Class XI Session 2025-26
Subject - Economics
Sample Question Paper - 6

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. Simple aggregate of quantities is a type of **[1]**

   a) Quantity control
   b) Both Quality control and Quantity Indices
   c) Price control
   d) Quantity indices

2. **Assertion (A):** The common man does not have a distrust of statistics. Statistics is an inseparable part of business and economic analysis. **[1]**

   Reason (R): It is possible to misuse statistics by deliberately twisting or manipulating data.

   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.

3. Degree of Correlation Between + 0.25 and + 0.75 is **[1]**

   a) Perfect
   b) Moderate
   c) High
   d) Low

4. Find index number for year 2005 taking 2000 as the base year from the following data by simple average of price relative method: **[1]**

Commodities	A	B	C	D	E
Price (2000) (Rs)	100	80	160	220	40
Price (2005) (Rs)	140	120	180	240	40

   a) 121.32
   b) 154.32
   c) 122.2
   d) 135.32

5. Laspayer's index is based on **[1]**

a) Base year Prices

b) Average of current and base year

c) Current year quantities.

d) Base year quantities

6. From the following which is not a problem in the construction of Index numbers? **[1]**

a) selection of price

b) understanding of the purpose

c) selection of commodities

d) selection of base

7. What is the root cause of all economic problems? **[1]**

a) Deficient demand

b) Scarcity

c) Excess supply

d) Excess demand

8. The breadth of a rectangle is equal to the width of the class-interval in **[1]**

a) Both (Ogive) and (Histogram)

b) Ogive

c) Histogram

d) Frequency polygon

9. Which of the following index numbers is based on the assumption that all the commodities are of equal importance? **[1]**

a) Weighted index number

b) None of the given

c) Simple index number

d) Weighted index number and Simple index number

10. Calculate the correlation coefficient of the marks obtained by 12 students in mathematics and statistics and interpret it **[1]**

Marks (in Maths)	50	54	56	59	60	62	61	65	67	71	71	74
Marks (in statistics)	22	25	34	28	26	30	32	30	28	34	36	40

a) 0.77

b) 0.78

c) 0.76

d) +0.75

11. Calculate weighted aggregative price index number from the following data using Paasche's method. **[3]**

Commodity	**Base Year**		**Current Year**	
	Price (Rs.)	**Quantity**	**Price (Rs.)**	**Quantity**
A	10	30	12	50
B	8	15	10	25
C	6	20	6	30
D	4	10	6	20

12. Compute the median from the following data. **[3]**

Marks	40	41	42	43	44	45	46	47
Number of Students	2	3	7	8	10	12	14	16

OR

What is first quartile? Show it graphically.

13. From the following data, prepare simple frequency distribution on the basis of equal class interval. **[4]**

Marks	**Number of Students**
Less than 5	7
Less than 10	20
5-15	38
15 and above	55
20-25	20
25 and above	5
30 above	1

14. Present the following data by a percentage sub-divided bar diagram. **[4]**

Subject	Number of Students (in '000)	
	2011-12	2012-13
Statistics	25	30
Economics	40	42
History	35	28

OR

A manager was required to submit the report of components of cost to his senior. Cost had reduced in absolute terms but increased in percentage. He used sub divided bar diagram to present the data. Do you think there was some motive behind it? Which diagram will you recommend to be used?

15. There are 80 students in Silver Bells School who play cricket. A city level tournament has been organised and the school is required to send it's team to play in the tournament. The sports teacher, Mr Murthy, decided to select 14 players; 11 regulars and 3 substitutes. Should he select the team randomly? Why or why not? **[4]**

16. Calculate Karl Pearson's coefficient of correlation between the following two series by short-cut method. **[6]**

X	24	27	28	28	29	30	32	33	35	35	40
Y	18	20	22	25	22	28	28	30	27	30	22

17. If the arithmetic mean of the data given below is 28, find **[6]**

a. The missing frequency.

b. The median of the series.

Profit Per Retail Shop (in ₹)	0-10	10-20	20-30	30-40	40-50	50-60
Number of Retail Shops	12	18	27	-	17	6

OR

Calculate Q_1 and Q_3 from the following data.

