

M.A. ECONOMICS PROGRAMME

[Two Year Regular Full Time Programme]

COURSE CONTENTS

[Revised Syllabus]

[Effective from the Academic Year: 2017-2018 onwards]

**DEPARTMENT OF STUDIES IN ECONOMICS & COOPERATION
UNIVERSITY OF MYSORE
MANASAGANGOTRI, MYSURU-570 006**

UNIVERSITY OF MYSORE
DEPARTMENT OF STUDIES IN ECONOMICS AND COOPERATION
MANASAGANGOTRI, MYSURU-570 006
M.A. ECONOMICS PROGRAMME
[Revised Syllabus: 2017-2018]

INSTRUCTIONS:

▪ **M.A. Economics Programme & Courses: Under Choice Based Credit System [CBCS]**

1. **Duration:** M.A. Economics Programme is of Four Semesters/Two Year duration.
2. **Credit Requirement for the Masters Degree:** Minimum 76 Credits & Maximum 96 Credits
3. **Number of Courses for M.A. Economics Programme:**
 - 5 to 6 Courses per Semester for a Minimum $72 + OE\ 4 = 76$ Credits; or $76 + OE\ 4 = 80$ Credits, and
 - 7 Courses per Semester with a Maximum of 96 Credits

[i.e., if a candidate opts to complete a minimum of 18 extra credits to acquire **Add on Proficiency Diploma** in that particular discipline/subject along with the Masters Degree **without any additional fee component**].
4. **Breakup of Total Number of Courses in M.A. Economics Programme is as follows:**
 - (i) Number of Courses for Minimum $72 + OE\ 4$ Credits [Without Add-on Proficiency Diploma] = Total 23 Courses
[I-Semester: 6 Courses + II-Semester: 6 Courses + III-Semester: 5 Courses + (1 OE) + IV Semester: 5 Courses]
 - (ii) Number of Courses for 76 Credits in Economics [Without Add-on Proficiency Diploma] = Total 24 Courses
[I-Semester: 6 Courses + II-Semester: 6 Courses + III-Semester: 5 Courses + (1 OE) + IV Semester: 6 Courses]
 - (iii) Number of Courses for Maximum 96 Credits [MA Economics & Add-on Proficiency Diploma] = Total 28 Courses.
[I-Semester: 7 Courses + II-Semester: 7 Courses + III-Semester: 6 Courses (+1 OE) + IV Semester: 7 Courses]

M.A Economics with Minimum and Maximum Number of Credits [With & Without Add-on Proficiency Diploma]

Sl. No.	M.A. Economics with and without Add-on Proficiency Diploma	Number of Courses in M.A Economics Programme					Number of Credits		
		Hard Core	Soft Core	Specialization Elective (SC)	Proficiency Diploma	Open Elective	Total Courses	Credits Per Course	Total Credits
1	M.A. Economics Without Add-on Proficiency Diploma [Minimum 76 or 80 Credits]	14	4	4	-	+ 1	23	3 to 4	$72^* + 4 = 76$
		or 15	4	4	-	+ 1	24	3 to 4	$76 + 4 = 80$
2	M.A. Economics with Add-on Proficiency Diploma [Maximum 96 Credits]	15	4	4	+ 4	+ 1	$23 + 1OE + 4 = 28$	3 to 4	$92 + 4 = 96$ Credits

Note: * A Student who intends to earn just a minimum of 72 Credits in Economics (instead of 76 Credits) has an option of not pursuing a course on Managerial Economics with 4 Credits in the Fourth Semester.

Semester-wise No. of Courses for M.A Economics Programme: $76 + 4 = 80$ Credits [without Add-on Proficiency Diploma]

Sl. No.	Semester	Number of Courses in M.A Economics Programme					Number of Credits		
		Hard Core Courses	Soft Core Courses	Specialization Elective (SC)	Open Elective	Total Courses	Credits Per Course	Total Number of Credits	
1	First Semester	3 or 4	1	1	-	5 or 6	3 to 4	16 or 20 Credits	
2	Second Semester	4	1	1	-	6	3 to 4	20 Credits	
3	Third Semester	3	1	1	1	6	3 to 4	$16 + 4 = 20$ Credits	
4	Fourth Semester	4	1	1	-	6	3 to 4	20 Credits	
Total: Courses & Credits		15	4	4	1	24	-	$72+4$ or $76+4$ Credits	

Semester-wise Number of Courses in M.A Economics Programme with 96 Credits [With Add-on Proficiency Diploma]

Sl. No.	Semester	Number of Courses in M.A Economics Programme					Number of Credits		
		Hard Core Courses	Soft Core Courses	Specialization Elective (SC)	Open Elective	Proficiency Diploma	Total Courses	Credits Per Course	Total Number of Credits
1	First Semester	4	1	1	-	+ 1	7	3 to 4	24 Credits
2	Second Semester	4	1	1	-	+ 1	7	3 to 4	24 Credits
3	Third Semester	3	1	1	1	+ 1	7	3 to 4	$20+4=24$ Credits
4	Fourth Semester	4	1	1	-	+ 1	7	3 to 4	24 Credits
Total: Courses & Credits		15	4	4	1	+ 4	28	-	$92 + 4$ Credits

5. Definition of Courses:

Hard Core Course: A Course which should be compulsorily studied as a Core requirement.

[Requirement: Minimum 42 & Maximum 52 Credits]

Soft Core: A Course with an option for students to choose from a pool of courses from the main discipline/subject of study or from sister/related discipline/subject which supports the main subject.

[Requirement: Minimum 16 Credits]

Elective Course: Generally a course which can be chosen from a pool of courses and which may be very specific or specialized or advanced or supportive to the discipline/subject of study which provides an extended scope or which enables an exposure to some other discipline/subject/domain or nurtures the proficiency/skill. A Soft Core Course may also be considered as an elective.

Elective: A Core Course offered in a discipline/subject may be treated as an elective by other discipline/subject and vice versa.

Open Elective: A Course chosen generally from an unrelated discipline/subject with an intention to seek exposure. [Requirement: Minimum 4 Credits and Maximum 12 Credit]

Special Course: Project Work/Dissertation work involving application of knowledge in solving/analyzing/exploring a real life situation/difficult problem. A project/dissertation work may be hard core or a soft core as decided by the concerned Board of Studies (BoS).

6. Breakup of Number of Courses:

- | | | |
|--|--|---|
| (i) Hard Core Courses [Compulsory] : 14/15 | [3 or 4 Credits for each Course] | |
| (ii) Soft Core [With Single Choice] : 04 | [04 Courses x 3 Credits per Course = 12 Credits] | } Minimum is 16 Credits
} Courses offered 24 Credits |
| (iii) Soft Core [Specialization Elective] : 04 | [04 Courses x 3 Credits per Course = 12 Credits] | |
| (iv) Proficiency Diploma* [Soft Core] : 04 | [04 Courses x 4 Credits per Course = 16 Credits] | Additional 18 Credits] |
| (v) Open Elective [Compulsory] : 01 | [01 Course Minimum x 4 Credits = 04 Credits] | [Maximum of 3 Courses] |

[Note: * As per CBCS Regulations Section 5.5, "a candidate can opt to complete a minimum of 18 extra credits to acquire an **Add-on Proficiency Diploma** in that particular discipline/subject **along with Masters Degree** in Economics with a Minimum of 72 + 4 OE Credits] without any additional fee component".

7. Teaching Hours: 3 to 4 Hours per week for each course. [About 60 Hours for each course per semester]

[This shall be inclusive of Theory/Application/Practical Work/Tutorials/Seminars depending on the content of the course and approach by the faculty for each course]

8. Allocation of Marks for M.A Economics Programme:

Total Marks for M.A Economics [without Add-on Proficiency Diploma] with 6 courses per semester with 72/76 Credits = **2300/2400 Marks** [600 Marks in I, II, & III Semester and 500/600 Marks in the IV Semester]

Total Marks for M.A Economics Programme [with Add-on Proficiency Diploma] with 7 courses per Semester with total number of 96 Credits = **2800 Marks** [700 Marks in all the I, II, III & IV Semesters]

[This is Inclusive of one Open Elective Course pursued by the students of this department in other departments]

Number of Marks for Each Course: 100 Marks

Out of 100 Marks: **C3 = 70 Marks** is for Theory Examination [Comprehensive end Semester Examination]

C1 + C2 = 15 + 15 = 30 Marks is for Continuous Assessment [for all the Courses in 4 Semesters]

30 Marks for C1 & C2 shall have the break-up as follows:

C1: 10 Marks for the First Test + 5 Marks for Assignment [For all the Course in 4 Semesters]

C2: 10 Marks for the Second Test + 5 Marks for Seminar [For all the Course in 4 Semesters]

Note: Out of total marks allocated to C1&C2, Minimum 30% marks have to be secured by students to write C3 Examination.

[i.e., a student is not permitted to write the end Semester Examination without securing 30% of marks in C1 + C2 put together]

9. Specialization Elective Courses:

1. Elective Courses (6th Paper) have been designed with the focus on different fields/areas of Specialization.
2. Each Specialization Elective consist of Four Courses during Four Semesters [one each in every semester]
3. Introduction of any few of the Elective Courses from out of the 8 + 2 areas of specialization shall depend on the availability of faculty with respective area of specialization or interest to offer a particular course.
4. Specialization Elective Course shall either be opted by the student [from out of the Specialization Courses offered by the Department] or could be allotted by the department [depending on the circumstances] at the beginning of the first semester.
5. Specialization Elective Courses have a horizontal sequencing and once chosen/allotted in the first semester shall continue till the end of the fourth semester. Hence, there is no provision for any change.
6. However, students from 1 to 8 Specialization Elective Courses (which are general) have an option to pursue (technical courses) i.e., either on (i) 6.9 on Optimization Techniques: I & II or (ii) 6.10 on Mathematical Economics: I & II in the Third and the Fourth Semesters.
7. Project Work to be submitted by the students in the fourth semester shall generally be from the area of Specialization Elective Course/Papers pursued by the student [without Add-on Proficiency Diploma] or issues related to latest developments or current issues in Economics.

10. Add-on Proficiency Diploma Courses: Electives

1. Seven Add-on Proficiency Diploma Courses are focused on some of the new areas of Specialization in Economics. [One Course each with 4 Credits for every Semester]
2. Introduction of any Add-on Proficiency Diploma Course/s (out of seven approved courses), depends on (i) the interest expressed by the students and (ii) the availability of faculty with respective area of specialization/interest to offer a particular course at the beginning of the first semester.
3. Add-on Proficiency Diploma Course/s have horizontal sequencing and once opted in the first semester shall continue till the end of the fourth semester. Hence, there is no provision to change the course opted in between the semesters.
4. Project Work to be submitted by the students in the fourth semester shall generally be from the area of Specialization Elective or Add-on Proficiency Diploma Course pursued by the student or issues related to latest developments or current issues in Economics.

11. Statistical Software for Data Analysis*

A Course on "Statistical Software for Data Analysis" offered during the Fourth Semester is Practical Computer Lab Oriented. It is considered desirable for the students of Economics to pursue this course since it would be useful for pursuing M.Phil., or Ph.D., Research or for skill based professions.

1. Practical Examination relating to *Statistical Software for Data Analysis* [at the end of the fourth semester] shall be for 50 Marks.
2. A Supportive Course on *Fundamentals of Computers* [to be completed in II or III Semester] is a must for the students to pursue the Core Course on *Statistical Software for Data Analysis* in the Fourth Semester.
3. **There shall be an additional fee component for the Course on "Statistical Software for Data Analysis"** and a Supportive Course on "*Fundamentals of Computers*" since there is no Computer Lab Facility in the Department. Hence, it needs to be offered either in the Center for Information Science and Technology [CIST] or Computer Center of the University [for the students of Department of Economics, University of Mysore, Manasagangotri, Mysuru].
4. The Fee prescribed by the University shall be inclusive of the supportive course on *Fundamentals of Computers*, which shall be offered preferably during the II or III Semester in the centers mentioned.
5. Fees to be collected from the students [by the University] at the time of admission shall be included in the Fee Structure of the University.

12. Project Work**

1. **Project Work** is mandatory to students who intend to pursue a Course on “Statistical Software for Data Analysis” in the Fourth Semester.
2. **Topic** for the Project Work as mentioned, can either be selected by the Student or suggested by the Faculty on the issues related to: Specialization Elective Course or Add-on Proficiency Course or Core Courses or latest developments, or current issues in Economics at the beginning of the Third Semester.
3. **Submission of Project Work** by the Students to the Department shall either be before the end of the Fourth Semester [i.e., on or before the last working day of the Semester].
4. **Marks for the Project Work:** 10 + 30 + 10 = 50 Marks.
5. **Break-up of Marks** for the Project Work is as follows:

Component-1	(C1)	: Periodic Progress and Reports	[05 Marks]
Component-2	(C2)	: Results of the Work and Draft & Final Report	[05 Marks]
Component-3:	(C3)	: Dissertation/Project Work Evaluation	[30 Marks]
		: Viva Voce Examination	[10 Marks]

Note: Students who do not intend to pursue a Course on “Statistical Software for Data Analysis & Project Work” in the Fourth Semester have an option to study one course of the two following courses.

- (i) Indian Economic Policies
- (ii) Evolution of Economic Thought

13. Viva-Voce Examination

1. Viva-Voce shall be conducted on the Project Work submitted by the students during the Fourth Semester.
2. Viva-Voce Examination shall be conducted in (i) Department of Studies in Economics & Cooperation, University of Mysore, Manasagangotri, Mysuru; or (ii) Post-Graduate Centers of the University of Mysore; or (iii) Constituent or Affiliated Colleges of the University of Mysore which have been offering M.A. Economics Programme [looking to the location of the institution and convenience of the students] within a week or two after the completion of IV Semester examination, .
3. Viva-Voce Committee shall comprise of: (i) The Chairperson, (ii) Concerned Supervisor of the Projects, (iii) Faculty from the Department and (iv) Faculty from the Constituent or Affiliated Colleges.
4. One External Examiner from other universities within Karnataka may be invited for conducting of Viva-Voce Examination by seeking the approval from the University. [but this is not mandatory]
5. Marks for the Viva-Voce Exam shall be the average of marks given by all the examiners.
6. Consolidated Marks List [consisting of the marks given by each examiner] shall be sent to the University preferably on the same day or immediate next working day.

14. Eligibility for Admission

Candidates possessing a Bachelor's Degree of the University of Mysore or of any other University equivalent thereto and complying with the eligibility criteria indicated in the Admission Regulations of the University of Mysore are eligible for admission to Post-Graduate Degree Programme in M.A. Economics.

15. Attendance: 75% Attendance is mandatory for the student in each Course/Paper to appear for C3 Exam.

Note:

1. **In case a candidate secures less than 30% in C1 and C2 put together in a course, the candidate is said to have DROPPED the course and is not allowed to appear for C3 in the Course.**
2. **In case a candidate secures less than 30% in C3, he/she may choose DROP/MAKE-UP option.**

UNIVERSITY OF MYSORE
DEPARTMENT OF STUDIES IN ECONOMICS & COOPERATION

M.A. ECONOMICS WITHOUT ADD-ON PROFICIENCY DIPLOMA (REVISED SYLLABUS: 2017-2018)

[Semester-wise Title of the Hard Core, Soft Core, Specialization Elective (Soft Core) & Open Elective Courses] [76 Credits]

I-SEMESTER

Course No.	Course Code No.	Title of the Course/Paper	Number of Credits	C1 + C2 [Assessment]	C3 [Theory Exam]	Total Marks
1	I-HC: 1.1	Microeconomics: Theory of Value	4	15 + 15	70	100
2	I-HC: 1.2	Macroeconomics	4	15 + 15	70	100
3	I-HC: 1.3	Mathematics for Economics	3	15 + 15	70	100
4	I-HC: 1.4	Economics of Growth and Development	3	15 + 15	70	100
5	I-SC.Ele: 1.5.1	Indian Economy	3	15 + 15	70	100
	I-SC.Ele: 1.5.2	OR- Optimization Techniques-I				
6	I-SC.Sp.Ele:6:1 to 8	Specialization Elective-1	3	15 + 15	70	100
TOTAL			20	180	420	600

II-SEMESTER

Course No.	Course Code No.	Title of the Course/Paper	Number of Credits	C1 + C2 [Assessment]	C3 [Theory Exam]	Total Marks
1	II-HC: 2.1	Theory of Distribution and Welfare Economics	4	15 + 15	70	100
2	II-HC: 2.2	Monetary Economics	3	15 + 15	70	100
3	II-HC: 2.3	Statistics for Economics	3	15 + 15	70	100
4	II-HC: 2.4	Public Economics: Theory & Policy	4	15 + 15	70	100
5	II-SC.Ele: 2.5.1	Development Issues and Policies	3	15 + 15	70	100
	II-SC.Ele: 2.5.2	OR- Optimization Techniques-II				
6	II-SC.Sp.Ele:6:1 to 8	Specialization Elective-2	3	15 + 15	70	100
TOTAL			20	180	420	600

III-SEMESTER

Course No.	Course Code No.	Title of the Course/Paper	Number of Credits	C1 + C2 [Assessment]	C3 [Theory Exam]	Total Marks
1	II/III/IV OE.HC: 1-6	OPEN ELECTIVES	[4]	15 + 15	70	100
2	III-HC: 3.2	Research Methodology and Quantitative Methods for Data Analysis	3	15 + 15	70	100
3	III-HC: 3.3	Theory of Econometrics	3	15 + 15	70	100
4	III-HC: 3.4	International Trade: Theory and Policy	4	15 + 15	70	100
5	III-SC.Ele: 3.5.1	Indian Public Finance	3	15 + 15	70	100
	III-SC.Ele: 3.5.2	OR- Mathematical Economics-I				
6	III-SC.Sp.Ele:6:1to10	Specialization Elective-3	3	15 + 15	70	100
TOTAL			16+4=20	180	420	600

IV-SEMESTER

Course No.	Course Code No.	Title of the Course/Paper	Number of Credits	C1 + C2 [Assessment]	C3 [Theory Exam]	Total Marks
1	IV-HC: 4.1	Managerial Economics***	4	15 + 15	70	100
2	IV-HC: 4.2.1	Statistical Software for Data Analysis* & Project Work**	4	Project Work 30 Marks	Practical 50 Viva Voce 20	100
	IV-HC: 4.2.2	OR- Indian Economic Policies	..	15 + 15	70	100
	IV-HC: 4.2.3	OR- Evolution of Economic Thought				
3	IV-HC: 4.3	Applied Econometrics	3	15 + 15	70	100
4	IV-HC: 4.4	International Finance and Monetary System	3	15 + 15	70	100
5	IV-SC.Ele: 4.5.1	India in the World Economy	3	15 + 15	70	100
	IV-SC.Ele: 4.5.2	OR- Mathematical Economics-II				
6	IV-SC.Sp.Ele:6:1to10	Specialization Elective-4	3	15 + 15	70	100
TOTAL			20	180	420	600

*** A Student who intends to earn just a minimum of 72 Credits in Economics (instead of 76 Credits) can opt to give up a course on Managerial Economics with 4 Credits

M.A. ECONOMICS WITH ADD-ON PROFICIENCY DIPLOMA (REVISED SYLLABUS: 2017-2018)
 [Semester-wise Title of the Courses for M.A. Degree in Economics with 96 Credits & Add-on Proficiency Diploma]
 [Hard Core, Soft Core, Specialization Elective Soft Core, Add-on Proficiency Diploma Soft Core & Open Elective Courses]

I-SEMESTER

Course No.	Course Code No.	Title of the Course/Paper	Number of Credits	C1 + C2 [Assessment]	C3 [Theory Exam]	Total Marks
1	I-HC: 1.1	Microeconomics: Theory of Value	4	15 + 15	70	100
2	I-HC: 1.2	Macroeconomics	4	15 + 15	70	100
3	I-HC: 1.3	Mathematics for Economics	3	15 + 15	70	100
4	I-HC: 1.4	Economics of Growth and Development	3	15 + 15	70	100
5	I-SC.Ele: 1.5.1	Indian Economy	3	15 + 15	70	100
	I-SC.Ele: 1.5.2	OR- Optimization Techniques-I				
6	I-SC.Sp.Ele: 6:1to 8	Specialization Elective-1	3	15 + 15	70	100
7	I-SC.APD: 7: 1 to 7	Add-on Proficiency Diploma: Course-1	+ 4	15 + 15	70	100
TOTAL			20+4=24	210	490	700

II-SEMESTER

Course No.	Course Code No.	Title of the Course/Paper	Number of Credits	C1 + C2 [Assessment]	C3 [Theory Exam]	Total Marks
1	II-HC: 2.1	Theory of Distribution and Welfare Economics	4	15 + 15	70	100
2	II-HC: 2.2	Monetary Economics	3	15 + 15	70	100
3	II-HC: 2.3	Statistics for Economics	3	15 + 15	70	100
4	II-HC: 2.4	Public Economics: Theory & Policy	4	15 + 15	70	100
5	II-SC.Ele: 2.5.1	Development Issues and Policies	3	15 + 15	70	100
	II-SC.Ele: 2.5.2	OR- Optimization Techniques-II				
6	II-SC.Sp.Ele:6:1to 8	Specialization Elective-2	3	15 + 15	70	100
7	II-SC.APD: 7: 1 to 7	Add-on Proficiency Diploma: Course-2	+ 4	15 + 15	70	100
TOTAL			20+4=24	210	490	700

III-SEMESTER

Course No.	Course Code No.	Title of the Course/Paper	Number of Credits	C1 + C2 [Assessment]	C3 [Theory Exam]	Total Marks
1	II/III/IV OE.HC: 1-6	OPEN ELECTIVES	[4]	15 + 15	70	100
2	III-HC: 3.2	Research Methodology and Quantitative Methods for Data Analysis	3	15 + 15	70	100
3	III-HC: 3.3	Theory of Econometrics	3	15 + 15	70	100
4	III-HC: 3.4	International Trade: Theory and Policy	4	15 + 15	70	100
5	III-SC.Ele: 3.5.1	Indian Public Finance	3	15 + 15	70	100
	III-SC.Ele: 3.5.2	OR- Mathematical Economics-I				
6	III-SC.Sp.Ele:6:1to10	Specialization Elective-3	3	15 + 15	70	100
7	III-SC.APD: 7: 1 to 7	Add-on Proficiency Diploma: Course-3	+ 4	15 + 15	70	100
TOTAL			20+4=24	210	490	700

IV-SEMESTER

Course No.	Course Code No.	Title of the Course/Paper	Number of Credits	C1 + C2 [Assessment]	C3 [Theory Exam]	Total Marks
1	IV-HC: 4.1	Managerial Economics***	4	15 + 15	70	100
2	IV-HC: 4.2.1	Statistical Software for Data Analysis* & Project Work**	4	*Project Work 30 Marks	Practical 50 Viva Voce 20	100
	IV-HC: 4.2.2	OR- Indian Economic Policies	..	15 + 15	70	100
	IV-HC: 4.2.3	OR- Evolution of Economic Thought				
3	IV-HC: 4.3	Applied Econometrics	3	15 + 15	70	100
4	IV-HC: 4.4	International Finance and Monetary System	3	15 + 15	70	100
5	IV-SC.Ele: 4.5.1	India in the World Economy	3	15 + 15	70	100
	IV-SC.Ele: 4.5.2	OR- Mathematical Economics-II				
6	IV-SC.Sp.Ele:6:1to10	Specialization Elective-4	3	15 + 15	70	100
7	IV-SC.APD: 7: 1 to 7	Add-on Proficiency Diploma: Course-4	+ 4	15 + 15	70	100
TOTAL			20+4=24	210	490	700
*** A Student who intends to earn just a minimum of 72 Credits in Economics (instead of 76 Credits) can opt to give up a course on Managerial Economics with 4 Credits						

SPECIALIZATION ELECTIVE COURSES

[3 Credits per Course]

[Each Specialization Elective Consists of Four Courses/Papers for Four Semesters]

Note: Introduction of any few of the Specialization Elective Courses out of EIGHT to TEN approved courses depends on the availability of faculty with the respective specialization or interest to offer the course.

▪ **Specialization Elective-6.1: AGRICULTURAL ECONOMICS**

Semester	Course No	Course Code	Title of the Course
I	6.1	I-SC.Sp.Ele: 6.1	Agricultural Economics
II	6.1	II-SC.Sp.Ele: 6.1	Theories and Models of Agricultural Development
III	6.1	III-SC.Sp.Ele: 6.1	Agricultural Economy of India
IV	6.1	IV-SC.Sp.Ele: 6.1	Agricultural Finance, Marketing & Agri-Business Management

▪ **Specialization Elective-6.2: RURAL DEVELOPMENT**

Semester	Course No	Course Code	Title of the Course
I	6.2	I-SC.Sp.Ele: 6.2	Rural Development: Paradigms and Approaches
II	6.2	II-SC.Sp.Ele: 6.2	Rural Economy of India
III	6.2	III-SC.Sp.Ele: 6.2	Rural Development in India: Planning, Policies & Programmes
IV	6.2	IV-SC.Sp.Ele: 6.2	Institutions for Rural Development in India

▪ **Specialization Elective -6.3: INDUSTRIAL ECONOMICS, PUBLIC ENTERPRISES & UTILITIES**

Semester	Course No	Course Code	Title of the Course
I	6.3	I-SC.Sp.Ele: 6.3	Industrial Economics
II	6.3	II-SC.Sp.Ele: 6.3	Industrial Development in India
III	6.3	III-SC.Sp.Ele: 6.3	Economics of Public Enterprises
IV	6.3	IV-SC.Sp.Ele: 6.3	Economics of Public Utilities

▪ **Specialization Elective-6.4: MONEY, BANKING AND FINANCIAL INSTITUTIONS**

Semester	Course No	Course Code	Title of the Course
I	6.4	I-SC.Sp.Ele: 6.4	Money and Banking: Theory and Practice
II	6.4	II-SC.Sp.Ele: 6.4	Money and Banking in India
III	6.4	III-SC.Sp.Ele: 6.4	Non-Bank Financial Institutions in India
IV	6.4	IV-SC.Sp.Ele: 6.4	Financial Markets, Instruments and Services in India

▪ **Specialization Elective-6.5: DEMOGRAPHY AND LABOUR ECONOMICS**

Semester	Course No	Course Code	Title of the Course
I	6.5	I-SC.Sp.Ele: 6.5	Demography
II	6.5	II-SC.Sp.Ele: 6.5	Population and Development
III	6.5	III-SC.Sp.Ele: 6.5	Labour Economics
IV	6.5	IV-SC.Sp.Ele: 6.5	Industrial and Informal Labour in India

▪ **Specialization Elective 6.6: INFRASTRUCTURE ECONOMICS**

Semester	Course No	Course Code	Title of the Course
I	6.6	I-SC.Sp.Ele: 6.6	Economics of Infrastructure
II	6.6	II-SC.Sp.Ele: 6.6	Energy Economics
III	6.6	III-SC.Sp.Ele: 6.6	Economics of Education
IV	6.6	IV-SC.Sp.Ele: 6.6	Health Economics

▪ **Specialization Elective-6.7: SPATIAL ECONOMICS**

Semester	Course No	Course Code	Title of the Course
I	6.7	I-SC.Sp.Ele: 6.7	Regional Economics
II	6.7	II-SC.Sp.Ele: 6.7	Urban Economics
III	6.7	III-SC.Sp.Ele: 6.7	Rural Economics
IV	6.7	IV-SC.Sp.Ele: 6.7	Tribal Economics

▪ **Specialization Elective-6.8: COOPERATION AND THIRD SECTOR**

Semester	Course No	Course Code	Title of the Course
I	6.8	I-SC.Sp.Ele: 6.8	Theory of Cooperation
II	6.8	II-SC.Sp.Ele: 6.8	Cooperative Movement in India and Abroad
III	6.8	III-SC.Sp.Ele: 6.8	Cooperative Management in India
IV	6.8	IV-SC.Sp.Ele: 6.8	Cooperative Law, Allied Law, Accounts and Audit

Note: Students from any Specialization Elective Course [6.1 to 6.8] have an option to pursue One of the following courses [ie., either 6.9 or 6.10] in the in the 3rd and 4th Semester

- (i) 6.9: Optimization Techniques: I & II or
- (ii) 6.10: Mathematical Economics: I & II

▪ **Specialization Elective-6.9: OPTIMIZATION TECHNIQUES**

Semester	Course No	Course Code	Title of the Course
III	6.9	III-SC.Sp.Ele: 6.9	Optimization Techniques-I
IV	6.9	IV-SC.Sp.Ele: 6.9	Optimization Techniques-II

▪ **Specialization Elective-6.10: MATHEMATICAL ECONOMICS**

Semester	Course No	Course Code	Title of the Course
III	6.10	III-SC.Sp.Ele: 6.10	Mathematical Economics-I
IV	6.10	IV-SC.Sp.Ele: 6.10	Mathematical Economics-II

Note:

- HC = Hard Core
- SC = Soft Core
- SC. Ele = Soft Core Elective
- SC.SP.Ele = Soft Core Specialization Elective
- SC.APD = Soft Core Add-on Proficiency Diploma
- OE = Open Elective

**ADDITIONAL SOFT CORE ELECTIVE COURSES
FOR ADD-ON PROFICIENCY DIPLOMA**

[4 Credits per Course]

[Each Add-on Course Component Consists of Four Courses/Papers for Four Semesters]

Note: Introduction of any of the Proficiency Related Courses out of 7 approved courses depends on the availability of faculty with the respective specialization or interest to offer the course.

▪ **Add-on Proficiency Course-7.1: NATURAL RESOURCE AND ENVIRONMENTAL ECONOMICS**

Semester	Course No	Course Code	Title of the Course
I	7.1	I-SC.APD: 7.1	Natural Resource Economics
II	7.1	II-SC.APD: 7.1	Ecology and Economics
III	7.1	III-SC.APD: 7.1	Environmental Economics
IV	7.1	IV-SC.APD: 7.1	Environmental Hazards and Environmental Policy

▪ **Add-on Proficiency Course-7.2: GENDER AND DEVELOPMENT**

Semester	Course No	Course Code	Title of the Course
I	7.2	I-SC.APD: 7.2	Gender Economics
II	7.2	II-SC.APD: 7.2	Women in Development
III	7.2	III-SC.APD: 7.2	Women and Work
IV	7.2	IV-SC.APD: 7.2	Trade and Gender

▪ **Add-on Proficiency Course-7.3: HUMAN DEVELOPMENT**

Semester	Course No	Course Code	Title of the Course
I	7.3	I-SC.APD: 7.3	Human Development: Dimensions and Disparities
II	7.3	II-SC.APD: 7.3	Human Development in South Asia
III	7.3	III-SC.APD: 7.3	Human Development in India
IV	7.3	IV-SC.APD: 7.3	Human Development in Karnataka

▪ **Add-on Proficiency Course-7.4: PLANNING AND ECONOMIC POLICIES**

Semester	Course No	Course Code	Title of the Course
I	7.4	I-SC.APD: 7.4	Development Planning and Practices
II	7.4	II-SC.APD: 7.4	Evolution of Economic Policies in India
III	7.4	III-SC.APD: 7.4	Economic Planning & Panchayat Raj Institutions in India
IV	7.4	IV-SC.APD: 7.4	Economic Reforms in India

▪ **Add-on Proficiency Course-7.5: ECONOMIC HISTORY AND THOUGHT IN INDIA**

Semester	Course No	Course Code	Title of the Course
I	7.5	I-SC.APD: 7.5	Economic History of Ancient & Medieval India
II	7.5	II-SC.APD: 7.5	Economic History of India During British Period
III	7.5	III-SC.APD: 7.5	Evolution of Economic Thought in India
IV	7.5	IV-SC.APD: 7.5	Development of Economic Thought in India

▪ **Add-on Proficiency Course-7.6: EVOLUTION OF ECONOMIC THOUGHT & CONTRIBUTIONS OF SELECT ECONOMISTS**

Semester	Course No	Course Code	Title of the Course
I	7.6	I-SC.APD: 7.6	Evolution of Economic Thought [Ancient Period to 1900]
II	7.6	II-SC.APD: 7.6	Development of Economic Thought [1900 to 2015]
III	7.6	III-SC.APD: 7.6	Contributions of Noted Economists [John Kenneth Galbraith, Gunnar Myrdal, Elinor Ostrom, Agnus Deaton Amartya K.Sen, Mahbub ul Haq, Mohamad Yunus.]
IV	7.6	IV-SC.APD: 7.6	Contributions of Nobel Laureates to Economic Science [Planning, Growth, Information Economics, Game Theory, Business Cycles, Optimization Techniques]

▪ **Add-on Proficiency Course-7.7: COMPARATIVE DEVELOPMENT AND GLOBAL BUSINESS**

Semester	Course No	Course Code	Title of the Course
I	7.7	I-SC.APD: 7.7	Comparative Economics in a Transforming World Economy
II	7.7	II-SC.APD: 7.7	Global Business Environment
III	7.7	III-SC.APD: 7.7	Economics of Globalization
IV	7.7	IV-SC.APD: 7.7	Challenges to Socio-Economic Development

▪ **OPEN ELECTIVE COURSES**

Sl. No	Offered During	Course Code	Credits	Title of the Course
1	II-Semester	II-OE.HC: 1	4	Economic Development of India
2	II-Semester	II-OE.HC: 2	4	Research Methodology
3	III-Semester	III-OE.HC: 1	4	Indian Financial Institutions and Markets
4	III-Semester	III-OE.HC: 2	4	Basic Econometrics
5	IV-Semester	IV-OE.HC: 1	4	Economics and Law
6	IV-Semester	IV-OE.HC: 2	4	UNO and International Financial Institutions

PATTERN OF QUESTION PAPER FOR SEMESTER END EXAMINATION

Pattern of Question Paper shall consist of Very Short/Short and Long Answer Questions.

Pattern of Question Paper for Final Exam:

Part I:	(Very Short Answer)	5 Questions x 2 Marks for each Question	= 10 Marks
Part II:*	(Short Answer)	6 Questions x 5 Marks for each Question	= 30 Marks
Part III:**	(Long Answer)	3 Questions x 10 Marks for each Question	= 30 Marks

Written Examination C3 = 70 Marks

[C1:10 Marks for Test & 5 for Assignment + C2: 10 Marks for Test & 5 Marks for Seminar] **C1 + C2 = 30 Marks**

TOTAL = 100 Marks

Note: Medium of Instruction is English and hence Question Papers will be set only in English.
However, the Students have an option to write in Kannada.

M.A ECONOMICS PROGRAMME

Sl.No	Semester	Code Number	Credits	Course Title	P. No
I-SEMESTER					
1	I-SEM HC: 14 SC: 03 Sp.Ele: 03 = 20 Credits APD + 4	I-HC: 1.1	4	Microeconomics: Theory of Value	1-2
2		I-HC: 1.2	4	Macroeconomics	3-4
3		I-HC: 1.3	3	Mathematics for Economics	5-6
4		I-HC: 1.4	3	Economics of Growth and Development	7-8
5		I-SC.Ele: 1.5.1	3	Indian Economy	9-10
		I-SC.Ele: 1.5.2		OR- Optimization Techniques-I	11-12
6		I-SC.Sp.Ele:6:1 to 8	3	Specialization Elective-1	51-122
Total			20		
7		I-SC.APD: 7: 1 to 7	+ [4]	Add-on Proficiency Diploma Course-1	123-178
II-SEMESTER					
1	II-SEM HC: 14 SC: 03 Sp.Ele: 03 = 20 Credits APD + 4	II-HC: 2.1	4	Theory of Distribution and Welfare Economics	13-14
2		II-HC: 2.2	3	Monetary Economics	15-16
3		II-HC: 2.3	3	Statistics for Economics	17-18
4		II-HC: 2.4	4	Public Economics: Theory and Policy	19-20
5		II-SC.Ele: 2.5.1	3	Development Issues and Policies	21-22
		II-SC.Ele: 2.5.2		OR- Optimization Techniques-II	23-24
6		II-SC.Sp.Ele:6:1 to 8	3	Specialization Elective-2	51-122
Total			20		
7		II-SC.APD: 7: 1 to 7	+ [4]	Add-on Proficiency Diploma Course-2	123-178
III-SEMESTER					
1	III-SEM HC: 10 SC: 03 Sp.El: 03 = 16 + 4 OE = 20 Credits APD + 4	II/III/IV: OE.HC: 1-6	[4]	OPEN ELECTIVE	179-190
2		III-HC: 3.2	3	Research Methodology and Quantitative Methods for Data Analysis	25-26
3		III-HC: 3.3	3	Theory of Econometrics	27-28
4		III-HC: 3.4	4	International Trade: Theory and Policy	29-30
5		III-SC.Ele: 3.5.1	3	Indian Public Finance	31-32
		III-SC.Ele: 3.5.2		OR- Mathematical Economics-I	33-34
6		III-SC.Sp.Ele:6:1to10	3	Specialization Elective-3	51-122
Total			16+4		
7		III-SC.APD: 7: 1 to 7	+ [4]	Add-on Proficiency Diploma Course-3	123-178
IV-SEMESTER					
1	IV-SEM HC: 14 SC: 03 Sp.El: 03 = 20 Credits APD + 4	IV-HC: 4.1	4	Managerial Economics***	35-36
2		IV-HC: 4.2.1	4	Statistical Software for Data Analysis* & Project Work**	37-38
		IV-HC: 4.2.2		OR- Indian Economic Policies	39-40
		IV-HC: 4.2.3		OR- Evolution of Economic Thought	41-42
3		IV-HC: 4.3	3	Applied Econometrics	43-44
4		IV-HC: 4.4	3	International Finance and Monetary System	45-46
5		IV-SC.Ele: 4.5.1	3	India in the World Economy	47-48
	IV-SC.Ele: 4.5.2	OR- Mathematical Economics-II		49-50	
6	IV-SC.Sp.Ele:6:1to10	3	Specialization Elective-4	51-122	
Total			20		
7		IV-SC.APD: 7: 1 to 7	+ [4]	Add-on Proficiency Diploma Course-4	123-178
Statistical Software for Data Analysis*: 50 Marks Lab Exam; Project Work**: 30 Marks; & Viva-Voce Exam: 20 Marks					
OPEN ELECTIVE COURSES					
1	II-Semester	II-OE.HC: 1	4	Economic Development of India	179-180
2		II-OE.HC: 2	4	Research Methodology	181-182
3	III-Semester	III-OE.HC: 1	4	Indian Financial Institutions and Markets	183-184
4		III-OE.HC: 2	4	Basic Econometrics	185-186
5	IV-Semester	IV-OE.HC: 1	4	Economics and Law	187-188
6		IV-OE.HC: 2	4	UNO and International Financial Institutions	189-190

Hard Core Courses: : I-Sem: 14 + II-Sem: 14 + III-Sem: 10 + IV-Sem: 14 = 52 Maximum [Minimum is 42]
 Soft Core Courses: : I-Sem: 03 + II-Sem: 03 + III-Sem: 03 + IV-Sem: 03 = 12 } [Soft Core Minimum 16 Credits
 Specialization Elective Courses : I-Sem: 03 + II-Sem: 03 + III-Sem: 03 + IV-Sem: 03 = 12 } is required to M.A. Degree]
 Add-on Proficiency Diploma : I-Sem: 04 + II-Sem: 04 + III-Sem: 04 + IV-Sem: 04 = 16
 [With Extra 18 Credits in addition to minimum of 76 Credits for M.A Economics]

Minimum Credits for M.A Economics Degree is 76 [Hard Core Credits: 48 or 52+Soft Core Credits:24 (12+12)=72 or 76+OE: 4=80]

SPECIALIZATION ELECTIVE COURSES [SOFT CORE]

No	Semester	Code Number	Credits	Course Title	Page No
Agricultural Economics					
6.1	1	I-SC.Sp.Ele: 6.1	3	Agricultural Economics	51-52
	2	II-SC.Sp.Ele: 6.1	3	Theories and Models of Agricultural Development	53-54
	3	III-SC.Sp.Ele: 6.1	3	Agricultural Economy of India	55-56
	4	IV-SC.Sp.Ele: 6.1	3	Agricultural Finance, Marketing & Agri-Business Management	57-58
Rural Development					
6.2	1	I-SC.Sp.Ele: 6.2	3	Rural Development: Paradigms and Approaches	59-60
	2	II-SC.Sp.Ele: 6.2	3	Rural Economy of India	61-62
	3	III-SC.Sp.Ele: 6.2	3	Rural Development in India: Planning, Policies & Programmes	63-64
	4	IV-SC.Sp.Ele: 6.2	3	Institutions for Rural Development in India	65-66
Industrial Economics, Public Enterprises and Utilities					
6.3	1	I-SC.Sp.Ele: 6.3	3	Industrial Economics	67-68
	2	II-SC.Sp.Ele: 6.3	3	Industrial Development in India	69-70
	3	III-SC.Sp.Ele: 6.3	3	Economics of Public Enterprises	71-72
	4	IV-SC.Sp.Ele: 6.3	3	Economics of Public Utilities	73-74
Money, Banking and Financial Institutions					
6.4	1	I-SC.Sp.Ele: 6.4	3	Money and Banking: Theory and Practice	75-76
	2	II-SC.Sp.Ele: 6.4	3	Money and Banking in India	77-78
	3	III-SC.Sp.Ele: 6.4	3	Non-Bank Financial Institutions in India	79-80
	4	IV-SC.Sp.Ele: 6.4	3	Financial Markets, Instruments and Services in India	81-82
Demography and Labour Economics					
6.5	1	I-SC.Sp.Ele: 6.5	3	Demography	83-84
	2	II-SC.Sp.Ele: 6.5	3	Population & Development	85-86
	3	III-SC.Sp.Ele: 6.5	3	Labour Economics	87-88
	4	IV-SC.Sp.Ele: 6.5	3	Industrial and Informal Labour in India	89-90
Infrastructure Economics					
6.6	1	I-SC.Sp.Ele: 6.6	3	Economics of Infrastructure	91-92
	2	II-SC.Sp.Ele: 6.6	3	Energy Economics	93-94
	3	III-SC.Sp.Ele: 6.6	3	Economics of Education	95-96
	4	IV-SC.Sp.Ele: 6.6	3	Health Economics	97-98
Spatial Economics					
6.7	1	I-SC.Sp.Ele: 6.7	3	Regional Economics	99-100
	2	II-SC.Sp.Ele: 6.7	3	Urban Economics	101-102
	3	III-SC.Sp.Ele: 6.7	3	Rural Economics	103-104
	4	IV-SC.Sp.Ele: 6.7	3	Tribal Economics	105-106
Cooperation and Third Sector					
6.8	1	I-SC.Sp.Ele: 6.8	3	Theory of Cooperation	107-108
	2	II-SC.Sp.Ele: 6.8	3	Cooperative Movement in India and Abroad	109-110
	3	III-SC.Sp.Ele: 6.8	3	Cooperative Management in India	111-112
	4	IV-SC.Sp.Ele: 6.8	3	Cooperative Law, Allied Law, Accounts and Audit	113-114
Note:	Students who opt to pursue any Specialization Elective Courses in Four Semesters i.e., from 6.1 to 6.8 have an option to pursue Optimization-I & Optimization-II or Mathematical Economics: I & II in the 3rd and 4th Semesters.				
Optimization Techniques					
6.9	3	III-SC.Sp.Ele: 6.9	3	Optimization Techniques-I	115-116
	4	IV-SC.Sp.Ele: 6.9	3	Optimization Techniques-II	117-118
Mathematical Economics					
6.10	3	III-SC.Sp.Ele: 6.10	3	Mathematical Economics-I	119-120
	4	IV-SC.Sp.Ele: 6.10	3	Mathematical Economics-II	121-122

COURSES FOR ADD-ON PROFICIENCY DIPLOMA

No.	Semester	Code Number	Credits	Course Title	Page No
Natural Resources and Environmental Economics					
7.1	1	I-SC.APD: 7.1	4	Natural Resource Economics	123-124
	2	II-SC.APD: 7.1	4	Ecology and Economics	125-126
	3	III-SC.APD: 7.1	4	Environmental Economics	127-128
	4	IV-SC.APD: 7.1	4	Environmental Hazards and Environmental Policy	129-130
Gender and Development					
7.2	1	I-SC.APD: 7.2	4	Gender Economics	131-132
	2	II-SC.APD: 7.2	4	Women in Development	133-134
	3	III-SC.APD: 7.2	4	Women and Work	135-136
	4	IV-SC.APD: 7.2	4	Trade and Gender	137-138
Human Development					
7.3	1	I-SC.APD: 7.3	4	Human Development: Dimensions and Disparities	139-140
	2	II-SC.APD: 7.3	4	Human Development in South Asia	141-142
	3	III-SC.APD: 7.3	4	Human Development in India	143-144
	4	IV-SC.APD: 7.3	4	Human Development in Karnataka	145-146
Planning and Economic Policies					
7.4	1	I-SC.APD: 7.4	4	Development Planning and Practices	147-148
	2	II-SC.APD: 7.4	4	Evolution of Economic Policies in India	149-150
	3	III-SC.APD: 7.4	4	Economic Planning & Panchayat Raj Institutions in India	151-152
	4	IV-SC.APD: 7.4	4	Economic Reforms in India	153-154
Economic History and Thought in India					
7.5	1	I-SC.APD: 7.5	4	Economic History of Ancient & Medieval India	155-156
	2	II-SC.APD: 7.5	4	Economic History of India During British Period	157-158
	3	III-SC.APD: 7.5	4	Evolution of Economic Thought in India	159-160
	4	IV-SC.APD: 7.5	4	Development of Economic Thought in India	161-162
Evolution of Economic Thought and Contributions of Select Economists					
7.6	1	I-SC.APD: 7.6	4	Evolution of Economic Thought [Ancient Period to 1900]	163-164
	2	II-SC.APD: 7.6	4	Development of Economic Thought [1900 to 2015]	165-166
	3	III-SC.APD: 7.6	4	Contributions of Noted Economists [John Kenneth Galbraith, Gunnar Myrdal, Elinor Ostrom, Agnus Deaton, Amartya K.Sen, Mahbub ul Haq, Mohamad Yunus.]	167-168
	4	IV-SC.APD: 7.6	4	Contributions of Nobel Laureates to Economic Science [Planning, Growth, Information Economics, Game Theory, Business Cycle, Optimization Techniques]	169-170
Comparative Development and Global Business					
7.7	1	I-SC.APD: 7.7	4	Comparative Economics in a Transforming World Economy	171-172
	2	II-SC.APD: 7.7	4	Global Business Environment	173-174
	3	III-SC.APD: 7.7	4	Economics of Globalization	175-176
	4	IV-SC.APD: 7.7	4	Challenges to Socio-Economic Development	177-178
OPEN ELECTIVE COURSES					
1	II-Semester	II-OE.HC: 2.1	4	Economic Development of India	179-180
2		II-OE.HC: 2.2	4	Research Methodology	181-182
3	III-Semester	III-OE.HC: 3.1	4	Indian Financial Institutions and Markets	183-184
4		III-OE.HC: 3.2	4	Basic Econometrics	185-186
5	IV-Semester	IV-OE.HC: 4.1	4	Economics and Law	187-188
6		IV-OE.HC: 4.2	4	UNO and International Financial Institutions	189-190

M.A. Economics [Revised Syllabus: 2017-2018]
[Without Add-On Proficiency Diploma] with 72 or 76 Credits

Course No.	No. of Credits	I-Semester	II-Semester	III-Semester	IV-Semester
1	4	Microeconomics: Theory of Value (4)	Theory of Distribution and Welfare Economics (4)	Open Elective Courses (4) Five Courses	Managerial Economics*** (4)
2	3 or 4	Macroeconomics (4)	Monetary Economics (3)	Research Methodology and Quantitative Methods for Data Analysis (3)	Statistical Software for Data Analysis* & Project Work** (4) OR- Indian Economic Policies OR- Evolution of Economic Thought
3	3	Mathematics for Economics(3)	Statistics for Economics (3)	Theory of Econometrics (3)	Applied Econometrics (3)
4	3 or 4	Economics of Growth and Development(3)	Public Economics: Theory & Policy (4)	International Trade: Theory and Policy (4)	International Finance and Monetary System (3)
5.1	3	Indian Economy(3)	Development Issues & Policies (3)	Indian Public Finance (3)	India in the World Economy (3)
5.2		Optimization Techniques-I	Optimization Techniques-II	Mathematical Economics-I	Mathematical Economics-II
6	3	Specialization Elective-1 (3)	Specialization Elective-2 (3)	Specialization Elective-3 (3)	Specialization Elective-4 (3)
TOTAL		20 Credits	20 Credits	16 Credits + 4 Open Elective = 20	20 Credits
Note: Statistical Software for Data Analysis* (1) Practical Lab Oriented Examination: 50 Marks (2) Project Work** : 10 + 30 Marks and (3) Viva-Voce : 10 Mark					
*** A Student who intends to earn just a minimum of 72 Credits in Economics (instead of 76 Credits) can opt to give up a course on Managerial Economics with 4 Credits					

Mandatory Soft Core Courses			Specialization Elective-1	Specialization Elective-2	Specialization Elective-3	Specialization Elective-4
Course No.:6	No. of Credits	Area of Specialization	I-Semester	II-Semester	III-Semester	IV-Semester
6.1	3	Agricultural Economics	Agricultural Economics	Theories and Models of Agricultural Development	Agricultural Economy of India	Agricultural Finance, Marketing & Agri-Business Management
6.2	3	Rural Development	Rural Development: Paradigms and Approaches	Rural Economy of India	Rural Development in India: Planning, Policies and Programmes	Institutions for Rural Development in India
6.3	3	Industrial Economics, Public Enterprises and Utilities	Industrial Economics	Industrial Development in India	Economics of Public Enterprises	Economics of Public Utilities
6.4	3	Money, Banking and Financial Institutions	Money and Banking: Theory and Practice	Money and Banking in India	Non-Bank Financial Institutions in India	Financial Markets, Instruments and Services in India
6.5	3	Demography and Labour Economics	Demography	Population & Development	Labour Economics	Industrial and Informal Labour in India
6.6	3	Infrastructure Economics	Economics of Infrastructure	Energy Economics	Economics of Education	Health Economics
6.7	3	Spatial Economics	Regional Economics	Urban Economics	Rural Economics	Tribal Economics
6.8	3	Cooperation and Third Sector	Theory of Cooperation	Cooperative Movement in India and Abroad	Cooperative Management in India	Cooperative Law, Allied Law, Accounts and Audit
6.9	3	Optimization Techniques	Students from any of the Specialization Electives Course can opt to pursue these courses (one stream) in 3 rd & 4 th Semester		Optimization Techniques-I	Optimization Techniques-II
6.10	3	Mathematical Economics			Mathematical Economics-I	Mathematical Economics-II

Hard Core (A Minimum of 42 & Maximum of 52 Credits) = 48 or 52 [48 Hardcore (- ME***) +12 Mandatory Soft Core+12 Specialization Soft Core Elective= **72**]
Soft Core (A Minimum of 16) [5.1 is Mandatory Soft core] = 12 [52 Hardcore with ME***+12 Mandatory Soft Core+12 Specialization Soft Core Elective= **76**]
Soft Core (Specialization Elective) [one from out of 10 Electives] = 12
Open Elective (A Minimum of 4 a Maximum of 12) = 04

M.A. Economics [Revised Syllabus: 2017-2018]

Course No.	No. of Credits	I-Semester	II-Semester	III-Semester	IV-Semester	
1	4	Microeconomics: Theory of Value	Theory of Distribution and Welfare Economics	<i>Open Elective Courses</i>	Managerial Economics***	
2	4	Macroeconomics	Monetary Economics	Research Methodology and Quantitative Methods for Data Analysis	Statistical Software for Data Analysis* & Project Work** OR-Indian Economic Policies OR- Evolution of Economic Thought	
3	3	Mathematics for Economics	Statistics for Economics	Theory of Econometrics	Applied Econometrics	
4	4/3	Economics of Growth and Development	Public Economics: Theory & Policy	International Trade: Theory and Policy	International Finance and Monetary System	
5.1	3	Indian Economy	Development Issues and Policies	Indian Public Finance	India in the World Economy	
5.2		Optimization Techniques-I	Optimization Techniques-II	Mathematical Economics-I	Mathematical Economics-II	
6	3	Specialization Elective-1	Specialization Elective-2	Specialization Elective-3	Specialization Elective-4	
7	4	Add-on Proficiency Diploma-I	Add-on Proficiency Diploma-II	Add-on Proficiency Diploma-III	Add-on Proficiency Diploma-IV	
TOTAL		20 Credits + 4 APD = 24	20 Credits + 4 APD = 24	16 Credits + 4 OE + 4 APD = 24	20 Credits + 4 APD = 24	
Note: Statistical Software for Data Analysis* (1) Practical Lab Oriented Examination: 50 Marks (2) Project Work** : 30 Marks and (3) Viva-Voce : 20 Mark						
Mandatory Soft Core Courses		Specialization Elective-1	Specialization Elective-2	Specialization Elective-3	Specialization Elective-4	
Course No.:	No. of Credits	Area of Specialization	I-Semester	II-Semester	III-Semester	IV-Semester
6.1	3	<i>Agricultural Economics</i>	Agricultural Economics	Theories and Models of Agricultural Development	Agricultural Economy of India	Agricultural Finance, Marketing & Agri-Business Management
6.2	3	<i>Rural Development</i>	Rural Development: Paradigms and Approaches	Rural Economy of India	Rural Development in India: Planning, Policies and Programmes	Institutions for Rural Development in India
6.3	3	<i>Industrial Economics, Public Enterprises and Utilities</i>	Industrial Economics	Industrial Development in India	Economics of Public Enterprises	Economics of Public Utilities
6.4	3	<i>Money, Banking and Financial Institutions</i>	Money and Banking: Theory and Practice	Money and Banking in India	Non-Bank Financial Institutions in India	Financial Markets, Instruments and Services in India
6.5	3	<i>Demography and Labour Economics</i>	Demography	Population & Development	Labour Economics	Industrial and Informal Labour in India
6.6	3	<i>Infrastructure Economics</i>	Economics of Infrastructure	Energy Economics	Economics of Education	Health Economics
6.7	3	<i>Spatial Economics</i>	Regional Economics	Urban Economics	Rural Economics	Tribal Economics
6.8	3	<i>Cooperation and Third Sector</i>	Theory of Cooperation	Cooperative Movement in India and Abroad	Cooperative Management in India	Cooperative Law, Allied Law, Accounts and Audit
6.9	3	<i>Optimization Techniques</i>	Students from any of the Specialization Electives Course can opt to pursue these courses (one stream) in 3 rd & 4 th Semester	Optimization Techniques-I	Optimization Techniques-II	
6.10	3	<i>Mathematical Economics</i>		Mathematical Economics-I	Mathematical Economics-II	
A student can acquire Add-on Proficiency Diploma in Economics* along with Master's Degree by pursuing FOUR Courses from the following without any additional fee						
For 96 Credits		Proficiency in the Field of:	20 + 4 = 24 Credits	19 + 4 = 23 Credits	18 + 4 = 22 Credits	19 + 4 = 23 Credits
7.1	4	<i>Natural Resources & Environmental Economics</i>	Natural Resources Economics	Ecology and Economics	Environmental Economics	Environmental Hazards and Environmental Policy
7.2	4	<i>Gender and Development</i>	Gender Economics	Women in Development	Women and Work	Trade and Gender
7.3	4	<i>Human Development</i>	Human Development: Dimensions and Disparities	Human Development in South Asia	Human Development in India	Human Development in Karnataka
7.4	4	<i>Development Issues, Planning and Policies</i>	Development Issues and Policies	Development Planning and Practices	Evolution of Economic Policies in India	Economic Reforms in India
7.5	4	<i>Economic History and Thought in India</i>	Economic History of Ancient & Medieval India	Economic History of India During British Period	Evolution of Economic Thought in India	Development of Economic Thought in India
7.6	4	<i>Evolution of Economic Thought & Contributions of Select Economists</i>	Evolution of Economic Thought [Ancient Period to 1900 AD]	Development of Economic Thought [1900 AD to 2015]	Contributions of Select Economists [John Kenneth Galbraith, Gunnar Myrdal, Elinor Ostrom, Agnus Deaton, Amartya K. Sen, Mahbub ul Haq, Mohamad Yunus]	Contributions of Nobel Laureates to Economic Science [Planning, Growth, Information Economics, Game Theory, Business Cycle, Optimization Techniques]
7.7	4	<i>Comparative Development & Global Business</i>	Comparative Economics in a Transforming World Economy	Global Business Environment	Economics of Globalization	Challenges to Socio-Economic Development

M.A. ECONOMICS

I-SEMESTER

Course No: 1 [Hard Core-1] 4 Credits

Course Code: (I-HC: 1.1) MICROECONOMICS: THEORY OF VALUE

Preamble: The course analyses the economic behaviour of individuals, firms and markets. It is mainly concerned with the objective of equipping the students in a rigorous and comprehensive manner with the various aspects of consumer behaviour and demand analysis, production theory and behaviour of costs, the theory of traditional markets and equilibrium of firm in modern profit and non-profit maximizing framework.

