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Elective

## **SJECO4 E10 - RESEARCH METHODOLOGY AND COMPUTER APPLICATIONS**

**(Credit 4)**

### **Module I: Fundamentals of Research Methodology**

Meaning of research- The relation between theory and research- Types of research- Scientific and social research- Pure and applied research- Special features of social research- Different approaches in social research.

### **Module II: Formulation of Research Problem**

Formulation of null and alternative hypothesis- Research design and methods- Exploratory, diagnostic and experimental studies- Deductive and inductive method- Static and dynamic method- Historical and dialectical method- Case study method-Interdisciplinary research.

### **Module III: Data Collection**

Sources of data- Primary and secondary- Time series and cross section data- Sample survey- Methods - Interview methods-Questionnaire methods- Construction of questionnaire.

### **Module IV: Sampling Methods**

Random, stratified, multistage, systematic, cluster, quota and judgment samples- Data analysis techniques- Drawing inferences from analysis- Scaling-Problems and Techniques- Report writingprocedures.

### **Module V: Computer Applications**

Estimation of mean, median and mode-Standard deviation and coefficient of variation- Presentation of graphs- Line, sub divided, multiple, pie graphs- Estimation of growth rates- Estimation of trend equations- Estimation of regression equations- Introduction to EXCEL, SPSS.

### **REFERENCES**

1. William J Goode and Paul K Hatt (1981): Methods in Social Research- McGraw-Hill.
2. Pauline V Young: Scientific Social Surveys and Research- Prentice Hall India PvtLtd.
3. C R Kothari (2004) Research Methodology: Methods and Techniques- NewAge.
4. W Lawrence Neuman (2006): Social Research Methods: Quantitative and Qualitative Approaches-Pearson.
5. Wilkinson and Bhandarkar (2002) Methodology and Techniques of Social Research- Himalaya PublishingHouse.
6. Marc Blaug: The Methodology of Economics, or How Economics Explain-CUP.
7. Wilkinson and Bhadarkar: ResearchMethodology.
8. Modern Language (2009) The MLA Handbook for Writers of Association of America, ResearchPapers.
9. Sarma KVS (2001): Statistics Made Simple: Do it Yourself on PC- PrenticeHall.
10. William M. K. Traochim, Research Methods, 2nd Edn.,Biztantra, 2003.
11. Ellen.R.Griden, Evaluating Research Articles, SAGE,2001.
12. Bridget Somekth& Cathy Liwin (Ed) Research Methods in Social Sciences, Vistar,2005.
13. John Adams, Research Methods for Graduate Business & Social Science Students, Response,2007.

MODEL QUESTION PAPER  
M. A DEGREE FOURTH SEMESTER EXAMINATION  
RESEARCH METHODOLOGY AND COMPUTER APPLICATIONS

**Time:3hour**

**Maximum weightage:30**

**Part A**

(Answer **all** questions)

Objective type questions

1. The process of examining the collected raw data to detect errors is called a) coding b) editing c) classifying d) none of the above
2. The analysis is to make a prediction about the dependent variable based on its covariance with all the concerned independent variables a) ANOVA b) canonical analysis c) multiple discriminant analysis d) multiple regression analysis
3. The study of how one or more variables affect changes in other variables a) causal b) correlation c) both a&b d) none of these
4. The Most important objectives of research are:  
a) to discover the truth or facts b) find out new techniques c) find out generalisations d) to resolve the contradictions
5. Historical research related to:  
a) studies of past to find cost effect pattern b) location of the source of data c) feasibility of the study pattern d) none of these
6. Which is a modification of cluster sampling  
a) multi stage sampling b) stratified sampling c) random sampling d) area sampling
7. The excel command for estimating standard deviation from a sample ignoring logical values and text in the sample is:  
a) STDEV b) STDEVA c) STDEVP d) STDEVPA
8. Which of the following does form non-probability samples?  
a) Accidental samples b) systematic sampling c) quota samples d) stratified samples
9. Snow ball sampling is a  
a) purposive sampling b) convenient sampling c) quota sampling d) none of these
10. A tentative assumptions made by the researcher to speculate the outcome of research is called :  
a) Research process b) Research problem c) Research design d) Research hypothesis.
11. Research similar to descriptive research is  
a) Ex post facto research b) Ex ante research c) One time research d) Diagnostic research
12. Exploratory studies is also known as  
a) Formulative research studies b) Action research studies c) Analytical research studies d) Longitudinal research studies
13. Which variable can be measured or controlled by the researcher ?  
a) Dependent variable b) Independent variable c) extraneous variable d) none of these
14. Survey related to data collection over a period of time:  
a) longitudinal survey b) cross-sectional survey c) literature survey d) none of these
15. Questionnaire contains both close and open type questions are called as:  
a) fact questionnaire b) opinion questionnaire c) mixed questionnaire d) simple questionnaire

(15x1/5=3 w)

**Part B (Very short answer questions)**

(Answer **any five**)

**Each question carries a weightage of 1**

16. Non-sampling error

17. Null Hypothesis
18. Inductive method
19. Questionnaire
20. Coding
21. Policy research
22. Social survey
23. Research design

(5x1=5w)

**Part C (Short Answer questions)**

**(Answer any Seven )**

**Each carry 2 weightage**

24. Case study method
25. Distinguish between time series and cross sectional data
26. Differentiate pure and applied research
27. Estimation of trend equations
28. What is stratified sampling? Explain.
29. What are the qualities of a good research?
30. Explain various methods of collecting primary data
31. Discuss the pros and cons of interview method
32. What are the sample survey methods?
33. Interdisciplinary research

(7x2 = 14 weightage)

