



# M.A ECONOMICS 2020-2021

Sem	Subject Code	Title of the Paper	Hrs	Credits
I	19PG1E1	Micro Economic Analysis	6	4
	19PG1E2	Statistical Methods	6	4
	19PG1E3	Indian Economy	6	4
	19PG1E4	Money and banking	6	4
	19PGEEDC	Business Skills for Women	3	3
II	19PG2E5	Macro Economic Analysis	6	4
	19PG2E6	Mathematics for Economics		
	19PG2E7	Financial Markets	6	4
	19PG2E8	Computer Application for Economists	6	4
	19PGEEDC	Business Skills for Women	3	3
III	19PG3E9	Development Economics	6	4
	19PG3E10	Econometrics	6	4
	19PG3E 11	Research Methodology	6	4
	19PG3AE11	Financial Economics/ Commerce:	4+2	4+2
	19PG3EA11	Software Package for Accounting Decisions		
	<b>Electives</b> 19PG3EE1 19PG3EE2	Agricultural Economics Gender Economics	4	4
		Internship		6
IV	19PG4E12	Indian Fiscal System	6	5
	19PG4E13	International Economics	6	5
	19PG4E14	Behavioral Economics	6	5
	19PG4E15	Environmental Economics	6	5
	<b>Electives</b> 19PG4EE4 19PG4EE5	National Income Accounting Industrial Economics	4	4
		PROJECT		

**II SEMESTER**  
**MAJOR CORE**  
**MATHEMATICS FOR ECONOMIST – 19PG2E6 (2019-2020)**

(For those who joined in 2019 onwards)

**HOURS/WEEK: 6**

**CREDIT:**

**4**

**COURSE DESCRIPTION**

Mathematical tools are necessary for the application of economic theories.

**COURSE OBJECTIVE/S**

1. To equip the students with application oriented theories like input -output Model, Linear Programming and Game Theory.
2. To equip students in acquiring analytical skills.
3. To equip them to face IES, IAS exams and NET exam
4. To equip the students with application oriented theories like input - output Model, Partial and Total Derivations, Linear Programming and Game Theory.
5. To equip students in acquiring analytical Skills.
6. To give training for students for IES and NET exam

**COURSE OUTCOMES (CO)**

No.	Course Outcome	Knowledge Level
<b>CO 1</b>	Inculcating the Knowledge of Mathematical Application in Economics	K1
<b>CO 2</b>	Enable them to identify the significance of Mathematics in studying economics	K3
<b>CO 3</b>	Equipped them to adopt problem solving skills	K2
<b>CO 4</b>	Ensuring competency in clearing SET & NET Exams	K3
<b>CO 5</b>	Inculcating the Knowledge of Mathematical Application in Economics	K3

**UNIT I: DIFFERENTIATION**

**[15HRS]**

Applications of Derivatives: The Sign and magnitude of Derivative – Average and Marginal Values –Application of the second derivative – **Finding maximum and minimum values (Self study)** – General problems of average and marginal

values – point of inflexion – Market equilibrium-Perfect Competition monopoly and Duopoly in economic theory –Economic applications of Derivatives.

## **UNIT II: PARTIAL DIFFERENTIATION**

**[15HRS]**

Partial Derivatives and its applications: First and second order partial derivative – Economic applications of partial differentiation on elasticity demand, Homogenous functions- Euler's theorem- Cobb-Douglas production function-CES production function. Maxima and Minima for two variables. **Profit maximization for discriminating monopoly (Self study)** – Properties of Cobb- Douglas production function and CES production function.

## **UNIT III: INTEGRATION**

**[15HRS]**

Integral Calculus – rules of integration indefinite and definite integrals - substitution methods of integration - applications- integration as total function of economics marginal functions – **consumer and producer surplus. (Self study)**

## **UNIT IV: GAME THEORY**

**[15HRS]**

Game Theory– Classification and Description of Games – Payoffs Matrix – Saddle Point Solution – Mixed Strategy – **Dominated Strategies (Self study)** – Graphical Method – Applications – Static & Dynamic Game with and without complete information – Prisoner's Dilemma Game Theory in action.

## **UNIT V: LINEAR PROGRAMMING & INPUT OUTPUT ANALYSIS**

**[15HRS]**

Introduction to Linear Programming Problem- Formulation of LPP Problem – Solution of LPP using graphical and simplex method. **Solving LPP involving surplus variables (Self study)** – Duality in LPP – Shadow prices.Input output analysis and technical coefficient.

## **UNIT VI- DYNAMISM & CURRENT AFFAIRS**

Working out answers for TNPSC, UPSC, BANKS Exam question papers. Working out problems in Differentiation, Partial Differentiation, Iteration, Game Theory and Linear Programming

## II SEMESTER

## MAJOR CORE

## MATHEMATICS FOR ECONOMIST – 19PG2E6 (2020-2021)

(For those who joined in 2019 onwards)

HOURS/WEEK: 5

CREDIT: 4

## COURSE DESCRIPTION

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## COURSE OBJECTIVE/S

## Objectives:

1. To equip the students with application oriented theories like input -output Model, Linear Programming and Game Theory.
2. To equip students in acquiring analytical skills.
3. To equip them to face IES, IAS exams and NET exam
4. To equip the students with application oriented theories like input - output Model, Partial and Total Derivations, Linear Programming and Game Theory.
5. To equip students in acquiring analytical Skills.
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## COURSE OUTCOMES (CO)

No.	Course Outcome	Knowledge Level
CO 1	Inculcating the Knowledge of Mathematical Application in Economics	K1
CO 2	Enable them to identify the significance of Mathematics in studying economics	K3
CO 3	Equipped them to adopt problem solving skills	K2
CO 4	Ensuring competency in clearing SET & NET Exams	K3
CO 5	Inculcating the Knowledge of Mathematical Application in Economics	K3

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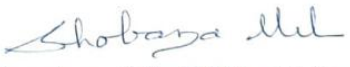
## **UNIT V: LINEAR PROGRAMMING & INPUT OUTPUT ANALYSIS**

**[15HRS]** **7%**

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Signature of the HOD with Seal  
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