# Class XI Session 2025-26
# Subject - Economics
# Sample Question Paper - 8

**Time Allowed: 3 hours** **Maximum Marks: 80**

**General Instructions:**

1. This question paper contains two sections:

   Section A – Micro Economics

   Section B – Statistics

2. This paper contains 20 Multiple Choice Questions type questions of 1 mark each.
3. This paper contains 4 Short Answer Questions type questions of 3 marks each to be answered in 60 to 80 words.
4. This paper contains 6 Short Answer Questions type questions of 4 marks each to be answered in 80 to 100 words.
5. This paper contains 4 Long Answer Questions type questions of 6 marks each to be answered in 100 to 150 words.

**Section A**

1. Index Number reveals the state of **[1]**

   a) Both b) None

   c) Deflation d) Inflation

2. If there is a perfect disagreement between the marks in geography and statistics ,then what would be the value of rank correlation coefficient? **[1]**

   a) 1 b) 0

   c) - 1 d) 5

3. Calculate index numbers from the following data by simple aggregate method taking prices of 2000 as base. **[1]**

| Commodity | | A | B | C | D |
|---|---|---|---|---|---|
| Price per unit (in Rupees) | 2000 | 80 | 50 | 90 | 30 |
| | 2001 | 95 | 60 | 100 | 45 |

   a) 130 b) 140

   c) 120 d) 150

4. **Assertion (A):** Various problems arise due to unequal distribution of wealth and national income and are solved with the help of statistical data. **[1]**

   **Reason (R):** Statistical methods are used in solving the problem of the distribution of national income.

   a) Both A and R are true and R is the correct explanation of A.

   b) Both A and R are true but R is not the correct explanation of A.

   c) A is true but R is false.

   d) A is false but R is true.

5. In most of the weighted index numbers, the weight pertains to: **[1]**

a) current year

b) base year or current year .

c) Base year

d) Both base and current year

6. The father of statistics is: **[1]**

a) Fisher

b) Marshall

c) Bowley

d) Gottfried Achenwall

7. We use price index numbers **[1]**

a) To measure and compare prices

b) To compare prices

c) To change in prices

d) To measure prices

8. The graph of a cumulative frequency distribution is called **[1]**

a) a histogram

b) an ogive

c) a line graph

d) A polygon

9. A weighted aggregate price index where the weight for each item is its current-period quantity is called the **[1]**

a) Paasche Index

b) Consumer Price Index

c) Laspeyres Index

d) Aggregate index

10. In an evaluation of answer script the following marks are awarded by the examiners. Can you find any correlation between the two? **[1]**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| $1_{st}$ | 88 | 95 | 70 | 96 | 50 | 80 | 75 | 85 |
| $2_{nd}$ | 84 | 90 | 88 | 55 | 48 | 85 | 82 | 72 |

a) 0.543

b) 0.363

c) 0.365

d) 0.578

11. If the salary of a person in the base year is ₹ 4,000 per annum and the current year salary is ₹ 6,000, by how much should his salary be raised to maintain the same standard of living if the CPI is 400? **[3]**

12. What is central tendency? **[3]**

OR

There are two factories employing 100 and 80 men, respectively. If the arithmetic mean of their monthly salaries are Rs.575 and Rs.625, then find the arithmetic mean of the salaries of both the factories together.

13. What is classification of data? What should be its characteristics? **[4]**

14. What is a false base line? What is its purpose? Give an example. **[4]**

OR

What is tabulation? Differentiate between tabulation and classification.

15. What are the essentials of a good sample? **[4]**

16. From the data given below, calculate Karl Pearson's coefficient of correlation between density of population and death rate by step deviation method. **[6]**

| **Region** | **Area(in sq km)** | **Population** | **Death** |
|---|---|---|---|
| A | 200 | 40000 | 480 |
| | | | |

| | | | |
|---|---|---|---|
| B | 150 | 75000 | 1200 |
| C | 120 | 72000 | 1080 |
| D | 80 | 20000 | 280 |

17. **Give formula for:** **[6]**

a. Simple mean in individual series by short cut method

b. Weighted mean

c. Simple mean in continuous series by direct method

d. Simple mean in discrete series by short cut method

e. Combined Mean

f. Simple mean in continuous series by step deviation method

OR

Find out the missing item x of the following distribution, where arithmetic mean $(\overline{X})$ is 11.37

| **X** | 5 | 7 | x | 11 | 13 | 16 | 20 |
|---|---|---|---|---|---|---|---|
| **Frequency** | 2 | 4 | 29 | 54 | 11 | 8 | 4 |

