Govt. Model Question Paper - 2018-19

with Answer Key

and

Sura's Model Question Papers - 2 Nos.

with Answer Key

11th STD.

ECONOMICS

Time allowed : 2½ hours **Total Marks : 90 Marks**

On 21.08.2018, Model Question Paper is released by the Govt. We have given it along with Answer Key.

Kind Attention to the Students

- From this year onwards, blue print system has been abolished.
- Please note that questions will be framed from IN-TEXT portions ALSO.
- Approximately 20% of the questions will be asked from IN-TEXT portions.
- These questions will be based on Reasoning and Understanding of the lessons.
- Further, Creative and Higher Order Thinking Skills questions will also be asked. It requires the students to clearly understand the lessons. So the students have to think and answer such questions.
- It is instructed that henceforth if any questions are asked from 'out of syllabus', grace marks will not be given.
- Term Test, Revision Test and Model Exam will be conducted based on the above pattern only.
- Concentrating only on the book-back questions and/or previous year questions, henceforth, may not ensure to score 100% marks.
- Also note that the answers must be written either in blue ink or in black ink. Avoid using both the colour inks to answer the questions.
- For MCQs, the answers should be written in full. Simply writing (a) or (b) etc. will not get full marks. You have to write (a) or (b) etc., along with the answer given in the options.

On 21.08.2018, Model Question Paper is released by the Govt. We have given it along with Answer Key.

11th STD. GOVT. MODEL QUESTION PAPER - 2018- 19

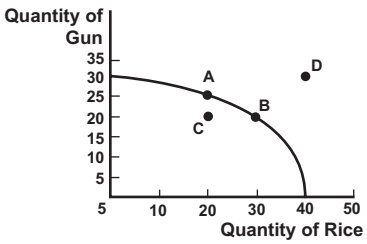
(WITH ANSWER KEY)

Time : 2.30 Hours **ECONOMICS** **Total Marks : 90**

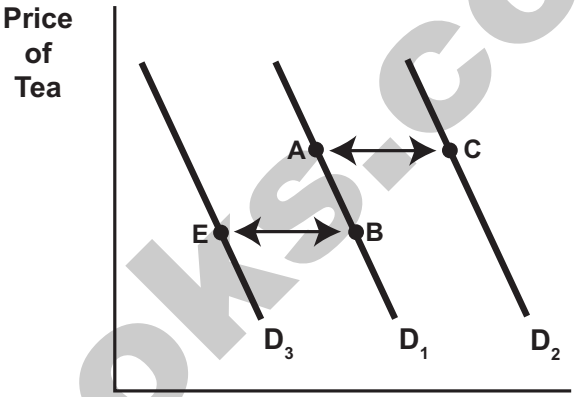
PART - A **[20 × 1 = 20]**

Answer the following questions.
Choose the best answers

1. Which of the following is a microeconomics statement?
   (a) The real domestic output increased by 2.5 percent last year.
   (b) Unemployment was 9.8 percent of the labour force last year.
   (c) The price of wheat declined last year.
   (d) The general price level increased by 4 percent last year.
2. Find the odd one out:
   (a) " An inquiry into the nature and the causes of the Wealth of Nations"
   (b) " Principles of Economics"
   (c) "Nature and Significance of Economic Science"
   (d) "Ceteris paribus"
3. Consider the PPF diagram below.



   Given the PPF illustrated, what is the opportunity cost of moving from B to A?
   (a) 5 Gun (b) 10 Rice.
   (c) 5/10 Rice (d) 10/5 Gun.
4. The chief exponent of the Cardinal utility approach was
   (a) J.R.Hicks (b) R.G.D.Allen
   (c) Marshall (d) Stigler
5. Given potential price is Rs.375 and the actual price is Rs.200. Find the consumer surplus.
   (a) 375 (b) 175 (c) 200 (d) 50
6. Demand curve can be derived from the law of diminishing marginal utility on which the following assumptions?
   (i) Utility can be measured in quantitative terms
   (ii) Utility of money is constant
   (a) Only (i) is true
   (b) Both (i) and (ii) are true
   (c) Only (ii) is true
   (d) Neither (i) nor (ii) is true
7. The diagram below illustrates 3 possible demand curves for Tea.