Marks	**Number of Students**
10	4
20	10

30	20
40	8
50	6
60	3

Section B

18. If the price of the commodity falls by 10% and consequently the quantity supplied decreases by 20 %, then the elasticity of supply will be **[1]**

a) 0.5
b) -2
c) 1
d) 2.0

19. Which of the following is not concerned with the problem of choice? **[1]**

a) Limited (scarce) resources
b) Alternative use of resources
c) Excessive income
d) Unlimited wants

20. Which of the following statements is associated with general equilibrium analysis? **[1]**

a) Equilibrium in the market of gold ornaments
b) Equilibrium price of a good in consumer good market
c) Equilibrium across all markets in the economy
d) Equilibrium price of a good in the competitive market

21. What happens to total revenue when Marginal revenue is zero **[1]**

a) TR rises
b) TR is maximum and constant
c) TR falls
d) TR is also zero

22. Money costs mean **[1]**

a) Money spent by the consumers
b) Money expenditure on output
c) Money expenditure on purchase of goods from the factory
d) Money expenditure of a producer in the production process

23. **Assertion (A):** The graph of the Market demand curve slopes upward. **[1]**
Reason (R): There is an inverse relationship between the price of a commodity and its quantity demanded.

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. Average revenue and price are always equal under: **[1]**

a) monopolistic competition only
b) All market forms
c) perfect competition only
d) monopoly only

25. Which of the following statements is appropriate in case of monopoly? **[1]**

a) Slope of both AR and MR curves is downwards and MR curve is below AR
b) Slope of both AR and MR curves is upwards
c) AR curve slopes upward while MR curve
d) Slope of both AR and MR curves is

slopes downward

downwards and MR curve is above AR curve

26. Which of the following is the variable cost for a firm? **[1]**

a) Monthly rent

b) Insurance premium

c) Interest on loan

d) Wages to employees

27. Which of the following is not the feature of an imperfect competition? **[1]**

a) Price maker

b) Single seller

c) Homogeneous product

d) Large number of buyers

28. Explain the problem 'How to produce'. **[3]**

OR

What happens, if resources do not have alternative uses?

29. Explain the implications of perfect knowledge about market under perfect competition. **[3]**

30. Explain the change in demand of a good on account of the change in prices of related goods. **[4]**

31. Given the following schedule, state at which level of output, will the firm be at equilibrium and why. **[4]**

Quantity (in units)	Price (in ₹)	Total Cost (in ₹)
0	20	10
1	20	50
2	20	80
3	20	100
4	20	105
5	20	125
6	20	150

OR

What do you mean by producers equilibrium? State and briefly explain the conditions of producer's equilibrium with Marginal Revenue and Marginal Cost approach. Use diagram.

32. What are the main assumptions on which consumer's equilibrium (with the help of utility analysis) is based? **[4]**

33. a. What is meant by increasing returns to a variable factor? **[6]**

b. Discuss briefly, any two reasons for the decreasing returns to a variable factor.

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

(a) Draw a demand curve with unitary price elasticity. Give explanation. **[3]**

(b) When price of a goods falls from ₹ 8 per unit to ₹ 7 per unit, its demand rises from 12 units to 16 units. Compare expenditure on the goods to determine whether demand is elastic or inelastic. **[3]**

Solution

Section A

1.

(d) Quantity indices

Explanation:

Quantity indices is a type of Simple aggregate of quantities.

This index number measures the changes in the level of quantities of items consumed, or produced, or distributed during a year understudy with reference to another year known as the base year. Like the price index number, the simplest formula of this index number is as follows:

$Q_{01} = (q_1/q_0) \times 100$

Where, Q_{01} = quantity index number of the current year on the basis of the base year's quantity.

2.

(d) A is false but R is true.

Explanation:

The common man has a distrust of statistics. Statistics is an inseparable part of business and economic analysis because it is possible to misuse statistics by deliberately twisting or manipulating data.

3.

(b) Moderate

Explanation:

If value of r is close to 0, correlation is said to be low, while the values of r close to ± 1 represent high correlation. Degree of correlation between +0.25 and +0.75 will therefore be moderate.

4.

(c) 122.2

Explanation:

From the below table , $P_{01} = \frac{\sum P}{n} = \frac{611}{5} = 122.2$

p_0	p_1	$P = \frac{p_1}{p_0} \times 100$
100	140	140
80	120	150
160	180	112
220	240	109
40	40	100
		$\sum P = 611$

5.

