

H. H. THE RAJAH'S COLLEGE (Autonomous B⁺) PUDUKKOTTAI – 622 001

DEPARTMENT OF ECONOMICS

BOARD OF STUDIES MEETING

Date: 28.06.2018

Time: 10.00 am

Place: Department of Economics

AGENDA

- Item -1: To approve the minutes of the previous meeting.
- Item 2: To approve the choice based credit system course pattern and syllabus for B.A., M.A., M.Phil., Economics for the year 2018-19 onwards.
- Item 3: To approve the question paper pattern for the choice based credit system for B.A., M.A., and M.Phil., Economics for the year 2018-19 onwards.
- Item 4: To approve the incorporation of the feedback of the students, scholars, alumni and parents while revising the regulations, curriculum and syllabi of all programmes offered by the Department of Economics.
- Item 5: To approve the incorporation of the suggestions of the Board of Studies members while revising the regulations, curriculum and syllabi of all programmes offered by the Department of Economics.
- Item 6: To approve the incorporation of higher weightage given by the NAAC for the curriculum.
- Item 7: To approve the list of papers newly introduced for B.A., and M.A., Economics for the year 2018-19 onwards.
- Item -8: Any other matter with permission of the Chair.

CHAIRPERSON

H. H. THE RAJAH'S COLLEGE (Autonomous B⁺), PUDUKKOTTAI – 622 001

DEPARTMENT OF ECONOMICS

Submitted to the Principal

Sub: Minutes of the meeting – Board of studies – Placing at Academic Council – For Approval – reg.

Minutes of the Board of Studies meeting of the Department of Economics, H.H. The Rajah's College (Autonomous), Pudukkottai, held on 28th June 2018 at 10.00 a.m. at the Department of Economics.

The following resolutions are passed in the meeting.

Item – 1: To approve the minutes of the previous meeting.

Resolved to approve the minutes of the previous meeting held on 18th April 2015.

Item – 2: To approve the choice based credit system course pattern and syllabus for B.A., M.A., M.Phil., Economics for the year 2018-19 onwards.

Resolved to approve the choice based credit system course pattern and syllabus for B.A., M.A., M.Phil., Economics for the year 2018-19 onwards.

Item – 3: To approve the question paper pattern for the choice based credit system for B.A., M.A., and M.Phil., Economics for the year 2018-19 onwards.

Resolved to approve the existing pattern of the question paper for the choice based credit system for B.A., M.A., and M.Phil., Economics for the year 2018-19 onwards.

Item – 4: To approve the incorporation of the feedback of the students, scholars, alumni and parents while revising the regulations, curriculum and syllabi of all programmes offered by the Department of Economics.

Resolved to approve the incorporation of the feedback of the students, scholars, alumni and parents while revising the regulations, curriculum and syllabi of all programmes offered by the Department of Economics.

Item – 5: To approve the incorporation of the suggestions of the Board of Studies members while revising the regulations, curriculum and syllabi of all programmes offered by the Department of Economics.

Resolved to approve the incorporation of the suggestions of the Board of Studies members while revising the regulations, curriculum and syllabi of all programmes offered by the Department of Economics.

Item – 6: To approve the incorporation of higher weightage given by the NAAC for the curriculum.

Resolved to approve the incorporation of higher weightage given by the NAAC for the curriculum.

Items – 7: To approve the list of papers newly introduced for B.A., and M.A., Economics for the year 2018-19 onwards.

Resolved to approve the list of papers newly introduced for B.A., and M.A., Economics for the year 2018-19 onwards.

For B.A., Economics following papers were newly introduced:

- 1. Managerial Economics
- 2. Economic of Insurance
- 3. Economics of Transportation
- 4. Basic Economics
- 5. Capital Market
- 6. Agricultural Economics
- 7. Economics of Service Sector

For M.A., Economics following papers were newly introduced:

- 1. Welfare Economics
- 2. Health Economics
- 3. Human Resources Management
- 4. Economics for IES/NET/SET

Members Present:

1.	Dr. VELU SURESH KUMAR	-	Chairperson
2.	Dr. L. GANESAN	-	University Nominee
3.	Dr. K. SADASIVAM	-	External Member
4.	Dr. M. MARIA JOHN KENNED	Y-	External Member
5.	Mr. S. RAJAKUMAR	-	Industrialist
6.	Dr. M. KARUPPIAH	-	Member
7.	Mr. S. SURIYAKANTH	-	Member
8.	Dr. V. MURUGESAN	-	Member
9.	Dr. S. ASAITHAMBI	-	Member
10.	Dr. A. KARNAN	-	Member
11.	Dr. B. BALAMURUGAN	-	Member
12.	Dr. T. SUDAKAR	-	Member
13.	Mr. P. SARAVANAN	-	Old Student (Member)

H. H. THE RAJAH'S COLLEGE (Autonomous B+), PUDUKKOTTAI PG & RESEARCH DEPARTMENT OF ECONOMICS PROGRAMME OUTCOMES FROM M.A. ECONOMICS (2021-2022 Onwards)

Program Educational Objectives (PEOs)

PEO1: To teach the latest developments in the principles of economic theory.

PEO2: To equip students with tools of econometrics for applied economic research.

PEO3: To teach applications of theories in analyzing current economic problems.

PEO4: To develop skills to evaluate the opportunities available in the field of Economics.

PEO5: To continuously enhance academic rigor and research outcomes.

Program Specific Outcomes (PSOs)

PSO1: Able to apply economic theories and to expand the problem-solving acumen.

- **PSO2:** Able to apply theories in analyzing current economic problems.
- **PSO3:** Conscious about the socio-economic environment, both domestic and international and its implications on business.
- **PSO4:** Open up research opportunities in the national level premier educational institutes.
- **PSO5:** Can easily crack the competitive examinations and become successful in getting employment opportunities.

Programme Outcomes (POs)

After 2 years of completion of programme, the post graduates will be able to:

- **PO1:** Gain an in-depth knowledge on microeconomic analysis, macroeconomic variables such as multiplier, consumption, investment and general equilibrium.
- **PO2:** Understand how to apply some basic tools of mathematics, statistics and econometrics for applied economic research.
- **PO3:** Identify the standard level of growth and development of the economy of the country and to determine and frame planning policies.
- **PO4:** Understand and apply the knowledge of the industrial economics on location, efficiency, productivity and industrial policies.
- **PO5:** Identify and formulate the research design, analyze data and be able to unite the research report and provide valid inferences.
- **PO6:** Take decision on how to acquire resources for the health sector, and how best to use the scarce resources for the production of health services.
- **PO7:** Promote social and economic well-being by leadership and policy practice which addresses social and economic problems.

COURSE SUMMARY

Percentage to be assigned for modification

- Complete Unit Change 20%
- Partially Unit Change 10%
- Minimum Modification 5%
- No deletion 0%

Name of the Programme : M.A.

Name of the Course : Economics

Title of the Paper : Micro Economic Analysis - I

(Tick the appropriate box)

 \Box Core \Box Allied \Box Elective \Box NME \Box SBE \Box ED

Unit	Deduction (%)	Addition (%)	Modification (%)	Revision (%)	
(1)	(2)	(3)	(4)	(2 + 3 + 4)	
Unit – I	5	5	0	10	
Unit – II	5	5	0	10	
Unit – III	5	5	0	10	
Unit – IV	0	0	0	0	
Unit – V	0	0	0	0	
	Average				

Title of the Paper

: Macro Economic Analysis - I

(Tick the appropriate box)

 \Box Core \Box Allied

□ Elective

 \Box NME \Box SBE

Unit	Deduction (%)	Addition (%)	Modification (%)	Revision (%)
(1)	(2)	(3)	(4)	(2 + 3 + 4)
Unit – I	5	5	0	10
Unit – II	5	5	0	10
Unit – III	5	5	0	10
Unit – IV	5	5	0	10
Unit – V	0	0	0	0
	40			

Title of the Paper : Statistics – I

(Tick the appropriate box)

$\Box \text{ Core } \Box \text{ Allied } \Box \text{ Elective } \Box \text{ NME } \Box \text{ SBE } \Box \text{ ED}$

Unit	Deduction (%)	Addition (%)	Modification (%)	Revision (%)
(1)	(2)	(3)	(4)	(2 + 3 + 4)
Unit – I	0	0	0	0
Unit – II	0	0	0	0
Unit – III	0	0	0	0
Unit – IV	0	0	0	0
Unit – V	0	0	0	0
	0			

Title of the Paper : Welfare Economics

(Tick the appropriate box)

 \Box Core \Box Allied

□ NME

 \Box ED

 \Box SBE

Unit	Deduction (%)	Addition (%)	Modification (%)	Revision (%)
(1)	(2)	(3)	(4)	(2 + 3 + 4)
Unit – I	0	0	20	20
Unit – II	0	0	20	20
Unit – III	0	0	20	20
Unit – IV	0	0	20	20
Unit – V	0	0	20	20
	100			

Title of the Paper : Micro Economic Analysis - II

(Tick the appropriate box)

 \Box Core \Box Allied

 \Box Elective

 \Box NME \Box SBE

Unit	Deduction (%)	Addition (%)	Modification (%)	Revision (%)
(1)	(2)	(3)	(4)	(2 + 3 + 4)
Unit – I	0	0	0	0
Unit – II	0	0	0	0
Unit – III	0	0	20	20
Unit – IV	0	0	20	20
Unit – V	0	0	20	20
	60			

