higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

N330(E)(N10)H
NOVEMBER EXAMINATION

NATIONAL CERTIFICATE

ECONOMICS N4

(22020034)

10 November 2014 (X-Paper)
09:00–12:00

REQUIREMENTS: Graph paper must be provided.

Calculators may be used.

This question paper consists of 16 pages.

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DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE
ECONOMICS N4
TIME: 3 HOURS
MARKS: 200

NOTE: If you answer more than the required number of questions, only the required number of questions will be marked. All work you do not want to be marked must be clearly crossed out.

INSTRUCTIONS AND INFORMATION

1. ANSWER ALL the questions in SECTION A.
2. Answer any THREE of the four questions in SECTION B.
3. Read ALL the questions carefully.
4. Number the answers according to the numbering system used in this question paper.
5. ALL graphs must be clearly labelled.
6. Write neatly and legibly.

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SECTION A

Answer ALL the questions in SECTION A.

QUESTION 1

Various options are provided as possible answers to the following questions. Choose the answer and write only the letter (A–D) next to the question number (1.1–1.25) in the ANSWER BOOK.

1.1 The fixed cost of the firm …

A increases with a decrease in the output level.
B decreases with an increase in the output level.
C does not vary with the level of output.
D increases with an increase in the output level.

1.2 The convex shape of the indifference curves can be expressed in terms of the …

A law of demand.
B law of supply.
C law of diminishing marginal utility.
D marginal rate of substitution.

1.3 The monopoly's marginal revenue decreases as the quantity sold increases because …

A the demand curve facing the monopoly is negatively sloped.
B the monopoly must increase prices to entice more customers.
C the demand curve facing the monopoly is the marginal income curve.
D All the above.

1.4 Which ONE of the following factors influences the supply of labour?

A The price of the final product
B Legal limits to certain vocations
C The marginal income product
D Transfer earnings

1.5 If the product concerned is an inferior product, the quantity demanded will …

A stay constant as the income of consumers increases.
B decrease as the income of the consumers decreases.
C increase if the income of consumers increases.
D decrease as the income of consumers increases.

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1.6 The production possibility curve will move to the right when…

A there is an improvement in technology.
B the number of suppliers increases.
C the consumers demand more products due to an increase in income.
D None of the above

1.7 The problem of scarcity …

A means that there are shortages of certain products.
B exists because of human needs that cannot be satisfied with the means available.
C exists only in economies that rely on the market mechanism.
D None of the above

1.8 The supply curve has a positive slope because …

A high prices are necessary to cover higher production costs.
B the higher the demand the higher the supply.
C at higher prices firms will make higher profits which will lead to higher outputs.
D it is a graphical representation of the law of supply.

1.9 Economists protest against monopolies because monopolies …

A normally maintain lower levels of production than the perfect competitor.
B produce too much in order to maximise profits.
C contribute to the deficit on the balance of payments.
D do not contribute to the economy.

