CENTRAL UNIVERSITY

FAITH · INTEGRITY · EXCELLENCE

2021/2022 END OF FIRST SEMESTER EXAMINATIONS

FACULTY OF ARTS AND SOCIAL SCIENCES
DEPARTMENT OF ECONOMICS AND DEVELOPMENT STUDIES

ECON 101: INTRODUCTION TO ECONOMICS I

(LEVEL 200)

FEBRUARY, 2022

Time Allowed: 2 HOURS

INSTRUCTIONS

Answer all questions in Section **A** and ANY TWO (2) questions in Section **B**.

Answer All Questions in the Booklet

DO NOT TURN OVER THIS PAGE UNTIL YOU HAVE BEEN TOLD TO DO SO BY
THE INVIGILATOR

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SECTION A: OBJECTIVE TEST (50 Marks)

(Answer All Questions in this section in your answer booklet)

1) Which of the following events would cause the production-possibilities curve to shift outward?

   a) The economy experiences depletion of resources.
   b) Neutral Technical advancement.
   c) More women leave the labor force.
   d) The retirement age of the labour force has been reduced

2) A decrease in the relative price of a good corresponds to:

   a) An Increase in quantity supplied of the good.
   b) An Increase in the supply of the good.
   c) An Increase in the quantity demanded of the good.
   d) An Increase in demand of the good

3) According to the law of demand, the quantity of a good demanded in a given time period:

   a) Remains constant as its relative price changes.
   b) Increases as its relative price rises, ceteris paribus.
   c) Decreases as its relative price falls, ceteris paribus.
   d) Increases as its relative price falls, ceteris paribus.

4) A market surplus is:

   a) A situation in which market price equals equilibrium price.
   b) The amount by which the quantity demanded exceeds the quantity supplied at a given price.
   c) A situation in which market price does not equal the equilibrium price, so that people are not able to buy all of the goods that sellers are willing and otherwise able to offer for sale.
   d) Excess demand.

5) A leftward shift in the supply curve depicts:

   a) Increase in supply
   b) Increase in quantity supplied.
   c) Decrease in supply.
   d) Decrease in quantity supplied.

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6) Which of the following would generally cause an increase in the demand for cars?

   a) Consumer expectation that the price of cars will be lower next year.
   b) A decrease in the average price of car.
   c) A decrease in the average fares of alternative means of transport.
   d) Government pays subsidy to car buyers

7) A study shows that the coefficient of the cross price elasticity of **good X** and **good Y** is positive. This information indicates that **good X** and **good Y** are

   a) normal goods
   b) complementary goods
   c) substitute goods
   d) independent goods

8) If a 10% increase in the relative price of one good results in a decrease of 50% in quantity demanded of the good then the own price elasticity of demand for the good is

   a) Price Elastic
   b) Price Inelastic
   c) Price Unitary elastic
   d) Price Perfectly elastic

9) When a firm raises price, total revenue definitely:

   a) Increases, thus increasing profits
   b) Falls, thus lowering profits
   c) Increases, but profits may fall
   d) Increases if demand is price inelastic

10). In a market economy, when there is a shortage a firm has an incentive to:

   a) Raise prices.
   b) Lower prices.
   c) Increase supply.
   d) Maintain supply.

11) In Economics, a resource has value when it is

   a) available
   b) useful
   c) relatively scarce
   d) a free gift of nature

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12) A shift in a supply curve is defined as a change in the:

    a) Equilibrium quantity.
    b) Quantity supplied.
    c) Quantity supplied due to a change in price.
    d) Quantities supplied at alternative prices.

13) By definition, market demand is:

    a) The sum of individual demands vertically.
    b) The total quantity of a good or service people are willing to buy at a given price over a given period of time ceteris paribus.
    c) The total quantity of a good or service people are willing and able to buy at alternative prices over a given period of time, ceteris paribus.
    d) The total quantity of a good or service people are willing and able to buy at a given price over a given period of time ceteris paribus.