Title of the Paper

□ Core

: Macro Economic Analysis - II

□ Elective

(Tick the appropriate box)

 \Box Allied

Unit	Deduction (%)	Addition (%)	Modification (%)	Revision (%)
(1)	(2)	(3)	(4)	(2 + 3 + 4)
Unit – I	0	0	0	0
Unit – II	0	0	20	20
Unit – III	0	0	20	20
Unit – IV	0	0	0	0
Unit – V	0	0	0	0
	40			

 \square NME

 \Box SBE

 \Box ED

Title of the Paper : Statistics - II

(Tick the appropriate box)

 $\Box \text{ Core } \Box \text{ Allied } \Box \text{ Elective } \Box \text{ NME } \Box \text{ SBE } \Box \text{ ED}$

Unit	Deduction (%)	Addition (%)	Modification (%)	Revision (%)
(1)	(2)	(3)	(4)	(2 + 3 + 4)
Unit – I	0	0	0	0
Unit – II	0	0	0	0
Unit – III	0	0	0	0
Unit – IV	0	0	20	20
Unit – V	0	0	0	0
	20			

Title of the Paper : Human Resource Management

(Tick the appropriate box)

 \Box Core \Box Allied

□ Elective

 \Box NME \Box SBE

Unit	Deduction (%)	Addition (%)	Modification (%)	Revision (%)
(1)	(2)	(3)	(4)	(2 + 3 + 4)
Unit – I	0	0	20	20
Unit – II	0	0	20	20
Unit – III	0	0	20	20
Unit – IV	0	0	20	20
Unit – V	0	0	20	20
	100			

Title of the Paper

: General Studies for Competitive Examinations

(Tick the appropriate box)

	Allied 🗆 Electiv	ve 🗆 NME	\Box SBE \Box E	D
Unit	Deduction (%)	Addition (%)	Modification (%)	Revision (%)
(1)	(2)	(3)	(4)	(2 + 3 + 4)
Unit – I	0	0	20	20
Unit – II	0	0	20	20
Unit – III	0	0	20	20
Unit – IV	0	0	20	20
Unit – V	0	0	20	20
	100			

Title of the Paper : Research Methodology

(Tick the appropriate box)

 \Box Core \Box Allied

ied \Box Elective

 \Box NME \Box SBE

 \Box ED

Unit	Deduction (%)	Addition (%)	Modification (%)	Revision (%)
(1)	(2)	(3)	(4)	(2 + 3 + 4)
Unit – I	0	0	20	20
Unit – II	0	0	20	20
Unit – III	0	0	20	20
Unit – IV	0	0	20	20
Unit – V	0	0	20	20
	100			

Title of the Paper : Mathematical Economics

(Tick the appropriate box)

 \Box Core \Box Allied

□ Elective

 \Box NME \Box SBE

Unit	Deduction (%)	Addition (%)	Modification (%)	Revision (%)
(1)	(2)	(3)	(4)	(2 + 3 + 4)
Unit – I	0	0	20	20
Unit – II	0	0	20	20
Unit – III	0	0	20	20
Unit – IV	0	0	20	20
Unit – V	0	0	20	20
	100			

Title of the Paper : Industrial Economics

 \Box Allied

(Tick the appropriate box)

□ Core

Unit	Deduction (%)	Addition (%)	Modification (%)	Revision (%)
(1)	(2)	(3)	(4)	(2 + 3 + 4)
Unit – I	0	0	0	0
Unit – II	0	0	0	0
Unit – III	0	0	0	0
Unit – IV	0	0	0	0
Unit – V	0	0 0		0
	0			

 \Box NME

 \Box SBE

Title of the Paper : International Economics

(Tick the appropriate box)

 \Box Core \Box Allied

 \Box Elective

□ Elective

 \Box NME \Box SBE

 \Box ED

 \square ED

Unit	Deduction (%)Addition (%)Modification (%)		Revision (%)	
(1)	(2)	(3)	(4)	(2 + 3 + 4)
Unit – I	0 0 0		0	
Unit – II	0	0	0	0
Unit – III	0	0	0	0
Unit – IV	Unit – IV 0		0	0
Unit – V 0		0	20	0
	20			

Title of the Paper : Health Economics

(Tick the appropriate box)

 \Box Core \Box Allied

□ Elective

 \Box NME \Box SBE

Unit	Deduction (%)	Addition (%)	Modification (%)	Revision (%)
(1)	(2)	(3)	(4)	(2 + 3 + 4)
Unit – I	0	0	20	20
Unit – II	0	0	20	20
Unit – III	0	0	20	20
Unit – IV	0	0	20	20
Unit – V	0	0	20	20
	100			

Title of the Paper: Fiscal Economics

(Tick the appropriate box)

□ Core	Allied 🗆 Elect	ive 🗆 NME	\Box SBE \Box E	D
Unit	Deduction (%)	Addition (%)	Modification (%)	Revision (%)
(1)	(2)	(3)	(4)	(2 + 3 + 4)
Unit – I	0	0	0	0
Unit – II	0	0	0	0
Unit – III	0	0	20	20
Unit – IV	0	0	20	20
Unit – V	0	0	20	20
	60			

Title of the Paper : Economics of Development and Planning

(Tick the appropriate box)

 \Box Core \Box Allied

ied \Box Elective

 \Box NME \Box SBE

 \Box ED

Unit	Unit Deduction (%) Additi		Modification (%)	Revision (%)
(1)	(2)	(3)	(4)	(2 + 3 + 4)
Unit – I	0	0	0	0
Unit – II	II 0 0		0	0
Unit – III	0	0	0	0
Unit – IV	0	0	20	20
Unit – V	0	0	20	20
	40			

Title of the Paper : Economics for IES / NET / SET

(Tick the appropriate box)

 \Box Core \Box Allied

□ Elective

 \Box NME \Box SBE

Unit	Deduction (%)	Addition (%)	Modification (%)	Revision (%)
(1)	(2)	(2) (3) (4)		(2 + 3 + 4)
Unit – I	0	0 20		20
Unit – II	0	0	20	20
Unit – III	0	0 0		20
Unit – IV	0	0	20	20
Unit – V	0	0	20	20
	100			

PROGRAMME SUMMARY

Name of the Programme : M.A.

Name of the Course : Economics

Title of the Paper	Average % of Changes in each paper
Micro Economic Analysis - I	30
Macro Economic Analysis - I	40
Statistics – I	0
Welfare Economics	100
Micro Economic Analysis - II	60
Macro Economic Analysis - II	40
Statistics - II	20
Human Resource Management	100
General Studies for Competitive Examinations	100
Research Methodology	100
Mathematical Economics	100
Industrial Economics	0
International Economics	20
Health Economics	100
Fiscal Economics	60
Economics of Development and Planning	40
Economics for IES / NET / SET	100
Average Changes in the Programme	1010/17 = 59.41

H.H. THE RAJAH'S COLLEGE (AUTONOMOUS B⁺), PUDUKKOTTAI DEPARTMENT OF ECONOMICS CBCS - COURSE PATTERN FOR M.A., ECONOMICS (2018-19 Onwards)

SI.	'n				Hrs/	No. of		Marks		
No	Ser	Paper	Code	Name of the Paper	Hrs/ No. of Week Credits		Inter.	Exter	Total	
1		Core - I	18PEC1	Micro Economic Analysis - I	7	5	25	75	100	
2		Core - II	18PEC2	Macro Economic Analysis - I	7	5	25	75	100	
3	Ι	Core - III	18PEC3	Statistics - I	7	5	25	75	100	
4			1005051	Indian Economy and Reforms	7	~	25	75	100	
4		Elective -I	ISPECEI	Welfare Economics	/	5	25	15	100	
					•					
5		Core - IV	18PEC4	Micro Economic Analysis - II	6	5	25	75	100	
6		Core - V	18PEC5	Macro Economic Analysis - II	6	5	25	75	100	
7		Core - VI	18PEC6	Statistics - II	6	5	25	75	100	
	П		1000000	Entrepreneurial Development		5	25	75	100	
8		Elective-II	7e-II 18PECE2	Human Resource Management	6		25	/5	100	
9	Extra Disciplinary 18PECED		18PECED1	General Studies for Competitive Examinations	5	5	25	75	100	
10		Core - VII	18PEC7	Research Methodology	6	5	25	75	100	
11		Core-VIII	18PEC8	Mathematical Economics	6	5	25	75	100	
12		Core - IX	18PEC9	Industrial Economics	6	5	25	75	100	
13	III	Core - X	18PEC10	International Economics	6	5	25	75	100	
					Computer Applications in					
14		Elective-III	18PECE3	Health Economics	5	5	25	75	100	
						<u> </u>				
15		Core - XI	18PEC11	Fiscal Economics	6	5	25	75	100	
16	IV	Core - XII	18PEC12	Economics of Development and Planning	6	5	25	75	100	
17	1 1	Core-XIII	18PEC13	Economics for IES / NET / SET	6	5	25	75	100	
18		Core-XIV	18PEC14	Project Work	12	5	25	75	100	
				TOTAL	116	90	450	1350	1800	

QUESTION PAPER PATTERN

CHOICE BASED CREDIT CUM SEMESTER PATTERN (Effective from the academic year 2018-19 onwards)

