

## Economics 2<sup>nd</sup> PUC Mid Term Examination 2018

### Model Paper 1

#### IMPORTANT INSTRUCTIONS

- Crudely drawn or poorly drawn diagrams will not be accepted.
- Main and question number under it must be mentioned
- Diagrams may be in either blue or black pen but legible
- Highlight all key words
- Legend for the diagrams must be clearly mentioned.
- 4 mark and 6-mark questions must start in a new page.
- **Not following instructions mentioned above will lead to loss of marks.**

#### PART A

##### I. Choose the correct option. Each question carries 1 mark (1x5=5)

1. Utility is
  - a) Objective
  - b) Subjective
  - c) Both a & b
  - d) None of the above
2. In the short run, a firm
  - a) Can change all the inputs
  - b) Cannot vary all the inputs
  - c) Can keep the inputs fixed
  - d) None of the above
3. The firm's profit is denoted by
  - a)  $\Sigma$
  - b)  $\Delta$
  - c)  $\emptyset$
  - d)  $\Pi$
4. The firms earn super normal profit if the profit is greater than the minimum of:
  - a) Marginal cost
  - b) Total cost
  - c) Average cost
  - d) Fixed cost
5. Profit:
  - a)  $P \times Q$
  - b)  $TR - TC$
  - c)  $TFC + TVC$
  - d)  $TR/Q$

##### II. Fill in the blanks. Each question carries 1 mark (1x5=5)

1. An equation  $xy = C$  gives us \_\_\_\_\_ hyperbola
2. \_\_\_\_\_ is the set of all possible combinations of the two inputs that yield the same maximum possible level of output.
3. \_\_\_\_\_ cost of some activity is the gain forgone from the second-best activity
4. It is assumed that, in a perfectly competitive market an \_\_\_\_\_ is at play.
5. With the zero-production cost when the total revenue of monopoly firm is maximum, the profit \_\_\_\_\_

**III. Match the following. Each question carries 1 mark (1x5=5)**

A	B
CRS	$\frac{\Delta TC}{\Delta C}$
SAC	Long run average cost
LRAC	Short run average cost
TFC + TVC	Constant returns to scale
SMC	TC

**IV. Answer the following in one word / one sentence. Each question carries 1 mark (1x5=5)**

1. What is demand?
2. What do you mean by Total product?
3. Give the meaning of super-normal profit
4. What is price ceiling?
5. Give the meaning of monopolistic competition.

**PART B**

**V. Answer any NINE of the following in 4 sentences each. Each question carries 2 marks. (2x9=18)**

1. What are the differences between budget line & budget set?
2. What do you mean by inferior goods? Give example?
3. Mention the types of Returns to scale.
4. Name the short run costs.
5. Give the meaning of shut-down point
6. Give the meaning of opportunity cost with an example.
7. Define equilibrium price and quantity.
8. How is price determined, when fixed number of firms exist in perfect competition?
9. Write any two possible ways in which simultaneous shift of both demand and supply curves.
10. What is marginal revenue product of labour (MRP<sub>l</sub>)
11. Mention the requirements of a monopoly market structure.
12. State the meaning of average revenue and marginal revenue
13. State the relationship between marginal revenue and price elasticity of demand.

**PART C**

**VI. Answer any SEVEN of the following questions in 12 sentences each. Each question carries 4 marks. (4x7=28)**

1. Write the differences between Total utility & Marginal utility.
2. Briefly explain the budget set with the help of a diagram.
3. Explain the long run costs.
4. The following table gives TP schedule of labour. Find the corresponding average product and marginal product

TP	0	1	35	50	40	48
L	0	1	2	3	4	5

5. What is the implication of free entry and exit of firm on market equilibrium. Briefly explain.

6. Write a table to show the impact of simultaneous shifts in equilibrium.
7. What is market demand curve? Draw a market demand curve for a monopoly firm.
8. Calculate TR and MR from the following table

Q	1	2	3	4	5	6	7	8	9	10
P	100	90	80	70	60	50	40	30	20	10

9. Briefly explain the monopolistic competitive market.
10. Show the relationship between average revenue and marginal revenue of a monopoly market with the help of diagrams.