**Section B**

18. Extension of supply occurs due to change in: **[1]**

a) technique of production

b) goal of the firm

c) number of firms

d) own price of the commodity

19. The basic economic activities put in order are **[1]**

a) Production, consumption and exchange

b) Consumption, exchange and production

c) Production, Exchange and consumption

d) Exchange, production and consumption

20. Excess capacity is a prominent feature of equilibrium under? **[1]**

a) Perfect competition

b) gopoly

c) Monopolistic competition

d) Monopoly

21. Under perfect competition: **[1]**

a) AR remains constant

b) Price = AR = MR

c) Price = AR = MR and AR remains constant

d) MR curve is below AR curve

22. The defined shape of AFC is due to **[1]**

a) Constant TFC

b) Variable TFC

c) U shape of MC

d) Constant TC

23. **Assertion (A):** More goods are purchased only when the price of the commodity falls. **[1]**

**Reason (R):** For every additional unit to be purchased the consumer is willing to pay less and less price.

a) Both A and R are true and R is the correct explanation of A.

b) Both A and R are true but R is not the correct explanation of A.

c) A is true but R is false.

d) A is false but R is true.

24. Which of the following is a feature of perfect competition? **[1]**

a) Large Number of Buyers and Sellers
b) All of these
c) Homogeneous Units of the Product
d) Perfect Knowledge of the Market

25. The AR curve and industry demand curve are same in case of? **[1]**

a) Oligopoly
b) None of above
c) Perfect competition
d) Monopoly

26. AFC curve never touches 'x' axis though it lies very close to x axis because **[1]**

a) AFC can never be zero as TFC can never be zero
b) AFC is always vertical
c) AFC is horizontal
d) AFC curve can never be extended to touch zero with increase in output

27. The break- even point where TR=TC, the firm cannot earn abnormal profits **[1]**

a) True
b) Can't say
c) False
d) May be

28. State and discuss any two factors that will shift the Production Possibility Frontier (PPF) to the right. **[3]**

OR

What does a simple economy mean?

29. Explain equilibrium price. How is it determined? **[3]**

30. Define demand. State the factors affecting demand for a commodity by a consumer. **[4]**

31. Imagine yourself a producer (in a perfectly competitive market structure), focusing on profit maximisation. Will you prefer striking an equilibrium in a state of increasing returns? **[4]**

OR

Is a producer at equilibrium under the following situations?

i. When Marginal Revenue is greater than Marginal Cost.
ii. When Marginal Revenue is equal to Marginal Cost. Give reasons for your answer.

32. Explain why an Indifference curve has a negative slope (i.e. IC slope down-wards to the right). **[4]**

33. What is meant by increasing returns to a factor? Discuss any two reasons behind increasing returns to a factor. **[6]**

34. **Answer the following questions** **[6]**

(a) If power tariff is lowered during off-peak hours, do you think the problem of load-shedding for household consumption can be solved to some extent? Use the concept of elasticity of demand. **[3]**

(b) From the schedule provided below calculate the total revenue, demand curve, and the price elasticity of demand: **[3]**

| **Quantity** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| **Marginal Revenue** | 10 | 6 | 2 | 2 | 2 | 0 | 0 | 0 | -5 |