M.A. Economics

```
External Pattern
```

Duration of Examination: 3 Hours

Part – A Answer ALL the Questions 10 x 2 = 20 marks			Part – B Answer ALL the Questions Internal Choice Type 5 x 5 = 25 marks			Part – C Answer any THREE Questions 3 x 10 = 30 marks		
	Questi	ons	Ques	tions		Questions		
1-2	_	Unit I	11(a) or 11(b)	– Unit I	16	– Unit I		
3-4	_	Unit II	12(a) or 12(b)	– Unit II	17	– Unit II		
5-6	_	Unit III	13(a) or 13(b)	– Unit III	18	– Unit III		
7-8	_	Unit IV	14(a) or 14(b)	– Unit IV	19	– Unit IV		
9 – 10	_	Unit V	15(a) or 15(b)	– Unit V	20	– Unit V		

Elective Course

(or)

1. a)

b)

2. a)

(or) b)

Internal Pattern

- 1. Internal Test 1 50 marks
- 2. Internal Test 2 75 marks
- 3. Assignment 1 10 marks
- 4. Assignment -2 10 marks
- 5. Seminar 5 marks
 - Total 150 marks*

*Total marks to be converted into 25 marks

Extra Disciplinary Course

(Objective Type – Online Exam)

M.A Economics Major Paper - 1

MICRO ECONOMIC ANALYSIS - I

Semester I 18PEC1

7 Hrs 5 Credits

Objective

Micro Economic Analysis - I provides an in-depth knowledge on microeconomic, because it is the basis for applied economic research. Under this subject, student will study how the economic forces are operating in the economy.

Course Outcomes

On completion of this course, the students will be able to:

- **CO1:** Deep knowledge on demand analysis.
- **CO2:** Familiar with production analysis.
- CO3: Gain analytical skill on cost and revenue concepts.
- **CO4:** Exposure to analysis of market structure.

CO5: Understand the concept of oligopoly.

- Unit I Demand Analysis: Meaning of Demand Marshallian Revealed Preference Approach - Neumann – Morgenstern Utility Index – Friedman Savage Hypothesis – Meaning of Indifference Curve - Properties – Consumers' Equilibrium – Price Effect - Income Effect – Substitution Effect.
- Unit II Production Analysis: Meaning of Production Function Isoquants Producer Equilibrium Law of Variable Proportions Returns to Scale Cobb Douglas Production Function CES Production Function Production Possibility Curves Equilibrium of the Firm.
- Unit III Cost and Revenue Analysis: Accounting and Economic Cost Opportunity Cost Short-run Total and Average Cost Marginal Cost Relationship between Average and Marginal Cost Long-run Average Cost and Marginal Cost Total Revenue Average Revenue Marginal Revenue Relationship between Average Revenue and Marginal Revenue.

- Unit IV Market Structure Analysis: Perfect Competition Features Perfect Vs Pure Competition – Monopoly – Price and Output Determination – Price Discrimination – Bilateral Monopoly – Monopolistic competition – Features – Price and Output Determination – Selling Cost.
- Unit V Oligopoly: Meaning Characteristics Price and Output Determination Collusive Oligopoly – Price Leadership – Kinked Demand Curve – Duopoly – Meaning – Cournot Model – Edgeworth Model.

Text Books:

Modern Micro Economics – A. Koustsoyiannis
 Advanced Micro Economy – M. Maria John Kennedy
 Advanced Economic Theory – M.L. Jhingan
 Advanced Economic theory – H.L. Ahuja

	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	9	3	9	9	9	1	3
CO2	9	1	3	3	1	9	3
CO3	9	1	1	3	9	3	9
CO4	9	3	9	3	3	3	3
CO5	9	9	3	3	9	9	9
Total	45	17	25	21	31	25	27
Weightage	2.70	1.04	1.53	1.28	1.88	1.52	1.64

Course Outcome Vs Programme Outcome

M.A. Economics Major Paper – 2

MACRO ECONOMIC ANALYSIS - I

Semester I 18PEC2

7 Hrs 5 Credits

Objective

Macro Economics Analysis - I founds the functional relationship and essential for the proper comprehension of the different policies and issues at aggregate level.

Course Outcomes

On completion of this course, the students will be able to:

CO1: Understand the basic concepts of macro economics.

CO2: Gain knowledge on circular flow and national income.

CO3: Exposure to theories of income and employment.

CO4: Familiar with consumption function.

CO5: Be aware of consumption theories.

- Unit I Introduction to Macro Economics: Meaning Nature and Scope Importance
 Limitations Partial Equilibrium and General Equilibrium Economic Static and Dynamic Comparative Static and Dynamic Stocks and Flows Distinction between Micro and Macro Economics.
- Unit II Circular Flow and National Income: Meaning of Circular flow of National Income – Two Sector Model – Three Sector Model – Four Sector Model – Importance – Meaning of National Income – Concepts – Measurement – Importance of National Income – Difficulties in the Measurement of National Income.
- Unit III Theories of Income and Employment: J.B. Say's Law Classical Theory of Income and Employment - Keynesian Theory of Income and Employment -Principle of Effective Demand - Aggregate Supply - Aggregate Demand.
- Unit IV Consumption Function: Meaning Propensity to Consume: Average Propensity to Consume Marginal Propensity to Consume Propensity to Save: Average Propensity to Save Marginal Propensity to Save Keynes' Psychological Law of Consumption Importance of Consumption Function.

Unit – V Theories of Consumption: Absolute Income Theory of Consumption – Relative Income Theory of Consumption - Life Cycle Theory of Consumption - Permanent Income Theory of Consumption.

Text Books:

1.	Macro Economic Theory	-	M.L. Jhingan
2.	Macro Economics: Theory and Policy	-	Dwivedi
3.	Macro Economics: Theory and Policy	-	H.L. Ahuja
4.	Macro Economics	-	G.S. Gupta
5.	Macro Economic Theory	-	M.C. Vaish
6.	Macro Economics	-	M.L. Seth

	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	9	9	9	9	9	1	3
CO2	9	1	3	3	3	9	3
CO3	9	3	3	1	9	3	1
CO4	9	3	9	3	3	3	3
CO5	9	9	3	1	9	9	3
Total	45	25	27	17	33	25	13
Weightage	2.70	1.53	1.65	1.04	2.00	1.52	0.80

Course Outcome Vs Programme Outcome

M.A Economics Major Paper - 3

STATISTICS - I

Semester I 18PEC3

Objective

This subject provides some knowledge in statistical methods to the students and the scholars involved in social science research activities.

Course Outcomes

On completion of this course, the students will be able to:

CO1: Familiar with central tendency and dispersion.

CO2: Gain knowledge in correlation and regression analysis.

CO3: Exposure to measure changes in the standard of living as well as the price level.

CO4: Deep knowledge in time series.

CO5: Understand the basic concepts of probability.

- Unit I Measures of Central Tendency and Dispersion: Meaning Advantages of Central tendency – Mean – Median – Mode - Geometric Mean - Harmonic Mean -Measures of Dispersion – Advantages of Dispersion - Range - Quartile Deviation
 Mean Deviation - Standard Deviation - Co-efficient of Variation.
- Unit II
 Correlation and Regression Analysis: Meaning Types of Correlation Scatter Diagram Karl Pearson's Co-efficient of Correlation Spearman's Rank Correlation Meaning of Regression Regression in two Variables Uses of Regression.
- Unit III Index Numbers: Meaning Uses of Index Numbers Problems in the Construction of Index Numbers - Methods of Construction Index Numbers – Tests of an Index Numbers - Consumer Price Index Numbers.
- Unit IV Time Series: Definition Uses of Time Series Components of Time Series Measurement of Trend: Graphic Method - Semi-Average Method - Moving Average Method - Method of Least Squares – Measurement of Seasonal Variation: Method of Simple average.

7 Hrs 5 Credits **Unit - V Probability:** Definition and Concepts - Addition and Multiplication Theory of Probability (statement & simple problems) - Bay's Theorem – Conditional Probability – Mathematical Expectations.

Text Books:

1.	Economics and Business Statistics	_	P.A. Navanitham
2.	Statistical Methods	_	S.P. Gupta
3.	Statistics	_	R.S.N. Pillai & Bagavathi
4.	Fundamentals of Applied Statistics	_	S.C. Gupta & V.K. Kapoor

	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	9	3	3	3	3	1	3
CO2	9	3	3	3	3	9	3
CO3	9	9	3	3	9	3	3
CO4	9	3	3	3	3	3	3
CO5	9	1	3	1	9	1	3
Total	45	19	15	13	27	17	15
Weightage	2.70	1.17	0.92	0.80	1.64	1.04	0.92

Course Outcome Vs Programme Outcome

M.A Economics Elective Paper - 1

INDIAN ECONOMY AND REFORMS

Semester I 18PECE1

7 Hrs 5 Credits

Objective

This subject is highly useful for students to know the contemporary Indian economic development policy issues, challenges and reforms.

Course Outcomes

On completion of this course, the students will be able to:

CO1: Acquainted with the features of Indian economy.

CO2: Understand the performance of agricultural sector before and after reforms.

CO3: Understand the performance of industrial sector before and after reforms.

CO4: Understand the concept of foreign trade and BOP.

CO5: Familiar with NITI Aayog and merits and demerits of demonetization.