Module-1: Science of Economics

Power of Economic Analysis - Economic Models - Microeconomics vs Macroeconomics - Principles of Economics - Thinking like an Economist - Scarcity and the World of Trade-off - Purpose of the Theory - Economic Theory and Economic Policy.

Module-2: Theory of Demand and Supply

Derivation and Determinants of Individual and Market Demand Schedules - Factors Influencing Demand - Elasticity of Demand (Applications) - Changes in Demand and Changes in Quantity Demanded - Price Elasticity - Income Elasticity - Recent Developments in the Theory of Demand - Linear Expenditure System - Demand for the Product of a Firm.

Supply Schedule: Factors Influencing Supply - Changes in Supply - Supply Elasticity - Determinants of Supply Elasticity - Market Determination of Price and Quantity - Equilibrium Supply and Demand - (Applications).

Module-3: Theory of Consumer Behaviour

Introduction - Historical Development of the Theory - Cardinal Utility Analysis - Indifference Curves - (Application) Revealed Preference Hypothesis - Consumer's Behaviour under Conditions of Uncertainty and Risk - Theory of Marginal Preference - Lancaster's Theory.

Module-4: Production and Cost Analysis

Production Theory: Production Function with One Variable Input and Two Variable Inputs - Optimal use of Variable Inputs and Optimal Combination - Returns to Scale - Empirical Production Function - Statistical Estimation of Production Function - Technology and International Competition (Application)

Cost Theory: Nature of Costs - Short-Run Cost Function and Cost Curves - Long-Run Cost Curves - Economics of Scale and Economics of Scope - Learning Curves - Empirical Estimation of Cost Functions - (Applications).

Module-5: Price and Output Determination under Different Markets

Perfect Competition: Equilibrium of the Firm under Market Period, Short-Run and Long- Run - Constant, Increasing and Decreasing Cost - Industries - Equilibrium of the Firm and Industry.

Pure Monopoly: Demand and Marginal Revenue under Monopoly - Short-Run and Long- Run Equilibrium - Cost of Monopoly to Society - Price Discrimination - Regulation of Monopoly (Application) - Monopoly and Antitrust Policy

Imperfect Competition:

Monopolistic Competition: Fundamentals - Short-Run and Long-Run Equilibrium - Product Differentiation - Resource Allocation and Utilization - Selling Cost.

Oligopoly: Features - Price and Output Determination - Cournot Model - Edgeworth Model - Chamberlin Model - Kinked Demand Curve Model - Centralized and Market Sharing Cartel Model - Price Leadership - Collusive Oligopoly - Oligopoly and Price Rigidity - (*Applications*)

Module-6: A Critique of the Neo - Classical Theory of Firm

Marginalist Controversy - A Critique of Average-Cost Pricing - Baumol's Sales Revenue Maximization Model - Williamson's Model of Managerial Discretion - Marris's Model of Managerial Enterprise - Full Cost Pricing Rule - Bain's Limit Pricing Theory and its Recent Developments - Sylos-Labini's Model - Behavioural Model of Firm - Game Theoretic Model.

Basics: McConnell R. and Stanley L. Brue, **Principles of Economics**, Tata McGraw Hill Inc, New York [Schaum's Series] - Latest Edition

Text Books: [Please refer to the Latest Editions]

1. Dominick Salvatore, *Theory and Problems of Microeconomic Theory*, Schaum's Outline Series, McGraw-Hill Book Company, Singapore.
2. Hubbard R. Glenn and Anthony Patrick O'Brien, *Microeconomics*, Pearson Prentice Hall, New Jersey.
3. Koutsoyiannis A. *Modern Microeconomics*, Macmillan, London.
4. Pindyck Robert S., and Daniel L. Rubinfeld, *Microeconomics*, Pearson Prentice Hall, New Jersey.

References: [Please refer to the Latest Editions]

1. Bradely R Schiller, *The Economy Today*, McGraw Hill Irwin, Boston.
2. Ferguson C.E and Maurice S. Charles, *Economic Analysis-Theory and Applications*, Richard D. Irwin Inc. USA.
3. Ahuja H.L *Advanced Economic Theory*, S. Chand and Company, New Delhi.

M.A. ECONOMICS

I-SEMESTER

Course No: 2 [Hard Core-2] 4 Credits

Course Code: (I-HC: 1.2)

MACROECONOMICS

Preamble: Macroeconomics or aggregate economics analyses and establishes the functional relationship between the large aggregates. The aggregate analysis has assumed such a great significance in recent times that a prior understanding of macroeconomic theoretical structure is considered essential for the proper comprehension of the different issues and policies. Macroeconomics is not only a scientific method of analysis but also a body of empirical economic knowledge. The Course equips the students to understand systematic facts and latest theoretical developments for empirical analysis.

Module-1: Introduction

Indicators of Macro Economic Activity - Key Concepts - Functional Relationship between Macro Variables - Key Issues in Macroeconomics.

Module-2: Measuring the Value of Economic Activity

Measurement of Macro Variables and Economic Performance - National Income Accounts - Important Concepts: GNP, GDP, NNP, NDP, NI, PI, DPI - Real GDP versus Nominal GDP - GDP Deflator - National Income Accounting Identities - GNP and Quality of Life - Net Economic Welfare - Measuring the Cost of Living: Consumer Price Index - Green Income.

Module-3: Classical Theory: The Economy in the Long-Run

The Classical Revolution - Basic Assumptions of the Classical School - Determinants of Output, Employment, Savings, Investment, Wages, Prices, Interest Rate - Equilibrium Output and Employment - Implications of Classical Full-Employment Model -Critical Evaluation.

Module-4: Keynesian Macroeconomics

Concept of Effective Demand: Aggregate Demand and Aggregate Supply -Underemployment Equilibrium.

Consumption Function and its Determinants: Implications of Consumption Function.

Alternative Theories of Consumption Behaviour - Irving Fischer and Inter-temporal Choice - Franco Modigliani and the Life-Cycle Hypothesis - Robert Hall and the Random-Walk Hypothesis. - David Laibson and the Pull of Instant Gratification.

Investment Function and its Determinants: Business Fixed Investment, Residential Investment, Inventory Investment - Equilibrium Income and Output in Simple Two Sector Model, Three Sector and Four Sector Models - Multiplier and Accelerator Analysis - Relevance and Critique of Keynesian Macroeconomics.

Module-5: Business Cycle Theory: The Economy in the Short-Run

Introduction to Economic Fluctuations: Time Horizons in Macroeconomics - Aggregate Demand - Aggregate Supply - Stabilization Policy.

Aggregate Demand: Goods Market and the *IS* Curve - Money Market and the *LM* Curve. Explaining Fluctuations with the *IS-LM* Model - *IS-LM* as a Theory of Aggregate Demand - The Great Depression.

Aggregate Demand in the Open Economy: Mundell-Fleming Model with Changing Price Level.

Aggregate Supply: Three Models of Aggregate Supply: Sticky-Wage Model, Imperfect-Information Model, Sticky-Price Model - Inflation, Unemployment and the Phillips Curve. Edmond Phelps on Phillips Curve.

Macroeconomic Policy Debates: Stabilization Policy.

Module-6: New Classical Economics

Emergence of New Classical Macroeconomics: Rational Expectations Analysis - Policy Conclusions and Implications - Supply-Side Economics - Theoretical Propositions and Implications - Keynesian Counter Critique.

Text Books: [Please refer to the Latest Editions]

1. Mankiw N. Gregory, *Macroeconomics*, Worth Publishers, New York.
2. Shapiro Edward, *Macroeconomic Analysis*, Galgotia Publications Pvt. Ltd, New Delhi.
3. Froyen Richard T. *Macroeconomics-Theories and Policies*, Macmillan Pub., Company, NY.
4. Dornbusch R, Stanley Fischer, and Richard Startz, *Macroeconomics*, McGraw Hill Inc., NY.

References: [Please refer to the Latest Editions]

1. Ackley Gardner, *Macroeconomics: Theory and Policy*, Macmillan, New York.
2. Blanchard Oliver, *Macroeconomics*, Pearson Prentice Hall, New Jersey.

M.A. ECONOMICS

I-SEMESTER

Course No: 3 [Hard Core-3] 3 Credits

Course Code: (I-HC: 1.3) MATHEMATICS FOR ECONOMICS

Preamble: Economics is incomplete without knowledge of mathematics, since mathematics gives flesh and blood to the subject of Economics. Mathematics for Economics deals with various applications of mathematical tools and techniques in defining and developing economic relationships. So this course, accordingly, is designed to include various mathematical methods to analyze and understand economic theories.

Module-1: Basic Mathematics for Economic Analysis

Relationship between Mathematics and Economics - Applications of Mathematics in Economic Analysis - Its Uses and Limitations - Logic, Sets and Relations - Functions -Meaning and Types: Linear and Non-Linear, Power, Exponential and Logarithm - Analytical Geometry - Simultaneous Equations - Solutions for Two Variables Application to Market Equilibrium: Derivation of Demand and Supply Functions - Marshal and Walras' Stability Conditions - Effect of Taxes and Subsidies, Indifference Curves, National Income, Interest: Compounding and Discounting, Changes in Aggregate Demand and Supply Functions, Consumption Function.

Module-2: Elementary Matrix Algebra

Basic Concepts - Types of Matrix - Matrix Operations - Transpose - Inverse Matrix -Determinants: Meaning, Properties, Rank of Matrix, Minor, Co-factor.

Functions of Several Variables - Cramer's Rule and its Applications in Economics.

Module-3: Differential and Integral Calculus

Differential Calculus: Limits - Derivations - Rules of Differentiation - Partial Derivatives, Total Derivatives, - Maxima and Minima for One and Two Variables.

Applications to Economic Analysis:

Consumers Behavior: Elasticity of Demand, Relationship between Price Elasticity and TR, AR and MR, Consumers' Equilibrium and Utility Maximization

Firm's Behaviour: Production Function - Cost Function - Revenue Function - Equilibrium of Firm and its Profit Maximization - Homogenous Function - Cobb-Douglas Production Function - CES Production Function - Euler's Theorem - Monopoly and Joint Production -Duopoly, Monopolistic Competition and Oligopoly.

Integral Calculus: Techniques of Integration - Definite and Indefinite Integration.

Applications to Economic Analysis: Consumer's Surplus - Producer's Surplus.

Introduction to Frontier Analysis: Technical Efficiency - Technological Change and Total Productivity - Multi-Market Equilibrium.

Module-4: Difference and Differential Equations

Difference Equations: Definitions and Concepts - Solutions to First Order and Second Order Difference Equations.

Applications to Economics: Cob-web Model.

Differential Equations: Definitions and Concepts - Solutions to First Order and Second Order Differential Equations.

Applications to Economics: Harrod-Domar Model, Multiplier and Accelerator.

Module-5: Linear Programming and Input-Output Analysis

Linear Programming: Basic Concepts - Constrained Optimization - Formulation of Linear Programming Problem - Nature of Feasible and Optimal Solutions - Solution through Graphical Methods - Introduction to Simplex method - Duality Theorem.

Input-Output Analysis: Basic Concepts, Static, Open and Closed Input-Output Models

References: [Please refer to the Latest Editions]

1. Allen R.G.D., *Mathematical Analysis for Economists*, Macmillan.
2. Bose D., *An Introduction of Mathematical Economics*, Himalaya Publishing House, Mumbai.
3. Chiang A.C., *Fundamental Methods of Mathematical Economics*, McGraw-Hill Higher Education.
4. Veerachami R., *Quantitative Methods for Economists*, New Age International Pub., New Delhi
5. Yamane Taro, *Mathematics for Economists - An Implementer Analysis*, Phi Learning Publishers.

M.A. ECONOMICS

I-SEMESTER

Course No: 4 [Hard Core-4] 4 Credits

Course Code: (I-HC: 1.4) ECONOMICS OF GROWTH AND DEVELOPMENT

Preamble: Economic development is of universal importance and its study is gaining lot of prominence in the present day world. Economic Development is in the interest of both rich and poor countries. For developed nations, the study is crucial for overcoming the problem of secular stagnation where as for the developing countries; the study is essential to break the vicious circle of poverty. While a few success stories can be counted, many have grappled with the chronic problems like poverty and insecurity, unemployment, poor health, environmental pollution etc. The modules deal exclusively with various theories of development - from Adam Smith to endogenous growth models and throw light on several of development approaches.

Module-1: Economic Development: An Overview

Economic Development - Sustainable Development - Ethics and Economic Development - Why Study Development Economics? - Measurement of Economic Development - Concept of Human Development - Human Development Index - Human Capability Approach to Development - Development as Freedom - Development versus Displacement.

Module-2: Theory of Poverty and Income Distribution

Growth and Distribution Justice - Kuznet's Hypothesis - Poverty and its Measurement - Poverty Alleviation Measures - Convergence and Divergence Economic Theories - Development Gap - Causes, Consequences and Measures to Reduce Development Gap.

Module-3: Grand Theories of Economic Growth and Development

Classical Theory of Economic Development and its Salient Features- *Adam Smith's & David Ricardo's* Theories of Growth - *Karl Marx*: Growth and Decay of Capitalism, Theory of Social Change, Surplus Value Theory, Reserve Army and Materialistic Interpretation of History - *Schumpeter's* Growth Theory: Capitalistic Development, Crisis in Capitalism, Innovation, Degeneration of Capitalism - Structural Analysis of Development.

Module-4: Neo-Classical Growth Theories

Stylized Factors of Neo-Classical Growth Theory - *J.E. Meade's* Growth Model- *Harrod- Domar* Model- *Kaldor & Mirrlees* Model - *Mrs. Joan Robinson's* Model-Cambridge Criticism of Neo-Classical Growth Model.

Module-5: Partial Theories of Economic Growth and Development

Salient Features of Partial Theories - Vicious Circle of Poverty - Theory of Circular Cumulative Causation - *Lewis* Model - Big-push and Critical Minimum Effort Thesis, Balanced and Unbalanced Growth Theories - Dualistic Theories - Dixit - Marglin Models - Dependency Theory of Development - Two Sector Model of *Uzawa*.

Module-6: New Growth Theories

Endogenous Growth Models - *Romar-Lucas* Model - Learning by Doing and Production Function Approach to Development - Total Factor Productivity and Growth Accounting, Optimal Savings and *Ramsay's* Rule - Golden Rule of Accumulation.

References: [Please refer to the Latest Editions]

1. Adelman Irma, *Theories of Economic Growth and Development*, Stanford University Press, Stanford, USA.
2. Branko Milanovic, *Global Inequality: A New Approach for the Age of Globalization*, Harvard University Press.
3. Higgins Benjamin, *Economic Development: Theory, Principles and History*, W. W. Norton, New York, USA.
4. Meier Gerald M., *Leading Issues in Economic Development*, Oxford University Press, New York, USA
5. Ray Debraj, *Development Economics*, Princeton University Press. New Jersey.
6. Srivastava O.S., *Economics of Growth, Development and Planning*, Vikas Publications, New Delhi.
7. Thrilwal A.P, *Growth and Development*, 6th Edition, West Press Ltd., New Delhi.
8. Todaro Michael.P. *Economic Development in the Third World*, Orient and Longman, London.

M.A. ECONOMICS

I-SEMESTER

Course No: 5.1 [Soft Core-1] 3 Credits

Course Code: (I-SC.Ele.:1.5.1)

INDIAN ECONOMY

Preamble: The major purpose of the course is to enable the student to have an analytical understanding of various issues of the Indian economy. It enables the student to understand the structure and development of the economy and critically analyze the approaches, forces and issues of the Indian Economy and critically appraise current economic problems in India.

Module-1: An Overview of Indian Economy

Natural Resources - Population - Human Resource Development - Infrastructure Growth - Trends in the Growth of National Income - Green Accounting - Structural Changes in the Economy - Poverty and Income Distribution - Trends: Savings, Investment and Capital Output Ratio and their Implications - India's Development Experience - Planning and Development Strategies - Planning Commission to NITI Aayog - Parallel Economy and its Implications.

Module-2: Agricultural Sector in India

Importance of Agriculture in Development - Cropping Pattern - Land Reforms - Farm Size and Efficiency - Agricultural Labour Problems - Mechanization and Green Revolution - Agricultural Finance and Rural Indebtedness - Agricultural Marketing - Agricultural Prices - Agricultural Co-operatives - Food Problem and Public Distribution System - Rural Development and Agriculture - WTO and Agriculture.

Module-3: Industrial Sector in India

Role of Industrialization - Growth and Structural Composition - Structural Transformation - Small-Scale Industries - Public Sector Industries - Role and Performance - Privatization of Public Sector - Private Sector Industries and their Performance and Problems.
Industrial Labour - Industrial Finance; Development Banks - Capital Market - Industrial Monopoly - MRTP - New Industrial Policy - Competition Law - Mergers, Amalgamations and Takeover.

Module-4: Trade, Balance of Payments and Trade Policy

Exchange Rate Policy of India - Trends in India's Foreign Trade - Balance of Payments - Problems and Policies - New Trade Policy - Export Promotion vs. Import Substitution - Liberalization - WTO and India's Trade Prospects - Foreign Direct Investment in India - Globalization and its Impact on India's Trade and Investment.

Module-5: Financial System in India

Reserve Bank of India - Money and Money Markets - Monetary Policy - Money Supply - Commercial Banks - Banking Sector and Non-Banking Financial Sector - Financial Instruments and Financial Services - Cooperative Banks - Causes and Consequences of Inflation - Financial Sector Reforms - Demonetization.

Module-6: Growth of Service Sector in India

Concept and Composition of Service Sector - Growth Trajectory of Service Sector - GATS in Trade in Services 2006 - Service Sector in India - Major Trends in the Growth of Service Sector - Critical Issues - Sustainability of Service Sector Growth.

Social Sector Reforms: Education, Health, Housing, Employment - Budget Allocation to Social Sector. Millennium Development Goals - Sustainable Development Goals.

Text Books: [Please refer to the Latest Editions]

1. Agrawal A.N., *Indian Economy-Problems of Development and Planning*, Wishwa Prakashan, New Delhi.
2. Dutt Ruddar, and K.P.M. Sundaram, *Indian Economy*, S. Chand and Company, New Delhi.
3. Ghosh Alak, *Indian Economy*, World Press, Calcutta.
4. Misra S.K. and V.K. Puri, *Indian Economy - Its Development Experience*, Himalaya Publishing House, Mumbai.

References: [Please refer to the Latest Editions]

1. Acharya Shankar, *India's Economy: Some Issues and Answers*, Academic Foundation, New Delhi.
2. Datt Ruddar, *Economic Reforms in India - A Critique*, S. Chand & Co. Ltd., New Delhi.
3. Dhar P.K., *Indian Economy: Its Growing Dimensions*, Kalyani Publications, Ludhiana.
4. Hanson James A., and Sanjay Kathuria (Ed), *India-A Financial Sector for the Twenty-First Century*, World Bank, Oxford University Press, New York.
5. Kapila Uma, *Understanding the Problem of Indian Economy*, Academic Foundation, New Delhi.
6. Kapila Uma, *Indian Economy since Independence*, Academic Foundation, New Delhi.
7. NCAER, *Economic and Policy Reforms in India*, National Council of Applied Economic Research, New Delhi.
8. Vaidyanathan A, *India's Economic Reforms and Development*, Academic Foundation, New Delhi.

Reports: [Please refer to the Latest Editions]

1. Government of India, *Economic Survey Reports*, Ministry of Finance, New Delhi.
2. Planning Commission, *Five Year Plan Drafts*, (6th to 12th Plan) New Delhi.
3. Reserve Bank of India, *Report on Currency and Finance*, Mumbai.

-OR-

M.A. ECONOMICS

I-SEMESTER

Course No: 5.2 [Soft Core-1] 3 Credits

Course Code: (I-SC.Ele: 1.5.2) OPTIMIZATION TECHNIQUES-I

Preamble: Mathematical Economics is that elite branch of economics that attempts to codify in a precise, logical and rigorous manner the various cause and effect sequences inherent in the vast and often chaotic body of economic theory. It is the forerunner of econometrics that deals with the quantification aspect of these sequences. Just as Descartes succeeded in converting Euclidean geometry into a precise science known as Analytical Geometry, mathematical economists have attempted not just to revise economic theory but also to practically re-write it in a precise and scientific manner. This extensive revision using various types of optimization methods implies that non-mathematical economists have a limited scope for keeping pace with the break-through being affected in the frontier areas of economics using mathematical tools of analysis, and thus this course is devised with an explicit purpose of providing students with an exposure to these optimization methods which have succeeded in elevating economics to the level almost of a science.

Module-1: Linear Programming

Standard Concepts - The Basic Theorem of Linear Programming - The Simplex Method - Completeness of the Algorithm - Convergence Properties - Sensitivity Analysis - Duality - The Dual Problem and its Economic Interpretation - Some Duality Theorems - Dual Simplex Algorithm - Additional and Tighter Constraints - Upper Bounded Variables.

Module-2: Game Theory

Basic Definitions and Classifications - Strategies and the Payoff Matrix - The Evaluation of Strategies - The Worth of a Game - Strictly Determined Games - Maximin and Minimax Strategies - Chance and Expected Values - Mixed Strategies and Games without Saddle Points - The Minimax Theorem - Non Constant Sum and Many Person Games - Interrelationship between Game Theory and Linear Programming - Games in Extensive, Strategic and Co-operative (or Coalitional) Form - Continuum of Strategies: Time, Goods and Players - Co-operative Solutions - The Shapely Value - Non Cooperative Solutions - Non Co-operative Equilibrium Points.

Module-3: Input-Output Analysis

Basic Concepts - Linear Programming Interpretation - The Hawkins-Simon Condition - Solving an Input-Output System - The Non Substitution Theorem - Prices in the Leontief System - Open and Closed Leontief Systems - The Leontief Dynamic System - Causal Indeterminacy in the Dynamic Leontief Model - Balanced Growth and Intertemporal Efficiency - The Problem of Dual Instability.

Module-4: Non-Linear Programming

Preliminary Concepts - Linear Inequalities and Theorems of the Alternative - Farkas' Theorem - Convex Sets and Separation Theorems for Convex Sets - Hahn-Banach Theorem - Gordon's Theorem - Saddle Point Optimality Criteria of Non-Linear Programming - The Kuhn Tucker Optimality Conditions - Rationale, Interpretation and Sufficiency of the Kuhn Tucker Conditions - Duality in Non-Linear Programming - Optimality and Quality in the Presence of Non-Linear Equality Constraints.

References: [Refer to the Latest Editions]

1. Arrow, K.J and M.D. Intrilligator, (Eds.), *Handbook of Mathematical Economics-Volume II*, North Holland, Amsterdam.
2. Blitzer, C.R., P.B. Clark and L. Taylor, (Eds.), *Economy-Wide Models and Development Planning*, OUP, Oxford.
3. Dorfman, R., P.A. Samuelson and R.M. Solow, *Linear Programming and Economic Analysis*, McGraw-Hill, Tokyo.
4. Luce, R.D and H. Raiffa, *Games and Decisions*, Wiley, New York.
5. Mangasarian, C.L., *Non-Linear Programming*, McGraw Hill, New York.
6. Shubik, M, *Game Theory in the Social Sciences*, MIT Press, Cambridge-Mass.

M.A. ECONOMICS

II-SEMESTER

Course No: 1 [Hard Core-5] 4 Credits

Course Code: (II-HC: 2.1) **THEORY OF DISTRIBUTION AND WELFARE ECONOMICS**

Preamble: The Course deals with laws underlying the determination of Factor Shares, General Equilibrium and Welfare Economics. Welfare Economics is the framework within which the normative significance of Economic events is evaluated. It serves as a foundation to many applied branches of Economics such as Public Finance, Cost-Benefit Analysis and Economics of Government Policy. Welfare Economics is considered as a Half-Way House between Microeconomics and Macroeconomics.

Module-1: Theories of Factors of Production (A Brief Introduction)

Rent: Ricardian Theory, Modern Theory, and Quasi Rent Theory.

Wages: Subsistence Theory, Wage-Fund Theory, Residual Claimant Theory, Marginal Productivity Theory, and Modern Theory.

Interest: Classical Theory -Loanable Funds Theory, Liquidity Preference Theory, and Hicks - Hansen Theory (IS-LM).

Profit: Dynamic Theory, Innovation Theory, Risk-bearing Theory and Uncertainty bearing Theory.

Module-2: Pricing of Factors of Production

Factor Pricing: Significance and Complexity of Resource Pricing - Marginal Productivity Theory of Resource Demand - Determinants of Resource Demand - Elasticity of Resource Demand - Optimal Combination of Resources - Supply of Factors of Production in Perfect and Imperfect Competitive Markets - Factor Pricing in Perfectly and Imperfectly Competitive Markets.

Module-3: Theory of Income Distribution:

Marginal Productivity Theory of Income Distribution - Elasticity of Factor Substitution - Technological Progress and Income Distribution.

Additional Topics on Factor Pricing and Income Distribution

Prices of Fixed Factors: Rents and Quasi Rents - Non-Homogeneous Factors and Wage Differentials - 'Adding-up' Problem: 'Product Exhaustion' Theorem (Euler's 'Product Exhaustion' Theorem), Clark - Wicksteed-Walras 'Product Exhaustion' Theorem.

Module-4: Financial Microeconomics Interest, Investment and Cost of Capital

Lending and Borrowing Equilibrium - Saving and Investment Equilibrium - Investment Decisions - Determinants of Market Rates of Interest - Cost of Capital - Effects of Foreign Investments on the Receiving Nation - Some Applications of Financial Microeconomics.

Module-5: General Equilibrium Theory

Interdependence in the Economy - Partial and General Equilibrium Analyses - Walrasian Excess Demand and Input - Output Approaches to General Equilibrium - Existence, Uniqueness and Stability of Equilibrium.

Two-Sector Model: Static Properties of General Equilibrium State: Equilibrium of Production and Equilibrium of Consumption - Simultaneous Equilibrium - General Equilibrium and Allocation of Resources - Prices of Commodities and Factors - Factor Ownership and Income Distribution.

Relationship between Relative Commodity and Factor Prices (Stolper-Samuelson Theorem) - Relationship between Output Mix and Real Factor Prices, Effect of Changes in Factor Supply in Closed Economy (Rybczynski Theorem) - Production and Consumption.

Module-6: Welfare Economics

Measurement of Economic Welfare - Definition - Utilitarian Economics (Pre-Paretian Welfare Economics) - Welfare and General Equilibrium - Pareto-Optimality and Market Equilibrium - Arrow's Impossibility Theorem - Externalities and Market Failures - Welfare Economics and Social Choice Theory.

Problem of Public Goods - Pigouvian Welfare Economics - Second Best Optima - Sen's Contributions to Welfare Economics - Collective Choice and Social Welfare.

Text Books: [Please refer to the Latest Editions]

1. Koutsoyiannis, *Modern Microeconomics*, Macmillan, London.
2. Dominick Salvatore, *Microeconomics Theory and Applications*, Oxford University Press, New York.

References: [Please refer to the Latest Editions]

1. Ahuja H.L, *Advanced Economic Theory*, S. Chand and Company, New Delhi.
2. Ferguson C.E and Maurice S. Charles, *Economic Analysis - Theory and Applications*, Richard D. Irwin Inc. USA.
3. Sen A.K, *Collective Choice and Social Welfare*, Holden-Day, San Francisco.

M.A. ECONOMICS

II-SEMESTER

Course No: 2 [Hard Core-6] 3 Credits

Course Code: (II-HC: 2.2)

MONETARY ECONOMICS

Preamble: Money plays an important role in macroeconomic situation. A clear understanding of the operations of money, interactions between monetary aggregates and real aggregates, monetary policy interventions and their interactions with the rest of the economy is essential to realize how monetary forces operate through a multitude of channels viz., markets, non-markets, institutions and the State. The course enables the students to understand the facts and latest theoretical developments for empirical analysis in a systematic manner.

Module-1: Money and the Economy

Money and Economy Linkages - Money Supply and Money Demand - Concepts and Measures.

Module-2: Determination of Value of Money

Theories of Money: Quantity Theory of Money - Classical and Keynesian Version of the Quantity Theory of Money - Milton Friedman's Reformulation of Quantity Theory of Money - Tobin's Portfolio Analysis - Monetarist Counter Revolution - Monetarism V/s Keynesianism.

Liquidity Approach to Monetary Theory

General Liquidity: Concept and Definitions - Effects of General Liquidity - Radcliffe - Sayers Thesis - Gurley - Shaw Thesis - Implications of Monetary Policy.

Module-3: Theories of Interest

Classical and Neo- Classical Theory of Interest - Keynesian Theory of Liquidity Preference - Hicks-Hansen *IS-LM* Approach to General Equilibrium - Portfolio Balance Theory - Factors affecting the Equilibrium Rate of Interest - Implications of these Theories for Monetary Policy.

Module-4: Inflation: Theories and Policies

Theories of Inflation - Demand-Pull and Cost-Push Theories of Inflation - Phillips Curve - Monetarist, Keynesian and New Classical Views on Inflation and Unemployment - Role of Aggregate Demand and Aggregate Supply Management - Monetary and Fiscal Policy Options.

Inflation and Interest Rates: Real and Nominal Interest Rates - Fisher Effect - Nominal Interest Rate and the Demand for Money - Social Costs of Inflation - Hyperinflation - Classical Dichotomy.

Module-5: Monetary Theories of Business Cycle

Introduction to Economic Fluctuations - Monetary Theories of Business Cycle - Control of Business Cycle - Role of Macro Economic Policy in the Control of Business Cycle.

Module-6: Open Economy Macroeconomics

Basic Concepts - International Flows of Capital and Goods - Saving and Investment in a Small Open Economy - Exchange Rates - A Case of a Large Open Economy (Example United States and India) - Equilibrium in an Open Economy - Influence of Policies on an Open Economy.

Module-7: Monetary Policy

Introduction - Objectives of Monetary Policy - Exchange Rate Stability - Price Stability - Price Policy - Limitations of Monetary Policy - Time Lags in the Monetary Policy -Efficiency of Monetary Policy - Co-ordination between Instruments and Objectives of Monetary and Fiscal Policies.

Text Books: [Please refer to the Latest Editions]

1. Edward Shapiro, *Macro Economic Analysis*, Galgotia Publications (P) Ltd., New Delhi.
2. Hajela T.N, *Monetary Economics*, Konark Publishers Private Ltd., Delhi.
3. Mankiw N., Gregory, *Macroeconomics*, Worth Publishers, New York.
4. Olivier Blanchard, *Macroeconomics*, Pearson Prentice Hall, New Jersey.
5. Richard T. Froyen, *Macroeconomics*, Macmillan Publishing Company, New York.

References: [Please refer to the Latest Editions]

1. Campbell R McConnell and Harish C. Gupta, *Introduction to Macro Economics*, Tata McGraw Hill Publishing Company Limited.
2. David Romer, *Advanced Macroeconomics*, McGraw Hill Companies, New York.
3. Dornbusch Rudiger, Stanley Fischer and Richard Startz, *Macroeconomics*, McGraw-Hill Irwin Inc, New York.
4. Gardner Ackley, *Macro Economic Theory*, Macmillan Company, New York.
5. Richard G Lipsey and Paul N Courant, *Macroeconomics*, Harper Collins College Publishers.
6. Roger E.A. Farmer, *Macroeconomics*, South-Western College Publishing.

M.A. ECONOMICS

II-SEMESTER

Course No: 3 [Hard Core-7] 3 Credits

Course Code: (II-HC: 2.3)

STATISTICS FOR ECONOMICS

Preamble: Economics has become more and more analytic over the years, requiring sufficient knowledge of quantitative methods. To meet this requirement, a course in Statistics for Economics is absolutely essential. This course will help the student in data collection, presentation, analyses and drawing inferences about various statistical hypotheses. Further, it helps to develop the analytical skills in the student.

Module-1: Introduction to Statistics

Types of Data - Nominal, Ordinal & Ratio-Scale Data, Qualitative and Quantitative Data, Individual, Discrete and Continuous Data - Cross Section, Time Series and Pooled Data - Sources of Data - Population and Samples - Descriptive Statistics and Inferential Statistics.

Module-2: Measures of Average and Dispersion

Measurement of Average - Arithmetic Mean, Weighted Arithmetic Mean, Geometric Mean, Harmonic Mean, Median, Quartile, Percentiles, and Mode.

Measures of Variability - Range, Inter-quartile Range, Quartile Deviation, Percentiles Deviation - Mean Deviation, Standard Deviation, and Coefficient Variation.

Module-3: Probability and Distribution

Probability Theory - Concepts and Approaches to Estimate Probability - Probability Distribution Functions - Theoretical Distribution: Normal, t, Chi-Square & F Distribution.

Module-4: Theory of Estimation and Hypothesis Testing

Concept of Estimator - Sampling Distribution of Estimator - Point and Interval Estimation - Properties of Good Estimator for Small and Large Samples.

Hypothesis Testing: Approaches to Hypothesis Testing - Confidence Interval Approach - Test of Significance Approach and P-Value Approach - Formulation of Hypothesis - Null and Alternative - Level of Significance - One Sided and Two Sided Hypothesis - Type-I and Type-II Error - Test Statistic - Critical Value - Parametric and Non-Parametric Tests.

Module-5: Correlation and Regression

Correlation: Meaning and Types of Correlation - Measurement of Correlation - Scatter Diagram - Karl Pearson's Coefficient of Correlation - Spearman's Rank Correlation - Testing of Correlation Coefficients.

Regression: Simple Regression Model - Estimation - Least Squares Method - Goodness of Fit - Introduction to Multiple Regression.

Module-5: Time Series Analysis

Nature and Decomposition of Time Series - Analysis of Trend - Polynomial Trend - Moving Average Method, Exponential Smoothing, Least-Square Method, Seasonal Component - Forecasts and their Accuracy - Root Mean Square Error.

Module-6: Index Numbers

Nature and Purpose of Index Numbers - Types of Index Numbers: Price Index - Retail Price Index - Quantity Index, Link and Chain Index - Simple and Aggregate Index Numbers: Laspeyre's Index, Paasche's Index, Marshall and Edgeworth's Index - Fisher's Index - Time Reversal and Factor Reversal Tests - Deflation and Splicing of Index Numbers - Problems of Construction of Index Numbers - Limitation of Index Numbers.

Practical Component:

Graphical Presentation of Data: *Tabular and Graphical Methods - Relative Frequency and Percentage - Frequency Distribution - Bar Graphs, Line Graph, Pie Charts, Histogram, Cumulative Distribution and Ogives.*

References: [Please refer to the Latest Editions]

1. Anderson, Sweeney & Williams, *Statistics for Business & Economics*, Thomson South-Western, Bangalore.
2. Gupta S P. *Statistical Methods*, S. Chand and Company, New Delhi.
3. Veerachami R. *Quantitative Methods for Economists*, New Age International Publication, New Delhi.
4. Yamane Toro, *Statistics - An Introductory Analysis*, Harper and Row Publishers, New York.

M.A. ECONOMICS

II-SEMESTER

Course No: 4 [Hard Core-8] 4 Credits

Course Code: (II-HC: 2.4) PUBLIC ECONOMICS: THEORY AND POLICY

Preamble: The objective of the course is to impart a thorough understanding of the role and functions of the government in a modern economy. The Government today performs functions different from those of earlier societies. It is this change which is responsible for designating this course as 'Public Economics' rather than the more conventional 'Public Finance'.

Module-1: Overview of the Public Sector

Economics of Public Sector: The Field of Public Finance - Private and Public Interests: Individual Rights versus Social Responsibility - Adam Smith's Role of Government - Musgrave's Economic Role of Government.

Principle of Maximum Social Advantage: Musgrave's Views on Principle of Maximum Social Advantage - Fundamental Theorems of Welfare Economics.

Public Goods and the Need for Government: Public and Private Goods - Rivalry and Exclusion. Allocation of Public and Private Goods - Efficiency in Public Goods Provision - A Game Theoretical Motivation for Government - Market Failure and Potential Roles for Government - Modes of State Intervention.

Module-2: Externalities

Economics of Externalities: Categories and Examples - Externalities and the Absence of Markets - Public Goods as a Special Case of Externalities.

Negative Externalities: Analysis of Marginal Damages - Extent of the Damages - Pollution Abatement. *Positive Externalities:* Analysis of Marginal External Benefits.

Remedies for Externalities: A Private Solution: The Coase Theorem - Emissions Permit Trading - A Public Solution: Regulations and Controls - Pigouvian Taxes and Subsidies.

Module-3: Social Choice in a Democratic Society

Collective Decision Making: Individual Preferences and Collective Decision Making - Optimal and Sub-optimal Inter-Sectoral Allocation - The Societal Production Possibility Curve - Alternative Public Sector Allocation Instruments - Problem of Revealing Preferences and their Aggregation - Reconciliation of Conflicting Preferences - Representative Democracy - The Theory of Second Best.

Module-4: Public Expenditure

Theories of Public Expenditure - Structure and Growth of Public Expenditure - Budgeting in the Public Sector: Forecasting, Cost-Benefit Analysis and Debt Management - Public Education - Infrastructure, Capital Spending, and Public Sector Borrowing - Welfare, Social Security, and the Social Safety Net - Health Care - Control and Accountability - Expenditure Evaluation - Reforms in Expenditure Budgeting - Zero Base Budgeting.

Module-5: Sources of Public Revenue

Meaning and Significance - Sources of Public Revenue: Taxes, Commercial Revenues and Administrative Revenues.

Taxation: Theories of Taxation - Structure and Principles of Taxation: Efficiency and Equity Issues - Benefit and Ability to Pay Approaches - Theory of Optional Taxation: Ramsey Rule - Trade off between Equity and Efficiency -Tax Policy Analysis.

Classification: Taxes on Income, Corporate Income Tax - Sales and Excise Taxes - Property Taxes - Wealth Tax - Fees and Charges as a Revenue Source - Intergovernmental Grants in Theory and Practice.

Efficiency and Equity Effects of Taxes and Subsidies: Defining the Tax Base - Excess Burdens of Taxes and Subsidies - The Incidence of Taxes - Equity Concepts.- Optimal Taxation - Incentive Effect of Taxation: Taxation and Saving/Borrowing - Tax Evasion.

Module-6: Government Budgets, Borrowing, Deficit Financing and Fiscal Policy

Government Accounting, *Budgets* and Budget Processes - Determinants of the Size of Federal Deficit - *Government Debt:* Sources and Burden of Public Debt: Theories - Principles of Debt Management and Repayment - *Deficit Financing* of the Government.

Fiscal Policy: Objectives - Fiscal Policy and Price Stability - Full Employment, Economic Growth and Equity Interdependence between Fiscal and Monetary Policies - Fiscal Policy for Stabilization - Automatic versus Discretionary Stabilization.

Text Books: [Please refer to the Latest Editions]

1. Anderson John E, *Public Finance Principles and Policy*, Houghton Mifflin Company, Boston, USA.
2. Hyman David N, *Public Finance - A Contemporary Application of Theory to Policy*, Thomson South-Western, Ohio, USA.
3. Ulbrich Holley, *Public Finance - In Theory and Practice*, Thomson South-Western, Ohio, United States of America.

References: [Please refer to the Latest Editions]

1. Buchanan J.M, *The Public Finance*, Richard D. Irwin, Homewood.
2. Musgrave R.A and P.A. Musgrave *Public Finance in Theory and Practice*, McGraw-Hill Kogakusha, Tokyo.
3. Stiglitz J.E, *Economics of Public Sector*, Norton, New York.
4. Tyagi B.P, *Public Finance*, Jaiprakashnath and Company, Meerut, India.

M.A. ECONOMICS

II-SEMESTER

Course No: 5 [Soft Core-2] 3 Credits

Course Code: (II-SC. Ele: 2.5.1) DEVELOPMENT ISSUES AND POLICIES

Preamble: The focus of this Course is on various development policy matters pertaining to the Third world countries. The modules make an attempt to study the critical issues pertaining to various sectors and discuss the development policy initiatives. However, the crucial importance of institutional factors in economic development has been taken care of by incorporating social, state and market forces in the context of development. At the same time the development prospects are also duly recognized by considering the development goals of the 21st century.

Module-1: Development: Sectoral Aspects

Agriculture and Economic Development - Efficiency and Productivity - Sustainable Agriculture - Globalization and Agriculture- Agricultural Development Policy - Rationale of Industrialization - Critical Issues in Industry Development - Terms of Trade between Agriculture and Industry - Industry Development Policy - Infrastructure and Economic Development - Critical Issues in Infrastructure Development - Infrastructure Development Policy - Information and Communication Technology.

Module-2: Trade and Economic Development

Trade and Economic Development - Trade as an Engine of Growth- Static and Dynamic Gains, Declining Terms of Trade -Prebisch - Singer and Myrdal's Thesis - Trade Liberalization and Trade Policy Debate - WTO and Developing Countries - GATS.

Module-3: Social aspects of Development

Food Security - Health - Education and Nutrition - Population Problem - Theory of Demographic Transition - Population as limit to Growth and Ultimate Source - Human Resource Development - Social Capital - Population, Poverty and Environment - Environment Policy.

Module-4: Macro Economic Policies and Development

Role of Monetary and Fiscal Policies in Developing Countries - Inflation and Economic Development - Resources Mobilization, Internal and External - Foreign Direct Investment, Multinational Corporations and Developing Countries.

Module-5: Resources Allocation for Development

Need for Investment Criteria in Developing Countries, Present vs Future, Alternative Investment Criteria - Cost Benefit-Analysis - Social Cost-Benefit Analysis - Shadow Prices - Project Appraisal- UNIDO Guide Lines.

Module-6: Institutions and Development

Market and Market Failure - State and State Failure - Changing Role of State in Economic Development - Neo-Liberal State - Issues in Good Governance, Policy Initiatives - Rent Seeking - Parallel Economy - Liberalization as an instrument to Combat Corruption - Development Goals in the 21st Century.

References: [Please refer to the Latest Editions]

1. Adelman, Irma, *Theories of Economic Growth and Development*, Stanford University Press, Stanford.
2. Behrmans, T.N. Srinivasan, *Handbook of Development Economics*, Vol.3. Elsevier, Stendam.
3. Debraj Ray, *Development Economics*, Princeton University Press Princeton New Jersey.
4. Gerald M Meier, James E Eanch, *Leading Issues in Economic Development*, Oxford New York.
5. Ghatak, *An Introduction to Development Economics*, Allen and Unwin.
6. Kindleberger, *Economic Development*, McGraw Hill, New York.
7. Robert J Barro and Xanier Sale-I-Martin, *Economic Growth*, McGraw Hill.
8. Srivastava O. S., *Economics of Growth, Development and Planning*, Vikas, New Delhi.
9. Stuart R Lynn, *Economic Development: Theory and Practice for a Divided World*, Prentice Hall, New Jersey.
10. Thirlwall A.P, *Growth and Development*, 6th Education, West press Pvt. Ltd. New Delhi.
11. Todaro Michael P, *Economic Development in the Third World*, Orient and Longman, United Kingdom.
12. Todaro Michael P. and Stephen C. Smith, *Economic Development*, Addison Wesley, Boston.

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M.A. ECONOMICS

II-SEMESTER

Course No: 5 [Soft Core-2] 3 Credits

Course Code: (II-SC.Ele: 2.5.2) OPTIMIZATION TECHNIQUES-II

Preamble: This course is in continuation of Optimization Techniques-I of the previous semester and is devised with an explicit purpose of providing students with an exposure to these optimization methods which have succeeded in elevating economics to the level almost of a science.

Module-1: Dynamic Programming

Analysis of Dynamic Phenomena - Structure of Multistage Decisions - Bellman's Principle of Optimality - Applicability of Dynamic Programming - Numerical Solutions - Computational Feasibility - Sensitivity Analysis - Models with an Infinite Horizon - Discrete Dynamic Programming - Probabilistic Dynamic Programming - Dynamic Programming in Markov Chains.

Module-2: System Theory

The Notion of A System - State and System Equivalence - State Space Theory of Linear Time Varying Systems - Linear Systems - The Standard form Transfer Function of the Standard Form - Theory of Systems - Non-Linear Feedback System - Stability Theory - Stability of Systems of Direct Control - The Method of Virtual Liberalization - Decomposition of Large Scale Systems: Hierarchal Control.

Module-3: The Calculus of Variations

Functional and Theorem Variations - A Necessary Condition: The Euler Equation - Variational Problems with Constraints - Fixed End Point and Natural Boundary Problems - Variable End Points - Broken External and the Weierstrass Erdman Corner Conditions - Variations of Functional - The Legendre Condition - The Jacobin Condition - The Weierstrass Condition for Strong Extrema - The Legendre Clebsch Condition - Sufficient Conditions.

Module-4: The Theory of Optimal Control

The Dynamic Optimization Problem - The Control Problem - The State of the Dynamic System - The Control Variables - Controllability and Observability - An Objective Functional Form - The Calculus of Variations to Optimal Control - Pontryagin's Maximum Principle - Transversality Conditions - Optimal Control with Equality and Inequality Constraints - Dynamic Programming - Hamilton Jacobi Equation and the Euler Equation - Bang Bang Control and Time Minimum Problems - Singular Control - Linear Regulator Problems - Linear Tracking Problems - Sensitivity Analysis - Cross Sensitivity - Objective Functional Sensitivity - Stability and Sensitivity - Robustness Analysis - The Optimum Linear Discrete Filter - The General Discrete Kalman Filter.

References: [Refer to the Latest Editions]

1. Bellman, R.E. and S.E.Dreyfus, *Applied Dynamic Programming*, Princeton University Press, and Princeton.
2. Chakravarty, S., *Capital and Development Planning*, MIT Press, Cambridge, Mass.
3. Chow, G.C, *Analysis and Control of Dynamic Economic Systems*, John Wiley, New York.
4. Hadley, G. and M.C. Kemp, *Variational Methods in Economics*, North-Holland, Amsterdam.
5. Optner, S.L., (Ed), *Systems Analysis*, Penguin Books, Harmondsworth.
6. Sage, A.P. and J. L. Melsa, *Estimation Theory with Applications to Communications and Control*, McGraw-Hill, New York.
7. Zadeh, L.A and C.A. Desoer, *Linear System Theory*, McGraw-Hill, New York.