# Solution

**Section A**

1. **(a)** Both
   **Explanation:**
   In statistics, we assume that index no .of base year is a hundred. If the index number calculated from data is less than 100, it implies deflation and if it is greater than 100, it implies inflation.
2. **(c)** - 1
   **Explanation:**
   If there is perfect disagreement then it means that the correlation is negative. so the slope will be -1.
3. **(c)** 120
   **Explanation:**
   95+60+100+45/80+50+90*100=12
4. **(b)** Both A and R are true but R is not the correct explanation of A.
   **Explanation:**
   Various problems arise due to unequal distribution of wealth and national income and are solved with the help of statistical data. Statistical methods are used in solving the problem of the distribution of national income.
5. **(b)** base year or current year .
   **Explanation:**
   In a weighted price relative index weights may be determined by the proportion or percentage of expenditure on them in total expenditure during the base period. It can also refer to the current period depending on the formula used.
6. **(d)** Gottfried Achenwall
   **Explanation:**
   The father of statistics is Gottfried Achenwall.
7. **(a)** To measure and compare prices
   **Explanation:**
   Index numbers are used for the measurement and comparison of prices.
8. **(b)** an ogive
   **Explanation:**
   An ogive graph plots cumulative frequency on the y-axis and class boundaries along the x-axis. It's very similar to a histogram.
9. **(a)** Paasche Index
   **Explanation:**
   IIt's as per definition of Paache's index number.
10. **(b)** 0.363
    **Explanation:**

| X ($1_{st}$) | Y ($2_{nd}$) | $dX$ | $dY$ | $dX^2$ | $dY^2$ | $dXdY$ |
|---|---|---|---|---|---|---|
| 88 | 84 | 18 | -4 | 324 | 16 | -72 |
| 95 | 90 | 25 | 2 | 625 | 4 | 50 |
| 70 (A) | 88 (A) | 0 | 0 | 0 | 0 | 0 |
| 96 | 55 | 26 | -33 | 676 | 1089 | -858 |
| 50 | 48 | -20 | -40 | 400 | 1600 | 800 |
| 80 | 85 | 10 | -3 | 100 | 9 | -30 |
| 75 | 82 | 5 | -6 | 25 | 36 | -30 |
| 85 | 72 | 15 | -16 | 225 | 256 | -240 |
| | | 79 | -100 | 2375 | 3010 | -380 |

r = $\frac{N\sum XY-\sum X\sum Y}{\sqrt{N\sum X^2-(\sum X)^2}\sqrt{N\sum Y^2-(\sum Y)^2}}$

= $\frac{8(-380)-(79)(-100)}{\sqrt{8(2375)-(79)^2}\sqrt{8(3010)-(-100)^2}}$ = 0.363

11. Base CPI = ₹ 100

    Current CPI = ₹ 400

    Base Year Salary = ₹ 4,000

    Current Year Salary = ₹ 6,000

    When Base CPI is ₹ 100, then the salary is = ₹ 4,000

    When Base CPI is ₹ 100, then the salary is = $\frac{4,000}{100}$

    When the Current CPI is ₹ 400, then the salary should be = $\frac{4,000}{100} \times 400$ = ₹ 16,000

    Thus, his salary should be ₹ 16,000. Therefore, in the current year, his salary should increase by ₹ 10,000 (i.e. ₹ 16,000 - ₹ 6,000)

12. Measure of central tendency is a single value which is representative of an entire set of data. It is a measure that attempts to describe a whole set of data with a single value that represents the middle or centre of its distribution. There are three main measures of central tendency: the mode, the median and the mean. Each of these measures describes a different indication of the typical or central value in the distribution. It is also called as "Average" or "Measure of location".

    OR

    Let $n_1$ be the no. of persons in the first factory and $\overline{X}_1$ be the mean of the first factory workers, and $n_2$ be the number of persons in the second factory and their mean be $\overline{X}_2$

    $\because n_1 = 100$ and $\overline{X}_1 = 575$ and $n_2 = 80$ and $\overline{X}_2 = 625$

    $\therefore$ Combined Mean $\left(\overline{X}_{1,2}\right) = \frac{n_1\overline{X}_1+n_2\overline{X}_2}{n_1+n_2}$

    $\Rightarrow \quad \overline{X}_{1,2} = \frac{575\times100+625\times80}{100+80} = \frac{57500+50000}{180}$

    $= \frac{107500}{180} = 597.2$

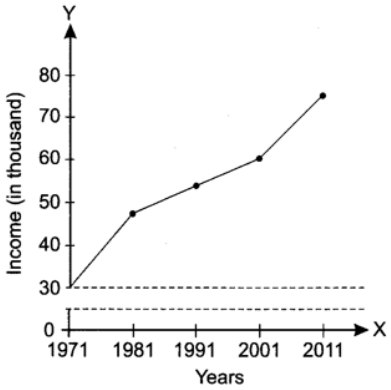
    $\therefore \quad \overline{X}_{1,2} = 597.2$

