## חAMIBIA UחIVERSITY

OF SCIEПCE AПD TECHПOLOGY

## FACULTY OF MANAGEMENT SCIENCES

DEPARTMENT OF ACCOUNTING, ECONOMICS AND FINANCE

| QUALIFICATION: BACHELOR OF ECONOMICS |  |
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| QUALIFICATION CODE: 07BECO | LEVEL: $\mathbf{7}$ |
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| SESSION: JUNE 2019 | PAPER: THEORY |
| DURATION: $\mathbf{2}$ HOURS | MARKS: 100 |


| FIRST OPPORTUNITY EXAMINATION QUESTION PAPER |  |
| :--- | :--- |
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## INSTRUCTIONS

1. Answer ALL the questions.
2. Write clearly and neatly.
3. Number the answers clearly.
4. This question paper is made up of four (4) sections.
5. Answer Section $A$ and $B$ on the attached answer sheet.
6. Answer ALL the questions and in blue or black ink.
7. Start each question on a new page in your answer booklet.

THIS QUESTION PAPER CONSISTS OF 13 PAGES (Including this front page)

## SECTION A 20 Marks

Instruction: Please use the answer sheet at the end of Question paper. Cross the alternative you select with an X .

1. Marginal cost is the change that results from one unit increase in ...
(a) Price
(b) Cost
(c) Output
(d) Revenue
2. A consumer maximises his or her utility when ...
(a) The total utility of all the goods he or she can afford to purchase are equal.
(b) The marginal utility per dollar are equal for all the goods he or she can afford to purchase.
(c) The marginal utility is at its maximum.
(d) The marginal utility derived from all the goods he or she can afford to purchase equals the marginal utility derived from all other goods.
3. Josh and his father go to an all-you-can-eat pizza parlor. They find that each piece of pizza is less satisfying than the last. What economic principle does this scenario illustrate?
(a) Law of diminishing marginal utility
(b) Increasing opportunity cost
(c) Law of diminishing comparative advantage
(d) Law of disappearing satisfaction
4. Economies of scale occur when, as output increases, the ...
(a) long-run average cost increases
(b) long-run average cost decreases
(c) short-run average cost decreases
(d) long-run average cost stays constant
5. Spring Hill Bottling Company has average variable costs of $\mathbf{N} \$ 6$ and average total costs of $\mathrm{N} \$ 10$ when it produces 1000 units of bottled water. The firm's total fixed costs equal ...
(a) $\mathrm{N} \$ 2000$
(b) $\mathrm{N} \$ 3000$
(c) $\mathrm{N} \$ 4000$
(d) $\mathrm{N} \$ 5000$
6. Which of the following is NOT a condition of perfect competition?
(a) Few number of firms.
(b) Similar products.
(c) Perfect mobility of factors.
(d) Informative advertising to ensure that consumers have good information.
7. A monopolist has a downward sloping demand curve because ...
(a) It has an inelastic demand.
(b) Typically, it sells only to a few large buyers.
(c) Its demand curve is the same as the industry's demand curve.
(d) Consumers prefer that product.
8. Diseconomies of scale ...
(a) Account for the downward-sloping part of the long-run average cost curve.
(b) Account for the upward-sloping part of the long-run average cost curve.
(c) Is associated with the short run.
(d) Is the marginal cost curve above the average variable cost curve.
9. If marginal revenue is $\mathbf{N} \$ 6$ and marginal cost is $\mathbf{N} \$ 4$, the firm seeking to maximize profits should:
(a) Increase its output
(b) Reduce its output
(c) Raise its price
(d) None of the above
10. The competitive firm maximizes profit when it produces output up to the point where ...
(a) Price equals average variable cost.
(b) Marginal revenue equals average revenue.
(c) Marginal cost equals total revenue.
(d) Marginal cost equals marginal revenue.
11. 

