חATIBIA UПIVERSITY
OF SCIEПCE AПD TECHПOLOGY FACULTY OF COMMERCE, HUMAN SCIENCES AND EDUCATION DEPARTMENT OF ECONOMICS, ACCOUNTING AND FINANCE

| QUALIFICATION: BACHELOR OF ECONOMICS |  |
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| 1ST OPPORTUNITY EXAMINATION QUESTION PAPER |  |
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## INSTRUCTIONS

1. This question paper is made up of Five (5) sections.
2. Answer Section $A$ and $B$ on the attached answer sheet
3. Write each question on a separate page in your answer booklet
4. Write neatly and legibly

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THIS QUESTION PAPER CONSISTS OF 18 PAGES (Including this front page)

## SECTION A <br> 20 Marks

## Instructions:

- Read all questions carefully
- Answer all questions
- All answers should be on the answer sheet provided on page 16. Tear the page off and place it inside your examination script.


## QUESTION 1

1.1 Which of the following would most likely to shift the production possibilities curve to the left?
[1 mark]
A. A sudden and substantial expansion of consumer wants
B. An improvement in the literacy level and general level of education
C. A decline in the size of the population and labour force
D. Shifting resources from the production of capital goods to the production of consumer goods.
1.2 If a country is producing on its production possibilities curve, then...
A. It cannot produce more of one good without producing less of the other good
B. It is not using all of its available resources
C. It is impossible, as you can only produce within your production possibilities curve
D. None of the above is true

### 1.3 Opportunity cost is

[1 mark]
A. The cost of not acting on all opportunities
B. Irrelevant when the economy is at full employment
C. Irrelevant when the economy is not operating at full employment
D. The value of the next best alternative action that has been forgone
1.4 Which of the following is a correct match of an economic resource and payment for that resource?
A. Land and rental income
B. Labour and profit
C. Capital and salaries
D. Entrepreneurial ability and wages
1.3 Which of the following is a problem with a market economy?
[1 mark]
A. There is no reward for initiative.
B. The government finds it difficult to coordinate the plans of producers and households.
C. The government finds it difficult to decide which goods and services to produce.
D. The goods which are produced are distributed according to current patterns of income and wealth
1.6 On a linear downward sloping demand curve, the elasticity of demand is one: [1 mark]
A. At its vertical intercept
B. At its midpoint
C. It its horizontal intercept
D. Above the linear curve
1.7 If the price elasticity of demand is 1.2 and a firm increases the price of its product it would expect its total revenue to:
[1 mark]
A. Decrease
B. increase
C. stay the same
D. None of the above
1.8 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 $X$-axis.
B. The Price is the independent variable, and we always plot it on the $Y$-axis.
A. The Quantity is the independent variable, and we always plot it on the $Y$-axis.
B. The Quantity is the independent variable, and we always plot it on the X -axis.

### 1.9 Which of the following would cause an increase in the demand for Namibian beef? [1 mark]

A. A fall in the price of land for rearing cattle
B. An improvement in farming technique
C. A fall in consumers' income (assume beef is a normal good)
D. An increase in the price of chicken
1.10 If people expect the price of Namcor shares to increase because of an expected future increase in the price of oil, what will happen to the equilibrium price of Namcor shares? [1 mark]
A. Is likely to increase now because of an increase in the supply of Namcor shares
B. Is likely to increase now because of an increase in the demand for Namcor shares
C. Will only increase once the oil price increases
D. Is undetermined because we do not really know what will happen to the oil price in future