13. A classification is an ordered set of related categories used to group data according to its similarities. It consists of codes and descriptors and allows survey responses to be put into meaningful categories in order to produce useful data. To be meaningful, classification should have following characteristics.

    a. **It should be unambiguous:** Classification aims at removing ambiguity. It is a must that all classes should be defined in such a way that there is no room for doubt and confusion and each item must fit to at least and at most one class.
    b. **The classes must not overlap:** None of the item should be eligible to be a part of more than one class.
    c. **It should be stable:** Without stability, classified data will not be fit for comparison.
    d. **Classification should be according to purpose of enquiry.** For example, if I need to classify my students into two groups for bus arrangement, it will be better to use geographical classification. If the purpose is judging their academic performance the quantitative classification is more suitable. If purpose is judging their value system then qualitative classification is recommended.
    e. **It should be mathematically accurate:** The test of mathematical accuracy is confirmation of total items in the series with total items in the universe.

f. **It should be flexible:** It should be flexible. It should be possible to adjust the series to new situations and circumstances. With change in time some figures may become obsolete and other may become more relevant.

14. Usually, when we draw any graph, the scale on which the graph is measured starts from zero on the y-axis. However, under the situations when the data to be plotted on graph starts from a value which is far above zero, results in the problem of shortage of space on graph. To overcome this problem of shortage of space, a false baseline is plotted. False base line is a line which is drawn to grasp the attention of the reader on the fluctuations which usually remains unnoticed. Graphical Presentation




OR

Tabulation is the process of condensing classified data in the form of a table so that it may be more easily understood, and so that any comparison involved may be more readily made. -D. Gregory and H. Ward .It is a medium of communication of great economy and effectiveness for which ordinary prose is inadequate. In addition to its formation in simple presentation, the statistical table is also a useful tool of analysis. -D.W . Pade and E. F. Lindquist .

**Difference between classification and Tabulation**

Table depicts the few differences between classification and tabulation

| **Classification** | **tabulation** |
|---|---|
| It is the basis for tabulation | It is the basis for further analysis |
| It is the basis for simplification | It is the basis for presentation |
| Data is divided into groups and sub groups on the basis of similarities and differences. | Data is listed according to the logical sequences of the related characteristics. |

15. Essentials of a good sample are as follows:
    a. **Representativeness:** A good sample should be representative of the entire population. It should have same characteristics as the entire population. It is possible when samples are selected at random i.e. each and every item was given equal chance of selection.
    b. **Independence:** Items comprising the sample should be independent of each other. It means that selection of one item should not be dependent on selection of another item.
    c. **Homogeneity:** There should be uniformity in sample in terms of units and another characteristic. If two different samples are taken from same population, they should give similar results.
    d. **Adequacy:** Sample should be adequate to give accurate results. In this context, there are two laws of statistics- Law of Inertia of Large Numbers and Law of Statistical Regularity.

16.

| **Region** | **Density(X)** | **dx(X - A), A = 500** | **dx' $\left(\frac{dx}{c_1}\right)$, $c_1$ = 50** | **dx'$^2$** | **Death Rate(Y)** | **dy(Y - A), A = 16** | **dy' $\left(\frac{dy}{c_2}\right)$, $c_2$ = 1** | **dy'$^2$** | **dx'dy'** |
|---|---|---|---|---|---|---|---|---|---|
| A | 200 | -300 | -6 | 36 | 12 | -4 | -4 | 16 | 24 |
| B | 500 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 0 |
| C | 600 | 100 | 2 | 4 | 15 | -1 | -1 | 1 | -2 |
| D | 250 | -250 | -5 | 25 | 14 | -2 | -2 | 4 | 10 |
| | | | $\Sigma$dx' = -9 | $\Sigma$dx'$^2$ = 65 | | | $\Sigma$dy' = -7 | $\Sigma$dy'$^2$ = 21 | $\Sigma$dx'dy' = 32 |