M.A. ECONOMICS

III - SEMESTER

Course No: 2 [Hard Core-9] 3 Credits

Course Code: (III-HC: 3.2)

RESEARCH METHODOLOGY AND QUANTITATIVE METHODS FOR DATA ANALYSIS

Preamble: Research as defined in Webster's 'new international dictionary' consists of "careful or critical inquiry or examination in seeking facts or principles; diligent investigation in order to ascertain something". This emphasis of the fact that - research in its broader sense is a purposive investigation or inquiry. The main purpose of research is to describe, interpret and explain phenomena by relating it to other phenomena, thereby setting it within its proper context and by making its meaning or sense explicit through its chain of interconnections. This Course will give a thorough insight to acquire research skills and capabilities.

Module-1: Introduction to Research Process

What is Research? - Meaning and Characteristics - Types of Research - Methods - Planning a Research - Identification of Research Problem - Defining the Research Problem - Theoretical Foundation - Review of Literature - Objectives - Hypotheses - Difference between a Proposition, a Hypothesis and a Theory - Data Source - Sampling - Scope - Methodology - Logic of Inquiry - Research Design - Reference and Documentation in the Library - Need and Importance of Research in Economics - Applicability - Plagiarism - Limitations and Ethical Issues in Research.

Module-2: Types and Methods of Research

Classification of Research: Pure and Applied Research - Qualitative, Quantitative and Mixed - Exploratory, Descriptive, Diagnostic, Evaluation, Action and Experimental Research - Historical Research - Surveys - Case Study - Field Study - Steps in Research.

Module-3: Data Sources and Methods of Data Collection

Sources of Data: Primary and Secondary Sources of Data - Quantitative Data: Availability of Sources - Time Series Data - Cross Section Data and Pooled Data - Census, Reports and Documents, other Published and Unpublished Sources.

Qualitative Methods of Data Collection: Direct Observation - Indirect Observation: Interview Method, Schedules and Questionnaires - Questionnaire Designing Procedure - Case Study, Projective Methods - Simulation - Merits & Demerits.

Module-4: Sampling Considerations and Data Processing

Sampling Considerations: Concepts - Sample v/s Census - Principles of Sampling Design & Process - Types of Sample Design: Probability Sampling Techniques: Simple Random, Stratified Random, Cluster and Multi-Stage and other Methods of Sampling. Non-Probability Sampling Techniques: Quota Sampling, Convenient Sampling, Purposive Sampling, Judgment Sampling and other Methods - Determination of Sample Size - Advantages and Disadvantages - Errors in Sampling.

Data Processing: Processing and Distribution - Field Work Validation - Tabulation - Editing - Coding - Classification and Tabulation of Data - Presentation - Graphical Representation.

Module-5: Data Analysis and Interpretation (Theoretical Exposure)

Univariate and Multivariate Data Analysis - Descriptive vs Inferential Analysis - Descriptive Analysis of Univariate Data and Bivariate Data - Testing of Hypotheses: Concepts, Steps in Testing of Hypothesis.

Estimation of Mean: Test of Single Sample Mean - Two Independent Means Tests - Testing for Means of Paired Data - Testing for the Equality of 'K' Population Means - Assumptions for Analysis of Variance - Between Treatments Estimate of Population Variance - Within Treatments Estimate of Population Variance - Comparing the Variance of Estimates - The F Test - Multiple Comparison Procedures.

Estimation of Variance: Test of Single Sample Variance - Two Sample Variance Test.

Non-Parametric Tests: Advantages & Disadvantages - Chi-square tests - Tests for Randomness.

Introduction to Advanced Data Analysis Techniques: Correlation and Regression Analysis - Factor Analysis - Discriminant Analysis - Cluster Analysis - Multidimensional Scaling.

Module-6: Report Writing and Presentation of Results

Importance of Report Writing - Types of Reports: Brief Reports, Detailed Reports, Technical Reports and Business Reports - Report Preparation - Report Structure: Preliminary Section, Main Report - Interpretations of Results - Research Findings and Suggested Recommendations - Limitations of the Study, and End Notes - Report Writing: Report Formulation - Effective Documentation: Need and Guidelines: Presenting Tabular Data, Visual Representations: Tables, Graphs, Charts - Presenting Footnotes and Bibliography - Oral Presentation of Research.

References: [Please refer to the Latest Editions]

1. Bryman Alan, *Social Research Methods*, Oxford University Press, Oxford.
2. Kothari C.R., *Research Methodology*, New Age International Publication, New Delhi.
3. Krishnawamy O.R. and Ranganathan, M., *Methodology of Research in Social Sciences*, Himalaya Publishing House, Bangalore.
4. Kurian C.T. *Research Methodology in Economics*, Institute of Development Studies, Madras.
5. Majumdar P.K., *Research Methods in Social Science*, Viva Books Private Limited, New Delhi.
6. Robert, A. Day, *How to Write and Publish a Scientific Paper*, Cambridge University Press, Great Britain.

M.A. ECONOMICS

III - SEMESTER

Course No: 3 [Hard Core-10] 3 Credits

Course Code: (III-HC: 3.3)

THEORY OF ECONOMETRICS

Preamble: The explosive growth in econometric literature in the last few decades hardly needs any emphasis. Introduction of this Course can be viewed as an attempt to expose the students to the basic concepts of econometrics. Keeping this in mind, the focus of this Course will be on a meaningful interface between theory and application - the emphasis being more on empirical analysis rather than theoretical rigour.

Module-1: Introduction to Econometrics

Meaning - Nature and Scope of Econometrics - Distinction between Economics and Econometrics, Mathematics and Econometrics, Statistics and Econometrics - Methodology of Econometrics - Types of Econometrics.

Module-2: Simple and Multiple Regression Model

Simple Regression: Meaning - Basic Ideas - Significance of Disturbance Term. Method of Estimation: Ordinary Least Squares and Maximum Likelihood Estimation - BLUE Property - Coefficient of Determination - Assumptions - Hypothesis Testing - Confidence Interval and Test of Significance Approach - Testing Regression Coefficients - Interpretation of Results.

Multiple Regression: Meaning - Three Variable Regression Model - Partial Regression Coefficients - Method of Estimation - R-Square and Adjusted R-Square - Hypothesis Testing - Testing Individual Regression Coefficient - Overall Significance Test - ANOVA.

Introduction to Matrix Approach to Estimation of Parameters of more than Three Variables.

Module-3: Practical Problems of Regression

Multicollinearity: Nature - Causes -Consequences - Detection - Remedial Measures.

Heteroscedasticity: Nature - Causes -Consequences - Detection - Remedial Measures.

Auto-Correlation: Nature - Causes -Consequences - Detection - Remedial Measures.

Module-4: Dummy Variable and Dynamic Regression Models

Dummy Variable Model: Meaning - Nature - Dummy Variable Trap - Dummy Variable Model with Single Qualitative Variable - Two Qualitative Variables - Dummy Variable Model with Mixture of Qualitative and Quantitative Variables.

Autoregressive and Dynamic Models: Role of Lag in Economics - Estimation Methods: Koyck's: Adaptive Adjustment and Partial Expectation Models - Almon Approach to Distributed Lag Models.

Module-5: Simultaneous Equation Models

Nature - Simultaneous Equation Bias - Identification: Under - Exact - Over Identification - Rules of Identification - Order and Rank Condition of Identification - Estimation of Simultaneous Equations Models: ILS, 2SLS, 3SLS, LIMLE, FIMLE.

References: [Please refer to the Latest Editions]

1. Damodar N Gujarati, *Basic Econometrics*, McGraw Hill, International Student Edition.
2. Damodar N Gujarati, *Econometrics by Example*, Palgrave Macmillan, United Kingdom.
3. Ghosh Sukesh K, *Econometrics- Theory and Applications*, Prentice Hall Private Ltd., New Delhi.
4. Koutsoyiannis A., *Theory of Econometrics*, The Macmillan Press Ltd., London.

M.A. ECONOMICS**III-SEMESTER****Course No: 4 [Hard Core-11] 4 Credits****Course Code: (III-HC: 3.4) INTERNATIONAL TRADE: THEORY AND POLICY**

Preamble: The course on International Economics aims to give a thorough understanding about the principles which govern international Trade theories and policies which affects the domestic economy. It gives theoretical basis to the structure of real trade dealings with factors affecting demand, supply and international equilibrium within the classical, neoclassical and modern framework of analysis. It adopts a macro approach in analyzing the principles of commercial policy. The effects of commercial policy on welfare and income distribution are included to enable the students to understand the basis and implications of trade policies adopted in general. Further, it concentrates on trade in dynamic perspective dealing with the influence of factors growth and technical progress on the terms of trade.

Module-1: Introduction

What is International Economics about? - The basis of International Trade - Internal and International Trade - The Importance of International Economics.

Module-2: International Trade Theories

Mercantilists Views on Trade - Trade based on Absolute Advantage: Adam Smith - Trade based on Comparative Advantage: David Ricardo - Mill's Reciprocal Demand - Comparative Advantage and Opportunity Cost.

The Standard Theory of International Trade:

The Production Frontier with Increasing Costs - Community Indifference Curves - Equilibrium in Isolation - The Basis for the Gains from Trade with Increasing Costs - Trade based on Difference in Tastes.

Demand and Supply, Offer Curves and the Terms of Trade:

Partial Equilibrium Analysis - Offer Curves - General Equilibrium Analysis - Relationship between General and Partial Equilibrium Analysis.

Factor Endowments and The Heckscher-Ohlin Theory:

Assumptions of the Theory - Factor Intensity, Factor Abundance - Factor Endowments and Heckscher-Ohlin Theorem - Factor Price Equilibrium Theorem - Empirical Test of Heckscher-Ohlin Model. Leontief Paradox - Recent Developments in the Theories of International Trade: The Availability Doctrine - The Stolper-Samuelson Theorem - The Vent for Surplus Approach - The Product Cycle Hypothesis.

Economic Growth and International Trade:

Growth of Factors of Production: Labour Growth and Capital Accumulation - The Rybczynski Theorem - Technical Progress - Growth and Trade: Small Country and The Large Country Case - Immiserizing Growth - Growth Changes Tastes and Trade in both Nations.

Module-3: International Trade Policies

Trade Restrictions: Tariffs - Partial Equilibrium Analysis of a Tariff - The Theory of Tariff Structure - General Equilibrium Analysis of a Tariff - The Optimum Tariff.

Non-Tariff Trade Barriers and the New Protectionism: Import Quotas - Voluntary Export Restraints - Technical, Administrative and other Regulations - International Cartels - Dumping - The Political Economy of Protectionism and Strategic Trade and Industrial Policy - Outstanding Trade Problems.

Module-4: Economic Integration

Customs Unions and Free Trade: Introduction - Trade Creating Customs Union - Trade Diverting Customs Union - Static and Dynamic Benefits from Customs Union - History of Economic Integration - The European Economic Community - The European Free Trade Association - NAFTA - Attempts of Developing Countries towards Economic Integration - SAARC.

Module-5: World Trade Organization

General Agreements on Tariffs and Trade (GATT) to World Trade Organization (WTO) - Objectives and Functions - Trade Related Intellectual Properties (TRIPs) - Trade Related Investment Measures (TRIMs) - General Agreements on Trade in Services (GATS) - Trade and Environment - Trade Liberalization - Recent Developments in PRIDS and TRIMS.

Module-6: International Trade and Economic Development

Importance of Trade in Development - Terms of Trade and Economic Development - Import Substitution and Export Promotion - Current Problems and Demands of Developing Countries related to Trade.

Text Books: [Please refer to the Latest Editions]

1. Dominick Salvatore, *International Economics*, Macmillan Publishing Company, New York.
2. Kindleberger C P, *International Economics*, R.D Irwin, Home Wood, Illinois, USA.
3. Peter H Lindert and Thomas A Pugel, *International Economics*, Irwin, Chicago.

References: [Please refer to the Latest Editions]

1. Bardhan P K, *Economic Growth, Development and Foreign Trade*, Willy Int. New York, USA.
2. Mannur H G, *International Economics*, Vikas Publishing House Pvt. Ltd, New Delhi.
3. Mithani D M, *International Economics*, Himalaya Publishing House, Mumbai.

M.A. ECONOMICS

III-SEMESTER

Course No: 5 [Soft Core-3] 3 Credits

Course Code: (III-SC.Ele: 3.5.1)

INDIAN PUBLIC FINANCE

Preamble: The course on “Indian Public Finance” aims at giving the students an analytical understanding of the growth, pattern and terms in public expenditure, and revenue, and the role of the government in the budgetary process. The Course also focuses on the centre-state financial relations, growth in public debt and its management.

Module-1: Budget Trends and Policy in India

Classification of the Central Government Budget - Budgetary Trends in India - Budgetary Policy in India since 1951 (a Brief Review) - Long-term Fiscal Policy -1985.

Module-2: Public Expenditure in India

Expenditure of Central Government - Trends in the Expenditure of the Central Government - Expenditure of State Governments - Trends in Public Expenditure in India on: Security Services, Social Services, Development Services - Subsidies and their Impact - General Problems of Public Expenditure.

Module-3: Public Revenue: Direct and Indirect Taxes; Non-Tax Revenue, and Agricultural Taxation in India

Direct Taxes: Sources of Tax Revenue of the Central and State Governments - Revenue from Taxes on: Personal Income, Corporate Income, Capital Gains, Wealth, Property and Capital Transactions- Direct Taxes Enquiry Committee Report - Direct Tax Law Committee Report.

Indirect Taxes: Commodity Taxation of the Central Government: Customs Duties, Union Excise Duties - Commodity Taxation of State Governments: State Excise Duties, Sales Tax, Motor Vehicles Taxation, Entertainment Tax etc.,

Non-Tax Revenues: Public Enterprises and Other Sources. Non-Tax Revenue of the States: Public Enterprises, Posts and Telegraphs, Currency and Mint, Irrigation, Forests, Electricity Schemes, Road and Water Transport Schemes.

Agricultural Taxation: Importance of Agricultural Taxation - Present Position of Agricultural Taxation - Burden of Agricultural Taxation in India and Proposals - Raj Committee Report.

Module-4: Financing of Plans, Deficit Financing and Public Debt in India

Pattern of Financing of the Plans - Merits and Demerits of Development Finance .

Deficit Financing: As a Source of Plan Finance - Extent, Effects and Limit of Deficit Financing - Concepts used - Trends in Deficits.

Public Debt: India’s Public Debt before Independence (a brief mention) and after Independence - Trends and Composition of Public Debt of Central and State Governments.

Indian Railway Finance: Early Developments - Revised Conventions - Causes for Persistent Deficit and Recent Surplus in Railways - Budget of the Year.

Module-5: Centre State Financial Relations and Local Finance

Evolution of Federal Finance in India - Financial Relations under the Constitution - Finance Commissions - Recommendations of the Fourteenth Finance Commission - Centre/State Conflict on Finances.

Local Finance: Local Bodies and their Functions - Finances of Local Bodies - Local Taxation.

Module-6: Budgets, Fiscal Policy in India, and Parallel Economy.

Budget at Glance (Latest) - Its Analysis and Implications.

Tax Reforms and Policy - Chellaiah Committee Recommendations - Task Force on Taxes - Kelkar Task Force Proposals - Introduction of Modified Value Added Tax (MODVAT) - Goods and Services Tax (GST).

Parallel Economy: Meaning, Magnitude and Consequences - Major Causes - Impact on the Economy - Government Measures - Suggested Measures.

Text Books: [Please refer to the Latest Editions]

1. Mankar V.G., and Suseela Sarma, *Public Finance- Theory and Practice*, Himalaya Publishing House, Mumbai.
2. Sundaram K.P.M and K.K. Andley, *Public Finance- Theory and Practice*, S. Chand and Company Ltd., New Delhi.

References: [Please refer to the Latest Editions]

1. Agarwal A.N. *Indian Economy-Problems of Development and Planning*, Wishwa Prakashan, New Delhi.
2. Bhatia H.L. *Public Finance*, Vikas Publishing House Pvt., Ltd.
3. Datt Ruddar and K.P.M.Sundaram, *Indian Economy*, S. Chand and Co., Ltd., New Delhi.
4. Tyagi B.P., *Public Finance*, Jai Prakash Nath & Co., Meerut.

Reports: [Please refer to the Latest Editions]

1. Government of India, *Annual Budget Reports*, Ministry of Finance, New Delhi.

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M.A. ECONOMICS

III-SEMESTER

Course No: 5 [Soft Core-3] 3 Credits

Course Code: (III-SC.Ele: 3.5.2) MATHEMATICAL ECONOMICS-I

Preamble: The field of mathematical economics can be defined as one that includes various applications of mathematical concepts and techniques to economics, particularly economic theory. This course is the logical extension of the optional course on Optimization Techniques because here we apply many of those techniques. The Course deals with the applications of mathematical techniques of analysis to microeconomic theory comprising consumer theory, producer theory, and oligopoly theory.

Module-1: Consumer Theory

Commodities and Prices - Consumer Preferences - Utility Functions - Properties of Preferences of Utility Functions - Demand without Transitivity - Demand under Separability - Expenditure Functions and Indirect Utility Functions - Properties of Differentiable Utility Functions - Differentiable Demand - Separability and the Slutsky Matrix - Additive Utility and Demand.

Module-2: Producers' Theory

Production Technology - Properties of the Production Function and Duality - Applications of the Duality Principle: Profit and Cost Functions - Functional forms of the Production Function - Capital Stock Aggregation: The Cambridge Controversy - Disequilibrium Models of Input Demand - Behaviour of the Firm Under Regulatory Constraints - Economies of Scale and Scope in the Multi-Product Firm.

Module-3: Oligopoly Theory

Overview of Oligopoly Theory - The Early History - Single Period Models - Co-operative Versus Non-Cooperative Equilibria - Stability and Reaction Functions - Multi-Period Models - Lagged Response - Reaction Function Models - Models with Quick Response or Adjustment Costs - Models with a Time Dependent Structure - Oligopoly and Game Theory - Entry and Exit in Oligopoly Models - Bilateral Monopoly - Oligopoly and General Equilibrium Models - The Core Theory Approach - The Impossibility Theorem.

Module-4: Investment Theory

One-Period Portfolio Selection - Risk Measures for Securities and Portfolios in the one-Period Model-Spanning, Separation and Mutual Fund Theorems - Models of One-Period Portfolio Selection - Time-State for the Firm - Inter-temporal Consumption and Portfolio Selection Theory.

References: [Refer to the Latest Editions]

1. Arrow, K.J. and M. Intriligator, Eds, *Handbook of Mathematical Economics*, Volume II, North-Holland, Amsterdam.
2. Arrow, K.J., S. Karlin and P. Suppes, Eds. *Mathematical Methods in the Social Sciences*, Stanford University Press, Stanford.
3. Friends, I. and J. Bicksler, Eds. *Studies in Risk and Return-Vols. I and II*, Ballinger, Cambridge, Mass.

M.A. ECONOMICS

IV-SEMESTER

Course No: 1 [Hard Core-12] 4 Credits

Course Code: (IV-HC: 4.1)

MANAGERIAL ECONOMICS***

Preamble: The course deals with the application aspects of Microeconomics and Macroeconomics to decision-making science. This helps the student to develop not only the analytical capabilities but applications skills too also. This is needed in the changing global economic and management scenario.

Module-1: Nature and Scope of Managerial Economics

Introduction - Definition, Relationship of Managerial Economics to Economic Theory as well as Decision Science. Organization of Business Firms - Concepts and Types of Business Organization, Proprietorship, Partnership, Joint Stock Company, Corporation, Co-operatives. Case Study Method : Analyze a Case and Usefulness of Case Study.

Module-2: Organizations and Objectives of Firm

Reasons for the existence of Firms and their Functions - Objective and Value of the Firm: Model of Profit Maximization, Managerial Theories of Firm, Baumol's Sales Revenue Maximization Model, Baumol's Theory with Advertisement, Dynamic Model, Williamson's Model, Marris Model of Managerial Enterprises, Behaviour Theories - Simon's Satisfising Model - Cyert and March's Theory of Firm. Measuring Efficiency of the Firm: Profitability Ratios, Financial Stability, Solvency and Gearing.

Module-3: Demand Estimation and Forecasting

Identification Problem - Marketing Research Approaches - Regression Analysis - Problems in Regression Analysis - Demand Estimation.
Demand Forecasting: Time Series Analysis - Smoothing Techniques - Barometric Methods - Econometric Models (Input-Output Forecasting).

Module-4: Optimization Technique: Linear Programming

Problems of Optimization - Linear programming for Optimization -Meaning, Assumptions and Applications of Linear Programming - Basic Linear Programming Concepts - Procedure used in Formulating and Solving Linear Programming Problem - Linear Programming and Profit Maximization - Linear Programming and Cost Minimization - Graphical Solution and Simplex Method - Dual Problem and Shadow Prices - Linear Programming and Logistics in the Global Economy - Game Theory and Optimization Technique in Decision Making Process.

Module-5: Pricing Practices and Strategies and Profit Analysis

Pricing Practices: Specific Pricing Problems - Popular Pricing Practices: Cost-Oriented Pricing, Cost-Plus Pricing and Other Price Determinants, Peak - Load Pricing, Price over the Life Cycle of the Product, Penetration Price - Pricing of Multiple Products - Price Discrimination - International Price Discrimination and Dumping - Transfer Pricing.

Profit Analysis: Nature and Function of Profits: Business versus Economic Profit - Theories of Profit: Residual Claimant Theory, Wage Fund Theory, Dynamic Surplus Theory, Innovation Theory - Profit Policy - Break- Even Analysis and Profit Measurement, Profit Forecasting.

Module-6: Capital Budgeting, Regulation and Risk Analysis

Capital Budgeting- An Overview - Meaning and Importance - Capital Budgeting Process. Capital Budgeting Decisions - Factors Influencing in Investment Decision - Determining the Size of Capital Budget - Methods used for Investment Decisions: Cost-Benefit Analysis, Steps for Capital Project Evaluation and Techniques for Investment Appraisal - Sources of Fund for Long-Term Financing - Measurement of Cost.

Regulation and Risk Analysis: Role of the Government in the Economy - Risk and Uncertainty in Managerial Decision Making - Long Run Investment Decisions.

Self Study: Theory of Demand - Price and Output Determination under various Market Conditions - Profit Theories - Role of Government in Business

Text Books: [Please refer to the Latest Editions]

1. Mc Guigon R. James, R. Charles Moyer, Frederick H Deb, Harris (2002), *Managerial Economics: Applications, Strategy and Tactics*, South Western, USA
2. Salvatore Dominick, *Managerial Economics in a Global Economy*, McGraw Hill Inc., New York.

References: [Please refer to the Latest Editions]

1. Keat Paul G. and Philip K.Y. Young, *Managerial Economics- Economic Tools for Today's Decision Makers*, Prentice Hall, New Jersey.
2. Mehta P.L., *Managerial Economics: Analysis, Problems and Cases*, Sultan Chand and Sons, New Delhi.
3. Petersen H. Craig and W. Cris Lewis, *Managerial Economics*, Maxwell Macmillan International Editions, New York.
4. Samuelson William F, and Stephen G. Marks, *Managerial Economics*, John Wiley and Sons, Inc., New Jersey.
5. Shankaran S. *Managerial Economics*, Margham Publications, Madras.
6. Thomas Christopher R. and Charles Maurice S., *Managerial Economics*, McGraw-Hill Irwin, Boston.

Note: * A Student who intends to earn just a minimum of 72 Credits in Economics (instead of 76 Credits) can opt to give up a course on Managerial Economics with 4 Credits**

M.A. ECONOMICS

IV-SEMESTER

Course No: 2 [Hard Core-13] 4 Credits

Course Code: (IV-HC: 4.2.1) STATISTICAL SOFTWARE FOR DATA ANALYSIS* AND PROJECT WORK**

* [Statistical Software for Data Analysis: Practical Exam 50 Marks] &

** [Project Work: 30 Marks & Viva Voce: 20 Marks]

Preamble: In the era of information technology proper use of information technology in most of the disciplines has become a necessity. Economics being an empirical science, computer has emerged as the pivotal instrument for economic analysis, research and forecasting. Given the highly quantitative aspect of research in economics, it becomes imperative for students to equip themselves with a basic knowledge of statistical software if they are to keep abreast of the explosive growth of knowledge in the rapidly growing area. This is essential for anyone intending to specialize in applied economics, as statistical software are the only interface between data and their meaningful analysis (especially if the data collection is done at a substantially sophisticated level). Therefore the students of economics need to be equipped with skills and tools based on statistical software. This will not only enhance their employability but also prepare them for future challenges. This course is basically tailored to meet this current lacuna in the research in applied economics.

Module-1: Introduction - Getting Started - Entering Data in the Data Viewer - Defining Variables - Recoding Variables - Computing new Variables - Data Analysis with Statistical Software - Generating Frequency Table, Bar Chart, Pie Chart, Histogram, Arithmetic Mean, Median, Standard Deviation and Range, Contingency Table, Chi-square, and Cramer's V, Pearson's r , and Spearman's rho, Scatter Diagrams - Saving, Retrieving Data - Printing Output.

Module-2: Matrix and Determinants Operations - Computing Inverse Matrix, Input-Output Analysis - Construction of Different Tables - Transaction Matrix, Technical Coefficient Matrix, Computation of Values on the Basis of Problems.

Module-3: Computing, Discounting and Calculation of Present Value - Linear Programming - Procedure used in Formulating and Solving Linear Programming Problems- Graphical and Simplex Methods, Profit Maximization and Cost Minimization.

Module-4: Construction of Frequency - Generating Graphs - Histogram, Pie Charts, Bar - Graphs, Calculation of Probability, Calculation of Central Tendencies and Measures of Dispersion.

Module-5: Estimation Correlation Coefficient - Zero Correlation Matrix - Partial Correlation - Estimation of Simple Regression - Ordinary Least Squares - Estimation of Multiple Regression.

Module-6: Test of Statistical Significance - 't' Test - F Test - ANOVA Test - Chi-Square Test Construction of Index Numbers - Deflating a Series by Price Indexes - Time Series Analysis and Forecasting.

References: [Please refer to the Latest Editions]

1. Bryman Alan, *Social Research Methods*, Oxford University Press, Oxford.
2. Edward Minieka, *Statistics for Business with Computer Application*, South-Western, USA
3. Sonia Taylor, *Business Statistics*, Palgrave.

COMPUTER BASICS

Self-Finance Course
[To be pursued during II or III Semester]

Essential Pre-requisite to pursue Statistical Software for Data Analysis

(A SUPPORTIVE COURSE TO STATISTICAL SOFTWARE FOR DATA ANALYSIS - Course IV in IV Semester)

Module-1: Introduction to Digital Computers

Historical Perspective of Computer Development - Generation of Computers - System Logical Organization - Number Systems: Binary, Octal, Hexadecimal.

Module-2: Computer Hardware

Fundamentals of Computers - Organization and Components of Computers - Computer Hardware - Input Devices: Keyboard, Mouse, and VDU - Output Devices: Printers (various types), Plotter and Monitor, Scanner, Digitizer etc., - Secondary Storage Devices: Floppy Disk, Hard Disk and CD ROM - Specification of peripherals and Computers.

Module-3: Computer Software

Different Types of Software, Translator and Compilers - Application Software - Algorithms and Flow Chart - Programming Language - Errors - Types - Introduction Operating System and Utilities.

Module-4: Computing Environment

Types of Computers: Micro Computers, Mini Computers, Main Frame Computers, Desk Top Computers, Note Book Computers and Work Stations - Computer Networks - Brief Introduction to LAN, WAN and Internet.

Module-5: Office Automation

Various Types of Operating System - MS DOS, Basic Commands - Windows 1998 and 2000 - Introduction - Working with Windows - Copying, Creating, Deleting Files and Folders in Windows - Introduction to Window Application - Programme - MS Office - Word, Excel and Power Point - Information Integrity Ensuring Integrity - Computer Security - Preventive Measures and Treatment.

Module-6: Data Processing and Data Management

Inputting Data from the Keyboard - Creating File in Microsoft Excel - Loading of existing Data Set - Inputting Data from Raw Data File - Copying Data from Microsoft Excel to Clipboard - Adding Two Sheets/Files, Editing Files - Printing, Saving and Copying Edited Files.

Module-7: File Processing

File Processing - Sorting - Searching - Merging - Summarizing - Direct Access - Storage - Retrieval - File Organization Techniques - Documentation Debugging Storage and Time Execution Estimation - System Security.

Module-8: Internet

Introduction to Internet - World Wide Web - Electronic Mail - Browsing the Web - Utilities - Tools and Techniques - Introduction to e-Commerce - e-payment-e-security- e-Governance - e-economics.

References: [Please refer to the Latest Editions]

1. Reader's Digest, *How to Do Just Anything on a Computer*, London.
2. Saxena Sanjay, *A First Course in Computers*, Vikas Pub., House Private Ltd, New Delhi.

-OR-

M.A. ECONOMICS

IV-SEMESTER

Course No: 2 [Hard Core-13] 4 Credits

Course Code: (IV-HC: 4.2.2) INDIAN ECONOMIC POLICIES

Preamble: Policy analysis emerged as a professional field in the late 1960s, and have matured in applying its "problem solving" skills to a wide range of problems in the last three decades. The field now has its own professional organizations, its own scholarly journals, and academic graduate programs. This course introduces students to various approaches to policy analysis with examples from different sectors and key policy issues.

Module-1: Introduction to Policy Analysis

Policy Analysis: Meaning and Definition - Public Policy - Basic Concepts and Theoretical Background for Policy Analysis: The Problem of Collective Action, Basic Economics of Markets and Human Behaviour - Welfare Economics - the Role of the State - Ethical and Political Dimensions of Policy Analysis.

Module-2: Steps in Policy Analysis

(i) Verify, Define and Detail the Problem: Verifying the Problem - Definition - Developing Problem Statements - Back-of-the-Envelope Calculations - Quick Decision Analysis - Political Analysis - First Cut Policy Analysis.

(ii) Establish Evaluation Criteria: Meaning - Types of Criteria: Reliability and Validity - Economic Criteria - Equity Criteria - Technical Criteria - Political Criteria - Administrative Criteria.

(iii) Identify and Assess Alternative Policies: Generating Alternatives - Sources of Alternatives - Assessing Policy Alternatives - Forecasting - Economic Analysis - Discounting - Net Present Value - Cost-Benefit Ratios - Internal Rate of Return - Sensitivity Analysis - Risk Analysis - Political Analysis - Implementation Analysis -

(iv) Display and Distinguishing among Alternatives: *Displaying Policy Alternatives*: Decision Rules - Paired Comparisons - Grading Method, Lexicographic Ordering Non-Dominated Alternatives - Equivalent Alternatives - Weighted Decision Criteria, Groller Scorecard.

(vi) Implement, Monitor, and Evaluate the Policy: Implementation Analysis - Policy Monitoring - Policy Evaluation - Formative Evaluation - Summative Evaluation - Evaluation Design

Module-3: Methods in Policy Analysis

Selecting Techniques - Cross-Cutting Methods, Identifying and Gathering Data - Library Search Methods - Interviewing for Policy Data - Quick Surveys - Assessing Information Quality - Basic Data Analysis - Communicating the Analysis.

Module-4: Agriculture, Industry, Finance, Tax and External Sector Policies in India

Agricultural Policy: National Policies on Agriculture - Agriculture Policy Vision 2020 - Subsidies - Minimum Support Prices - Public Distribution System - Terms of Trade in Agriculture - Agricultural Policy in the Context of WTO - Impact of Agricultural Policy on Agricultural Sector.

Industrial Policy: Industrial Policy in India since Independence - Industrial Licensing Policy - New Economic Policy - Impact of Policy Changes on Industrial Production - Structural Changes - Corporate Social Responsibility (CSR)

Financial Sector: Banking Sector Policies - Mergers & Amalgamation - NBFIs - Insurance Sector - Financial Sector Reforms - Inflation Targeting Policy – Monetary Policy.

Tax Policy Reforms: Tax Policies: an Overview - Goods and Services Tax (GST) -Fiscal Policy.

External Sector: Trade Policy in India since Independence - EXIM Policy - Policies relating to Foreign Direct Investment - Technology Policy - International Labour Migration and Remittances.

Module-5: Social Sector Policies in India

Population Policies - Demographic Dividend - Population Policy 2000 - Poverty and Unemployment Policies - MGNREGA - Unorganised Sector Labour Policies - Health Policies - Health for All. Education Policies & Right to Education (RTE) - Food Security and Right to Food - Right to Employment - Right to Information - MDGs and SDGs.

Module-6: Macroeconomic Policies Issues in India

Social and Political Landscape in India - New Economic Policy 1995 - Structural Adjustments - Liberalization, Privatization (EXIT Policy) and Globalization - Impact of WTO: TRIPs, TRIMs, & GATS.

References: [Please refer to the Latest Editions]

1. Acharya Shankar, *India's Economy: Some Issues and Answers*, Academic Foundation, New Delhi.
2. Anthony E. Boardman, David H. Greenberg, Aidan R. Vining, and David L. Weimer, *Cost-Benefit Analysis: Concepts and Practice*, Englewood Cliffs, New Jersey, Prentice-Hall.
3. Bardach, Eugene, *A Practical Guide for Policy Analysis: The Eightfold Path to More Effective Problem Solving*, Washington D.C.
4. David L. Weimer and Aidan R. Vining, *Policy Analysis: Concepts and Practice*, Englewood Cliffs, New Jersey: Prentice-Hall.
5. Dhar P. N, *The Evolution of Economic Policy in India-Selected Essays*, OUP, New Delhi
6. Dhar P.K., *Indian Economy: Its Growing Dimensions*, Kalyani Publications, Ludhiana.
7. Dunn, William N, *Public Policy Analysis: An Introduction*, Prentice Hall.
8. Dutt Ruddar, and K.P.M. Sundaram, *Indian Economy*, S. Chand and Company, New Delhi.
9. Dye, T. *Understanding Public Policy*, Englewood Cliffs, NJ, Prentice Hall.
10. Hanson James A., and Sanjay Kathuria (Ed), *India-A Financial Sector for the Twenty-First Century*, World Bank, Oxford University Press, New York.
11. Hanumantha Rao C. H. *Agriculture, Food Security, Poverty Environment - Essays on Post Reform India*, OUP
12. Kapila Uma, *Indian Economy since Independence*, Academic Foundation, New Delhi.
13. Kapila Uma, *Understanding the Problem of Indian Economy*, Academic Foundation, New Delhi.
14. Misra S.K. & V.K. Puri, *Indian Economy-Its Development Experience*, Himalaya Pub.,House, Mumbai.
15. NCAER, *Economic and Policy Reforms in India*, NCAER, New Delhi.
16. Patton & Sawicki, *Monitoring & Evaluating Implemented Policies*, Prentice Hall
17. Patton, Carl V. and David S. Sawicki, *Basic Methods of Policy Analysis and Planning*, Englewood Cliffs, New Jersey, Prentice Hall.
18. Vaidyanathan A, *India's Economic Reforms and Development*, Academic Foundation, New Delhi.

-OR-

M.A. ECONOMICS**IV-SEMESTER****Course No: 2 [Hard Core-13] 4 Credits****Course Code: (IV-HC: 4.2.3)****EVOLUTION OF ECONOMIC THOUGHT**

Preamble: The course is recommended as an essential input into the training of a student specializing in Economics. Its purpose is not merely to acquaint the students with economic ideas and how they developed over time, but also to provide them with information on the evolution of social thought, in which economic thought is only a part. It also helps to understand economic history in a general and develop ideas in articulating them. This course covers the analysis of economic ideas from Ancient Period to the Marginalists School. A critical study of the economic theories and the economic ideas of the great economic thinkers of the past are at once challenging, illuminating and enlightening. A historical reconstruction of the ideas of economic thinkers is essential for understanding and appreciating the controversial questions in the history of economic ideas. This course covers the analysis of economic ideas from Keynesian to New Classical Economics.

Module-1: Introduction and the Mercantilists School and the Physiocratic School

A Time Scale of Economic Ideas - The Five Major Questions - The Value of Studying Economics and Its History - Economic Ideas in Ancient and Medieval Period.

Overview of Mercantilism: Thomas Mun (Gerard Malyne, Charles Davenant, Jean Baptiste Colbert, Sir William Petty - An Overview of the Physiocrats Francois Quesnay (Anne Robert Jacques Turgot).

Module-2: The Classical School

Overview of the Classical School - Forerunners - Sir Dudley North, Richard Cantillon, David Hume.

The Classical School: Adam Smith Biographical Details - Important Influences - The Theory of Moral Sentiments - Wealth of Nations - The Economic Laws of a Competitive Economy.

Thomas Malthus: Historical and Intellectual Setting - Malthus's Population Theory.

David Ricardo: Biographical Details - The Currency Question - The Theory of Diminishing Returns and Rent - The Theory of Exchange Value and Relative Prices - The Distribution of Income.

Jeremy Bentham, Jean-Baptiste Say, Nassau William Senior, and John Stuart Mill.

Module-3: The Rise of Socialist Thought & German Historical School

Overview of Socialism - Henri Comte De Saint-Simon - Charles Fourier - Simonde De Sismondi - Robert Owen - Louis Blanc - Charles Kingsley.

Marxian Socialism: Biographical Details and Intellectual Influences - Marx's Theory of History - Assessment of Marx's Economics.

The German Historical School: Overview: Friedrich List - Wilhelm Rooscher, Gustav Schmoller, Max Weber.

Module-4: The Marginalist School-Forerunners & the Neoclassical School

Overview - Antoine Augustin Cournot - Jules Dupuit - Johann Heinrich Von Thunen. William Stanley Jevons. Carl Menger, Friedrich Von Wieser, Eugen Von Bohm-Bawerk. Francis Y. Edgeworth and John Bates Clark.

The Neoclassical School: Alfred Marshall, Monetary Economics & Departure from Pure Competition
Marshall's Life and Method - Utility and Demand - Supply - Equilibrium Price and Quantity - Distribution of income - increasing and Decreasing Cost Industries.

Monetary Economics: John Gustav Wickshell - Irving Fisher - George Hawtrey.

Departure from Pure Competition: Piero Sraffa - Chamberlin - Joan Robinson.

Module-5: Mathematical Economics, The Institutionalist School & Welfare Economics

Types of Mathematical Economics - Leon Walras - Wassily Leontief - John Von Neumann and Oscar Morgenstern - John R. Hicks - Linear Programming.

The Institutionalist School: Overview of the Institutionalist School - Thorstein Bunde Veblen - Wesley Clair Mitchell - John Kenneth Galbraith.

Welfare Economics: Vilfredo Pareto - Arthur Cecil Pigou - Ludwig Von Mises - Oscar Lange - Kenneth Arrow - James M. Buchanan.

Module-6: The Keynesian School

Overview of the Keynesian School - John Maynard Keynes - The Keynesian School: Developments since Keynes: Alvin H. Hansen - Paul A. Samuelson - The Post-Keynesians - The New-Keynesians.

Module-7: Theories of Economic Growth and Development & The Chicago School

Sir Roy F. Harrod and Evsey Domar - Robert M. Solow - Joseph Alois Schumpeter - Ragnar Nurkse - W. Arthur Lewis - Theodore W. Schultz.

The Chicago School: Overview - Milton Friedman - Robert E Lucas, Jr. - Gary S. Becker.

References: [Please refer to the Latest Editions]

1. Eric Roll, *A History of Economic Thought*, Rupa and Co, New Delhi.
2. Ingrid Hahne Rima, *Development of Economic Analysis*, Richard D. Irwin, inc. Illinois.
3. John Fred Bell, *A History of Economic Thought*, The Ronald Press Company, New York.
4. Joseph A Schumpeter, *Ten Great Economists, from Marx to Keynes*, OUP, New York.
5. Lewis H. Haney, *History of Economic Thought*, The Macmillan Company, New York.
6. Overton H. Taylor, *A History of Economic Thought*, McGraw-Hill Company, Inc. New York.
7. Overton H. Taylor, *A History of Economic Thought*, McGraw-Hill Company, Inc. New York.
8. Spiegel H W, *Development of Economic Thought*, John Wiley and Sons, inc., New York.
9. Stanley L. Brue, *The Evolution of Economic Thought*, The Dryden Press, Fort Worth.

M.A. ECONOMICS

IV-SEMESTER

Course No: 3 [Hard Core-14] 3 Credits

Course Code: (IV-HC: 4.3)

APPLIED ECONOMETRICS

Preamble: This course covers the statistical foundations of econometric theory as well as econometric methods and applications. The focus of this course will be therefore on an interface between these three facets that are essential for a proper understanding of econometric applications in economic analysis.

Module-1: Qualitative Dependent Variable Models

Nature of Qualitative Variables - Linear Probability Model - Logit Model - Probit Model - Tobit Model for Grouped and Ungrouped Data - Their Application in Economics.

Module-2: Time Series Econometrics

Introduction - Stationary and Non-Stationary Series - Random Walk Model - Testing of Unit Root - Co-integration - Test for Co-integration - Engel-Granger Test - Johansen Test - Error Correction Model - Introduction to ARCH and GARCH Modeling - Their Application in Economics.

Module-3: Panel Data Models

Why Panel Data? - Estimation - Fixed Effects Method - All Coefficient Constant across Time and Individuals - Slope Coefficients Constant but Intercept Varies across Individuals - Slope Coefficients Constant but Intercept Varies Over Individuals as Well as Time - All Coefficients Vary across Individuals - Random Effects Method - Fixed Effects v/s Random Effects Model - Hausman Test - Their Application in Economics.

Module-4: Empirical Demand, Production and Investment Analysis

Static Single Equations - Demand Analysis - Theoretical Foundations of Demand Analysis - Utility Theory - Tobin's Study- Static Multiple Equations - Production Function - Neoclassical Production Function - Cobb-Douglas Production Function - CES Production Function - Dynamic Single Equation Model - Investment Behaviour Models - Meyer and Kuh Model - Kuh Model

Module-5: Econometric Applications in India

Econometric Applications in Indian Demand Analysis - Indian Agriculture - Indian Industry - International Trade.

References: [Please refer to the Latest Editions]

1. Brooks Chris, *Introductory Econometrics for Finance*, Cambridge University Press, Cambridge.
2. Desai Meghnad, *Applied Econometrics*, McGraw Hill Publishing Company Ltd.
3. Gujarathi Damodar, *Basic Econometrics*, McGraw Hill, International Student Edition.
4. Krishna K. L., *Indian Econometrics Models*, Oxford University Press, Oxford.
5. Patterson Kerry, *An Introduction to Applied Econometrics a Time Series Approach*, Macmillan Press.

M.A. ECONOMICS

IV-SEMESTER

Course No: 4 [Hard Core-15] 3 Credits

Course Code: (IV-HC: 4.4) INTERNATIONAL FINANCE AND MONETARY SYSTEM

Preamble: In this course, the relationship between trade and balance of payments, international resource movements, foreign exchange rates and markets, international financial instruments, markets and institutions, role of Central Bank, open economy macroeconomics, financial integration are given special focus, highlighting the role of foreign capital and of direct investment. It takes up monetary aspects of international transactions as a counterpart of real trade transactions. Problems of exchange rate, balance of payments and their repercussions on the functioning of the trading countries are given due importance highlighting the required adjustments in the domestic policies. Further developments in international monetary system and related issues are also discussed.

Module-1: International Payments and Exchange

Why it is important to Understand International Money and Finance - Circular Flow of Income and Product - International Transactions and how they affect Balance of Payments (an example).

Module-2: International Resource Movements and Multinational Corporations

International Capital Flows - Motives and Effects of International Capital Flows - Multinational Corporations - Labour Migration - Motives and Effects of International Labour Migration.

Module-3: Foreign Exchange Markets

Functions of Foreign Exchange Markets - Exchange Rates and the Markets for Foreign Exchange - Foreign Exchange Risks - Interest Arbitrage and the Efficient and Effective Exchange Rates - Composite Currencies: Special Drawing Rights and European Currency Unit - Foreign Exchange Arbitrage - Demand and Supply of Currencies - Introduction to Foreign Exchange Rate Theories - International Money Markets.

Exchange Rate Arrangements and Systems: Gold Standard - Bretton Woods System - Flexible Exchange Rate System - Other Forms of Exchange Rate Arrangements Today - Fixed or Floating Exchange Rates?

Module-4: International Financial Instruments, Markets and Institutions

Forward Currency Market and International Financial Arbitrage: Foreign Exchange Risk - Forward Exchange Market - International Financial Arbitrage - Uncovered Interest Parity - Eurocurrency Market.

Interest Yield, Interest Rate Risk, and Derivative Securities: Hedging, Speculation and Derivative Securities and their Risk.

International Financial Market Integration: International Capital Markets - International Money Markets - Vehicle Currencies - Capital Market Integration - International Banking and Payment System.

Module-5: Central Banks, Exchange Rates, and Balance of Payments Determination

Role of the Central Banks: Managed Exchange Rates: Foreign Exchange Interventions - Do Interventions Accomplish Anything?

Traditional Approaches to Exchange-Rate and Balance of Payments Determination: Exports, Imports and the Demand for and Supply of Foreign Exchange - Elasticity Approach - Absorption Approach - Monetary and Portfolio Approaches to Exchange Rate and Balance of Payment Determination.

Module-6: Open Economy Macroeconomics and Policy Analysis

An Open Economy Framework - Economic Policy with Fixed Exchange Rates - Economic Policy with Floating Exchange Rates - Policy Co-ordination, Monetary Union and Target Zones - Monetary and Fiscal Policy under Fixed Exchange and Floating Exchange Rates.

Module-7: International Financial Market Integration

International Monetary System: Gold Standard and Inter-War Experience - Bretton Woods System and its Operation, Evolution and its Collapse - Present International Monetary System - Economic Policy and Status of the World Economy - Current International Economic Problems.

Text Books: [Please refer to the Latest Editions]

1. Daniels Joseph and David Van Hoose, *International Monetary and Financial Economics*, South-Western College Publishing, Cincinnati.
2. Melvin Michael, *International Money and Finance*, Addison Wesley Longman, Massachusetts.
3. Salvatore Dominick, *International Economics*, Macmillan Publishing Co., New York.

Additional References: [Please refer to the Latest Editions]

1. Francisco L River-Batiz and Luis River-Batiz, *International Finance and Open Macro Economy*, Macmillan Publishing Company.
2. International Monetary Fund and World Bank, *Annual Reports*, Washington. D.C., USA.

M.A. ECONOMICS

IV-SEMESTER

Course No: 5 [Soft Core-4] 3 Credits

Course Code: (IV-SC.Ele: 4.5.1) INDIA IN THE WORLD ECONOMY

Preamble: The main objective of this Course is to give an analytical understanding to the student about the position of India in the integrated global economy in terms of output, income, trade, technology and other services. The Course also aims at providing an overview of the benefits reaped and problems confronted by India in the process of globalization and various economic reforms introduced to face the challenges of the new millennium.

Module-1: Development Experience of the Indian Economy

A brief Review of the Performance of the Indian Economy during the Pre - Reform Period (1951-91) - Indian Economy in the 1990s - Need for Economic Reforms in India - Features, Rationale and Reasons - Problems needed to be Addressed.

Module-2: World Economy at the End of the Twentieth Century

Privatization: Wave in the World - A Comparison of Public and Private Sector - Privatization and Economic Reforms in India: Performance of Public Sector - Privatization Process - Public v/s Private Sector Debate - Redefining the Role of State.

Liberalization: Process in the World Economy - Global Response to Liberalization.

Globalization: Concepts and Definition and Features - Need for Globalization - Process of Globalization and its Advocacy - Globalization and Its Impact on India - Fair Globalization and the Need for Policy Framework.

Module-3: Economic Reforms in India

Agricultural Sector: Trends in World Production in Agriculture and Extent of Agricultural Production in India - Food Crisis and Food Policy in India - Sustainable Agricultural Development and Agricultural Revolution in India- Agricultural Exports from India.

Industrial Sector in India - New Industrial Policy and Industrial Production and Exports from India.

Financial Sector Reforms and India - Opening up of Insurance Sector and its Implication on Indian Economy.

Labour Sector Reforms.

Module-4: India's Global Links

World Trade: Composition, Direction and Trends - India's Trade - Trends in India's Trade and its Share in the World Trade - Export Import Policy of India - WTO and India.

Foreign Direct Investment: Trends in Global Investments - Foreign Direct Investment in India: Trends and Sector-wise Classification - Policies and Programmes Adopted by the Government to Encourage Foreign Direct Investment.

Technology Transfer: Trends in Transfer of Technology to India - Types of Technology Transferred.

Official Development Assistance (ODA)/Aid: Trends in ODA Flows to India and External Debt of India - India's International Commercial Borrowings.

Information and Communication Technology: India ITC Sector. Changing Composition of GDP in India.

Labour Mobility: Labour Migration from India: Who is Migrating and Destination of Migration - Gain and Loss?

Module-5: India's Link with International Financial Institutions

International Monetary Fund and India - World Bank, International Development Association and India.

Module-6: Challenges Ahead

Socio-Economic Problems: Population, Poverty, Pollution, Unemployment and Urbanization in the World and India - Challenges in Health, Education in the World and India - Millennium Development Goals and India - Smart Development Goals (2015-2030).

References: [Please refer to the Latest Editions]

1. Agarwal A.N, *Indian Economy-Problems of Development and Planning*, Wishwa Prakashan, New Delhi.
2. Byre J.Terence, *Indian Economy - Major Debates Since Independence*, Oxford University Press, New Delhi.
3. Datt Ruddar and K.P.M. Sundaram, *Indian Economy*, S. Chand and Co, New Delhi.
4. Kapila Uma, *Indian Economy Since Independence*, Academic Foundations, New Delhi.
5. Krueger (ed), *Economic Policy Reforms*, Oxford University Press, New Delhi.
6. Lal Deepak, *India in the World Economy*, Oxford University Press, New Delhi.
7. Mohan Rakesh (ed), *Facets of the Indian Economy*, OUP, New Delhi.
8. Sacha D. Jeffrey, Varshney Ashutosh, Bajpai Nirupam, (ed), *India in the Era of Reforms*, Oxford University Press, New Delhi.
9. Subramanian S (ed), *India's Development Experience*, OUP, New Delhi.
10. Vaidyanathan A. *India's Economic Reforms and Development*, Oxford University Press, New Delhi.

Reports: [Please refer to the Latest Editions]

1. Government of India, *Five Year Plan Drafts (Tenth, Eleventh and Twelfth Plan Drafts)*, Planning Commission, New Delhi.
2. Government of India, *India Human Development Reports*, New Delhi.
3. International Monetary Fund, *Annual Reports*.
4. United Nations Development Programme, *Human Development Reports*, OUP.
5. World Bank, *World Development Indicators*, Washington D.C.
6. World Bank, *World Development Reports*, Washington D.C.

-OR-

M.A. ECONOMICS

IV-SEMESTER

Course No: 5 [Soft Core-4] 3 Credits

Course Code: (IV-SC.Ele: 4.5.2) MATHEMATICAL ECONOMICS-II

Preamble: This Course is the logical extension of the elective Course on Optimization Techniques because here we apply many of those techniques. The Course deals with the applications of mathematical techniques of analysis to microeconomic theory comprising investment theory. Further, General Equilibrium theory including equilibrium under uncertainty and application of mathematical techniques to macroeconomic theory comprising of optional economic growth and theory of planning are also included.