   Suppose that Tea and Coffee are substitutes. If the price of Coffee increases, which of the following movements will represent the effect of this in the market for Tea?
   (a) A to C. (b) A to B.
   (c) B to A. (d) B to E.
8. In a firm 6- units of factors produce 30 units of the product. When the number of factor increases by one, the production increases to 42 units. Calculate the Average Product.
   (a) 30 (b) 6 (c) 5 (d) 24
9. Name the returns to scale when the output increases by 3%, for a 5% increase in the inputs,
   (a) Increasing returns to scale
   (b) decreasing returns to scale
   (c) Constant returns to scale
   (d) All of the above
10. **Assertion (A) :** An isocost line is a straight line
    Reason (R) : The market rate of exchange between the two inputs is constant.
    (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.
11. Identify the formula of estimating average variable cost.
    (a) TC/Q (b) TVC/Q
    (c) TFC/Q (d) TAC/Q

12. Match the following and choose the correct answer using the codes given below

Elasticity	Marginal Revenue
A. e=1	I. MR -ve
B. e>1	II. MR =0
C. e<1	III. MR +ve

Code:

	A	B	C
(a)	I	II	III
(b)	II	III	I
(c)	III	I	II
(d)	I	III	II

13. "Wages as a sum of money are paid under contract by an employer to a worker for services rendered" –Who said this?
(a) Benham (b) Marshall
(c) Walker (d) J.S.Mill

14. The year 1921is known as …..
(a) Year of small divide
(b) Year of Population Explosion
(c) Year of Urbanisation
(d) Year of Great Divide

15. The objective of the Industrial Policy 1956 was ……..
(a) Develop heavy industries
(b) Develop agricultural sector only
(c) Develop private sector only
(d) Develop cottage industries only

16. The highest rate of tax under GST is _____
(a) 18% (b) 24% (c) 28% (d) 32%

17. **Assertion (A) :** Industrial policy -1991 initiated liberalization of Indian Economy.
Reason (R) : Industrial growth was very slow before 1991.
(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.

18. Identify the year in which National Rural Health Mission was launched.
(a) 2000 (b) 2005 (c) 2010 (d) 2015

19. Which district in TN has the highest sex ratio?
(a) Nagapattinam (b) Nilgiris
(c) Tiruchy (d) Thanjavur

20. If x+y = 5 and x-y= 3 then x =
(a) 4 (b) 3 (c) 16 (d) 8

PART - B [7 × 2 = 14]

Answer any seven in which question No. 30 is compulsory.

21. What are branches of Economics?
22. The price of a commodity falls from ₹.50 to ₹.30, resulting in an increase in the purchase of the commodity from 200 units to 220 units. Calculate the price elasticity of demand.
23. Bring out the relationship among Average and Marginal Products.
24. What is meant by Sunk cost?
25. Who is price-taker?
26. Fill the sex ratio of India.

Census year	Sex ratio (Number of females per 1000 males)
1951	?
2001	?
2011	?

27. Name out the different types of land tenure existed in India before independence.
28. State the meaning of special Economic Zones.
29. The demand function is given by $x = 20 - 2p - p^2$ where p and x are the price and the quantity in demand respectively. Find the elasticity of demand for p = 2.5.
30. Find out the names of Indian Economic Idealogists:
a) "It is not a great misfortune for a state if its revenues are limited, provided the Expenditure is kept within bounds."
b) He felt that it was better for India to be poor that to have thousands of drunkards.
c) He has focused on the poor, viewing them not as objects of pity requiring charitable hand – outs

PART - C [7 × 3 = 21]

Answer any seven questions' in which question No. 40 is compulsory.

31. Distinguish between microeconomics and macroeconomics.
32. Distinguish between Price – Maker and Price – Taker?
33. Define opportunity cost and provide an example.
34. State the meaning of selling cost with an example.
35. State the meaning of liquidity preference.
36. Write the V.K.R.V.Rao's contribution on multiplier concept.
37. State the reasons for nationalization of commercial banks.
38. What are the measures taken towards Globalization.
39. Mention the features of SHGs.

40. Mention different stages of returns to scale.

Labour (Units)	Capital (Units)	Total Product
1	2	4
2	4	11
3	6	19
4	8	29
5	10	39
6	12	49
7	14	57
8	16	63
9	18	67

PART - D **[7 × 5 = 35]**

Answer all the questions.

41. (a) Compare and contrast various definitions of Economics.

(OR)

(b) A consumer's total utility of apples consumed per day is given below. Derive the marginal utility schedule. Also find out the quantity of apples the consumer will purchase in his equilibrium given that marginal utility of a rupee for him is ₹.8. Price of the apple is ₹ 2 per unit.

