

TAMIBIA UNIVERSITY

OF SCIENCE AND TECHNOLOGY

FACULTY OF MANAGEMENT SCIENCES

DEPARTMENT OF ACCOUNTING, ECONOMICS AND FINANCE

QUALIFICATION: BACHELOR OF ECONOMICS		
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COURSE CODE: PMI511S COURSE NAME: PRINCIPLES OF MICROECONOMICS		
SESSION: JUNE 2019 PAPER: THEORY		
DURATION: 2 HOURS	MARKS: 100	

	FIRST OPPORTUNITY EXAMINATION QUESTION PAPER			
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INSTRUCTIONS
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

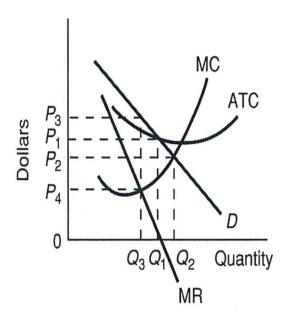
Instruction: Please use the answer sheet at the end of Question paper. Cross the alternative you select with an X.

- 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

- Spring Hill Bottling Company has average variable costs of N\$6 and average total costs of N\$10 when it produces 1 000 units of bottled water.
 The firm's total fixed costs equal ...
- (a) N\$ 2 000
- (b) N\$ 3 000
- (c) N\$ 4 000
- (d) N\$ 5 000
- 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 N\$6 and marginal cost is 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) P5 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.

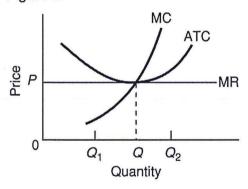
14. Which of the following curves is not U-shaped but continues to decline as output increases?

- (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 N\$60 and supplies 7 units at a total cost of N\$72. The marginal cost of the 7th unit is thus ...
- (a) N\$12
- (b) N\$132
- (c) N\$1
- (d) 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

SECTION B 20 Marks

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 N\$10 000 per year, and you could have earned N\$12 500 per year working instead, the opportunity cost of your year of study is N\$2 500 **[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 N\$ 150 each. Answer the question that follow Table 1: Utility schedule for CDs and DVDs

	CDs		DVDs			
Units	TU	MU	MU/P	TU	MU	MU/P
0	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. (16)
- 1.2 At which combination of CDs and DVDs that Daniel will be in equilibrium if he spends his total income of 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 **N\$12 per unit** and the firm's cost structure is given in table 2

Table 2: Production Schedule

Units	TFC	TVC	тс	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)

TOTAL MARKS FOR PAPER: 100



Student number:	
Name of lecturer:	

ANSWER SHEET FOR SECTION A

Mark the correct answer with an X.

Question				
Number	а	В	С	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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