Figure 1


Refer to figure 1 above. The equilibrium price and quantity where the Monopolist will maximise profit, is ...
(a) P2 and Q2
(b) P 5 and Q2
(c) P1 and Q1
(d) P3 and Q3
12. Diminishing marginal returns for the first four units of a variable input is exhibited by the total product sequence:
(a) $50,50,50,50$
(b) $50,40,30,20$
(c) $50,110,180,260$
(d) $50,90,120,140$
13. Average total cost is ...
(a) Total fixed cost minus total variable cost.
(b) Total cost divided by the number of units of the fixed factor.
(c) Total fixed cost plus total variable cost divided by the number of units of output.
(d) None of the above.
14. Which of the following curves is not U-shaped but continues to decline as output increases?
(a) Average fixed cost curve
(b) Average variable cost curve
(c) Average (total) cost curve
(d) Marginal cost curve
15. The short-run supply curve of a firm in a perfectly competitive market ...
(a) Depends on the industry's supply curve.
(b) Depends on the industry's demand curve.
(c) Is identical to the firm's MC curve above its AVC curve.
(d) Is the rising part of the average total cost curve.

Figure 2

16. The diagram in Figure 2 above portrays:
(a) A competitive firm which should shut down in the short run
(b) A competitive firm which is realizing an economic profit
(c) The loss-minimizing position of a competitive firm in the short run
(d) The equilibrium position of a competitive firm in the long run
17. The equilibrium price of rhino horns will increase if, ceteris paribus:
a) Consumers are more aware that there are no medical benefits from rhino horn consumption.
b) There is a surplus of rhino horns.
c) The supply of rhino horns decreases.
d) Rhino horn is a normal good and income decreases
18. Which of the following is the most accurate description of a monopolist?
(a) A firm that produces a single product.
(b) A firm that is the sole producer of a narrowly define product class, such as yellow, grade A, butter produced in Jackson County, Wisconsin.
(c) A firm that is the sole producer of a product for which there are no good substitutes in a market with high barriers to entry.
(d) A firm that is large relative to its competitors.
19. A firm supplies 6 units of a product at a total cost of $\mathbf{N} \$ 60$ and supplies 7 units at a total cost of $\mathbf{N} \$ 72$. The marginal cost of the $7^{\text {th }}$ unit is thus ..
(a) $\mathrm{N} \$ 12$
(b) $\mathrm{N} \$ 132$
(c) $\mathrm{N} \$ 1$
(d) $\mathrm{N} \$ 10$
20. Economic profit is equal to ...
(a) Total revenues minus explicit costs
(b) Total revenues minus implicit costs
(c) Total revenues minus marginal costs
(d) Total revenues minus explicit and implicit costs

## Instructions:

- Answer all the questions.
- All answers should be on the answer sheet provided on page 13. Tear the page off and place it inside your examination script.

1. Capital in economics mean the money that banks lend to firms. [T/F]
2. If tuition plus other expenses of studying at the Polytechnic come to $\mathbf{N} \$ 10000$ per year, and you could have earned $\mathrm{N} \$ 12500$ per year working instead, the opportunity cost of your year of study is $\mathrm{N} \$ 2500$ [T/F]
3. In a market economy, the allocation of resources is determined only by producers who purchase factors of production. [T/F]
4. If an economy experiences increasing opportunity costs, its production possibilities curve is a curved line (bowed out) concave to the origin. [T/F]
5. A decrease in the price of apples will result in an increase in the quantity demanded of apples. [T/F]
6. An increase in supply, ceteris paribus, raises the equilibrium price. [T/F]
7. The supply curve for houses would probably shift leftward if the wages of construction workers were increased. [T/F]
8. A price floor is a minimum price and must be set above the equilibrium price to be effective. [T/F]
9. If the price elasticity of demand for cell phones is greater than one then the manufacturers of cell phones can increase their total revenue by raising the price of cell phones. [T/F]
10. If an increase in the price of sugar leaves the total revenue unchanged, then the price elasticity of demand for sugar is equal to one. [T/F]
11. According to the principle of diminishing marginal utility, if consumption of a third glass of beer gives 10 utils of satisfaction, the fifth glass of beer must give less than 10 utils of satisfaction. [T/F]
12. The law of diminishing returns states that if increasing quantities of a variable factor are applied to a given quantity of fixed factors, the marginal product will eventually decrease with the average product remaining constant. [T/F]
13. When a firm's total revenue is less than its total economic costs, the firm is earning a normal profit only. [T/F]
14. Average fixed cost decreases, reaches a minimum and then increases. [T/F]
15. Marginal cost is the addition to total cost required to produce one additional unit of a product. [T/F]
16. Under perfect competition the market price also represents the marginal revenue and average revenue of the firm. T/F]
17. A perfectly competitive firm maximises profits by choosing the optimal price. [T/F]
18. The shut-down point for the firm is where price is equal to minimum average variable cost. [T/F]
19. In the short run, a perfectly competitive firm can earn normal profit only. [T/F]
20. Under monopoly the market demand curve is also the firm's marginal revenue curve. [T/F]