Quantity of apple	Total Utility
1	20
2	38
3	54
4	68
5	80
6	90

42. (a) Describe the feature of human wants.

(OR)

(b) Elucidate the law of diminishing marginal utility with diagram.

43. (a) List out the properties of iso-quants with the help of diagrams.

(OR)

(b) If total cost = $10+Q^3$, find out AC, AVC, TFC, AFC when Q=5.

44. (a) How price and output are determined under the perfect competition?

(OR)

(b) Describe briefly the Innovation Theory of Profit.

45. (a) Explain features of Indian economy

(OR)

(b) Describe the performance of any 5- five year plans in India.

46. (a) Describe the salient features of EXIM policy (2015 – 2020)

(OR)

(b) 'The features of Rural Economy are peculiar'- Argue.

47. (a) Describe the qualitative aspects of population.

(OR)

(b) Calculate the elasticity of demand for the demand schedule by using differential calculus method P = 60 – 0.2Q where price is i) P = 0, (ii) P = 20, (iii) P = 40

ANSWER

PART - A

1. (c) The price of wheat declined last year.
2. (d) "Ceteris paribus"
3. (c) 5/10 Rice
4. (c) Marshall
5. (b) 175
6. (b) Both (i) and (ii) are true
7. (a) A to C.
8. (b) 6
9. (b) decreasing returns to scale
10. (d) A is false but R is true.
11. (b) TVC/Q
12. (b) II III I
13. (a) Benham
14. (d) Year of Great Divide
15. (a) Develop heavy industries
16. (c) 28%
17. (a) Both A and R are true and R is the correct explanation of A.
18. (b) 2005
19. (b) Nilgiris
20. (a) 4

PART - B

21. (i) Consumption
    (ii) Production
    (iii) Exchange
    (iv) Distribution

22. ***Solution :***

Formula for calculating price elasticity of demand $= \frac{\Delta Q}{Q} \times \frac{P}{\Delta P}$

$= \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$

$Q = 200$ $\quad \Delta Q = 20 \quad (220 - 200)$

$P = 50$ $\quad \Delta P = 20 \quad (50 - 30)$

$$EP = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$$

$$= \frac{\cancel{20}^{1}}{\cancel{20}} \times \frac{\cancel{50}^{1}}{\cancel{200}^{4}}$$

$\therefore EP = 0.25$

23. Relationship among Average and Marginal Products.

Stages	Marginal Product	Average Product
Stage - I	At the begining it increases, then reaches a maximum and starts to decrease	At the first instant it increases, then attains maximum
Stage - II	It continues to diminish and becomes equal to zero	It is equal to MP and then begins to diminish
Stage - III	It becomes negative	It continues to diminish but always greater than zero (positive)

24. (i) A cost incurred in the past and cannot be recovered anymore in future is called as sunk cost.

(ii) This is historical but irrelevant for future business.

25. (i) A firm under perfect competition is a price taker, not a price-maker.

(ii) It takes the price of the product from the industry.

26.

Census year	Sex ratio (Number of females per 1000 males)
1951	946
2001	933
2011	940

27. (i) The three different types of land tenure existed in India before independence.

(ii) They were Zamindari system, Mahalwari system and Ryotwari system.

28. A special economic zone in which business and trade laws different from the rest of the country sez are located within a country's national borders, and their aims include increased trade, increased investment, job creation and effective administration.

29. ***Solution :***

$$\eta d = \frac{p}{x}\frac{dx}{dp}$$

$$\frac{dx}{dp} = -2 - 2p$$

$$\eta d = \frac{-p}{20 - 2p - p^2}(-2-2p)$$

$$= \frac{2p(r+p)}{20 - 2p - p^2}$$

When $p = 2.5$ $= \frac{2(2.5)(1+2.5)}{20 - 2(2.5) - (2.5)^2}$

$$= \frac{5(3.5)}{20 - 5 - 6.25}$$

$$= \frac{17.5}{15 - 6.25}$$

$$= \frac{17.5}{8.75}$$

Ans. = 2

30. (a) Valluvar

(b) Gandhi

(c) Amartyasen

PART - C

31.

Sl. No.	Micro Economics	Macro Economics
1	Micro means small	Macro means large.
2	Micro Economics is the study of individuals households, firms etc.	Macro Economics concerned with the economy as a whole.
3	It covers value theory and Theory of economic welfare.	It is the study of aggregates such as national output, unemployment and taxes.
4	Price theory.	Income theory.
5	Alfred Marshall is the father of micro economics.	J.M. Keynes is the father of macro economics.