(d) Base year quantities

Explanation:

A weighted aggregative price index using base period quantities as weights, is also known as Laspeyre's price index.

6. **(a)** selection of price

Explanation:

Prices are given and considering them donot create bias given weights are used with the given prices.

7.

(b) Scarcity

Explanation:

Had scarcity of resources not been there, the questions: what to produce, how to produce and for whom to produce(economic problems) were all absurd as, all was available in abundance.

8.

(c) Histogram

Explanation:

Since, for classes 10-20, 20-30 we say that width of class interval is 10, width also means breadth .since, histogram is drawn for exclusive data where width of all classes is same.

9.

(c) Simple index number

Explanation:

Simple index numbers grant equal importance to all items no matter what share it has. In other words, it considers each item to be equal with respect to the given variable.

10.

(b) 0.78

Explanation:

X	Y	dX	dY	dX^2	dY^2	$dXdY$
50	22	-12	-8	144	64	96
54	25	-8	-5	64	25	40
56	34	-6	4	36	16	-24
59	28	-3	-2	9	4	6
60	26	-2	-4	4	16	8
62 (A)	30 (A)	0	0	0	0	0
61	32	-1	2	1	4	-2
65	30	3	0	9	0	0
67	28	5	-2	25	4	-10
71	34	9	4	81	16	36
71	36	9	6	81	36	54
74	40	12	10	144	100	120
	$\sum$	6	5	598	285	324

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

$$= \frac{12(324) - (6)(5)}{\sqrt{12(598) - (6)^2}\sqrt{12(285) - (5)^2}} = 0.78$$

11. **Construction of Price index Number**

In paasche's index number we use current year prices as weight and computer weighted index by aggregative method.

Commodity	**Base Year**		**Current Year**		p_0q_1	p_1q_1
	p_0	q_0	p_1	q_1		
A	10	30	12	50	500	600

B	8	15	10	25	200	250
C	6	20	6	30	180	180
D	4	10	6	20	80	120
					$\Sigma p_0 q_1 = 960$	$\Sigma p_1 q_1 = 1150$

Paasche's Price Index Number

Thus, prices have increased by 19.79 percent $P_{01} = \frac{\Sigma p_1 q_1}{\Sigma p_0 q_1} \times 100 = \frac{1150}{960} \times 100 = 119.79$

12. The given series is a discrete series. So we have the first find the cumulative frequency of the series.

Calculation of Median

Marks (X)	**Number of Students (f)**	**Cumulative Frequency (cf)**
40	2	2
41	3	5
42	7	12
43	8	20
44	10	30
45	12	42
46	14	56
47	16	72
	$n = \Sigma f = 72$	

Here, n=Sum of frequency=72

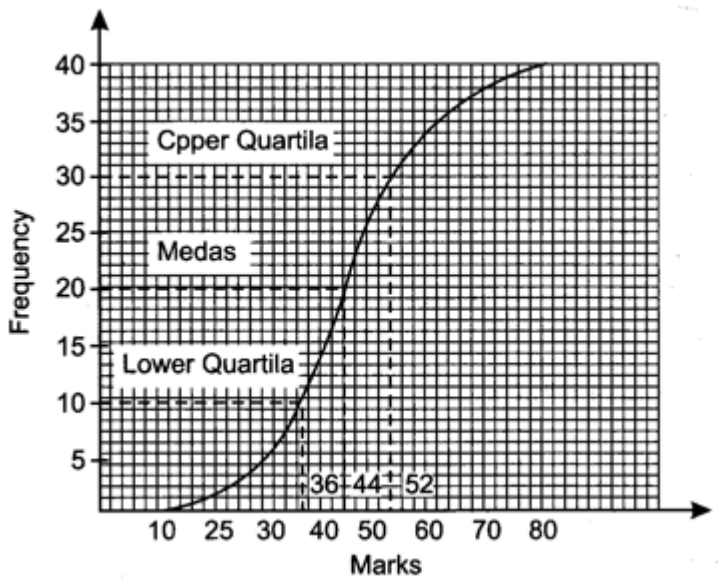
$Position\ of Median = \left(\frac{n+1}{2}\right)$ th item $= \left(\frac{72+1}{2}\right) th\ items$

=36.5th item

The 36.5th item falls in the cumulative frequency 42. We can see that the marks corresponding to this cumulative frequency are 45. Therefore, the required median is 45.