14) For a society to be productively efficient is to:

    a) Cause the society to operate at a point above its production possibilities curve.
    b) Cause the society to operate at a point inside its production possibilities curve.
    c) Cause society to operate at a point on its production possibilities curve.
    d) Cause society to operate just below its production possibilities curve.

15) By definition, supply reflects:

    a) The ability and willingness to sell a specific quantity of a good at a given price over a given time period, ceteris paribus.
    b) The ability and willingness to sell specific quantities of a good at alternative prices over a given time period, ceteris paribus.
    c) The willingness to sell a specific quantity of a good at a given price over a given time period, ceteris paribus.
    d) The ability and willingness to produce a specific quantity of a good at a given price in a given time period, ceteris paribus.

16) The meaning of the word "**economics**" is most closely associated with the word

    a) Resources
    b) Scarcity
    c) Unlimited wants
    d) Opportunity cost

17) A fall in the relative price of a commodity, holding everything constant, results in

   a) A decrease in demand as well as an increase in supply
   b) An increase in quantity demanded as well as a decrease in quantity supplied
   c) A decrease in quantity demanded as well as an increase in quantity supplied
   d) An increase in supply as well as an increase in quantity demanded

18) If a straight-line demand curve is tangent to a demand curve, the point own price elasticity of the two demand curves at the point of tangency is

   a) Difficult to determine
   b) Different
   c) The same
   d) It depends on the location of the point of tangency

19) At a consumer's point of saturation consuming commodity X, the Marginal Utility (MU) of commodity X to the consumer is...

   a) Positive
   b) Negative
   c) Zero
   d) Constant

20) An increase in the price of a commodity whose demand curve is vertical in price- quantity demanded space causes total expenditures on the commodity to

   a) Increase
   b) Decrease
   c) Remain unchanged
   d) Increase or fall

21) Goods are in competitive demand if
   I.   They are substitutes
   II. They are jointly produced
   III. Demand for one and price of the other varies directly.
   IV. Demand for one and price of the other varies inversely.

   a)   I and II only
   b)   I and III only
   c)   II and III only
   d)   II and IV only

22) Moving upward along a linear demand curve results in:

    a) Less elastic demand and a changing slope
    b) Less elastic demand but a constant slope
    c) More elastic demand and a changing slope
    d) More elastic demand and a constant slope

23) The concave production-possibilities curve indicates:

    a) Decreasing opportunity costs.
    b) Constant Opportunity costs.
    c) Negative opportunity costs
    d) Increasing opportunity costs.

24) Midpoint (Arc) measurement of own price elasticity gives a better estimate of price elasticity on a demand curve than the point measurement because

    a) The result is not influenced by the base chosen.
    b) The result is influenced by the base chosen.
    c) The result is sensitive to the base chosen.
    d) The result is the sum of the own price elasticity calculated at two points on the demand curve.

25) Given a demand curve $Qd = 200 - 4P$, the price elasticity demand when price is equal to 20 is

    (a) −0.44
    (b) −0.67
    (c) −1.25
    (d) 0

26) The absolute slope of a production-possibilities curve provides information about:

    a) The growth of the economy.
    b) Technological change in the economy.
    c) Opportunity costs in the economy.
    d) The availability of resources in the economy.

27) In a price-quantity demanded space, a perfectly own price elastic demand curve is ....

    a) downward sloping
    b) horizontal
    c) vertical
    d) upward sloping

Use the Table 1 below to answer questions 28 to 29.

Suppose you have the following item listed in order of importance beginning from the top.

Table 1

Stationery	50 000
Air Conditioners	50 000
Classroom Furniture	40 000
School Bus	60 000
Building of additional theatres	100 000
Campus Decoration	50 000
Computers	100 000

28) If you have ¢100 000 to spend, what would you spend it on?

    a) Computers
    b) Classroom furniture and School Bus
    c) Building of additional Lecture theatre.
    d) Stationery and Air Conditioners

29) What would be the opportunity cost of the item(s) you purchased with the ¢100,000?

    a) Computers
    b) Building of additional theatres a
    c) Classroom furniture and School Bus
    d) Stationery and Air Conditioners

Use Figure 1 the Demand curve below to answer questions 30 to 33.