32.

Sl. No.	Price - Maker	Price - Taker
1	The power in the firm to set the price for goods in the market.	The feature of a firm to accept the price fixed in the industry.
2	Firms under monopolistic competition are price makers.	A firm under perfect competition is a price taker.

33. (i) It refers to the cost of next best alternative use.

(ii) In other words, It is the value of the next best alternative.

(iii) It is also called as 'Alternative cost' or 'Transfer cost'

For Example :

(i) A farmer can cultivate both paddy and sugarcane in a farm land.

(ii) If he cultivates paddy the opportunity cost of paddy output is the amount of sugercane output given up.

34. (i) From the discussion of 'Product differentiation'. We can infer that the producer under monopolistic competition has no incur expenses to popularise his brand.

(ii) This expenditure involved in selling the product is called selling cost.

(iii) According to prof. Chemberlin, selling cost is "the cost incurred in order to alter the position or shape of the demand curve for a product".

(iv) Most important form of selling cost is advertisement.

35. (i) Liquidity preference means the preference of the people to hold wealth in the form of liquid cash.

(ii) Other non liquid assets like bonds, securities, bills of exchange, land, building, gold, etc.

36. (i) Rao's examination of the "interrelation between investment, income and multiplier in an under developed economy (1952).

(ii) Prof. Rao examined the validity of the keynesian multiplier in underdeveloped countries.

(iii) This was his major contribution to macro economic theory.

(iv) Rao was a thinker, teacher, economic adviser and direct policy maker.

(v) Rao followed the footsteps of his great teacher J.M. Keynes.

37. (i) The main objective of the economic planning aimed at social welfare.

(ii) Before the independence commercial bank were in the private sector.

(iii) These commercial banks failed in helping the government to achieve social objectives of planning.

(iv) Therefore, the government decided to nationalize 14 major commercial banks.

38. (i) Import liberalization through reduction of tariff and non tariff barriers.

(ii) Opening the doors to foreign direct investment.

(iii) Foreign direct investment (FDI) and Foreign portfolio Investment (FPI) are some of the measures towards globalization.

39. (i) Self help groups are informal voluntary association of poor people.

(ii) Socio - Economic background, up to 20 women come together for the purpose of solving their common problems through self help and mutual help.

(iii) The SHGs promotes small saving among its members the amount of ₹10 to ₹ 50 a month.

(iv) The savings are kept with a bank.

(v) After saving 6 months, they lend small amount to their members for interest.

(vi) They are linked with the bank for further assistance under SHG Bank linked program.

(vii) It is a holistic programme of micro enterprises covering all aspects of self employment organization of the rural poor.

40. ***Solution :***

$MP_n = TP_n - TP_{n-1}$

Labour units	Capital units	Total Product	Marginal Product	Stages
1	2	4	(4–0)=4	Increasing Returns to scale
2	4	11	(11–4)= 7	
3	6	19	(19–11)=8	
4	8	29	(29–19)=10	constant returns to scale
5	10	39	(39–29)=10	
6	12	49	(49–39)=10	
7	14	57	(57–49)=8	Decreasing returns to scale
8	16	63	(63–57)=6	
9	18	67	(67–63)=4	

PART - D

41. (a) Marshall's Definition vs. Robbin's Definition

Marshall's Definition	Robbin's Definition
"Economics is the study of man in the ordinary business of life." It examines that part of individual and social action, which is most closely connected with the attainment and with the use of material requisites of well being.	"Economic is the science which studies human behaviour as a relationship between multiple ends and scarce means, which have alternative uses".

Similarities between Robbins & Marshall's Definition.

Human Behaviour :

(i) Both the definitions are concerned with human behaviour.

(ii) Marshall's and Robbin's definitions are concentrate on optimization.

(iii) According to Marshall, wealth is the basic source of maximisation of material welfare. Robbins is of the opinion that maximize our satisfaction by scarce resources.

Differences between Marshall's & Robbins Definition.

Economic activity - Material / Immaterial :

(i) Marshall believes in only material activities which promote material welfare.

(ii) Robbins believes in both material and immaterial activities to tackle the problem of choice.

Social Science / Natural Science :

(i) Marshall economics is a social science.