**Part D (Essay questions)**

**(Answer any two)**

**Each carry 4 weightage**

34. What are the prominent data analysis techniques used in research? Explain how to draw inferences from the analysis.
35. What is research report? Explain the format of a research report.
36. Discuss in detail salient features of Excel. What are its uses in empirical research?
37. Define different methods of data collection. Explain the merits of interview method

(2x4=8w)

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## Elective Course V

### ECO4 E01 - ADVANCED ECONOMETRICS

	Course Outcome	POs/ PSOs	CL	KC	Class Session s (appr.)	Lab (Hrs)
CO1	Understand Qualitative Response Regression Models	PO1/PSO 3	U	C	12	0
CO2	Find out Dynamic Econometric Models and Panel Data Regression Models	PO1/PSO 3	E	P	8	0
CO3	Apply Simultaneous Equation Methods	PO1/PSO 3	A	P	16	0
CO4	Estimate Instrumental Variables Regression and Time Series Econometrics	PO1/PSO 3	E	P	10	0
CO5	Analyse Stochastic processes, stationary versus nonstationary stochastic processes-Unit roots	PO1/PSO 3	Z	U	20	0
CO6	Estimate Modelling Stochastic Processes	PO1/PSO 3	E	P	8	0
CO7	Evaluate the Testing for unit roots	PO1/PSO 3	E	P	8	0
CO8	Create Modelling Stochastic Processes	PO1,PO5/ PSO3, PSO4	C	P	8	0

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**Elective Course V**  
**MA ECONOMICS (CBCSS)**  
**IV SEMESTER**  
**ECO4 E01 - ADVANCED ECONOMETRICS**  
**(Credit 4)**

**Module I: Qualitative Response Regression Models**

The linear probability model (LPM)- The logit model- The probit model- The tobit model.

**Module II: Dynamic Econometric Models and Panel Data Regression Models**

Autoregressive and distributed-lag models-Role of lag in economics-The Koyck approach-The adaptive expectations model- Stock adjustment model-Estimation of autoregressive models- The method of instrumental variable (IV)- Durbin h test- Almon approach to distributed lag models.Panel Data Regression ModelsFixed effects regression model-The random effects model.

**Module III: Simultaneous Equation Methods**

Simultaneous equation bias-The identification problem-Rules of identification- Rank and order condition- Simultaneous equation methods-Limited information versus full information methods-Recursive models and ordinary least squares-The method of indirect least squares (ILS)-The method of two stage least squares (2SLS)-Instrumental variable estimation-Properties of various estimators.

**Module IV: Instrumental Variables Regression and Time Series Econometrics**

Instrumental variables estimator with a single regressor and a single instrument- The general IV model-Checking instrument validity, instrument relevance and instrument exogeneity.

**Time Series Econometrics**

Stochastic processes, stationary versus nonstationary stochastic processes-Unit roots- Trend stationary versus difference stationary stochastic processes- Spurious regression-Testing for unit roots- Dickey Fuller and Augmented Dickey Fuller tests-Cointegration and error correction models

**Module V: Modelling Stochastic Processes**

The Box Jenkins methodology -AR, MA, ARMA and ARIMA models-Estimation and forecasting- Vector autoregression (VAR)-Measuring volatility- The ARCH and GARCH models.

**References**

- 1: Damodar N Gujarati and Dawn C Porter (2009): Basic Econometrics- Fifth Edition, McGraw Hill International Edition.
- 2: James H Stock and Mark W Watson (2008): Introduction to Econometrics- Pearson, AddisonWesley.
- 3: Christopher Dougherty (2007): Introduction to Econometrics, Third Edition, Oxford UniversityPress.
- 4: Robert S Pindyck and Daniel L Rubinfeld (1998): Econometric Models and Economic Forecasts- Fourth Edition, McGraw Hill International Edition.

- 5: Jeffrey M Wooldridge (2006) -Introductory Econometrics: A Modern Approach- Third Edition, Thomson South Western
- 6: Chandan Mukherjee, Howard White and Marc Wuyts (1998): Econometric and Data Analysis for Developing Countries- First Edition, Routledge
- 7: Gary Koop (2005): Analysis of Economic Data- Second Edition, John Wiley and Sons.
- 8: Kerry Patterson (2000): An Introduction to Applied Econometrics: A Time Series Approach- First Edition, Palgrave.
- 9: Jack Johnston and John Dinardo (1998): Econometric Methods- Fourth Edition, The McGraw Hill Companies.
- 10: William H Greene (2003): Econometric Analysis- Fifth Edition, Pearson Education.
- 11: Walter Enders (2004): Applied Econometric Time Series- Second Edition, Wiley India Edition.
- 12: Richard Harris and Robert Sollis (2006): Applied Time Series Modelling and Forecasting- First Ed

Elective Course VI  
**ECO4 E02 - BUSINESS ECONOMICS(Credit 4)**

	Course Outcome	POs/ PSO's	CL	KC	Class Sessions (appr.)	Lab (Hrs)
<i>CO1</i>	understand the basic principles Business economics	PO 1/PSO1	U	C	8	0
<i>CO2</i>	identify the basic problems of an economy and growth strategies	PO1/ PSO2	U	C	8	0
<i>CO3</i>	understand the types of External expansion- Vertical integration	PO1/PSO 1	U	C	12	0
<i>CO4</i>	Describe the concept Demand Forecasting	PO1/PSO 4	A	C	8	0
<i>CO5</i>	measure the Financial Statements and Profit Planning	PO2/PSO 2	A	P	9	0
<i>CO6</i>	Evaluate the Risk Analysis and Capital Budgeting	PO7&PO2 /PSO2	E	p	10	0
<i>CO7</i>	Distinguish between Rigid pricing- Flexible pricing	po1/ps01 &ps04	A	c	12	0
<i>CO8</i>	Compare Payback period- Benefit cost ratio	po1&po2/ ps01	A	C	11	0

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Elective Course VI  
**MA ECONOMICS (CBCSS)**  
**IV SEMESTER**

**ECO4 E02 - BUSINESS ECONOMICS**

**(Credit 4)**

**Module I: Growth of the Firm**

Growth strategy-Constraints on growth-Alternative growth strategies-Internal expansion-External expansion- Vertical integration- Diversification-Merger-Growth through strategic alliance- Multinational corporation-Types of multinationals-Problems facing the multinationals.