Figure 1

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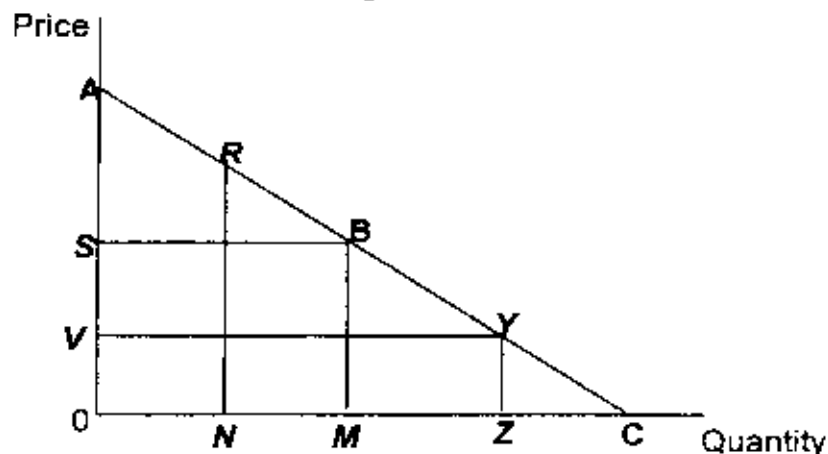
30) What is the expected value of own price elasticity (E$_d$) at point C?

   a) Ed = 0
   b) Ed = ∞
   c) Ed > 1
   d) Ed < 1

31) At point R, Ed equals _____

   a) $\dfrac{MC}{OM}$

   b) $\dfrac{NC}{ON}$

   c) $\dfrac{AB}{BC}$

   d) $\dfrac{ON}{NC}$

32) At what point is own price unitary elastic?

   a) A
   b) B
   c) C
   d) Y

33) What is the value of the coefficient of own price elasticity at point Y?

   a) $\dfrac{MC}{OM}$

   b) $\dfrac{NC}{ON}$

   c) $\dfrac{ZC}{OZ}$

   d) $\dfrac{ON}{NC}$

34) The price elasticity of demand is indicated by the ratio of

   a) price changes to quantity changes
   b) quantity changes to price changes
   c) percentage changes in quantity demanded to percentage change in price
   d) proportionate change in price to proportionate change in quantity demanded

35) A rise in consumers' income which causes consumers' total expenditure on a good to increase is the case of …

    a) An inferior good.
    b) A normal good.
    c) Substitutes.
    d) Complements.

36) Which of the following influences people's buying plans and does not shift the demand curve when it changes?

    a) Income.
    b) Advertisement.
    c) The relative price of the good.
   d) The relative price of related goods

37) Which of the following elasticities measures a shift of a demand curve rather than a movement along the demand curve?

    a) Point measure of own price elasticity of demand
    b) Mid-Point (Arc) measure of own price elasticity of demand
    c) The own price elasticity of demand
    d) The cross price elasticity of demand

38) The Ghana Medical and Dental Council believes that the price elasticity of demand for sugar is 0.5. Suppose the government influenced by the findings that linked sugar consumption and diabetes were to impose a tax on sugar that raises its price by 15% what effect will this have on consumption of sugar?

    a) The quantity consumed will decrease by 15 percent.
    b) The quantity consumed will increase by 7.5 percent.
    c) The quantity consumed will decrease by 11.25 percent.
   d) The quantity consumed will decrease by 75 percent

39)