Module-1: The Economics of Uncertainty

Introduction and Overview - Measures of Risk and Risk Aversion - Economics of Search - Elementary Search Model - Variations of the Basic Model - Adaptive Search - Economics of Insurances - Optimal Consumption Under Uncertainty - Multi-period Models - Competitive Firms Under Uncertainty - Factor Demand Under Price Uncertainty - Alternatives to the Expected Utility Hypothesis - The Competitive Industry Under Uncertainty - Brownian Motion and Martingales - Their Economic Applications - The Efficient Market Hypothesis - Stochastic Models of Inventory and the Demand for Cash Balances - Diffusion Process and their Applications to Economics - Evolutionary Processes in Economics.

Module-2: General Equilibrium Theory

Existence of Competitive Equilibrium - Simultaneous Optimization Approach - Excess Demand Approach - Economies with a Measure Space of Agents - Stability - Trading Out of Equilibrium - Regular Economies - Debreu's Theorem - Large Economies - Smale's Approach - Core of an Economy - Replica Economies - Temporary General Equilibrium Theory - Equilibrium Under Uncertainty - Computation of Equilibrium Prices - Brouwer's Fixed Point Theorem - Non-Retraction Theorem - Algorithm of Scarfe.

Module-3: Optimal Economic Growth and Stabilization

Economic Growth: Theories, Models, Concepts and Methods - The Harrod-Domar Model - The Neoclassical one - Sector Model - Two Sector Models of Economic Growth - Models with Technical Progress - Optimal Economic Growth - The Von Neuman Model - The Keynes - Ramsey Rule - The Golden Rule of Accumulation - Turnpike Theorems - Stock Adjustment Models - The Behaviour of Inventory Cycles - The Mathematics of Oscillations - Stabilization Policy - Trade Cycle Theory - Linear and Nonlinear Acceleration.

Module-4: The Theory of Planning

How much should a Nation Save? - Consistency Models vs. Utility Maximization Models - The Assumption of a Labour Surplus Economy - Problems of Social Choice - The Length of the Planning Horizon - The concept of Time Preference - The Strotz Phenomenon - Optimal Growth Paths for Infinite Horizon - Terminal Conditions - Optimal Growth Paths for Infinite Planning Horizons - the Consumption Turnpike Theorem - Utility Maximization over an Infinite Horizon - Optimal Programmes of Capital Accumulation - The Siftable Capital Base - The Non-Shiftable Case: The Feldman-Mahalanobis Model-Domar Model - The Non-Shiftable Two-Sector Model with a Time Minimization Constraint - Non-Linear Utility Functions in Multi-Sector Models.

References: [Refer to the Latest Editions]

1. Arrow, K.J. and M. Intriligator, Eds. *Handbook of Mathematical Economics*, Volume II, North-Holland, Amsterdam.
2. Chaktavathy S, *Capital and Development Planning*, MIT Press, Cambridge, Mass.
3. Diamond P and M. Rothschild, Eds, *Uncertainty in Economics*, Academic Press, New York.
4. Scarfe, B.L., *Cycles, Growth and Inflation*, McGraw-Hill, New York.

M.A. ECONOMICS

[SPECIALIZATION ELECTIVE COURSE: 6.1]

6.1: AGRICULTURAL ECONOMICS**I-SEMESTER: Course No: 6 [Soft Core: 6.1] 3 Credits****Course Code: (I-SC.Sp.Ele:6.1) AGRICULTURAL ECONOMICS**

Preamble: The overwhelming importance of agriculture in any developing economy hardly needs to be emphasized. The course on “Agricultural Economics” intends to highlight some of the central aspects of the Agricultural Economics. It deals with the important aspects and role of agriculture in a growing economy; discusses the farm-size productivity relationship and supply price of agricultural factor markets, bringing out the Interlinkages involved therein.

Module-1: Agriculture and Economic Development

Agricultural Economics: Introduction - Meaning - Nature of Agricultural Economics - Definition and Scope of Agricultural Economics - Farming Systems - Agricultural Production - Commercialization of Agriculture - Modernization of Agriculture.

Role of Agriculture in Economic Development: Agriculture in a Developing Economy - Share of Agriculture in National Income - Changing Phase of Agriculture - Interdependence and Complementarities between Agriculture and Industry - Need for Balanced Development.

Module-2: Resource Management in Agriculture

Introduction - Characteristics of Land - Factors affecting the Productivity of Land - Importance of land in Agriculture - Labour: Characteristics, Types, Efficiency of Labour. Capital: Characteristics of Capital - Forms of Capital - Cost of Farm Machinery.

Module-3: Input-Output, Factor, and Product Relationships

Input-Output Relationships: Stock and Flow of Resources - Production Relationships - Types of Production Function - Cobb-Dougllass Production Function - Elasticity of Substitution Production Function - Spillman Function - Cobweb Theorem.

Factor-Factor Relationship: Iso-product Line - Factor-Factor Relationships - Other Properties.

Product-Product Relationships: Relationship between Enterprises - Production Possibility Curve - Optimum Combination of Enterprises.

Module-4: Supply and Demand Behaviour, Risk and Uncertainty in Agriculture

Supply and Demand Behaviour: Importance of Supply Demand Analysis - Determinants of Supply and Demand Behaviour - Supply Behaviour in Less Developed Countries - Price Support Programme - Nerlove Model - Response of Agricultural Production to Price, Technology Supply and Input-Price.

Risk and Uncertainty in Agriculture: Introduction - Degree of Uncertainty and Risk Taking - Difference between the Risk and Uncertainty - Types of Risk - Estimation of Risk - Risk Bearing Capacity - Measures to Minimise Risk and Uncertainty.

Module-5: Farm Systems, Practices and Management

Systems of Farm Organization: Different Systems of Farming: Peasant Farming, Corporate Farming, State Farming, Cooperative Farming, Collective Farming - Criteria for Choice in India - Stability of Alternative Systems.

Farm Size and Practices: Measurement of Size of Farm - Pattern of Farm Holding - Factors Determining Economic Holding - Farm-Size Practices: Large-Scale and Small Scale Farming, Specialized and Diversified Farming, Mixed Farming, Extensive and Intensive Farming.

Farm Management Principles: Definition - Objectives - Scope - Relationship of Farm Management with other Sciences - Problems in Farm Management - Principles and its Limitations.

Module-6: Sustainable Agriculture

Importance of Sustainable Agriculture - Concepts and Indicators of Sustainability - Strategies of Sustainable Agriculture - Conventional Farming to Sustainable Farming - Approaches to Sustainable Agriculture in India - Need for Sustainable Agriculture and its Advantages.

References: [Please refer to the Latest Editions]

1. Ashok Rudra , *Indian Agricultural Economics, Myths and Realities*, Allied Publishers Mumbai.
2. Bilgrami S. A.R. *An Introduction to Agricultural Economics*, Himalaya Publishing House, Mumbai.
3. Dandekar V.M *The Indian Economy 1947-92 Vol 1: Agriculture*, Sage Publishing House, Mumbai.
4. Lekhi R.K., & Joginder Singh, *Agricultural Economics*, Kalyani Publishers, New Delhi.
5. Sadhu A.N and Singh Amarjit, *Fundamentals of Agricultural Economics*, Himalaya Pub., House, New Delhi.
6. Schultz T.W. *Economic Growth and Agriculture*, McGraw Hill, New York.
7. Shivanna T (Ed), *Sustainable Agricultural Development in India*, Southern Economist Publication, Bangalore.

6.1: AGRICULTURAL ECONOMICS**II-SEMESTER: Course No: 6 [Soft Core: 6.1] 3 Credits****Course Code: (II-SC.Sp.Ele:6.1)****THEORIES AND MODELS OF AGRICULTURAL DEVELOPMENT**

Preamble: Keeping in view the importance of Agriculture in the economy, especially the developing and less developed countries the theories propound by several economists shall be discussed in the course. The course focuses on the theoretical framework relating to Agriculture and linking it to the other related issues and problems encountered in the agriculture sector. Besides, an overview of the agricultural production of the major producing countries across the world, employment in the sector, emerging issues and challenges and impact of World Trade Organization on Agriculture shall be discussed in one of the chapters. The objective is to give the theoretical and empirical perspective related to the sector.

Module-1: Lewis Theory of Unlimited Supplies of Labour

Two Sector Economy - Assumptions - Capitalist Surplus - The Process of Economic Expansion - Relationship between Capital, Technical Progress and Productivity - Role of State and Private Capitalist - Role of Savings - Role of Bank Credit - End of Growth Process - Critical Appraisal - Conclusion.

Module-2: Schultz's Transformation of Traditional Agriculture

Main Constraints - Unsettled Questions - Attributes of Traditional Agriculture - Allocative Efficiency - Zero Marginal Productivity - High Returns in Traditional Agriculture - Traditional Agriculture as a source of Economic Growth - Role of Farm Size - Control and Investment - Technological Change and Productive Investment - Investment in Human Capital - Conclusion - Diagrammatic Representation - Critical Evaluation.

Module-3: Jorgenson's Model of Development of Dual Economy

Introduction - Two-Sector Economy - Development of Model - Development of Dual Economy - Neo-Classical Approach - Implication of Policy Analysis - Beyond Disguised Employment - Comparison of Two Approaches.

Module-4: Fei and Ranis Model of Economic Growth

Introduction - Assumptions - Explanation - Development of Agricultural Sector - Development of Industrial Sector - Generation of the Agricultural Surplus - Agricultural Surplus as a Wage Fund - Necessity of Labour Reallocation - Balanced Growth - Evaluation.

Module-5: Mellor's Model & Boserup Model of Agricultural Development

Mellor's Model: Introduction - Agricultural Development Phases - Critical Evaluation.
Boserup Theory and Present Day Under Developed Countries - Criticisms.

Module-6: Todaro's Model of Rural Urban Migration and Unemployment

Introduction - Assumptions - Basic Nature of Migration - Features - Implications of the Model -
Mathematical Treatment of the Model - Disguised Unemployment - Types of Disguised
Unemployment - Extent of Disguised Unemployment - Measurement of Disguised
Unemployment.

Module-7: Agricultural Production Across Countries

Top Agricultural Producers - Population and Internal Food Security.

World Production: Corn: United States, China Brazil. *Rice:* China, India, Japan and Indonesia.
Wheat: China, India, United States. Other Cereals and Pulses, Oil Seeds Fruits and Vegetables.
Difference between Volume of Production and High-Value Production. Employment in
Agricultural Sector - Genetically Modified Seeds - Subsidies - Food Security in Developed,
Developing and Less Developed Countries - World Trade Organization and Agriculture.

References: [Please refer to the Latest Editions]

1. Lekhi R.K., & Joginder Singh, *Agricultural Economics*, Kalyani Publishers, New Delhi.

6.1: AGRICULTURAL ECONOMICS**III-SEMESTER: Course No: 6 [Soft Core: 6.1] 3 Credits****Course Code: (III-SC.Sp.Ele:6.1) AGRICULTURAL ECONOMY OF INDIA**

Preamble: The course intends to highlight some of the central aspects of the agricultural economy of India with an analytical framework, focusing on the important debates therein. It comprises of the factors determining the behaviour of agricultural prices in India and the problems of agricultural price policy. It also focuses on interregional disparities in agricultural growth and productivity and the factors affecting the same. Its objective is to familiarize the students with policy issues that are relevant to Agricultural Economics and enable them to analyze the issues.

Module-1: Agricultural Economy of India

Introduction - Meaning and Importance of Agriculture - Share of Agriculture in National Income - Employment in Agriculture - The Rural Economy - Agricultural Labour - Labour Problems - Bhoodan Movement - Unemployment and Under-employment - Problems of Socio-economic and Cultural Background - Employment Generation and Absorption.

Module-2: Agriculture and Economic Development

Concept of Development - Characteristics of Indian Economy - Causes of Agricultural Backwardness - Present Position of Agriculture - Causes of Low Productivity in Agriculture - Strategies of Growth and Development In Planning - Agricultural Policies and Programmes in India - New Agricultural Strategy and Green Revolution and its Impact on the Economy - Agrarian Structure and the Growth of Capitalism in India Agriculture - Infrastructure Development.

Module-3: Land Tenure, Land Reforms and Policies

Importance of Forests in National Economy - Forest Development Policy and Social Forestry.
Land Utilization: Classification - Changing Land Utilization Pattern - Cropping Pattern and its Determinants - Dry Land Farming.
Land Tenure: Land Tenure Systems: During Hindu, Muslim, British Period and on the eve of Independence - Zamindari, Mahalwari, Ryotwari Systems.
Land Reforms: Importance - Evolution of Land Reforms Policy - Land Reforms in Independent India - Objectives - Land Reform Measures - Difficulties in the Abolition of Intermediaries - Ceiling of Land Holdings - Recommendations of Expert Committees - Problems of Marginal and Small Farmers - Tenancy Reforms - Land Distribution - Tenancy and Crop Sharing - Cooperative Farming - Landless Rural People - Gramdhan Movement - Achievements of Land Reforms - Impact of Land Reforms.

Module-4: Agricultural Inputs

Seeds: High-Yielding Varieties of Seeds.

Fertilizers: - Chemical Fertilizers and Manures, Fertilizer Production, Distribution and Pricing - Fertilizer Subsidy - Organic Manure. *Pesticides* and Plant Protection Measures - Cattle Feeds and Fodder.

Irrigation: Need for Irrigation - Sources of Irrigation - Development of Irrigation in India - Minor and Major Irrigation in India - Inter-State Water Disputes - Flood Management - National Water Development Agency.

Mechanization of Agriculture: Types and Magnitude - Rural Electrification.

Environment and Soil Erosion: Degradation of Land Deforestation - Ecological Imbalance in India - Soil Erosion - Extent of Soil Erosion - Soil Conservation, Dry Farming Land Reclamation and Development. Pricing of Inputs - Subsidies.

Module-5: Agricultural Growth in India

Agricultural Production under Five Year Plans - Recent Trends in Agricultural Growth in India - Cropping Pattern Shifts - Impact of Agriculture on Industry - Diversification of Agriculture - Inter-Regional Variations in Growth and Output and Productivity - Role of Public Investment and Capital Formation in Indian Agriculture - Strategy of Agricultural Development and Technological Progress - Sustainable Agriculture in India - Indigenous Practices - Bio-Technological Practices and Growth Potential.

Food Security: Nature of Food Problem - Food Policy and Food Security - Right to Food.

References: [Please refer to the Latest Editions]

1. Acharya S.S. *Agricultural Economics*
2. Balla G.S, & Gurmail Singh, *Economic Liberalization and Indian Agriculture*, Sage Pub. Pvt. Ltd.
3. Dantwala M.L. *Indian Agricultural Development since Independence*, Oxford and IBH, New Delhi.
4. Gulati A. and T.Kelly, *Trade, Liberalization and Indian Agriculture*, OUP, New Delhi.
5. Lekhi R.K., & Joginder Singh, *Agricultural Economics*, Kalyani Publishers, New Delhi.
6. Rao.C.H.Hanumatha, *Agricultural Growth, Rural Poverty and Environmental Degradation in India*, Oxford University Press, New Delhi.
7. Rudra A. *Indian Agricultural Economics: Myths and Reality*, Allied Publishers, New Delhi.
8. Shankaran S. *Agricultural Economy of India*, Progressive Corporation Private Ltd., Bombay.

6.1: AGRICULTURAL ECONOMICS**IV-SEMESTER: Course No: 6 [Soft Core: 6.1] 3 Credits****Course Code: (IV-SC.Sp.Ele:6.1)****AGRICULTURAL FINANCE, MARKETING AND AGRI-BUSINESS MANAGEMENT**

Preamble: The objective of this course is to give the students a good understanding of the issues relating to agricultural Finance, Marketing and Agri-Business Management in India. It deals with mobilization of agricultural surplus and its marketing, and examines the impact of state intervention on marketing efficiency. Indian agriculture has largely been a subsistence sector aiming mainly on food grains production. But agriculture in India has also undergone drastic changes, comprising of the input supply, agricultural production, and output marketing systems. In recent years, it has witnessed a great transformation resulting in attaining not only relative self-sufficiency in food-production but also increased commercialization. It is a well known fact that the focus of present day agriculture is increasingly shifting from raising the production to market orientation and value addition. The factors such as fast growing market for agricultural products at domestic and international arena coupled with globalization of economy are responsible for the above situation. All these systems are integrated into one system now termed “Agribusiness”. In the context of present agricultural scenario, agribusiness has become one of the most important components of rural development in India. The liberalization of Indian economy coupled with recent advances in farm technology has opened up opportunities for agribusiness. The course is an attempt to familiarize the students with the issues mentioned.

Module-1: Agricultural Finance

Rural Indebtedness: Extent, Nature, Causes and Effects of Rural Indebtedness - Government Measures to reduce Rural Indebtedness.

Agricultural Finance: Features of Agricultural Finance - Need for Agricultural Finance - Extent and Problems of Agricultural Finance - Sources of Agricultural Finance - Role of Money Lenders as a Preferred Source - Defects - Regulation of Money Lending System - Cooperative Credit Societies in India - Problems - Suggestions for Improvement - Recommendations of Committees - Cooperative Credit Structure: Three-Tier Structure. Land Development Banks - Achievements and Weaknesses.

Module-2: Agricultural Credit Institutions

Introduction - Commercial Banks- Lead Bank Scheme - Multi-Agency Approach - Nationalization of Banks - Regional Rural Banks - National Bank for Agriculture and Rural Development (NABARD) - Reserve Bank of India - Government Policy for Agricultural Credit - Agricultural Credit under Plans and Rural Credit in India - Farmers Service Societies.

Module-3: Agricultural Marketing and Marketable Surplus

Agricultural Marketing: Concept and Features of Marketing - Main Defects of Agricultural Marketing - Establishment of Regulated Markets - Warehousing Facilities - Structure and Functioning - Government Measures - Need for Efficient Marketing System .

Marketable Surplus: Output Margins - Marketed Surplus - Factors Influencing Marketing Costs - Price Spread - Market Channels - Income and Price Elasticity of Agricultural Commodities - Cob-Web Model - Financing of Agricultural Marketing - Measures to Improve Marketing Efficiency.

Module-4: State and Agricultural Marketing

Rationale of State intervention in Agricultural Marketing and Its Impact on Marketing Efficiency - Marketing of Major Agricultural Commodities in India (Food Grain and Commercial Crops) - Price Expectation and Price Uncertainties - Price Stabilization Measures.

Storage Transportation and Processing: Traditional and Rural Storage of Agricultural Products - Scientific Storage and Warehouse - Transformation of Agriculture Produce - Processing and Packing - Grading and Standardization - AGMARK.

Module-5: Scope, Issues and Strategies of Agribusiness

Agribusiness and Extension Management - Agribusiness: Value Addition and Marketing - *Agribusiness in the Context of Globalization:* Agribusiness Opportunities - Impact of World Trade Organization (WTO) and Agribusiness - WTO Agreements and Indian Agriculture: Scope, Issues and Strategies of Agribusiness.

Module-6: Farmers' Organizations & Farmer-led Marketing in Agribusiness

Role of Public and Private Sectors in Promoting Agribusiness - Methods of Organization of Farmers through Self-Help Groups - Promotion of Agribusiness among Rural Women and Role of NGOs - Organization of Farmers' Groups for Sustainable Agriculture Development - Marketing Extension in Agribusiness - Transfer of Knowledge Based Inputs to Farmers.

Export Oriented Agribusiness and Globalization - Harnessing Floriculture for Exports.

Role of Information Technology: Evolution of Research and Development and Extension in India - Product Diversification - Role of Information Technology for Promoting Agribusiness - Requirements of Training for Agribusiness.

Economic and Environmental Impact of Agribusiness: Integrated Watershed Development and Management - Impact on Lives of Farmers and Landless Labourers - Impact on Socio-Economic and Environmental Sustainability and Sustainable Agriculture.

References: [Please refer to the Latest Editions]

1. Acharya S.S. and N.L. Agarwal, *Agricultural Marketing in India*, Oxford and IBH Pub., New Delhi.
2. Agarwal A.N., *Indian Economy*, Vishwa Prakashana, New Delhi
3. Alagh, Y.K. and G.S. Balla (1979) *Performance of Indian Agriculture: A District-wise Study*, Sterling Publishers, New Delhi.
4. Government of India, *Economic Survey Reports*, Ministry of Finance, New Delhi.
5. Government of India, *Five Year Plan Documents*, Planning Commission, New Delhi
6. Hansra B.S. and K. Vijayaragavan (ed), *Agribusiness and Extension Management*, Concept Publishing Company, New Delhi.
7. Kaur R., *Agricultural Price Policy in Economic Development*, Kalyani Publishers, Delhi.
8. Raj K.N. (Ed), *Essays in Commercialization of Indian Agriculture*, OUP, New Delhi.
9. Soni R.N., *Leading Issues in Agricultural Economics*, Arihant Press, Jalandar.
10. Sumith Roy, *Agriculture and Technology in Developing Countries: India and Nigeria*, Sage Publishers, New Delhi
11. Thakur DC, *Agricultural Sector Development*, Deep and Deep Publications, New Delhi
12. Vaidyanathan A, *The Indian Economy: Crisis, Response and Prospects*, Orient Longman, New Delhi.

6.2: RURAL DEVELOPMENT**I-SEMESTER: Course No: 6 [Soft Core: 6.2] 3 Credits****Course Code: (I-SC.Sp.Ele:6.2)****RURAL DEVELOPMENT: PARADIGMS AND APPROACHES**

Preamble: This course deals with the main theoretical models of rural development and focuses on the significance of rural development in national economy, various stages of evolution and formulation as well as implementation of rural development programmes during pre and post-1947 periods with reference to India and it also introduces students into a brief study of rural reconstruction programmes of some of the Asian and African countries. Thus, this course is good blend of theories, policies and programmes of rural development. Further, a separate study of Rural Development by students can be interesting and socially relevant.

Module-1: Introduction

Meaning - Concept and Connotations of Rural Development - Basic Elements and Objectives of Rural Development - Rising Expectations and Development - Development and Change - Need for Rural Development - Human Beings as the Cause and Consequence of Development - Dilemmas in Development.

Module-2: Measures of Rural Development

Introduction - Measures of the Level of Rural Development - Measures of: Distribution of Income and Development Simplicity - Some Measures of Rural Poverty: GNP - Per Capita Public Expenditure on Community Facilities and Services - Indicators of Development - Physical Quality of Life index - Measures of Income Inequality - Record of Rural Development.

Module-3: Paradigms of Rural Development

Introduction - Modernization Theory - Dependency Theory of the Marxist School - Rosenstein-Rodan's Theory of the 'Big-Push' - Leibenstein's Critical Minimum Effort Thesis - Lewis' Model of Economic Development with Unlimited Supplies of Labour - Gunnar Myrdal Thesis of 'Spread and Backwash' Effects - Human Capital Model of Development - Gandhian Model of Rural Development - Development Theories from Other Social Sciences.

Module-4: Determinants of Rural Development

Introduction - Changes in Output, Utilization of Natural Resources and Employment - Increase in Capital - Changes in Capital, Technology, Organisational and Institutional Framework - Relation between Rural Development and its Determinants.

Module-5: Rural Development Initiatives in India

Firka Development Scheme of Madras (1947) - Nilokiteri Approaches in Haryana (1947) - Etawa Rural Development Pilot Project of UP (1948) - Gandhian Approach to Rural Development: Sarvodaya Movement in 1950s - Bhoodan Movement (1951) - Tagore Society for Rural Development at Kolkata (1969) - Marthandam Integrated Development Society in Tamilnadu (1997) - Other National Initiatives.

Module-6: Approaches to Rural Development Across Countries

Rural Reconstruction Programmes: Bangladesh - China - Cuba - Brazil and African Countries.

References: [Please refer to the Latest Editions]

1. Jain Gopal Lal, *Rural Development*, Mangal Deep Publications, Jaipur.
2. Katar Singh, *Rural Development: Principles, Policies and Management*, Sage Publications, New Delhi.
3. Satya Sundaram I, *Rural Development*, Himalaya Publishing House, New Delhi.
4. Shriram Maheshwari, *Rural Development in India: A Public Policy Approach*, Sage Publications, New Delhi.
5. Internet Sources.

6.2: RURAL DEVELOPMENT**II-SEMESTER:****Course No: 6 [Soft Core: 6.2] 3 Credits****Course Code: (II-SC.Sp.Ele:6.2)****RURAL ECONOMY OF INDIA**

Preamble: The course provides a brief analysis of the need for and the significance of a separate study on the evolution of rural communities in India. It enables the students to make a quick survey of the rural resource base and its composition and helps to analyse the contributions of rural activities to the economy. It deals with the problems of rural economy of India viz., rural poverty, rural unemployment and under-employment; rural-urban disparities in income, problems in increasing rural incomes, rural-urban interdependence and their implications. Some of the target group programmes of rural development are also included.

Module-1: Evolution of Rural Communities in India

Nature and Scope of the Study of Rural Economy - Need for the Study of the Rural Economy - Causes for its Negligence - Economic Backwardness - Recent Interest on the Study.
 Pattern of Rural Economy - Origin and their Constitution - Comparison of Rural and Urban Economy - Rural Economy during British Period 1947 to 1990 and Present Situation.

Module-2: Rural Resources of India

Natural Resources: Land, Water, Mineral and Forest Resources.
 Utilization and Potential: Capital and Human Resources - Levels of Technology.

Module-3: Rural Income, Poverty and Indebtedness in India

Rural Income: Sources of Household Income - Contributions of Agriculture and Allied Activities to National Income - Animal Husbandry - Income Differences between Rural and Urban Sectors - Problems of Rising Rural Incomes.

Rural Poverty: Causes and Consequences - Estimates of Poverty - Incidence of Poverty, Inter State Comparison - Factors Responsible for Poverty - Measures Taken to Address Poverty.

Rural Credit: Magnitude of Rural Credit - Multi-Agency Approach to Rural Credit.

Rural Indebtedness: Extent of Rural Indebtedness - Nature of Indebtedness - Causes of Rural Indebtedness - Effects of Indebtedness - Government Measures.

Module-4: Rural Economic Activities in India

Agriculture - Size of Land Holdings - Farm Inputs and Outputs - Land Tenure and Land Reforms - Farm Technology - Special Problems of Small and Marginal Farmers - Cost-Benefit Analysis - Priorities and Policies for Agricultural Development - Cottage and Village Industries - Importance, Problems and Promotion of these Industries.

Module-5: Structure and Problems of the Rural Economy of India

Size, Growth and Occupational Structure of the Rural Population - Density, Literacy, Land-Man Ratio, Problem of Growth of Population in Rural Areas - Rural Surplus Man Power - Rural Unemployment and Under-Employment - Problems of Unemployment among Youths - Remedial Measures Taken (TRYSEM) - Agricultural Labourers and their Problems - Migration of Rural Population to Urban Centres - Causes and Problems - Rural-Urban Economic Relations - Interdependence between Rural and Urban Economy.

Module-6: Agricultural Sector and Rural Economy of India

Land: Classification - Land Utilization Pattern - Cropping Pattern and its Determinants - Dry Land Farming.

Land Tenure: Land Tenure Systems: During Hindu Rulers, Islamic Rule, Colonial Rule and on the eve of Independence - Zamindari, Mahalwari, Ryotwari Systems.

Land Reforms: Importance - Evolution of Land Reforms Policy - Land Reforms in Independent India - Objectives - Land Reform Measures - Difficulties in the Abolition of Intermediaries - Ceiling of Land Holdings - Recommendations of Expert Committees - Problems of Marginal and Small Farmers - Tenancy Reforms - Land Distribution - Tenancy and Crop Sharing - Cooperative Farming - Landless Rural People - Gramdhan Movement - Achievements of Land Reforms - Impact of Land Reforms.

References: [Please refer to the Latest Editions]

1. Dalip S Thakur, *Poverty, Inequality and Unemployment in Rural India*, B R Pub., Corporation, Delhi.
2. Government of India, *Five-Year Plan Documents- from Fifth Plan to Tenth Plan*.
3. Katar Singh, *Rural Development, Principles, Policies and Management*, Sage Publications.
4. Satya Sundaram I, *Rural Development*, Himalaya Publishing House, Mumbai.
5. Sharma D.P Desai U V, *Rural Economy of India*, Vikas Publishing House Private Limited.

6.2: RURAL DEVELOPMENT

III-SEMESTER: **Course No: 6 [Soft Core: 6.2] 3 Credits**

Course Code: (III-SC.Sp.Ele:6.2)

RURAL DEVELOPMENT IN INDIA: PLANNING, POLICIES AND PROGRAMMES

Preamble: This course deals with the planning techniques and policy tools. A study of Planning and Rural Development provides technical expertise and competence to the learners who intend to get employed in research and government agencies as well as NGOs dealing with rural development process. The course is structured so as to include all activities and services whose planning helps to achieve the goals of fastening rural development and increase rural welfare.

Module-1: Introduction to Economic Planning

Significance and Meaning of Economic Planning - Types of Planning - Objectives of Planning - Strategy of Planning - Methodology of Micro and Macro Level Planning - Rural Reconstruction and Planned Development - Planning at Different Levels: National, State, District, Block and Village - Planning in Practice.

Module-2: Planning for Rural Development

Need for Planning at Grass Root Level - Planning Machinery and Planning Process for Rural Development - The Concept of integrated Approach to Rural Development - Regional Planning for Rural Areas -integrating of Sectoral Plans - Urban-Rural Economic integration in Planning - Rural Development in Practice.

Module-3: Organizing for Rural Development

A Detour Organizational Models - Search for Paradigms - Criteria for Designing an Appropriate Organization - Government Organization - Bureaucratic Reorientation - Regional, Area Development Authorities - Command Area Development Authority (CADA) - Voluntary or NGOs Agencies - Organizing People.

Module-4: Rural Development Policies and Strategies

Importance and Need for Rural Development Policies - Freedom, Control and Public Policy - Goals of Rural Development Policy - Hierarchy of Policy Goals - Rural Development Policies. *Policy Instruments of Rural Development:* Conceptual Framework - Action System - Instruments of Public Finance - Instruments of Money and Credit - Instrument of Exchange Rate - Direct Controls - Changes in the Institutional Framework - Economic Policy and Development Model. *Strategies of Rural Development:* Growth Welfare, Responsive Oriented and Integrated or Holistic Strategy - Liberalization and Rural Development.

Module-5: Rural Development Programmes

Community Development Programmes: Concept, Philosophy, Objectives, Activities, Organization, Contents and Methodology - Community Development - Block Agencies for Development of Villages - Evaluation of the Working of the Community Development Blocks - Committees for Rural Development

Planning for Plan Implementation - Rural Development during the Five Year Plans: Small Farmers Development Agency (SFDA) - Marginal Farmers and Agricultural Labourers Development Agency (MFAL) - Drought Prone Area Development Programme (DRAP) - Integrated Rural Employment Programme (IREP) - Programmes for Rural Debt Relief, Health, Sanitation, Food and Nutrition - Drinking Water etc., integrated Rural Development Programme (IRDP) - Special Group and Area Specific Programmes - Qualitative Policy Models - Jawahar Rozgar Yojana (JRY) - Integrated Wasteland Development Scheme (IWDS) - Area Development Programmes - Mahatma Gandhi National Rural Employment Guarantee Programme (MNREGA).

Factors Affecting Implementation - People's Participation - Integration and Co-ordination.

Module-6: Infrastructure Programmes for Rural Development

Transport and Communication: Road Connectivity - Access to Information - Power Supply.

Education: Importance of Education - Status of Schools and Enrolment - Compulsory Primary Education - Saksharaths - Importance of Education for Rural Reconstruction - New Educational Policy: Navodaya Schools, Sarva Shiksha Abhiyan (SSA) - Right to Education - Current Issues.

Health Care Facilities: Medical Care - Hospitals - Health for All - Programmes for Health Care

Welfare Services: Housing.

References: [Please refer to the Latest Editions]

1. Agarwal A N and Singh S P, *The Economics of Under Development*, OUP, New Delhi.
2. Ekans Richard S and K S Parikh, *Planning and Growth: Multi-sectoral, Inter-temporal Models Applied to India*, The MIT Press, Massachusetts.
3. Higgins Benjamin, *Economic Development: Principles, Problems and Policies*, Central Book Depot, Allahabad.
4. Katar Singh, *Rural Development, Principles, Policies and Management*, Sage Publications, New Delhi.
5. Madan G R, *India's Developing Villages*, Allied Publishers, New Delhi.

6.2: RURAL DEVELOPMENT**IV-SEMESTER: Course No: 6 [Soft Core: 6.2] 3 Credits****Course Code: (IV-SC.Sp.Ele:6.2)****INSTITUTIONS FOR RURAL DEVELOPMENT IN INDIA**

Preamble: This course deals with rural - social, religious, political, economic and co-operative credit and other financial institutions. A detailed study of these different forms of rural institutions shall enable the students to understand their 'Growth Propelling' and 'Growth Arresting' effects. The knowledge will be useful in formulating an institutional approach for rural development in purely a rural society.

Module-1: Introduction

Importance of the Study of Rural institutions in the Process of Development - Rural Socio - Economic Structure - Family and Kinship - Caste and Class System - Religion - Traditional Practices - Community Leadership - Law of inheritance - Special Problems of the Weaker Sections of the Society - influence of Social institutions on Rural Reconstruction viz., on Savings and Capital formation, Entrepreneurship, Mobility of Labour, Land Holdings etc.

Module-2: Rural Development and Cooperatives

Meaning of Cooperation - Basic Values, Principles and Objectives of Cooperation - Role and Importance - Forms and Functions of Cooperatives - Cooperation under Five Year Plans - Working of Some of the Important Cooperative Societies - Primary Cooperatives - Cooperative Credit Societies - Cooperative Farming Societies - Credit Requirements and Types of Credit - Financing of Allied Activities - Cooperative Education and Training.

Module-3: Rural Financial Institutions other than Cooperatives

Money Lenders - Traders - Rural Banks - Commercial Banks and Other Agencies - Evaluation of the Working of these Institutions - World Bank Lending to Rural Development - Associations and Rural Development - Self Help Groups (SHGs) - Micro-Financial Institutions (MFIs) - Role of Third Sector - NGOs and Rural Development.

Module-4: Evolution of Decentralization and Panchayat Raj Institutions

Historical Development: Village Panchayats in Ancient India - Panchayats before Independence - Causes for the Decay of Village Panchayats - Royal Commission on Decentralisation (1907) - Democratic Decentralization - Features of Good Panchayat Raj - Relation between Village Cooperatives and Panchayats - Panchayati Raj and Rural Development.

Module-5: Various Committees on Panchayati Raj

Shortcomings of the Working of Village Panchayats - Weaknesses of Panchayati Raj Institutions - Attempts towards Reforms - Ministers Conference (1954) - Committees on Panchayat Raj: Balwant Rai Mehta: 1957) - V.T. Krishnamachari: 1960 - Takhatmal Jain Study Group: 1966 - Ashok Mehta Committee: 1977 - G.V.K. Rao Committee: 1985 - Dr. L.M. Singhvi Committee: 1986 - Panchayat Committee of Local Self-Government - 72nd Constitutional Amendments (1992 and 1993).

Module-6: Function of Panchayat Samiti (Local Government Body)

Panchayats after Independence: Nature, Functions and Objectives - Organisation and Structure:

Block Level Panchayat: Panchayat Samiti - A Link Between Gram Panchayat and District Administration - Membership - Term Period.

Departments in the Samiti: General Administration, Finance, Public Works, Agriculture, Health, Education, Social Welfare, Information Technology, Water Supply, animal Husbandry.

District level Panchayats: Zila Parishad - Functions - Sources of Funds.

Village Level Panchayats: Gram Panchayats - Sarpanch and Members - Period - Reservation for Women in Panchayat Raj Institutions (PRIs)

Administrative Responsibilities of BDO, CEO and ZP - Resources for Panchayat Raj - Working of Village Panchayats.

References: [Please refer to the Latest Editions]

1. Report of A.D. Gorawala Committee.
2. Report of Venkatappaiah Committee.
3. Government of India, *Economic Survey*, Ministry of Finance, New Delhi.
4. Government of India, *Five Year Plan Documents*, Planning Commission, New Delhi.
5. Katar Singh, *Rural Development, Principles, Policies and Management*, Sage Publications.
6. Reserve Bank of India, *All India Rural Credit Review Committee Report*, Mumbai.
7. Satya Sundaram I, *Rural Development*, Himalaya Publishing House, Mumbai.
8. Sharma D.P and Desai U V, *Rural Economy of India*, Vikas Publishing House Private Limited, Delhi.

6.3: INDUSTRIAL ECONOMICS, PUBLIC ENTERPRISES & UTILITIES**I-SEMESTER: Course No: 6 [Soft Core: 6.3] 3 Credits****Course Code: (I-SC.Sp.Ele:6.3) INDUSTRIAL ECONOMICS**

Preamble: The course intends to provide a thorough knowledge about the economics of Industry in a cogent, analytical manner. Industrial Economics is one of the well-researched and developed branches of Economics. The course deals with various aspects like Industrial economics and industrialization, Framework and problems of Industrial Economics, Industrial Pricing, Market Performance, investment and Industrial location. The syllabus is highly structured and well knit so as to deal with the fundamental theories of Industrial Economics. The study of Industrial Economics has an eternal value

Module-1: Industrial Economics and industrialization

Nature, Scope and Growth of Industrial Economics - Industrialization- Concept, Rationale, Factors Promoting and Hindering industrialization - Implications - Theoretical Justification for Industrialization - Arguments against Industrialization - Industry and Sectoral Linkages.

Module-2: Optimum Theory of Firm

Firm- Objectives- Organization - Passive and Active Behaviour of Firm - Growth of Firm-Size & Growth - Theory of Optimum Firm, Factors Determining Optimum Firm - Reconciliation of Optima - Choice of Technology.

Module-3: Industrial Location

Industrial Location Concept - Dynamics of Industrial Location - Factors Determining Industrial Location - Alfred Weber and Sargent Florence's Theory of Industrial Location - Policy Interventions in Industrial Location.

Module-4: Forms of Industrial Organization

Different form of Industrial Organization - Economies of Scale - Economics of Scope - Industrial Combinations, Pools, Trust and Cartels - Mergers and Acquisitions and Take-Overs & Amalgamations - MNCs - Corporate Governance.

Module-5: Industrial Pricing & productivity

General Situations for Pricing Decisions - Pricing Procedure, Product Differentiation - Market Structure and Profitability - 'L' and 'U' Shaped Cost Curves - MC and AC Pricing - Full Cost Pricing-Net Present Value-Internal Rate of Return- Concept of Industrial Productivity-Determinants - Measures of Industrial Productivity.

Module-6: Market Structure and Conduct

Standard Forms of Market Structure- Market Structure & Innovation- Market Concentration- Profitability, Efficiency and Capacity Utilization Concepts and their Measurement & Determinants - Investment Decisions In Industry.

References: [Please refer to the Latest Editions]

1. Bhartwal R, *Industrial Economics - An Introductory Text Book* ,New Age International Pvt. Ltd, Bangalore.
2. Cherumilaum F, *Industrial Economy of India*, Himalaya Publishing House, Mumbai.
3. Dennis Carlton, Jeffrey Perloff, *Modern Industrial Organisation*, Global Edition.
4. Divine P. J and R.M Jones (et.al), *An Introduction to Industrial Economics*, George Allen and Unwin Ltd. London.
5. Hay D.A and Morris D J, *Industrial Economics, Theory and Evidence*, Oxford University Press.
6. Kuchaal, *Industrial Economy of India*, Chaitanya, Allahabad.
7. Singh A and A.N Sandhu, *Industrial Economics*, Himalaya Publication House, Mumbai.
8. Sivayya K. V and V.B.M Das , *Indian Industrial Economy*, S. Chand and Company.

6.3: INDUSTRIAL ECONOMICS, PUBLIC ENTERPRISES & UTILITIES**II-SEMESTER: Course No: 6 [Soft Core: 6.3] 3 Credits****Course Code: (II-SC.Sp.Ele:6.3) INDUSTRIAL DEVELOPMENT IN INDIA**

Preamble: This course offers an opportunity for students to learn in detail the direction, nature and composition of Industrial growth under plan periods in India on one hand and it focuses in detail on financing, regulating, identifying and resolving the problems of Indian industries, on the other hand. This theme is the main analytical strand of the present course and runs through its six well-structured modules. However adequate care is taken to include the trends and practices of Industrial restructuring and reforms implemented in India since 1991.

Module-1: Industrial Development in India

Industrial Growth and Profile in India - Progress Under Plans - Industrial Policies, New Industrial Policy - Problems and Prospects of Industries - Growth of Public and Private Sector Industries - Indian Industries and Globalisation.

Module-2: Small and Medium Enterprises (SMEs) in India

Concept, Features, Importance of SMEs - Agro- Processing, Cottage and Village industries and Rural industrialization - Problems and Prospects of SMEs - New Challenges Emerging in the Small Scale Sector - New MSME policy- WTO and SMEs.

Module-3: Industrial Monopoly and Competition in India

Industrial Monopoly Concept - Growth of Industrial Monopoly in India - State Regulations of Industrial Monopoly - MRTP Act and its latest Amendments - Emerging Trends in Industrial Monopoly- Competition Law Factors Affecting Industrial Competition Globalisation and Industrial Competition.

Module-4: Industrial Finance

Institutional Financing of Industrial Development - Sources of Industrial Financing - Capital and Money Market - Development Banks, Role of IDBI, IFCI, ICICI and IRCI, Mutual Funds, Supply and Demand Position of Industrial Finance.

Module-5: Multinational Corporations and India

Multinational Corporations (MNCs) in India - Advantages & - Disadvantages - Technology Transfer, MNCs and Liberalization -State Policy towards MNCs- Trends in the Growth of MNCs in India.

Module-6: Regional Development of Industries in India

Location Pattern of Industrial Development in India - Government and Industrial Location, Development of Industrially Backward Area, Pandey and Wanchoo Committee Reports - Measures to Develop Industrially Backward Areas - Contemporary Challenges and Opportunities - Globalisation and Regional Development of Industries.

References: [Please refer to the Latest Editions]

1. Ahluwalia I J, *Industrial Growth in India*, Oxford University Press, Oxford.
2. Cherunilam F, *Industrial Economics; Indian Perspectives*, Himalaya Pub, House, New Delhi.
3. Desai B, *Industrial Economy of India*, Himalaya Pub. House, Mumbai.
4. Desai. S.S.M and Nirmal Balerao, *Industrial Economy of Indian*, Himalaya Pub., House, Mumbai.
5. Dilip Mookerjee, *Indian Industry: Policies and Performance*, Oxford University Press, Delhi.
6. Hashim S.R, Suri K. B., (ed), *Small Scale Enterprises in Industrial Development, The Indian Experience*, Sage Publication, New Delhi.
7. Kyoko Inone, *Industrial Development Policy in India*, Institute of Developing Economies, Tokyo.
8. Nagesh Kumar, *MNCs and Industrial Organization*, Sage pub. New Delhi.
9. Ram Shankar Singh, *Industrialization in India*, Deep and Deep, New Delhi.
10. Singh A and A. N. Sandhu, *Industrial Economics*, Himalaya Publishing House, Mumbai.
11. Tendulkar S.D.(ed), *India: Industrialisation in a Reforming Economy*, Academic Foundation, New Delhi.

6.3: INDUSTRIAL ECONOMICS, PUBLIC ENTERPRISES & UTILITIES**III-SEMESTER:****Course No: 6 [Soft Core: 6.3] 3 Credits****Course Code: (III-SC.Sp.Ele:6.3)****ECONOMICS OF PUBLIC ENTERPRISES**

Preamble: This course deals with the growth, performance, organization, management, and financing of State Enterprises in India on one hand and it also throws light upon sickness in public enterprises, problems like low productivity, lack of autonomy, administered pricing and rigid pricing practices etc., of the State Enterprises, on the other. Further, this course provides an opportunity for students to study the reforms initiated to restructure State Enterprises and to privatize some of them in full or in part. Thus, in brief, this course records well the “commanding heights” assigned to public enterprises in India and their high cost structure and low level social benefits & the subsequent reforms in public sector.

Module-1: Public Enterprises Profile in India

Definition and Concept - Rationale and Objectives - Growth of Public Sector in India - Classification of Public Enterprises - Role of Public Sector in the Indian Economy.

Module-2: Organization and Management

Forms of Organization - Governing Boards - Delegation of Authority and Decentralization - Financial Management - Materials and inventory Management - Personnel Management - Performance of Public Enterprises.

Module-3: Financing Public Enterprises

Financing of Public Enterprises - Different Sources - Equity Participation - Loan and Debenture - Borrowing from Financial institutions - Debt-Equity Ratio - Budget Allocation - Recent Trends in the Financing of Public Enterprises.

Module-4: Leading Issues in Public Enterprises

Efficiency, Productivity and Capacity Utilization in Public Enterprises - Pricing Policy, Practices and Reforms - Research and Development Activities - Consumers’ interest - Industrial Relations - Workers Participation in Management - Wage Structure in Public Sector - Industrial Sickness - .Globalisation and Public Sector.

Module-5: Accountability and Accountability in Public Enterprises

Autonomy and Accountability of Public Enterprises - Aspects of Control Over Public Enterprises - Ministerial Control - Parliamentary Control - Audit Control - Issues Relating to Autonomy and Accountability.

Module-6: Public Sector Reforms and Restructuring

MoU - Privatization of Public Enterprises - Disinvestments, Private Enterprise Shares - Public Sector Reforms and Restructuring - industry & labour Exit Policy in Public Enterprises.

References: [Please refer to the Latest Editions]

1. Bhatia G.S and Batra G., *Accountability of Public Enterprises*, Deep and Deep, New Delhi.
2. Das D.K (1994) *Privatization of Public Enterprises*, Deep and Deep, New Delhi.
3. Desai S.S.M., and Nirmal Bhalerao, *Industrial Economy of India*, Himalaya Publishing House, Mumbai.
4. Goyal S K, *Public Enterprises*, Indian institute of Public Administration. Delhi.
5. Jagadish Prakash, Nageshwara Rao and Mata Badal Shukla, *Administration of Public Enterprises in India*, Himalaya Publishing House, Mumbai.
6. Laxminarain, *Principles and Practices in Public Enterprises Management*, Chand and Chand, New Delhi.
7. Rabindra Kumar Choudhary, *Economics of Public Sector and Public Utility*, Himalaya Publishing House, Mumbai.
8. Singh B N, *Public Enterprises in Theory and Practice*, Deep and Deep Publications, New Delhi.

6.3: INDUSTRIAL ECONOMICS, PUBLIC ENTERPRISES & UTILITIES**IV-SEMESTER: Course No: 6 [Soft Core: 6.3] 3 Credits****Course Code: (IV-SC.Sp.Ele:6.3)****ECONOMICS OF PUBLIC UTILITIES**

Preamble: This course is a socially significant subject of study since it is concerned with the most essential set of goods and services for leading a good civic life and some of them are also very important inputs to the production. It deals with the production and delivery, pricing and financing, regulation and commercialization of various types of public utilities. The public utility industries manifest certain unique production and pricing practices, which are not found in the production of certain other private goods. Thus, this course shall enable students to acquire knowledge about a strategically important production sector viz., public utility enterprises.

Module-1: Introduction

Public Utilities Concept - Public Utility Status - Salient Features of Public Utilities - Characteristics of Rights and Duties of Public Utilities and Public Goods - Importance of Public Utilities - The institutional Approach to Public Utilities and the Role of the State.

Module-2: Financing of Public Utilities

Role of State - Alternate Methods of Financing - Public Utilities - A Review of investment Strategy - Concessionaire Approach - External Financing of Public Utilities.

Module-3: Pricing of Public Utilities

Theories of Utility Pricing - Pricing Policy in General Practice - Objectives of Pricing Policy - Guiding Principles of Ratemaking - Differential Pricing - Marginal Pricing - Single Pricing.

Module-4: Peak Load Problem in Public Utilities

Joint and Peak Loads, Load Factor of Utility Industry - Diversity Factor of Utility Industry, Joint Cost and Indivisibility - Indivisibility and Capacity - Peak Load and Efficiency.

Module: 5: Organisational Structure and Regulation of Public Utilities

Forms of Public Utilities - Organization, Operating Companies, Holding Companies and Departmental Undertakings - Regulation of Public utilities- Need for regulation - Mechanism of Regulating Public Utilities.

Module-6: Commercialization of Public Utilities

Need for Commercialization - Methods - Move towards Privatization - Issues; Pricing, Financing, Regulations, Accountability- Public-Private -Partnership- Empirical Evidences.

References: [Please refer to the Latest Editions]

1. Clemens E.W, *Public Utility Economics*, Century Crafts, New York.
2. Cosmo Graham, *Regulating Public Utility a Constitutional Approach*, OUP, Oxford.
3. Crew W. A and P.R Kleindorfer, *Public Utility Economics*, McMillan, London.
4. Farriss M.T. and Love Joy W, *Public Utility Economics*, Primitive Hall.
5. India Infrastructure, *Annual Reports*.
6. Michael A. Crew & Paul R. Kleindorfer, *Public Utility Economics*, Palgrave MacMillan, UK.
7. Panchanri R.K., *Energy Policy for India*, McMillan Company, New Delhi.
8. Rabindra Kumar Choudhary, *Economics of Public Sector and Public Utility*, Himalaya Publishing House, Mumbai.
9. Stephen J. Brown & David Sumner Sibley, *The Theory of Public Utility Pricing*, Cambridge University Press.
10. World Bank, *World Development Report on Infrastructure-1994*, Washington D.C.

6.4: MONEY, BANKING AND FINANCIAL INSTITUTIONS**I-SEMESTER: Course No: 6 [Soft Core: 6.4] 3 Credits****Course Code: (I-SC.Sp.Ele:6.4)****MONEY AND BANKING: THEORY AND PRACTICE**

Preamble: The relevant theory for the analysis of money and banking is macroeconomic theory, which analyses the working of the economy at the aggregate level. Monetary theory is a branch of macroeconomic theory, which analyses the role of monetary forces. To understand the working of these monetary forces and their interaction with the rest of the economy, we need the guidance of theory of Money and Banking. This understanding helps one to realize that monetary forces operate through a multitude of channels - market, non-market, institutional and others. The course deals with the evolution of money, developments of commercial banks, central banks, theory relating to banking and banking practices in major developed countries.

Module-1: Introduction to Money

Introduction - Definition - Evolution of Money - Nature and Significance of Money - Kinds of Money - Demand and Supply of Money - Monetary Standards - The Commodity Theory of Money Value - A Brief Review of Theories of Money - The Theory of Money Supply - The 'H' Theory of Money Supply.

Module-2: Development of Commercial Banks and The Central Banking System

Commercial Banks: Introduction - Evolution of Modern Banking System - Structure of Commercial Banking System - Importance - Functions - Process of Credit Creation.

Central Banking System: Definition - Changing Concepts of Central Banking - Objectives, Guidelines and Measures of Central Banks - Functions of Central Bank - Role of Central Banks in Developing Countries: Regulatory and Promotional Role - State Ownership of Central Bank - Objectives of Monetary Policy.

Module-3: Theory of Banks and Non-Banks

Introduction - Changing Theories of Commercial Banking - Modern Representation of Banking Theories by James Tobin and E.S. Shaw - Gurley - Shaw Thesis and Non-Bank Financial Institutions (NBFIs).