### 1.11 Total utility describes

A. The benefit gained from all consumption.
B. Tn increase in consumption multiplied by the gain in utility.
C. Total consumption multiplied by marginal utility.
D. Total consumption divided by marginal utility.
1.12 Sue spends her income of $\mathbf{N} \$ 12$ on only two goods: sandwiches and pop. Initially, the price of a sandwich is $\mathbf{N} \$ 4$ and the price of pop is $\mathbf{N} \$ 2$ a can. If the price of a sandwich rises to $\mathrm{N} \$$ 6, Sue will buy $\qquad$ . [1 mark]
A. More pop
B. Fewer sandwiches
C. Fewer cans of pop so that she can still afford to buy two sandwiches.
D. Both options A and B are correct.
1.13 Marginal utility theory predicts that as the price of coffee rises, the $\qquad$ a substitute for coffee $\qquad$ and the $\qquad$ .
A. Supply of; increases; demand for coffee decreases.
B. Supply of; decreases; supply of coffee increases
C. Demand for; increases; quantity demanded of coffee decreases.
D. Demand for; decreases; demand for coffee increases
1.14 Jitters Coffee Company can lower the cost of packaging a pound of coffee by doubling the quantity packaged each day, Jitters is achieving $\qquad$ [1 mark]
A. Economies of scale
B. Economies of scope
C. Economies of team production
D. All of the above
1.15 Which of the following is NOT an assumption of marginal utility theory? [1 mark]
A. A consumer derives utility from the goods consumed.
B. Each additional unit of consumption yields additional utility.
C. Consumers maximize their total utility.
D. As more of a good is consumed, the decrease in the marginal utility from the good means that the total utility from the good decreases also.
1.16 A perfectly competitive firm will maximize profits by
A. Setting the price so that marginal revenue equals marginal cost.
B. Setting a price so that total revenue is at a maximum.
C. Producing all the output it can at any particular price.
D. Setting the price so that price exceeds the total cost by the greatest amount.
1.17 The short-run supply curve of a firm in a perfectly competitive market is
A. Derived from the market supply curve.
B. Identical to the firm's AVC curve above its MC curve.
C. Identical to a firm's MC curve above its AVC curve.
D. The same as the firm's demand curve.
1.18 An individual firm in a perfectly competitive market faces a demand curve that
A. Slopes downward to the right.
B. Slopes upward to the right.
C. Is the same as the market demand curve.
D. Appears flat (horizontal).
1.19 In a monopolised industry
A. There must be barriers to entry if the monopoly is to persist.
B. Other firms have no incentive to enter.
C. Profits are inevitable.
D. There will be less incentive to lower costs than under perfect competition.
1.20 A pure monopoly may be based on
A. A patent right or an exclusive government franchise.
B. Sole control over the supply of raw materials.
C. Economies of scale.
D. All of the above.

## SECTION B 20 Marks

## Instructions:

- Read all questions carefully
- Answer all questions
- All answers should be on the answer sheet provided on page .17. Tear the page off and place it inside your examination script.


## QUESTION 1

## [20 marks]

1.1 Goods are scarce because society's desire for them exceeds society's ability to produce them. [T/F]
1.2 Namibia's production possibilities curve will shift outward (rightward) if additional resources are discovered in Namibia. T/F
1.3 Many modern economic systems are based largely on tradition.

T/F
1.4 Ceteris paribus, a production possibilities curve will show scarcity when points of combination are outside the curve .
1.5 Opportunity cost is best defined as the amount of labour that must be used to produce one unit of every product. .
[T/F]
1.6The demand for cigarettes tend to have inelastic demand.
1.7 If a product is having price elasticity of demand greater than 1 , then a decrease in its price would increase the total revenue. T/F
1.8 Consider a market for the supply of DVD players. If there is a removal of a subsidy by the government the supply curve shifts to the left . T/F
1.9 A price ceiling is imposed mainly to protect the interests of the producer in a particular industry?
1.10 The income and substitution effect explains the rationale behind the downward slope of the demand curve which shows an indirect relationship between the price of a good and the quantities demanded of that particular good. T/F
1.11 If an increase in the number of workers increases total product, then marginal returns are increasing. T/F
1.12 A firm's total cost in the short run is the sum of its fixed cost plus its variable cost plus its marginal cost. T/F
1.13 In the long run, total fixed cost equals zero. T/F
1.14 Marginal utility is the total satisfaction that a person gets from the consumption of all the units of a good consumed. T/F
1.15 The principle of diminishing marginal utility says that total utility increases by smaller and smaller amounts as the quantity of the good, consumed increases. T/F
1.16 If all firms in a perfectly competitive market earn economic profits, new firms will be attracted to the market. The supply of the good will increase, thus lowering its price. Eventually all firms will be earning normal profit only.
1.17 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]
1.18 In a competitive market a firm cannot control the price of the product and in a monopolistic market, it can.
[T/F]
1.19 The supply curve of a firm in a perfectly competitive market is the rising part of the Variable cost curve above the average (total) cost curve.
[T/F]
1.20 In a Monopoly market, firms take the market price as a given, which implies that the market demand is infinitely elastic. [

T/F]

## SECTION C <br> 20 Marks

## QUESTION 1

Walvis Bay is a small town in Namibia. The inhabitants grow potatoes and catch fish. The accompanying table shows the maximum annual output combinations of potatoes and fish that can be produced. Obviously, given their limited resources and available technology, as they use more of their resources for potato production, there are fewer resources available for catching fish.

Table 1: Production possibilities for potatoes and fish

| Maximum annual <br> output options | Quantity of <br> potatoes (kg) | Quantity of fish <br> $\mathbf{( k g})$ |
| :--- | :--- | :--- |
| A | 1,000 | 0 |
| B | 800 | 300 |
| C | 600 | 500 |
| D | 400 | 600 |
| E | 200 | 650 |
| F | 0 | 675 |

1.1 Draw a production possibility frontier with potatoes on the horizontal axis and fish on the vertical axis illustrating these options, showing points A-F. [4 marks]
1.2 Can Walvis Bay produce 500 pounds of fish and 800 pounds of potatoes? Explain. Where would this point lie relative to the production possibility frontier? [3 marks]
1.3 What is the opportunity cost of increasing the annual output of potatoes from 600 to 800 pounds?
1.4 What is the opportunity cost of increasing the annual output of potatoes from 200 to 400 pounds?
1.5 Can you explain why the answers in 1.3 and 1.4 above are not the same? What does this imply about the slope of the production possibility frontier? [4 marks]