Figure 2

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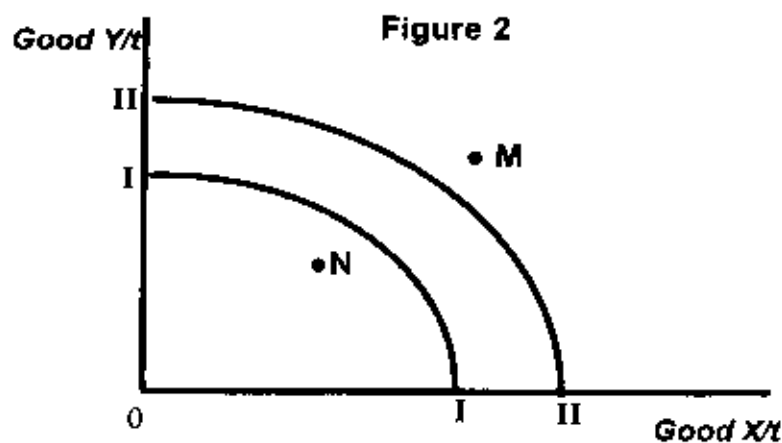
In Figure 2 above are production-possibilities curves I and II. What can be deduced from the diagram?

    a) Curve I represents a more efficient situation than curve II.
    b) Curve II represents an economic situation in which there are more economic resources and/or improved technology than that existed for curve I.
    c) Point M represents a more efficient point.
    d) Point N represents the most efficient point

40) A convex production-possibilities curve indicates:

    a) Increasing opportunity costs.
    b) Decreasing opportunity costs.
    c) Constant Opportunity costs.
    d) Zero Opportunity costs.

Figure 3 below is a production possibility curve of a hypothetical society. Use it to answer questions **41 - 43**

Figure 3
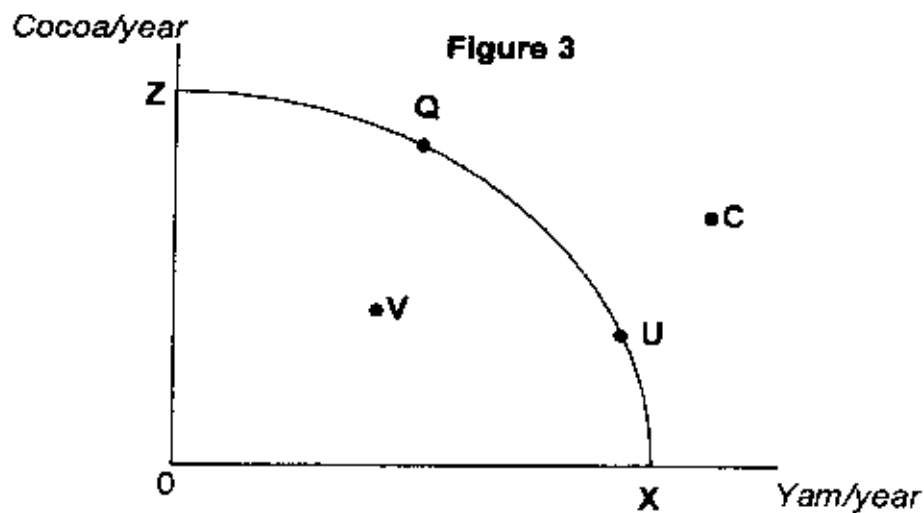
41) From the diagram which point(s) depicts production of only yam

    a) Points Z and X
    b) Point Z
    c) Point X
    d) Points Q and U

42) Which points are attainable?

    a) Points Z, Q, U, X and V
    b) Points Z, Q, U, X and C
    c) Points Z, Q, U, and X
    d) Points Z, Q, U, and C

43) Which points show productive efficiency?

    a) Points Z, Q, U and V
    b) Points Z, Q, U and X
    c) Points Z, Q, U and C
    d) Points Z, C, U and V

Use Table 2 below to answer questions **44 to 48**

LAND	LABOUR	TOTAL PRODUCT	AVERAGE PRODUCT	MARGINAL PRODUCT
1	0	0	0	-
1	1	3	3	3
1	2	8	A	5
1	3	12	4	B
1	4	15	C	3
1	5	17	3.4	D
1	6	E	2.84	0
1	7	16	2.29	-1
1	8	13	1.63	-3