- Unit I Development and Underdevelopment: Meaning of Underdevelopment Basic Characteristics of Indian Economy – Stages of Economic Development – Need for Economic Reforms in Social Sector and Financial Sector.
- Unit II Agriculture and Economic Reforms: Importance of Agriculture in Indian Economy - Agricultural Mechanization – Green Revolution – Agriculture Labour
 - Rural Development and Modernization – Agriculture Policy Vision 2020.
- Unit III Industrial Policy Reform: New Industrial Policy 1991 Features Role and Performance of Large Scale Industries Problems Remedial Measures Role and Performance of Small Scale industries Problems Remedial Measures Role and Performance of Public and Private Sector Disinvestment of Public Sector Undertakings in India.
- Unit IV Foreign Trade and Balance of Payment: Importance of Foreign Trade Composition of Foreign Trade Foreign Trade Policy Objectives and Strategies
 Special Economic Zones Salient Features of SEZs Performance Disadvantages Foreign Exchange Reserves FEMA and FERA Impact of WTO on various aspects of Indian Economy.

Unit - V NITI Aayog and Demonetization: History of NITI Aayog – Structure – Objectives – Functions – Demonetization: Meaning – Merits and Demerits – GST: Meaning – Importance – Effects on Indian Economy.

Text Books:

1.	Indian Economy	-	Dutt and K.P. M. Sundaram
2.	Economic Reforms in India	-	P.P Arya and B.B. Tandan
3.	Indian Economy	-	A.N. Agrawal
4.	The Indian Economy	-	C. Dhingra
5.	The Indian Economy: Problems and Prospects	-	B. Jalan

	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	9	3	3	9	3	1	9
CO2	9	9	3	3	3	9	3
CO3	9	9	3	9	9	3	1
CO4	9	3	3	3	3	3	3
CO5	9	1	3	1	9	1	1
Total	45	25	15	25	27	17	17
Weightage	2.70	1.53	0.92	1.52	1.64	1.04	1.04

Course Outcome Vs Programme Outcome

M.A Economics Elective Paper - 1

WELFARE ECONOMICS

Semester I 18PECE1

Objective

This paper is to study the welfare economics concepts relevant to the present society, and how to apply economic theories to maximize economic welfare.

- **CO1:** Acquainted with the concepts of social welfare.
- **CO2:** Understand the market failures and externalities.
- **CO3:** Exposure to paretian welfare economics.
- CO4: Familiar with social welfare functions.
- CO5: Understand the theories of new welfare economics.
- **Unit I** Introduction: Welfare Economics Introduction, Meaning and Concept Explanation Three Concepts of Social Welfare Role of Value Judgments in Welfare Economics.
- Unit II: Market Failures And Externalities: Market Failures Externalities and Public Goods – Welfare Maximization and Perfect Competition – Monopoly as an Obstacle to the Attainment of Pareto Optimality – Externalities and Pareto Optimality – Public Goods and Market Failures – Free Rider's Problem – Public Goods and Pareto Efficiency – Market Failures and Role of Government – Theory of Second Best.
- Unit III Paretian Welfare Economics: Economic Efficiency and Paraeto Optimality Notion of Pareto Optimality and Economic Efficiency Pareto Criterion of Social Welfare Marginal Conditions of Pareto Optimality The Optimum Distribution of Products among the Consumers: Efficiency in Exchange Optimum Allocation of Factors Pareto Efficiency in Production Optimum Direction of Production: Efficiency in Product Mix The Second Order and Total Conditions of Pareto Optimality.
- **Unit IV** Social Welfare Function: Social Welfare Function Bergson Samuelson Social Welfare Function – Social Welfare Function and Value Judgments – Grand Utility Possibility Frontier and Point of Constrained Bliss.

7 Hrs 5 Credits Unit – V New Welfare Economics: New Welfare Economics: Compensation Principle – Kaldor, Hicks Welfare Criterion: Compensation Principle – Scitovsky's Paradox
 – Scitovsky's Double Criterion of Welfare – Critique of the Compensation Principle – Kenneth Arrow's Impossibility Theorem.

References:

1.	Economic Theory and the Welfare State	-	Nicholas, B.
2.	Welfare Economics	-	Boumol, W.J.
3.	Welfare Economics and Social Choice Theory	-	Feldman, A.M.
4.	Welfare Economics and the theory of the State	-	Baumol. W.J.
5.	The Economics of Welfare	-	Pigou, A.C.
6.	Theoretical Welfare Economics	-	Graaff.J, de V.
7.	Social Choice and Individual Values	-	Arrow, K.J.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	9	3	1	3	1	1	9
CO2	9	1	3	3	3	3	3
CO3	9	9	3	1	9	3	1
CO4	9	3	3	3	3	3	3
CO5	9	1	3	1	9	1	1
Total	45	17	13	11	25	11	17
Weightage	2.70	1.04	0.80	0.67	1.52	0.67	1.04

Course Outcome Vs Programme Outcome

M.A Economics Major Paper - 4

MICRO ECONOMIC ANALYSIS - II

Semester II 18PEC4

6 Hrs 5 Credits

Objective

This paper is to study the concept of micro economics in advanced manner and to impart an understanding about the behaviourial pattern of economic activities.

Course Outcomes

On completion of this course, the students will be able to:

CO1: Understand the difference between factor pricing and product pricing.

CO2: Familiar with the theories of distribution.

CO3: Exposure to input-output analysis.

CO4: Familiar with game theory.

CO5: Aware of risk and uncertainty.

- Unit I Factor Pricing under Different Market Conditions: Difference between Factor Pricing and Product Pricing – Factor Pricing under Perfect Competition – Factor Pricing under Imperfect Competition – Euler's Product Exhaustion.
- Unit II Theories of Distribution: Marginal Productivity Theory of Distribution -Ricardian Theory of Distribution – Marxian Theory of Distribution – Kalecki's Degree of Monopoly Theory – Kaldors Theory of Distribution.
- Unit III Input-Output Analysis: Meaning Features Static Input-Output Model Dynamic Input output Model – Limitations – Importance of Input Output Analysis.
- **Unit IV** Game Theory: Basic Concepts Two-Persons Zero Sum Game Pay-off matrices Prisoners Dilemma.
- Unit V Rick and Uncertainty: Individual Behaviour towards Risk Expected Utility and Certainty Equivalence Approaches - Risk and Risk Aversion – Gambling and Insurance - The Economics of Insurance, Cost and Risk - Risk Pooling and Risk Spreading - Optional Consumption under Uncertainty.

Text Books:

1.	Modern Micro Economics	_	A. Koustsoyiannis
2.	Advanced Micro Economy	_	M. Maria John Kennedy
3.	Advanced Economic Theory	_	M.L. Jhingan
4.	Advanced Economic theory	_	H.L. Ahuja

	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	9	3	3	9	9	9	9
CO2	9	3	1	9	9	1	9
CO3	9	9	1	1	1	1	9
CO4	9	9	9	9	1	9	9
CO5	9	9	9	9	9	9	9
Total	45	33	23	37	29	29	45
Weightage	2.70	2.01	1.41	2.23	1.76	1.76	2.70

Course Outcome Vs Programme Outcome

M.A Economics Major Paper - 5

MACRO ECONOMIC ANALYSIS - II

Semester II 18PEC5

6 Hrs 5 Credits

Objective

Macro economics founds the functional relationship and essential for the proper comprehension of the different policies and issues at aggregate level. It is more scientific and blends itself with same empirical economic knowledge.

Course Outcomes

On completion of this course, the students will be able to:

CO1: Gain insight into investment function.

- **CO2:** Exposure to demand and supply of money.
- **CO3:** Understand the concept of multiplier and accelerator.
- CO4: Familiar with trade cycle and IS-LM curve model.

CO5: Deep knowledge in monetary and fiscal policy.

- Unit I Investment Function: Meaning of Investment Types Determinants of the level of Investment Marginal Efficiency of Capital Marginal Efficiency of Investment Relationship between MEC and MEI.
- Unit II Demand and Supply of Money: Demand For Money The Classical Approach: Fisher's Version – The Keynesian Approach – The Post-Keynesian Approach: Baumol – Tobin – Supply of Money – Definition – Determination of Money Supply – High Powered Money – Money Multiplier – Measures of Money Supply in India.
- Unit III Multiplier and Accelerator: Meaning of Multiplier Working of Multiplier Leakages – Importance – Criticisms – Employment Multiplier – Investment Multiplier – Static and Dynamic Multiplier – Balanced Budget Multiplier – Foreign Trade Multiplier – Meaning of Accelerator – Working – Limitations – Multiplier and Accelerator Interaction.

- Unit IV Trade Cycle and IS-LM Curve Model: Meaning of Trade Cycle Features Phases Keynes's Theory of Trade Cycle Samuelson's Theory of Trade Cycle Hick's Theory of Trade Cycle Goods Market and Money Market Derivation of IS Curve Shift in IS Curve Derivation of LM Curve Shift in LM Curve Intersection of IS and LM Curve.
- Unit V Monetary and Fiscal Policy: Meaning of Monetary Policy Objectives Instruments – Limitations – Objectives of Fiscal Policy – Role of Fiscal Policy in Developing Countries – Instruments – Limitations – Monetary and Fiscal Policy Mix to Control Inflation and Unemployment.