OR

First quartile is a positional average which distributes data in such a way that 25% items of the series lie below first quartile and 75% items lie-above it.



13. The simple frequency distribution table on the basis of equal class interval is shown below

Marks	**Number of Students**
0-5	7
5-10	13 [20-7]

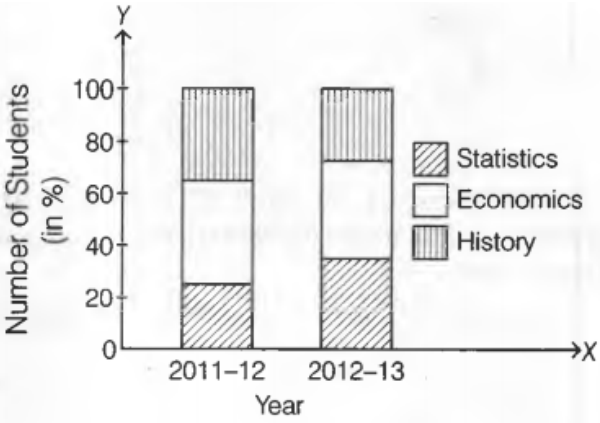
10-15	25 [38-13]
15-20	30 [55-25]
20-25	20
25-30	4 [5-1]
30-35	1
Total	100

We are given that frequency for all values less than 10 is 20. Thus, when we form a class interval 5 - 10, it contains all values greater than 5 but less than 10, so we subtract 7 from 20 to get the frequency of the class 5-10.Because 7 is the frequency of values greater than zero but less than 5. Likewise, we proceed.

14. First, we prepare a percentage table.

Percentage Table				
Subject	**2011-12**		**2012-13**	
	Number of students (in '000)	**Percent**	**Number of students (in '000)**	**Percent**
Statistics	25	25	30	30
Economics	40	40	42	42
History	35	35	28	28
Total	100	100	100	10

A percentage sub-divided bar diagram of given data is shown below



OR

Yes, there was a motive of misrepresentation and manipulation of data. It reflects dishonesty of the manager. In my opinion, he should have used either percentage bar diagram or pie chart as both show relative changes and would have shown the true picture.

15. No, Mr. Murthy should not select the players randomly. The random selection gives equal chance to every player of getting selected. In this method selection of the player will not be in accordance with his ability. If Mr. Murthy, adopts this method then it is possible that all the players selected are either bowlers or batsmen or even those players could be selected whose performance is not up to the standard. Mr. Murthy should use judgment method of selecting the players. Mr. Murthy has good knowledge related to his profession and is experienced in the work. In this method, the individual player will be selected by Mr.Murthy(investigator)consciously using his judgment. The players will be selected only if Mr. Murthy is convinced that they play well and it will also facilitate the selection of the required number of batsmen and bowlers.

16.

X	dx(X - A), A = 32	dx^2	Y	dy(Y - A), A = 25	dy^2	dxdy
24	-8	64	18	-7	49	56
27	-5	25	20	-5	25	25
28	-4	16	22	-3	9	12
28	-4	16	25	0	0	0
28	-4	16	22	-3	9	12

29	-3	9	22	-3	9	9
30	-2	4	28	3	9	-6
32	0	0	28	3	9	0
33	1	1	30	5	25	5
35	3	9	27	2	4	6
40	8	64	22	-3	9	-24
	$\Sigma dx = -18$	$\Sigma dx^2 = 224$		$\Sigma dy = -11$	$\Sigma dy^2 = 157$	$\Sigma dxdy = 95$

r = $\frac{n\Sigma dxdy - (\Sigma dx)(\Sigma dy)}{\sqrt{\Sigma dx^2 \cdot n - (\Sigma dx)^2} \times \sqrt{\Sigma dy^2 \cdot n - (\Sigma dy)^2}}$

$= \frac{11 \times 95 - (-18)(-11)}{\sqrt{224 \times 11 - (-18)^2} \times \sqrt{157 \times 11 - (-11)^2}}$

