



# BK BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS  
SENIOR SECONDARY|CO-ED DAY CUM BOYS' RESIDENTIAL SCHOOL

MID-TERM EXAMINATION 2023-24

ECONOMICS (030)



Class : XI  
Date : 11/10/2023  
Admission No.:

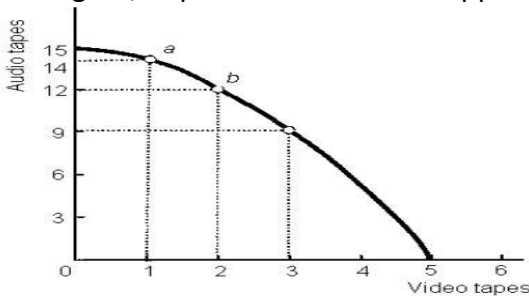
Duration : 3 Hrs  
Max. Marks : 80  
Roll No.:

## General Instructions:

- This question paper contains two sections:  
Section A – Micro Economics  
Section B – Statistics for Economics
- This paper contains 20 Multiple Choice Questions of 1 mark each.
- This paper contains 4 Short Answer Questions of 3 marks each to be answered in 60 to 80 words.
- This paper contains 6 Short Answer Questions of 4 marks each to be answered in 80 to 100 words.
- This paper contains 4 Long Answer Questions of 6 marks each to be answered in 100 to 150 words.

## SECTION A – MACRO ECONOMICS

1. In Figure, at point 'a' what is the opportunity cost of producing one more audio tape? (1)



- (a) 1 video tape. (b) 2 video tapes.  
(c) 14 video tapes. (d) There is no opportunity cost.
2. When at price of Rs.5 per unit of a commodity, A's demand is for 11 units, B's demand is for 14 units and C'S demand is for 8 units, then market demand will be: (1)  
(a) 11 units (b) 14 units  
(c) 17 units (d) 33 units
3. How are two goods (apple and orange) related when, as a result of rise in the price of apples, demand for oranges increases? (1)  
(a) substitute goods (b) complementary goods  
(c) normal goods (d) inferior goods

**DIRECTION** : Mark the option which is most suitable :

- (a) If Both assertion and reason are true, and reason is the correct explanation of assertion.  
(b) If Both assertion and reason are true, but reason is not the correct explanation of assertion.  
(c) If Assertion is true, but reason is false.  
(d) If Both assertion and reason are false
4. **Assertion (A):** The demand of normal goods varies directly with income (1)  
**Reason (R):** The demand curve of normal goods shifts to the right with fall in income of the consumer.

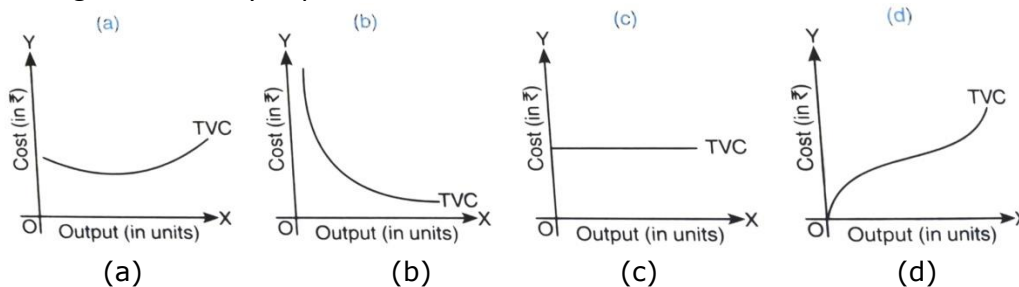
5. Assertion (A): At every point on the rectangular hyperbola curve  $P \cdot ed = 1$  (1)

Reason (R): The percentage change in price along the demand curve always leads to equal percentage change in quantity.

6.  $P \cdot ed = (-)1$ , what will be percentage change in price that will raise the demand from 20 units to 30 units. (1)

- (a) (-) 50%
- (b) + 50%
- (c) + 33%
- (d) (-) 33.3%

7. Which diagram correctly depicts total variable cost curve? (1)



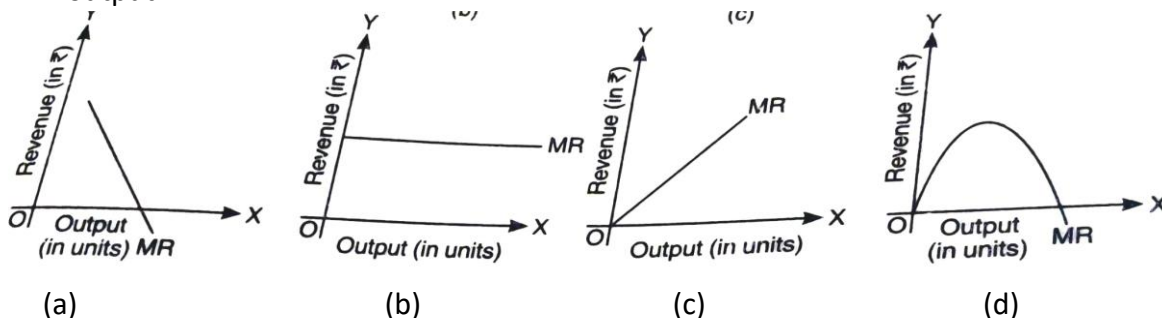
8. Assertion: Total cost curve and total variable cost curve are parallel to each other. (1)

Reason: The vertical distance between TC and TVC curves is TFC, which remains constant at all levels of output.

