

FAKIR CHAND COLLEGE
INTERNAL ASSESSMENT 2021
SEMESTER I
ECONOMICS HONOURS
Paper – CC1
INTRODUCTORY MICROECONOMICS
Full Marks – 10

Group – A

Choose the correct answer for **any four** of the following questions: (1X4=4)

1. Which of the following is not a principle of individual decision making:
 - a) people face trade-offs
 - b) rational people think at the margin
 - c) people respond to incentives
 - d) Markets are usually a good way to organize economic activity.
2. Which of the following statements is true?
 - a) Two countries can achieve gains from trade even if one of them has absolute advantage in the production of all goods.
 - b) Absolute advantage is more important for trade.
 - c) The principle of comparative advantage states that each good should be produced by the country for which it has higher opportunity cost.
 - d) The principle of comparative advantage shows that trade can make everyone worse off.
3. If the demand and supply of a commodity increases simultaneously, then the equilibrium price
 - a) Might increase
 - b) Might decrease
 - c) Might remain the same
 - d) All of the above.

4. When the seller sales the commodity at a fixed price, the MR curve will be
- a) Upward rising
 - b) Downward sloping
 - c) Horizontal
 - d) Vertical
5. The indifference curve for goods that are perfect substitute to each other has which of the following shapes?
- a) Strictly convex to the origin
 - b) Strictly concave to the origin
 - c) L-shape
 - d) Downward sloping straight line

Group – B

Answer any two of the following questions: (3X2=6)

6. What is elasticity of demand? Distinguish between income elasticity of demand and cross price elasticity of demand. 1+2
7. Show with a diagram how tax on a good affect the price paid by buyers, price received by sellers, and the quantity sold? 3
8. What is price consumption curve (PCC)? Derive PCC graphically. 1+2

FAKIR CHAND COLLEGE
INTERNAL ASSESSMENT 2021

SEMESTER I

ECONOMICS HONOURS

Paper – CC2

MATHEMATICAL METHODS IN ECONOMICS - I

Full Marks – 10

Group – A

Choose the correct answer for any four of the following questions: (1X4=4)

1. If $S = \{1,2,3,4,5,6,7\}$ and $A = \{1,3,5,7\}$, what is the value of A^C ?

(a) $\{1,2,6\}$

(b) $\{2,4,6\}$

(c) $\{1,3,5\}$

(d) $\{2,3,6\}$

2. A function is defined as:

$$f(x) = \begin{cases} x^2 & \text{when } x \neq 2 \\ 5 & \text{“ } x = 2 \end{cases}$$

Is $f(x)$:

(a) Discontinuous

(b) Continuous

(c) Both

(d) None of these

3. Rank of the given matrix $\begin{pmatrix} 1 & 5 \\ 3 & 9 \end{pmatrix}$ is:

- (a) 0
- (b) 1
- (c) 2
- (d) 4

4. The equilibrium price in a single commodity market is given by $P^* = \frac{a+c}{b+d}$
Where a,b,c,d are positive parameters of the model. Then the impact of infinitesimal change in parameter 'a' on equilibrium price 'P*' i.e. $\frac{\partial P^*}{\partial a}$ will be:

- (a) $\frac{a+c}{b+d}$
- (b) $\frac{a}{b+d}$
- (c) $\frac{c}{b+d}$
- (d) $\frac{1}{b+d}$

5. Given a linear equation system $Ax=d$. where A is an n x n coefficient matrix, determinant $A \neq 0$ implies

- a) A is non-singular
- b) A^{-1} exists
- c) a unique solution $x^* = A^{-1}d$ exists
- d) All of the above

Group – B

Answer any two of the following questions: (3X2=6)

6. The cost function of a firm is $C = 150 + 7Q$. Maximum Capacity of the firm is to produce 100 units per week. Find the Domain and Range of the cost function.

3

7. Find the relative maxima and minima for the following function:

$$Y=f(x)=x^3 - 12x^2 + 36x + 8$$

3

8. Consider a two-person Zero-sum game involving pure strategies A1 and A2 for player A and B1, B2, B3, B4 for player B, having the following pay-off matrix for A:

		B1	B2	B3	B4
Player A	A1	8	40	20	5
	A2	10	30	-10	-8

Find the saddle point for the game using maximin minimax strategy.