**Module II: Demand Forecasting**

Demand forecasting- Need for demand forecasting-Types of demand forecasting- Short term and long term forecasting -Quantitative and qualitative forecasts -Explanatory versus time series forecasting- Basic steps involved in a forecasting task -Criteria of a good forecasting method- Survey methods and statistical methods.

**Module III: Financial Statements and Profit Planning**

Time value of money-Present value and discounting- Sources of business finance- Financial statements (income statement-balance sheet-statement of retained earnings-statement of cash flows)-Financial ratios (liquidity, activity, debt, profitability and market ratios)- Breakeven analysis- Operating leverage.

**Module IV: Risk Analysis and Capital Budgeting**

Risk analysis-Types of risks- Risk return indifference curves-Risk management- Adjusting the valuation model for risk-Certainty equivalent adjustment- Risk adjusted discount rate- Decision trees -Computer simulation-Capital budgeting- Need for capital budgeting- Steps in capital budgeting- Capital budgeting and decision rules-Net present value- Internal rate of return- Payback period- Benefit cost ratio- Cost of capital- Capital rationing and profitability index.

**Module V: Pricing of Goods and Services**

Price discrimination- Pricing and the product life cycle-Pricing of multiple products-Products with interdependent demands-Joint products- Fully distributed versus incremental cost pricing- Ramsey pricing- Tying-Product bundling- Peak load pricing- Mark up pricing- Rigid pricing- Flexible pricing- Special designs pricing-Charm pricing- Seasonal pricing- Progressive pricing- Two-part tariff-Prestige pricing-Price lining-Price matching-Auction pricing-New product pricing (price skimming, penetration pricing, going rate pricing)- Transferpricing.

**References**

1. John Sloman and Mark Sutcliff: Economics for Business- Third Edition,Pearson.
2. Mark Hirschey: Managerial Economics- Cengage LearningIndia.

3. Lila J Truett and Dale B Truett: Managerial Economics- John Wiley & Sons.
4. Spyros Makridakis, Steven C. Wheelwright, and Rob J Hyndman: Forecasting Methods and Applications- Third Edition, John Wiley & Sons.
5. Dominick Salvatore: Managerial Economics- Fourth Edition, Thomson Asia Pvt.Ltd.
  
6. Lawrence J Gitman: Managerial Finance- Tenth Edition, Pearson Education.
7. H Craig Peterson W Cris Lewis: Managerial Economics- Fourth Edition, Prentice Hall
8. Paul G Keat and Philip K Y Young: Managerial Economics- Pearson Education.
9. R R Barthwal: Industrial Economics- New Age International (P)Ltd.
10. D N Dwivedi: Managerial Economics- Seventh Edition, Vikas Publishing House.

Elective Course VII  
ECO4 E03 - DEMOGRAPHY

	Course Outcome	POs/ PSOs	CL	KC	Class Sessions (appr.)	Lab (Hrs)
CO1	the meaning of Meaning and scope of demography	PSO1/PSO4	U	A	20	0
CO2	analyse the Measures of fertility and mortality	PS04	U	A	10	0
CO3	analyse the Determinants of sex and age structure	PSO2 /PSO4	U	A	10	0
CO4	understand Socio-economic factors of Fertility	PSO1	U	A	10	0
CO5	Analyze different phases of : Nuptiality and Mortality	PSO4	A	E	10	0
CO6	Identify Importance of migration in the study of population	PSO1/PSO4	U	E	10	0
CO7	understand the effectiveness Levels and trends-Factors affecting fertility in developed and LDCs	PSO1/PSO4	U	E	10	0
CO8	choose an appropriate policy for upliftment of Socio-economic aspects of migration	PSO2/PSO4	U	E	10	0

**\*R-remember, U-understand, A-apply, Z-analyze, E-evaluate, C-create**

**\*F-factual, C-conceptual, P-practical/procedure**

Elective Course VII  
**MA ECONOMICS (CBCSS)**  
**IV SEMESTER**

**ECO4 E03 - DEMOGRAPHY**

**(Credit 4)**

**Module I: Concepts and Measures of Population Changes**

Meaning and scope of demography- Components of population growth and their interdependence- Measures of population change- Growth, structure and distribution and sources of population data- Demographic data in India- Censuses, Civil Registration System and Sample Surveys- Sample registration- Methods and drawbacks- Measures of fertility and mortality- Standardized birth rates and death rates- Concepts of life table- Meaning of its column and uses- Population distribution- Population projections-Stable, stationary and quasi stable population.

**Module II: Sex and Age Structure**

Patterns of sex and age structure in developed and less developed countries- Determinants of sex and age structure- Demographic effects of sex and age structure- Ageing and younging of population.

**Module III: Fertility**

*Fertility:* Levels and trends-Factors affecting fertility in developed and LDCs- Differential fertility- Ecological factors- Regional differences- Urban-rural-Socio-economic factors- Educational attainment, economic status, occupation of husband, employment status of wife, religion, caste, race, etc.