9. The average fixed cost at 4 units of output is Rs.20. Average variable cost at 5 units of output is Rs.40. Average cost of producing 5 units is: (1)

- (a) Rs.20
- (b) Rs.40
- (c) Rs. 56
- (d) Rs. 60

10. Identify the correct MR curve from the following options when price remains same with rise in output. (1)



11. The given supply schedule represents..... (1)

Price (Rs.)	20	20
Supply (Units)	100	120

- (a) Expansion in supply
- (b) Increase in supply
- (c) Contraction in supply
- (d) Decrease in supply

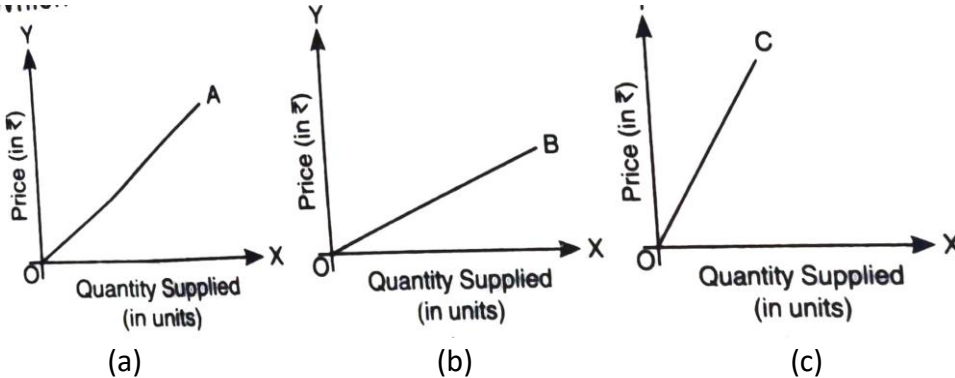
12. When marginal product rises, total product: (Choose the correct alternative) (1)

- (a) falls
- (b) rises
- (c) can rise or can fall
- (d) remains constant

- 13.** Due to installation of a machine with latest technology, the cost of production has decreased. (1)  
It will lead to:
- (a) Expansion in supply (b) Increase in supply  
(c) Contraction in supply (d) Decrease in supply

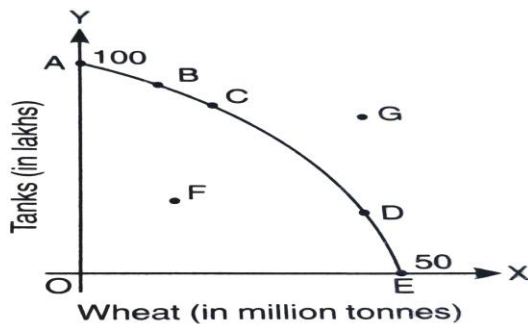
OR

Which of the following diagram correctly depicts the situation of Unitary Elastic Supply?



- 14.** Average revenue equals: (Choose the correct alternative) (1)
- (a) Total revenue divided by the quantity produced (b) Price  
(c) Both (a) and (b) (d) None of the above

**15.** On the basis of the given diagram, answer the following questions:



- (i) On the production possibility curve AE, if the economy decides to produce 50 million tonnes of wheat, then how many tanks it can produce? (3)  
(ii) If there is growth in resources, what will happen to the production possibility curve?  
(iii) Which point in the diagram represents underutilisation of resources?

OR

Distinguish between Microeconomics and Macroeconomics. Give examples

- 16.** Write true or false with reasons. (3)
- (a) When quantity demanded of a commodity does not change with change in price, then Coefficient of price elasticity of demand is zero.  
(b) A rise in price of tea will lead to an upward movement in the demand curve of coffee.

- 17.** With the help of a diagram, state the behaviour of MP when: (3)
- (a) TP of the variable factor reaches a maximum.  
(b) TP of the variable factor falls.

- 18.** State the factors that can cause a rightward shift of Demand Curve of a commodity. (4)

19. Explain the degrees of Elasticity of Demand with diagrammatic presentation. (4)

20. A country produces two commodities: X and Y. Its production possibilities are shown in the following schedule: (4)

Possibility	A	B	C	D	E	F
Commodity X	20	14	9	5	2	0
Commodity Y	0	1	2	3	4	5

- (a) Calculate Marginal rate of transformation (MRT)
- (b) Construct a PPF with the help of various possibilities.
- (c) Comment on the shape of PPF along with its reason.
- (d) State two assumptions of PPF.

21. Complete the following table: (4)

OUTPUT	AVC	TC	MC
1	---	60	20
2	18	---	---
3	---	---	18
4	20	120	---
5	22	---	---

22. Write True or False with reason: (4)

- (i) Average Variable Cost falls when it is more than Marginal Cost.
- (ii) Total fixed cost is more than Total Variable cost at zero level of output.