### PART D

**VII. Answer any FOUR of the following questions in 20 sentences each. Each question carries 6 marks. (6x4=24)**

1. Explain the law of diminishing marginal utility with the help of a table and diagram
2. Explain the simultaneous shifts of demand and supply curve in perfect competition.
3. Suppose the demand and supply curves of wheat are given by

$$q^D = 200 - P \text{ and } q^S = 120 + P$$

- a) Find the equilibrium price
  - b) Find the equilibrium quantity of demand and supply
  - c) Find the quantity of demand and supply when  $P >$  equilibrium price
  - d) Find the quantity of demand and supply when  $P <$  equilibrium price
4. Explain the short run equilibrium of a monopoly firm with the help of the simple case of zero cost.
  5. Explain the short run equilibrium of a monopolist firm, when the cost of production is positive and by using TR and TC curves with the help of a diagram.
  6. The market demand curve for a commodity and the total cost for a monopoly firm producing the commodity is given by the schedules below. Use the information to calculate the following:

Q	0	1	2	3	4	5	6	7	8
P	52	44	37	31	26	22	19	16	13

Q	0	1	2	3	4	5	6	7	8
Total Cost	10	60	90	100	102	105	109	115	125

- a) The MR and MC schedules
- b) The quantity for which the MR and MC are equal
- c) The equilibrium quantity of output and equilibrium price of the commodity
- d) The total revenue, total cost and total profit in equilibrium.

**PART E**

**VIII. Answer any TWO of the following. Each question carries 5 marks. (5x2=10)**

1. A consumer wants to consume two goods. The price of bananas is Rs. 4 and the price of mangos is Rs. 5. The consumer income is Rs. 20.
  - a) How much bananas can he consumer if he spends his entire income on the good?
  - b) How much mangos can he consume if he spends his entire income on that good?
  - c) Is the slope of the budget line upward or downward?
  - d) Are the bundles on the budget line equal to the consumer income or not?
  - e) If you want to more bananas you have to give up mangos. Is it true?
  
2. Find the missing products in the following.

Factor 1	TP	MP	AP
0	0	0	0
1	10	-	10
2	24	-	12
3	40	16	13.33
4	-	10	-
5	-	6	11.2
6	57	1	9.5

3. Compute the total revenue, marginal revenue and average revenue schedules in the following table when market price of each unit of goods is Rs. 10

Quantity Sold	TR	MR	AR
0			
1			
2			
3			
4			
5			
6			

**Economics 2<sup>nd</sup> PUC Mid Term Examination 2018**

**Model Paper 2**

**PART A**

**I. Choose the correct option. Each question carries 1 mark (1x5=5)**

1. The shape of an indifference curve is normally
  - a) Convex to the origin
  - b) Concave to the origin
  - c) Horizontal
  - d) Vertical
2. The formula of production is
  - a)  $q = f(L, K)$
  - b)  $q = d(p)$
  - c)  $y = f(x)$
  - d) None of the above
3. In a perfect competition each firm produces and sells
  - a) Heterogenous products
  - b) Homogenous products
  - c) Luxury goods
  - d) Necessary goods
4. In perfect competition, buyers and sellers are:
  - a) Price makers
  - b) Price takers
  - c) Price analysts
  - d) None of the above
5. Profit:
  - a)  $P \times Q$
  - b)  $TR - TC$
  - c)  $TFC + TVC$
  - d)  $TR/Q$

**II. Fill in the blanks. Each question carries 1 mark. (1x5=5)**

1. Want satisfying capacity of a commodity is \_\_\_\_\_
2. In the long run, all inputs are \_\_\_\_\_
3. Price taking behaviour is the single most distinguishing characteristic of \_\_\_\_\_
4. In a perfectly competitive market, equilibrium occurs when \_\_\_\_\_ is equal to \_\_\_\_\_
5. The monopoly firm's decision to sell a larger quantity is possibly only at \_\_\_\_\_

**III. Match the following. Each question carries 1 mark. (1x5=5)**

A	B
Adam Smith	Attraction of new firms
Price ceiling	Operation of invisible hand
Market equilibrium	Lower limit on price
Possibility of supernormal profit	Upper limit on price
Price floor	$QD = QS$

**IV. Answer the following in one word / one sentence. Each question carries 1 mark. (1x5=5)**

1. Expand MRS.
2. Write the meaning of cost function of the firm
3. Define marginal revenue
4. Through which legislation, the government ensures that the wage rate of the labourers does not fall below a level?
5. What is duopoly?