Text Books:

1.	Macro Economic Theory	—	M.L. Jhingan
2.	Macro Economics: Theory and Policy	_	H.L. Ahuja
3.	Keynes Post Keynesian Economics	_	R.D. Gupta
4.	Introduction of Keynesian Economics	_	M.L. Seth, R. Cauvery, Sudha Nayak
5.	Macro Economics	_	M. Girija & R. Meenakshi

	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C01	9	3	9	9	9	1	9
CO2	9	9	9	9	9	9	1
CO3	9	9	9	1	9	9	9
CO4	9	1	9	9	9	1	9
CO5	9	9	9	9	9	9	9
Total	45	31	45	37	45	29	37
Weightage	2.70	1.89	2.72	2.23	2.70	1.76	2.23

Course Outcome Vs Programme Outcome

M.A Economics Major Paper - 6

STATISTICS - II

Semester II 18PEC6

Objective

This paper provides advance knowledge in statistical methods to the students and the scholars involved in social science research activities.

Course Outcomes

On completion of this course, the students will be able to:

CO1: Exposure to probability distribution.

CO2: Familiarity with testing of hypothesis.

CO3: Deep knowledge in Chi-square test and analysis of variance.

CO4: Familiarity with statistical quality control.

CO5: Understand the various sources of Indian statistics.

- Unit I Probability Distribution: Random Variables Types of Random Variables Probability Distribution Binomial Distribution Poisson Distribution Normal
 Distribution (only definition, uses, properties without proof and simple problems).
- Unit II
 Tests of Hypothesis: Null and Alternative Hypothesis Type I and Type II Error
 One-tailed and Two-tailed Tests of Hypothesis Standard Error Point and Interval Estimation – Properties of a Good Estimator – Test of Significance for Attributes – Tests of Significance of Large and Small Samples – Student's t-test.
- Unit III Chi-square Test and Analysis of Variance: Definition of Chi-square test Uses of Chi-square test Degree of Freedom Properties of Chi-square test F-test Meaning of Analysis of Variance Techniques of Analysis of Variance One way classification model Two way classification model.
- Unit IV Statistical Quality Control: Control Charts Meaning types of control charts setting up a control procedure X Chart Control chart for C (no. of defects per unit) Control chart for P (fraction defective) Advantage and Limitations of Statistical Quality Control.

6 Hrs 5 Credits Unit - V Indian Statistics: Central Statistical Organisation - Agricultural Statistics – National Income and social Accounting – Population Statistics – National Sample Survey Organisation – Industrial Statistics – Trade Statistics – Financial Statistics – Labour Statistics – Critical appraisal of Indian Statistics.

Text Books:

1.	Statistical Methods: Concepts, Application and Computations	Y. P. Agarwal	
2.	Methods of Statistical Analysis	-	P.S. Grewal
3.	Statistical Methods	-	S. P. Gupta
4.	An Introduction to Statistical Methods	-	C. B. Gupta
5.	Statistics	-	R.S.N. Pillai & Bagavathi
6.	Economics and Business Statistics	-	P.A. Navanitham
7.	Fundamentals of Applied Statistics	-	S.C. Gipta & V.K. Kapoor

	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	9	1	9	9	3	1	9
CO2	9	1	1	1	9	9	1
CO3	9	3	3	1	9	9	9
CO4	9	1	9	3	9	1	3
CO5	9	9	9	9	9	3	9
Total	45	15	31	23	39	23	31
Weightage	2.70	0.92	1.89	1.40	2.35	1.40	1.88

Course Outcome Vs Programme Outcome

M.A Economics Elective Paper - 2

ENTREPRENEURIAL DEVELOPMENT

Semester II 18PECE2

6 Hrs 5 Credits

Objective

To improve student's life management, promote citizenship and provide resources for the future. To provide students with diverse opportunities for participation and improving students social and economic skills.

Course Outcomes

On completion of this course, the students will be able to:

- **CO1:** Understand the functions and types of entrepreneurs.
- **CO2:** Able to understand the essential of a project report and constraints.
- CO3: Gain knowledge on the concept of EDP.
- **CO4:** Know the institutions assisting entrepreneurship.

CO5: Familiarity with concepts of rural women entrepreneurs.

- Unit I Introduction: Definition of Entrepreneur Importance of Entrepreneur Functions – Types of Entrepreneurs – Qualities of a Successful Entrepreneur – Factors affecting Entrepreneurial Growth – Economic Factors – Social Factors – Cultural Factors.
- Unit II Starting a Business: Meaning of Project Classification Constraints Essential of a Project Report - Project Formulation – Concept – Need – Significance and Elements – Project Life Cycle – Project Identification.
- Unit III Entrepreneurial Development Programme: Concept of Entrepreneurial Development Programme (EDP) – Objectives of EDP – Phases of EDP – Functions of EDP – Problems in Entrepreneurial Development – Target Groups – Evaluation.

- **Unit IV** Institutions Assisting Entrepreneurship: NABARD MSMEs DIC TIIC NSIC SIDO and TCO Role of Lead Banks Support of Commercial Banks.
- Unit V Rural and Women Entrepreneurs: Concepts of Women Entrepreneurs -Schemes for Rural and Women Entrepreneurs – Problems faced by Rural and Women Entrepreneurs – Industrial Estates – Causes and Prevention of Industrial Sickness.

Text Books:

- 1. Entrepreneurial Development C.B. Gupta and N.P. Srinivasan
- 2. Entrepreneurial Development P. Saravanavel

	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	9	3	9	9	9	3	9
CO2	9	9	3	9	3	9	3
CO3	9	3	3	3	9	3	9
CO4	9	3	9	9	9	3	3
CO5	9	9	9	3	9	9	9
Total	45	27	33	33	39	27	33
Weightage	2.70	1.65	2.01	2.00	2.35	1.64	2.00

Course Outcome Vs Programme Outcome

M.A Economics Elective Paper - 2

HUMAN RESOURCES MANAGEMENT

Semester II 18PECE2

6 Hrs 5 Credits

Objective

The paper is to impart to the students to understanding the role of HRM, the selection process and various test of interviews. It is also very to learn more knowledge about the various bargaining system and human resource agencies.

Course Outcomes

On completion of this course, the students will be able to:

- CO1: Understand about human resources and its functions.
- CO2: Familiar with concept of recruitment and selection.
- CO3: Gain knowledge on training and employees welfare.
- CO4: Understanding industrial relation.
- CO5: Know about bargaining system and human resource agencies.
- Unit I Human Resource Management: Definition Objectives Functions Scope Importance – HRM in India – Evolution of HRM – Human Resource Planning – Job Analysis, Job Description and Job Specification.
- Unit II Recruitment and Selection: Sources of Recruitment Selection Process Test Types – Interview Types – Career Planning Vs Manpower Planning and Succession Planning – Process – Career Development – Placement and Induction.
- Unit III Human Resource and Training: Methods of Training Executive Development
 Performance appraisal and methods Transfers Promotion Wage and Salary
 Administration Wage Boards and Pay commission Wage Incentive –
 Employees Welfare Safety and Health Measures Grievance Procedures –
 Redressal of Grievances.
- Unit IV Industrial Relations: Meaning and Characteristics of Industrial Relations Nature of Trade Unions – Problems of Trade Union – Measures to strengthen Trade Union Movement in India – Causes for Industrial Disputes – Settlement of Industrial Disputes.

Unit – V Human Resources and Collective Bargaining: Collective Bargaining – Features
 – Pre-requisite of Collective Bargaining – Agreement at different levels - Workers
 Participation in Management – Objectives for Successful Participation.

Text Books

1.	Personnel and Human Resource Management	-	P.Subba Rao
2.	Human Resource and Personnel Management	-	K.Aswanthappa
3.	Human Resource Management	-	Pattanayak
4.	Human Resource Management	-	C.B. Gupta
5.	Dynamics of Industrial Relations	-	C.B. Memoria, Satish Memoria and V.Gankar

	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	9	9	9	9	9	1	9
CO2	9	9	3	9	1	9	1
CO3	9	3	3	3	9	3	3
CO4	9	3	9	9	3	3	3
CO5	9	9	9	3	9	9	9
Total	45	33	33	33	31	25	25
Weightage	2.70	2.01	2.01	2.00	1.88	1.52	1.52

Course Outcome Vs Programme Outcome

M.A. Economics Extra Disciplinary Paper – 1

GENERAL STUDIES FOR COMPETITIVE EXAMINATIONS Semester II 5 Hrs 18PECED1 5 Credits

Objective

This paper would help the students to get adequate knowledge on general studies for all competitive examinations.

Course Outcomes

On completion of this course, the students will be able to:

CO1: Understand the concept of teaching and research aptitude.

- CO2: Able to read comprehension and communication.
- **CO3:** Gain knowledge on the concept of reasoning.

CO4: Able to analysis and mapping of data.

CO5: Familiarity with environmental concepts and higher education system.

- Unit I Teaching and Research Aptitude: Teaching: Nature Objectives -Characteristics and Basic Requirements - Learner's Characteristics - Factors Affecting Teaching - Methods of Teaching - Teaching Aids - Evaluation Systems. Research: Meaning - Characteristics and Types - Steps of Research - Methods of Research - Research Ethics – Paper – Article – Workshop – Seminar - Conference and Symposium - Thesis Writing: Its Characteristics and Format.
- **Unit II Reading Comprehension and Communication:** A passage to be set with questions to be answered Communication: Nature Characteristics Types Barriers and Effective Classroom Communication.
- Unit III Reasoning (including Mathematical) Number Series Letter Series Codes Relationships Classification Logical Reasoning: Understanding the Structure of Arguments Evaluating and Distinguishing Deductive and Inductive Reasoning Verbal Analogies: Word Analogy Applied Analogy Verbal Classification Reasoning Logical Diagrams: Simple Diagrammatic Relationship Multi-diagrammatic Relationship Venn Diagram Analytical Reasoning.