## SECTION C 20 Marks

## Instructions:

- Answer all the questions in this section.
- Answer each question on a new page.


## QUESTION 1 [20 marks]

Daniel loves music and often has to decide whether to buy the CD of his favourite band or the live- in concert DVD. He has a limited income of $N \$ 600$ per month and CDs cost N\$ 100 each, while DVDs cost $\mathrm{N} \$ 150$ each. Answer the question that follow Table 1: Utility schedule for CDs and DVDs

| Units | CDs |  |  |  | DVDs |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
|  | TU | MU | MU/P | TU | MU | MU/P |  |
|  | 0 |  |  |  | 0 |  |  |
| 1 | 150 |  |  |  | 170 |  |  |
| 2 | 280 |  |  |  | 150 |  |  |
| 3 | 380 |  |  |  | 100 |  |  |
| 4 | 470 |  |  |  | 85 |  |  |
| 5 | 545 |  |  |  | 75 |  |  |

1.1 Copy Table 1 in your answer book and complete the columns for marginal utility (MU) and MU/P.
1.2 At which combination of CDs and DVDs that Daniel will be in equilibrium if he spends his total income of $\mathrm{N} \$ 600$ ? (2)
1.3 What is Daniel's total utility at that point of equilibrium (2)

## SECTION D

## 20 Marks

## Instructions:

- Answer all questions.
- Answer each question on a new page.


## QUESTION 1 [20 marks]

The firm produces a product which it sells in a perfectly competitive market, the price of the product is $\mathbf{N} \$ 12$ per unit and the firm's cost structure is given in table 2

Table 2: Production Schedule

| Units | TFC | TVC | TC | ATC | AVC | MC |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 0 |  |  | 20 |  |  |  |
| 1 |  | 10 |  |  |  |  |
| 2 |  |  |  |  |  | 6 |
| 3 |  | 24 |  |  |  |  |
| 4 |  |  |  | 13.5 |  |  |
| 5 |  |  | 66 |  |  |  |
| 6 |  |  |  |  |  | 14 |
| 7 |  | 76 |  |  |  |  |
| 8 |  |  |  |  |  |  |
|  |  |  | 114 |  |  |  |

1.1 Copy table 2 in your answer book and complete the table (16)
1.2 How many units should this firm produce to maximise its profits? Why? (2)
1.3 Calculate this firm's total profit or total loss at the profit maximising output level (2)

## SECTION E 20 Marks

## QUESTION 1 [20 marks]

1.4 Compare perfect competition and monopoly regarding the aspects listed below: (8)

|  | Perfect competition | Monopoly |
| :--- | :--- | :--- |
| (a) Number of firms |  |  |
| (b) The product |  |  |
| (c) Market entry |  |  |
| (d) Control over the price |  |  |

1.5 What is price discrimination? Why does a monopolist want to practice price discrimination? (1)
1.6 What are the conditions necessary for the monopolist to be able to practice price discrimination? (3)
1.7 Use a diagram to illustrate the equilibrium position of a monopolist that makes an economic (surplus) profit. Clearly indicate the firm's total profit. (8)

Student number: $\qquad$
Name of lecturer: $\qquad$

## ANSWER SHEET FOR SECTION A

Mark the correct answer with an X .

| Question <br> Number | a | B | C | d |
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Student number:
Name of lecturer:

## ANSWER SHEET FOR SECTION B

Mark the correct answer with an X .

|  | True | False |
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