Density is calculated as $\frac{population}{area}$

Death Rate is calculated as $\frac{death}{population} \times 100$

Here, $\Sigma dx' = -9$, $\Sigma dx'^2 = 65$, $\Sigma dy' = -7$, $\Sigma dy'^2 = 21$, $\Sigma dx\ 'dy' = 32$

Now, $r = \frac{\Sigma dx'dy' - \frac{\Sigma dx' \times \Sigma dy'}{n}}{\sqrt{\sum dx'^2 - \frac{(\Sigma dx')^2}{n}} \times \sqrt{\Sigma dy'^2 - \frac{(\Sigma dy')^2}{n}}}$

$= \frac{32 - \frac{(-9 \times -7)}{4}}{\sqrt{65 - \frac{(-9)^2}{4}} \times \sqrt{21 - \frac{(-7)^2}{4}}}$

$= \frac{32 - 15.75}{\sqrt{65 - 20.25} \times \sqrt{21 - 12.25}}$

$= \frac{16.25}{\sqrt{44.75} \times \sqrt{8.75}} = \frac{16.25}{6.69 \times 2.96} = \frac{16.25}{19.80} = 0.82$

- Therefore, Karl Pearson's coefficient of correlation between density of population and death rate is 0.82.
- Interpretation of r: There is a high degree of positive correlation between density of population and death rate.

17. (a) $\bar{x} = \frac{1}{n}A + \frac{\sum d}{N}$

(b) Weighted Mean $= \Sigma WX / \Sigma W$

(c) $\bar{x} = \frac{\sum\limits_{i=1}^{n} f_i m_i}{\sum\limits_{i=1}^{n} f_i}$

(d) $\bar{x} = A + \frac{\sum\limits_{i=1}^{n} f_i d_i}{\sum\limits_{i=1}^{n} f_i}$

(e) Combined Mean $\bar{x}12 = \frac{\bar{x}_1 N_1 + \bar{x}_2 N_2}{N_1 + N_2}$

(f) $\bar{x} = A + \frac{\sum d'}{N} \times i$

OR

| X | Frequency (f) | fX |
|---|---|---|
| 5 | 2 | 10 |
| 7 | 4 | 28 |
| x | 29 | 29x |
| 11 | 54 | 594 |
| 13 | 11 | 143 |
| 16 | 8 | 128 |
| 20 | 4 | 80 |
| | $\Sigma f = 112$ | $\Sigma fX = 983 + 29x$ |

Given, arithmetic mean $(\overline{X})$ = 11.37

$Now, \quad \overline{X} = \frac{\Sigma fX}{\Sigma f}$

$= 11.37 = \frac{983 + 29x}{112}$

=1273.44 = 983 + 29x

=29x = 290.44

= x =10.01≅10

Hence, the missing item x of the distribution is 10.

**Section B**

18.

**(d)** own price of the commodity

**Explanation:**

Extension of supply refers to an increase in quantity supplied due to an increase in own price of the commodity.

19.

**(c)** Production, Exchange and consumption

**Explanation:**

Production, consumption and capital formation are called the basic economic activities of an economy. Scarce resources are used in the production of goods and services with the objective of satisfying our needs and wants.

20.

**(c)** Monopolistic competition

**Explanation:**

In monopolistic competition , the actual output supplied is always less than the potential output. A producer under monopolistic competition will not move towards the potential or ideal output as that will increase his MC and MC will become more than MR leading to losses.

21.

**(c)** Price = AR = MR and AR remains constant

**Explanation:**

Under perfect competition, a firm is a price taker. It cannot change the market price. It means that AR(Price) is constant for a firm. Constant AR implies constant MR. It means that AR = MR.

22. **(a)** Constant TFC

**Explanation:**

AFC curve is a rectangular hyperbola i.e. area under the curve remains same at all points becasue of constant TFC.

23. **(a)** Both A and R are true and R is the correct explanation of A.

**Explanation:**

More goods are purchased only when the price of the commodity falls. For every additional unit to be purchased the consumer is willing to pay less and less price according to the law of diminishing marginal utility.

24.

**(b)** All of these

**Explanation:**

All the options are features of perfect competition.