$= \frac{1045 - 198}{\sqrt{2464 - 324} \times \sqrt{1727 - 121}} = \frac{847}{\sqrt{2140} \times \sqrt{1606}} = \frac{847}{46.26 \times 40.07} = \frac{847}{1853.64}$ = 0.456 (approx)

- ***Therefore, Karl Pearson's coefficient of correlation between X and Y is 0.456***
- ***Interpretation: It shows medium degree of positive correlation between X and Y series.***

17. a. For the calculation, Let the missing frequency be f_1 of class interval 30-40

Calculation of missing frequency

Profit per Retail Shop (in ₹)	Number of Retail Shops (f)	Mid Value (m)	fm
0-10	12	5	60
10-20	18	15	270
20-30	27	25	675
30-40	f_1	35	$35f_1$
40-50	17	45	765
50-60	6	55	330
	$\Sigma f = 80 + f_1$		$\Sigma fm = 2100 + 35f_1$

$\overline{X} = \frac{\Sigma fm}{\Sigma f}$

or $28 = \frac{2100 + 35f_1}{80 + f_1}$

or 2240 + $28f_1$ = 2100 + $35f_1$

2240 - 2100=$35f_1$-$28f_1$ or 140 =7 f_1

f_1=20

Therefore, the missing frequency of the given data is 20.

b. Now, as calculated above the frequency of class interval 30-40 is 20. Calculation of the median is given below:

Groups	Frequency	Cumulative Frequency
0-10	12	12
10-20	18	30
20-30	27	57
30-40	20	77
40-50	17	94
50-60	6	100
Total	$\Sigma f = 100$	

$\Sigma f = n = 100$

So, the Median class $(m) =$ Size of $\left(\frac{n}{2}\right) th\ item$

= 50th item

50th item lies in the 57th cumulative frequency and the corresponding class is 20-30.

$Median = l_1 + \frac{\frac{n}{2} - cf}{f} \times h = 20 + \frac{\frac{100}{2} - 30}{27} \times 10$

$= 20 + \frac{50-30}{27} \times 10 = 20 + \frac{20}{27} \times 10 = 27.40$

Therefore, the median of the given data is 27.40

OR

Marks	Number of Students (f)	Cumulative Frequency (cf)
10	4	4
20	10	14
30	20	34
40	8	42
50	6	48
60	3	51
	$n = \Sigma f = 51$	

First quartile and third quartile can be calculated by using the formula given below:

Q_1	Q_3
$Q_1 =$ Size of $\left(\frac{n+1}{4}\right) th\ item$	$Q_3 =$ Size of $3\left(\frac{n+1}{4}\right) th\ item$
$=$ Size of $\left(\frac{51+1}{4}\right) th\ item$ = Size of 13th item and it lies in cf 14, Hence ***Q_1= 20 marks***	$=$ Size of $3\frac{(51+1)}{4} th\ item$ =Size of 39th items and it lies in cf 42, Hence ***Q_3= 40 marks***

Section B

18.

(d) 2.0

Explanation:

Elasticity of Supply = $\frac{percentage\ change\ inqty\ supplied}{percentage\ change\ in\ price}$

19.

(c) Excessive income

Explanation:

If Income is excessive, the problem of choice will not arise. The problem of choice arises because of scarce resources and their alternative uses.

20.

(c) Equilibrium across all markets in the economy

Explanation:

Equilibrium across all markets in the economy. General equilibrium analyzes the economy as a whole, rather than analyzing single markets like with partial equilibrium analysis. General equilibrium shows how supply and demand interact and tend toward a balance in an economy of multiple markets working at once.

21.

(b) TR is maximum and constant

Explanation:

When MR is zero, then TR is maximum. and after this level, the MR starts becoming negative and TR starts falling.

22.

(d) Money expenditure of a producer in the production process

Explanation:

When production cost is expressed in terms of monetary units, it is called money cost.

23.

(d) A is false but R is true.

Explanation:

The graph of the Market demand curve slopes downward because there is an inverse relationship between the price of a commodity and its quantity demanded.

24.

(b) All market forms

Explanation:

All market forms

25. **(a)** Slope of both AR and MR curves is downwards and MR curve is below AR

Explanation:

Under Monopoly, the firm's average revenue curve slopes downward from left to right. Accordingly, firm's AR curve slopes downward. If AR curve slopes downward, MR curve also slopes downward and faster than AR curve. So that MR<AR.