- Unit IV Data Interpretation and ICT: Sources Acquisition and Interpretation of Data Quantitative and Qualitative Data Graphical Representation and Mapping of Data Information and Communicating Technology (ICT): Meaning Advantages Disadvantages and Uses General Abbreviations and Terminology Basics of Internet and E-Mailing.
- Unit V Environment and Higher Education System: People and Environment Interaction Sources of Pollution Pollutants and their Impact on Human Life Exploitation of Natural and Energy Resources Natural Hazards and Mitigation Higher Education System : Governance Polity and Administration; Structure of the Institutions for Higher Learning and Research in India; Formal and Distance Education Professional/Technical and General Education -Value Education: Governance, Polity and Administration Concept Institutions and their Interactions.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	9	9	3	9	3	1	3
CO2	9	9	3	3	3	9	1
CO3	9	9	3	3	9	9	3
CO4	3	1	9	9	3	3	3
CO5	9	9	9	3	9	9	9
Total	39	37	27	27	27	31	19
Weightage	2.35	2.25	1.65	1.64	1.64	1.88	1.16

Course Outcome Vs Programme Outcome

M.A. Economics Major Paper – 7

RESEARCH METHODOLOGY

Semester III 18PEC7

6 Hrs 5 Credits

Objective

This paper would make the students to know the basic concepts and methods in research methodology. This paper helps the students to pursue further research such as M.Phil. and Ph.D. in economics.

Course Outcomes

On completion of this course, the students will be able to:

- **CO1:** Familiar with various concepts of research methodology.
- **CO2:** Know about research problem and design.
- CO3: Understand the sampling techniques and test of hypothesis
- **CO4:** Be aware of collection and analysis of data.

CO5: Gain knowledge on report writing.

- Unit I Social Research: Meaning Definition Objectives Significance Types of Research – Qualities of a Good Research – Deductive and Inductive Methods – Characteristics of Causality – Research Objectives in Social Research – Computer Application in Social Research.
- Unit II Research Problem and Design: Formulation of Research Problem Sources of Research Problem – Meaning of Research Design – Definition – Concepts - Need for Research Design – Steps in Research Design.
- Unit III Sampling Techniques and Test of Hypothesis: Meaning of Sampling Essential of Good Sampling Methods of Sampling Random and Non-Random Sampling Simple Random Sampling Systematic Sampling Convenience Sampling Quota Sampling Meaning of Hypothesis Formulation of Hypothesis Types of Hypothesis Null and Alternative Hypothesis Testing of Hypothesis.
- Unit IV
 Collection and Analysis of Data: Sources of Data Primary and Secondary Data
 Method of Collecting Primary and Secondary Data Observation and Experiment
 Survey Scaling Techniques Analysis of Data Interpretation of Data.

Unit - V Report Writing: Structure of Research Report – Problems of Report Writing – Qualities of a Good Report - Contents of the Report - Documentation of Report.

Text Books:

1.	A Guide of Research in Economics	-	C.T. Kurien
2.	Methods of Social Research	-	Good & Hatt
3.	Research Methodology	-	Saravanavel
4.	Research Methodology Methods & Techniques	-	C.R. Kothari
5.	Methodology of Research in Social Science	-	O.R. Krishna Samy & M. Renganthan
6.	Social Research Methods and	-	R. Swaminatha Rathnam

- 6. Social Research Methods and Techniques
- R. Swaminatha Rathnam

	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	9	9	9	9	9	1	9
CO2	9	9	3	9	1	9	1
CO3	9	3	3	3	9	3	9
CO4	9	1	9	9	9	3	3
CO5	9	9	9	3	9	9	9
Total	45	31	33	33	37	25	31
Weightage	2.70	1.89	2.01	2.00	2.23	1.52	1.88

Course Outcome Vs Programme Outcome

M.A Economics Major Paper - 8

MATHEMATICAL ECONOMICS

Semester III 18PEC8

6 Hrs 5 Credits

Objective

The objective of this paper is to introduce the basic techniques of mathematics relating to economics and to get an insight into economic problems with the help of mathematical tools.

Course Outcomes

On completion of this course, the students will be able to:

- **CO1:** Familiar with the concept of differential calculus and integration.
- **CO2:** Understand the concept of consumer behavior.
- **CO3:** Aware of the theory of the firm.
- **CO4:** Gain knowledge about market structure.

CO5: Become familiar in solving linear programming problems.

- **Unit I Differential Calculus and Integration:** Rules of Differentiation Total Derivatives Partial Derivatives Maxima and Minima Integration Simple rules of Integration.
- Unit II The Theory of Consumer Behaviour: Utility Function Indifference Curve -Budget Constraint - Marginal Rate of Substitution - Consumer Equilibrium - Price Effect - Income Effect - Substitution Effect - Demand Function - Price and Income Elasticity of Demand - Relationship between Total Revenue, Average Revenue, Marginal Revenue and Elasticity of Demand.
- Unit III The Theory of the Firm: Production Function Homogeneous Production Function – Cobb-Douglas Production Function - Properties – Revenue and Cost Functions – Relationship between Average and Marginal Cost Functions – Shortrun and Long-run Cost Functions – Profit Maximization.
- **Unit IV** Market Equilibrium: Determination of Price and Output under Perfect Competition - Monopoly – Discriminating Monopolist – Multiple Plant Monopolists - Cournot Duopoly.

Unit - V Linear Programming Problem: Meaning – Mathematical Formulation of LPP – Matrix form of LPP – Feasible Region - Feasible Solution – Optimal Solution -Graphical Method of Solving LPP.

Text Books:

1.	Mathematical Analysis for Economics	-	R.G.D. Allen
2.	Modern Micro Economics	-	A. Koutsoyiannis
3.	Mathematics for Economists	-	Metha and Madnani
4.	An Introduction to Mathematical Economics	-	D. Bose
5.	Fundamental Methods of Mathematical Economics	-	Alpha C Chiang
6.	Mathematics for Economics	-	Tara Yamne

	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	9	3	9	9	9	1	9
CO2	9	9	3	3	1	3	1
CO3	9	3	3	3	9	3	3
CO4	9	3	9	9	9	3	3
CO5	9	9	3	3	9	9	9
Total	45	27	27	27	37	19	25
Weightage	2.70	1.65	1.65	1.64	2.23	1.16	1.52

Course Outcome Vs Programme Outcome

M.A. Economics Major Paper – 9

INDUSTRIAL ECONOMICS

Semester III 18PEC9

6 Hrs 5 Credits

Objective

The objective of this paper intends to provide knowledge to the students on the basic issues as productivity, efficiency, capacity utilization and debate involved in industrial development.

Course Outcomes

On completion of this course, the students will be able to:

CO1: Understand the role of industrialization in economic growth.

- **CO2:** Exposure to the theories of industrial location.
- **CO3:** Familiar with industrial organization and ownership pattern.

CO4: Aware of industrial labour.

CO5: Understand the concept of industrial finance and policy.

- Unit IIndustrialization and Economic Development: Meaning Characteristics –
Classification of Industrialization Industrialization and Economic Growth –
Determinants of Industrial Growth Factors inhibiting Industrialization.
- Unit II Theories of Industrial Location and Productivity: Determinants of Industrial Location - Weber's theory of Location – Sargant Florence's Theory – August Losch's Theory – Decentralization of Industries – Industrial Productivity – Measurement of Productivity – Factors influencing Industrial Productivity.
- Unit III Industrial Organization and Ownership Pattern: Meaning Organizational Forms – Public Sector Enterprises – Private Sector – Joint Sector – Productive Co-operatives – Consumer Co-operatives – Credit Co-operatives.
- Unit IV Industrial Labour: Structure of Industrial Labour- Employment Dimensions of India Industry- Industrial Legislation - Industrial Relations- Exit-policy and Social Security - Wages and Problem of Bonus - Labour Market Reforms.
- Unit V Industrial Finance and Industrial Policy: Need for Finance Types of Institutional Finance for Industries - IFCI – ICICI – IDBI – SFCs – SIDC - NIDC
 – Commercial Banks etc - Industrial Policy – Impact of Liberalization, Privatization and Globalization on Industrial Sector.

Text Books:

1.	The Growth of Industrial Economics	_	W. Hoffman
2.	Industrial Economy of India	_	S.C. Kuchhal
3.	Industrial Economics	_	R. Barthwal
4.	Indian Industrial Economy	_	K.V Sivayya & V.B.M. Das

	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	9	9	9	9	9	3	3
CO2	9	9	3	3	3	9	3
CO3	9	3	3	1	9	3	1
CO4	9	3	3	3	9	3	3
CO5	9	9	3	3	9	9	9
Total	45	33	21	19	39	27	19
Weightage	2.70	2.01	1.29	1.16	2.35	1.64	1.16

Course Outcome Vs Programme Outcome

M.A. Economics Major Paper – 10

INTERNATIONAL ECONOMICS

Semester III 18PEC10

6 Hrs 5 Credits

Objective

This paper is mainly concerned with the theories of international trade. It provides some basic knowledge of international economics to the students in a rigorous and comprehensive manner.