Module-4: Banking Practices

Banks and Account Holders - Types of Deposit Accounts and Account Holders - Instruments used in the Operation of Bank Accounts: Cheques, Drafts, Pass-Book, and Bills - Bank Advances - Secured and Unsecured Loans - Overdrafts, Cash Credits etc. - Medium and Long-term Advances - Banker-Customer Relationship - Obligations of Banks to Customers and vice-versa - Secrecy and Disclosure.

Module-5: Money Markets and Capital Markets

Importance of Money Markets and Capital Markets - London Money Market - New York Money Market - Indian Money Market - Working of Capital Markets.

Module-6: Banking System

Group Banking and Chain Banking, Unit Banking, Mixed Banking and Correspondent Banking - Advantages and Disadvantages. Banking in United Kingdom: Origin - Banking System and Structure - Bank of England and Evolution of Central Banking - Structure, Management and Functions of Bank of England.

Banking in United States of America: Introduction - Commercial Banking in USA - Federal Reserve System - Other Financial institutions - Credit Control Devices.

References: [Please refer to the Latest Editions]

1. Appannaiah and Reddy, *Theory and Practice of Banking*, Himalaya Pub., House, Mumbai.
2. Basu. A.K, *Fundamentals of Banking Theory and Practice*, Fourth Edition, Mukerji, Calcutta.
3. Bedi H.L and Hardikar, *Practical Banking Advances*, UBS Publishers, New Delhi.
4. Desai Vasant, *Development Banking and Financial Intermediaries*, Himalaya Pub., House.
5. Khan, M. Y, *Indian Financial System*, Tata McGraw-Hill Education, New Delhi.
6. Mithani and Gordon, *Banking Theory and Practice*, Himalaya Pub., House, Mumbai.
7. Natarajan and Gordon, *Banking, Theory, Law and Practice*, Himalaya Pub., House, Mumbai.
8. Pathak, Bharati V. *The Indian Financial System: Markets, Institutions and Services*, Pearson Education India.
9. Reddy P. V. and H R Appannaiah, *Banking Theory and Practice*, Himalaya Pub., House, Mumbai.
10. Shekhar & Shekhar, *Banking Theory and Practice*, Vikas Publishing House, New Delhi.
11. Srivastava P K. *Banking Theory and Practice*, Himalaya Publishing House, Mumbai.

6.4: MONEY, BANKING AND FINANCIAL INSTITUTIONS**II-SEMESTER: Course No: 6 [Soft Core: 6.4] 3 Credits****Course Code: (II-SC.Sp.Ele:6.4)****MONEY AND BANKING IN INDIA**

Preamble: The study of financial institutions is of equal importance to comprehend the working of the monetary forces and to analyze their effects in order to plan policy measures and evaluate their consequences. This course is therefore an optimal integration of monetary theory and banking institutions, which combines within itself a systematic discussion on institutions and policy, concerning money, banking with special reference to India. The guiding principle in the preparation of this course has been the relevance of these topics to contemporary Indian experience and planning needs.

Module-1: Introduction to Currency System in India

Establishment and Breakdown of Silver Standard - Gold Exchange Standard - Council and Reserve Council Bills - Gold Bullion Standard - Stabilization of Sterling Rupee Exchange Rate - Monetary Authority - Gold Parity Standard - Decimal Coinage.

Module-2: Banking System in India

Introduction - Historical Background - Banking Prior to 1950 - Development of Banking since 1950 - An Overview of Money and Capital Markets - State Control over Banks - Nationalization of Banks (1969) - Banks after Nationalization - National Credit Council - Banking Commission.

Module-3: Reserve Bank of India

Introduction - Origin and Development - Structure and Management - Functions and Working of Reserve Bank of India - instruments of Monetary Control - Quantitative and Qualitative Credit Control - Public Debt - Secondary Debt Market - Reserve Requirements - Advances to Priority Sectors - Supervision System - Role of Reserve Bank of India in the Economy.

Module-4: Commercial Banking

Evolution - Nature of Commercial Banks - Role, Functions - Financial Services - Fiduciary Services - off-Balance Sheet Activities - Analysis of assets and Liabilities of Scheduled Commercial Banks - inter Bank Borrowings - Problem of Non-Performing Assets.

Module-5: Regional Rural Banks and Cooperative Banks

Regional Rural Banks: Objectives - Role of RRBs - RBI Assistance - Evaluation of RRBs.

Cooperative Banks: Introduction - Organization Structure and Development of Cooperatives - Role of RBI in Cooperative Banks - National Bank for Agriculture and Rural Development (NABARD) - Reforms in Co-operative Credit.

Module-6: Development Banking and Banking Sector Reforms

Development Banking: Nature - Financial Appraisal - Liquidity Ratios - Capital Ratios-Technical and Economic Appraisal - Social Cost-Benefit Analysis - Promoter's Contribution-Term Loans - Development Finance institutions - Capital Adequacy- Sources of Funds of DFIs - SEBI Guidelines - Trends in Disbursements - Choice of Financial Institution.

Banking Sector Reforms: Brief review of Banking Legislation - Need for Reforms - Narasimham Committee Reports (I & II) - Post Reform Scenario.

References: [Please refer to the Latest Editions]

1. Khan, M. Y. *Indian Financial System*, Tata McGraw-Hill Education, New Delhi.
2. Machiraju H.R. *Indian Financial System*, Vikas Publishing House PVT Ltd., New Delhi.
3. Parameswaran R and Natarajan S. *Indian Banking*, S.Chand and Co, New Delhi.
4. Pathak, Bharati V. *The Indian Financial System: Markets, Institutions and Services*, Pearson Education India.
5. Vasant Desai, *Indian Financial System*, Himalaya Publishing House, Mumbai.

Reports: [Please refer to the Latest Editions]

1. Reserve Bank of India, *Trends and Progress of Banking in India*, Mumbai.
2. Reserve Bank of India, *Report on Currency and Finance*, Mumbai.
3. Reserve Bank of India, *RBI Bulletin*, Mumbai.

6.4: MONEY, BANKING AND FINANCIAL INSTITUTIONS**III-SEMESTER: Course No: 6 [Soft Core: 6.4] 3 Credits****Course Code: (III-SC.Sp.Ele:6.4)****NON-BANK FINANCIAL INSTITUTIONS IN INDIA**

Preamble: Banking and institutions have long history in most economies of the world. The nature, functioning and issues related to banks and non-bank financial institutions need to be understood by students of economics. The operation of financial markets and their regulation need to be studied to appreciate their key role in an economy, especially after the far-reaching banking and financial sector reforms in India and elsewhere. The present course is designed to acquaint the students fully with the changing role of financial institutions in the process of growth and development.

Module-1: Financial Systems in India

Financial System: Significance and Definition - Purpose and Organization.

Module-2: Savings and Financial Intermediation

Factors Determining Savings - Composition of Savings - Financial Liabilities - Savings Rate in the Tenth and Eleventh Plan - Financial Intermediation and Economic Development in India.

Module-3: Non-Bank Financial Institutions (NBFIs)

The Fundamental aspects of NBFIs - New Theory of Finance - Role and Significance of NBFIs and Monetary Theory in Developed Countries and Developing Countries - The Structure and Growth of NBFIs in India - Financial Sector Reforms - Liberalization Measures for NBFIs (1996) - Limits on Acceptance of Deposits - Size of NBFIs - Distribution of Deposits - Capital Issues of Finance Companies - assets of NBFIs - Investment Norms for NBFIs - Deployment of Funds - Leasing Companies.

Module-4: Insurance, Investment Banking, Merchant Banking & Mutual Funds

Insurance: Growth and Structure of Insurance Companies - Life Insurance Corporation and its Progress - General Insurance Companies and their Functions - Reforms in the Insurance Sector.

Investment Banking: Investment Banks and Commercial Banks - Their Activities.

Merchant Banking: Introduction - Banking Commission Report (1972) - Merchant Banking in India - Regulations of Merchant Banking - Prospects - General Obligations and Responsibilities.

Mutual Funds: Introduction - Mutual Funds in India - Types of Mutual Funds - Return from Mutual Funds - SEBI's Directives - Private Mutual Funds - Asset Management Company - Unit Trust of India - Evaluation of the Performance of Mutual Funds - Components of investment Performance - Market Timing- Money Market Mutual Funds - RBI Guidelines.

Module-5: Foreign Exchange Market

Market Regimes and Rates-Trading in foreign Exchange Markets - Speculation - Foreign Exchange Rates - Market Makers - Liberalized Exchange Rate Management System, 1992 - Capital Account Convertibility - Relationship between Exchange and Money Markets - Foreign Exchange Market foreign Currency Accounts - Currency Arbitrage - Hedging with Options.

Module-6: Financial Sector Reforms

Regulation of Non-Bank Financial Intermediaries and the RBI - Need for Comprehensive Monetary Policy - RBI and Financial Sectors Reforms.

References: [Please refer to the Latest Editions]

1. Khan, M. Y, *Indian Financial System*, Tata McGraw-Hill Education, New Delhi.
2. Machiraju H.R., *Indian Financial System* Vikas Publishing House Pvt. Ltd, New Delhi.
3. Madaiah M, *Financial Intermediaries, Monetary Policy and Economic Development*, Prasaranga, Mysore.
4. Nirmala Prasad and Chandradass J, *Banking and Financial System*, Himalaya Publishing House, Mumbai.
5. Pathak, Bharati V, *The Indian Financial System: Markets, Institutions and Services*, Pearson Education India.
6. Reserve Bank of India, *Bulletin* (latest edition), Mumbai.
7. Reserve Bank of India, *Report on Currency and Finance* (latest edition).
8. Reserve Bank of India, *Trends and Progress of Banking in India* (latest edition), Mumbai.
9. Varshney and Sundaram, *Banking Theory, Law and Practice*, Sultan Chand and Sons.

6.4: MONEY, BANKING AND FINANCIAL INSTITUTIONS**IV-SEMESTER: Course No: 6 [Soft Core: 6.4] 3 Credits****Course Code: (IV-SC.Sp.Ele:6.4)****FINANCIAL MARKETS, INSTRUMENTS AND SERVICES IN INDIA****Module-1: Financial Markets**

Money Market: Introduction - Functions, Efficiency - The Indian Money Market-Role of RBI in the Money Market - Money Market Centres - Steps to Develop Money Market in India - Money Market Instruments - Treasury Bills, Commercial Paper, Commercial bills, Certificates of Deposit, Call/Notice Money Market, Money Market Derivatives - Collateralised Borrowing and Lending Obligation (CBLO) - Link between the Money Market and the Monetary Policy in India - Tools for Managing Liquidity in the Money Market.

Module-2: Capital Market

Introduction, History, Functions, Types, Scams and Reforms - The Primary Market - Introduction, Free Pricing Regime, Book Building - New Issue Mechanism in India, Primary Issues, Resource Mobilization from the Primary Market, Mutual Funds.

Module-3: Secondary Market

Introduction, Stock Exchanges National and Regional - Measures to boost Liquidity in the Secondary Market - Market Making System - Impact of Reforms and Measures on Secondary Market Activities.

Module-4: Derivatives Market and Debt Market

Derivatives Market: Introduction - Forwards and Futures - Futures Trading Strategies - Options - Trading Strategies - Derivatives Market in India - Derivatives Trading in India.

Debt Market: Introduction - Private Corporate Debt Market - Public Sector Undertaking Bond Market - Government Securities Market.

Module-5: New Financial Instruments

New Financial Instruments - Meaning - Floating rate Bonds - Zero Interest Bonds - Deep Discount Bonds - Revolving Underwriting Finance facility (RUFF) - Auction Rated Debentures (ARD) - Secured Premium Notes (SPNs) with Detachable Warrants - Non-Convertible Debentures (NCDs) with Detachable Equity Warrants - Tradable Warrants - Fully Convertible Debentures - Domestic Convertible Bonds - Differential Shares - Securitized Paper - Collateralized Debt Obligations (CDO) - Inverse Float & Perpetual Bonds - Municipal Bonds.

Module-6: Financial Services

Investment Banking - Introduction, Functions, Types - Investment Banking Services - Merchant Banking Services - SEBI - Pre-Issue Obligations - Post-Issue Obligations - Changing Scenario of Investment Banking - Depositories and Custodians - Credit Rating.

Credit Rating Agencies in India - Factoring and Forfeiting - Housing Finance - Leasing and Hire Purchase.

References: [Please refer to the Latest Editions]

1. Khan, M. Y, *Indian Financial System*, Tata McGraw-Hill Education, New Delhi.
2. Machiraju H.R, *Indian Financial System*, Vikas Publishing House Pvt. Ltd., New Delhi.
3. Parameswaran R and Natarajan S., *Indian Banking*, S.Chand and Co, New Delhi.
4. Pathak, Bharati V, *The Indian Financial System: Markets, Institutions and Services*, Pearson Education India.
5. Vasant Desai, *Indian Financial System*, Himalaya Publishing House, Mumbai.

6.5: DEMOGRAPHY AND LABOUR ECONOMICS**I-SEMESTER: Course No: 6 [Soft Core: 6.5] 3 Credits****Course Code: (I-SC.Sp.Ele:6.5) DEMOGRAPHY**

Preamble: The course aims at an analytical treatment of demography within a global context. A historical and current perspective of population size, growth rates and region-wise distribution is contained therein so as to provide students with a background for further delving into the subject. The study of the determinants of the structure of population and the dynamics of population growth form the major part of the course and are dealt with in the content. These will enable the students to make the best use of relevant demographic statistics in development analysis.

Module-1: Introduction

Meaning and Scope of Demography - Components of Population Growth and their Interdependence - Measures of Population Change - Growth, Structure and Distribution-Sources of Population Data.

Module-2: Historical and Regional Trends in the Population Size of the World

Population Trends in the Modern Era - Trends in Population (from 1965 onwards) - Population Explosion as a recent Phenomenon in the Perspective of Human History - Regional Variations in Rates of Growth of Population in the Modern Era by Regions of the World such as: Africa, Latin America, North America, Europe, Russian Federation, and Oceanic - Estimates of Sizes and Rate of Growth of Population in the Recent Years - Shifting Proportions of Human Population and Density in Different Regions.

Module-3: Sex and Age Structure

Patterns of Sex and Age Structure in More Developed and Less Developed Countries - Determinants of Sex and Age Structure - Age Structure - Economic and Social Implications of Sex and Age Structure- Demographic Dividend.

Module-4: Fertility, Nuptiality, Mortality

Fertility: Levels and Trends of Fertility in MDCs and LDCs - Factors Affecting Fertility in LDCs- Factors Associated with Decline in Fertility in MDC and LDC - Differential Fertility: Ecological Factors - Regional Differences, Urban-Rural Differences - Socio-Economic Factors.

Nuptiality: Concepts, Analysis of Marital Status from Census, Singulate Mean Age at Marriage Status and Decadal Synthetic Cohort Methods, Mean Age at Widowhood and Divorce - Trends in Age at Marriage - Change in the Pattern of Marriage.

Mortality: Levels and Trends of Mortality in MDCs and LDCs - Sex and Age Patterns of Mortality - Sex and Age Difference in Mortality - Fetal and Infant Mortality - Levels and Trends of Infant Mortality, Characteristics of Infant Mortality - Factors Affecting Fetal and Infant Mortality - Causes of Death - Mortality of Differentials - Urban -Rural, Geographical, Occupational, Ethnic Etc., - Factors Related to High Mortality in the Past - Factors in Mortality Declines in MDCs and LDCs.

Module-5: Techniques of Demographic Analysis

Crude Birth and Death Rates, Age Specific Birth and Death Rates - Standardized Birth and Death Rates - Study of Fertility: Total Fertility Rate, Gross Reproduction Rate, and Net Reproduction Rate - Study of Marital Status - Life Table- Reproductive and Child Health in India - Temporal and Spatial Variations in Sex Ratios.

Module-6: Population Projections and Population Policies

Techniques of Population Projection - Concept of Stationary, Stable and Quasi - Stationary Population - Ageing of Population - Changes in Family Structure and Old Age Security. Definition and History of Policies affecting fertility in Developing and Less Developed Countries.

References: [Please refer to the Latest Editions]

1. Agarwal U.D. *Population Projections and Their Accuracy*, B.R.Publishers, New Delhi.
2. Bhende A and Kanitkar T. *Principles of Population Studies*, Himalaya Pub., House, Mumbai
3. Bogue D.J. *Principles of Demography*, John Wiley New York.
4. Hans Raj, *Fundamentals of Demography*, Surjeet Publications, Delhi.
5. Misra B.D. *An Introduction to Study of Population*, South Asian Publishers, New Delhi.
6. Rowland D.T., *Demographic Methods and Concepts*, Oxford University Press, Oxford.
7. Srinivasan K. *Basic Demographic Techniques*, Sage Publications, New Delhi.

6.5: DEMOGRAPHY AND LABOUR ECONOMICS**II-SEMESTER: Course No: 6 [Soft Core: 6.5] 3 Credits****Course Code: (II-SC.Sp.Ele:6.5)****POPULATION AND DEVELOPMENT**

Preamble: The main objective of this course is to make the students aware of the importance of population in economic development and the various theories that explain the growth of population in a country. The course also enlightens the student on the quantitative and the qualitative aspects, and characteristics of the population through various demographic techniques. In recent times, gender characteristics of the population have acquired greater importance. Migration and urbanization are the characteristics of structural change taking place in a society. Their study is essential to understand the dynamics of this change. The course exposes the students to sources of population data and related characteristics and also to the rationale, need, and evolution of population policy.

Module-1: Population and Development

Population, Economy and Environment Linkages - Population and Productivity Nexus - Population and Human Development Issues - Population and Labour Force.

Module-2: Theories of Population

Malthusian Theory of Population - Optimum Theory of Population - Theory of Demographic Transition - Views of Medows, Enke and Simen - Biological Theories - Social Theories of Population - Economic Theories of Population: Marx's Theory of Surplus Population - Libenstein's Population Law - Microeconomic Theory of Fertility.

Module-3: Population Problems in the World

Problems of rapid Growth Rate of Population - Population and Capital Formation - Population and Resources Utilization - Population and Consumption, and Living Standard - Technology and Population.

Module-4: Migration and Urbanization

Concepts and Types - Characteristics of Modern Migration - Migration Measurement - Internal and International Migration - Factors Affecting Migration - Migration Theories (Internal) - Growth and Distribution of Rural Urban Population in Developed and Developing Countries.

Module-5: Population in India

Demographic Data in India - Changing Characteristics of Population in India - Population - Health, Education, Productivity - Population Policies and Programs in India - New Economic Policy and Perspectives Plan- Salient Features of 2011 Census.

Module 6; Population Education

Concept of Population Education, Objectives, Features, Importance - Institutional Approach to Population Education - Population Problems: A Global Concern - World Summits on Population.

References: [Please refer to the Latest Editions]

1. Agarwal S.N. *India's Population Problems*, Tata McGraw Hill Co., Mumbai.
2. Bhende A. and Kanitkar T. *Principles of Population Studies*, Himalaya Pub., House, Mumbai.
3. Choubay P.K. *Population Policy in India*, Kanishka Publications, New Delhi.
4. Coale A.J & Hoover. E.M. *Population Growth & Economic Development in Low Income Countries*, Princeton University Press, Princeton.
5. Ghosh B.N. *Population Economics*, Deep and Deep Publications, New Delhi.
6. Mahendra M. Premi, *India's Changing Population Profile*, NTB, New Delhi.
7. Nicholas, Polunin, *Population and Global Security*, Cambridge.
8. Rajendra.K.Sharma, *Demography and Population Problem*, Atlantic Publishers & Dist.
9. Todaro Michael. P. *Economic Development in the Third World*, Orient and Longman.

6.5: DEMOGRAPHY AND LABOUR ECONOMICS**III-SEMESTER: Course No: 6 [Soft Core: 6.5] 3 Credits****Course Code: (III-SC.Sp.Ele:6.5) LABOUR ECONOMICS**

Preamble: Labour is the source of all value and labour economics is emerging as one of the most important specialized branches of economics. Labour is unique and different from other factors of production. Therefore pure market analysis cannot cover all the intricacies of labour issues. Hence, it has become crucial to understand the nature of labour problem, labour market, supply and demand for labour, employment, wage labour unions and their collective bargaining etc., to analyze and tackle the labour issues effectively. This course provides the foundation for the same.

Module-1: Labour Economics

Labour Economics - Nature, Scope and Evolution - Labour Concept - Labour as Distinct from Other Input Factors - Nature of Labour Problems - Multidisciplinary Approach to Labour Problems

Module-2: Labour Market

Labour Market Concept - Differences between Labour Market and Commodity Market - Paradigms of Labour Market: Classical New-Classical and Modern Labour Market Equilibrium - Labour Market Flexibility - Labour Market and Globalization.

Module-3: Supply and Demand for Labour

Measuring the Labour Force - Some Stylized Facts about Labour Supply - Determinants of the Supply of Labour - Labour Supply of Women - Labour Supply Over Life-Cycle and Business Cycle - Demand for the Employment Decisions in Short and Long-Run - Marshall's Rules of Derived Demand - Determinants of the Demand for Labour.

Module-4: Employment and Economic Development

Employment and Economic Development - Employment Elasticity - New Concept of Full Employment - New Dimensions of Employment - Unemployment: Causes and Measures - Impact of Technology, Modernization and Rationalization on Employment - Employment Models: Classical Keynesian and Modern - State and Employment - Impact of Globalization on Employment.

Module-5: Wage and its Determination

Wage Concept - Wages and Economic Development - Theories of Wages: Classical, Neo-Classical and Modern - Relationship between Wages & Employment, Productivity, Inflation - Wage Differentials - Wage Discrimination and Wage Standardization - Impact of Globalization on Wages.

Module-6: Industrial Relations and Trade Unions

Industrial Disputes - Trade Union Objectives - Theories of Trade Unionism - Collective Bargaining - Global Trends in Trade Union Movement - Labour Rights under Globalization.

References: [Please refer to the Latest Editions]

1. Bhagol Wal T.N, *Economics of Labour and Industrial Relations*, Sahitya Bhavan, Agra.
2. George J Boyas, *Labour Economics*, McGraw Hill, New York.
3. Joshi M.V. *Labour Economics and Labour Problems*, Atlantic Publishers and Distributors.
4. Lester R.A. *Economics of Labour*, McMillan, New York.
5. McConnell and Stanley Brue, *Contemporary Labour Economics* McGraw Hill, New York.
6. Mittal A.C. and Sanjay Prakash Sharma, *Labour Economics*, RSBA, Jaipur.
7. Phelps Brown Ed., *Economics of Labour*, Yale University Press, New Heaven.
8. Susan Hortan, Ravi Kanbur and Dipak Majumdar, *Labour Market in an Era of Adjustment*, World Bank, Washington D.C.

6.5: DEMOGRAPHY AND LABOUR ECONOMICS**IV-SEMESTER: Course No: 6 [Soft Core: 6.5] 3 Credits****Course Code: (IV-SC.Sp.Ele:6.5) INDUSTRIAL AND INFORMAL LABOUR IN INDIA**

Preamble: It has been rightly recognized world over that labour has the real potential to contribute to growth. However, its management is more important. This course intends to analyze the nature and problems of Indian labour market, industrial relations, trade union movement, and role of State in managing the labour and labour market reforms in India. The course also covers the relationship between India and International Labour Organization, International labour standards, migration etc.

Module-1: Indian Labour Market

Features of Indian Labour Market - Size and Composition - Supply Of and Demand For Labour in India - Major Issues in the Indian Labour Market - Labour Absenteeism - Labour Turn over and Labour Recruitment - Labour Productivity - Labour Migration and Mobility - Impact of Globalization on Indian Labour Market- Sources of Labour Statistics.

Module- 2: Informal Labour in India

Concept of Informal Labour - Size and Composition - Causes for Informal Sector - Growth of Informal Sector - Rural and Urban Informal Sector - Agricultural Labour - Features- Women in Informal Labour Market - Wage and Social Security Issues - Linkages between Formal and Informal Labour - Rural - Urban Migration - State and Informal Labour in India - National Commission on Agriculture Labour - Globalization and Informal Sector.

Module-3: Industrial Relations and Trade Unions in India

Industrial Relations in India - Industrial Disputes Act - Machinery for Settlement of Industrial Disputes - Globalization Impact on Industrial Relations - Evolution and Development of Trade Union in India - Problems and Prospects - Trade Union Act - Changing Profile of Indian Trade Union Movement.

Module-4: Wages in India

Minimum Wages Act - Criteria for Fixing Minimum Wages - Implications of Minimum Wages - Wage Structure - Dearness Allowance - Bonus-Wage Determination, Wage Boards - National Wage Policy - Globalization Impact on Wage.

Module-5: State and Labour

State Intervention in Labour Matters - Labour Legislations relating to Working Conditions Women and Child Labour - Exit Policy - Labour Market Reforms - Changing Role of State in Labour Matters - Personnel Management - Labour Participation in Management - Quality Circle.- Labour in an Integrating World- Second National Commission on Labour- ILO and India.

Module-6: Labour Welfare Management in India

Labour Welfare and Social Security Measures in India: ESI Act, Fringe Benefits, Occupational Health Hazards, Industrial Safety, Health and Hygiene, Workers Education - Social Security and Pension Sector Reforms - International Labour Standards - Globalization and Labour Issues.

References: [Please refer to the Latest Editions]

1. Bhargoliwal T. *Economics of Labour and Industrial Relations*, Sahitya Bhavan, Agra.
2. Hajela P.D, *Labour Restructuring in India- A Critique of New Economic Policies*, Common Wealth Publications, New Delhi.
3. Mamorina C.B, *Labour Problems and Social Welfare*, Kitab Mahal, Allahabad.
4. Mittal A.C., and Sanjay Prakash Sharma, *Labour Economics*, RSBA Publications, Jaipur.
5. Papola T.S., P.P Ghosh and A L Sharma, *Labour Employment and Industrial Relations in India*, B.R.Publications, New Delhi.
6. Rajendra K Sharma, *Industrial Labour in India*, Atlantic Publishers. New Delhi.
7. Rina Agarwala , *Informal Labour, Formal Politics & Dignified Discontent in India*.
8. Sharma A.V, *Aspects of Labour Welfare and Social Security*, Himalaya Pub., House, New Delhi.
9. Srivastava S.C. *Industrial Relations and Labour Laws*, Vikas Publishing House Private Ltd.
10. Tom Barnes, *Theorizing Informal Labour in New India*, Routledge.
11. Venkata Ratnam C S, *Globalization and Labour Management Relations: Dynamics of Change*, Sage Publications, New Delhi.

6.6: INFRASTRUCTURE ECONOMICS**I-SEMESTER: Course No: 6 [Soft Core: 6.6] 3 Credits****Course Code: (I-SC.Sp.Ele:6.6) ECONOMICS OF INFRASTRUCTURE**

Preamble: The course on “Economics of infrastructure” is basically designed to provide the students with an essential idea on “Social Overhead Capital”. This concept is gaining importance, and, if the burgeoning literature in this area is an indicator of its accelerating credibility, it will soon become as important as “Directly Productive Activities”. It helps to enhance the rate of growth of the economy. The importance of infrastructure in the development process of a country is undisputed. In case of developing countries, lack of infrastructure has been considered as a major obstacle to growth. This course deals with Transport Economics, which forms the core of the sector. It deals with concepts such as - the demand for transport, cost-benefit analysis, valuation of travel, and the role of communication.

Module-1: Introduction

Infrastructure and Economic Development - Infrastructure as a Public Good - Social and Physical infrastructure - Special Characteristics of Infrastructural Facilities - Green Infrastructure Economies of Scale of Joint Supply - Marginal Cost Pricing versus Other Methods of Pricing in Public Utilities - Cross-Subsidization - Free Prices, Equity and Efficiency.

Module-2: Transport Economics

The Structure of Transport Costs and Location of Economic Activities - Demand for Transports - Modals of Freight and Passenger Demand - Modal Choice - Cost Functions in the Transport Sector, Principle of Pricing - Special Problems of individual Modals of Transport - Inter-Modal Condition in the Indian Situation - Urban and Metropolitan Transportation Planning.

Module-3: Communications

Structure of Telecommunication Sector - Price Determination - Principles of Decreasing Costs in Telephone Industry - Characteristics of Postal Services - Criteria for Fixation of Postal Rates - Measurement of Standards of Services in Telephone and Postal Utilities - Private Sector Participation in Telephones and Postal Utilities - Regulatory Framework and Institutions -TRAI.

Module-4: Water Supply Economics

Irrigation - Financing Water Utilities - Urban and Rural Water Supply - Pricing of Drinking Water Supply and Sanitation - investments - Public Sector and Community Collaboration.

Module-5: Social Infrastructure

Organization and Financing of Supply of Social Services - Private versus Public Sector Financing - Recent Debate about the Fixation of Prices of Social Services - Development of Social Services in the Successive Indian Plans - Privatization Feasibility of the Sector in India.

References: [Please refer to the Latest Editions]

1. Indian Council of Social Science Research (ICSSR), *Economics of Infrastructure*, Vol - IV, New Delhi.
2. Kneafsey J.T., *Transportation Economic Analysis*, Lexington, Trouts.
3. National Council of Applied Economic Research (NCAER), *India Infrastructure Report: Policy Implications for Growth and Welfare*, New Delhi.
4. Norton H.S., *Modern Transport Economics*, C.E. Merrill, London.
5. Parikh, K.S. (Ed), *India Development Reports*, Oxford University Press, New Delhi.

6.6: INFRASTRUCTURE ECONOMICS**II-SEMESTER: Course No: 6 [Soft Core: 6.6] 3 Credits****Course Code: (II-SC.Sp.Ele:6.6) ENERGY ECONOMICS**

Preamble: Energy Economics has emerged to be a separate branch of economic science. It is an application of general principles of standard economic theory into the study of energy sector in a modern economy. The present course deals with the significance of the sector, production, supply, demand and pricing determinants.

Module-1: Energy Concepts

Concepts - Definitions - Sources and Categories of Energy - Energy Balance Tables - Energy Data Sources - Energy System - Energy - Economy Linkages - Green Energy.

Module-2: Energy Sub-Sectors

Forms of Energy - Electricity, Coal, Oil and Renewable Sources - Availability and Features - Management of Energy Resources - Energy and Environmental Sustainability.

Module-3: Energy Supply and Demand Analysis

Energy Supply Analysis: Availability and Supply of Different Sources of Energy - Supply Constraints - Role of Renewable Sources of Energy - Institutional Framework for Energy Supply in India - Supply Scenario and Investment Requirements - Alternative Energy Sources - Energy Imports - Trends and Issues - Policies of the Government.

Energy Demand Analysis: Determinants of Energy Demand - Estimating Energy Demand - Methods of Estimation - Price and Income Elasticity - Demand Estimation under Administered Price Regimes - Demand - Supply Gap - Energy Shortage and Crisis - Need for Energy Demand Management - Renewable Energy Options.

Module-4: Energy Pricing

Need - Methods and Principles of Energy Pricing - Economic Efficiency and Equity Considerations - Pricing Under Supply Constrained Framework - Energy Markets - Regulation - Issues and Challenges.

Module-5: Energy Efficiency and Conservation

Need - Principles and Methods - Energy Supply Side and Demand Side Management and Efficiency - Institutional Machinery and Community Engagement - Estimation of Benefits - Energy Audit - Policy Alternatives.

Module-6: Energy Planning and Policy

Approaches to Energy Planning - Principles and Components - Implementation Machinery - Decentralised Approach to Energy Planning - Planning for Energy Security - Integrated Energy Policy - Issues and Challenges.

Alternative Energy Sources: Wind Energy - Solar Energy - Bio Mass Power - Waste-to-Power Small Hydro Power - Availability and Utilization - Government Policies.

References: [Please refer to the Latest Editions]

1. Kneese, A. V. and Sweeny, J L, *Handbook of Natural Resource and Energy Economics*. North Holland.
2. Munasinghe M & Meier P, *Energy Policy Analysis and Modeling*, Cambridge University Press, U K.
3. Paul Stevens (ed), *The Economics of Energy Vol -I and Vol -II* Edward Elgar.
4. Sankar U., *Public Sector Pricing: Theory and Applications*, Indian Economic Association Trust for Research and Development, New Delhi.

6.6: INFRASTRUCTURE ECONOMICS**III-SEMESTER: Course No: 6 [Soft Core: 6.6] 3 Credits****Course Code: (III-SC.Sp.Ele:6.6) ECONOMICS OF EDUCATION**

Preamble: The course is meant to provide some insights into the application of economic theory in the design and implementation of public policy related to the management of one of the social sectors i.e., Education. The course finds roots in welfare economics, national income accounting, macroeconomic policies, and development. It deals with the economics of education with special emphasis on educational planning, manpower balances and human resource development.

Module-1: Introduction to Economics of Education

Concepts of Human Resource Development - Development of Knowledge, Skills and Capabilities - Formal and Non-Formal Education - Economic Analysis of Investment in Man - Education as Investment - Expenditure on Education - The Residual Approach in Determining the Contribution of Education to GNP - The Rate of Return from Expenditure on Education - Major Problems of Human Resource Development - Generation and Utilization of High-Level Man Power - Utilization of Redundant Manpower - Strategies of Human Resource Development - Indicators of Human Resource Development - Stock of Human Capital - Rate of Human Capital formation - Composite Index of Levels of Human Resource Development.

Module-2: Cost-Benefit Analysis of Educational Expenditures

Educational investment - Characteristics of Educational Investment - Educational Priorities - The Rate of Return on Investment in Education: The Measurement of Costs - Alternative Cost Concepts - Current Costs - Capital Costs - The Pattern of Unit Costs of Education - The Relationship between Average and Marginal Costs - The Measurement of Benefits; Education and Productivity - The Use of Shadow Wage Rates and Prices - External Effects of Investments in Education - Social Rate of Return to investment in Education - Analysis of Production and Cost Functions of Education.

Module-3: Financing Educational Expenditure

Public and Private Financing of Education - Trends in Public Expenditure on Education in India - Educational Price Deflators - Expenditure on Different Sectors of Education such as Primary, Secondary, Vocational, Higher, Technical and Adult Education. Sources of Educational Finance: Fee Income - Central and State Governments' Grants-in-Aid - The University Grants Commission and Other Funding Agencies - Voluntary Organizations - Private Financing.

Module-4: Educational Planning and Development in India

Theoretical Considerations in Educational Planning - The Scope and Goals of Educational Planning - Quantitative, Qualitative and Spatial Objectives - Equity Considerations in Educational Planning - Priorities in Educational Development - A Review of Educational Development in India Under The Five Year Plans - Development of Primary, Secondary, Vocational Higher, Technical and Adult Education - Issues in Privatization of Education in GATS and Its Impact on Education Sector in India.

Module-5: Man Power Approach to Educational Planning

Manpower Needs - Methods of Manpower Forecasting - Manpower Demand and Selection of Educational Investment - Manpower Planning in India- Education Policy of India.

References: [Please refer to the Latest Editions]

1. Blaug M (ed), *Economics of Education*, Penguin Books, England.
2. McMohan W.W., *Education and Development: Measuring the Social Benefit*, OUP, Oxford.
3. Padmanabhan C.B, *Financial Management in Education*, Select Books, New Delhi.
4. Psacharopoulos G Woodhalll, *Education for Development*, OUP, New York.
5. Tilak, J.B.G., *Education for Development in Asia*, Sage Publications, New Delhi.
6. Vaizey J, *Economics of Education*, Faber and Faber, London.
7. Woodhall M., *Cost Benefit Analysis in Educational Planning*, UNESCO, Paris.

6.6: INFRASTRUCTURE ECONOMICS**IV-SEMESTER: Course No: 6 [Soft Core: 6.6] 3 Credits****Course Code: (IV-SC.Sp.Ele:6.6)****HEALTH ECONOMICS**

Preamble: Health services constitute one of the major components of the social infrastructure. They are provided under different organizational structures. The health service providers are, in general, non-profit organizations and hence the traditional theory of the firm is not applicable. The demand for health services is determined not by the consumer but by his physician. Hence the traditional consumer demand theory is not applicable. Health services are provided as merit goods by the government, giving rise to specific problems in public finance. Health insurance and other forms of financing also become relevant. In particular, the issue of mobilizing finances through developmental financing is engaging the attention of economists. It is the objective of this course to acquaint the student with all these and related aspects by applying economic reasoning to resource allocation problems of the health sector. This Course would enable students to acquire sufficient knowledge about fundamental principles of Health Economics which is a new branch of economics and has great relevance to mankind.

Module-1: Introduction to Health Economics

Defining Health Economics/Economics of Health Care - Economic Theory - Health Needs and Health Care Sector, Role of Health Care Services in HRD - Global Health Scenario - Major Diseases - Estimates of Disease Burdens - Importance and Usefulness of Health Care Statistics - Estimation of Economic Value of Health Care Services - Indicators of Health Status.

Module-2: Supply of and Demand for Health Care Services

Supply Function of Health Care Services - The Physicians - The Hospitals and Nursing Homes - The Physician Induced Supply for Health Care - Cost Function of Health Care - A Hierarchical Structure - Health Care Network Demand for Health Care: Conceptual Framework - Health Needs - Diseases and Demand for Health Care - Derivation of Individual and Market Demand for Health Care (Illness Cases) - Impact of Health Insurance on Health Care Demand - The Role of Quality in Demand for Health Care.

Module-3: Financing National Health Care Systems

NHRM - Government Financing of Health Care - Health Care as Pure Public Good and Merit Good - Efficiency and Equity in Financing Health Care Sector - Individual (Private) Financing of Health Care - Household Behaviour - Health Insurance - Role of Individuals - The Government and the Insurance Companies - Social Insurance for Health Care of the Poor, Disabled and Aged - Alternative Payment Systems for Health Care - Role of Development Finance Institutions in Financing Health Care.

Module-4: Health Infrastructure and Public Health Care System

Health Infrastructure - Hospital Building Infrastructure - Manpower - Facilities Drugs.
Public Health Care Delivery System - Problems of Public Health - Social Externalities and Threats to Health - Tobacco, Alcohol and Drugs Abuse - Environmental Pollution and Health - Second Generation Health Issues.

Module-5: India's Health Sector

Health Sector Under Five Year Plans - National Health Policy - Emerging Health Insurance Market - Trends in Public Expenditure on Health and Family Welfare - Globalisation and Health Sector.

References: [Please refer to the Latest Editions]

1. Feldstein, N.S, *Economic Analysis of Health Services Efficiency*, Amsterdam: North Holland.
2. Folland, Sherman, Allen C Goodman and Miron Stano, *The Economics of Health and Health Care*, Prentice-Hall, New Jersey.
3. GOI, *National Health Policy*, Ministry of Health and Family Welfare, New Delhi.
4. Government of India, *Five Year Plan Documents* (6th to 12th Plan and On) Planning Commission, New Delhi.
5. Heggade, Odeyar, D, *Hospital Management*, Mohit Publications, New Delhi.
6. Phelps, Charles, E, *Health Economics*, Second Ed. Addison-Wesley, Reading.
7. Weisman J, *Economics of Public Health*, University of Pennsylvania, Pennsylvania.
8. World Bank, *The Financing of Health Services in Developing Countries-An Agenda for Reform*, World Bank Policy Study, Washington D.C.
9. World Bank, *Investing in People: The Health Sector*, World Bank, Washington, D.C.
10. Zweifel, peter and Freidrich Breyer, *Health Economics*, Oxford University Press, New York.

M.A. ECONOMICS

[SPECIALIZATION ELECTIVE COURSE: 6.7]

6.7: SPATIAL ECONOMICS**I-SEMESTER:****Course No: 6 [Soft Core: 6.7] 3 Credits****Course Code: (I-SC.Sp.Ele:6.7) REGIONAL ECONOMICS**

Preamble: This course enables the students to analyse the regional problems of growth and development within the theoretical framework of regional development, planning and policy. It deals with spatial microeconomic and macroeconomic theory, regional economic policy, regional imbalances and policy remedies for overcoming these imbalances.

Module-1: Introduction

Definition and Scope of Regional Economics - Regional Economics as an Independent Field of Academic Enquiry-Concepts of Region - Types of Region - Importance of Regionalization - Approaches to Regionalization - Globalization and Regionalization - Indicators of Regional Development.

Module-2: Spatial Micro Economic Theory

Factors Influencing Location - Regional Location- Theories of Location: Von Thunen, Weber, Isard, Christaller, Losch and Others - General Equilibrium Theory- Concentration versus Dispersal of Economic Activities.

Module-3: Spatial Macroeconomic Theory

Regional Social Accounting - Regional Growth Process - Regional Multipliers - Regional Input-Output Analysis-Regional Business Cycle - Convergence and Divergence Trends in Per Capita Income - Survey of Recent Techniques for Regional Analysis.

Module-4: Regional Economic Policy

Importance and Objectives of Regional Economic Policy - Formulation of Regional Economic Policy - Tools and Techniques - Implementation Mechanism and Limitations.

Module-5: Regional Disparities and Regional Planning

Causes of Regional Disparities - Extent, Trends - Policies and Programmes to Reduce Regional Disparities - Regional Planning - Backward Area Development Programmes - Institutional and Policy Framework for Removal of Regional Disparities - New Economic Policy and Regional Disparities.

References: [Please refer to the Latest Editions]

1. Chand M and V.K. Puri, *Regional Planning in India*, Allied Publishers, New Delhi.
2. Misra R.P., K.V Sundaram and V.L.S Prakash Rao, *Regional Development Planning in India*, Vikas Publishing House Pvt .Ltd, Delhi.
3. Richardson H.W., *Elements of Regional Economics*, Penguin, Harmondsworth.
4. Shrivastava O. S., *Regional Economics: Theoretical Issues*, Anmol Publications, New Delhi.
5. Sudharshu Shekhar (Ed), *Regional Planning in India* - Volume: I & II, Anmol Publications, New Delhi.

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[SPECIALIZATION ELECTIVE COURSE: 6.7]

6.7: SPATIAL ECONOMICS**II-SEMESTER: Course No: 6 [Soft Core: 6.7] 3 Credits****Course Code: (II-SC.Sp.Ele:6.7) URBAN ECONOMICS**

Preamble: Cities constitute the centers for industrial development and economic growth. Cities have an important functional role to play in the hierarchy of human settlement of different size and classes. Urbanization is a global phenomenon and very soon it is expected that nearly one half of the world and our country's population will be living in urban area. Given this importance of urban areas, this course deals with various economic issues pertaining to urbanization and other aspects associated with it.

Module-1: Introduction

Definition and Scope of Urban Economics - An Overview of the Emergence and Growth of Cities
- Globalization and Urbanization -Urban Centers as the Engine of Economic Growth.

Module-2: Economics of Urbanization

The Process of Urbanization: Nature and Dimensions - Factors Initiating and Perpetuating - The Urbanization Process-Characteristics of an Economy Passing through Different Stages of Urbanization - Clusters and Agglomeration - Sub-urbanization.

Module-3: Theories of Urban Growth

Christaller's Central Place Theory - Urban Economic Base and Urban Growth - The Human Ecological Approach to Urban Growth - City Size and Urban Growth - Urban Size: Ratchet-Rank Size Rule - The Cost and Benefits of City Size - Optimum City Size.

Module-4: Theories of Urban Spatial Structure

Urban Spatial Structure: Features - Concepts of City Structure - The Minimization of Costs of Friction Hypothesis -Location Equilibrium of an Urban Firm - Retail Establishments - Market Areas - Consumers and Residents - The Concentric Zone Hypothesis - Urban Residential Land Use Models: Von Thunen, Alonso, Muth, Siegel, Park Burgess Etc.,

Module-5: Urban Public Economy

Urban Local Administration - Role and Functions - The Developmental Role of Urban Local Bodies - Local Public Finance and Fiscal Problems - Methods of Financing - Urban Government Expenditure.

Module-6: Urban Problems and Urban Planning

Urban Housing Problem and Slum Upgradation - Urban Transport - Urban Environment - Urban Poverty and Unemployment - Urban Infrastructure Management - Water Supply and Sanitation - Need for Urban Planning: Objectives and Techniques - Existing Methods and Practices - Emerging Planning Process - Strategies and Issues.

References: [Please refer to the Latest Editions]

1. Harry W Richardson, *Urban Economics*, The Dryden Press, Italians.
2. Hirsch W.E., *Urban Economic Analysis*, McGraw-Hill Book Company, New York.
3. James Heilbrich, *Urban Economics and Public Policy*, St Martic's Press, New York.
4. O' Sullivan, *Urban Economics*, McGraw Hill Higher Education, Boston.
5. Robert L Bish and Hugh O Nourse, *Urban Economics and Policy Analysis*, McGraw Hill Kogakusha Ltd. Tokyo.

6.7: SPATIAL ECONOMICS**III-SEMESTER: Course No: 6 [Soft Core: 6.7] 3 Credits****Course Code: (III-SC.Sp.Ele:6.7) RURAL ECONOMICS**

Preamble: This Course deals with the main theoretical models of rural development and focuses on the significance of rural development in national economy. It introduces the students to a brief study of rural reconstruction programmes of some of the Asian and African countries and about rural resource base and its composition and problems of rural economy with various stages of evolution, formulation and implementation of rural development programmes during pre and post-1947 periods in India and planning techniques and policy tools. The course is structured so as to include all activities and services which helps to achieve the goals of fastening rural development and increase rural welfare. Further, it deals with rural - social, religious, political, economic conditions and cooperative credit and other financial institutions. A detailed study of different forms of rural institutions shall enable the students to understand 'Growth Propelling' and 'Growth Arresting' effects and knowledge shall be useful in formulating an institutional approach for rural development.

Module-1: Introduction

Meaning - Concept of Rural Development - Need for the Study - Causes for its Negligence - Economic Backwardness - Recent Interest on the Study Basic Elements - Rising Expectations and Development - Development and Change - Need for Rural Development - Human Beings as the Cause and Consequence of Development - Dilemmas in Development.

Rural Reconstruction Programmes: Bangladesh, China, Cuba, Brazil and African Countries.

Module-2: Measures, Paradigms and Determinants of Rural Development

Measures of the Level of Rural Development - Rural Poverty: Per Capita Public Expenditure on Community Facilities and Services - Indicators of Development - Income Inequality.

Paradigms of Rural Development: Modernization Theory - Dependency Theory of the Marxist School - Rosenstein-Rodan's Theory of the 'Big-Push' - Leibenstein's Critical Minimum Effort Thesis - Lewis' Model of Economic Development with Unlimited Supplies of Labour - Gunnar Myrdal Thesis of 'Spread and Backwash' Effects - Human Capital Model of Development - Gandhian Model - Development Theories from Other Social Sciences. Determinants of Rural Development

Module-3: Structure and Problems of the Rural Economy of India

Structure of Rural Economy - Rural Economy during British Period and Present Situation - Rural Resources of India: Natural Resources: Land, Water, Mineral and Forest Resources.

Production and Occupational Structure - Rural Unemployment and Under-Employment - Capital and Human Resources - Levels of Technology.

Rural Economic Activities in India: Agriculture - Land Utilization Pattern - Farm Inputs and Outputs - Land Tenure & Land Reforms - Cropping Pattern - Cooperative Farming - Landless Rural People - Gramdhan Movement - Dry Land Farming - Farm Technology - Cottage and Village Industries. Migration of Rural Population - Interdependence between Rural and Urban Economy. Rural Income, Poverty - Causes and Effects of Indebtedness - Rural Credit.

Module-4: Planning, Policies and Strategies for Rural Development

Planning at Different Levels: National, State, District, Block and Village - Need for Planning at Grass Root Level - Government Organization - Bureaucratic Reorientation - Development Authorities - Command Area Development Authority (CADA) - Voluntary or NGOs Agencies - Organizing People.

Rural Development Policies: Goals - Hierarchy - Instruments of Money and Credit - *Strategies of Rural Development:* Growth, Welfare, Responsive Oriented and Integrated or Holistic Strategy - Liberalization and Rural Development.

Module-5: Rural Development Programmes

Community Development Programmes - Committees for Rural Development - Rural Development during the Five Year Plans: SFDA, MFAL, DRAP, IREP, IRDP, JRY, IWDS - Programmes for Rural Debt Relief, Health, Sanitation, Food and Nutrition - Drinking Water etc., - Special Group and Area Specific Programmes - Qualitative Policy Models - Area Development Programmes - MNREGA. Factors Affecting Implementation - People's Participation.

Rural Development Initiatives in India: Firka Development Scheme of Madras (1947) - Nilokiteri Approaches in Haryana (1947) - Etawa Rural Development Pilot Project of UP (1948) - Gandhian Approach to Rural Development: Sarvodaya Movement in 1950s - Bhoodan Movement (1951) - Tagore Society for Rural Development at Kolkata (1969) - Marthandam Integrated Development Society in Tamilnadu (1997) - Other National Initiatives.

Infrastructure for Rural Development: Transport and Communication: Road Connectivity - Access to Information - Power Supply. *Education:* Status of Schools and Enrolment - Compulsory Primary Education - Saksharaths - Importance of Education for Rural Reconstruction - New Educational Policy: Navodaya Schools, Sarva Shiksha Abhiyan (SSA) - Right to Education - Health Care Facilities - Welfare Services: Potable Water, Sanitation facilities - Housing.

Module-7: Institutions for Rural Development in India

Importance of Rural Institutions - Rural Socio-Economic Structure - Family and Kinship - Caste and Class System - Religion - Traditional Practices - Community Leadership - Law of Inheritance - Special Problems of the Weaker Sections of the Society - Rural Development and Cooperatives - Rural Financial Institutions other than Cooperatives: Money Lenders - Traders - Rural Banks - Commercial Banks and Other Agencies - World Bank Lending to Rural Development - Self Help Groups - Micro-Financial Institutions - Role of Third Sector - NGOs and Rural Development.

Decentralization and Panchayat Raj Institutions: Historical Development: Village Panchayats in Ancient India, - Royal Commission on Decentralisation (1907) - Democratic Decentralization - Ministers Conference (1954) - Committees on Panchayat Raj: Balwant Rai Mehta: (1957) - V.T. Krishnamachari (1960) - Takhatmal Jain Study Group (1966) - Ashok Mehta Committee(1977) - G.V.K. Rao Committee (1985) - Dr. L.M. Singhvi Committee (1986) - Panchyat Committee of Local Self-Government - 72nd Constitutional Amendments (1992 and 1993) - Function of Panchayat Samiti - *District level Panchayats* - Gram Panchayats - Reservation for Women PRIs - Administrative Responsibilities of BDO, CEO and ZP - Resources - Working of Village Panchayats.

References: [Please refer to the Latest Editions]

1. Agarwal A N and Singh S P, *The Economics of Under Development*, OUP, New Delhi.
2. Dalip S Thakur, *Poverty, Inequality and Unemployment in Rural India*, B R Pub., Delhi.
3. Ekans Richard S and K S Parikh, *Planning and Growth: Multi-sectoral, Inter-temporal Models Applied to India*, The MIT Press, Massachusetts.
4. Government of India, *Economic Survey*, Ministry of Finance, New Delhi.
5. Government of India, *Five Year Plan Documents*, Planning Commission, New Delhi.
6. Higgins Benjamin, *Economic Development: Principles, Problems and Policies*, Central Books.
7. Jain Gopal Lal, *Rural Development*, Mangal Deep Publications, Jaipur.
8. Katar Singh, *Rural Development, Principles, Policies and Management*, Sage Pub., Delhi.
9. Madan G R, *India's Developing Villages*, Allied Publishers, New Delhi.
10. Report of A.D. Gorawala Committee & Venkatappaiah Committee.
11. Reserve Bank of India, *All India Rural Credit Review Committee Report*, Mumbai.
12. Satya Sundaram I, *Rural Development*, Himalaya Publishing House, Mumbai.
13. Sharma D.P and Desai U V, *Rural Economy of India*, Vikas Publishing House, Delhi.
14. Shriram Maheshwari, *Rural Development in India: A Public Policy Approach*, Sage Pub., New Delhi.