**Module IV: Nuptiality and Mortality**

*Nuptiality:* Concepts-Analysis of marital status from census-Mean age at marriage- Synthetic and decadal synthetic cohort methods- Mean age at widowhood and divorce- Trends in age at marriage-Change in age pattern of marriage.

*Mortality:* Levels and trends of mortality in developed and LDCs-Sex and age patterns of mortality- Fetal and infant mortality-Still birth, abortion and prenatal mortality-Levels and trends of infant mortality-Factors affecting-Mortality differentials-Rural, urban, geographical, occupational, ethnic, etc.- Factors in mortality declines in developed and LDCs.

**Module V: Migration**

Basic concepts and definitions- Importance of migration in the study of population- Types of migration- Internal, international, temporary migration- Effects of immigration and emigration- Socio-economic aspects of migration- Theories concerning internal migration- Costs and benefits of internal migration and outmigration.

**References**

1. U.N: The Determinants and Consequents of Population Trends.
2. A.A. Bhende and T. Kanikar: Principles of Population Studies- Himalaya, 1982.
3. D.J. Bogue: Principles of Demography- Wiley, 1971.
4. B.D. Misra: An Introduction to the Study of Population- South Asian Publishers, 1980.
5. S. Nagarwal: India's Population Problem- Tata McGraw Hill, 1985.
6. Government of India: Census of India and Related Monographs and Reports.
7. U.N: Methods of Measuring Internal Migration- 1979.

Elective Course VIII  
**ECO4 E04 - ENVIRONMENTAL ECONOMICS**

	Course Outcome	POs/ PSOs	CL	KC	Class Sessions (appr.)	Lab (Hrs)
<i>CO1</i>	understand the basic principles of environmental economics	PO 1/PSO1	U	C	8	0
<i>CO2</i>	identify the basic environmental problems of an economy	PO1/ PSO2	U	C	8	0
<i>CO3</i>	understand the types of externalities-	PO1/PSO 1	U	C	12	0
<i>CO4</i>	Describe the concept Environmental Regulation	PO1/PSO 4	A	C	8	0
<i>CO5</i>	measure Benefits and Costs of Pollution Control	PO2/PSO 2	A	P	9	0
<i>CO6</i>	Evaluate the Indirect methods of measuring the benefits of environmental quality	PO7&PO2 /PSO2	E	p	10	0
<i>CO7</i>	Distinguish between Benefits and Costs of Environmental Programs	po1/pso1 &ps04	A	c	12	0
<i>CO8</i>	Compare Development and Sustainability	po1&po2/ ps01	A	C	11	0

**\*R-remember, U-understand, A-apply, Z-analyze, E-evaluate, C-create**

**\*F-factual, C-conceptual, P-practical/procedure**

Elective Course VIII MA  
ECONOMICS(CBCSS)  
IV SEMESTER

**ECO4 E04 - ENVIRONMENTAL ECONOMICS**

**(Credit 4)**

**Module I: Basic Concepts**

Basic concepts of environmental economics- Property rights in environment- Pollution rights- Habitats, resources, amenities- Collectively consumed goods and services- Spill over costs- Social efficiency- Economic efficiency- Sustainability- Bio-diversity-Ozone layer- Environmental quality- Environmental accounts- Externalities.

**Module II: Normative Theory of Environmental Regulation**

The theory of externalities-Measurement of externalities- The basic theory of environmental policy- The choice among policy instruments- Environmental policy under uncertainty- Market imperfections- Properties of the Pigouvian solution to the problem of externalities- Pigouvian levy as a tax equal to marginal damages at the optimal outcome.

**Module III: Design and Implementation of Environmental Policy**

Problems of measurement-Obstacles to determination of environmental policy- Second best approaches- Standards of targets for environmental quality- Design of regulatory system- Choice of policy instruments- Experience with economic incentives for environmental management- Legal liability as an economic instrument for environmental protection- Environmental federation- Enforcement policy on patterns of international trade- Command and control vs. economic incentives.

**Module IV: Benefits and Costs of Pollution Control and Environmental Programs**

Defining the value of change in environmental quality- Indirect methods of measuring the benefits of environmental quality- The advertising behaviour approach- Weak complementarity approach- Hedonic market methods- Contingent valuation method- Application of valuation techniques.

**Benefits and Costs of Environmental Programs**

Use of benefits- Cost analysis in environmental standards- Need for B-C analysis of environmental standards- Welfare loss from setting incorrect standards- Distribution of costs and benefits- Who pays for pollution abatement and who benefits from it- Environmental economics and environmental policy-Use of economic analysis and economic incentives in environmental management.

**Module V: Development and Sustainability**

Notion of development- Notion of sustainability-Variables of the ecological system- Rules that govern the interactions of these variables-Operational meaning of sustainability- Defining the target state- Measure of sustainability-Case of agricultural system- Soil technology- Crop production and environmental changes-Environmentally (Eco) friendly technology and development-Value of sustainable path- Use and constraints of natural resources accounting and auditing- Methodologies for pricing natural resources- an overview  
-Case studies of sustainable development (based on man and the biosphere series- Studies sponsored by the UNESCO).

References:

1. Joseph J Seneca and M K Taussig: Environmental Economics.
2. P Abelson: Cost Benefit Analysis and Environmental Problems.
3. P Nikamp: Theory and Application of Environmental Economics, Vol.I
4. P Nikamp: Environmental Economics, Vol.I
5. H Siebert: Economics of Environment: Theory and Policy.
6. D N Thompson: The Economics of Environmental Protection.
7. A M Freeman (etc) Economics of Environmental Policy.
8. C C Park: Environmental Policies: An International Review.
9. R Costanza: Ecological Economics.
10. Charles D Kolstad (2003): Environmental Economics-OUP.