25.

**(d)** Monopoly

**Explanation:**

In monopoly, price is determined by the industry, i.e. the firm is a price maker. A monopolist can sell as many units of a product by lowering the price. So, the AR curve of the firm is the same as the demand curve.

26. **(a)** AFC can never be zero as TFC can never be zero

**Explanation:**

There is always an element of TFC even at zero kevel of output. Because of this reason AFC can never be zero and though it kies close to the X axus it can never touch the X axis.

27. **(a)** True

**Explanation:**

The firm can earn abnormal profits only when TR > TC

28. Two factors that may shift the Production Possibility Frontier of an economy away from origin (to the right) are:

i. Increase in resources available to an economy (natural, physical or human resource). New resources may increase the output potential in an economy resulting in shift of PPF away from origin.

ii. Improvement in technology, when technology improves the production potential, i.e., economy may be able to produce more output using existing resources efficiently.

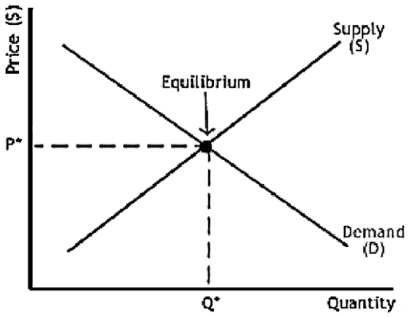
OR

An individual himself is not capable of producing all goods and services which he needs for the satisfaction of wants. He depends upon others. If you are a teacher, students depend upon you for their education. You, on the other hand, depend upon a baker for the bread, a tailor for stitching your clothes, a maidservant for domestic help, and so on. Thus, mutual interdependence is the essence of economic activity. Mutual interdependence leads to exchange. Accordingly, we can say that mutual interdependence

and exchange are the core elements of an economy.

A simple economy is the one in which the degree of 'interdependence and exchange' is of a moderate degree. Every individual in the community is occupied in the manufacturing of some goods or services and they require an amalgam of many goods and services not all of which are produced by them.

29. The equilibrium price is the price at which the demand and supply intersect in other words when the quantity demanded and supplied is the same in the market. At this point, the upward and downward pressure on price is equal and the quantity demanded equals the quantity supplied. Equilibrium Price changes with the change in demand and supply like an invisible force that drives the market. Graphically equilibrium price is the price at the intersection of demand and supply curve i.e. P.




30. Demand is defined as the quantity of a commodity that a consumer is willing and able to purchase m the market in a given period of time and at each possible price.

    E.g. a consumer demands 5 kg of sugar m a month at a price of Rs 40 per kg.

    Market demand means the total quantity of a commodity that all its buyers are willing to purchase at different prices over a given period of time e.g. demand of all the households for milk priced at Rs44 per litre is 20,000 litres per month.

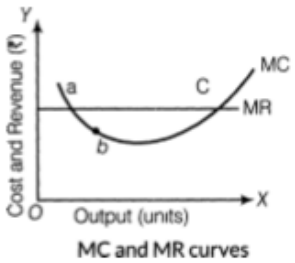
    It is affected by

    i. Price of the commodity: There is an inverse relationship between price and quantity demanded.
    ii. Price of related goods: Demand for the given commodity is affected by the change in prices of substitute or complementary goods.
    iii. Income of the consumers: The effect of a change in income on demand depends on the nature of the commodity under consideration.
    iv. Taste and preference of consumers: Taste and preference of consumers directly influence the demand for a commodity. They include changes in fashion, customs, habits, etc.
    v. Expectations of consumers regarding the availability of goods
    vi. Population size: Increase or decrease in size of the population directly affects the demand.
    vii. Distribution of income
    viii. Composition of population

31. Striking an equilibrium in a state of increasing returns to a factor (when MP is rising or MC is falling) is absolutely ruled out. Because it is a situation when every additional unit of output adds more and more to total profits. This is so because MR is constant (under perfect competition) MC is falling (owing to increasing returns), so that the difference between MR and MC tends to rise. It is only when the difference (MR - MC) starts shrinking and is finally eliminated, that the profits are maximised. This happens only in a state of diminishing returns when MP is falling or MC is rising. It would be an irrational decision for a producer to strike his equilibrium in a situation of falling MC. It is only when MC is rising that a producer should strike his equilibrium.