6.7: SPATIAL ECONOMICS**IV-SEMESTER: Course No: 6 [Soft Core: 6.7] 3 Credits****Course Code: (IV-SC.Sp.Ele:6.7) TRIBAL ECONOMICS**

Preamble: India is habited with number of Tribes across various regions and states. The trends in and approaches to tribal studies have changed with the changes in the larger context. The Tribals though generally share common life and culture, and many of their problems largely common they get different treatment depending upon the state situation. The Constitutional Provisions, tribal development administration, approach to address their problems has given much importance since it is essential for inclusive approach and also to sustainable development. This course helps the student to have a broad view about the tribal problems, situation, issues and measures taken to address their them in India.

Module-1: Introduction

Concepts - Definitions - Features - Structure - Need for a Separate Study - Approaches to Study Tribal Economy - Political Economy of Tribal Development - Tribal Studies with a Difference - Existence of Tribes Across Countries - Tribal Economic Development and Community Well Being - Changing Nature of Tribal Society.

Module-2: Demographic Features and Tribal Scenario in India

Brief Information about the Tribes in Andhra Pradesh, Bihar, Gujarat, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu, North and North Eastern States.

Demographic Features of Tribes: Tribe and its Indian Context - Classification of Tribes - Tribal Population Size, Growth, Distribution, Sex Ratio. Socio-Cultural Profile - Illiteracy and Literacy, Occupation, Poverty and Unemployment. Tribal Economy - Disparities Amongst States and Traditionally Disadvantaged Groups - Sectoral Disparities - Tribal Situation.

Module-3: Tribal-Forest Relationship

Tribal Land - Compulsory Acquisition o of Tribal Lands for Public Purpose - Settlement of Non-Tribals on Tribal Lands - Encroachment of Forests Traditionally held by Tribes - Land Alienation - Ceiling Law - Oppression - Enhancement of Rent - Compulsory Bonded Labour - Major Issues: Non-Timber Forest Products, Forest Policy and Forest Laws, Forestry, Shifting Cultivation , Ownership of Lands Employment, Environmental Hazards and Rehabilitation - Emergence, Growth and Development of Forest Labour Cooperative Societies - Role of FLCS in Tribal Development - Functions and Programmes - Welfare Activities.

Module-4: Tribal Problems in India

Genesis of Tribal Problems: Nature of Tribal Problem - Tribal and Non-Tribal Relationship - Health and Nutritional Problems in Tribal Areas - Problems and Approaches to Development:

Resettlement and Rehabilitation: Prerequisites - Availability of Land, Drinking Water, Irrigational Facilities Ethnicity Cultural Milieu, Political Ideology Language - Ecological Surroundings Development Paradigms - Missing Links - Core Provisions - Human Factors in Resettlement and Rehabilitation - Consequences of Failure.

Module-5: Measures Regarding Tribal Development in India

Constitutional Provisions and Safeguards - Representation in Legislature and Panchayats - Reservation the Service - Administration of Scheduled Castes and Tribes - Tribes' Advisory Council - Commissioner for the SCs and STs - Welfare Department in States - Educational Facilities - Scholarships - Economic Opportunities - Tribal Research Institute.

Module-6: Tribal Development: Parameters and Initiatives

Relying on Bureaucracy for Development - Tribal Development - Development: Displacement and Rehabilitation - Impact of Development Projects on Tribals - Growth with Contradictions -Tribal Development in Rajasthan, Karnataka, Gujarat, Madhya Pradesh, Maharashtra - Effects of New Economic Policy on Tribals - Tribal Sub-Plan - Human Resource Development.

Voluntary Initiatives for Tribal Development: Selection of Voluntary Agencies - Professional Approach - Mobilization Approach - Efficient Delivery Approach - Role of NGOs.

Growth with Polarities Contradictions - Development Perspectives and Prospects - Sustainable Development Programmes - Monitoring and Evaluation.

References: [Please refer to the Latest Editions]

1. Joshi Vidyut (ed), *Tribal Situation in India- Issues in Development*, Rawat Pub., Jaipur.
2. Bhowmick, Prabodh Kumar (Ed), *Tribal People of India : Society Culture and Development*, India R.N. Bhattacharya, Kolkata.
3. Bijoy, C R., *India and the Rights of Indigenous People : Constitutional, Legislative and Administrative Provisions Concerning Indigenous and Tribal People*, Asia Indigenous People Pact.
4. Bose, Nirmal Kumar, *Some Indian Tribes*, National Book Trust, New Delhi.
5. Burman, B K R, *Indigenous and Tribal People : Gathering Mist and New Horizon*, Mittal Publication, New Delhi.
6. Bhupinder Singh And Mahanti, Neeti, *Tribal Policy In India*, Inter- India Pub., New Delhi.
7. Chaudhuri, Kumar Sarit (2004), *Constraints Of Tribal Development.*, Mittal Publications, New Delhi.
8. Furer- Haimendorf, Von Chritoph , *Tribes of India: The Struggle for Survival*, Oxford University.
9. India. Ministry of Information and Broadcasting, *Tribal People of India*, Publications Division.
10. Kumar, Suresh Singh, *Tribal Movements in India*, Manohar Book Service.
11. Rath, Govinda Chandra, *Tribal Development In India : Contemporary Debate*, Sage Publication.

Module-6: State and Cooperation

Different forms of State aid - Advantages and Limitations of state aid - Officials and Non-officials in Cooperative Movement.

References: [Please refer to the Latest Editions]

1. Ajit Kumar N, *Cooperation*, Himalaya Publishing House, Mumbai,
2. Bedi R.D., *Theory, History and Practice of Cooperation*, Loyal Book Depot, Meerut.
3. Hajela T.N, *Cooperation: Principles, Problems and Practice*, Konark Publishers, New Delhi
4. Krishnaswamy O.R. and Kulandhiswamy V., *Cooperation: Concept and Theory*, Arudra Academy, Coimbatore, Tamil Nadu.
5. Mathur B.S., *Cooperation in India*, Sahitya Bhawan, Agra.
6. Sharada V, *Theory of Cooperation*, Himalaya Publishing House, Bombay.

6.8: COOPERATIVE MANAGEMENT**II-SEMESTER: Course No: 6 [Soft Core: 6.8] 3 Credits****Course Code: (II-SC.Sp.Ele:6.8)****COOPERATIVE MOVEMENT IN INDIA AND ABROAD****Module-1: Cooperative Movement Abroad**

Cooperative Movement in: Germany -Great -Denmark - Japan - USA - Canada - Italy - Sweden - France and Israel.

Module-2: Cooperative Movement in India

Origin and Growth of Cooperative Movement in India - Pre-Independence Developments - Major Developments in the Post-Independence Period - Types of Cooperatives.

Module-3: Committees and Commissions on Cooperatives

All India Rural Credit Survey (AIRCS) -All India Rural Credit Review Committee (AIRCRC) Madhava Das Committee (HARARI Committee) - Committee for Reviewing Arrangement for Financing Institutional Credit for Agricultural and Rural Credit (CRAFICARD) - Kushro Committee.

Module-4: Credit Cooperatives in India

Agricultural Credit - Organizational Pattern and Evolution - Small Sized Societies - Multipurpose Societies - Large Sized Societies.

Module-5: Non-Credit Cooperatives in India

- *Service Cooperatives:* Evolution, Functions and Structure of Cooperatives.
- *Cooperative Marketing:* Structure and Functions - Policies and pattern of Working - Marketing Practices - Linking Credit with Marketing.
- *Cooperative Farming:* Need and Importance - Types, Features, and Working of Cooperatives - Problems.
- *Cooperative Housing:* Origin and Development - Types of Housing Societies and their Working.
- *Industrial Cooperatives:* Need and Purpose -Types of Industrial Cooperatives - Aims and Objectives.
- *Dairy Cooperatives:* Formation of NDDB - Status of Milk Production - Marketing and Consumption.
- *Cooperative Education and Training:* Significance - Organizational Efforts in India - Various Training Programmes.
- *Consumers' Cooperatives:* Need and Importance - Recent Developments - Guiding Principles.

Module-6: National Level Cooperative Institutions in India

- National Cooperative Union of India (NCUI).
- National Cooperative Development Corporation (NCDC).
- National Cooperative Consumers' Federation (NCCF).
- National Agricultural Cooperative Marketing Federation of India (NAFED).
- National Dairy Development Board (NDDB).
- National Bank for Agriculture and Rural Development (NABARD).

Module-7: Community Development and Cooperatives

Panchayat Raj, Village Panchayats, Zilla Parishads - Progress and Evaluation.

References: [Please refer to the Latest Editions]

1. Ajit Kumar, *Cooperation*, Himalayan Publishing House, Mumbai.
2. Bedi R.D., *Theory, History and Practice of Cooperation*, Loyal Book Depot, Meerut.
3. Hajela T.N, *Cooperation: Principles, Problems and Practice*, Konark Publishers, New Delhi.
4. Mathur B.S., *Cooperation in India*, Sahitya Bhawan, Agra.
5. Ramkishan. Y., *Management of Cooperatives*, Jaico Publishing House, Mumbai.

6.8: COOPERATIVE MANAGEMENT**III-SEMESTER: Course No: 6 [Soft Core: 6.8] 3 Credits****Course Code: (III-SC.Sp.Ele:6.8) COOPERATIVE MANAGEMENT IN INDIA****Module-1: Concept of Management**

Definition, Nature, Scope, Principles, Objectives, and Functions Cooperative Management - Importance of Management - Problems of Management.

Module-2: Management of Cooperative Societies

General Body Meeting - Constitution and Working of Managing Committee and Elections - Disqualifications for Committee Members - Privilege of Cooperative Societies - Loan and Borrowing Properties and Disposal Restrictions of Share Holding.

Module-3: Management of Cooperatives

Principles of Cooperatives Management - Functions of Cooperative Management - Problems of Cooperative Management.

Management of Credit Cooperatives: Introduction - Structure - Objectives - Management Aspects - Managing Committee - Board of Directors - Chairman /Executives - Problems of Credit Cooperatives.

Management of Non-Credit Cooperatives: Consumer Cooperatives - Marketing Cooperatives - Dairy Cooperatives - Housing Cooperation.

Human Resource Management: Human Resource Management in Cooperatives - Management Information System - Management Information System in Cooperatives

Module-4: Marketing Management

Cooperative Marketing Management in India - Management Aspects of Marketing Cooperatives - Objectives of Cooperative Marketing Management - Adoption of Cooperative Marketing Approach - Role of Cooperative Marketing Management - Marketing Intelligence and Integrated Marketing System.

Module-5: Office Management

Office Organization and Office Maintenance of Records - Distribution of Work Among Staff Members - Office Correspondence - Filing System - Maintenance of Records and Statistics.

References: [Please refer to the Latest Editions]

1. Kamat G.S, *New Dimensions of Co-Operative Management*, Himalaya Publishing House, New Delhi.
2. Kulandiswamy V., *Principles and Practice of Cooperative Management*, Rainbow Publications, Coimbatore.
3. Nakkikron. S, *Cooperative Management*, Rainbow Publications, Coimbatore.
4. Ramkishen Y., *Management of Cooperatives*, Jaico Publishing House, New Delhi.
5. Shah A.K. *Functional Management for the Co-operative*, Rainbow Publishers, Coimbatore.
6. Varkey V.O. and V.G. Vartak, *Cooperative Management*, Varsha Prakasham Pune.

6.8: COOPERATIVE MANAGEMENT

IV-SEMESTER: **Course No: 8 [Soft Core: 6.8] 3 Credits**

Course Code: (IV-SC.Sp.Ele:6.8)

COOPERATIVE LAW, ALLIED LAW, ACCOUNTS AND AUDIT

Module-1: Evolution of Cooperative Legislation in India

Historical Background and Evolution of Cooperative Legislation in India

- 1904 Act to 1991 Model Act.
- Karnataka Cooperative Societies Act, 1959
- Karnataka Souhardha Act 1997

Module-2: Registration

Registration of Cooperative Society - Amendment of Bye-laws-Amalgamation and Division of co-operative Societies. Funds of Cooperative Societies.

Module-3: Cooperative Accounting

Definition of Accounting - Book Keeping and Accountancy Double Entry Book Keeping - Cash Book Ledger - Daybook Ledger- Balancing of Ledgers.

Final Accounts: Trial Balance - Receipts and Payments - Previous Year's Balance Sheet -Trading Account - Profit and Loss Account.

Management Accounting: Definition of Management Accounting - Objectives - Difference between Management Accountancy, Financial Accountancy and Cash Accountancy.

Accounts of Cooperative Societies: Accounting in PACS, Central Organization, Banks, State Cooperative Apex Bank.

Module-4: Cooperative Auditing

Evolution of Audit - Definition - Nature of Audit - Objectives - Scope - Difference between Cooperative Audit and Company Audit -Right Basis and Liabilities - Cooperation Auditor - Arrangements and Types of Audit - Vouching, Verifications and Examination - Fraud, Misappropriations and Embezzlement and Special Report. - Audit Rectification Report - Audit Classification - Concept of Performance Audit, Social Audit and Management Audit - Administrative set up of Cooperative Audit in India - Cooperative Audit Organization in Karnataka - Audit of Cooperative Organizations- Audit, Inquiry, Inspection and Surcharge, Settlement of Disputes and Arbitration - Liquidation.

Module-5: Review of Cooperative Legislation

Current Review of Cooperative Legislations in Andra Pradesh, Tamil Nadu, Maharashtra and Karnataka.

References: [Please refer to the Latest Editions]

1. Belwale V.R., *Cooperative Accounts*, Pragati Prakashan, Pune.
2. *Co-operative*, Bimonthly Journal and Cooperation, New Delhi.
3. Hajela T.N., *Co-operative, Principles, Problems and Practice*, Konark Publications, Delhi.
4. Krishnaswamy O.R, *Cooperative Audit*, Oxford and IBH, New Delhi.
5. Mahehwari. S.M., *Principles of Accounting*, S Chand and Co, New Delhi.
6. Murthy G.V., *The Karnataka Cooperative Societies Act 1959* Lawyers Law Book, Bangalore. (with Rules, Amendments and Circulars)
7. Raman B.S., *Advance Accountancy*, United Publications, Mangalore.
8. Samiuddin Mahjoozen Rahad K - Ivum Rahman, *Cooperative Accounting and Auditing*, Himalaya Publishing House, Bombay.
9. Wandkar D.V., *Cooperative Audit*, Pragathi Prakashana , Pune.

6.9: OPTIMIZATION TECHNIQUES

III-SEMESTER: Course No: 9 [Soft Core: 6.9] 3 Credits

Course Code: (III-SC.Sp.Ele:6.9) OPTIMIZATION TECHNIQUES-I

Preamble: Mathematical Economics is that elite branch of economics that attempts to codify in a precise, logical and rigorous manner the various cause and effect sequences inherent in the vast and often chaotic body of economic theory. It is the forerunner of econometrics that deals with the quantification aspect of these sequences. Just as Descartes succeeded in converting Euclidean geometry into a precise science known as Analytical Geometry, mathematical economists have attempted not just to revise economic theory but also to practically re-write it in a precise and scientific manner. This extensive revision using various types of optimization methods implies that non-mathematical economists have a limited scope for keeping pace with the break-through being affected in the frontier areas of economics using mathematical tools of analysis, and thus this course is devised with an explicit purpose of providing students with an exposure to these optimization methods which have succeeded in elevating economics to the level almost of a science.

Module-1: Linear Programming

Standard Concepts - The Basic Theorem of Linear Programming - The Simplex Method - Completeness of the Algorithm - Convergence Properties - Sensitivity Analysis - Duality - The Dual Problem and its Economic Interpretation - Some Duality Theorems - Dual Simplex Algorithm - Additional and Tighter Constraints - Upper Bounded Variables.

Module-2: Game Theory

Basic Definitions and Classifications - Strategies and the Payoff Matrix - The Evaluation of Strategies - The Worth of a Game - Strictly Determined Games - Maximin and Minimax Strategies - Chance and Expected Values - Mixed Strategies and Games without Saddle Points - The Minimax Theorem - Non Constant Sum and Many Person Games - Interrelationship between Game Theory and Linear Programming - Games in Extensive, Strategic and Co-operative (or Coalitional) Form - Continuum of Strategies: Time, Goods and Players - Co-operative Solutions - The Shapely Value - Non Co-operative Solutions - Non Co-operative Equilibrium Points.

Module-3: Input-Output Analysis

Basic Concepts - Linear Programming Interpretation - The Hawkins-Simon Condition - Solving an Input-Output System - The Non Substitution Theorem - Prices in the Leontief System - Open and Closed Leontief Systems - The Leontief Dynamic System - Causal Indeterminacy in the Dynamic Leontief Model - Balanced Growth and Intertemporal Efficiency - The Problem of Dual Instability.

Module-4: Non-Linear Programming

Preliminary Concepts - Linear Inequalities and Theorems of the Alternative - Farkas' Theorem - Convex Sets and Separation Theorems for Convex Sets - Hahn-Banach Theorem - Gordon's Theorem - Saddle Point Optimality Criteria of Non-Linear Programming - The Kuhn Tucker Optimality Conditions - Rationale, Interpretation and Sufficiency of the Kuhn Tucker Conditions - Duality in Non-Linear Programming - Optimality and Quality in the Presence of Non-Linear Equality Constraints.

References: [Refer to the Latest Editions]

1. Arrow, K.J and M.D. Intrilligator, (Eds.), *Handbook of Mathematical Economics-Volume II*, North Holland, Amsterdam.
2. Blitzer, C.R., P.B. Clark and L. Taylor, (Eds.), *Economy-Wide Models and Development Planning*, OUP, Oxford.
3. Dorfman, R., P.A. Samuelson and R.M. Solow, *Linear Programming and Economic Analysis*, McGraw-Hill, Tokyo.
4. Luce, R.D and H. Raiffa, *Games and Decisions*, Wiley, New York.
5. Mangasarian, C.L., *Non-Linear Programming*, McGraw Hill, New York.
6. Shubik, M, *Game Theory in the Social Sciences*, MIT Press, Cambridge-Mass.

M.A. ECONOMICS

[SPECIALIZATION ELECTIVE COURSE: 6.9]

6.9: OPTIMIZATION TECHNIQUES**IV-SEMESTER: Course No: 9 [Soft Core: 6.9] 3 Credits****Course Code: (IV-SC.Sp.Ele:6.9) OPTIMIZATION TECHNIQUES-II**

Preamble: This course is in continuation of Optimization Techniques-I of the previous semester and is devised with an explicit purpose of providing students with an exposure to these optimization methods which have succeeded in elevating economics to the level almost of a science.

Module-1: Dynamic Programming

Analysis of Dynamic Phenomena - Structure of Multistage Decisions - Bellman's Principle of Optimality - Applicability of Dynamic Programming - Numerical Solutions - Computational Feasibility - Sensitivity Analysis - Models with an Infinite Horizon - Discrete Dynamic Programming - Probabilistic Dynamic Programming - Dynamic Programming in Markov Chains.

Module-2: System Theory

The Notion of A System - State and System Equivalence - State Space Theory of Linear Time Varying Systems - Linear Systems - The Standard form Transfer Function of the Standard Form - Theory of Systems - Non-Linear Feedback System - Stability Theory - Stability of Systems of Direct Control - The Method of Virtual Liberalization - Decomposition of Large Scale Systems: Hierarchal Control.

Module-3: The Calculus of Variations

Functional and Theorem Variations - A Necessary Condition: The Euler Equation - Variational Problems with Constraints - Fixed End Point and Natural Boundary Problems - Variable End Points - Broken External and the Weierstrass Erdman Corner Conditions - Variations of Functional - The Legendre Condition - The Jacobin Condition - The Weierstrass Condition for Strong Extrema - The Legendre Clebsch Condition - Sufficient Conditions.

Module-4: The Theory of Optimal Control

The Dynamic Optimisation Problem - The Control Problem - The State of the Dynamic System - The Control Variables - Controllability and Observability - An Objective Functional Form - The Calculus of Variations to Optimal Control - Pontryagin's Maximum Principle - Transversality Conditions - Optimal Control with Equality and Inequality Constraints - Dynamic Programming - Hamilton Jacobi Equation and the Euler Equation - Bang Bang Control and Time Minimum Problems - Singular Control - Linear Regulator Problems - Linear Tracking Problems - Sensitivity Analysis - Cross Sensitivity - Objective Functional Sensitivity - Stability and Sensitivity - Robustness Analysis - The Optimum Linear Discrete Filter - The General Discrete Kalman Filter.

References: [Refer to the Latest Editions]

1. Bellman, R.E. and S.E.Dreyfus, *Applied Dynamic Programming*, Princeton University Press, and Princeton.
2. Chakravarty, S., *Capital and Development Planning*, MIT Press, Cambridge, Mass.
3. Chow, G.C, *Analysis and Control of Dynamic Economic Systems*, John Wiley, New York.
4. Hadley, G. and M.C. Kemp, *Variational Methods in Economics*, North-Holland, Amsterdam.
5. Optner, S.L., (Ed), *Systems Analysis*, Penguin Books, Harmondsworth.
6. Sage, A.P. and J. L. Melsa, *Estimation Theory with Applications to Communications and Control*, McGraw-Hill, New York.
7. Zadeh, L.A and C.A. Desoer, *Linear System Theory*, McGraw-Hill, New York.

6.10: MATHEMATICAL ECONOMICS**IV-SEMESTER: Course No: 10 [Soft Core: 6.10] 3 Credits****Course Code: (III-SC.Sp.Ele:6.10) MATHEMATICAL ECONOMICS-I**

Preamble: The field of mathematical economics can be defined as one that includes various applications of mathematical concepts and techniques to economics, particularly economic theory. This course is the logical extension of the optional course on Optimization Techniques because here we apply many of those techniques. The Course deals with the applications of mathematical techniques of analysis to microeconomic theory comprising consumer theory, producer theory, and oligopoly theory.

Module-1: Consumer Theory

Commodities and Prices - Consumer Preferences - Utility Functions - Properties of Preferences of Utility Functions - Demand without Transitivity - Demand under Separability - Expenditure Functions and Indirect Utility Functions - Properties of Differentiable Utility Functions - Differentiable Demand - Separability and the Slutsky Matrix - Additive Utility and Demand.

Module-2: Producers' Theory

Production Technology - Properties of the Production Function and Duality - Applications of the Duality Principle: Profit and Cost Functions - Functional forms of the Production Function - Capital Stock Aggregation: The Cambridge Controversy - Disequilibrium Models of Input Demand - Behaviour of the Firm Under Regulatory Constraints - Economies of Scale and Scope in the Multi-Product Firm.

Module-3: Oligopoly Theory

Overview of Oligopoly Theory - The Early History - Single Period Models - Co-operative Versus Non-Cooperative Equilibria - Stability and Reaction Functions - Multi-Period Models - Lagged Response - Reaction Function Models - Models with Quick Response or Adjustment Costs - Models with a Time Dependent Structure - Oligopoly and Game Theory - Entry and Exit in Oligopoly Models - Bilateral Monopoly - Oligopoly and General Equilibrium Models - The Core Theory Approach - The Impossibility Theorem.

Module-4: Investment Theory

One-Period Portfolio Selection - Risk Measures for Securities and Portfolios in the one-Period Model-Spanning, Separation and Mutual Fund Theorems - Models of One-Period Portfolio Selection - Time-State for the Firm - Inter-temporal Consumption and Portfolio Selection Theory.

References: [Refer to the Latest Editions]

1. Arrow, K.J. and M. Intriligator, Eds, *Handbook of Mathematical Economics*, Volume II, North-Holland, Amsterdam.
2. Arrow, K.J., S. Karlin and P. Suppes, Eds. *Mathematical Methods in the Social Sciences*, Stanford University Press, Stanford.
3. Friends, I. and J. Bicksler, Eds. *Studies in Risk and Return-Vols. I and II*, Ballinger, Cambridge, Mass.

6.10: MATHEMATICAL ECONOMICS

IV-SEMESTER: Course No: 10 [Soft Core: 6.10] 3 Credits

Course Code: (IV-SC.Sp.Ele:6.10) MATHEMATICAL ECONOMICS-II

Preamble: This Course is the logical extension of the elective Course on Optimization Techniques because here we apply many of those techniques. The Course deals with the applications of mathematical techniques of analysis to microeconomic theory comprising investment theory. Further, General Equilibrium theory including equilibrium under uncertainty and application of mathematical techniques to macroeconomic theory comprising of optional economic growth and theory of planning are also included.

Module-1: The Economics of Uncertainty

Introduction and Overview - Measures of Risk and Risk Aversion - Economics of Search - Elementary Search Model - Variations of the Basic Model - Adaptive Search - Economics of Insurances - Optimal Consumption Under Uncertainty - Multi-period Models - Competitive Firms Under Uncertainty - Factor Demand Under Price Uncertainty - Alternatives to the Expected Utility Hypothesis - The Competitive Industry Under Uncertainty - Brownian Motion and Martingales - Their Economic Applications - The Efficient Market Hypothesis - Stochastic Models of Inventory and the Demand for Cash Balances - Diffusion Process and their Applications to Economics - Evolutionary Processes in Economics.

Module-2: General Equilibrium Theory

Existence of Competitive Equilibrium - Simultaneous Optimization Approach - Excess Demand Approach - Economies with a Measure Space of Agents - Stability - Trading Out of Equilibrium - Regular Economies - Debreu's Theorem - Large Economies - Smale's Approach - Core of an Economy - Replica Economies - Temporary General Equilibrium Theory - Equilibrium Under Uncertainty - Computation of Equilibrium Prices - Brower's Fixed Point Theorem - Non-Retraction Theorem - Algorithm of Scarfe.

Module-3: Optimal Economic Growth and Stabilization

Economic Growth: Theories, Models, Concepts and Methods - The Harrod-Domar Model - The Neoclassical one - Sector Model - Two Sector Models of Economic Growth - Models with Technical Progress - Optimal Economic Growth - The Von Neuman Model - The Keynes - Ramsey Rule - The Golden Rule of Accumulation - Turnpike Theorems - Stock Adjustment Models - The Behaviour of Inventory Cycles - The Mathematics of Oscillations - Stabilization Policy - Trade Cycle Theory - Linear and Nonlinear Acceleration.

Module-4: The Theory of Planning

How much should a Nation Save? - Consistency Models vs. Utility Maximization Models - The Assumption of a Labour Surplus Economy - Problems of Social Choice - The Length of the Planning Horizon - The concept of Time Preference - The Strotz Phenomenon - Optimal Growth Paths for Infinite Horizon - Terminal Conditions - Optimal Growth Paths for Infinite Planning Horizons - the Consumption Turnpike Theorem - Utility Maximization over an Infinite Horizon - Optimal Programmes of Capital Accumulation - The Siftable Capital Base - The Non-Shiftable Case: The Feldman-Mahalanobis Model-Domar Model - The Non-Shiftable Two-Sector Model with a Time Minimization Constraint - Non-Linear Utility Functions in Multi-Sector Models.

References: [Refer to the Latest Editions]

1. Arrow, K.J. and M. Intriligator, Eds. *Handbook of Mathematical Economics*, Volume II, North-Holland, Amsterdam.
2. Chaktavarty S, *Capital and Development Planning*, MIT Press, Cambridge, Mass.
3. Diamond P and M. Rothschild, Eds, *Uncertainty in Economics*, Academic Press, New York.
4. Scarfe, B.L., *Cycles, Growth and Inflation*, McGraw-Hill, New York.

7.1: NATURAL RESOURCE AND ENVIRONMENTAL ECONOMICS**I-SEMESTER: Course No: 1 [Soft Core: 7.1] 4 Credits****Course Code: (I-SC.APD:7.1)****NATURAL RESOURCE ECONOMICS**

Preamble: This course introduces the concept of natural resources, decision making over time and the importance of interest rate, compounding and discounting. The modules incorporated in this course have a focus on the scarcity of natural resources, contributions of classical economists to economics of exhaustible resources, theory of exhaustible resources, Hotelling theory and petroleum conservation. The other important issues introduced are: the theory of exhaustible resources, resources scarcity and limits to growth. The course also discusses about resources availability, its use and misuse in India. The course is designed to give a good understanding of both theoretical and practical aspects of natural resources availability and utilization which is necessary for sustainable policy formulation.

Module-1: Introduction to Natural Resources Economics

Introduction - Concept - Importance of Resource Economics - Decision Making Over Time: Discounting - Types and Classification Natural Resources - Malthusian Approach - Stationary State of the Classical Economists - Club of Rome Approach - Scarcity of Natural Resources - Measuring Resource Scarcity: Unit Cost Measure, Real Prices, and Economic Rent.

Module-2: Economics of Exhaustible Resources

Resource Taxonomy - Efficient Inter temporal Allocations - The Two-Period Model Revisited - The *N*-Period Constant-Cost Case - Transition to a Renewable Substitute - Increasing Marginal Extraction Cost - Exploration and Technological Progress - *Historical Example of Technological Progress in the Iron Ore Industry* - Market Allocations of Depletable Resources - Appropriate Property Rights Structures - Environmental Costs - Harold Hotelling Theory of Exhaustible Resources - Petroleum Conservation in Theory and Practice

Module-3: Economics of Renewable Resources

Biological Mechanics - Bionomic Equilibrium - Harvesting under Open Sources - Socially Optimal Harvests under Private Property Rights - Regulation of Harvesting - Sole Ownership - Forests - The Economics of Forest Harvesting - Extending the Basic Model - Water as resource- The Potential for Water Scarcity - The Efficient Allocation of Scarce Water - Surface Water - Groundwater - Water Transfers and Water Markets - Examples - Water Market Assessment: Australia - Water Prices - Water Pricing in Canada

Module-4: Recyclable Resources: Minerals, Paper, Bottles, and E-Waste

Introduction- An Efficient Allocation of Recyclable Resources - Extraction and Disposal Cost - Recycling: A Closer Look - Recycling and Ore Depletion - Factors Mitigating Resource Scarcity - Exploration and Discovery - *Lead Recycling* - Technological Progress - Substitution - Market Imperfections - Disposal Cost and Efficiency - The Disposal Decision - Disposal Costs and the Scrap Market - Subsidies on Raw Materials - Corrective Public Policies - Markets for Recycled Materials - E-Waste - Pollution Damage

Module-5: Natural Resources Accounting

Natural Resources Accounting - Environmentalists' Criticism of National Accounts - Integrating National Accounting with Environmental Concerns - Valuation of Natural Resources - A Comparison between the System of National Accounts and the System of Integrated Environmental and Economic Accounting (SEEA).

Module-6: Resource Availability: Use and Misuse in India

Land Use and Land Degradation, Water Pollution - Energy Resources - Livestock Resources - Forest Resources and Deforestation - Fisheries and Aquatic Resources - Mineral Resources.

References: [Please refer to the Latest Editions]

1. Bernet H.J and Morse C, *Scarcity and Growth, the Economics of Natural Resource Activity*, John Hopkins, Baltimore.
2. Conard J.M and Clark C.W., *Natural Resource Economics: Notes and Problems*, Oxford University Press, Oxford.
3. Institute, *World Resources*, Annual Publications.
4. John M Kerr, *Natural Resource Economics*, Oxford and IBH, New Delhi.
5. Nalin K Shastree, *Environmental Resource Management*, Anmol Pub., Pvt, Ltd. New Delhi.
6. Perman, R., Ma, Y., McGillivray, J and Common, M., *Natural Resource and Environmental Economics*. 3rd edition, Pearson Education Limited, Edinburgh Gate.
7. Randall Alan, *Resource Economics*, Grid Publishing, Columbus, Ohio.
8. Tietenberg, T. and L. Lewis., *Environmental & Natural Resource Economics*, Pearson Education.
9. World Resource Institute, *World Resources*, Annual Publications.

7.1: NATURAL RESOURCE AND ENVIRONMENTAL ECONOMICS**II-SEMESTER: Course No: 1 [Soft Core: 7.1] 4 Credits****Course Code: (II-SC.APD:7.1)****ECOLOGY AND ECONOMICS**

Preamble: An understanding of ecology economics is important in understanding the environmental issues. This course introduces linkages between ecology and economics. It deals with the conflicting paradigms and ecological concerns in the evolution of economic thought, biosphere, ecosystems, climatic conditions, biodiversity, energy flow, economic process, biogeochemical cycles, nutrient cycles and the issue of climate change.

Module-1: Ecology, Ecosystems and Economics

Introduction - Ecology and Economics - Earth, Life and Biosphere Ecosystem - Conflicting Paradigms - Ecological Concern in the Evolution of Economic Thought - Components of Ecosystem - Organic and Inorganic Substances - Biodiversity - Soil Energy and its Role in the Biosphere - Solar Energy - Wind Energy - Climatic Condition and Limiting Factors Ecology and Economics - *Interdependent Systems*: Planet Earth, Population, Plant, Animals - Biological Evolution - Co-evolution - Ecological Concern in the Evolution - The Relationship between Ecological and Neoclassical Economics.

Module-2: Population Ecology and Human Population Growth

Population of Species and Human System - Population Attributes - Population Growth - Biotic Population Growth Pattern - Population Growth, Density, Migration and Trade - Population and Limitations of Earth Space - Population and Environment - Ecology of the Poor and the Effluent - India's Human Settlements.

Module-3: Human Ecology: Limits of Sources and Sinks

Nature as a Source and Sink Land, Soil and Food: Food Security, Land Use, Land Degradation Soil Erosion Impact of Soil Degradation Water; Water Resources Balance, Water Pollution, Development and Water Management Forest: Forest as a Resource, Extent of Deforestation and Degradation Biodiversity: Extent and Loss of Biodiversity Energy Development and Energy Security Energy and Environmental Pollution India's Energy Scene and Sustainability Non Energy Materials Sink and Wastes, Global Pollution: Acid Rain, Ozone Depletion, Global Warming, Degradation of Sink, Desertification.

Module-4: Economic Growth and the Environment

The IPAT Identity Scenarios for the Near Future - Commodity Composition of GDP - Consumption Technology Modelling Growth and the Environment on Substitution Possibilities - Renewable Resources - Nonrenewable Resources - Limits To Growth? Growth and the Environment in History *The Limits To Growth* - Reactions To *The Limits To Growth* - *Beyond The Limits* - Growth as the Solution to Environmental Problems - EKC Hypothesis - The Empirical Status - EKC Implications.

Module-5: Climate Change

Nature and Extent of the Problem - Greenhouse Effect - Enhanced Greenhouse Effect - Intergovernmental Panel on Climate Change - Impacts of Climate Change - Responding to the Enhanced Greenhouse Effect - Reasons for the Difficulty of the Problem - Global Public Bad-equity Issues - Complexity and Ignorance - Energy Use and Supply - Mitigation Targets and Instruments - Setting a Global Target - Instrument Regimes National Sovereignty and Mitigation - The United Nations Framework Convention on Climate Change - The Kyoto Protocol Assessment.

Module-6: Sustainable Economic Development

History of the Sustainable Development Principle - Early Days of Sustainable Development - Sustainability in Neoclassical Economics - The 'Brundtland Report' - Our Common Future - The United Nations Conference on Environment and Development (UNCED) - World Summit on Sustainable Development (WSSD) - Operationalising the Principle - Policy Approach to Sustainable Development - Role of Technology and Human Values - Management of Sustainable Development and Institutions.

References: [Please refer to the Latest Editions]

1. Barry C Field, *Environmental Economics*, McGraw Hill. New Delhi.
2. Charles D Kilted, *Environmental Economics*, Oxford, New Delhi.
3. Hanna D. *Sustainable Development Society for Peace, Security and Development Studies*, Allahabad.
4. Nick Hanley and Others, *Environment Economics in Theory and Practice*. McMillan. Delhi.
5. Peter Stiling, *Ecology: Theories and Applications*, Prentice Hall New Delhi.
6. Ramprasad Sengupta, *Ecology and Economics an Approach to Sustainable Development*, Oxford University Press, New Delhi.
7. Sharma P D, *Ecology and Environment*, Rastogi Publications, Meerut.
8. Mick Common and Sigrid Stagl, *Ecological Economics :An Introduction*, Cambridge University Press.

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[Courses for Add-on Proficiency Diploma: 7.1]

7.1: NATURAL RESOURCE AND ENVIRONMENTAL ECONOMICS**III-SEMESTER: Course No: 1 [Soft Core: 7.1] 4 Credits****Course Code: (III-SC.APD:7.1)****ENVIRONMENTAL ECONOMICS**

Preamble: This course is meant to provide some insights into the application of economic theory in the design and implementation of public policy related to the management of environment. It deals with issues relating to environmental economics, environmental problems, valuation of these services, and designing of instruments and institutions for the management of environment.

Module-1: Basic Concepts

Introduction to Environmental Economics - Definition and Scope of Environmental Economics - Evolution and growth of Environmental Economics - Its importance - Some typical environmental problems - Environment and Development - Environmental inputs into the economy - Environmentally Sustainable Development - Environment Interaction - The Material Balance Principle (Entropy Law).

Module-2: Theory of Externality, Public Goods and Techniques of Evaluation

Concepts Pollution and Externalities - Types of Externalities - Divergence between Social Cost and Private Cost Market Failure - Pigouvian Solution - Buchanan' Theory - Coase's Theorem and Its Critique - Pigouvian versus Coasian Solution - Detrimental Externality and Non-Convexities in the Production Set - Property Rights Collective Action. Environmental Costs of Economic

Module-3: Environment and Pollution

Environment and Pollution - Impact of Population Growth on Environment with Reference to Output, Growth and Urbanization - Types of Pollution - Causes and Consequences of Different Types of Pollution: Air Pollution, Water Pollution, Noise Pollution, Chemical Pollution and Degradation of Land and Habitat.

Module-4: Techniques of valuation Environment

Market and Non-Market Valuation - Physical Linkage Methods - Abatement Cost Methods - Behaviour Linkage Methods - Revealed and Stated Preference - Social Cost Benefit Analysis - Environmental Impact Assessment.

Module-5: Environmental Protection: Policies and Strategies

Pollution as an Economic Problem - Optimum Level of Pollution - Control Model Basic Approach to the Problem of Pollution Control - Moral Suasion Direct Control Regulation Prohibition Fiscal Techniques: Pigouvian Taxes and Subsidies - Allocation of Property Rights; Distributive Effects of Environmental Policy - Tradable Permits - Price versus Quantity Instruments - Mixed Instruments - Other Instruments - Enforcement Issues (Case Studies) - Distributive Effects of Environmental Policy.

Module-6: Environmental Issues and Problems in India

Sources and Types of Pollution: Air, Water, Solid Waste and Noise - Chemicals and Land Degradation - Status of Pollution and Environment in India - Causes and Effects of Environmental Degradation - Population, Poverty, Urbanization and Pollution - Urban and Rural Environmental Problems - Energy Environmental Interaction - Policy Measures.

References: [Please refer to the Latest Editions]

1. Arrow K.J and Scitovsky T, *Readings in Welfare Economics*, Richard Irwin inc.,
2. Barry C Field, *Environmental Economics*, McGraw Hill. New Delhi.
3. Barry C. Field, *Environmental Economics - An Introduction*, The McGraw-Hill Co., New York.
4. Bromely D.W. (ed), *Handbook of Environmental Economics*, Blackwell.
5. Cernea Michael (ed), *Putting People First*, Oxford University Press, New Delhi.
6. Charles D Kilted, *Environmental Economics*, Oxford, New Delhi.
7. Coase R.H., "The Problem of Social Cost" in Breit & Hochman (ed) *Readings in Microeconomics*, Rinehart and Winston, inc.,
8. Garg M R, Bansil V K and Tiwana N.S. ,*Environmental Pollution and Protection*, Deep and Deep Publishers, New Delhi.
9. Hanley N, J.F.Shogren & B.White *Environmental Economics in Theory & Practice*, Macmillan, NY.
10. Kolstad, Charles, *Environmental Economics*, Oxford University Press, New Delhi.
11. Mahajan V.S., *Environment Protection: Challenges and Issues*, Deep and Deep Pub., New Delhi.
12. Nick Hanley and Others, *Environment Economics in Theory and Practice*. McMillan. Delhi.
13. Peter Stiling, *Ecology: Theories and Applications*, Prentice Hall New Delhi.
14. Rabindra N.Bhattacharya, *Environmental Economics*, Oxford University Press, New Delhi.
15. Ramprasad Sengupta, *Ecology and Economics an Approach to Sustainable Development*, Oxford University Press, New Delhi.
16. Shankar U, (ed), *Environmental Economics (Readers in Economics)* Oxford University Press.
17. Shankaran S., *Environmental Economics*, Margam Publications, Madras.
18. Sharma P D, *Ecology and Environment*, Rastogi Publications, Meerut.
19. World Bank, *World Development Report: Development and Environment*, Washington D.C.

7.1: NATURAL RESOURCE AND ENVIRONMENTAL ECONOMICS**IV-SEMESTER: Course No: 1 [Soft Core: 7.1] 4 Credits****Course Code: (IV-SC.APD:7.1)****ENVIRONMENTAL HAZARDS & ENVIRONMENTAL POLICY**

Preamble: The objective of this course is to introduce environmental hazards, the policy options and the environmental policy adopted in India. The course gives an understanding of the environmental policy in India and global issues.

Module-1: Environmental Hazards

Introduction - Changing Perspectives -Pre-1950 , 1950-1999 And 2000 Onwards - Paradigms Of Hazard - The Dominant (Behavioural) Paradigm - The Radical (Structuralist) Paradigm - What Are The Environmental Hazards - Natural Hazards - Technical Hazards -Tectonic Hazards: Volcanic Hazards - Biophysical Hazards: Thermal Extremes, Disease Epidemics And Wildfires - Hydrological Hazards - Floods - Droughts - Technological Hazards - The Growth Of Industrial Hazards

Module-2: Environmental Disasters

Hazard, Risk and Disaster - Human Vulnerability to Disaster - Dimensions Of Disaster - Disaster Reporting - Disaster Impact Assessment - Disaster Patterns - Reasons For Increasing - Disaster Impact

Floods: Types of Flood - River Floods - Coastal Floods - Causes of Floods - Beneficent Effects of Floods - Negative Effects of Flood.

Drought and Desertification: Concepts and Causes - Indicators - Impacts of Drought and Desertification - Importance of Remote Sensing in Desertification Control.

Fire: Causes and Consequences - Loss of Forest and Biodiversity.

Acid Rain: Causes, Effects, Prevention of Acid Rain - Individuals Efforts and Government Actions towards Control of Acid Rain.

Module-3: Reducing the Impacts of Disasters

The Range of Options - Mitigation - Disaster Aid - Internal Government Aid - International Aid - Mitigation - Insurance - Government Insurance - Protection - Hazard Resistance - Macro-Protection - Micro-Protection - Adaptation - Preparedness - Adaptation - Land Use Planning

Module-4: International Environmental Concerns

Pollution as a Global Problem - Greenhouse Effect - Ozone Depletion - Global Warming and Threat to Biodiversity - International Action for Environmental Protection - Helsinki Protocol (1985) and Montreal Protocol (1987) - Earth Summit (1992) - International Financing of Environmental Protection - Debt for Nature Swaps - Trade and Environment - Sustainability in Ecology - Sustainability in Ecological Economics.

Module 5: Environmental Issues and Regulation in India

The status of Air pollution - Water Pollution - Land Degradation - Causes and Effects of Environmental Degradation - Urban and Rural Environmental Problems - Evolution of Environmental Policy - Air and Water Acts - Fiscal Incentives - Enforcement and Implementation Issues - Pollution Control Board - National Disaster Management Authority (India)

References: [Please refer to the Latest Editions]

1. Baumol W J and Oates, W E, *The Theory of Environmental Policy*, Cambridge University Press.
2. Dixon.J, *Economic Analysis of Environmental Impacts*, Earth Scan Publications, London.
3. Freeman III, A M, *The Economic Approach to Environmental Policy*, Edward Elgar, U K.
4. Jempa C and Munasinghe M, *Climate Change Policy: Facts, Issues and Analyses*, Cambridge University Press, Cambridge.
5. Mehta S; Mundle S and Sankar U. *Incentives and Regulation for Pollution Control*, Sage Publishers.
6. Sankar U (ed.), *Environmental Economics, Readers in Economics*, Oxford University Press.
7. United Nations, *Accounting and Valuation of Environment*, Vol. I and II: A Premier for Developing Countries, ESCAP, New York.
8. Michael Common and Sigrid Stagl, *Ecological Economics: An Introduction*, Cambridge .

7.2: GENDER AND DEVELOPMENT**I-SEMESTER: Course No: 2 [Soft Core: 7.2] 4 Credits****Course Code: (I-SC.APD:7.2)****GENDER ECONOMICS**

Preamble: The course entitled 'Gender Economics' deals with various aspects of feminist economics. Economic theory till recently did not focus on the gender dimensions. The course introduces the concepts of gender economics, economic theories, the gender factor in economic equality etc.

Module-1: Introduction to Gender Studies

Basic Concepts - Difference between Gender and Sex - Patriarchy - Feminism - Schools of Feminism - Gender Division of Work - Invisibility of Women's Work - Gender Mainstreaming - Concept of Gender Economics - Gender Concerns in Economic Theory - Sen's Contribution.

Module-2: Subject and Methods of Gender Economics

The Subject of Gender Economics - Institutionalization of Gender Economics - Methods of Gender Economics - Inter-Disciplinary Approach in Gender Studies - Macro and Micro Level of Studies - Gender Statistics and System of Sources of Data on the Population - Gender Inequality Factors: Development Factor - Discrimination and Behavioural Factors - Gender Gap in access to Resources and Control over Economic Resources.

Module - 3: Economic Growth and Gender Equality

Globalization of the World Economy and Gender Status - Impact of Economic Growth on Gender Equality - Gender Equality and Economic Growth and Socio-Economic Development. Impact of Globalization on Gender Status - Concept of the "Feminization of Poverty" - Basic Causes - Problems of Measuring the Feminization of Poverty - Gender Differences in Incomes - Women's Contribution to GDP - Estimation of Women's Unpaid Work.

Module - 4: Gender Factor in Household Economics

Distribution of Resources and Decision-Making Mechanisms within the Household - Theoretical Concepts and Gender Critique: Neo-Marxist Approach, Neo-Classic Household Theory - Gender Contract Negotiation Models - Household Time Budgets: Structure, and Problem of Measurement - Work in the Labour Market - Work in the Household, Leisure Time. Distribution of Incomes (Expenditures) in the Household - Inter-Generational and Gender Aspect - Model of Investment in Human Capital - Marital and Age-Dependent Models of Female and Male Employment.

Module-5: Measuring Gender Equity

Meaning of Gender Equity and Equality - Gender Equity Index - Gender Inequality Index of UNDP - Gender Status Index - Gender in Human Development - Gender Development Index - Gender Empowerment Measure - Gender in Social Development Indicators - the OECD Social Institutions and Gender Index (SIGI).

Module 6: Gender Analysis Frameworks and Gender Budgets

Gender Analysis: Harvard Analytical Framework/Gender Roles Framework - Gender Planning Framework: Caroline Moser - Gender Analysis Matrix: Rani Parker - Women Empowerment Framework: Sara Hlufekile Longwe - Social Relations Framework: Naila Kabeer - Integrated Gender Analysis.

Gender Budgets: Gender Budgeting - Methodology of Gender Budget Preparation - Approaches and Principles of Gender Budgeting - Experiences of Different Countries in Gender Budgeting - Gender Budgeting in India and Karnataka.

References and Readings: [Please refer to the Latest Editions]

1. Agarwal, B., *Bargaining and Gender Relations: Within and Beyond the Household*, Feminist Economics, Spring, pp. 1-25D.
2. Batliwala, S., *The Empowerment of Women in South Asia: Concepts and Practices*, Sage, New Delhi.
3. Boserup, Ester., *Women's Role in Economic Development*, New York, St Martin's Press.
4. Bowles Gloria and Dueli Klein Kenate, *Theories of Women Studies*, New York.
5. Committee on the Status of Women in India, *Towards Equality: Report of the Committee*.
6. Hunt, J, *Introduction to Gender Analysis Concepts and Steps*, Development Bulletin, no. 64, pp. 100-106.
7. Irene Tinker., *Persistent Inequalities: Women and World Development*, OUP, New York.
8. John, Mary E., *Gender and Development in India*, EPW, 31 (47), pp 3071-77.
9. Kabeer Naila, *Reversed Realities: Gender Hierarchies in Development Thought*, Kali for Women, New Delhi.
10. Klasen S. (2006) *UNDP's Gender-Related Measures: Some Conceptual Problems and Possible Solutions*, Journal of Human Development and Capabilities 7 (2), pp.243-74.
11. March, C., Smyth, I. and Mukhopadhyay, M. , *Guide to Gender-Analysis Frameworks*. Oxfam, Great Britain.
12. Mark McGillivray (Ed), *Human Well-being: Concept and Measurement*, Palgrave Macmillan: Basingstoke.
13. Moser, A., *Gender Mainstreaming Since Beijing: A Review of Success and Limitations in International Institutions*. Routledge, New York.
14. National Commission on Women in Self Employment (1987) Shramshakti Report.
15. Swapna Mukhopadhyay (ed.) *The Enigma of the Kerala Woman: The Failed Promise of Literacy*, Social Science Press, New Delhi.
16. UNDP, (2006), *Human Development Report, Fighting Climate Change: Human Solidarity in A Divided World*. Palgrave, New York.
17. Vasavi A R and C Kingfisher. (2003) *Poor Women as Economic Agents: the Neoliberal State and Gender in India and the US*, Indian Journal of Gender Studies, 10 (1), 1-24.

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[Courses for Add-on Proficiency Diploma: 7.2]

7.2: GENDER AND DEVELOPMENT**II-SEMESTER: Course No: 2 [Soft Core: 7.2] 4 Credits****Course Code: (II-SC.APD:7.2)****WOMEN IN DEVELOPMENT**

Preamble: The course entitled 'Women in Development' introduces various aspects of women in development process and the initiatives for promoting greater participation of women in development.

Module-1: Approaches to Women Development

Different Approaches - WID, WAD, GAD, Empowerment - Women's Contributions to Economic Development - Women in Agriculture, Industry and Services - Determinants and Evaluation - Gender Bias in Conceptualization and Measurement.

Women in Development (WID) - Women and Development (WAD) - Gender and Development (AD) - Women Empowerment - Approaches in Indian Context.

Module-2: International Initiatives for Women Development

Role of United Nations Organization and World Bank in Women's Development - Mexico City, Copenhagen, Nairobi, and Beijing Conferences - Beijing +5, +10, +15 - Gender Issues in the Millennium Development Goals and Sustainable Development Goals - International Women's Year and Decade - SAARC Year of Girl Child - CEDAW.

Module-3: National Policies, Programs & Role of Non-State Actors in Women Development

Feminist oriented Development Policy - Gender Analysis of Development Policy - Engendering Development Policies - Women Development Programs in India - Objectives and Methods of Gender Policy in India - Paradigm Shift from Welfare to Empowerment - Incorporation of Gender Policy Elements into Development Policies and Programmes at the National Level and in Karnataka - Experiences of Gender Policy Implementation.

Role of NGOs - Development Initiatives - Role of Women's Organizations - Mobilizing, Networking & Advocacy - Grass Root Level Initiatives - Micro Finance and Micro Enterprises - Self Help Groups (SHGs) as a Movement and Empowerment.