Elective Course IX

**ECO4 E05 -POLITICAL ECONOMY OF DEVELOPMENT**

	Course Outcome	POs/ PSOs	CL	KC	Class Sessions (appr.)	Lab (Hrs)
<i>CO1</i>	understand Subject matter of political economy	PO 1/PSO1	U	C	8	0
<i>CO2</i>	identify the basic theories of classical economists	PO1/ PSO2	U	C	8	0
<i>CO3</i>	understand the types of class wars in International Political Economy	PO1/PSO 1	U	C	12	0
<i>CO4</i>	Describe the concept Marxist Political Economy	PO1/PSO 4	A	C	8	0
<i>CO5</i>	measure undertaken Decentralisation and local government-displacements,	PO2/PSO 2	A	P	9	0
<i>CO6</i>	Evaluate the European Integration	PO7&PO2 /PSO2	E	p	10	0
<i>CO7</i>	Distinguish between Latin American experience and European Integration	po1/ps01 &ps04	A	c	12	0
<i>CO8</i>	Compare International Political Economy and Political Economy of Development in India	po1&po2/ ps01	A	C	11	0

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Elective Course IX  
**MA ECONOMICS (CBCSS)**  
**IV SEMESTER**

**ECO4 E05 -POLITICAL ECONOMY OF DEVELOPMENT**

**(Credit 4)**

**Module I: Subject Matter of Political Economy**

Subject matter of political economy- State, market and institutions-Government, bureaucracy, corruption, mis-governance, rent seeking- Elite capture, Political clientelism- Competitive Populism.

**Module II Classical Political Economy**

Genesis of Classical Political Economy-Adam Smith and David Ricardo on theory of value, growth and distribution- Views on trade- Major questions raised by classical economists- Neoclassical critique of classical economics-Contributions of Joan Robinson and Sraffa.

**Module III Marxist Political Economy**

Mode of production- Dynamics of social change- Primitive communism, slavery, feudalism, capitalism, socialism and communism- Asiatic mode of production- Theory of value, surplus value and profit- Marxian Scheme of Simple and Expanded Reproduction.

**Module IV International Political Economy**

Neoclassical views on international integration- WTO regime- Free Trade and its relative gains, ECLA-school- Latin American experience, Prebisch Singer, Unequal exchange, Dependency theory- Monopoly capital, imperialism and its critique. Cross border investment. European Integration- Intermediate regime.

**Module V Political Economy of Development in India**

The Mode of Production debate in India- Political economy of fiscal federalism- Political economy of liberalisation in India- Decentralisation and local government-displacements, Environment related movements - selected cases.

**References**

1. Ha-Joon Chang 2006: Rethinking Development Economics- Anthem Press.
2. Edmund S. Phelps, Political Economy: An Introductory Text-New York: WW Norton, 1985.
3. Usher, Dan 2003: Political Economy, Blackwell Publishing
4. Weingast, Barry R., and Donald Wittman: The Reach of Political Economy- The Oxford handbook of political economy,(2006)..
5. Dasgupta, A. K (1987): Epochs of Economic Theory- Blackwell Publishers
6. Bharadwaj, Krishna (1986): Classical Political Economy- Universities Press
7. Dimitris Milonakis and Ben Fine: From Political Economy to Economics: Method, the social and the historical in the evolution of economic theory”, Routledge.
8. Hahnel, Robin 2002: ABC of Political Economy- Modern Primer, Pluto Press.
9. Jeffrey S. Banks and Eric Allen Hanushek: Modern Political Economy: Old Topics, New Directions (Cambridge UP, 1995)
10. Skarstein, Rune. 1997: Development Theory: A Guide to Some Unfashionable Perspectives, OUP
11. Thomas Ferguson and Joel Rogers, eds., The Political Economy: Readings in the Politics and Economics of American Public Policy- M.E. Sharpe, 1984.

12. James P. Caporaso and David P. Levine: Theories of Political Economy -New York: Cambridge University Press,1992.
13. Martin Staniland, What is Political Economy? A Study of Social Theory and Underdevelopment -Yale,1985.
14. Dobb, Maurice (1975), Theories of Value and Distribution Since Adam Smith: Ideology and Economic Theory, Cambridge University Press
15. Screpanti, Ernesto and Zamagni, Stefano (2006), An Outline of the History of Economic Thought, Second Edition, Oxford University Press, New Delhi (Chapter8.1)
16. Sweezy, P. M (1968), The Theory of Capitalist Development, Monthly Review Press, New York
17. Robinson, Joan (1972), Economic Heresies, Macmillan
18. Baran, Paul A. and Sweezy, Paul, M (1966), Monopoly Capital- Monthly Review Press
19. Patnaik, Prabhat et. al (2011), Marx's Capital: An Introductory Reader, Leftword Books, Delhi
20. Gianni Vaggi, Peter D. Groenewegen (2003), A Concise History of Economic Thought: From Mercantilism to Monetarism, Macmillan.
21. Corbridge, Stuart: The Political economy of Development in India Since Independence. (2009): 318-336. Paul R Brass 'Handbook of South Asian Politics, Routledge
22. Ernest Mandel (2008), Marxist Economic Theory (Vol 1 & 2), Aakar Books, Delhi.
23. Kozlov (1977): Political Economy of Capitalism, Progress publishers, Moscow.
24. Khudokormov G.N. (1985), Political Economy of Socialism, Union of Soviet Socialist Republics.
25. Chalm K.S. (1999), Readings in Political Economy, Orient Longman, Hyderabad.
26. Vaggi, Gianni: Historical Antecedents of Development Economics- International Handbook of Development Economics. Cheltenham: Edward Elgar (2008):97-110.
27. Bagchi, A. K. 2008: Historical Perspectives on Development, in, Amitava Krishna Dutt and Jamie Ros (eds), International Handbook of Development Economics, Vol. 1, Edward Elgar, Cheltenham, UK and USA, Chapter 2, pp16-31.
28. Junankar P N: Marx's Economics.