1.10 Which ONE of the following will cause a decrease in supply?

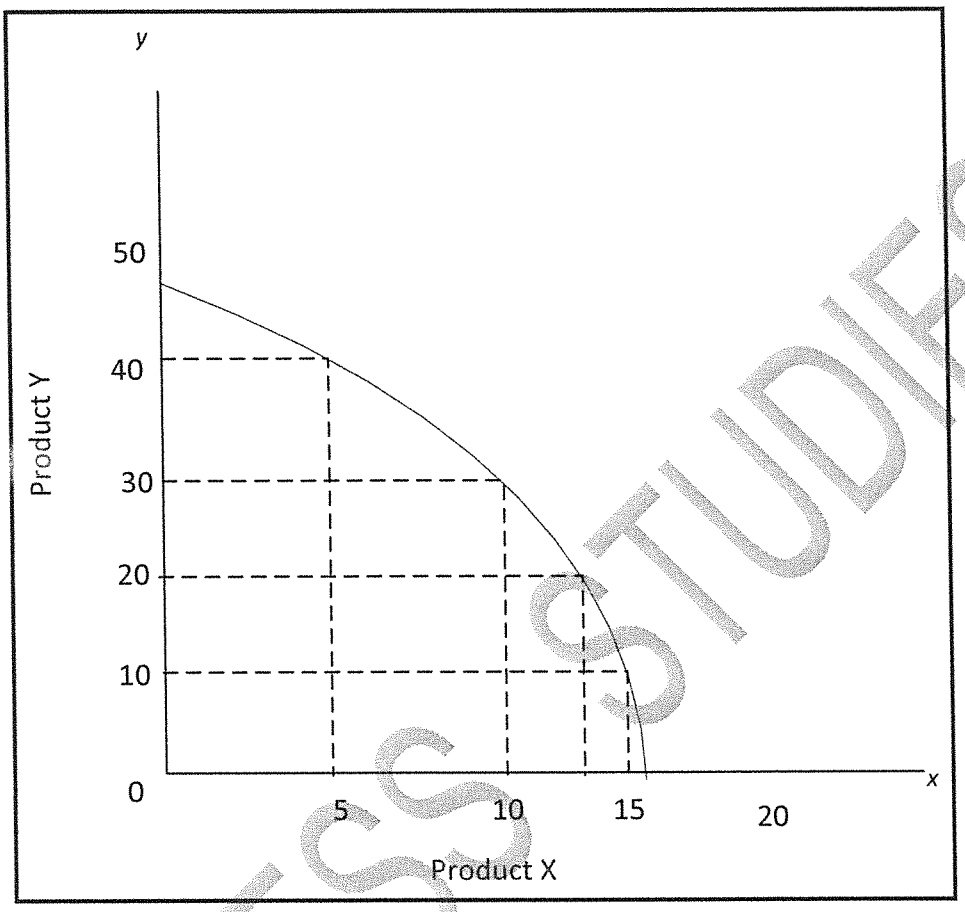
A A decrease in the population
B A decrease in input prices
C An increase in production costs
D An increase in the number of firms

1.11 If the firm is a price taker …

A it can influence the market price by moving up or down the demand curve.
B the supply curve will be a horizontal line against the current market price.
C the market price will be accepted as given, because control cannot be exerted over it.
D it can influence the market price by changing the demand.

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Refer to the production possibility curve in FIGURE 1 and answer the questions.



1.12 If 5 units of product X are currently produced, the opportunity cost of producing 5 more units of product X is ... of product Y.

FIGURE 1

A 20 units
B 10 units
C 30 units
D 15 units

1.13 Refer to the production possibility curve in FIGURE 1 above. If 10 units of product Y is currently produced, the opportunity cost of producing 20 more units of product Y is ... of product X.

A 5 units
B 10 units
C 15 units
D None of the above

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1.14 Marginal cost can be defined as …

A the increase in total variable cost when output increases by one unit.
B the increase in average total cost when output increases by one unit.
C total cost divided by quantity produced.
D the increase in average variable cost when output increases by one unit.

1.15 In economics we distinguish between micro- and macro-economics.

Which ONE of the following is NOT included in micro-economics?

A Allocation of scarce resources to producers
B Factors which influence the national product
C Theory of demand and supply
D Production cost

1.16 If a small percentage drop in the price level causes a large percentage increase in the quantity demanded, …

A demand is unit elastic.
B the price elastic of supply is close to infinity.
C demand is inelastic.
D demand is elastic.

1.17 The sum of the utility derived from consuming a product is referred to as the … utility

A diminishing
B average
C total
D marginal

1.18 A competitive firm should shut down operations when prices fall below the … cost.

A average fixed
B average total
C average variable
D marginal

1.19 A vertical demand curve …

A applies to most products.
B has an income elasticity of 0.
C has infinite price elasticity.
D has a price elasticity of 0.

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1.20 Suppose the equilibrium price on the market for apples is R14 and the equilibrium quantity is 60. A market surplus will exist at any point …

A to the right of the supply curve.
B to the right of the demand curve.
C below the equilibrium position.
D above the equilibrium position.

1.21 A point inside the production possibility curve represents …

A underemployment.
B insufficient use of resources.
C unemployment.
D All the above

1.22 Which ONE of the following is necessarily a consequence of scarcity?

A Low unemployment rate
B Racial discrimination
C Affirmative action
D The requirement to make a choice

1.23 A decrease in the price of a product from R12,50 to R11,50 causes an increase in the quantity demanded from 16 600 to 19 000 units. The price elasticity of demand is therefore …

A 1,2
B 1,6
C 1,25
D 0,62

1.24 Which one of the following is an example of a natural resource?

A Public roads
B Electricity
C Farming land
D An office building

1.25 A price ceiling will …

A result in a shortage.
B result in a surplus.
C clear the market of surpluses and shortages.
D induce entry into a specific industry.

