ПAmIBIA UПIVERSITY
OF SCIEחCE AחD TECHTOLOGY

## FACULTY OF COMMERCE, HUMAN SCIENCES AND EDUCATION DEPARTMENT ACCOUNTING, ECONOMICS AND FINANCE

| COURSE NAME: PRINCIPLES OF MICROECONOMICS | COURSE CODE: PMI511S |
| :--- | :--- |
| DATE: JUNE 2022 | SESSION: PAPER THEORY |
| DURATION: $\mathbf{3}$ 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. Answer Section $A$ and $B$ on the attached answer sheet.

## PERMISSIBLE MATERIALS

1. Scientific calculator
2. Pen and Pencil
3. Ruler

## SECTION A

20 MARKS

## Instructions:

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

## QUESTION 1 [20 marks]

1.1 The following can be identified as a need except,
A. Drinking water.
B. Eating food.
C. Safety and security
D. Latest Adidas shoes.
1.2 The diagram below illustrates:

A. Economic decline.
B. Improved techniques in producing capital goods.
C. Improved techniques in producing consumer goods.
D. Improved techniques in producing both goods.
1.3 Abraham Smith published a book with the title
A. 'An enquiry into the nature and causes of the wealth of nations'
B. 'The communist manifesto'
C. 'Das Kapital'
D. 'The general theory of employment, interest and money'
1.4 An open economy is the interaction of the sectors of the economy which include.
A. Households, firms, government, and the foreign sector.
B. Land, labour, capital, and entrepreneurship.
C. Factor market and goods market.
D. Market sector, command sector and mixed sector.
1.5 The following need to be considered when drawing a demand curve.
A. The Price is the independent variable, and we always plot it on the $Y$-axis.
B. The Price is the independent variable, and we always plot it on the $X$-axis.
C. The Quantity is the independent variable, and we always plot it on the Y -axis.
D. The Quantity is the independent variable, and we always plot it on the X -axis.
1.6 $\qquad$ is an exogenous variable or shift factor of demand.
A. Prices of related goods
B. Technology
C. Taxes and subsidies
D. The price of factors of production and other input
1.7 Suppose the price of a good increases fromN $\$ 10$ to $N \$ 25$ but the quantity supplied remains 15 . Elasticity of Supply is?
A. Perfectly inelastic supply.
B. Relatively inelastic supply.
C. Unit elastic supply.
D. Relatively elastic supply.
1.8 On a linear or straight line demand curve, the elasticity of demand varies over the length of the curve.
A. Above the midpoint of the curve price elasticity of demand is greater than 1 (elastic).
B. At the midpoint price elasticity of demand is less than 1 (inelastic).
C. Below the midpoint price elasticity of demand is equal to 1 (unit elastic).
D. Outside the curve it is unattainable and inefficient.
1.9 The price elasticity of demand for a good that is a necessity is likely to be:
A. Unit elastic.
B. Perfectly elastic.
C. Elastic, but not perfectly elastic.
D. Inelastic.
1.10 Negative values of the price elasticity of demand of a good can be attributed to:
A. The Law of Demand.
B. The Law of Supply.
C. The Law of Increasing Marginal Utility.
D. The Law of Diminishing Marginal Rate of Substitution.
1.11 The general rule for benefit maximization suggests that in personal equilibrium:
A. The ratio of total benefits to price should be identical across all goods.
B. The ratio of total benefits to income should be identical across all goods.
C. The ratio of marginal benefits to price should be identical across all goods.
D. The ratio of marginal benefits to income should be identical across all goods.
1.12 Increases in the marginal product of labor can be attributed to:
A. Specialization of workers.
B. Depreciation of capital.
C. Diminishing returns to workers.
D. Congestion and thus better use of workspace
1.13 Total revenue earned from the sale of a good is:
A. The price at which the good is sold.
B. The difference between price and cost of production of the good.
C. The product of price and quantity of the good sold in the market.
D. The product of cost of production and quantity of the good sold in the market.
1.14 The average revenue received by a firm in a perfectly competitive market
A. Increases with the quantity of output sold.
B. Decreases with the quantity of output sold.
C. Is at first greater than and later less than the marginal revenue.
D. Is equal to the market price.
1.15 If a perfectly competitive firm increases production from 10 to 11 units and the market price is $N \$ 20$ per unit, the total revenue for 11 units would be
A. $N \$ 10$
B. $N \$ 20$
C. $N \$ 210$
D. $N \$ 220$
1.16 The demand curve for a product sold by a firm in a perfectly competitive market is
A. Unit elastic.
B. Perfectly elastic.
C. Perfectly inelastic.
D. Relatively but not perfectly elastic.
1.17 The profit - maximising level of output for a perfectly competitive firm is where
A. Marginal revenue equals price.
B. Total revenue equals total cost.
C. Marginal cost equals marginal revenue.
D. Average revenue equals average total cost.
1.18 A downward-sloping demand curve exists for
A. A monopolist, but not for a perfectly competitive firm.
B. A perfectly competitive firm, but not for a monopolist.
C. Both A and B
D. None of the above
1.19 The profit maximising rule MC=MR is followed by
A. A perfectly competitive firm, but not a monopoly.
B. A monopolist, but not a perfectly competitive firm.
C. Both a monopolist and a perfectly competitive firm.
D. Either a monopolist or a perfectly competitive firm, depending on the shape of the demand curve.
1.20 Which of the following is not an example of price discrimination?
A. The local club offering lower rates to students.
B. "Buy two, get one" free pizza promotions at Scooters Pizzeria.
C. The lower cost structure of momondo.com which allows it to sell cheaper airline tickets.
D. Cheaper electricity during off-peak periods.