(ii) Robbins Economics is natural science like Physics, Chemistry etc.

Practical / Theoretical :

(i) Marshall's definition is practical in nature.

(ii) Robbins definition is theoretical in nature.

Welfare / Scarcity :

(i) Marshall's definition is based on human material welfare.

(ii) Robbins definition is based on scarcity resources.

(OR)

(b) ***Solution :***

$$Mu_n = Tu_n - Tu_{n-1}$$

Quantity of Apples	Total Utility	Marginal Utility
1	20	20
2	38	(38–20)=18
3	54	(54–38)=16
4	68	(68–54)=14
5	80	(80–68)=12
6	90	(90–80)=10

Marginal Utility of Apples

	1,	2,	3,	4,	5,	6
Price of	2	2	2	2	2	2

Apple is Rs. 2.

2	4	6	8	10	12

When the consumer consumes 4 units of apples he derives maximum satisfaction for Rs. 8. When the consumer consumes 4th units of Apple.

Illustration :

(i) This law can be illustrated with the help of table.

(ii) Let us assume that the consumer has a given income of Rs. 8/- He wants to spend this entire income (ie. Rs. 8) on Apple. The price of an Apple is Rs. 2/- each.

(iii) If the consumer wants to attain Maximum Utility he can use the following formula.

$$\frac{\text{Marginal Utility of Apple}}{\text{Price of Apple}}$$

Marginal Utility of rupee is Rs. 8

Price of Apple is Rs. 2

$$= \frac{8^{4}}{2_{1}}$$

∴ 4 units of Apple

Therefore he should buy 4 units of apple to attain maximum utility.

42. (a) (i) **Wants are unlimited :**

(1) Human wants are countless in number and various in kinds. When one want is satisfied another want crops up.

(2) Human wants multiply with the growth of civilization and development.

(ii) **Wants become habits :**

(1) Wants become habits; for example, when a man starts reading news paper in the morning, it becomes a habit.

(2) Same is the case with drinking tea or chewing pans.

(iii) **Wants are Satiable :**

(1) Though we cannot satisfy all our wants, at the same time we can satisfy particular wants at a given time.

(2) When one feels hungry, he takes food and that want is satisfied.

(iv) **Wants are Alternative :**

There are alternative ways to satisfy a particular want eg. Idly, dosa or chappathi.

(v) **Wants are Competitive :**

(1) All our wants are not equally important. So, there is competition among wants.

(2) Hence, we have to choose more urgent wants than less urgent wants.

(vi) **Wants are Complementary :**

(1) Sometimes, satisfaction of a particular want requires the use of more than one commodity.

(2) Example: Car and Petrol, Ink and Pen.

(OR)

(b) (i) H.H. Gossen, and Austrian Economist was the first to formulate this law in Economics in 1854.

(ii) Jevons called this law as "Gossen's first law of consumption".

Definition :-

Marshall states the law as "the additional benefit which a person derives from a given increase of his stock of a thing, diminishes with every increase in the stock that he already has".

Assumptions :-

(i) The marginal utility of money remains constant.

(ii) The consumer should be rational and his aim is to attain maximum satisfaction with minimum expenditure.

(iii) The units of the commodity must be reasonable in size.

(iv) Uniform in character like weight, quality, taste, colour etc.

(v) Goods must be made continuously at a given period of time.

(vi) No change in the taste, habits, preferences, fashions, income and character etc.

Explanation :-

The law of Diminishing Marginal utility states that if a consumer continues to consume more and more units of the same commodity, its marginal utility diminishes.

Illustrations :-

(i) Suppose a consumer wants to consume 7 apples one after another.

(ii) The utility from the first apple is 20.

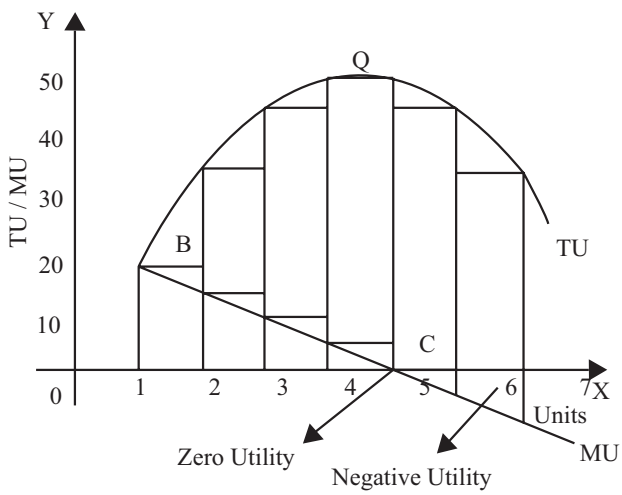
(iii) The second apple will be less than that of first (say 15), the third less than that of second (say 10) and so on, finally the utility from the fifth apple becomes zero.