## QUESTION 2 (5 marks)

2.1 The following demand and supply market schedule is provided. Use the information to draw and illustrate the market equilibrium price and quantity for the market Nike Sneakers.
[3 marks]

Table 2: Market demand and supply schedule for Nike sneakers

| Quantity Demanded | Price | Quantity supplied |
| :--- | :--- | :--- |
| 5000 | 100 | 1000 |
| 4000 | 200 | 2000 |
| 3000 | 300 | 3000 |
| 2000 | 400 | 4000 |
| 1000 | 500 | 5000 |

2.2 What will happen to the quantities demanded for the Nike sneakers, if the price for a related good, e.g. Puma sneakers, decreases? Show the change on the diagram in your answer 1.1 above. [2 marks]

## SECTION D <br> 20 Marks

## QUESTION 1

## [5 marks]

1.1 Refer to the following coordinates and answer the questions that follow.

Price $1=6$
Quantity $1=350$
Price $2=4$
Quantity $2=450$
a) calculate the price elasticity of demand using arc formula.
b) What type of elasticity does your answer above show and what does it mean [2 marks]

## QUESTION 2

[12 marks]
2.1 Xavier's Pizza's production function is shown in the table below. Assume Xavier currently operates Plant 1. He hires workers at a wage rate of $\mathrm{N} \$ 50$ a day and his total fixed cost is $\mathrm{N} \$ 100$.

| Labor <br> (workers) | Plant 1 | Plant 2 | Plant 3 | Plant 4 |
| :--- | :--- | :--- | :--- | :--- |
| 1 | 8 | 11 | 13 | 14 |
| 2 | 18 | 22 | 24 | 25 |
| 3 | 26 | 30 | 33 | 35 |
| 4 | 31 | 36 | 40 | 43 |
| 5 | 34 | 40 | 45 | 50 |
| 6 | 35 | 42 | 48 | 54 |
| Ovens | 1 | 2 | 3 | 4 |

a) Calculate Xavier's Pizza's total variable cost and marginal cost in the table below.
b) Economies of scale refer to a decline in unit costs as output increases. Mention any two reasons for a reduction in unit costs.
[2 marks]
a) Draw Xavier's marginal, average variable, and average total cost curves in one figure.[5 marks]
3.1 The table below gives the total utility Ester derives from the consumption of cookies and cake. Jamal has $N \$ 12$ to spend on these two goods. The price of a cookie is $N \$ 3$, and the price of a cake is $\mathrm{N} \$ 1.50$.

Table 3: Ester's Total Utility

| Cookies |  |  |  |
| :---: | :---: | :---: | :---: |
| Quantity | Total utility | Quantity | Total utility |
| 0 | 0 | 0 | 0 |
| 1 | 126 | 1 | 54.0 |
| 2 | 243 | 2 | 103.5 |
| 3 | 342 | 3 | 145.5 |
| 4 | 414 | 4 | 177.0 |
| 5 | 441 | 5 | 196.5 |

a) Ester's budget is $N \$ 12$. For Ester to maximize her utility, how many cookies and cakes should she buy? Show that her Utility is maximized.
[3 marks]

## SECTION E <br> 20 Marks

## QUESTION 1

1.1 Exogenous variable in the market operation mechanism of demand and supply may cause the equilibrium price or equilibrium quantity for a particular good to change thus affecting either the consumers or suppliers of that good unfairly.
a) What price control mechanism can be imposed to ensure that consumers are protected in terms of price? Explain what this control mechanism means
b) What are the advantages of this price control mechanism by the government? List three advantages

## QUESTION 2

(15 MARKS)
2.1 Suppose a hotel school at NUST requires every student checking in at the hotel to show proof of residents. The hotel will then set the price for the room only after determining each person's town (or town of residence). What type (degree) of price discrimination does this example illustrate and elucidate why are you saying so?
[ 4 marks]
2.2 List two (2) conditions necessary for third-degree price discrimination.
2.3 Use a diagram to illustrate the equilibrium position of a monopolistic that makes a supernormal profit. Clearly indicate the firm's total profit and state the condition for equilibrium. [ 10 Marks]

Student number:.

ANSWER SHEET FOR SECTION A

Mark the correct answer with an X.

|  | A | B | C | D |
| :---: | :---: | :---: | :---: | :---: |
| 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 |  |  |  |  |

## Student number:..

## 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 |  |  |
| 1.16 |  |  |
| 1.18 |  |  |
| 1.19 |  |  |
| 1.20 |  |  |
| 10 |  |  |
|  |  |  |
|  |  |  |