## SECTION B <br> 20 MARKS

## Instructions:

1. Answer all the questions.
2. All answers should be on the answer sheet provided on page 14. Tear the page off and place it inside your examination script.

## QUESTION 1 [20 marks]

1.1 Wants are described as the things that we as human beings desire and they are unlimited. [T/F]
1.2 According to Abraham Maslow, social needs reflect the need to be recognised and respected by others [T/F]
1.3 Microeconomics focuses on the economy as a whole. [T/F]
1.4 In a market economy, consumers use "money votes" that is their financial resource to dictate to producers, through the market, what to produce. [T/F]
1.5 When we construct a production possibilities curve, we assume that all resources are fixed. [T/F]
1.6 In a three-sector circular flow model, the households which offers factors of production to the firms, also offer some of its production factors to the government through the factor market. [T/F]
1.7 A demand schedule is a graph that shows quantities demanded at different prices. [T/F]
1.8 A supply curve shows the relationship between output and the total cost of production. [T/F]
1.9 A good is said to have an elastic supply if its price elasticity of supply is greater than one. [T/F]
1.10 The process by which inputs are transformed to outputs is referred to as distribution. [T/F]
1.11 In the long run some inputs of a firm can be changed. [T/F]
1.12 Average product is the change in the total output of a firm associated with using one more unit of an input. [T/F]
1.13 The marginal cost curve intersects the average total cost curve at its minimum. [T/F]
1.14 Accounting profit is the difference between total revenue and implicit costs. [T/F]
1.15 Firms under a perfect competition have greater degree of monopoly power than any other market structures. [T/F]
1.16 In a perfect competition market structure factors of production are regarded as immobile [T/F]
1.17 Output production for a monopoly is bigger and they charge relatively low prices compared to firms in perfect competition. [T/F]
1.18 Because a perfectly competitive firm supplies a negligible share of the market output, it must "take" or accept the price that is determined by the market. [T/F]
1.19 A firm that makes zero economic profit is said to earn a normal profit and it represents the minimum profit necessary to keep a firm in operation. [T/F]
1.20 In a competitive market a firm has a negatively sloped demand curve and in a monopolistic market it has a horizontal demand curve. [T/F]

## SECTION C

## QUESTION 1 [15 marks]

1.1 Use the information provided to answer the following questions:
i) Use the chart below to draw a PPC curve, with shoes on the $y$-axis and hats on the $x$ axis

Table 1: Production Possibilities schedule

|  | A | B | C | D | E |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Hats | 0 | 1 | 2 | 3 | 4 |
| Shoes | 30 | 29 | 25 | 15 | 0 |

ii) Calculate the opportunity cost from moving between combination B to C (1 mark)
iii) Label the following points on the graph:

X= Underutilization/inefficient
$Y=$ Impossible given current resource
iv) List the four factors of production
v) How does the PPC illustrate the ideas of scarcity and trade-offs?
vi) Mention at least 2 assumptions when constructing a production possibilities curve