Course Outcomes

On completion of this course, the students will be able to:

- CO1: Familiar with various theories of international trade.
- CO2: Familiar with trade policy and its analysis.
- CO3: Have an elementary understanding of state trading and exchange control.
- CO4: Understanding international monetary system and its importance
- CO5: Gain knowledge on globalization and foreign aid.
- Unit I Theories of International Trade: Internal and International Trade Absolute Cost Advantage and Comparative Cost Advantage – Opportunity Cost Theory – Heckscher-Ohlin Theory – Leontief Paradox – Rybenzynski – Stopler-Samuuelson Theory.
- **Unit II Trade Policy:** Free Trade Vs Protection Tariffs Effects of Tariff Non -Tariff Barrier – Quotas – Arguments for and against Free Trade – Regional Economic Co-operation – SAARC – UNCTAD – BIMs and BRICS.
- Unit III Foreign Exchange and Balance of Payments: Meaning of Foreign Exchange Fixed and Flexible Exchange Rate – Floating Exchange Rate – Determination of Exchange Rate: Mint Parity Theory – Purchasing Power Party Theory – Balance of Payments Disequilibrium – Causes and Methods of correcting Disequilibrium.
- **Unit IV** International Monetary System: Liquidity problem Role of IMF Special Drawing Rights International Liquidity World Bank International Finance Corporation International Development Association.
- **Unit V Globalization:** Meaning Strategy Impacts Case for and against Globalization Technology and Transfer Govt. Interventions / Barriers NIEO.

Text Books:

- 1. International Economics D.M. Mithani _ 2. International Economics Cherunelam _ 3. International Economics Charles Van _ 4. International Economics Desai -5. International Economics M.L.Jhingan -
- 6. International Economics

M.C Vaish Sudhma Singh -

	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	9	3	9	9	9	3	3
CO2	9	1	3	3	3	9	3
CO3	9	1	3	3	9	3	9
CO4	9	3	9	3	3	3	3
CO5	9	9	3	3	9	9	9
Total	45	17	27	21	33	27	27
Weightage	2.70	1.04	1.65	1.28	2.00	1.64	1.64

Course Outcome Vs Programme Outcome

M.A Economics Elective Paper - 3

COMPUTER APPLICATIONS IN ECONOMICS

Semester III 18PECE3

5 Hrs 5 Credits

Objective

To make the students to know the basic concepts of computer, usage of internet and its applications in economic analysis which will be useful to the social science research scholars in general and economic research scholars in particular.

Course Outcomes

On completion of this course, the students will be able to:

- **CO1:** Familiarity with history and components of computers.
- CO2: Gain knowledge on MS Word and PowerPoint.
- CO3: Understand the basic concepts of MS Access.
- **CO4:** Develop skill to analysis data using MS Excel and SPSS.

CO5: Deep knowledge in World Wide Web.

- Unit I Introduction to Computer: Definition of Computer Importance of Computers

 Classification of Computers History of Computers Computer Generation Characteristics of Computer Components of Computer Input devices Output Devices Hardware and Software.
- Unit II MS Word & MS Power Point: Basics of MS Word Formatting text Working with Header, Footer and Footnotes - Spell and Grammar check – Creation of Tables – Mail Merge - Basics of Power Point – Working with Text, Graphics and Multimedia – Creation Power Point Slide.
- Unit III MS Access And Applications: Introduction to Access Creating Database and Tables – Forms – Entering and Editing Data – Finding, Sorting and Displaying Data – Printing Reports, Forms, Letters and Labels.
- Unit IV MS Excel and SPSS: Concept of Data Data Entry Formulas and Functions Formatting Data – Creating Graphs and Charts - Data entry in SPSS – Calculation of Mean, Correlation, Regression and Compound Growth Rates.

Unit - V World Wide Web: Internet basics – Search Engines – Opening e-mail id – Downloading text from internet – Uses of internet for business and commercial activities.

Text Books:

1.	Fundamentals of Computers (Prentice Hall of India, New Delhi)	-	V. Rajaraman
2.	Computer Fundamentals (BPB Publications, New Delhi)	-	P. K. Sinha

3. Computer Application in Economics - K. Dhanasekaran (*Vrinda Publication, New Delhi*)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	9	3	9	9	9	3	9
CO2	9	9	9	9	9	9	3
CO3	9	9	9	3	9	9	9
CO4	9	3	9	9	9	3	9
CO5	9	9	9	9	9	9	9
Total	45	33	45	39	45	33	39
Weightage	2.70	2.01	2.72	2.35	2.70	2.00	2.35

Course Outcome Vs Programme Outcome

M.A Economics Elective Paper - 3

HEALTH ECONOMICS

Semester III 18PECE3

5 Hrs 5 Credits

Objective

To enable the students to understand the importance of health economics.

Course Outcomes

On completion of this course, the students will be able to:

CO1: Know the nature and significance of health economics.

- **CO2:** Exposure to health care services and infrastructure.
- **CO3:** Familiar with health care planning.
- CO4: Understand the concept of mother-child health care.

CO5: Know the significance of nutritional programme.

- **Unit I** Introduction: Definition of Health Economics Nature and Significance of Health Economics Demand and Supply of Health Care Characteristics of Demand for and Supply of Health Care Health Indicators.
- Unit IIGeneral Health Issues: Health Status of the people in India Health Care
Services in Urban and Rural areas Health Inequalities in Rural Urban areas –
Vital Statistics Health Infrastructure in India and Tamil Nadu.
- Unit III Health Care Planning: Health Care Planning Need for Planning Process of Planning in Health Sector Planning at the micro level Health Management Management of Health Institutions.
- Unit IV Mother-Child Health Care: Maternal Mortality Natal Care Anaemia Problems during Delivery – Rural and Urban Family Welfare Programmes – Infant Mortality – Immunisation – Diarrhoea management – Child Health Care Programmes.

Unit – V Health Infrastructure and Nutritional Programme: Rural Housing – Hygiene
 – Sanitation – Safe Drinking Water – 108 Ambulance Services – Implementation of Nutritional Programmes in India: Mid-day meals scheme, Integrated Child Development Scheme (ICDS) – Health Insurance – Health policy of the Government – Role of Private and NGOs in Rural Health System – Public-Private Partnership (PPPs) in Health Care System.

Reference:

1.	Prevention of Diseases in India	-	Dhandapani. C
2.	Health Issues and Challenges	-	Dhandapani. C
3.	The Directory of Health Economics	-	Culyr.A.J
4.	Health Economics in India	-	Himanusha Skar, Rout & Prashant Panda
5.	Health Economics	-	Culyr.A.J
6.	Hand Book of Health Economics	-	Gulyr.A.J
7.	Health Management	-	Preethi Oberoi

	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	9	9	9	9	9	3	9
CO2	9	9	3	9	1	9	1
CO3	9	3	3	1	9	3	3
CO4	9	3	9	9	3	3	3
CO5	9	9	9	6	9	9	9
Total	45	33	33	34	31	27	25
Weightage	2.70	2.01	2.01	2.06	1.88	1.64	1.52

Course Outcome Vs Programme Outcome

M.A Economics Major Paper – 11

FISCAL ECONOMICS

Semester IV 18PEC11

6 Hrs 5 Credits

Objective

The learning objective of this paper is to impart to the students to get through understanding of the role and functions of the Government in a modern economy. To introduce to the students the nature and theories of public goods. To make the students aware of the recent trends in taxations and budgetary policy.

Course Outcomes

On completion of this course, the students will be able to:

CO1: Under the nature and scope of public finance.

CO2: Know the causes for the growth of public expenditure and sources of public revenue.

CO3: Deep knowledge on public debt and budget.

CO4: Exposure to fiscal and monetary policy.

CO5: Familiarity with principles of federal finance.

- Unit I Introduction: Nature and Scope of Public Finance Public and Private Finance –
 Public Goods Private Goods Merit Goods Market Failure Problem of Allocating Resources Principle of Maximum Social Advantage.
- Unit II Public Expenditure and Revenue: Public and Private Expenditure Causes for the Growth of Public Expenditure Types of Public Expenditure Reforms in Public Expenditure Sources of Public Revenue Tax Revenue and Non-Tax Revenue Canon's of Taxation Direct and Indirect Taxes MANVAT MODVAT VAT GST Recent Tax Structure in India.
- Unit III Public Debt and Budget: Meaning of Public debt Classification Importance -Burden and Effects, Public debt in India - Control of Public debt - Meaning of Budget - Objective - Requirements of a good budget - Performance of Budgeting - Zero Base Budgeting.
- Unit IV Fiscal and Monetary Policy: Fiscal Policy Fiscal and monetary policies Fiscal deficit and its Measurement Fiscal Policy for Stabilization Fiscal Policy and Liberalization Meaning and Significance of Budgetary Account Revenue Account Capital Account.

Unit - V Fiscal Federalism: Fiscal Federalism - Principles of Federal Finance - Fiscal Federalism in India - Assignment of Functions and Sources of Revenue - Finance Commission and Planning Commission - Resource Transfer Mechanism in India - Transfer of Resources from Union and State to Local Bodies - Union State Financial Relations - Problem of State Indebtedness .