Module-4: Women and Environment

Relationship between Women and Environment - Eco-Feminism - Women and Environment Management - Gender Dimensions of the Environment - Productivity of Women and Environment - Empowerment of Women for Environment Preservation - Women in Forest Resource Management - Women and Water Management.

Module- 5: New Economic Policy and Women

Impact of Technological Development, Industrialization and Modernization on Women's Work - Work Participation Rate - Economic Status - Women's Work and Wages.

Emergence and Growth of Women Entrepreneurs - Motivating Factors - Role of the State - Problems and Prospects.

Gender Analysis of Structural Adjustment, Liberalisation, Privatisation and Globalisation - Impact of New Economic Policy on Female Labour, Employment, Health, Education and Economic Status.

Module-6 : Women and Well Being

Defining Well Being - Conceptualization and Measurement as if Gender Mattered - Paths towards Well Being: Case Studies of Public Action and Mainstreaming - Gender-Links between Women's Well Being and Education - Gender and Health: Demographic Transition, Nutrition, Vulnerability to Violence and Conflict - Safeguarding Women's Interests.

References: [Please refer to the Latest Editions]

1. Arputha Murthy Savithri, *Women Work and Discrimination*, Ashish Pub., House, New Delhi.
2. Bosarup Ester, *Women's Role in Economic Development*, George Allen and Unwin, London.
3. Devasia Leelamma, *Empowering Women for Sustainable Development*, Ashish Publishing House, New Delhi.
4. Dex Shirley, *Women's Occupational Mobility*, Macmillan Press, London.
5. Dreze J & Sen A, *India economic development and social opport Moduley*. OUP, New Delhi.
6. Gupta A. S. et. Al (eds), *Reflections of the Right to Development*, Centre for Development and Human Rights. Sage Publication, New Delhi.
7. Gupta Nirmal K. and Sudan Falendra K, *Women at Work in Developing Economy*, Anmol Publications, New Delhi.
8. Jain Devaki, *Women Development and the UN: A Sixty Year Quest for Equality and Justice*. Indiana University, Bloomeston.
9. Mark McGillivray (Ed), *Human Well-being: Concept and Measurement*, Palgrave Macmillan, Basingstoke.
10. Momsen J. H., *Gender and Development*, 2nd Edition, Rutledge, New York.
11. Sen G. & Caren G., *Development Crisis and Alternative Visions: Third World Women's Perspectives*. Institute of Social Studies Trust, New Delhi.
12. Sen M. and Sivakumar A. K, *Women in India How Free, How Equal*. UNDP India, New Delhi.
13. Swapna Mukhopadhyay (ed.) *The Enigma of the Kerala Woman: The Failed Promise of Literacy*, Social Science Press, New Delhi.
14. Vishwanthan N. Ed, *the Women Gender and Development Reader*. Zubaan, New Delhi.

7.2: GENDER AND DEVELOPMENT**III-SEMESTER: Course No: 2 [Soft Core: 7.2] 4 Credits****Course Code: (III-SC.APD:7.2)****WOMEN AND WORK**

Preamble: The course entitled 'Women and Work' deals with processes and problems of women labour participation in a modern economy. The course introduces conceptualization of female work, wage discrimination based on sex, protection of women labour interests through legislations, provision of social security and problems confronted by women in globalization process.

Module-1: Theories of Women Exploitation

Theories of Women Exploitation - Economic Basis and Functioning of Patriarchy - Marx-Engel's Theory of Exploitation - Exchange Theory and Exploitation - Gender-Based Evaluation of Theories of Development: Growth, Value, Distribution, Income, Welfare, Population Etc - Women's Claims in Households, Economy, Policy and Society.

Module-2: Women as Workers

Concept and Analysis of Women's Work - Valuation of Production and Unproductive Work - Visible and Invisible Work - Paid and Unpaid Work - Economically Productive and Socially Productive Work - Invisibility of Women's Work - Problems in Measurement - Classification of Work in Indian Census and NSSO -Main Workers, Marginal Workers, Non-workers - Non-Recognition of Women's Work in National Income Accounting - Measuring Women's Contribution to National Income.

Module-3: Gender Inequality in Labour Market

Segmented Labour Market and Occupational Segregation - Gendered Jobs and Social Inequality Sex Segregation at Work Place - Factors Affecting Female Entry in Labour Markets; Supply and Demand for Female Labour in Developed and Developing Countries Indian Context - Trends in Female Work Participation in Agriculture, Non-agricultural Rural Activities, Informal Sector, Cottage and Small Scale Industries, Organized Industry, and Services Sector.

Module-4: Wage Discrimination

Discriminations Against Women - Garry Becker's Theory - Determinates and Definitions of Wage - Factors Influencing Women's Labour Demand and Supply Functions - Wage Discrimination Based on Sex - Women's Education, Skill, Productivity, and Efficiency - Structure of and Trends in Wage Differentials.

Module-5: Labour Legislation for Women

Justification for Equal Wages - A Review of Labour Legislations in India - Gaps and Biases in the Implementation Labour Laws - Women in Trade Unions - Factors Determining Women's Collective Bargaining - Organization and Struggles - Need for re-Orientation and Framework.

Module-6: Social Security and Protection for Women:

Need for Social Security and Protection Entitlements - Ensuring Economic Independence and Risk Coverage - Access to Credit and Insurance Markets - Role of Governments, Non-Government Organizations and Self- Help Groups in Providing Social Security and Protection - Review of Social Security Legislation - Affirmative Action for Women and Improvement in their Economic and Social Status.

References: [Please refer to the Latest Editions]

1. Ahmed I, *Technology and Feminization of Work*, EPW, 29 (18), WS34-38.
2. Arputha Murthy Savithri, *Women Work and Discrimination*, Ashish Pub., House, New Delhi.
3. Bosarup Ester, *Women's Role in Economic Development*, George Allen and Unwin, London.
4. Bowles Gloria and Dueli Klein Kenate, *Theories of Women Studies*, New York.
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6. Devasia Leelamma, *Empowering Women for Sustainable Development*, Ashish Pub., New Delhi.
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15. Maithreyi Krishnaraj., *Women's Work in the Indian Census*, EPW, 25 (48), pp.2663-72.
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17. Moduleed Nations, *World's Women*, New York.
18. Neetha N., *Invisibility Continues? Social Security and Unpaid Women Workers*, Economic and Political Weekly, Vol. XLI (32).
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[Courses for Add-on Proficiency Diploma: 7.2]

7.2: GENDER AND DEVELOPMENT**IV-SEMESTER: Course No: 2 [Soft Core: 7.2] 4 Credits****Course Code: (IV-SC.APD:7.2) TRADE AND GENDER**

Preamble: The course on trade and gender introduces the theoretical linkages between international trade policy and gender issues and also the empirical evidence from different countries. It is important to understand the gendered impact of global and national trade policies when there is an increasing participation of women in paid work in service sector.

Module-1: Linkage between Trade Policy and Gender

Trade and Gender - Trade-Induced Effects on Income and Employment Opportunities - Role of Women in Export Competitiveness - Trade Effects on Wage Differentials - Trade and Access to Resources - Gender Aspects of Multilateral Trade Arrangements and Commitments - Policy Dimension.

Module-2: Engendering of Trade for Development: An Overview

Introduction - UNCTAD's Mandate and Mission - Trade, Gender, Poverty and Sustainable Development - Key Issues in "Engendering" Trade and Development - Women in Agriculture and Commodities - Effects of Trade in Manufactures on Gender - Women and Development of Trade in Services - Gender, Trade and Environment - Traditional Knowledge - Market Access, Market Entry and Competitiveness Issues - Trade-Related Investment Measures, Incentives and Affirmative Action - TRIPS, Public Health and Women - Incorporating Gender into Development Benchmarks.

Module-3: Agriculture, Trade and Gender

Introduction - Women's Contribution to Agriculture - Impact of International Trade in Agriculture on Gender Equity: Selected Country Case Studies - Ghana: Production of Non-Traditional Agricultural Exports - Agricultural Exports in the Caribbean - Expansion of Non-Traditional Agricultural Exports in Philippines and in Uganda - Sugar Cane Production in Fiji - Transformation of Agriculture and its Implications for Women's Employment in China - Trade Agreements Relating to Agriculture - A Gendered Analysis of Trade in Agriculture.

Module-4: Multilateral Negotiations on Agriculture and Possible Effects on Women in Developing Countries

Introduction - Negotiations on Agriculture - Agricultural Trade Liberalization and Gender - Potential Benefits from Liberalizing the Agricultural Trading System - Gender-Related Issues in the Textiles and Clothing Sector - Gender Aspects of Employment in the Textiles and Clothing Sector - the International Trade Regime for Textiles and Clothing - Implications for Women Following Full Integration of Trade in Textiles and Clothing within the WTO System - Market-Access Issues - Labour Conditions.

**Module-5: Gender-Based Analysis of International Trade in Services:
The Experience of Developing Countries**

Introduction - International Liberalization of Trade in Services, and Development - Myths and Realities of Liberalization of Trade in Services - Trade in Services and Small Service Suppliers - Gender and Liberalization of Trade in Services - National Policies on Services in Developing Countries - Gender and Services: Women as Entrepreneurs - Gender and Services: Women As Workers - Women as Consumers - Development Programming and Women Entrepreneurs - Gender Issues in the GATS Negotiations.

Module-6: Impact of WTO Rules on the Pursuit of Gender Equality

Gender Equality: A Key Dimension of Human Rights and Human Development - Promotion of Human Rights and Human Development within the WTO System - Pursuing Gender Equality in the Context of WTO Law - Agreement on Agriculture - Agreement on Trade-Related Investment Measures - Agreement on Subsidies - General Agreement on Trade in Services - Agreement on Trade-Related Aspects of Intellectual - Property Rights.

References: [Please refer to the Latest Editions]

1. UNCTAD, *Trade and Gender Opportunities and Challenges for Developing Countries*, Edited by Anh-Nga TRAN-NGUYEN and Americo BEVIGLIA ZAMPETTI, UN Inter-Agency Network on Women and Gender Equality Task Force on Gender and Trade.
2. Artecona R and Cunningham WV, Effects of Trade Liberalisation on the Gender Wage Gap in Mexico. *World Bank Development Research Group*, Washington, DC. World Bank, May.
3. Baden S., Gender Issues in Financial Liberalisation and Financial Sector Reform. *BRIDGE Development-gender*, Report No. 39, Institute of Development Studies, Brighton.
4. Cardero ME et al., NAFTA's Impact on the Female Work Force in Mexico. UNIFEM, Mexico.
5. Dollar D and Gatti R., Gender Inequality, Income and Growth: Are Good Times Good for Women? *World Bank Policy Research Report on Gender and Development*, Working Paper Series No.1, Washington, DC, World Bank.
6. Elson D., Labour Markets as Gendered Institutions: Equality, Efficiency and Empowerment Issues. *World Development*, 27(3): 611-627.
7. Joeques S., Trade-related Employment for Women in Industry and Services in Developing Countries, Geneva. UNRISD, *Occasional Paper No* Prepared for the Fourth World Conference on Women.
8. Joeques S., A Gender-Analytical Perspective on Trade and Sustainable Development. in: UNCTAD, *Trade, Sustainable Development and Gender*, New York and Geneva, UNCTAD/EDM/Misc.78.
9. Kabeer N., Necessary, Sufficient or Irrelevant? Women, Wages and Intra-household Power Relations in Bangladesh. *IDS Working Paper No. 25*, Institute of Development Studies, University of Sussex, Brighton.
10. Fontana M, Joeques S and Masika R., *Global Trade Expansion and Liberalisation: Gender Issues and Impacts*. Study prepared for the Department for International Development, UK, Institute of Development Studies, University of Sussex, Brighton, United Kingdom.

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[Courses for Add-on Proficiency Diploma: 7.3]

7.3: HUMAN DEVELOPMENT**I-SEMESTER: Course No: 3 [Soft Core: 7.3] 4 Credits****Course Code: (I-SC.APD:7.3)****HUMAN DEVELOPMENT: DIMENSIONS AND DISPARITIES**

Preamble: This course provides a thorough knowledge regarding certain distinct and diverse dimensions of human development process around the world. The subject of Human Development has economic, non-economic and ethical dimensions. Here, the major focus is on economic and political aspects of human development. This course provides an opportunity for students to learn about an emerging branch of Economics. This course also deals with the concept and measurement of human development. It unfolds the relationship between economic growth and human development; financing and efficiency aspects of the human development. It deals with the impact of consumption and new technologies on human development and how to regulate them to enhance the quality of human development, and issues in environmental sustainability. It takes students into the study of gender and governance perspectives of human development. It further deals with different dimensions of human security; the two-way relationship between human rights and human development, and a policy framework for achieving the millennium goals.

Module - 1: Introduction to Human Development

Concept of Human Development - Defining Human Development - Measuring Human Development. HDI - Human Poverty Index - Gender Development Index (GDI) Gender Empowerment Measure (GEM) - Changes in and Implications of HDI and GDI Across the Countries - Need for and Significance of Separate Study of Human Development - Nature and Scope and Major Concerns of Human Development as a Branch of Economics.

Module - 2: Economic Growth and Human Development

Relationship between Economic Growth and Human Development - Sustained Human Development - Disrupted Human Development - Missed Opportunities for Human Development - Efficiency in Human Development - Financing Human Development - Growth as a Means to Human Development - Human Capabilities Approach to Development.

Module - 3: Consumption, New Technologies and Human Development

Consumption from a Human Development Perspective - Concepts of Consumption - Factors Affecting Consumption Options - Consumption and the Links with Human Development - Environmental Sustainability and Human Development - Unequal Human Impacts of Environmental Damage - New Technologies and Human Development - The Race for Knowledge - The New Technologies - Drivers of Globalization - Access to the Network Society - The New Rules of Globalization - Shaping the Path of Technology - Impacts on People - The Need to Reshape Technology's Path.

Module - 4: Gender and Governance Perspectives of Human Development

Gender Disparities in Human Development - Valuing Women's Work - Towards Gender Equality - Feminization of Poverty - Democratic Governance for Human Development - Deepening Democracy for Human Development.

Module - 5: Human Development in the New Millennium

New Dimensions of Human Security - Human Rights and Human Development - Interlinks - The Struggles for Human Freedoms - Promoting Rights in Human Development - The Millennium Development Goals: Concept and Goals - Priority Challenges in Meeting the Goals - Achieving Goals Relating to Hunger, Education, Health, Water Supply and Sanitation - Private Finance and Provision of Health, Education and Water - Public Policies to Ensure Environmental Sustainability - Community Engagement - Sustainable Development Goals and Human Development - Challenges Ahead.

References: [Please refer to the recent edition]

1. Haq , Mahbub, UI (1995), *Reflections on Human Development* , OUP, New York.
2. Nussabaum Martha C and Sin, Amartya (Ed) (1996) *The Quality of Life*, Clarendon Press, Oxford
3. Rawls (1971), *Theory of Justice*, Harvard University Press, Cambridge Mass, Oxford.
4. Sen, Amartya K (1985), *Commodities and Capabilities*, North-Holland, Amsterdam.
5. Sen, Amartya K (2000), *Development As Freedom*, Oxford University Press, Oxford.
6. United Nations Development Programme, *Human Development Reports*, (1990 to Date), Oxford University Press, Oxford.

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[Courses for Add-on Proficiency Diploma: 7.3]

7.3: HUMAN DEVELOPMENT**II-SEMESTER:****Course No: 3 [Soft Core: 7.3] 4 Credits****Course Code: (II-SC.APD:7.3)****HUMAN DEVELOPMENT IN SOUTH ASIA**

Preamble: This course deals with the levels, disparities and issues in Human Development in South Asian Countries. South Asia has largest population and known for highest incidence of poverty and widespread human deprivations. A detailed study of processes and problems of human development in South Asia would reveal another dimension of underdevelopment in these nations. This course provides a brief sketch of the need for and significance of human development and its problems in South Asia, with educational profiles and problems of educational development. It provides a Gender and Women perspective of human development, problems of good governance in South Asian countries. It also deals with the argument for a better and accelerated development process for human development through different sectoral programmes. This course is quite useful since it deals with problems of economic and social development of world's poorest.

Module - 1: Human Development Status in South Asia

Need for and Significance of the Separate Study of Human Development in South Asia - Human Deprivation and Poverty Profile of South Asia - Human Security Under Siege -Crisis of Governance in South Asia - Economic Performance and Human Development in South Asia.

Module - 2: Education for Human Development in South Asia

Education for Development - Implications for South Asia - Progress, Setbacks, Disparities and Other Organizational Problems of Education - Removing Gender Disparities in Education - Better Educational Network for the Future.

Module - 3: Women, Economy and Human Development in South Asia

Sex, Gender and Women Issues - South Asia's Response to Beijing Commitments - Women in South Asian Economics - Women in Labour Force: Agriculture Other Informal and Formal Sectors - Wage Differentials by Sex - Women and Micro-Credit - Globalization and Its Impact on Women Interests - Women's Health and Nutrition Challenges - Policy Perspectives.

Module - 4: Governance for Human Development in South Asia

Human Governance - A Conceptual Framework - Political Dimensions - Measuring Human Governance - Corruption Menace - Social Costs of Poor Governance - An Agenda for Human Governance - Facilitating Change.

Module - 5: Better and Accelerated Development for Human Development in South Asia

Towards More Better and Accelerated Development Process - Agricultural, Industrial Rural and Urban Development - Increasing Productivity - Income and Employment for All - Social Development and Equity - Women and Poverty.

References: [Please refer to the recent edition]

1. Mahbubul Ul Haq, *Human Development in South Asia*, Human Development Center (Annual Reports from 1997 to Date), Oxford University Press, Oxford.
2. United Nations Development Programme, *Human Development Reports* (1990 to Date) OUP, Oxford.

7.3: HUMAN DEVELOPMENT**III-SEMESTER: Course No: 3 [Soft Core: 7.3] 4 Credits****Course Code: (III-SC.APD:7.3)****HUMAN DEVELOPMENT IN INDIA**

Preamble: The course deals with different aspects of Economics of Human development process in India, particularly since 1990s. It gives a brief review of current economic scenario and growth experience of India and its States relating to human development, patterns and measurement of human development; causes for low human development in India and related problems. It exposes the students to the study of minimum needs programmes, provides a detailed analysis of growth, expansion, and problems of education and health sectors, their impact on standards of living and social development, and gives a direction to the development process to achieve the goals of human development in general, and women, children, backward classes in particular.

Module - 1: Introduction to Human Development in India

Need for and Significance of Separate Study of Human Development in India - Current Indian Macroeconomic Scenario - Economic Development under Indian Five Year Plan Periods - Implications for Human Development in India - Gender Implications for Human Development - Globalization and Human Development

Module - 2: Human Development: Levels, Patterns and Measurement

Human Development Index (HDI): All India and State-Wise Analysis - Changes in HDI - Implications - Factors Responsible for Low HDI in India - Poverty and Relative Income - Assets Structure and Growth - Income Distribution - Extent of Income Inequality - Implications for HDI in India - Minimum Needs Programmes - Poverty Alleviation - Food Security - PDS - Household Expenditure on Minimum Needs.

Module - 3: Educational Growth and Human Development

Growth and Expansion of Education Under Five Year Plan - Primary, Secondary and Higher Secondary Education - Higher Education in India - Trends in Public and Private Sector Investment in Education - Problems of Quality and Inputs Shortages - Rural and Urban Disparities in Education - Role of Non-Formal Education - Long-Term Policy for Educational Development.

Module - 4: Health Care Services and Human Development

The Changing Epidemiological Conditions - Disease Burden - Factors Responsible for Increasing Disease Burden - Growth and Expansion of Health Care System in India - Problems of Health Care Production, Financing and Delivery - Regional and Rural-Urban Disparities - Quality of Health Care Services - National Health Policy - Impact of Health Care on Standard of Living.

Module - 5: Development Process and Human Development

Directing Development Process to Achieve the Goals of Human Development - Human Development for Empowerment of Women, and Backward Classes - Regional Development Policies for Human Development - Good Governments for Human Development in India - Recent Initiatives.

References: [Please refer to the recent edition]

1. Government of India (2001), *National Human Development Report*, Planning Commission, Oxford University Press, New Delhi.
2. Government of India, *Five Year Plan Documents (VI to XI Plan)*, Planning Commission, New Delhi.
3. National Council of Applied Economic Research, (2001), **South India: Human Development Report**, Oxford University of Press, New Delhi.
4. NCAER (2002), *West and Central India: Human Development Report*, OUP, New Delhi.
5. NCAER (2003), *North India: Human Development Report*, OUP, New Delhi.
6. Shariff, Abusaleh (1999), *India: Human Development Report*, OUP, New Delhi.

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[Courses for Add-on Proficiency Diploma: 7.3]

7.3: HUMAN DEVELOPMENT

IV-SEMESTER: Course No: 3 [Soft Core: 7.3] 4 Credits

Course Code: (VI-SC.APD:7.3)

HUMAN DEVELOPMENT IN KARNATAKA

Preamble: The purpose of the course is to give an exposure to the dimensions of Human Development in an economically progressive State like Karnataka. The course provides an Introduction to Karnataka Economy, Polity and Society and its experience in economic growth. It provides an opportunity to study the extent of progress in human development in Karnataka and its experience in democratic decentralization, people participation and people's movement.

Module - 1: Introduction to Economic Development in Karnataka

Economic Growth (SGDP and District Income) and Social Change - Salient Features of Karnataka Economy - Civil Society and Democratic Polity - Growth in Population - Changes in Demographic Composition - Karnataka: A State in Socio-Economic Transition.

Module - 2: Progress in Human Development in Karnataka

HDI Ranking - Districts According to HDI Ranking - Variations in District HDI and their Implications - Income, Employment and Poverty in Karnataka - Analysis of Regional Variations - Framework for Human Development in Karnataka.

Module - 3: Education, Health, Nutrition and Family Welfare in Karnataka

Growth of Education and Literacy since 1951 - Inter-District Disparities - Development of Higher Education and Associated Problems - Karnataka's Education Policy.

Development of Health and Family Welfare Sector in Karnataka - Major Disease Burden - Health Programs - Family Welfare Under Five Year Plans - Problems - Nutrition and Food Security in Karnataka.

Module - 4: Development of Social Sectors in Karnataka

Housing, Water Supply and Sanitation Programmes - Inter-District Disparities - Problems - Need for Long-Term Approach.

Module - 5: People's Participation and Democratic Governance in Karnataka

Development and Democratic Decentralization Process - Role of Panchayat Raj Institutions and Urban Local Bodies - Powers, Functions and Finances - People's Participation and Decentralized Planning - Emergence of Third Sector in Karnataka - NGOs and Government Organizations, Co-operatives and Civil Society - People's Movements for Environment Protection, Abolition of Online Lottery, Liquor Prohibition Etc., -Institutional

District Human Development Reports - Gram Panchayat Human Development Report - Brief Information

References: [Please refer to the recent edition]

1. Government of Karnataka, (1999), *Human Development in Karnataka*, Planning Department, Bangalore.
2. Government of Karnataka, (2006), *A Handbook on Statistics Outline of Karnataka*, Directorate of Economics and Statistics, Bangalore.
3. Government of Karnataka, *Economic Survey, Latest Issue*, Department of Economics and Statistics and Planning, Bangalore.
4. Indian Economic Association (1998) *Economic Development of Karnataka*, Edited by M.V.Srinivasagowda and D.T. Nanjgowda.
5. Madaiah. M, and Ramapriya, *Karnataka Economy*, Himalaya Publishing House, Mumbai.
6. Puttaswamaiah, *Economic Development of Karnataka (2 Volumes)*, Oxford University Press, Mumbai.

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[Courses for Add-on Proficiency Diploma: 7.4]

7.4: PLANNING AND ECONOMIC POLICIES**I-SEMESTER: Course No: 4 [Soft Core: 7.4] 4 Credits****Course Code: (I-SC.APD:7.4)****DEVELOPMENT PLANNING AND PRACTICES**

Preamble: The objective of this course is to give an exposure to the students regarding the origin and development in Planning by establishing the need for planning. It deals with the analysis of types of planning and the plan strategies, planning models, policies for development, quantitative and qualitative aspects of planning etc.

Module-1: The Development Issues and Planning Process

Concept and Goals of Development Planning - The Desire and Need for Development - The Aims of Socio-Economic Policy - Meaning and the Need for Planning - Objectives of Planning - Methods of Planning - Planning Procedure and Organization of Planning.

Module-2: Types of Planning

Planning under Socialism: Nazi Germany, Former USSR, China, and East European Countries.

Planning Under Capitalism: United Kingdom and United States of America.

Planning Under Mixed Economy: India, Pakistan and South-East Asia.

Module-3: Financing the Plan

Internal Resource Mobilization - Foreign Investments - Foreign Aid - Remittances from Non-Residents.

Module-4: Qualitative Aspects of Development Plan

The Optimum Social Order - Welfare Economies as a Method - The Empirical Approach to the Problem - Fundamental Reform in the Developing Countries.

Module-5: Policies for Development Planning

Fiscal Policy - Monetary Policy - Commercial Policy - Price Policy - Social Sector Development Policy - A New Thrust to Planning.

Module-6: Problems of Consistency in Planning

Time Horizon of Planning - Input-Output Analysis - Techniques and Application - Linear Programming Technique - Programming Approach - Criteria of Investment - Choice of Technique - Capital-Output Ratio - Limitations of the Techniques.

References: [Please Refer to Latest Editions]

1. Tinbergen Jan, *Development Planning*, McGraw Hill Book Company, New York.
2. Dewett K.K and Satish Wadhawan, *Economics of Development Planning*, S. Chand and Co. Ltd, New Delhi.
3. Seth M.L., *Theory and Practice of Economic Planning*, S. Chand and Co. Pvt. Ltd, New Delhi.

7.4: PLANNING AND ECONOMIC POLICIES**II-SEMESTER: Course No: 4 [Soft Core: 7.4] 4 Credits****Course Code: (II-SC.APD:7.4) EVOLUTION OF ECONOMIC POLICIES IN INDIA**

Preamble: The course traces various aspects of development under the aegis of the Five Year Plans in India (in brief). The government of India is said to have under emphasized agriculture and over depended on aid. It has compromised with the inefficiency of the public sector and has failed to implement rational economic policies. This course, hence, emphasises the need for understanding the rationality of economic policies which is essential for understanding the country's economic potential.

Module-1: Evolution of Economic Policy : An Overview

An Overview of the Targets and Achievements from 1951 to 2007 - Emerging Issues - Prospects of Recent Policy Initiatives.

Module-2: Strategy for Growth: Emphasis on Capital-Goods Sector

Two Sector Model - Emphasis on Heavy Industry - Priority to Small Scale Industries and Cottage Industries.

Need for Debate: The Need for Comprehensive Statement of Policy - Problems with Old Model.

Module-3: Economy Under a Shadow: Plea for Aid & Economic Challenges

Economy Under a Shadow: Onset of the Crisis - Inter-sectoral Imbalances: Agricultural Stagnation - In Defence of Import Substitution - Aid Requirements - Urgent Need for Sustainable Agricultural Development - Prospects of Growth.

Economic Challenges: Capital Accumulation - Saving Possibilities - Financial Relations - Mobilising Domestic Resources.

Module-4: Centre- State Relations and Industrial Development

Logic of Differential Regional Growth - Regional Disparities - Regional Allocation of Resources - Towards Regional Parity - Allegations - Role of the State in Industrial Development.

Module-5: Political Economy of Development in India

Role of Labour - Omission of Small Industries - Government Policies for Big Industries - Role of Middle Peasant - The Green Revolution - Role of the State.

Module-6: Constraints on Growth and Development

Past Performance - Recent Improvements - The Public Sector - Industrial Sickness - Balance between Economic and Socio-Political Goals - Licensing System - Need for Policy Change.

References: [Please Refer to Latest Editions]

1. Byres J Terence (Ed), *The Indian Economy, Major Debates since Independence*, OUP, New Delhi.
2. Kapila Uma (Ed), *Indian Economy since Independence*, Academic Foundations, New Delhi.
3. Kelkar L Vijay and V V Bhanoji Raod, *India Development Policy Imperatives*, Tata Mcgraw Hill Publishing Company Limited, New Delhi.
4. Krueger O Anne, (Ed), *Economic Policy Reforms and the Indian Economy*, OUP, New Delhi.
5. Mohan Rakesh, (Ed), *Facets of the Indian Economy*, OUP, New Delhi.
6. P.N.Dhar, *The Evolution of Economic Policy in India: Selected Essays*, Oxford University Press, New Delhi.
7. Reddy Venugopal, *Economic Policy in India - Manging Change*, UBSPD, New Delhi.
8. Subramanian S.(Ed), *India's Development Experience*, OUP, New Delhi.
9. Vaidyanathan A, *India's Economic Reforms and Development*, OUP, New Delhi.

7.4: PLANNING AND ECONOMIC POLICIES**III-SEMESTER: Course No: 4 [Soft Core: 7.4] 4 Credits****Course Code: (III-SC.APD:7.4)****ECONOMIC PLANNING AND PANCHAYAT RAJ INSTITUTIONS IN INDIA**

Preamble: The process of Planning in India began in 1950-51 and it has completed Ten Five Year Plans and few Annual Plans. Now, the economy is in its Eleventh Plan (2007-2012). The course deals with the basic features of planning in India, experience and achievements of the economy during the Planning periods, approaches to Planning and other issues related to the economy and its planning process.

Module-1: Planning in India: Basic Features and Analysis

History of Planning in India - Centralization-Decentralization - Planning Strategy of Development.

Module-2: Approaches to Planning and Planning in Action

The Nehru Mahalanobis Approach - Wage Goods Approach - Evolution and Evaluation of the Planner's Views - Subsequent Approaches to Planning - 1st to 3rd Five Year Plan - 4th to 7th Five Year Plan - 8th to 10th Five Year Plan - 11th and 12th Five Year Plan.

Planning Commission to NITI Aayog: Rationale - Objectives - Differences between Planning Commission to NITI Aayog - Composition of the Members - Functions - Vision and Mission.

Planning in Action: Objectives of Planning - Decades of Development Experience: Agriculture, Industry Trade, Transport, Banking, Infrastructure and Social Sector - Information Technology.

Module-3: Evolution of Decentralization and Panchayat Raj Institutions

Historical Development: Village Panchayats in Ancient India - Panchayats before Independence - Causes for the Decay of Village Panchayats - Royal Commission on Decentralisation (1907) - Democratic Decentralization - Features of Good Panchayat Raj - Relation between Village Cooperatives and Panchayats - Panchayati Raj and Rural Development.

Module-4: Various Committees on Panchayati Raj

Shortcomings of the Working of Village Panchayats - Weaknesses of Panchayati Raj - Causes of Failure - Attempts towards Revival - Ministers Conference (1954) - Committees on Panchayat Raj: Balwant Rai Mehta: 1957) - V.T. Krishnamachari: 1960 - Takhatmal Jain Study Group: 1966 - Ashok Mehta Committee: 1977 - G.V.K. Rao Committee: 1985 - Dr. L.M. Singhvi Committee: 1986 - Panchayat Committee of Local Self-Government - 73rd Constitution Amendment (1993).

Module-5: Function of Panchayat Samiti (Local Government Body)

Panchayats after Independence: Nature, Functions, and Objectives - Organisation and Structure:

Block Level Panchayat: Panchayat Samiti - Link Between Gram Panchayat and District Administration - Membership - Term Period.

Departments in the Samiti: General Administration, Finance, Public Works, Agriculture, Health, Education, Social Welfare, Information Technology, Water Supply, animal Husbandry.

District level Panchayats: Zila Parishad - Functions - Sources of Income.

Village Level Panchayats: Gram Panchayats - Sarpanch and Members - Period - Reservation for Women in Panchayat Raj Institutions (PRIs). Administrative Responsibilities of BDO, CEO and ZP - Resources for Panchayat Raj - Working of Village Panchayats.

Module-6: Current Issues and Challenges

Plan vs. Market Debate - Centralization of Planning in India - Decentralization and Impact on the Economy - Rural Economy of India since Decentralization - Persistent Poverty, Inequality and Unemployment - Inclusive and Sustainable Approach to Development - Integrated Approach to Planning in India.

References: [Please Refer to Latest Editions]

1. Kamal Nayan Kabra, *Development Planning in India: Explaining on Alternative Approach*, Sage, New Delhi.
2. Seth M.L, *Theory and Practice of Economic Planning*, S. Chand and Co .Pvt Ltd, New Delhi.
3. Sinha R.K, *Planning in India - A Critique*, South Asian Publishers, New Delhi.

7.4: PLANNING AND ECONOMIC POLICIES**IV-SEMESTER: Course No: 4 [Soft Core: 7.4] 4 Credits****Course Code: (IV-SC.APD:7.4) ECONOMIC REFORMS IN INDIA**

Preamble: The Basic Objective of the course is to review the impact of reforms on the Indian economy. It focuses on the overall development strategy pursued in the economy since the early 1990s, the rationale and thrust of the structural adjustment programmes, sectoral performance, persisting problems and constraints to development, and the challenges ahead before the Indian economy.

Module-1: Economic Reforms in India

The Economic Scenario in India during 1990-91- Why Reforms? The Need for Reforms - Financial Crisis of the Early 1990s - Resumptions of Reforms - The Growing Debt Problem - Steps Taken - Expectations.

Module-2: Structural Adjustment in the Indian Economy

Problem of Liberalization - Devaluation and After - Major Changes - Safety Net.

Module-3: Sectoral Performance

Economic Reforms and Agricultural Growth - Growth of Indian Industry - Industrial Policy: Myth and Reality about Small Sector - Trade - Payments Crisis, and the Debt Trap - Foreign Direct Investment - Information Technology.

Module-4: Poverty, Inequality and Development Policy

Poverty and Development Policy - New Economics of Policy - Political Economy of the Evolution of Anti-Poverty Programmes - Restructing Poverty Alleviation Programmes - Inequalities in Rural India.

Module-5: Balance of Payments Crisis and Debt Trap

Balance of Trade and Payment Crisis in India - Extent of External Debt in India and Debt Trap - Policy Options.

Module-6: Challenges to Development

Parallel Economy in India - Black Money - Corruption - Scams- Liberalization and the Role of the State - Redefining the Role of the State and the Markets.

References: [Please Refer to Latest Editions]

1. Byres J Terence (Ed), *The Indian Economy, Major Debates since Independence*, OUP, New Delhi.
2. Datt Ruddar, *Economic Reforms in India - A Critique*, S.Chand and Co, New Delhi.
3. Kapila Uma (Ed), *Indian Economy since Independence*, Academic Foundations, New Delhi.
4. Kelkar L Vijay and V V Bhanoji, *India Development Policy Imperatives*, Tata Mcgraw Hill Limited, New Delhi.
5. Krueger O Anne, (Ed), *Economic Policy Reforms and the Indian Economy*, OUP, New Delhi.
6. Mohan Rakesh, (Ed), *Facets of the Indian Economy*, OUP, New Delhi.
7. Patel I.G., *Economic Reform and Global Change*, Macmillan India Limited, New Delhi.
8. Rangarajan C, *Indian Economy- Essays on Money and Finance*, UBSPD, New Delhi.
9. Reddy Venugaopal Reddy, *Monetary and Financial Sector Reforms in India, A Central Banker's Perspective*, UBS Publishers' Distributors Ltd., New Delhi.
10. Reddy Venugopal, *Economic Policy in India - Managing Change*, UBSPD, New Delhi.
11. Sachs D.Jeffrey, A.Varshney and Nirupam Bajpai (Ed), *India in the Era of Economic Reforms*, OUP, New Delhi.
12. Sen Kunal and Rajendra R.Vaidya, *The Process of Financial Liberalization in India*, OUP, New Delhi.
13. Subramanian S,(Ed), *India's Development Experience*, OUP, New Delhi.
14. Vaidyanathan A, *India's Economic Reforms and Development*, OUP, New Delhi.

7.5: ECONOMIC HISTORY AND THOUGHT IN INDIA**I-SEMESTER: Course No: 5 [Soft Core: 7.5] 4 Credits****Course Code: (I-SC.APD:7.5)****ECONOMIC HISTORY OF ANCIENT AND MEDIEVAL INDIA**

[Ancient Period to 1857]

Preamble: A course in economic history at the post-graduate level should not content with merely providing historical facts but also should aim at training the student in the use of the historical method as a basis for analysis While a study of economic theory equips one to use the logical method a course in quantitative economics enables one to use quantitative method of analysis, a course in economic history would prepare a student to make use of the historical method. In fact, a students' training at the post-graduate level cannot be considered complete without a proper grounding in all the three methods of analysis, viz., the logical, quantitative and the historical method.

Module-1: Economic History of India during the Ancient and Medieval Period

Ancient Indian (3500 BC to 1800 BC): Dawn of the Indus Valley Civilization - Agriculture and Domestication of Animals - Trade and Transportation - Town Planning and Urban Development - Minting and Usage of Coinage Currency.

Medieval India (1200-1500): Religion - Family Business - Organizational Identities - Structure of Agrarian Economy - Forests Deserts and Un-titled Lands - Tax System - Non-Agricultural Production - Coinage - Towns - Trade - Legal System - Organizational Entities - GDP Estimates.

Module-2: Administration in India: 1500 - 1850s

Selected Problems in Indian Economic History - Methods of Historical Research - Sources and Nature of Historical Material for the Period 1500-1853 and for 1850-1947 - Theory and History - The Nature of the State: Mughal India and South India - Creation and Maintenance of Social Overhead.

Module-3: Agriculture in India: 1757-1850s

The Agrarian Structure - Conditions of Agriculture - Agrarian and Tenorial Relations - Crop Pattern, Yields and Productivity - Land Revenue - Village Community - Technological Change - Trade in Agricultural Produce - The Agrarian Crisis of the Mughal Empire.

Module-4: Industry in India

Type of Industries in India - The Organization of Manufacturing for Local, Regional, National and International Markets - The Contract System - Regional Contracts.

Module-5: Trade

The Structure of Ancient Trade - Indigenous Forms and Instruments of Trade - The Arab Merchants - Indian Mercantile Communities - Portuguese Trade as a Redistributive Enterprise - The English and the Dutch Companies - Trade Within Asia and Between Asia and Europe - The Impact of Dutch Conquest of Indonesia and the English Conquest of Bengal on the Structure of Asian Trade - The Rise of the China Trade - Export of Textiles - Internal Trade and Finance.

References: [Please refer to the Latest Editions]

1. Roy Thirthankar , *The Economic History of India: 1857-1947*, OUP, New Delhi.
2. Kushal G., *Economic History of India: 1757-1966*, Kalyani Publishers, New Delhi.

M.A. ECONOMICS

[Courses for Add-on Proficiency Diploma: 7.5]

7.5: ECONOMIC HISTORY AND THOUGHT IN INDIA**II-SEMESTER: Course No: 5 [Soft Core: 7.5] 4 Credits****Course Code: (II-SC.APD:7.5)****ECONOMIC HISTORY OF INDIA DURING BRITISH PERIOD**

[1857 to 1947]

Preamble: Economic development of the less developed countries can only be understood better in the light of its past experience and exploitation if any, by the rest of the world and in the course of the industrial revolution. Hence, a study of economic history of any country is equally important for the students in the less developed countries. The present course deals with the economic history of India during the British period and the consequences of it on the economy.

Module-1: Introduction to Economic History

Theories of Economic History - Market-led Growth - Institutions - Class and Power.

British Economic History: Agrarian Revolution - Industrial Revolution - Growth and Fluctuations in British Economy.

Important Problems in Indian Economic History: 1850-1947.

Module-2: Social and Economic History of Population

Construction of Population Estimates - Characteristics of Population: Fertility, Mortality, Morbidity, Sex-Ratio - Determinants of Population Growth - Population Size and Growth 1880-1941 - Urbanization Settlement Patterns - The Economic Impact of High Population Growth - Famines as Demographic Events - Natural Disasters and their Relation to Economic Activities. Occupational Structures - National Income.

Module-3: Agriculture and Common Property Resources

Agrarian Structure and Land Relations - Agricultural Production - Land Tenure - Expansions in Markets: Product Market - Land, Labour and Credit Markets - Market Organization - Effects of Market Expansion: Standard of Living - Inequality in Income - Land Ownership and Class Structure - Forced Commercialization - Resource Endowments - Class Structure - Common Property Resources: What were Common Property Resources? - Commerce and Technology - Trends in the Performance and Productivity - Changes During British Rule - Famines and Food Security.

Module-4: Plantations and Mines

Tea Plantations: Capital and Marketing System- Labour - Plantation and Development.

Coal Mining: Capital - Production and Labour - Other Mines - Mining and Development.

Module-5: Railways, Small and Large Scale Industries, and Manufacturing

Railways: De-industrialization Debate - Evolution of Entrepreneurial and Industrial Structure - Nature of Industrialization in the Interwar Period - Constraints to Industrial Breakthrough.

Types of Industries: Growth of Tea, Cotton Textiles and Iron and Steel Industries.

Small Scale Industry: Perspectives - De-industrialization - The Commercialization Thesis - Labour and Capital in Traditional Small-Scale Industry - Modern Small Scale Industry.

Large-Scale Industry: Statistical Profile - Stages of Industrialization - Major Industries - Labour - Finance for Industry - Entrepreneurship - Management - Large Scale Industries in the Princely States - Their Significance.

Labour in Indian Industries: Labour Relations - Labour Problems and Labour Legislations.

Manufacturing: Its Organization in the Middle of 18th Century - The Impact of Industrial Revolution and Colonial Rule on Traditional Manufacturing - Effects of the Growth of Transport and Communication.

Module-6: Money, Banking and Trade

The Traditional Credit Organization - Commercial Banking - Growth of Modern Banking - Evolution of Central Bank.

International Trade: The Growth of Trade and Changes in Direction and Composition of Trade - Trends in Invisibles - Terms of Trade - Changing Structure of the Balance of Payments and Its Implications for the Domestic Economy - Trends in Capital Flows - Foreign Capital and the Colonial Economy.

Module-7: Economy and State in the Imperial Context

The Imperial Priorities and the Indian Economy - Drain Theory & Drain of Wealth - - Changes and Continuities - Government and Fiscal Policy - Deindustrialization - Swadeshi Movement - Effects of World Depression and the Second World War on the Indian Economy - Overall Impact of British Rule

References: [Please refer to the Latest Editions]

1. Kushal G., *Economic History of India: 1757-1966*, Kalyani Publishers, New Delhi.
2. Roy Thirthankar, *The Economic History of India: 1857-1947*, OUP, New Delhi.

7.5: ECONOMIC HISTORY AND THOUGHT IN INDIA**III-SEMESTER: Course No: 5 [Soft Core: 7.5] 4 Credits****Course Code: (III-SC.APD:7.5)****EVOLUTION OF ECONOMIC THOUGHT IN INDIA**

Preamble: This course introduces students to a study of main economic ideas of Indian economic thinkers. It enables one to know about the rich contributions of Indian economists. It imparts knowledge about the major economic thinkers of India during pre Independence period (1947). Thus, a detailed study of Indian economic thought provides to certain extent, an alternative perspective of economic problems as against the established western economic thought.

Module-1: Economic Thought in Ancient and Medieval India

- *Ancient Economic Thought:* Kautilya's Arthshastra - Vedas, Epics -National Economy - Importance of Agriculture and Animal Husbandry, Labour, Trade, Population, Slavery, Welfare State, Private Property - Justification for Interest - Consumption and Production - Economic Functions of State - Public Finance - Town Planning and Social Security.
- *Medieval Economic Thought:* Economic Ideas of Islamic Rules - Small Scale Production - Industrial Development - Division of Society - Taxation Policy.

Module-2: Beginning of Economic Thought in India

- *Dadadhai Naoroji:* East India Association - Poverty - Taxation, Military Expenditure and Public Debt - Drain Theory - Criticism of Administration.
- *Mahadev Govind Ranade:* Economic Development - India's Poverty - His Suggestions.
- *Dinshaw Edulji Wacha:* Causes of Famines - Industrial Development - Currency Policy - Railway Policy and Railway Finance - Importance of Economic, Commerce and Statistics - Agricultural Banks.
- *Romesh Chandra Dutt:* Causes of Poverty - Remedies.
- *Gopal Krishna Gokhale:* Public Expenditure and Financial Reforms.

- *N.M. Joshi*: Labour Conditions - Healthy Trade Unionism - Lack of Government Interest in Public Welfare.
- *Pramathanatha Banerjee*: Causes of Low Production in India - Public Finance - Functions of the State.
- *Vaman Govind Kale*: Importance of Indian Economics - Nationalism - Importance of Historical School - India and Imperial Conditions.
- *Brij Narain*: Indian Economic Life - Democratic Planning - Charkha - Marxism and Indian Socialism - Economic Structure of Free India.

Module-3: Economic Thought in Modern India

- *K.T. Shah*: Indian Finance - Trade, Tariffs and Transport - Municipal Government and Municipal Finance - Federal Finance - Economic Planning - Payment of War.
- *Radhakamal Mukerjee*: Balanced Development of Industries - Regional Economics - Institutional Theory of Economics - Rural Reconstruction and Rural Planning - Planning in India - Population - Ecological Theory of Population - Industrial Labour.
- *Gyan Chand*: Financial System - Local Finance - Economic Development - Population Problem - New Economy of China - Agricultural Development - Decentralized Industries - Economic Planning - Menace of Inflation - Deficit Financing - Devaluation.
- *C.N. Vakil*: Fiscal Policy of India - Financial Developments in India - Economic Consequences of New Constitution - Economic Consequences of Divided India - Economic Planning - Devaluation of Indian Rupee.
- *P.A.Wadia*: National Income of India - India's National Policy - Socialist Pattern based on Morality.

References: [Please refer to the Latest Editions]

1. Balasubramanyam. V.N, *Conversations with Indian Economists*, Macmillan India Ltd, New Delhi.
2. Basu Kaushik, *Of Peoples and Places*, Oxford University Press, Delhi
3. Bhatia H L, *History of Economic Thought*, Vikas Publishing House Pvt Ltd, Ghaziabad, U P.
4. Datta Bhabatosh, *Indian Economic Thought*, Tata McGraw-Hill Pub., Company Ltd, New Delhi.
5. Madan G R, *Economic Thinking in India*, S Chand and Company Ltd, New Delhi.
6. Shamasastri DR. R, *Kautilya's Arthashastra*, Mysore Printing and Publishing House, Mysore.
7. Srivastava S K, *History of Economic Thought*, S Chand and Company Ltd, New Delhi.

7.5: ECONOMIC HISTORY AND THOUGHT IN INDIA

IV-SEMESTER: Course No: 5 [Soft Core: 7.5] 4 Credits

Course Code: (IV-SC.APD:7.5)

DEVELOPMENT OF ECONOMIC THOUGHT IN INDIA

Preamble: This course introduces the students to the study of main economic ideas of Indian economic thinkers. Such a study enables to know the rich contributions of Indian economists into mainstream economics. It imparts knowledge about the major economic thinkers of India especially during and after Independence. A detailed study of Indian economic thought provides a good perspective of economic problems as against the established western economic thought.

Module-1: Economic Thought in Modern India

- *J.K. Metha:* Life Sketch; Economic Ideas: Scope and Definition of Economic - State of Wantlessness - Nature of Economic Generalizations - Static Economic and Dynamic Economics - Consumer's Surplus - Coordination of the Theories of Interest - Welfare Economics - Economics of Fasting - Growth and investment - Macro-Economic Growth.
- *D.R.Gadgil:* Industrial Evolution - Industrial Labour - War and Economic Policy - Planned Economic Development - Pre-condition for Economic Development - Price Policy - Rail-Road Coordination.
- *B.N. Ganguli:* Economic Relations with Far Eastern and Pacific Countries, Drain A Theory - Devaluation of the Rupee - Population and Development - Population Policy - Multi-National Corporations.
- *R. Balakrishna:* Industrial Development of Mysore - Regional Planning - Indian Finance - Economic Controls - Rationalization - Full Employment.
- *V.K.R.V.Rao:* National Income of India - Income Tax in India - War-Time Economic Policies - Post-War Economic Policy - Full Employment and Economic Development - Deficit Financing and Economic Development - Freedom and Economic Development - Post-Devaluation Problems.

Module-2: Gandhian Economics

- *M.K. Gandhi:* Biographical Note - Influences Shaping Gandhi's Economic Thought - Three Phases of Gandhi's Economic Thought - Background of Gandhain Era - Welfare Economy - Non-Violent Economy - Decentralization - Use of Machines - Regeneration of Villages - Khadi Industry - Doctrine of Trusteeship - Labour Welfare, Law of Bread Labour - Food and Population - Exchange Economy - Removal of Untouchability - Prohibition - Gandhi and Marx - Sarvodaya : How to Realize It?

Module-3: Economic Thought with a Socialist Approach

- *Jawaharlal Nehru*: Democracy - Planning - Large-Scale Industries - Rural Development - Panchayat Raj System - Socialism.
- *B.R. Ambedkar*: Financial Economics - Agricultural Economics - Economics of Caste and Socialism.

Module-4: Economic Thought since 1950s

- *Sir M. Visvesvaraya*: Planning - Industrialization - Education - Banks - Irrigation - Rural Development.
- *P.C. Mahalanobis*: One Sector Model, Two Sector Model and Four Sector Model.
- *C.N. Vakil and P.R. Bramhananda*: Wage Goods Model.
- *A.K. Sen*: Poverty, Famine, Welfare Economics and other Major Contributions

References: [Please refer to the Latest Editions]

1. Balasubramanyam V N, *Conversations with Indian Economists*, Macmillan India Limited, New Delhi.
2. Basu Kaushik, *Of Peoples and Places*, Oxford University Press, Delhi
3. Bhatia H L, *History of Economic Thought*, Vikas Publishing House Pvt Ltd, Ghaziabad, U P.
4. Datta Bhabatosh, *Indian Economic Thought*, Tata McGraw -Hill Pub., Company Ltd, New Delhi.
5. Lokanathan V, *A History of Economic Thought*, S. Chand and Company Limited, New Delhi
6. Madan G R, *Economic Thinking in India*, S Chand and Company Ltd, New Delhi.
7. Shamasastri DR. R, *Kautilya's Arthasastra*, Mysore Printing and Publishing House, Mysore.
8. Srivastava S K, *History of Economic Thought*, S Chand and Company Ltd, New Delhi.

7.6: ECONOMIC THOUGHT AND CONTRIBUTIONS OF SELECT ECONOMISTS**I-SEMESTER: Course No: 6 [Soft Core: 7.6] 4 Credits****Course Code: (I-SC.APD:7.6)****EVOLUTION OF ECONOMIC THOUGHT**

[Ancient Period to 1900]

Preamble: The course is recommended as an essential input into the training of a student specializing in Economics. Its purpose is not merely to acquaint the students with economic ideas and how they developed over time, but also to provide them with information on the evolution of social thought, in which economic thought is only a part. It also helps to understand economic history in a general and develop ideas in articulating them. This course covers the analysis of economic ideas from Ancient Period to the Marginalists School.

Module-1: Introduction and Overview

- A Time Scale of Economic Ideas - The Five Major Questions - The Value of Studying Economics and Its History - Economic Ideas in Ancient and Medieval Period.

Module-2: The Mercantilists School and the Physiocratic School

- Overview of Mercantilism: Thomas Mun (Gerard Malyne, Charles Davenant, Jean Baptiste Colbert, Sir William Petty - An Overview of the Physiocrats Francois Quesnay (Anne Robert Jacques Turgot).

