

6. Economics I Paper (Eco.311)

Micro Economics

Exam 2066

Time: 3 hrs

Full Marks: 100

Attempt any TWO questions from Group 'A' and SIX from Group 'B'.

Group 'A'

2×20=40

1. What is an indifference curve analysis? Explain how price effect is decomposed into income and substitution effect as explained by Hicks.
2. Discuss the laws of Returns to Scale. Explain how it applies in the long-run.
3. Critically examine the marginal productivity theory of distribution.

Group 'B'

6×10=60

4. Define Micro-economics. Explain interrelationship between micro and macro economics.
5. What is price elasticity of demand? Explain its types with the help of diagrams.
6. Derive long run AC and MC. Show the relation between the two and explain why the shape of LAC is U-shaped.
7. What is perfect competition? Explain how the price and output are determined under it.
8. What is profit? Explain innovation theory of profit.
9. Define oligopoly. Explain how cartelling is practiced for joint profit maximization.
10. What is Edgeworth box diagram? Explain.
11. What is linear programming? Explain how it is applied in factors choice for output maximization.

Exam 2067

Attempt any TWO questions from Group 'A' and SIX questions from Group 'B'.

Group 'A'

2×20=40

1. Define price and income effect and show that price effect can be regarded as the resultant of income and substitution effect.
2. Explain the theory of law of variable proportions and highlight on its significance.
3. 'Interest is the reward for parting with liquidity'. Do you agree with this statement? Explain.

Group 'B'

6×10=60

4. Distinguish between micro and macro economics.
5. What is elasticity of supply? Explain how it is measured.
6. What is linear programming? Explain how it is applied to factors selection for output optimization?
7. Explain short run equilibrium of a firm under perfect competition. Does a firm always earn profit in the short run?
8. Define monopoly. Explain how price and output are determined under it.
9. What is profit? Explain the dynamic theory of profit.
10. What is social welfare? Explain how it can be maximized?
11. Define AR. Show how AR is equal to price in all market situations.

Exam 2068

Attempt any TWO questions from Group 'A' and SIX from Group 'B'.

Group 'A'

2×20=40

1. What is an indifference curve approach? Show the effects of changes in price and income on consumer's equilibrium.

- How do you explain Cobb-Douglas theory of production function? Show its importance in manufacturing sectors.
- Explain critically the marginal productivity theory of wages.
Group 'B' **6×10=60**
- Define micro economics. Explain about its uses and limitations.
- What is indifference curve? Explain why MRS diminishes as we down on an indifference curve.
- What is production function? Distinguish between short run and long run production functions.
- Explain and illustrate the concept of isoquant.
- Why is discriminating monopoly? Explain how price and output are determined under price discrimination?
- What is interest? Explain modern theory of interest.
- What is partial equilibrium analysis? Explain its advantages.
- What is returns to scale? Discuss it diagrammatically.

Exam 2069

Attempt any TWO questions from Group 'A' and SIX questions from Group 'B'.

Group 'A'

2×20=40

- How does the consumer attain equilibrium under indifference curve? Show that price effect is the sum of income and substitution effect.
- What is production function? Explain the theory of returns to scale in production.
- Explain liquidity preference theory of interest. How is it different from classical theory?

Group 'B'

6×10=60

- Define micro and macro economics. Explain how they are interdependent.
- What is elasticity of demand? Explain any one method for measuring it.
- Explain the relationship between average revenue, marginal revenue and total revenue under imperfect market condition.
- Explain how price and output are determined under price.
- What are the features of oligopoly market? How the carteling is used for joint profit maximization? Explain.
- What is profit? Explain how profit arises under innovations and dynamic theory of profit.
- What is general equilibrium model? Explain Edgeworth Box Diagram.

Exam 2070

Full Marks: 100

Time: 3 hrs.

Micro-Economics(311)

Attempt any two questions from Group A and six from Group B.

Group 'A'

[2×20=40]

- What is indifference curve approach? Explain how a consumer attains equilibrium under it.
- What is production functions? Explain the theory of production functions in the short run.
- What is monopoly? Show how price and output are determined under price discrimination.

Group 'B'

[6×10=60]

- Distinguish between Micro and Macro economics.
- What is elasticity of demand? Explain the methods for its measurement.
- Explain the basic concept of linear programming. How graphical method is used under it?

- Define cost curves. Show the relationship between Marginal Cost (MC) and Average Cost (AC).
- What is rent? Explain the modern theory of rent.
- Explain how innovation is linked with profit.
- Derive short run supply curve of a perfectly competitive firm.
- What is Edge worth Box Diagram? Explain.

(301)(Mathematics & Statistics for Economics)

Attempt any two questions from Group A and six from Group B.

Group 'A'

[2×20=40]

- (a) Find the inverse of the matrix.

$$A = \begin{bmatrix} 2 & 0 & 1 \\ 2 & 1 & 3 \\ 1 & -1 & 0 \end{bmatrix}$$

- (b) Solve the following equations with the help of determinants.

$$4x + 2y + z = 15$$

$$x + 4y + 3z = 28$$

$$6x - y - z = -2$$

- Given the following data series:

X:	12	9	8	10	11	13	7
Y:	14	8	6	9	11	12	3

- Estimate regression equation Y on X.
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- Find the coefficient of correlation.
- Predict the value of Y when X=20.

- Find the extreme value of the function

$$f(x, y) = x^2 + 3xy - 5y^2 \text{ under the condition that } 2x + 3y = 6.$$

Group 'B'

[6×10=60]

- A bag contains 4 white, 8 black, 6 red and 2 green balls. Find the probability of getting either a white or a black or a green ball in a single throw.
- Find out the mean and standard deviation from the following data:

X:	10	11	12	13	14
f:	3	12	18	12	3

- Calculate the price index from the following data using Fisher's ideal formula.

Commodities	Base year		Current year	
	Price	Quantity	Price	Quantity
A	10	50	12	60
B	8	30	9	32
C	5	35	7	40

- Following table gives the per capita income (in U.S.\$) of a certain country in 5 years.

Year:	1982	1983	1984	1985	1986
Per capita income:	600	620	660	700	750

- Calculate Karl Pearson's coefficient of skewness from the following data:

Size:	06	09	12	14	18
Frequency:	07	12	19	10	02

- for the Cobb Douglas production function

$$Y = AL^\alpha K^\beta, \quad \alpha + \beta = 1$$

$$\text{Show that } L \cdot \frac{\partial Y}{\partial L} + K \cdot \frac{\partial Y}{\partial K} = Y.$$

- The demand function for a commodity is $P = 48 - 2x - x^2$.