	Course Outcome	POs/ PSOs	CL	KC	Class Session s (appr.)	Lab (Hrs)
CO1	Understand Gender and Women's Studies as an academic field of study	PO1/PSO1	U	F	6	0
CO2	Recognize the intersections between gender and other social and cultural identities	PO1/PSO2	R	C	8	0
CO3	Analyze the ways in which societal institutions and power structures impact the material realities of women's lives.	PO1,PSO6/PSO3	Z	C	20	0
CO4	Demonstrate adequate skills in listening, speaking, and writing effectively, performing critical thinking and analysis	PO2/PSO4	A	C	18	0
CO5	Evaluate and interpret information from a variety of sources including print and electronic media, film, video, and other information technologies.	PO5/PSO2,PSO4	E	C	10	0
CO6	On the basis of a solid understanding of alternative, gendered economic theory, propose alternative policies that address gender-inequalities in different economic spheres.	PO1,PSO6/PSO4	Z	F	12	0
CO7	Identify the connections between feminist economic theory and feminist economic reality	PO6/PSO4	R	C	8	0
CO8	Engage in promoting social justice and human rights	PO6/PSO2,PSO4	C	C	8	0

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**MA ECONOMICS (CBCSS)  
IV SEMESTER**

**ECO4 E07 - GENDER ECONOMICS**

**(Credit 4)**

**Module I: Introduction to Gender Studies**

Concepts of gender and sex-Feminity and masculinity-importance of women studies- Patrilineal and matrilineal systems and its relevance to present Indian society- Demography of female population in India-Age structure, mortality rates-Inter-state variations in sex ratio- Causes of declining sex ratio- Measurement of fertility and its control-UNDP's gender related measures.

**Module II: Women and Labour Markets**

Factors affecting female entry in labour markets-supply and demand for female labour in developed and developing countries, particularly in India- Female work participation in agriculture, non-agriculture rural activities, informal sector, cottage and small industries, organized industry and service sector- Wage differentials and its determinants- Gender, Education, Skill, Productivity, Efficiency -Impact of technology and modernization on women's work participation- Effects of globalization and liberalization on women.

**Module III: Tools of Women Empowerment**

Women and education- GER ratio in India -Addressing gender inequalities in education- Gender equity in health-Access to nutrition-Women's participation in decision making -Role of civil society -Role of NGO's in empowering women- Gender and Community Economic Development(CED)-SEWA-Shramshakti-Kudumbashree in Kerala.

**Module IV: Social Security for Women**

Measures for gender well being- Entitlements, ensuring economic independence and risk coverage, access to credit and insurance market- Review of legislation for women's entitlements in India -Importance of 73rd Amendment of constitution in gender empowerment.

**Module V: Social Protection for Women**

Protection of property rights- schemes for safety net for women- Effectiveness of collective bargaining-Public and private programmes to improve women's health-National Commission for Women(NCW)- The National Credit Fund for Women-Mahila Samridhi Yojana (MSY)- National policy for empowering women- International measures to protect women's' rights- U.N Decade for women -UN convention on CEDAW and DEVAW.

**References**

1. Sen, Sujatha (2012): Gender Studies- Dorling Kindersley (India) Pvt.Ltd, NewDelhi.
2. Sen, Suvarna (2006): Gender and Development- ICFAI University Press,Hyderabad.
3. Dutta, Nandita and, Sumitra Jha (2014): Women and Rural Development- Pacific Books InternationalDelhi.
4. Dutta, Nandita and, Sumitra Jha (2014): Women and Agricultural Development- Pacific Book, NewDelhi.
5. Dutta, Nandita and Sumitra Jha (2014): Women Social Work and Social Welfare- Pacific

Books International, NewDelhi.

6. Jitendra Ahirrao (2013): Entrepreneurship and Rural Women in India- New Century Publications, NewDelhi.
7. A.Venkateswarlu, et al. (2013): Dimensions of Female Sex Ratio::Interstate Variations in India- Serials Publications, NewDelhi.
8. Desai, N and M.K Raj (1974): Women and Society in India- SNDT University,Mumbai.
9. Krishna Raj .M, Sudarshan.R.M, and Shariff.A (1999): Gender, Population and Development- Oxford University Press, NewDelhi.
10. Seth .M (2000): Women and Development: The Indian Experience- Sage Publications, NewDelhi.
11. Srinivasa.K, and A.Shroff (1998): India Towards Population and Development Goals- OUP, NewDelhi.
12. Wazir, R, (2000): The Gender gap in Basic Education: NGO's as Change Agents- Sage Publications,Delhi.
13. Sen, Amartya. (1990): More than 100 Million Women are Missing- New York Review of Books, vol.37, No.20,1990.
14. UNRISD, (2004): Gender Equality: Striving for Justice in an Unequal World- UNRISD, France,2004.
15. ILO (2002): Women and Men in the Informal Economy: A Statistical Picture- ILO.
- 16.Govt. of India (1974): Towards Equality-Report of the Committee on the Status of Women in India- Dept of Social Welfare, Ministry of Education and Social Welfare, New Delhi.
17. Govt.of India (2009): Gender Equality and Women Empowerment in India- National Family Health Survey 2005-06 (NFHS-3), IIPS,Mumbai.
18. John Mary .E (1996): Gender and Development in India- EPW, 31(47), PP3071-77).
19. Pal, Manoranjan et.al (Ed) (2011): Health, Nutritional Status and Role of Women in India- Oxford University Press, NewDelhi.
19. E Boserup (1970): Women's Role in Economic Development- George Allen and Unwin, London.