(25 x 2) **[50]**

TOTAL SECTION A: 50

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SECTION B

Answer any THREE of the four questions in SECTION B.

QUESTION 2

2.1 Study the following table and answer the questions.

Number of Labourers	Total Physical Output	Total Fixed Cost	Total Variable Cost	Total Cost
0	0	15	0	15
1	7	15	20	35
2	12	15	45	60
3	16	15	70	85
4	19	15	95	110
5	21	15	120	135

TABLE 1

2.1.1 Calculate the average fixed cost of producing 12 units (Show ALL calculations.) (4)

2.1.2 If the production increases from 12 to 16 units, calculate the marginal cost of ONE of the additional units produced. (Show ALL calculations.) (5)

2.1.3 Calculate the average total cost of producing 19 units. (Show ALL calculations.) (4)

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2.2 The following are descriptions of specific terms used in economics. Write only the correct term for each description next to the question number (2.2.1–2.2.10) in the ANSWER BOOK.

2.2.1 The sensitivity of the consumer towards price changes

2.2.2 The government owns and controls the most important industries

2.2.3 The more of a product is consumed, the lower the satisfaction obtained from it

2.2.4 A market where the seller is a price taker

2.2.5 The executive class of labour

2.2.6 An economic system where the factors of production belong to the government

2.2.7 The cost of production remains constant irrespective of the quantity produced

2.2.8 The fixed price to protect an agricultural sector

2.2.9 Additional products produced by an additional worker employed

2.2.10 The percentage change in the quantity demanded of one product is the same as the percentage change in the price of another product

(10 x 2) (20)

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2.3 The following graph represents the profit maximising position of the individual entrepreneur.

Study the graph and answer the questions.

