

SCHOOL OF ACCOUNTING AND BUSINESS
BSc. (APPLIED ACCOUNTING) GENERAL / SPECIAL DEGREE
PROGRAMME

YEAR I SEMESTER I – INTAKE VIII (GROUP B)
END SEMESTER EXAMINATION – SEPTEMBER 2017

BEC 10125 Microeconomics

Date : 17th September 2017
Time : 9.00 a.m. - 11.30 a.m.
Duration : Two and a half (02 ½) hours

Instructions to Candidates:

- This paper consists of three sections (A, B and C).
- Section A – Answer **ALL** the questions on the separate sheet given
- Section B – Answer any **Four (04)** questions only
- Section C – Answer **only One (01)** question
- The total marks for the paper is 100.
- The marks for each question are shown in brackets.
- Answers should be written neatly and legibly

Section A

Answer **ALL** questions

Question No. 01

Select the **most appropriate answer** for questions (1) – (10).

1. Explicit costs are,
 - a. costs of market supplied resources
 - b. costs of owner supplied resources
 - c. costs of both market and owner supplied resources
 - d. all the fixed costs

2. A rational consumer maximizes the utility when;
 - a. $MRS = MU$
 - b. $M = P_x X + P_y Y$
 - c. $\frac{MU_X}{P_X} = \frac{MU_Y}{P_Y}$
 - d. $MU_X = MU_Y$

3. When the total product (TP) curve is downward sloping as a result of decrease in labour employed, marginal product (MP) is,
 - a. increasing
 - b. decreasing
 - c. either increasing or decreasing
 - d. neither increasing nor decreasing

4. The three stages of production in the short-run are;
 - a. Increasing MP, decreasing MP and negative MP
 - b. $MP > AP$, $MP > 0$ and $MP < 0$
 - c. $MP > AP$, $MP = AP$ and $MP < AP$
 - d. $MP > AP$, $AP > MP > 0$ and $MP < 0$

5. Output of the firm increased by 30% as a result of increase in inputs by 20%. This explains,
- increasing marginal product
 - increasing profit
 - economies of scale
 - none of the above
6. Assume that for a specific consumer both the substitution and income effects of a price increase is negative. This suggests that the commodity is,
- a normal good
 - an inferior good
 - either normal or inferior
 - a complement
7. After a certain level of output, marginal cost is increasing due to;
- diseconomies of scale
 - law of diminishing returns
 - inefficiency in production
 - none of the above
- Assume that the demand condition faced by a firm is explained by $Q = 180 - 2P$. Based on this information, answer the questions (8) to (10).
8. Marginal revenue (MR) of this firm is explained by;
- $MR = 90 - Q$
 - $MR = 180 - 4P$
 - $MR = 90 - 0.5Q$
 - $MR = 180 - Q$
9. Total revenue (TR) of the firm is maximized when the quantity demanded of the product equals to ;
- 45 units
 - 90 units
 - 180 units
 - 135 units

10. The selling price of the product when the TR is maximized;

- a. Rs. 45
- b. Rs. 0
- c. Rs. 2
- d. Rs. 90

(Total 20 marks)

Section - B

Answer only **four (04)** questions.

Question No. 02

- i. Why should everyone learn 'Economics'? Explain.
(05 Marks)
 - ii. Explain the application of opportunity cost and marginality in consumer and business decision making with relevant examples.
(05 Marks)
 - iii. Explain the relationship between 'positive economics' and 'normative economics' with an example.
(05 Marks)
- (Total 15 marks)**

Question No. 03

- i. What do you mean by 'constrained utility maximization'? Graphically explain this concept in favour of a rational consumer.
(05 Marks)
 - ii. "Indifference curves slope downward and convex to the origin". Do you agree? Explain your answer with the aid of a diagram.
(05 Marks)
 - iii. Suppose an individual has a daily income of Rs. 1,500 and spends it to consume commodities X and Y. The price of X is Rs. 75 and the price of Y is Rs. 50.
 - a. Write the equation for the budget constraint of this individual.
 - b. How much is the marginal rate of substitution (MRS) at the consumer optimization?
 - c. Why must any other point on the budget constraint be inferior to the optimum? Explain.
(05 Marks)
- (Total 15 marks)**

Question No. 04

- i. Explain the main characteristics of short run and long run production functions with relevant assumptions.

(05 Marks)

- ii. Why should a firm in a highly competitive market focus on economic efficiency rather than technical efficiency? Explain the reason.

(05 Marks)

- iii. a. If the demand function for a commodity is given by the equation; $P^2 + 4Q = 1600$, and the supply function is given by the equation; $550 - P^2 + 2Q = 0$, find the equilibrium price and the quantity.
- b. For producing a certain product, if total cost is explained by; $TC = 1600 + 1500Q$, and the total revenue is explained by; $TR = 1600Q - Q^2$, find the break-even point(s).

(05 Marks)

(Total 15 marks)

Question No. 05

- i. Explain the difference between following production concepts.

- a. Increasing returns and decreasing returns in the short run.
- b. Increasing returns to scale and decreasing returns to scale.

(05 Marks)

- ii. If a firm's short-run total cost function is explained by; $TC = 288 + 4Q + 2Q^2$,
- a. What is the output (Q) at the minimum average total cost (ATC)?
- b. How much is the marginal cost (MC) and the average variable cost (AVC) at the output in (a) above?
- c. How much is the total cost at the output in (a) above?

(10 Marks)

(Total 15 marks)

Question No. 06

- i. What are the key decisions that have to be made by a firm in the short-run? Explain with decision rule for each.

(05 Marks)

- ii. A firm produces an electronic component of which the monthly demand is given by; $P = 340 - 0.25Q$ (where P denotes the price in rupees and Q denotes the monthly quantity demanded).

The firm produces this component in a single plant and the total monthly cost is estimated to be; $TC = 10,500 + 70Q + 0.2Q^2$.

- Find the firms profit maximizing output and price.
- Identify the total fixed cost (TFC) of the firm.
- What is the total variable cost (TVC) function of the firm?
- How much is the total profit of the firm?

(10 Marks)

(Total 15 marks)

Section C

Answer only **one (01)** question

Question No. 07

- i. Explain the reasons for the U-shaped cost curves in the short run with properties of each.

(10 Marks)

- ii. Discuss with appropriate illustration, the long run behaviour of the average cost curve with important economic implications to the firm.

(10 Marks)

(Total 20 marks)

Question No. 08

- i. “Perfect competition is only a theoretical market structure, which is not available in practice.”

Evaluate the validity of the above statement.

(10 Marks)

- ii. Explain the nature of the demand curve faced by firms in each market structure based on the market power.

(10 Marks)

(Total 20 marks)