Elective Course XII  
**ECO4 E08 - HEALTH ECONOMICS**

	Course Outcome	POs/ PSOs	CL	KC	Class Sessions (appr.)	Lab (Hrs)
CO1	Understand economic principles to analyze the major issues of the health care sector.	PO1/PSO1, PSO2	U	C	6	0
CO2	Apply economic principles to analyze the major issues of the health care sector.	PO1,PO3/PSO4	Z	C	8	0
CO3	Understand both the perspective and limits of economic analysis applied to health care	PO1/PSO2	U	C	20	0
CO4	Gain some historical economic perspective on the evolution of major health policy issues	PO1,PO2/PSO3,PSO4	Z	C	18	0
CO5	Identify Government's role in health care policy and regulation	PO1,PO2,PSO5/PSO4	Z	C	10	0
CO6	Analyse Price discrimination and cost-shifting between public and private payers.	PO5/ PSO4	A	C	12	0
CO7	Evaluate Benefits and Costs of Health Services	PO2,PO5/PSO4	E	F	8	0
CO8	Evaluate present health-Nutritional status	PO1,PO5/PSO4	E	F	8	0

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Elective Course XII  
**MA ECONOMICS (CBCSS)**  
**IV SEMESTER**

**ECO4 E08 - HEALTH ECONOMICS**

**(Credit 4)**

**Module I: The National and International Health Scene**

Health output and input indicators and their correlation with the level of economic development and with the public expenditure on health-Sources of health statistics and a critical appraisal of their usefulness and limitations.

**Module II: Resource Allocation in the Health Sector**

Resource allocation problems in private and government hospitals- Resource allocation problems facing a private practitioner-The problem of multiple services of a hospital- Pricing of these services and the choice of the mix of services- The trade-offs between quantity and quality- Production function- Productivity-Efficiency and equity considerations applied to the hospital sector- Spatial distribution of health care facilities and services-The demand for health services and the role of the physician- The impact of pharmaceutical companies and health insurance on this demand.

**Module III: Evaluation of Benefits and Costs of Health Services**

Private benefits and private costs of providing health services- The failure of the market to provide essential health services- The provision of health services by the government-The application of benefit cost analysis to public health and family planning projects- The role of health in economic development- Value of output lost due to number of sick days- Benefits and costs (both private and social) of training professional manpower such as physicians, dentists, pharmacists and nurses.

**Module IV: Financing of Health Service and Issues in Health Economics**

Theory and practice- Review of per capita and public expenditure on health services over time and in different parts of the country- An analysis of the sources of public funds for health- The need for a general health insurance- Need for a social health insurance for the savings and the aged- A comparative analysis of alternative payment systems such as health insurance, prepayments scheme, savings-linked insurance system etc.-Financing health services through specific (health cess) and general (direct and indirect taxes) local government revenues- Theroleof government financing institutions in financing health.

**Issues in Health Economics**

Growth in expenditure of personal health services- Characteristics of health services- Healthcare problems, public's and economist's views- Analysis of demand for health services and supply of it-Tastes and preferences- Relative prices- Full-cost pricing- Rising healthcare costs- Supply, demand and reform approaches-Productivity and efficiency of private and public health services- Laissez-faire approach to healthcare industry-Issues in the Indian healthcare system.

## **Module V: Health and Nutrition: Indian Experience**

Socio-economic and political setting-Improvement in health status, a historical analysis-Factors affecting health-Nutritional status- Changes in morbidity pattern and trends immortality rates-Development policies, health strategy and role of non-health system - Socio-economic determinants of health status- Health goals, strategies and intersectoral action-Implementation of intersectoral programme for health-Institutional framework-Community participation and informal organization- Health and nutrition in Kerala-Issues for the 21st Century.

### **References**

1. Banerjee D: Social and Cultural Foundation of Health Service Systems in India- Enquiry, Supplement to Vol XII, June 1975.
2. Banerjee D: Poverty, Class and Health Culture in India. Vol. I, Practical Prakashan, New Delhi 1982.
3. Gandhian Institute for Rural Health and Family Planning: Studies on Morality in India- Monograph Series, No. 5, 1972.
4. Government of India: National Health Policy- New Delhi, 1983.
5. Indian Council of Social Science Research and Indian Council of Medical Research: Health for All- 2000 A.D- ICSSR, 1981.
6. Madan T.N: Who Chooses Modern Medicine and Why- Economic and Political Weekly, pp. 1475-84, 1969.
7. Madan T.N: Doctors and Society: Three Asian Case Studies- Vikas Publishing House, Delhi 1980.
8. Naik J.P: An Alternative System of Healthcare Services in India: Some Proposals- ICSSR, Delhi.
9. Feldstein M.S: Economic Analysis of Health Service Efficiency- North Holland, Amsterdam, 1967.
10. Jimenez E: Pricing Policy in the Social Sectors- Johns Hopkins University Press, New York, 1987.
11. Klarman H.E: The Economics of Health- Columbia University Press, Columbia, 1965.
12. Malenbaum W: Progress in Health: What Index of What Progress: Annals of the American Academy of Politics and Social Science- January, 1971.
13. Mote V.L. and H.N. Pathak: Drug Price Control: An Evaluation- Economic and Political Weekly, 15 July, 1972.
14. Newhouse J.P: Towards a Theory of Non-profit Institutions: An Economic Model of a Hospital- American Economic Review, March 1970.
15. Panchamukhi P.E. Economics of Health: A Trend Report- in ICSSR, A Survey of Research in Economics- Vol. VI, Infrastructure, Allied Publishers, Delhi.
16. Galenson W and W Pyatt: Quality of Labour and Economic Development in Certain Countries- International Labour Organisation, Geneva, 1964.
17. Pearce D and P Dasgupta: Social Benefit Cost Analysis- Macmillan, London, 1982.
18. Weisbrod B. A: Economics of Public Health- University of Pennsylvania Press, Pennsylvania, 1961.
19. Weisman J: Cost Benefit Analysis and Health Service Policy- Scottish Journal of Political Economy, Vol. 20, No. 1, February 1962.
20. Krishnakumar T and Rao K.N: Financing of Health Services in India: Perspectives and Issues- Department of Economics, University of Hyderabad (Mimeographed), September 1987.
21. Rothenberg J: Welfare Implications of Alternate Methods of Financing Medical Care- American Economic Review, Proceedings, May 1951.
22. World Bank: The Financing Health Services in Developing Countries: An Agenda for Reform- World Bank Policy Study, Washington, 1987.
23. David Daren: National Health Insurance: Benefits, Costs and Consequences- Brookings Institutions, 1975.