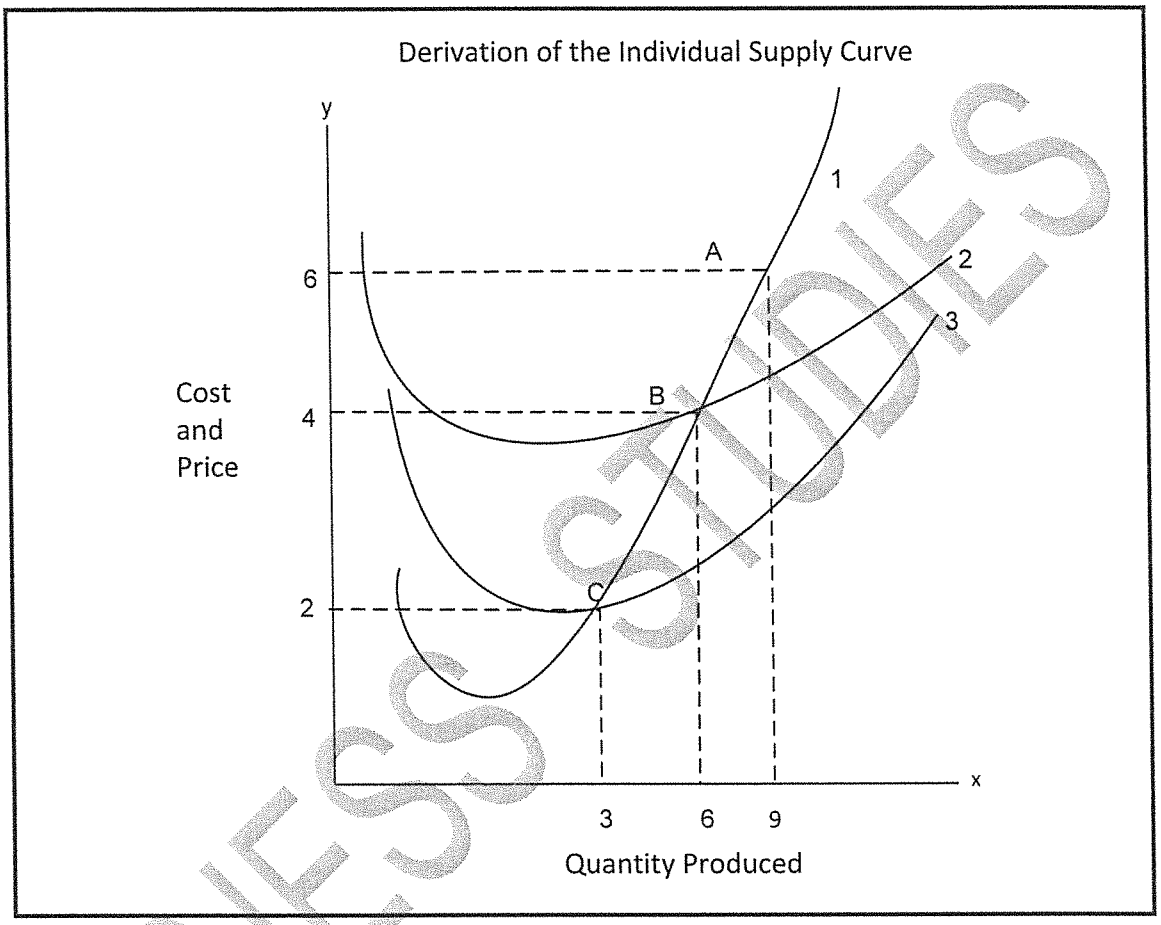


FIGURE 2

2.3.1 At which point on the graph will the firm make normal profits? (2)

2.3.2 Which curve represents the average total cost? (2)

2.3.3 What will the action of the perfect competitor be if the price of the product is R2? Motivate your answer. (5)

2.3.4 Curve 3 represents the … cost. (2)

2.3.5 At which point on the graph will the firm make an abnormal profit? (2)

2.3.6 Curve 1 represents the … cost. (2)

2.3.7 Calculate the total income of the firm at the profit maximising point. (Show ALL calculations.) (2)

[50]