## QUESTION 2 [5 marks]

2.1 Using your knowledge of demand and Supply in Economics with the aid of a diagram indicate what would happen to the demand, supply, price and quantity of clothing if there is a recession and income falls (assume that clothing are a normal good)

## SECTION D 20 MARKS

## QUESTION 1 [10 marks]

1.1 The quantity demanded of a particular brand of pens is 600 units when price per unit is $N \$ 5$. When the price increases to $\mathbf{N} \$ 20$, the quantity demanded falls to 200 units.
a) Calculate the arc price elasticity of demand.
b) What should the sellers of this product do to the price to increase their total revenue? Motivate your answer.
1.2 Classify and draw the demand curves for two goods with the following price elasticities of demand:
a) Price elasticity of demand $=\infty$
(2 marks)
b) Price elasticity of demand=0
(2 marks)

## QUESTION 2 [10 marks]

2.1 The following table shows the total utility that Denise derives from consuming different quantities of muffins. Study the table and answer the questions that follow.

Table 2: Total utility for muffins

| Quantity of Muffins Consumed | Total Utility |
| :--- | :--- |
| 0 | 0 |
| 1 | 10 |
| 2 | 18 |
| 3 | 24 |
| 4 | 29 |
| 5 | 30 |

a) What is the marginal utility that Denise derives from the third muffin?
b) If there is a sixth muffin that Denise consumes, and the marginal utility derived from it is -2 , what is the total utility derived when the sixth muffin has been consumed?
c) If the price of one muffin is $N \$ 3$, what is the marginal benefit per dollar spent on the fifth unit?
2.2 Define the term "consumer surplus."
(2 marks)
2.3 If your willingness to pay for a good is $\mathbf{N} \$ 400$ and you get it at a discount price of N\$270, what is your consumer surplus?
2.4 A candy shop that produces 100 bars of chocolate has a total cost of $\mathrm{N} \$ 500$ and a fixed cost of $N \$ 20$. Calculate the average variable cost of the shop.

## SECTION E

## QUESTION 1 [9 marks]

1.1 Table 3: Revenue and Cost conditions of Step-Ahead (Pty) Ltd.

| Output <br> (Q) | P=MR | Total <br> Revenue <br> (N\$) | Average <br> Total Cost <br> (N\$) | Total Cost <br> (N\$) | Marginal <br> Cost <br> (N\$) | Total <br> Profit/Loss <br> (N\$) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 10 | 10.00 |  | 20.80 |  |  |  |
| 20 | 10.00 |  | 12.40 |  | 4.00 |  |
| 30 | 10.00 |  | 9.90 |  | 5.00 |  |
| 40 | 10.00 |  | 8.80 |  | 8.20 |  |
| 50 | 10.00 |  | 9.00 |  | 10.00 |  |
| 60 |  |  |  |  |  |  |

a) Complete the table above.

## QUESTION 2 [11 marks]

Figure 1

2.1 What quantity will this monopolist produce at equilibrium?
2.2 At what price is this monopolist selling the product?
2.3 What is the condition for profit maximization (or loss minimisation) for this monopolist? (1 mark)
2.4 What is the total revenue of this firm?
2.5 Mention any two characteristics of a monopoly.
2.6 Explain without reference to the above graph, how a monopolist can become more profitable by using price discrimination.
(4 marks)

## Student number

$\qquad$

## ANSWER SHEET FOR SECTION A

Mark the correct answer with an X.


[^0]
## ANSWER SHEET FOR SECTION B

Mark the correct answer with an X .

|  | True | False |
| :---: | :---: | :---: |
| 1.1 |  |  |
| 1.2 |  |  |
| 1.3 |  |  |
| 1.4 |  |  |
| 1.5 |  |  |
| 1.6 |  |  |
| 1.7 |  |  |
| 1.8 |  |  |
| 1.9 |  |  |
| 1.10 |  |  |
| 1.11 |  |  |
| 1.12 |  |  |
| 1.13 |  |  |
| 1.14 |  |  |
| 1.15 |  |  |
| 1.16 |  |  |
| 1.17 |  |  |
| 1.18 |  |  |
| 1.19 |  |  |
| 1.20 |  |  |


[^0]:    Student number