**PART B**

**V. Answer any NINE of the following in 4 sentences each. Each question carries 2 marks. (2x9=18)**

1. What is monotonic preference?
2. Mention any two different approaches which explain consumer behaviour.
3. State the law of demand
4. What is isoquant?
5. Give the meaning of the concepts short run and long run.
6. Name the short run costs.
7. What are long run costs?
8. Mention the conditions needed for profit by a firm under perfect competition.
9. Mention the two determinants of a firm's supply curve.
10. Write any two possible ways in which simultaneous shift of both demand and supply curves.
11. Distinguish excess demand and excess supply.
12. Write the meaning of monopolistic competition and give an example.
13. Write the features of a monopoly.

**PART C**

**VI. Answer any SEVEN of the following questions in 12 sentences each. Each question carries 4 marks. (4x7=28)**

1. Explain the derivation of slope of budget line.
2. Explain the indifference map with a diagram.
3. Write the differences between substitutes and complements.
4. Explain the differences between normal and inferior goods with examples
5. Explain Isoquant with a diagram.
6. Explain TP, MP and AP with examples.
7. What is the implication of free entry and exit of firm on market equilibrium? Briefly explain.
8. What is market demand curve? Draw a market demand curve for a monopoly firm.
9. Briefly explain the monopolistic competitive market.
10. Show the relationship between average revenue and marginal revenue of a monopoly firm with the help of diagrams.

**PART D**

**VII. Answer any FOUR of the following questions in 20 sentences each. Each question carries 6 marks. (6x4=24)**

1. Explain the features of indifference curves with the help of diagrams.
2. Explain the optimal choice of a consumer with the help of a diagram.
3. Explain the movement along the demand curve and shift in demand curve with the help of two diagrams.
4. Give the meaning of price elasticity of demand and explain the elasticity along linear demand curve.
5. Explain the market equilibrium with the fixed number of firms with the help of diagram.
6. Explain how firms behave in oligopoly.

**PART E**

**IX. Answer any TWO of the following. Each question carries 5 marks. (5x2=10)**

1. A consumer wants to consume two goods. The price of bananas is Rs. 4 and the price of mangos is Rs. 5. The consumer income is Rs. 20.
  - a) How much bananas can he consumer if he spends his entire income on the good?
  - b) How much mangos can he consume if he spends his entire income on that good?
  - c) Is the slope of the budget line upward or downward?
  - d) Are the bundles on the budget line equal to the consumer income or not?
  - e) If you want to more bananas you have to give up mangos. Is it true?
  
2. Find the missing products in the following.

Factor 1	TP	MP	AP
0	0	0	0
1	10	-	10
2	24	-	12
3	40	16	13.33
4	-	10	-
5	-	6	11.2
6	57	1	9.5

3. Compute the total revenue, marginal revenue and average revenue schedules in the following table when market price of each unit of goods is Rs. 10

Quantity Sold	TR	MR	AR
0			
1			
2			
3			
4			
5			
6			

**Economics 2<sup>nd</sup> PUC Mid Term Examination 2018**

**Model Paper 3**

**PART A**

**I. Choose the correct option. Each question carries 1 mark (1x5=5)**

- The equation of budget line is
  - $P_x + P_1x_1 = M$
  - $M = P_0x_0 + P_x$
  - $P_1x_1 + P_2x_2 = M$
  - $Y = M_x + C$
- Cobb-Douglas production function is
  - $q = (x, x)$
  - $q = (x^{a_1}, x^{b_2})$
  - $q = (x_1, x_2)$
  - $q = (0)$
- When the supply curve is vertical the elasticity of supply is:
  - $es = 1$
  - $es > 1$
  - $es = 0$
  - $es = \infty$
- The government imposed lower limit on the price of goods and services is called:
  - Goods floor
  - Service floor
  - Price floor
  - None of the above
- A market structure which produces heterogeneous products is called:
  - Monopoly
  - Monopolistic competition
  - Perfect competition
  - None of the above

**II. Fill in the blanks. Each question carries 1 mark. (1x5=5)**

- As income increases the demand curve for normal goods shifts towards \_\_\_\_\_.
- SMC curve cuts the AVC curve at the \_\_\_\_\_ point of AVC curve from below
- \_\_\_\_\_ is a tax that the government imposes per unit sale of output
- \_\_\_\_\_ is determined at the point where the demand for labour and supply of labour curves intersect.
- TR = \_\_\_\_\_

**III. Match the following. Each question carries 1 mark. (1x5=5)**

A	B
TR	Perfect information
II	Zero profit
AR	$P \times Q$
Normal Profit	$TR - TC$
Perfect Competition	$TR/Q$



**IV. Answer the following in one word/one sentence. Each question carries 1 mark. (1x5=5)**

1. What do you mean by cardinal Utility Analysis?
2. Give the meaning of Marginal product.
3. What is normal profit?
4. Define market equilibrium
5. Write the equation of a demand function.