Module-3: The Classical School

- *Overview of the Classical School:* Forerunners - Sir Dudley North, Richard Cantillon, David Hume.
- *The Classical School:* Adam Smith Biographical Details - Important Influences - The Theory of Moral Sentiments - Wealth of Nations - The Economic Laws of a Competitive Economy.
- *Thomas Malthus:* Historical and Intellectual Setting - Malthus's Population Theory.
- *David Ricardo:* Biographical Details - The Currency Question - The Theory of Diminishing Returns and Rent - The Theory of Exchange Value and Relative Prices - The Distribution of Income.
- Jeremy Bentham, Jean-Baptiste Say, Nassau William Senior, and John Stuart Mill.

Module-4: The Rise of Socialist Thought

- Overview of Socialism - Henri Comte De Saint-Simon - Charles Fourier - Simonde De Sismondi - Robert Owen - Louis Blanc - Charles Kingsley.
- Marxian Socialism: Biographical Details and Intellectual Influences - Marx's Theory of History - Assessment of Marx's Economics.

Module-5: The German Historical School

- Overview of the German Historical School: Friedrich List - Wilhelm Roscher, Gustav Schmoller, Max Weber.

Module-6: The Marginalist School - Forerunners

- Overview of the Marginalist School - Antoine Augustin Cournot - Jules Dupuit - Johann Heinrich Von Thunen.
- William Stanley Jevons.
- Carl Menger, Friedrich Von Wieser, Eugen Von Bohm-Bawerk.
- Francis Y. Edgeworth and John Bates Clark.

References: [Please refer to the Latest Editions]

1. Eric Roll, *A History of Economic Thought*, Rupa and Co, New Delhi.
2. H W Spiegel, *Development of Economic Thought*, John Wiley and Sons, inc., New York.
3. Ingrid Hahne Rima, *Development of Economic Analysis*, Richard D. Irwin, inc. Illinois.
4. John Fred Bell, *A History of Economic Thought*, The Ronald Press Company, New York.
5. Joseph A Schumpeter, *Ten Great Economists, from Marx to Keynes*, OUP, New York.
6. Lewis H. Haney, *History of Economic Thought*, The Macmillan Company, New York.
7. Overton H. Taylor, *A History of Economic Thought*, McGraw-Hill Company, Inc. New York.
8. Stanley L. Brue, *The Evolution of Economic Thought*, The Dryden Press, Fort Worth.

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[Courses for Add-on Proficiency Diploma: 7.6]

7.6: ECONOMIC THOUGHT AND CONTRIBUTIONS OF SELECT ECONOMISTS**II-SEMESTER: Course No: 6 [Soft Core: 7.6] 4 Credits****Course Code: (II-SC.APD:7.6)****DEVELOPMENT OF ECONOMIC THOUGHT**

[1900- 2015]

Preamble: A critical study of the economic theories and the economic ideas of the great economic thinkers of the past are at once challenging, illuminating and enlightening. A historical reconstruction of the ideas of economic thinkers is essential for understanding and appreciating the controversial questions in the history of economic ideas. This course covers the analysis of economic ideas from Keynesian to New Classical Economics.

Module-1: The Neoclassical School

- **Alfred Marshall:** Marshall's Life and Method - Utility and Demand - Supply - Equilibrium Price and Quantity - Distribution of income - increasing and Decreasing Cost Industries.
- **The Neoclassical School - Monetary Economics:** John Gustav Wickshell - Irving Fisher - George Hawtrey.
- **The Neo Classical School - Departure from Pure Competition:** Piero Sraffa - Chamberlin - Joan Robinson.

Module-2: Mathematical Economics

- Types of Mathematical Economics - Leon Walras - Wassily Leontief - John Von Neumann and Oscar Morgenstern - John R. Hicks - Linear Programming.

Module-3: The Institutional School and Welfare Economics

- Overview of the Institutional School - Thorstein Bunde Veblen - Wesley Clair Mitchell - Brief discussion on John Kenneth Galbraith - Brief discussion on Elnor Ostrom.
- **Welfare Economics:** Vilfredo Pareto - Arthur Cecil Pigou - Ludwig Von Mises - Oscar Lange - Kenneth Arrow - James M. Buchanan - Brief discussion on A.K. Sen.

Module-4: The Keynesian School

- Overview of the Keynesian School - John Maynard Keynes - The Keynesian School: Developments since Keynes: Alvin H. Hansen - Paul A. Samuelson - The Post-Keynesians - The New-Keynesians.

Module-5: Theories of Economic Growth and Development

- Sir Roy F. Harrod and Evsey Domar - Robert M. Solow - Joseph Alois Schumpeter - Ragnar Nurkse - W. Arthur Lewis - Theodore W. Schultz.

Module-6: The Chicago School

- Overview of the Chicago School - Milton Friedman - Robert E Lucas, Jr. - Gary S. Becker.

References: [Please refer to the Latest Editions]

1. Eric Roll, *A History of Economic Thought*, Rupa and Co, New Delhi.
2. Ingrid Hahne Rima, *Development of Economic Analysis*, Richard D. Irwin, inc. Illinois.
3. John Fred Bell, *A History of Economic Thought*, The Ronald Press Company, New York.
4. Joseph A Schumpeter, *Ten Great Economists, from Marx to Keynes*, OUP, New York.
5. Lewis H. Haney, *History of Economic Thought*, The Macmillan Company, New York.
6. Overton H. Taylor, *A History of Economic Thought*, McGraw-Hill Company, Inc. New York.
7. Spiegel H W, *Development of Economic Thought*, John Wiley and Sons, inc., New York.
8. Stanley L. Brue, *The Evolution of Economic Thought*, The Dryden Press, Fort Worth.

7.6: ECONOMIC THOUGHT AND CONTRIBUTIONS OF SELECT ECONOMISTS**III-SEMESTER: Course No: 6 [Soft Core: 7.6] 4 Credits****Course Code: (III-SC.APD:7.6)****CONTRIBUTIONS OF NOTED ECONOMISTS****Module-1: John Kenneth Galbraith**

- Role of Institutions - American Capitalism: The Concept of Countervailing Power - The Great Crash - The Affluent Society - The New Industrial State - The Age of Uncertainty.

Module-2: Gunnar Myrdal

- Monetary Equilibrium - The Political Element in the Development of Economic Theory - Economic Theory and Underdeveloped Regions - Asian Drama: An Inquiry into the Poverty of Nations - The Challenges of World Poverty: World Anti-Poverty Programme in Outline - Welfare State - Theory of Circular Cumulative Causation - Theory of Backwash and Spread Effects Scope of Economics, Interdisciplinary Approach - Value Judgement.

Module-3: Amartya K. Sen

- Welfare Economics and Social Choice Theory particularly in expanding their Informational Bases, incorporating considerations of Liberty and Rights, and Exploring Problems of Collective Rationality.
- Contributions to Methods and Techniques to Economic Measurement Particularly of Real National Income, Poverty, Inequality, and Unemployment.
- Exploration of the analytic foundations of Rational Choice and of the Behavioural Bases of Economic Theory.
- Contributions to the Choice of Technology in Developing Countries and to Methods of Shadow Pricing and Cost-benefit Analysis.
- Developing a Theory of the Causation of Famine, Focusing on Entitlement Relations and General Economic Interdependence rather than just on Food Supply, and Application to Particular Famines in Asia and Africa.

Module-4: Mahbub ul Haq

Strategy of Economic Planning - Poverty Curtains for the Third World - Reflections on Human Development - Third World and the International Economic Order - New Imperitives of Human Security - Humanizing Global Institutions.

Module-5: Mohamad Yunus

Planning in Bangladesh - Grameen Bank - Banker to the Poor - Building Social Business - Long Range Planning - Microfinance and Financial Inclusion.

Module-6: Elinor Ostrom

Design Principles for Common Pool Resources (CPR) Institutions - Environmental Protection - Ostrom's Law - Institutional Economics - Institutional Incentives and Sustainable Development - Infrastructure Policies. Economic governance, especially the commons

Module-7: Angus Deaton

Analysis of Consumption, Poverty, and Welfare.

References: [Please refer to the Latest Editions]

1. Brahmananda. P.R., *Nobel Economics-A Historical Commentary from The Classical Angle*, Himalaya Publishing House, Mumbai.
2. Karl-Goran Maler (Ed), *Economic Sciences 1969-1980, 1981-1990 and 1991-1995*, World Scientific, Singapore.
3. Michael Szenberg (Ed), *Eminent Economists: Their Life Philosophies*, Cambridge University Press, Cambridge.
4. Puttaswamaiah K, *Nobel Economists -Lives and Contributions*, Vol I, II and III. Indus Publishing Company, New Delhi.
5. William Breit and Roger W. Spencer (Eds), *Lives of the Nobel Laureates*, The MIT Press, Cambridge.
6. Original Publication of the Economists and Internet Sources.

7.6: ECONOMIC THOUGHT AND CONTRIBUTIONS OF SELECT ECONOMISTS**IV-SEMESTER: Course No: 6 [Soft Core: 7.6] 4 Credits****Course Code: (IV-SC.APD:7.6)****CONTRIBUTIONS OF NOBEL LAUREATES TO ECONOMIC SCIENCE**

Preamble: As is well known the progress of this subject of economics and evolution and development of economic ideas has not come to stop with Keynesian, the subject has shown rapid progress since then and is showing further healthy developments in the present also. The course attempts to make the student of economics get acquainted with the ideas of and works of economists and thinkers who received Nobel Memorial Prize in economics. The development of ideas by the Nobel Laureates in Economics is breathtaking and covers some of the important areas of economic analyses, a relatively new branch.

Module-1: The Nobel Laureates in Economics

- Nobel Memorial Prize for Economic Science.
- Contributions of Nobel Laureates in Economics - Name Index and Subject Index.

Module-2: Planning Techniques & Economic Development and Economic Growth

- **Planning Techniques:** Jan Tinbergen - T.J. Koopmans - L. Kantorovich.
- **Economic Development and Economic Growth:** Simon Kuznets - Arthur Lewis - Gunnar Myrdal - Robert M. Solow.

Module-3: International Trade and Capital Movement

- James E. Meade - Bertil Ohlin - P.A. Samuelson - Robert A. Mundell.

Module-4: Macroeconomics and Monetary Economics

- Richard Stone - James Tobin - Milton Friedman - Robert E Lucas Jr.,

Module-5: Game Theory and Its Applications & Optimization Techniques

- John F. Nash - John C. Harsanyi - Reinhard C. Selten.

Module-6: Human Capital & Welfare Economics

- **Human Capital:** Theodore Schultz - Gary S. Becker.
- **Welfare Economics:** Kenneth J. Arrow - Paul A. Samuelson - Amartya K. Sen.

References: [Please refer to the Latest Editions]

1. Brahmananda. P.R., *Nobel Economics-A Historical Commentary from The Classical Angle*, Himalaya Publishing House, Mumbai.
2. Karl -Goran Maler (Ed), *Economic Sciences 1969-1980, 1981-1990 and 1991-1995*, World Scientific, Singapore.
3. Michael Szenberg (Ed), *Eminent Economists: Their Life Philosophies*, Cambridge University Press, Cambridge.
4. Puttaswamaiah K, *Nobel Economists -Lives and Contributions*, Vol I, II and III. Indus Publishing Company, New Delhi.
5. William Breit and Roger W. Spencer (Eds), *Lives of the Nobel Laureates*, The MIT Press, Cambridge.

7.7: COMPARATIVE DEVELOPMENT & GLOBAL BUSINESS**I-SEMESTER: Course No: 7 [Soft Core: 7.7] 4 Credits****Course Code: (I-SC.APD:7.7)****COMPARATIVE ECONOMICS IN TRANSFORMING WORLD ECONOMY****Module-1: Overview of Comparative Economics**

Criteria for Classifying Economies: Allocation Mechanism, Forms of Ownership, Role of Planning, Types of Incentives, Income Redistribution and Social Safety Nets, Role of Politics and Ideology.

Theory and Practice of Market Capitalism: Theoretical Efficiency of Market Capitalism - Limits of Efficiency of Laissez-Faire Market Capitalism - Role of Labour Unions - Macroeconomic Instability.

Theory and History of Marxism and Socialism: Development of Socialist Ideology - Utopian Socialism - Marxian Worldview - Controversies in Socialism up to the Bolshevik Revolution - Islamic Economics and the Economics of Other Religions - Criteria for Evaluating Economies.

Module-2: Different Advanced Market Capitalism

United State of America: The Market Capitalist Leader.

Japan: A Planned Market Economy with Traditional Elements - France: Whither Indicative Planning? - Sweden: Crisis and Reforms of the Social Market Welfare State - Germany: Unification and the Unification of Europe.

Module-3: Transition among Former Socialist Economies

Former Soviet Union: The Myth and Reality of the Command Economy and Russia's Economic Transition - Alternative Paths of Transition in the Former Soviet Union.

Poland: The Peril and Promise of Shock Therapy. *Hungary:* Gradualism and the First Successful Completed Transition. *Yugoslavia:* The Collapse of Worker-Managed Market Socialism - *Slovenia:* Worker-Managed Market Socialism and the Success.

Module-4: China's Socialist Market Economy

Historical and Cultural Background - Social Structure and Land Reforms and Land Tenure in Traditional China - The Dynasty Cycle - From Empire's /End to Communism's Victory - Maoist Economic Policies - Implanting Socialism and the Stalinist Model (1949-1957) - The Great Leap Forward (1958-1961) - The Period of Adjustment (1962-1965) - The Great Proletarian Cultural Revolution and the Late Maoist Period (1966-1978) - Oscillations of the Reform Process (1979 to the Present) - Reforms in Agriculture - Enterprise Reforms - Special Economic Zones and Foreign Trade - Distribution of Income and Standard of Living - Energy and Environmental Crisis - Hong-Kong, Taiwan and Mainland China - A Comparison.

Module-5: Alternative Paths among Developing Economies

India: A Brief Mention of the Trends in the Performance of the Economy - New Economic Reforms - 1990s Liberalization, Privatization and Globalization. Measures to Integrate the Indian Economy with the Rest of the World.

Iran: The Struggle for a New Traditional Islamic Economy.

Mexican Economy: Revolution and Reforms.

North and South Korea: The Lingering Shadow of the Cold War.

Module-6: Evolving Trends of the Transforming World Economy

Trends towards Privatization and its Limits - Clash of Civilizations - Integration, Disintegration and Globalization - Transforming World Economy and Sustaining the Growth - Global Environmental Issues in the Twenty-first Century.

References: [Please refer to the Latest Editions]

1. Barkeley Rosser J. Jr., and Marina V. Rosser, *Comparative Economics in a Transforming World Economy*, The MIT Press, Cambridge.

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[Courses for Add-on Proficiency Diploma: 7.7]

7.7: COMPARATIVE DEVELOPMENT & GLOBAL BUSINESS**II-SEMESTER: Course No: 7 [Soft Core: 7.7] 4 Credits****Course Code: (II-SC.APD:7.7)****GLOBAL BUSINESS ENVIRONMENT****Module-1: Global and National Business Environment**

Global Business Environment: Globalization - Forces Driving Globalization - Untangling the Globalization Debate: Impact on Labour, Environmental Regulation, Income Inequality, National Sovereignty and influence on Cultures - Key Players in International Business: Multinational Corporations, Entrepreneurs and Small Businesses - Global Business Environment.

National Business Environments: Cross-Culture Business - Components and Classifications.

Module-2: Politics and Law in Business

Political Systems - Political Risks - Legal Systems - Global Legal and Ethical Issues - Economic System and Development: Economic Systems: Centrally Planned Economy, Mixed Economy, Market Economy - Development of Nations - Human Development - Economic Transition.

Module-3: International Trade

Overview of International Trade - Benefits, Volume, Composition, Direction and Trends - Theories of International Trade: Mercantilism, Absolute Advantage, Comparative Advantage, Factor Proportions Theory, International Product Life Cycle, New Trade Theory - National Competitive Advantage. Political, Economic and Cultural Motives behind Government Intervention - Methods of Promoting and Restricting Trade - Global Trading System: General Agreement on Tariffs and Trade (GATT) and World Trade Organization (WTO).

Module-4: Foreign Direct Investment

Patterns of Foreign Direct Investment - Explanations for Foreign Direct Investment - Management Issues in FDI Decisions - Government Intervention in FDI - Government Policy Instruments and FDI - Composition, Direction and Trends in FDI.

Module-5: Regional Economic Integration

Meaning of Regional Economic Integration - Effects of Regional Economic Integration - Integration in Europe: European Union - Integration in Americas: North American Free Trade Agreement (NAFTA), Latin American Integration Association (ALADI), Southern Common Market (MERCOSUR), Free Trade Area of the Americas (FTAA) and Transatlantic Economic Partnership (TEP) - Integration in Asia: Association of Southeast Asian Nations (ASEAN), Asia Pacific Economic Cooperation (APEC) - Integration in Middle East: Gulf Cooperation Council (GCC) - Integration in Africa: Economic Community of West African States (ECOWAS).

Module-6: International Financial Markets and Monetary System

International Capital Markets - Main Components - Foreign Exchange Markets - Currency Convertibility - International Monetary System: Influence of Exchange Rates on Business Activities - Factors Determining Exchange Rates - Forecasting Exchange Rates - Evolution of International Monetary System.

Module-7: International Business Management

International Strategy - International Organizational Structure - International Opportunities: Screening International Opportunities - Conducting International Research - Selecting and Managing Entry Modes: Contractual, Investment Entry and Strategic Factors - Developing and Marketing Products Managing International Operations - Hiring and Managing Employees.

References: [Please refer to the Latest Editions]

1. Wild John J, Kenneth L Wild and Jerry C.Y. Han, *International Business: The Challenges of Globalization*, Pearson Prentice Hall. New Jersey.

M.A. ECONOMICS

[Courses for Add-on Proficiency Diploma: 7.7]

7.7: COMPARATIVE DEVELOPMENT & GLOBAL BUSINESS**III-SEMESTER: Course No: 7 [Soft Core: 7.7] 4 Credits****Course Code: (III-SC.APD:7.7)****ECONOMICS OF GLOBALIZATION**

Preamble: The basic objective of this course is to provide a good understanding of the concept of globalization, its various facets and the issues. The course also focuses on the impact of globalization on various economies and the challenges ahead in the new millennium.

Module-1: Globalization: Concept and Issues

What is Globalization? Why the Process of Globalization? When did it Begin? -Ideas behind Globalization - Views of Globalization - Is it Neutral? - Who are the Players in the Process of Globalization? - Why is it taking place now? - Extent of Globalization - Issues of Concern.

Module-2: Globalization and International Trade

World Trade Scenario: Composition, Direction and Trends in World Trade - Intra-Industry Trade - Regional Integration and Trade Composition - Trade between Developed Countries and between Developed and Developing Countries - Evaluation of the Performance of Major Traders - Performance Since the Initiation of Globalization - Costs and Benefits of Free Trade.

Module-3: Financial Flows and Technology Transfer in the Era of Globalization

Foreign Direct Investment: Composition, Direction and Trends in Foreign Direct Investments - Policies to Promote FDI - Gains from Foreign Direct Investment - Present Scenario - Controversies associated with it. - Portfolio Investment.

Technology Transfer: Need and Benefits from Technology Transfer - Trends in its Transfer - Type of Technology Transferred.

Official Development Assistance (ODA)/Aid: Trends in the Official Flows - Financial Crisis in Developing Countries - International Commercial Borrowings - Debt Flows to Developing Countries - Globalization of Finance - Trends and Problems - Reverse Flow of Resources?

Module-4: Information and Communication Technology

Global Revolution in Information and Communication Technology - Revolution in Bioengineering Technology and Related Fields - Sharing of Information: Traditional and Modern Media - Computers and Internet.

Module-5: Globalization and Labour Mobility

Labour Migration (Brain Drain) - Trends in Labour Migration - Emigrants' Destination - Causes and Consequences - Costs and Benefits of Labour Mobility - Remittances from Abroad and Controversies - Impact on Developing Countries.

Module-6: Crisis of Globalization and Challenges Ahead

Environmental impacts of Globalization - Myths and Realities of Globalization - Global Competition or Global Oligopoly? - Globalization and Global Poverty and Disparities - Globalization or "Imperialism"? - Social and Cultural Dimensions of Globalization. - Millennium Development Goals.

Module-7: Globalization: Myths and Realities

Myths and Realities of Globalization - Growing Protectionism among Developed Countries - Concentration Ratio in Trade, Foreign Investment, Level of Technology, and Access to Information - Sharing of Information - Biotechnology and its Impact - Labour Mobility - Impact of Labour Migration from Developing to Developed Countries - Costs and Benefits - Are the poor Countries Sub-serving the Interests of Rich - Growing Poverty and Inequality - North-South Gap - Need for a New International Economic Order.

References: [Please refer to the Latest Editions]

1. Yusuf Shahid, Simon Evenett, and Weiping WU, (ed), *Facets of Globalization: International and Local Dimensions of Development*, The World Bank, Washington. D.C.
2. Stiglitz Joseph E, *Globalization and Its Discontents*, W.W. Norton & Company, New York.
3. Goldin Ian and Kenneth Reinert, *Globalization for Development*, A Co- publication of the World Bank, and Palgrave Macmillan, Washington D.C.
4. Banerjee Brojendra Nath, *Globalization: Rough and Risky Road*, New Age International Publishers, New Delhi.
5. Isaak Robert A., *The Globalization Gap*, FT Prentice Hall, New Jersey.
6. Petras James and Henry Vltmeyer, *Globalization Unmasked*, Madhyam Books, Delhi.
7. Chossudovsky Michel, *The Globalization of Poverty*, The Other India Press, Goa.
8. Bhagwati Jagadish, *In Defense of Globalization*, Oxford University Press, New Delhi.
9. Norberg Johan, *In Defence of Global Capitalism*, Academic Foundation, New Delhi.
10. Singh Karaljit, *Globalization of Finance*, Madhyam Books, Delhi.

M.A. ECONOMICS

[Courses for Add-on Proficiency Diploma: 7.7]

7.7: COMPARATIVE DEVELOPMENT & GLOBAL BUSINESS**IV-SEMESTER: Course No: 7 [Soft Core: 7.7] 4 Credits****Course Code: (IV-SC.APD:7.7)****CHALLENGES TO SOCIO-ECONOMIC DEVELOPMENT**

Preamble: Despite the vast opportunities and development created by the technological revolutions of the 20th century, population explosion, poverty, unemployment, pollution, illiteracy, disease have been still bothering the mankind, besides disparities in the income distribution, crime, corruption etc. The sharp contrast between success and failure is the starting point for the 21st century and reducing poverty and human deprivation have become fundamental objectives of economic development. But achieving this is constrained by number issues to which mankind have been responsible. Hence, this course attempts to throw light on those crucial aspects which have been hindering and harming the process of development.

Module-1: Poverty Problems and Discrimination

Poverty: Status of World Poverty and Economics - Causes of Poverty and Requisites of Economic Growth - Role and Concern of the Government - Approach and the Role of the Markets - Poverty in Terms of Absolute Income Levels, and Income Distribution - Economic Causes of Poverty.

Discrimination: Discrimination Evidence for Discrimination in the Economy - Government Attempts to Alleviate Poverty - Measures to address the problem of Discrimination.

Module-2: Economic System, Resource Allocation, and Social Well-Being

Economic Systems: Resource Allocation in a Market Economy and in a Command Economy - The New Chinese Economy - Newly Emerged and Emerging Economies.

Government Control of Prices in Mixed Systems: Price Ceilings and Floors - Rent Controls - Minimum Wages.

Government Spending, Taxing, and National Debt: People's Concern - Economic Analysis of the Problem of Size - Principles of Taxation and Analysis - Beginning of a New Century: Economic Effects of Government Borrowing and Debt.

Module-3: Unemployment Issues and Inflation

Unemployment: Meaning and Costs of Unemployment - Analysis of the Unemployment Problem - Causes for Unemployment - Measures Combating Unemployment.

Inflation: Meaning and Measurement of Inflation - Economic Effects of Inflation - Money and the Process of Creating Money - Issue of Control - Inflationary Causes and Cures.

Module-4: Economics of Crime and Its Prevention

Meaning and Definition - Economic Crimes - Socio-Economic Costs of Crimes - Individually and Collectively Consumed Goods - The Economics of Crime Prevention Activities.

Module-5: Pollution Problems

Meaning - Types of Pollution - Markets, Resource Allocation, and Social Well-Being: A Recap and Extension - Economics of Pollution - Types of Pollution - Causes and Consequences of Pollution - Concerns and Measures to address the Problems of Pollution.

Module-6: The Economics of Education and Health: Crisis and Reform

Crisis in Education - Potential Shortcomings of a Purely Private Market for K-12 - Proposals for Reform in the Current System.

Social Security and Medicare: Securing Safety Nets for the Elderly - Social Insurance - Social Security - Economic Effects - Future of Social Security.

Market for Health Care: Financing, Economic Effects and Future of Medicare.

Module-6: The Economics of Big Business, Trade and Growth

The Economics of Monopoly Power - Fear of Bigness - Peculiar Case of Natural Monopoly.

Protectionism versus Free Trade: Today's International Trade Environment.

Economic Growth: Living in a "New Economy" - Myth or a Reality - Determinants of Economic Growth - The New Economy - Recent Slowdown in Growth.

Module-7: Black Money, Corruption, War and Terrorism

The Parallel Economy: Black Money and Super High Tax Rates - Scams.

Corruption: Meaning and Types of Corruption - Corruption as a System - Channels of Corruption - Impact of Corruption - Combating Corruption - Framework for Improving the Effectiveness of Anti-corruption Policies and Programmes - Impact on Governance and the Economy.

War and Terrorism: Reasons for War - Trends in the Expenditure on Defense and War - Justification for War - Impact of War on the Economy - Global Terrorism: Dimensions and Danger.

References: [Please refer to the Latest Editions]

1. Arvis Jean-Francois and Ronald E. Berenbeim, *Fighting Corruption in East Asia: Solutions from the Private Sector*, World Bank, Washington D.C.
2. Bhargava Vinay and Emil Bolongaita, *Challenging Corruption in Asia*, World Bank, Washington D.C.
3. Bhatnagar Ved, *Challenges to India's Integrity, Terrorism, Casteism, Communism*, Rawat Pub., Jaipur.
4. Sharp Ansel M, Charles A Register and Paul W. Grimes, *Economics of Social Issues*, McGraw-Hill Irwin, Boston, USA.
5. Srivastava C.P., *Corruption -India's Enemy Within*, Macmillan India Limited, New Delhi.
6. Transparency International, (Various Reports), *Global Corruption Report*, Pluto Press, London.

DEPARTMENT OF STUDIES IN ECONOMICS AND COOPERATION**OPEN-ELECTIVE COURSES****(Open Elective Course No: 1) [Hard Core-4] 4 Credits****Course Code: (II-OE.HC:1) ECONOMIC DEVELOPMENT OF INDIA**

Note: Course to be offered by the Department of Economics to the students of other departments during II-Semester depending on the availability of Faculty.

Preamble: The major purpose of the course is to enable the student to have an analytical understanding of various issues of the Indian economy. It enables the student to understand the structure and development of the economy and critically analyze the approaches, forces and issues of the Indian Economy and critically appraise current economic problems in India.

Module-1: Structure of the Indian Economy

India as a Developing Economy - Indian Economy on the Eve of Independence - National Income of India - Natural Resources and Human Resources - Human Development in India - Sectoral Composition - Regional Imbalance - Natural Resources & Environmental Degradation .

Module-2: Infrastructure in the Indian Economy

Infrastructure and Economic Development - Physical Infrastructure: Energy, Power, And Transport System: Roads, Railways, Water Transport, Civil Aviation, Communication System, Urban and Rural Infrastructure, Science and Technology.
Social Infrastructure: Development of Education, Health and Family Welfare in India.

Module-3: Planning and Economic Development

Objectives and Strategy of Economic Planning in India - Role of Public Sector - Disinvestment - Privatization, Liberalization, and Globalization in India - Economic Reforms - New Economic Policy - Approach to 12th Five Year Plan - NITI Aayog - Poverty and Inequality, Unemployment and Parallel Economy in India.

Module-4: Agriculture in India

Role of Agriculture in the National Economy - Progress of Agriculture - Green Revolution - Food Security in India - Irrigation and Other Agricultural Inputs - Land Reforms - Rural Credit - Agricultural Marketing and Warehousing - Formal and Informal Agricultural Labour.

Module-5: Indian Industries

Pattern of Industrial Development - Large-Scale Industries - Small Scale Enterprises - Information Technology Industry - Privatization and Disinvestment - Labour in Industrial Sector - Labour Problems and Labour Policy - Unorganised Sector and Informalisation of Indian Economy - Labour Commissions.

Module-6: External Sector: Trade, Investment and Labour Migration

Trends in Foreign Trade - Liberalization Policy and Impact on Trade - India's Balance Payments - Special Economic Zones - GATT, WTO and India's Foreign Trade - Foreign Direct Investment - Labour Migration from India.

Module-7: Indian Financial System

Indian Currency System - An Overview of the Indian Financial System - Reserve Bank India - Commercial Banks - Non-Bank Financial Institutions - Money and Capital Markets in India - Reforms in the Banking Sector and Financial System.

Module-8: Indian Public Finance

Central Government Budget (latest) - Trends in Revenue and Expenditure - Budget of the State Government - India's Public Debt - Deficit Financing - Tax Policies - Financial Relations between the Centre and States - Finance Commissions: 14th Finance Commission.

Text/Reference Books: [Please refer to the Latest Editions]

1. Datt Gaurav and Sundharam, *Indian Economy*, S. Chand and Company Pvt. Ltd., New Delhi.
2. Dingra Ishwar C. *The Indian Economy: Resources, Planning Development and Problems*, Sultan Chand & sons, New Delhi.
3. Kapila Uma, *Indian Economy since Independence*, Academic Foundation, New Delhi.
4. Misra S.K and Puri V.K. *Indian Economy- Its Development Experience*, Himalaya Publishing House, New Delhi.
5. Reserve Bank of India, *Reports on Currency and Finance*, Mumbai.
6. Government of India, *Economic Survey Reports, Ministry of Finance*, New Delhi.

DEPARTMENT OF STUDIES IN ECONOMICS AND COOPERATION

OPEN-ELECTIVE COURSES

(Open Elective Course No: 2) [Hard Core-4] 4 Credits

Course Code: (II-OE.HC:2) RESEARCH METHODOLOGY

[For Research in Social Science, Commerce and Management]

Note: Course to be offered by the Department of Economics to the students of other departments during II-Semester depending on the availability of Faculty.

Preamble: Research as defined in Webster's 'new international dictionary' consists of "careful or critical inquiry or examination in seeking facts or principles; diligent investigation in order to ascertain something". This emphasizes the fact that - research in its broadest sense is a purposive investigation or inquiry. The main purpose of research is to describe, interpret and explain a phenomena by relating it to other phenomena, thereby setting it within its proper context and by making its meaning or sense explicit through its chain of interconnections. This Course will give a thorough insight to acquire research skills and capabilities.

Module-1: Introduction to Research Process

What is Research? - Meaning and Characteristics - Types of Research - Methods - Planning a Research - Identification of Research Problem - Defining the Research Problem - Theoretical Foundation - Review of Literature - Objectives - Hypotheses - Difference between a Proposition, a Hypothesis and a Theory - Data Source - Sampling - Scope - Methodology - Logic of Inquiry - Research Design - Reference and Documentation in the Library - Need and Importance of Research in Economics - Applicability - Plagiarism - Limitations and Ethical issues in Research.

Module-2: Types and Methods of Research

Classification of Research: Pure and Applied Research - Qualitative, Quantitative and Mixed - Exploratory, Descriptive, Diagnostic, Evaluation, Action and Experimental Research - Historical Research - Surveys - Case Study - Field Study - Steps in Research.

Module-3: Data Sources and Methods of Data Collection

Sources of Data: Primary and Secondary Sources of Data - Quantitative Data: Availability of Sources - Time Series Data - Cross Section Data and Pooled Data - Census, Reports and Documents, other Published and Unpublished Sources.

Qualitative Methods of Data Collection: Direct Observation - Indirect Observation: Interview Method, Schedules and Questionnaires - Questionnaire Designing Procedure - Case Study, Projective Methods - Simulation - Merits and Demerits.

Module-4: Sampling Considerations and Data Processing

Sampling Considerations: Concepts - Sample vs Census - Principles of Sampling Design & Process - Types of Sample Design: Probability Sampling Techniques: Simple Random, Stratified Random, Cluster and Multi-Stage and other Methods of Sampling. Non-Probability Sampling Techniques: Quota Sampling, Convenient Sampling, Purposive Sampling, Judgment Sampling and other Methods - Determination of Sample Size - Advantages and Disadvantages - Errors in Sampling.

Data Processing: Processing and Distribution - Field Work Validation - Tabulation - Editing - Coding - Classification and Tabulation of Data - Presentation - Graphical Representation.

Module-5: Data Analysis and Interpretation (Theoretical Exposure)

Univariate and Multivariate Data Analysis - Descriptive v/s Inferential Analysis - Descriptive Analysis of Univariate Data and Bivariate Data - Testing of Hypotheses: Concepts, Steps in Testing of Hypothesis.

Estimation of Mean: Test of Single Sample Mean - Two Independent Means Tests - Testing for Means of Paired Data - Testing for the Equality of K Population Means - Assumptions for Analysis of Variance - Between Treatments Estimate of Population Variance - Within Treatments Estimate of Population Variance - Comparing the Variance of Estimates - The F Test - Multiple Comparison Procedures.

Estimation of Variance: Test of Single Sample Variance - Two Sample Variance Test.

Non-Parametric Tests: Advantages & Disadvantages - Chi-square tests - Tests for Randomness.

Introduction to Advanced Data Analysis Techniques: Correlation and Regression Analysis - Factor Analysis - Discriminant Analysis - Cluster Analysis - Multidimensional Scaling.

Module-6: Report Writing and Presentation of Results

Importance of Report Writing - Types of Reports: Brief Reports, Detailed Reports, Technical Reports and Business Reports - Report Preparation - Report Structure: Preliminary Section, Main Report - Interpretations of Results - Research Findings and Suggested Recommendations - Limitations of the Study, and End Notes - Report Writing: Report Formulation - Effective Documentation: Need and Guidelines: Presenting Tabular Data, Visual Representations: Tables, Graphs, Charts - Presenting Footnotes and Bibliography - Oral Presentation of Research.

References: [Please refer to the Latest Editions]

1. Bryman Alan, *Social Research Methods*, Oxford University Press, Oxford.
2. Kothari C.R., *Research Methodology*, New Age International Publication, New Delhi.
3. Krishnawamy O.R. and Ranghanathan, M., *Methodology of Research in Social Sciences*, Himalaya Publishing House, Bangalore.
4. Kurian C.T. *Research Methodology in Economics*, Institute of Development Studies, Madras.
5. Majumdar P.K., *Research Methods in Social Science*, Viva Books Private Limited, New Delhi.
6. Robert, A. Day, *How to Write and Publish a Scientific Paper*, Cambridge University Press, Great Britain.

DEPARTMENT OF STUDIES IN ECONOMICS AND COOPERATION

OPEN-ELECTIVE COURSES

(Open Elective Course No: 3) [Hard Core-4] 4 Credits

Course Code: (III-OE.HC:1) INDIAN FINANCIAL INSTITUTIONS AND MARKETS

Note: Course to be offered by the Department of Economics to the students of other departments during III-Semester depending on the availability of Faculty.

Preamble: The study of Banking and other financial institutions have long history in most economies of the world. The nature, functioning and issues related to banks and non-bank financial institutions are quite interesting. The operation of financial markets and their regulation need to be studied to appreciate their key role in an economy, especially after the far-reaching banking and financial sector reforms in India and elsewhere. The present course is designed to acquaint the students fully with the changing role of financial institutions in the process of growth and development.

Module-1: Introduction to Money and Banking System

Introduction - Definition - Evolution of Money - Nature and Significance of Money - Kinds of Money - Demand and Supply of Money - Monetary Standards.

Banking System: Evolution of Modern Banking System - Types of Banking - Structure of Banking System. *Central Banking System:* Objectives - Functions.

Money Market: Importance - London Money Market - New York Money Market - Indian Money Market. Introduction - Functions - Money Market Instruments - Primary Market - Resource Mobilization - Mutual Funds. **Secondary Market:** Introduction - Stock Exchanges

Module-2: Financial and Banking System in India

Financial Systems in India: Introduction - Historical Background - Banking Prior to 1950 - Development of Banking since 1950 - An Overview of Money and Capital Markets - State Control over Banks - Nationalization of Banks - Banking Commission.

Reserve Bank of India: Introduction - Origin and Development - Structure and Management - Functions and Working - Instruments of Monetary Control - Role of Reserve Bank of India in the Economy - Objectives of Monetary Policy - RBI and Financial Sectors Reforms.

Module-3: Commercial Banks, Cooperative Banks, & Development Banking in India

Commercial Banks: Evolution - Nature of Commercial Banks - Role and Functions - Credit Creation - Bank Borrowings - Problem of Non-Performing Assets.

Cooperative Banks Introduction - Organization Structure and Development of Cooperatives - Role of RBI in Cooperative Banks - Reforms in Cooperative Credit.

Development Banking - National Bank for Agriculture and Rural Development (NABARD).

Module-4: NBFIs, Insurance, Mutual Funds & Foreign Exchange Market in India

NBFIs: Significance - Structure and Growth of NBFIs in India - Financial Sector Reforms - Liberalization Measures (1996) - Size & Assets of NBFIs - Regulation of NBFIs and the RBI.

Insurance: Growth and Structure of Insurance Companies - Life Insurance Corporation and its Progress - General Insurance Companies and their Functions.

Mutual Funds: Introduction - Types - SEBI's Directives - Private Mutual Funds - Asset Management Company - Unit Trust of India - RBI Guidelines.

Foreign Exchange Market: Trading in Foreign Exchange Markets - Speculation - Foreign Exchange Rates - Liberalized Exchange Rate Management System:1992 - Capital Account Convertibility - Currency Arbitrage - Hedging with Options.

Module-5: Derivatives Market, Debt Market and Financial Services

Derivatives Market: Introduction - Forwards and Futures - Futures Trading Strategies - Options - Trading Strategies - Derivatives Market in India - Derivatives Trading in India.

Debt Market: Introduction - Private Corporate Debt Market - Public Sector Undertaking - Bond Market - Government Securities Market.

Financial Services: Investment Banking - Introduction, Functions, Types - Investment Banking Services - Merchant Banking Services - SEBI - Pre-Issue & Post-Issue Obligations - Changing Scenario of Investment Banking - Depositories and Custodians - Credit Rating.

Credit Rating Agencies in India: Factoring and Forfeiting - Housing Finance - Leasing and Hire Purchase.

1. Desai Vasant, *Development Banking and Financial Intermediaries*, Himalaya Pub., House.
2. Khan, M. Y, *Indian Financial System*, Tata McGraw-Hill Education, New Delhi.
3. Machiraju H.R. *Indian Financial System*, Vikas Publishing House PVT Ltd., New Delhi.
4. Madaiah M, *Financial Intermediaries, Monetary Policy and Economic Development*, Prasaranga, Mysore.
5. Mithani and Gordon, *Banking Theory and Practice*, Himalaya Pub., House, Mumbai.
6. Nirmala Prasad and Chandradass J, *Banking and Financial System*, Himalaya Pub., House, Mumbai.
7. Pathak, Bharati V. *The Indian Financial System: Markets, Institutions and Services*, Pearson Education India.
8. Reddy P. V. and H R Appannaiah, *Banking Theory and Practice*, Himalaya Pub., House, Mumbai.
9. Reserve Bank of India, *Trends and Progress of Banking in India* (latest edition), Mumbai.
10. Shekhar & Shekhar, *Banking Theory and Practice*, Vikas Publishing House, New Delhi.
11. Vasant Desai, *Indian Financial System*, Himalaya Publishing House, Mumbai.

DEPARTMENT OF STUDIES IN ECONOMICS AND COOPERATION

OPEN-ELECTIVE COURSES

(Open Elective Course No: 4) [Hard Core-4] 4 Credits

Course Code: (III-OE.HC:2) BASIC ECONOMETRICS

[For Research in Social Science, Commerce and Management]

Note: Course to be offered by the Department of Economics to the students of other departments during III-Semester depending on the availability of Faculty.

Preamble: The explosive growth in econometric literature in the last few decades hardly needs any emphasis. Introduction of this Course can be viewed as an attempt to expose the students to the basic concepts of econometrics. Keeping this in mind, the focus of this Course will be on a meaningful interface between theory and application - the emphasis being more on empirical analysis rather than theoretical rigour. This course covers the statistical foundations of econometric theory as well as econometric methods and applications. The focus of this course will be therefore on an interface between these three facets that are essential for a proper understanding of econometric applications in economic analysis.

Module-1: Introduction to Econometrics

Meaning - Nature and Scope of Econometrics - Distinction between Economics and Econometrics, Mathematics and Econometrics, Statistics and Econometrics - Methodology of Econometrics - Types of Econometrics.

Module-2: Simple and Multiple Regression Model

Simple Regression: Meaning - Basic Ideas - Significance of Disturbance Term - Method of Estimation: Ordinary Least Squares and Maximum Likelihood Estimation - BLUE Property - Coefficient of Determination - Assumptions - Hypothesis Testing - Confidence Interval and Test of Significance Approach - Testing Regression Coefficients - Interpretation of Results.

Multiple Regression: Meaning - Three Variable Regression Model - Partial Regression Coefficients - Method of Estimation - R-Square and Adjusted R-Square - Hypothesis Testing - Testing Individual Regression Coefficient - Overall Significance Test - ANOVA.

Introduction to Matrix Approach to Estimation of Parameters of more than Three Variables.

Module-3: Practical Problems of Regression

Multicollinearity: Nature - Causes -Consequences - Detection - Remedial Measures.

Heteroscedasticity: Nature - Causes -Consequences - Detection - Remedial Measures.

Auto-Correlation: Nature - Causes -Consequences - Detection - Remedial Measures.

Module-4: Dummy Variable and Dynamic Regression Models

Dummy Variable Model: Meaning - Nature - Dummy Variable Trap - Dummy Variable Model with Single Qualitative Variable - Two Qualitative Variables - Dummy Variable Model with Mixture of Qualitative and Quantitative Variables.

Autoregressive and Dynamic Models: Role of Lag in Economics - Estimation Methods: Koyck's: Adaptive Adjustment and Partial Expectation Models - Almon Approach to Distributed Lag Models.

Module-5: Time Series Econometrics

Introduction - Stationary and Non-Stationary Series - Random Walk Model - Testing of Unit Root - Co-integration - Test for Co-integration - Engel-Granger Test - Johansen Test - Error Correction Model - Introduction to ARCH and GARCH Modeling - Application in Economics.

References: [Please refer to the Latest Editions]

1. Brooks Chris, *Introductory Econometrics for Finance*, Cambridge University Press, Cambridge.
2. Damodar Gujarati, *Basic Econometrics*, McGraw Hill, International Student Edition.
3. Damodar Gujarati, *Econometrics by Example*, Palgrave Macmillan, United Kingdom.
4. Ghosh Sukesh K, *Econometrics- Theory and Applications*, Prentice Hall Private Ltd., New Delhi.
5. Koutsoyianms A., *Theory of Econometrics*, Palgrave Macmillan, United Kingdom.
6. Patterson Kerry, *An Introduction to Applied Econometrics a Time Series Approach*, Macmillan Press.

DEPARTMENT OF STUDIES IN ECONOMICS AND COOPERATION

OPEN-ELECTIVE COURSES

(Open Elective Course No: 4) [Hard Core-4] 4 Credits

Course Code: (IV-OE.HC:1) ECONOMICS AND LAW

Note: Course to be offered by the Department of Economics to the students of other departments during IV-Semester depending on the availability of Faculty.

Preamble: In order to understand the basic tools and methods of economic analysis both at the micro and macro levels, it is imperative to understand the basic provisions of law relating to consumer activities, business organizations, environment, custom duties, public sector undertakings, direct foreign investment and the law relating to international organizations and vice versa. However, economists have often taken for granted the various legal provisions which affect the economic behaviour that is not true. In order to meet this requirement, this course is essential and has been designed in a way that the students of economics would be able to comprehend the basic economic issues affecting the economy along with the related legal provisions. This would enable the economists to frame their models that are closer to reality, besides making them understand the consequence of legal rules, primarily as an exercise in applied microeconomics, macroeconomics, industrial economics and international economics.

Module 1: Introduction

Economic Analysis of Law - Introduction of Legal Reasoning, Efficiency - Markets and Efficiency - Market Failure - Coase Theorem and Related Ideas - Welfare Economics - compensation Principles - Social welfare Function - Maximization Problem - Nature of economic reasoning - economic Approach to Law - History and Criticism.

Module 2: An Introduction to Law and Legal Institutions

The Civil Law and the Common Law Traditions - The Institutions of the Federal and State Court Systems - The Nature of Legal Disputes - How Legal Rules Evolve.

Module 3: Law relating to consumer Activities

Bargain Theory - Economic Role of Contract - Economic Theory of Contract - Remedies as Incentives, Formation, Defense and Performance Excuses - Duress - Bargaining Power and Unconscious Ability - Defining Tort Law - Economics of Tort Liability - Tort Liability and Economic Models - Economics of Accidents, Fault, Victim, Fault and Strict Liability - Function of Damages - Consumer Protection - Consumer Courts.

Module 4: Law of Business Organizations

Structure of Firm - Kinds, Corporations - Corporate Vest, Capital, Shares, Debentures, Insiders' Trading, Antitrust, Reserve Bank of India (RBI), Industries Development and Regulation Act (IDRA), Monopolies and Restrictive Trade Practices Act (MRTP), Role of Securities and Exchange Board of India (SEBI) - Economics of Mergers - Amalgamations and Takeovers.

Module 5: Economic Theory of Crime and Punishment

The Traditional Theory of Criminal Law - Economic Theory of Crime and Punishment - Does Punishment Deters Crime? - Efficient Punishment - Efficacy of Capital Sentence - Addictive Drugs and Crime - Plea Bargaining - Reforms of Criminal Procedure and Futility Thesis - Law Relating to Economic offence - Corruption and Human Rights.

Module 6: Macroeconomics and Law

Law and distribution of Income and Wealth - Inequality - Contract Theory of Distributive Justice - Economic and Social Costs of Poverty and Corporate Taxation - Progressive Principle - Economics of Federalism - Freedom of Inter-State Trade and Commerce - National and Global Environmental Problems and International Environmental Agreements - Their Legal and Economic Implications - Economics of Social Sector - Disinvestments in Public Sector Units.

Module 7: International Aspects

General Agreements on Tariffs and Trade (GATT) - World Trade Organization (WTO) - Trade Related Intellectual Property Rights (TRIPs) and Trade Related Investment Measures (TRIMs) - Export-Import Policy - Custom Duties -Multinational Corporations (MNCs) and Foreign Direct Investment (FDI) - Foreign Exchange Management Act (FEMA).

References: [Please refer to the Latest Editions]

1. Bouckaert B. and G De Gesst (ed), *Encyclopedia of Law and Economics, (Volume I to V)* Edward Elgar Publishing Ltd., United Kingdom.
2. Cooter R.D. and T.S.Ulen, *Law and Economics*, Addison Wesley, New York.
3. Newman P. (ed), *The New Palgrave Dictionary of Economics and Law*, Stockton Press, New York.
4. Oliver J.M., *Law and Economics*, George Allen and Unwin, London.
5. Posner R.A., *Economic Analysis of Law*, Little Brown, Boston.
6. Posner R.A. and F. Parisi (eds), *Law and Economics*, Edward Elgar Publishing Ltd., United Kingdom.
7. Kumar Sanjeev, *Economic Laws and Practice*, Vrinda Publications Pvt. Ltd, New Delhi.
8. Taxmann's, *Economic Laws*, Taxmann Allied Services Private Ltd, New Delhi.

DEPARTMENT OF STUDIES IN ECONOMICS AND COOPERATION
OPEN-ELECTIVE COURSES

(Open Elective Course No: 4) [Hard Core-4] 4 Credits

Course Code: (IV-OE.HC:2) UNO AND INTERNATIONAL FINANCIAL INSTITUTIONS

Note: Course to be offered by the Department of Economics to the students of other departments during IV-Semester depending on the availability of Faculty.

Preamble: During the last nearly seventy five years UNO, the Institutions under the umbrella of UNO and especially the International Financial Institutions have played a decisive role in the development process of developed as well as developing countries. They have a significant bearing on the economic policies of the member countries. This is more evident in the era of globalization. This course is hence designed to give an exposure to the students regarding the working of major International Financial Institutions viz., International Monetary Fund, World Bank and its Affiliates and Asian Development Bank.

Module - 1: United Nations Organization: Formation and Functions

Introduction - League of Nations - Need for the Establishment of UNO, and International Financial Institutions - The Role and Significance of International Financial Institutions.

Module - 2: International Monetary Fund

Capital and the Organization of the IMF - Scope of the International Monetary Fund - Functions of IMF - The IMF and Gold Standard - International Liquidity and the IMF - New International Monetary System, January 1976 - Amended Rules of the IMF - India and the IMF.

Module - 3: International Bank for Reconstruction and Development (IBRD) (World Bank)

Objectives of the World Bank - Members of the World Bank - Capital Structure and Organization of the World Bank - Functions of the World Bank - World Bank's Borrowing and Lending Operations - Loan Policies and Procedures, Projects - Aid Co-ordination - Financing - Special Action Programmes - Other Activities - Review of the Bank's Operation - Critical Appraisal - World Bank and India

Module - 4: World Bank and its Affiliates

International Finance Corporation (IFC) - Membership - Organization - Capital - Objectives - investment Criteria - Financial Procedures - Review of the Working - Criticisms of the IFC - IFC and India

International Development Association (IDA) - Membership - Organization - Capital - Nature of the IDA assistance - Third World Window of the World Bank.
 International Center for Settlement of investment Disputes (ICSID) - Purpose and Functions
 The Multilateral Investment Guarantee Agency (MIGA) - Nature of Operation and Significance.

Module - 5: Asian Development Bank

Objectives of the Bank - Membership - Capital and Organization - Functions - Financial Resources - Lending Activities - Project Implementation - Technical assistance - Regional Activities

Module - 6: Towards a New Bretton Woods

Evolution of the International Economic System - Recovery and Improved Stabilization Policies for the Future - International Liquidity and IMF - Commercial Lending and Debt Management - Long-term Finance for Development - an Effective and integrated Regime for International Trade - Recommendations for the Future.

References: [Please refer to the Latest Editions]

1. Apte A.N. (1999) International Financial Management, Tata McGraw Hill Pub., Co. Ltd., New Delhi
2. Bhambari C.P, (1980) The World Bank and India, Vikas Publishing House, New Delhi,
3. International Development association, Annual Reports.
4. International Finance Corporation, Annual Reports.
5. International Monetary Fund, Annual Reports.
6. World Bank, (1995) The Evolving Role of the World Bank in the First Half Century, Washington D.C.
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8. World Bank, World Development Reports, and Annual Reports.

M.A. ECONOMICS PROGRAMME

[Two Year Regular Full Time Programme]

COURSE CONTENTS

[Revised Syllabus]

[Effective from the Academic Year: 2017-2018 onwards]

**DEPARTMENT OF STUDIES IN ECONOMICS & COOPERATION
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