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QUESTION 3

3.1 Study the following graph relating to consumer equilibrium and answer the questions.

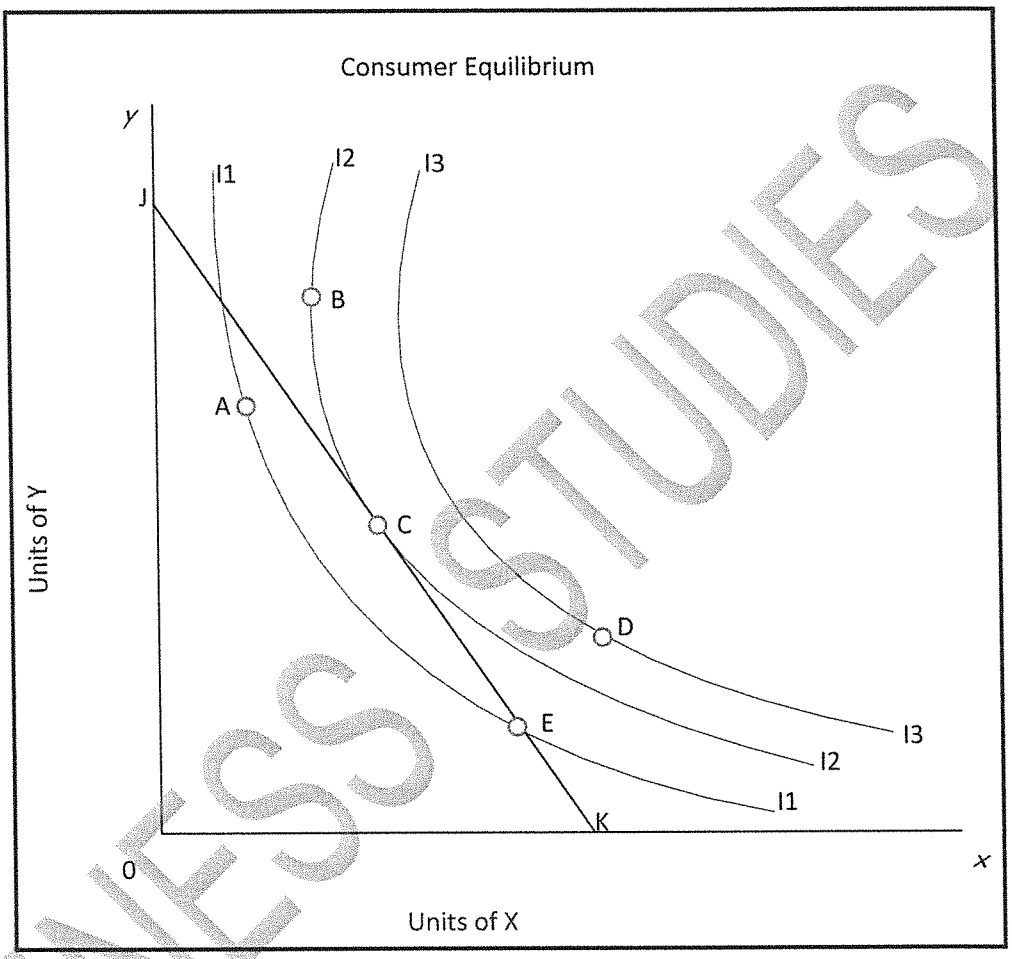


FIGURE 3

3.1.1 What do we call the curves marked I1 to I3? (2)

3.1.2 What do these curves represent? (2)

3.1.3 What is line KJ called? (2)

3.1.4 Which point on the graph represents consumer equilibrium? Motivate your answer. (4)

3.1.5 What does point D represent? (2)

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3.2 Complete the following sentences by filling in the missing word(s). Write only the word(s) next to the question number in the ANSWER BOOK.

3.2.1 The two primary factors of production are … and …

3.2.2 Micro-economics is also known as the …

3.2.3 The products traded on a perfect competitive market are …

3.2.4 If the cost of production increases the supply curve for the product will shift to the …

3.2.5 A decrease in demand combined with an increase in supply will cause the equilibrium price to …

(5 x 2) (10)

3.3 Define the term *transfer earnings.* (3)

3.4 Refer to Table 2 below and answer the questions.

Price	Quantity Demanded	Quantity Supplied
2	50	20
4	40	40
6	30	60
8	20	80
10	10	100

TABLE 2

3.4.1 What is the equilibrium price in the above table? (2)

3.4.2 A market surplus of … will exist at the price of R8. (2)

3.4.3 Suppose the price remains constant, but the quantity demanded increases with 30 units at each price level.

Write down the new quantities demanded for each price level. (5)

3.4.4 With reference to QUESTION 3.4.3 above, the new equilibrium price is … and the new equilibrium quantity is … units. (4)

3.4.5 The increase in demand will lead to a shift of the demand curve to the … (2)

3.5 Briefly state FIVE factors that influence the quantity demanded of a product.

(5 x 2) (10)

[50]

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QUESTION 4

4.1 Suppose the income of a consumer increases from R1 500 to R2 000 and the quantity demanded of a product increases from 30 units to 35 units.

4.1.1 Calculate the income elasticity of demand. (Show ALL calculations.) (8)

4.1.2 The demand for the product is income … (2)

4.2 It is said that people will consume goods and make use of services in order to satisfy needs.

Briefly define the term *consumption*. (4)

4.3 Assuming the income of a household is R1 000 which can be spent on product A and B. The price of product A is R50 per unit and the price of product B is R100 per unit.

Use the information provided to construct the budget line for this household. (8)

4.4 Briefly state FOUR factors that determine the size of the labour force. (4 x 2) (8)

4.5 The size and range/extent of savings in an economy is dependent on various factors.

Briefly name SIX factors determining the extent of savings. (6 x 2) (12)

4.6 Construct a graph representing each of the following types of elasticity. Ensure that all graphs are labelled correctly.

4.6.1 Completely elastic demand

4.6.2 Unit elastic supply

(2 x 4) (8)
[50]

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QUESTION 5

5.1 Indicate whether the following statements are TRUE or FALSE. Choose the answer and write only 'true' or 'false' next to the question number (5.1.1–5.1.5) in the ANSWER BOOK.

5.1.1 A price increase is normally caused by shortages on the market.

5.1.2 The law of demand indicates the positive relationship between the price of a product and the quantity demanded.

5.1.3 The government will levy excise duties on products with an inelastic demand to increase their total revenue received from taxes.

5.1.4 The production possibility curve represents the boundary between production levels that can and cannot be attained when an economy's resources are fully employed.

5.1.5 The main characteristic of a command economic system is the existence of a central plan according to which the economy should develop.

(5 x 2) (10)

5.2 Give FIVE reasons for the existence of imperfect competition. (5 x 2) (10)

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5.3 Study the following graph and answer the questions.