**PART B**

**V. Answer any NINE of the following in 4 sentences each. Each question carries 2 marks. (2x9=18)**

1. State the law of demand
2. Mention two different approaches which explain consumer behaviour.
3. What do you mean by price elasticity of demand?
4. Name the short run costs.
5. What are long run costs?
6. Mention the two determinants of a firm's supply curve
7. Give the meaning of price elasticity of supply and write the formula
8. How is price determined, when fixed number of firms exist in perfect competition?
9. Write any two possible ways in which simultaneous shift of both demand and supply curves.
10. What is marginal revenue product of labour (MRP<sub>l</sub>)
11. State the relationship between marginal revenue and price elasticity of demand.
12. Write the meaning of monopolistic competition and give an example.
13. Write the features of a monopoly.

**PART C**

**VI. Answer any SEVEN of the following questions in 12 sentences each. Each question carries 4 marks. (4x7=28)**

1. Explain the derivation of slope of budget line.
2. Explain the indifference map with a diagram.
3. Write the differences between substitutes and complements.
4. Explain the differences between normal and inferior goods with examples
5. Explain Isoquant with a diagram.
6. What is the implication of free entry and exit of firm on market equilibrium. Briefly explain.
7. Write a table to show the impact of simultaneous shifts in equilibrium.
8. What is market demand curve? Draw a market demand curve for a monopoly firm.
9. Calculate TR and MR from the following table

Q	1	2	3	4	5	6	7	8	9	10
P	100	90	80	70	60	50	40	30	20	10

11. Briefly explain the monopolistic competitive market.
10. Show the relationship between average revenue and marginal revenue of a monopoly market with the help of diagrams.

**PART D**

**VII. Answer any FOUR of the following questions in 20 sentences each. Each question carries 6 marks. (6x4=24)**

1. Explain the features of indifference curves with the help of diagrams.
2. Explain the optimal choice of a consumer with the help of a diagram.
3. Explain the movement along the demand curve and shift in demand curve with the help of two diagrams.
4. Explain the short run equilibrium of a monopoly firm with the help of the simple case of zero cost.
5. Explain the short run equilibrium of a monopolist firm, when the cost of production is positive and by using TR and TC curves with the help of a diagram.
6. The market demand curve for a commodity and the total cost for a monopoly firm producing the commodity is given by the schedules below. Use the information to calculate the following:

Q	0	1	2	3	4	5	6	7	8
P	52	44	37	31	26	22	19	16	13

Q	0	1	2	3	4	5	6	7	8
Total Cost	10	60	90	100	102	105	109	115	125

- a. The MR and MC schedules
- b. The quantity for which the MR and MC are equal
- c. The equilibrium quantity of output and equilibrium price of the commodity
- d. The total revenue, total cost and total profit in equilibrium.

**PART E**

**X. Answer any TWO of the following. Each question carries 5 marks. (5x2=10)**

1. A consumer wants to consume two goods. The price of bananas is Rs. 4 and the price of mangos is Rs. 5. The consumer income is Rs. 20.
  - a) How much bananas can he consumer if he spends his entire income on the good?
  - b) How much mangos can he consume if he spends his entire income on that good?
  - c) Is the slope of the budget line upward or downward?
  - d) Are the bundles on the budget line equal to the consumer income or not?
  - e) If you want to more bananas you have to give up mangos. Is it true?
  
2. Find the missing products in the following.

Factor 1	TP	MP	AP
0	0	0	0
1	10	-	10
2	24	-	12
3	40	16	13.33
4	-	10	-
5	-	6	11.2
6	57	1	9.5

3. Compute the total revenue, marginal revenue and average revenue schedules in the following table when market price of each unit of goods is Rs. 10

Quantity Sold	TR	MR	AR
0			
1			
2			
3			
4			
5			
6			