26.

(d) Wages to employees

Explanation:

Variable costs include payments such as **wages of labour employed**, prices of the raw materials, fuel and power used, the expenses incurred on transporting, etc. However, wages paid to workers for their regular hours are a fixed cost. Any extra time they spend on the job is a variable cost.

27.

(c) Homogeneous product

Explanation:

Homogeneous products can be seen only under perfect competition. Homogeneous products is a feature of perfect competition. In case of imperfect competition like Monopoly and Monopolistc competition homogenous product is not found.

28. The central problem 'How to Produce' is the problem of choosing the appropriate technique of production for producing goods.There can be more than one method for producing a good.
More labour and less capital (i.e., labour intensive technique) or more capital and less labour (i.e., capital intensive technique) can be used for production of a good.
Since resources are scarce, decision has to be taken about which technique should be used on the basis of availability of recources.
Example : A given quantity of cloth can be manufactured by combining factors of production in different proportions, making it capital-intensive or labour intensive method.

OR

There would not be any problem of choice or the problem of rational management of resources. The problem of choice then ceases to exist; accordingly there should not be any economic problem and no economics as such.
Example: If farming land could be used only for the production of rice (and no other crop) then where is the problem. Just grow rice and relax! The problem arises because farming land can be used for the production of different crops, like rice and Bajra.

29. In case of perfect competition, buyers and sellers have perfect knowledge of the market. Perfect knowledge means that both buyers and sellers are fully informed about the market conditions like price, quality, etc, Therefore, no firm is in a position to charge a different price and no buyer will pay a higher price. As a result, uniform price prevails in the market. Further both buyers and sellers have perfect knowledge about the input markets. This means that each firm has equal access to the technology and the inputs used in the production. Hence all the firms have uniform cost structure. Since there is a uniform price and uniform costs in case of perfect competition therefore all firms earn uniform profits.
30. Related goods are of two types

1. **Substitute goods:** Substitute goods are those goods which can be used in place of one another for satisfaction of a particular want, for example tea or coffee. The effect of change in price of a substitute good on the demand of the concerned good is direct. The rise in the price of the substitute good causes demand for the concerned good to rise, and fall in the price of the substitute good causes demand the concerned good to fall. For example, if price of a substitute good (say, coffee) increases, then demand for given commodity (say, tea) will rise as tea will become relatively cheaper in comparison to coffee.
2. **Complementary goods:** Complimentary goods are those goods which are used together to satisfy a particular want, for example car and petrol. The effect of a change in the price of a complementary good on the demand of the concerned good is inverse. Rise in price of the complementary good causes demand for the concerned good to fall, and fall in the price of the complementary good causes the demand for the concerned good to rise. For example, if price of a complimentary good (say, sugar) increases, then demand for given commodity (say, tea) will fall as it will be relatively costlier to use both the goods together.

31.

Quantity (in units)	Price = AR (in ₹)	TR (in ₹)	TC (in ₹)	MR (in ₹)		MC (in ₹)
0	20	0	10	-		-
1	20	20	50	20	<	40
2	20	40	80	20	<	30
3	20	60	100	20	=	20
4	20	80	105	20	>	5
5	20	10	125	**20**	**=**	**20**
6	20	120	150	20	>	25

The firm will be in equilibrium at 5 units of output as at this level of output both the conditions of firm's equilibrium are satisfied, i.e.

i. MR is equal to MC (₹ 20)
ii. MC is increasing at the point of equilibrium

OR

Producer's equilibrium refers to a situation, where a producer is producing that level of output, at which its profits are maximum. In other words, it is a situation of profit maximisation or cost minimisation (under MR and MC approach). According to this approach, the producer is in equilibrium when the Marginal Revenue (MR) is equal to the Marginal Cost (MC) and Marginal Cost curve cuts the Marginal Revenue curve from below. Two conditions under this approach are:

i. MC = MR
ii. MC curve should cut the MR curve from below.

MR is the addition to Total Revenue from the sale of one more unit of output and MC is the addition to Total Cost for increasing the production by one unit. The basic aim of every producer is to maximise the profit. For this, a firm compares its MR with its MC.