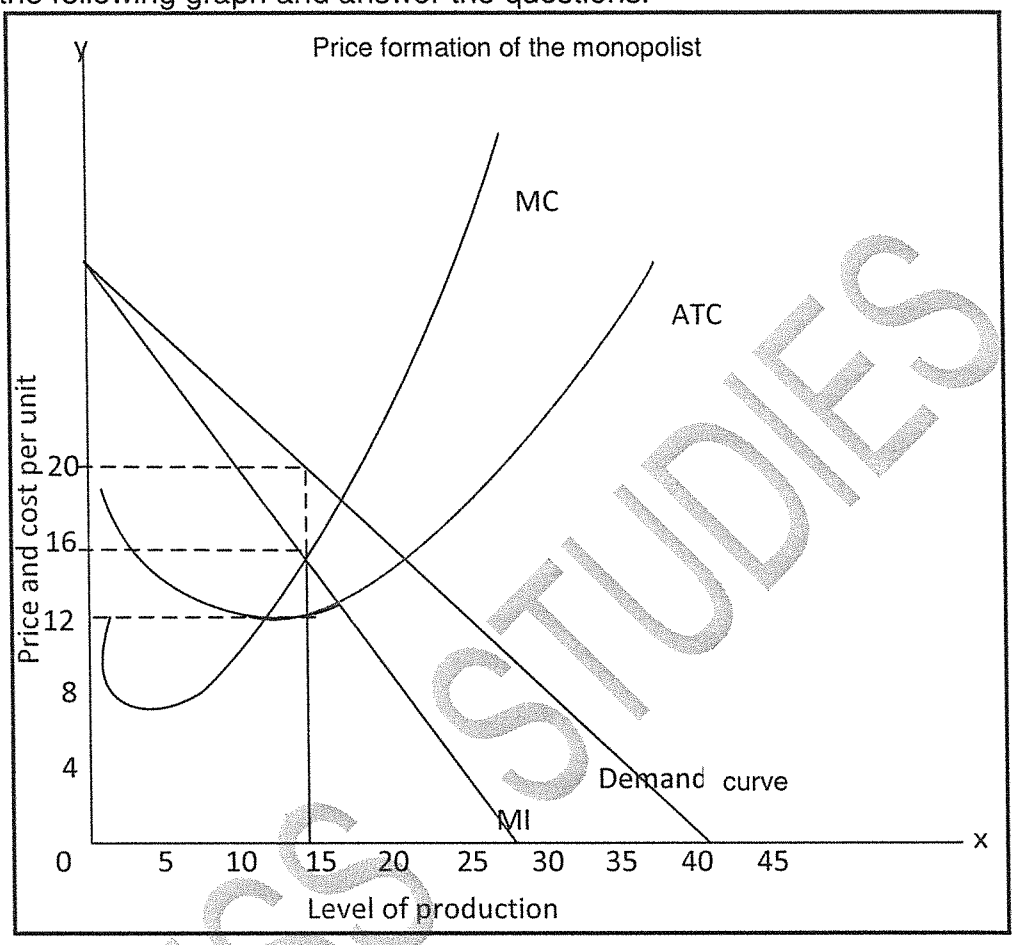


FIGURE 4

5.3.1 What is the price at which the monopolist maximises profits? (2)

5.3.2 What is the profit maximising production level of the monopolist? (2)

5.3.3 Calculate the total income of the monopolist at the profit maximising level. (Show ALL calculations.) (3)

5.3.4 Calculate the total profit of the monopolist at the profit maximising level. (Show ALL calculations.) (3)

5.4 Define the *law of production.* (4)

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5.5 The following table refers to the production function.

Study the table and answer the questions.

Number of Labourers	Total Physical Output
1	10
2	23
3	34
4	43
5	51

TABLE 3

5.5.1 Calculate the average output of the FOURTH labourer. (Show ALL calculations.) (3)

5.5.2 Calculate the marginal output of the SECOND labourer. (Show ALL calculations.) (3)

5.5.3 What happens to the marginal physical output? Motivate your answer. (4)

5.6 In economics we distinguish between land rent and transfer earnings.

Briefly state THREE factors that influence land rent.

(3 x 2) (6)
[50]

TOTAL SECTION B: 150
GRAND TOTAL: 200

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