    OR

    i. No, because when Marginal Revenue is greater than Marginal Cost, then this implies that the producer is getting increasing returns to a factor. If he increases his production level, his cost will further decrease and this will help him to earn more profits.



MC and MR curves

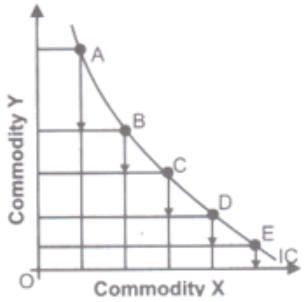
    In the above figure, at point 'b', MR > MC. So, the producer is earning super-normal profits. This will induce him to increase his production further,

    ii. There can be two possible situations

a. MR = MC and Marginal Cost is falling beyond the point of equilibrium. This condition is depicted at point 'a' in the graph. The producer is not in equilibrium at this point because beyond this point Marginal Cost is falling. So, by producing additional units the producer will be able to earn abnormal profits.

b. Marginal Revenue =Marginal Cost and Marginal Cost is rising beyond this point. This condition is depicted at point 'c' in the above graph.

32. Every IC is based on the assumption that various combination of two commodities gives equal satisfaction to a consumer. In order to remain at the same level of satisfaction, the consumer will have to reduce the consumption of one commodity if he wants to increase the consumption of another commodity. This means that the consumption of good X is negatively related to consumption of good Y and this implies that IC slopes downwards from left to right.




33. With the employment of more and more units of the variable factor along with the given fixed factor, MP increases and hence TP increases at an increasing rate. This is called Increasing returns to a factor.

Reasons for the Increasing returns to a variable factor are:-

i. Fuller utilisation of the fixed factor: Certain factors of production are indivisible. They can put to their best use only when they are fully employed.

ii. Division of labour and specialisation: When a large number of labour units are employed, it is possible to divide a job in different stages. It results in specialisation implies higher efficiency and more production.

34. Answer the following questions

(i) Power (electricity) is put to several uses by the households. It involves the use of several appliances. Some appliances (like washing machines, dishwashers) can be used during off-peak hours if the households have to pay the lower tariffs. Accordingly, it is expected that the peak-hour demand would reduce in response to high tariff rates. As a result, load-shedding is expected to reduce.

(ii) Price elasticity of demand is an economic measure of the change in the quantity demanded or purchased of a product in relation to its price change.

| Quantity | MR | TR | AR | Ed = $\frac{\triangle Q}{\triangle P} \times \frac{P}{Q}$ |
|---|---|---|---|---|
| 1 | 10 | 10 | $\frac{10}{1} = 10$ | - |
| 2 | 6 | 10 + 6 = 16 | $\frac{16}{2} = 8$ | $\frac{1}{2} \times \frac{10}{1} = 5$ |
| 3 | 2 | 16 + 2 = 18 | $\frac{18}{3} = 6$ | $\frac{1}{2} \times \frac{8}{2} = 2$ |
| 4 | 2 | 18 + 2 = 20 | $\frac{20}{4} = 5$ | $\frac{1}{1} \times \frac{6}{3} = 2$ |
| 5 | 2 | 20 + 2 = 22 | $\frac{22}{5} = 4.4$ | $\frac{1}{0.5} \times \frac{5}{4} = 2.5$ |
| 6 | 0 | 22 + 0 = 22 | $\frac{22}{6} = 3.6$ | $\frac{1}{0.9} \times \frac{4.5}{5} = 1$ |
| 7 | 0 | 22 + 0 = 22 | $\frac{22}{7} = 3.1$ | $\frac{1}{0.5} \times \frac{3.6}{6} = 1.2$ |
| 8 | 0 | 22 + 0 = 22 | $\frac{22}{8} = 2.7$ | $\frac{1}{0.4} \times \frac{3.1}{7} = 1.1$ |
| 9 | -5 | 22 + (-5) = 17 | $\frac{17}{9} = 1.9$ | $\frac{1}{0.8} \times \frac{2.7}{9} = 0.38$ |