**OR**

State the relationship between Average Revenue (AR) and Marginal Revenue (MR), using a schedule and diagram under imperfect competition market.

23. **CASE STUDY:** Read the following text carefully and answer the questions that follow:

There is then one general law of Demand: - The greater the amount to be sold, the Smaller must be the price at which it is offered in order that it may find purchasers; or, in other words, the amount demanded increases with a fall in price, and diminishes with a rise in price. There will not be any uniform relation between the fall in price and the increase of demand. A fall of one-tenth in the price may increase the sales by a twentieth or by a quarter, or it may double them. But as the numbers in the left-hand column of the demand schedule increase, those in the right-hand column will always diminish.

The demand prices in our list are those at which various quantities of a thing can be sold in a market during a given time and under given conditions. For instance, the list of demand prices for tea is drawn out on the assumption that the price of coffee is known; but a failure of the coffee harvest would raise the prices for tea. The demand for gas is liable to be reduced by an improvement in electric lighting; and in the same way a fall in the price of a particular kind of tea may cause it to be substituted for an inferior but cheaper variety.

- (a) Explain Law of Demand with two assumptions and two exceptions. (4)
- (b) Suppose the price elasticity for a good is -0.2. If there is a 5% increase in the price of tea, by what percentage will the demand for tea go down? (2)

- 24.**
- (a) Draw supply curves when elasticity of supply is less than one and greater than one. (2)
- (b) Explain two reasons for increasing returns to a factor. (2)
- (c) Under which market form a firm's Marginal Revenue is always equal to price and why? (2)
- OR
- (a) Draw AC and MC curves in a single diagram. Why are they both U-Shaped in the short run? (3)
- (b) What is point of inflexion? Show it with the help of a diagram. (2)
- (c) How is average revenue equal to price? (1)

### SECTION – B STATISTICS FOR ECONOMICS

- 25.** The arithmetic mean of 1,3,5,6, x, 10 is 6. The value of x is: (1)
- (a) 10 (b) 11 (c) 12 (d) None of these
- 26.** Which of the following measures of central tendency is based on the fifty percent of the central values. (1)
- (a) Mean (b) Median  
(c) Mode (d) All of the above
- 27. Statement 1:** Sum of deviations of items from median is always equal to zero (1)  
**Statement 2:** Arithmetic mean is not affected by extreme values.
- (a) Both the statements are true  
(b) Both the statements are false  
(c) Statement 1 is true and statement 2 is false  
(d) Statement 2 is true and statement 1 is false
- 28.** Total of the given variables is equal to..... (1)
- (a)  $\sum fX$  (b)  $\sum X$   
(c)  $\sum fd$  (d)  $\sum fm$
- 29.** If mean is 120 and median is 225, what is the value of mode? (1)
- (a) 345 (b) 90  
(c) 435 (d) None of these

**DIRECTION:** Mark the option which is most suitable:

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(b) If Both assertion and reason are true, but reason is not the correct explanation of assertion.  
(c) If Assertion is true, but reason is false.  
(d) If Both assertion and reason are false
- 30. Assertion (A):** Mode is the value occurring most frequently in a set of observations. (1)  
**Reason (R):** Mode can be calculated by inspection method and grouping method in discrete series and continuous series.

- 31.** Marks in statistics of the students of class XI are given below. Find out the arithmetic mean using direct method. (3)

Marks	Less than 10	Less than 20	Less than 30	Less than 40	Less than 50
No. of students	5	12	30	45	50

OR

The following table shows marks in economics of the students of class XI.  
Calculate arithmetic mean using Direct method.

Marks	More than 0	More than 2	More than 4	More than 6	More than 8
No. of students	50	45	30	20	10

32. Mean of weekly pocket money of 40 students is ₹265. But in the calculation, one value was read as 150 instead of 115. Find corrected mean. (4)

OR

Calculate the median of the following distribution of data:

Class interval	0 -10	10 -30	30 - 60	60 - 80	80 - 90
Frequency	5	15	25	8	3

33. (a) We are given the percentage of marks obtained by six students in Mathematics and Economics. Calculate coefficient of rank correlation. (3)

Students	Mathematics (X)	Economics (Y)
A	85	60
B	60	48
C	55	49
D	65	50
E	75	55
F	90	62

(b) Calculate Karl Pearson's coefficient of correlation from the following data: (3)

Marks in Economics	4	6	8	10	12
Marks in English	6	8	10	12	14

34. (a) Calculate mode from the following data (Use grouping method) (4)

X	0 - 10	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60
f	5	6	10	4	7	3

(b) Write the formula to calculate: (2)

- (i) Mean according to step deviation method in continuous series.
- (ii) Mode when mean and median are given.

OR

From the following frequency distribution find out the mean, median and mode: (6)

Marks	0 -10	10 -20	20 -30	30 - 40	40 -50
No. of students	3	4	2	7	10

\*\*\*\*\*End of Paper\*\*\*\*\*