(iv) Utility from sixth and seventh apple are negative (or) disutility (or) disliking.

(v) This tendency is called the "The law of Diminishing marginal Utility".

Table 2.1

Number of Apple	Total Utility	Marginal Utility
1	20	20
2	35	15 (35 – 20)
3	45	10 (45 – 35)
4	50	5 (50 – 45)
5	50	0 (50 – 50)
6	45	–5 (45 – 50)
7	35	–10 (35 – 45)



(vi) When marginal utility becomes zero, the total utility is maximum and when marginal utility becomes negative, the total utility diminishes.

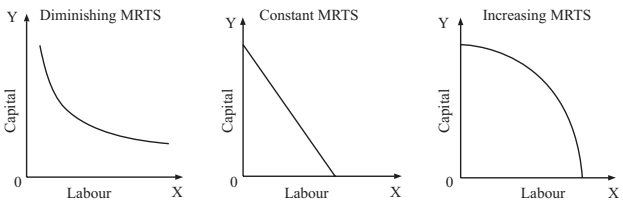
43. (a) **(A) Properties of Iso quant curve :**

(i) The Iso - quant curve has negative slope.

(ii) It slopes downwards from left to right indicating that the factors are substitutable.

(iii) This explains the Principle of marginal, rate of Technical Substitution ($MRTS_{KL}$)

(iv) Constant MRTS (Straight line) and increasing MRTS (Concave) are also possible.



(B) The Iso - quant curve is convex to the origin.

(i) This means that factors of production are substitutable to each other.

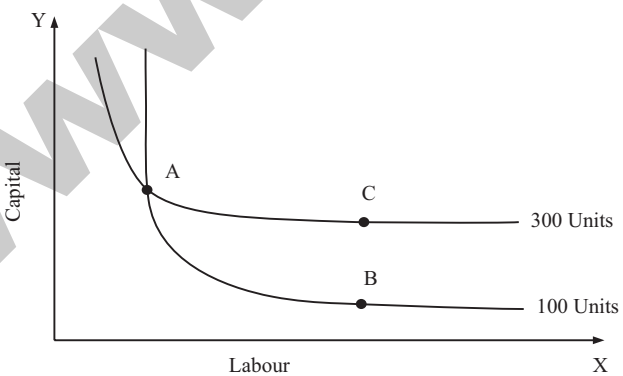
(ii) The capital substituted per unit of labour goes on decreasing when the Iso quant is convex to the origin.

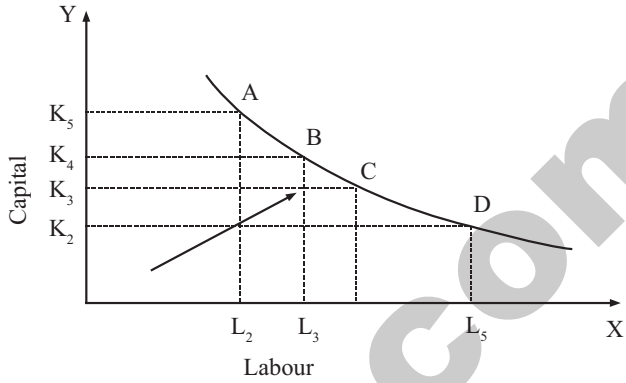
(C) Non inter-section of indifference curve

(i) For instance, point A lie on the Iso quants IQ_1 and IQ_2.

(ii) The point C shows a higher output and the point B shows a lower level of output IQ_1.

(iii) C = A, B = A, so C = B; But C > B which is illogical.