44) Calculate the values for **A** and **B**.

    a) 4, 4
    b) 4, 5
    c) 3. 4,
    d) 5, 5

45) Compute the value for **C**.

    a) 4.75
    b) 3.75
    c) 3.00
    d) 5.75

46) What is the value of **D**?

    a) 3
    b) 2
    c) 4
    d) 5

47) Determine the value of *E* to the nearest whole number.

     a) 18
     b) 17
     c) 19
     d) 15

48) What economic principle/law accounts for the behaviour of the marginal product in the table?

     a) The law of diminishing marginal utility
     b) The law of increasing marginal utility
     c) The law of diminishing returns to variable proportions
     d) Returns to Scale

Use the information below to answer questions **49 to 50.**

Seyram Designs is planning an Easter holiday shirt sales promotion. Sales data from its prototype design indicate that:

$Q_d = 2000 - 200P$, where Q_d is quantity of shirt sold and *P* is price per shirt.

49) How many shirts can she sell at ¢5 each?

     a) 1200
     b) 1000
     c) 1050
     d) 1000

50) What price does she have to charge to sell 1,500 shirts?

     a) ¢2.5
     b) ¢4.5
     c) ¢1.5
     d) ¢3.5

SECTION B: 50 marks
(Answer any two [2] questions in this section)

Question 1

The Table 3 below records the utility derived from the consumption of **good X** by Monica. Use it to answer the questions that follow:

Table 3

Quantity of X	Total Utility	Average Utility	Marginal Utility
1			60
2			50
3			35
4			15
5			5
6			0

a) Define Total Utility, Average Utility and Marginal Utility.   (9 marks)

b) Copy and complete the table by calculating the Total and Average utilities.

(6 marks)

c) State economic law that explains the behaviour of the marginal utilities as recorded in the table?   (4 marks)

d) Given that Monica has a fixed disposable income and that constant marginal utility of money (λ) equals 1 (one), how many units of good **X** will Monica consume to be in equilibrium if the price of good X is ¢15? Explain your answer with the help of the Table.   (6 marks)

(Total 25 marks)

Question 2

Table 4 below shows the various combinations of yam and maize that a society can produce given her resources. Use the information in the table to answer the questions that follow:

Table 4

Production Alternatives	Yam (in tons)	Maize (in tons)
A	0	550
B	30	500
C	60	450
D	80	400
E	100	300
F	120	180
G	150	0

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a) Name and define the table. (3 marks)

b) What is the opportunity cost to the society of producing:

      i. 30 tons of yam (3 marks)

      ii. 100 tons of yam (3 marks)

      iii. 300 tons of maize (3 marks)

      iv. 550 tons of maize (3 marks)

c) Suppose in the previous season the society settled for alternative E. In the current season because of the rising price of maize the society plans to increase the production of maize by 100 tons:

    I. What production alternative has the society settled for in the current season? (3 marks)

    II. What is the opportunity cost for the increase in maize production by 100 tons? (3 marks)

d) List any three (3) important assumptions underlying the Table.

(6 marks)

(Total 25 marks)

Question 3

a. Define the concept of Demand in Economics. (3 marks)

b. Explain three factors that determine demand (9 marks)

c. The following hypothetical equations describe monthly demand and supply relations for Restaurant meals in the city of Accra.

$$Q_D = 500,000 - 50,000P, \qquad \text{(Demand)}$$
$$Q_S = -100,000 + 100,000P \qquad \text{(Supply)}$$

Where Q is the quantity measured by the plates per month and P the price in Ghana cedis.

    i. At what price will quantity supplied equal zero? (3 marks)

    ii. Determine the equilibrium price and quantity. (6 marks)

    iii. Suppose because of power cut (Dumsor) in Ghana quantity supplied is limited to 100,000 plates (Qs = 100,000) what will be the new equilibrium price?

(4 marks)

(Total 25 marks)

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