24. Lindsay Cotton M (Ed.): New Directions in Public Health Care: A Prescription for the 1980s- Institute for Contemporary Studies, San Francisco,1980.
25. Russel L.B: Technology in Hospitals: Medical Advance and their Diffusion- Brookings Institution.
26. Panikar P.G. and C.R. Soman: Health Status of Kerala- Centre for Development Studies, Thiruvananthapuram.
27. CDS: Poverty, Unemployment and Development Policy- 1975, UN,NY.
28. Panikar P.G.K: Resources not the Constraint on Health Improvement-A Case Study of Kerala- EPW, No.44,1979.
29. Panikar P.G: Inter-regional Variations in Calorie Intake- EPW, Special No1980.
30. Government of Kerala: Report of the High Power Committee on Health Service- Thiruvananthapuram,1979.

	Course Outcome	POs/ PSOs	CL	KC	Class Sessions (appr.)	Lab (Hrs)
CO1	Understand Theory of consumer demand	PO1/PSO 3	U	C	10	0
CO2	Analysis of various production functions	PO1/PSO 3	Z	P	10	0
CO3	Apply Mathematics into various market situations	PO1/PSO 3	A	P	16	0
CO4	Understand LPP and use simplex method to solve it.	PO1/PSO 3	U	C	10	0
CO5	Explain the concept of complementary slackness and its role in solving primal/dual problem pairs	PO1/PSO 3	R	F	18	0
CO6	Estimate dynamics of Leontief's input –output analysis	PO1/PSO 3	A	C	10	0
CO7	Evaluate game theory	PO1/PSO 3	E	F	8	0
CO8	Create Decision theory framework	PO1,PO5 /PSO3, PSO4	C	P	8	0

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Elective Course XIII MA  
ECONOMICS(CBCSS)  
IV SEMESTER

**ECO4 E09 - MATHEMATICAL ECONOMICS**

**(Credit 4)**

**Module I Theory of Consumer Demand**

Utility maximization- derivation of demand functions – Elasticity- measurement –Slutsky equation -Direct and cross effects - Homogeneous and homothetic utility functions - Indirect utility function - Roy's identity - Linear expenditure systems -Constant elasticity models.

**Module II Theory of Production**

Production Function – Producers equilibrium – derivation of input demand functions - Cobb-Douglas production function - CES production function -VES production function- Translog production. Cost function: Derivation of cost as a function of output-Duality - Shepherd's lemma- derivation of supply function- generalized Leontief cost function - Technological progress and production function.

**Module III Theory of Markets**

Mathematical treatment of market equilibrium- Single goal firm and multiple goal firms- Mathematical treatment of equilibrium under different market situations.

**Module IV Linear Programming and Input-Output Analysis**

Linear programming: Primal and dual problem - General linear programme - Complementary slackness theorem - Simplex solution-Input Output Analysis: Open and closed, static and dynamic Leontief system -Technological viability -Hawkins-Simon's conditions for viability-

**Module V Decision Theory**

Decision theory framework-Payoff tables-Regret tables-Decision under uncertainty- uncertainty and risk-Methods of incorporating risk-Value of perfect information-Decision tree and its uses-Theory of Games: Two person zero-sum game - Pure and mixed strategy - Saddle point theorem.

**References**

1. Allen R.G.D (1956): Mathematical Economics- Macmillan Co.Ltd.
2. Birchenhall C and Grout P (1984): Mathematics for Modern Economics- Philip Allen. Harness and Noble Books,Oxford.
3. David. F Heithfield and Soren Wibe (1987): Introduction to Cost and Production Functions- Macmillan Education Ltd.
4. Eugene Silberberg (1990): The Structure of Economics: A Mathematical Analysis- Second Edition, McGraw Hill InternationalLtd.
5. J.M Henderson and R.E Quandt (1980): Microeconomic Theory: A Mathematical Approach- McGraw Hill InternationalLtd.
6. Michel D. Intriligator (1980): Econometric Models, Techniques and Applications- Prentice Hall of IndiaLtd.
7. Alpha C. Chiang (1988): Fundamental Methods of Mathematical Economics- McGraw Hill InternationalEdition.

8. Amitabh Kundu, et. al (1976): Input Output Framework and Economic Analysis- Centre for the Study of Regional Development, NewDelhi.
9. Krishna K.L (ed.) (1987): Econometric Applications in India- Oxford University Press, NewDelhi.
10. Barry Bressier: A Unified Introduction to Mathematical Economics.