Text Books:

1. Public Expenditure J. Burkhed & J. Mincer. _ 2. Public Finance in Theory and Practice R.A. Musgrave & P.A. Musgrave -3. Public Expenditure J. Burkhed & J. Mincer _ 4. Public Finance H L Rhatia 5. Public Finance **KPM Sundaram** 6. Public Finance Sarena & Mathur 7. Public Expenditure J. Burkhed & J. Mincer 8. Public Finance M. Maria John Kennedy _

	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	9	9	9	9	9	3	9
CO2	9	9	3	3	3	9	3
CO3	9	9	3	3	9	9	3
CO4	9	3	9	9	3	3	3
CO5	9	9	9	3	9	9	9
Total	45	39	33	27	33	33	27
Weightage	2.70	2.36	2.01	1.64	2.00	2.00	1.64

Course Outcome Vs Programme Outcome

M.A. Economics Major Paper – 12

ECONOMICS OF DEVELOPMENT AND PLANNING

Semester IV 18PEC12

6 Hrs 5 Credits

Objective

The objective of this paper is to understand the relevance of economics in growth and development perspectives. This will enable the students to study functional growth models relevant to economic development.

Course Outcomes

On completion of this course, the students will be able to:

CO1: Understand the difference between economic growth and development.

CO2: Gain knowledge on various theories of economic development.

CO3: Aware of capital formation nd economic development.

CO4: Understand the regional development disparities and social justice.

CO5: Gain knowledge on economic planning.

- **Unit I** Introduction: Meaning of Economic Growth and Economic Development Characteristics of Under Developed Countries - Vicious Circle of Poverty.
- Unit II Theories of Development: Adam Smith Theory Marxian Theory Schumpeterian Theory – Rostow's Stages of Economic Growth – Lewis Theory of Unlimited Supplies of Labour – Nelson's Low Level Equilibrium Trap – Big Push Theory – Balanced Growth Model – Unbalanced Growth Model – Harrod - Domar Model.
- Unit III Capital Formation and Economic Development: Meaning of Capital Formation

 Importance Role of Capital Formation in Economic Development Reasons for low level of Capital Formation Meaning of Human Capital Formation Importance Problems of Human Capital Formation Human Development Index.
- Unit IV Regional Development Disparities and Social Justice: Regional Development Reasons for Regional Development Disparities Problems of Balanced Regional Development Regional Planning in India Steps taken to reduce Regional Disparities Problems of Regional Planning in India Growth with Social Justice.

Unit - V Economic Planning: Meaning – Techniques of Planning – Types of Planning – Need for Planning in UDC- Planning in a Mixed Economy – Planning Models in India – Strategies of Planning – Instruments of Indian Planning.

Text Books:

1.	Economics of Development and Planning	-	M.L. Jhingan
2.	Economics of Development and Planning	—	A.N. Agarwal & Kundan Lal
3.	Economic Planning	—	M.L. Seth
4.	Economic of Growth and Development	_	Mirsa and Puri

	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	9	9	9	9	9	3	9
CO2	9	9	3	9	3	9	3
CO3	9	3	3	3	9	3	9
CO4	9	3	9	9	9	3	3
CO5	9	9	9	3	9	9	9
Total	45	33	33	33	39	27	33
Weightage	2.70	2.01	2.01	2.00	2.35	1.64	2.00

Course Outcome Vs Programme Outcome

M.A. Economics Major Paper – 13

ECONOMICS FOR IES /NET /SET

Semester IV 18PEC13

6 Hrs 5 Credits

Objectives

To assist the students to understand the concepts in economics and to help the students to prepare for IES / NET / SET.

Course Outcomes

On completion of this course, the students will be able to:

CO1: Familiar with the concepts of micro and macro economics.

CO2: Knowledge on economic models and public finance.

CO3: Exposure to the concepts of monetary economics.

CO4: Understand the features of Indian economy.

CO5: Gain knowledge on quantitative economics.

Unit - I Micro and Macro Economics: Theory of demand – Axiomatic Approach – Demand Functions – Consumer Behaviour – Under Conditions of Uncertainty – theory of Production – Collusive and Non-Collusive Oligopolies – Different Models of Objectives of the Firm – Baumol, Morris and Williamson Factor Pricing – General Equilibrium and Welfare Economics.

> Keynesian and Post-Keynesian Approaches to theory of Output and Employment; Concept of Investment Multiplier; Consumption Hypotheses – Theories of Investment and Accelerator – Theories of Demand for Money – Keynesian and Post–Keynesian – Different Approaches to Money Supply – Money Supply – Components and Determinants – Money Multiplier – Output – Price Determination (Aggregate Supply and Aggregate Demand Curve Analysis) Fleming-Mundell Open Economy Model.

Unit – II Development and Public Finance: Development and Growth – Role of Institutions – Theories of Growth and Development – Models of Growth of Joan Robinson and Kaldor Technical Progress – Hicks - Harrod - Production Function Approach to the Determinants of Growth: Endogenous Growth: Role of Education - Research and Knowledge – Explanation of Cross Country Differentials in Economic Development and Growth. Theories of Development – Classical – Marx – Schumpeter and Structural Analysis of Development –

Imperfect Market Paradigm - Lewis Model of Development - Ranis-Fei Model – Dependency Theory of Development - Factors in Economy Development – Natural Resources - Population – Capital – Human Resource Development and Infrastructure – Trade and Development – Trade as Engine of Growth.

Theories of Taxation – Types – Incidence and Effects – Theories of Public Expenditure – Effects on Savings – Investment and Growth Burden of Public Debt – Union Finance – Trends in Revenue and Expenditure of the Government of India – State Finance – Trends in Revenue and Expenditure of the State Governments – Public Debt – India's Public Debt Since 1951 – Growth Composition – Ownership pattern and Debt Management – Union-State Financial Relations – Horizontal and Vertical Imbalances; the Finance Commissions – Fiscal Policy and Fiscal Reforms in India.

 Unit – III Monetary Economics: Monetary Approach and Adjustment in the Balance of Payments – Regional Blocs –Multilateralism and World Trading System – The Political Economy of Imposition of Non-tariff Barriers – International Trade Under Conditions of Imperfect Competition in Goods Market - Theory of International Reserves – Theory and Impact in the Developed and Developing Countries – WTO and its Impact on the Different Sectors of the Economy.

> Components of Money Supply – Role – Constituents and Functions of Money and Capital Markets – RBI – Recent Monetary and Credit Policies – Commercial Banks and Cooperative Banks – Specialized Financial and Investment Institutions – Non-Bank Financial Institutions and Regional Rural Banks.

 Unit - IV Indian Economy: Industrial Structure and Economic Growth – Pattern of Industrialization – Public and Private; Large and Small Industries – Theories of Industrial location – Indian Experience – Industrial Productivity – measurement – Partial and Total Trends – Industrial Finance in India – Industrial Labour – Problems – Policies and Reforms in India – Economic Reforms and Industrial Growth.

> Population and Economic Development – interrelation between Population – Development and Environment – Sustainable Development – Malthusian Theory of Population – Optimum Theory of Population – Theory of Demographic Transition –Concepts of Demography – Vital Rates, Life Tables, Composition and Uses – Measurement of Fertility – Total Fertility Rate – Gross and Net Reproduction Rate - Poverty in India – Absolute and Relative – Analysis of Poverty in India – Environment as Necessity – Amenity and Public Goods – Causes of Environmental and Ecosystem Degeneration – Policies for Controlling Pollution – Relation between Population – Poverty and Environmental Degradation – Micro Planning for Environmental and Eco-Preservation – Water

Sheds, Joint Forest Management and Self-Help Groups – Role of State in Environmental Preservation – Review of Environmental Legislation in India.

Role of Agriculture in Indian Economy – Share of Agriculture - Interrelationship between Agriculture and Industry – Institutional Aspects – Land Reforms – Green Revolution – Technological Aspects – Agricultural Inputs and Shifts in Production Function – Capital Formation in the Rural Sector – Savings, Assets and Credits – Strategies for Rural Development – Regional Disparities in Indian Agriculture – Co-operative Movement in India- Organization – Structure and Development of Different Types of Co-operatives in India.

 Unit – V Quantitative Economics: Application of Differential and Integral Calculus in Theories of Consumer Behaviour – Production and Pricing under Different Market Conditions – Input-output Analysis and Linear Programming – Application of Correlation and Regression – Testing of Hypothesis in Regression Analysis.

Book for Reference:

1.	Objectives Economics for	-	Maria John Kennedy,
	Competitive Examinations		Himalaya Publishing House, Mumbai
2.	Advanced Micro Economic Theory	-	Maria John Kennedy,
			Himalaya Publishing House, Mumbai
3.	Economics of Development	-	Jhingan, M.L., Konark Publication,
	& Planning		New Delhi
4.	Public Finance	-	Tyagi, B.P., Jai Prakash Nath & Co, Meerut
5.	Indian Economy	-	Misra & Puri, Himalaya Publishing House,
			Mumbai
6.	Statistical Methods	-	Gupta, S.P. Sultan Chand & Sons,
			New Delhi

- 7. Money, Banking & International Trade
- Jhingan, M.L., Virinda Publication, New Delhi

	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	9	9	9	9	9	9	9
CO2	9	3	3	3	3	9	3
CO3	9	3	3	9	9	3	9
CO4	9	3	9	9	3	9	3
CO5	9	9	3	3	9	9	3
Total	45	27	27	33	33	39	27
Weightage	2.70	1.65	1.65	2.00	2.00	2.35	1.64

Course Outcome Vs Programme Outcome