As long as the addition to revenue is greater than the addition to cost, it is profitable for a firm to continue producing more units of output.

In the below diagram, output is shown on the X-axis, revenue and cost on the Y-axis.

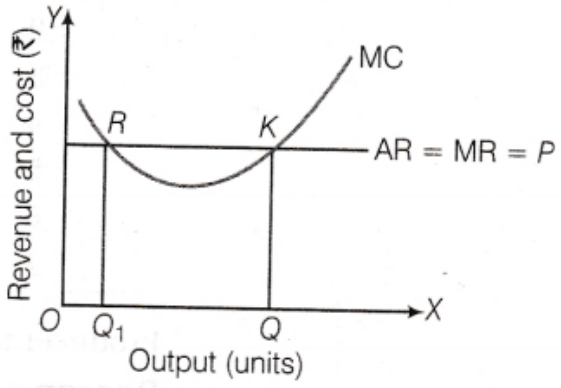
The Marginal curve, is 'U' shaped and p = MR= AR.

MC = MR at two points, R and K in the diagram but profits are maximised at point K, corresponding to OQ level of output. Between OQ_1 and OQ levels of output, MR exceeds MC. Therefore, firm will not stop at point R but will continue to take advantage of additional profit. Thus, equilibrium will be at point K where both the conditions are satisfied.

Two other situations may also exist:

i. MR > MC At output level less than
OQ, MR > MC which implies that firm is earning profit on the last unit of output. The marginal profit provides an incentive to the firm to increase production and move towards OQ units of output. Therefore, when MR>MC, the firm increases output to maximise its profit.
ii. MR < MC At output level more than
OQ, MR < MC which implies that firm is making a loss on its last unit of output. Hence, in order to maximise profit, a rational

producer decreases output as long as MC > MR. Thus, the firm moves towards producing OQ units of output.



32. A consumer is in equilibrium when he derives maximum satisfaction from the goods and is in no position to rearrange his purchases.
    i. Rational consumer because he wants to get maximum satisfaction out of his limited resources.
    ii. The utility can be measured in cardinal numbers.
    iii. The marginal utility of money remains constant.
    iv. There is independence of utilities.
    v. No change in taste, fashion, and habit.
    vi. The prices of the commodities remain constant.

33. a. Increasing returns to a variable factor, implies that as we keep on increasing the units of variable factor along a given fixed factor, the total production increases at an increasing rate i.e. Marginal Product increases. This is due to the factors like division of labour, proper coordination between fixed and variable factor etc.

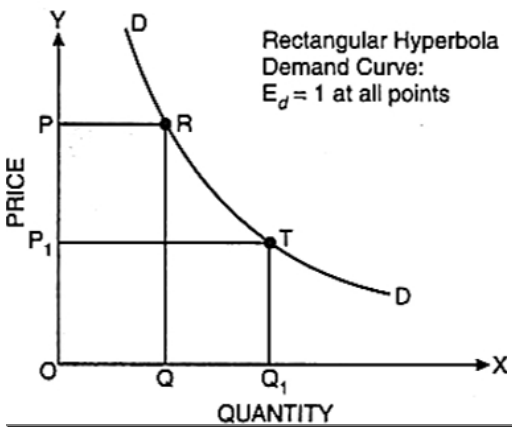
    b. Reasons for the decreasing returns to a variable factor

    i. **Over-utilisation of the fixed factor**
    As we keep on increasing the variable factor along with the fixed factor eventually a position comes when the fixed factor has its limits and starts yielding diminishing returns.

    ii. **Improper coordination between Fixed and Variable factors**
    After a certain level of employment of variable factors along with the fixed factors, the production process becomes too crowded. With the employment of additional variable inputs, factor proportion become lesser and lesser suitable for the production and start yielding diminishing returns.

34. Answer the following questions

(i) Elasticity of demand is unitary when: Total expenditure after the change in price = Total expenditure before the change in price
Rectangular hyperbola curve satisfies this condition. Elasticity of demand is unitary on any point on the demand curve if it is a rectangular hyperbola.



(ii)

Price (₹)	Quantity (Units)	TE (₹)
8	12	96
7	16	112

Price decreases and TE increases. It shows inverse relationship between price and total expenditure. So, there is elastic demand or greater than unitary elastic demand.