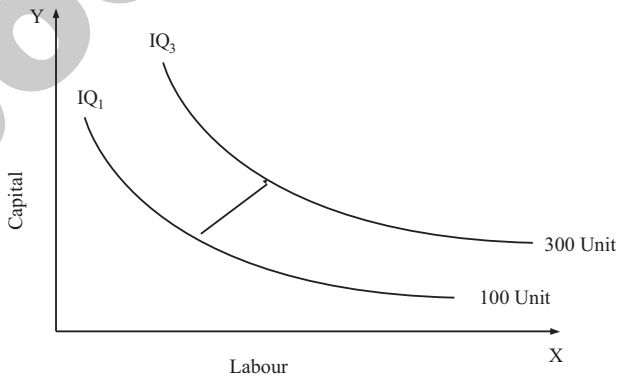




(D) An upper - Iso - quant curve represents a higher level of output :

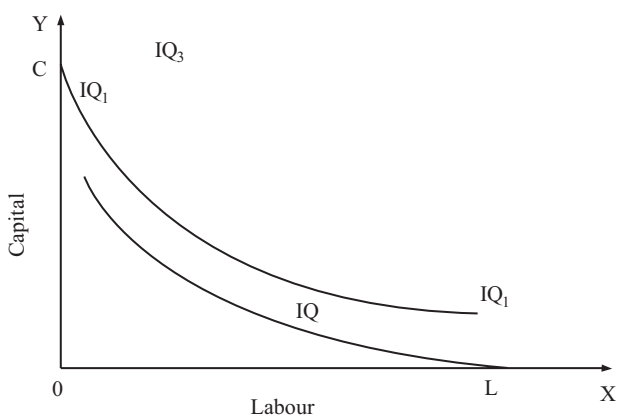
(i) Higher IQs shows higher output and lower IQs show lower outputs.

(ii) The upper iso quant curve implies the use of more factors than the lower of more factors than the lower iso quant curve.



(E) ISO - quant curve does not touch either x axis or y axis :

No Iso quant touches the X axis or Y axis because, IQ_1, only capital is used and in IQ only labour is used.



(OR)

(b) $\boxed{TC = TFC + TVC}$

$\boxed{AVC = \frac{TVC}{Q}}$

$\boxed{AFC = \frac{TFC}{Q}}$

$\boxed{AC = \frac{TC}{Q}}$

(i) $TC = 10 + Q^3$. Total cost has two components TFC and TVC.

(ii) TFC = is the total fixed cost which does not change with the level of output.

(iii) It is determined by putting the value of Q.

(iv) Given the total cost function

$TC = 10 + Q^3$

Q = units of output where Q = 5

Here TFC = 10 (TFC will not change when output changes)

$TC = 10 + (5)^3$

$TC = 10 + 125$

$TC = 135 \quad \therefore 135 = 10 + TVC$

$135 - 10 = TVC$

$\boxed{\mathbf{125 = TVC}}$

TVC = 125, TC = 135 ∴ TFC = ?

TC = (TFC + TVC)

$135 = x + 125$

$135 - 125 = 10$

$\boxed{\mathbf{\therefore TFC = 10}}$

$AFC = \frac{TFC}{Q} \qquad TFC = 10, Q = 5$

$AFC = \frac{10}{5} = 2$

$\boxed{\mathbf{AFC = 2}}$

$AVC = \frac{TVC}{Q} \qquad TVC = 125, Q = 5$

$AVC = \frac{125}{5} = 5$

$\boxed{\mathbf{AVC = 25}}$

$AC = \frac{TC}{Q} \qquad TC = 135, Q = 5$

$AC = \frac{135}{5} = 27$

(or)

AC = AFC + AVC

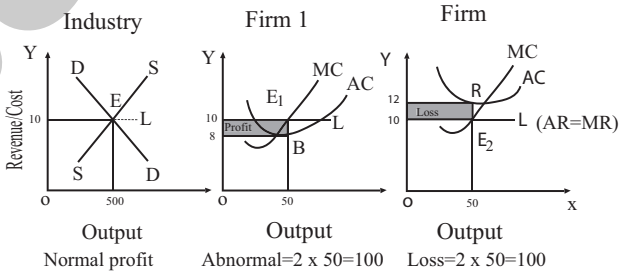
AC = 2 + 25

$\boxed{\mathbf{AC = 27}}$

44. (a) Under perfect competition take the price (10) from the industry and start adjusting their quantities produced. Qd = 100 – 5P. At equilibrium.

Qd = Qs Qs = 5 (10)

∴ Qs = 50



SS = Market Supply DD = Market Demand

AR = Average Revenue AC = Average Cost

MR = Marginal Revenue MC = Marginal Cost

(i) The equilibrium of an industry is explained in the first panel. Price is OP

(ii) The equilibrium of an industry is obtained at 500 units of output.

The second part :

(i) AC curve is lower than the price line.

(ii) The equilibrium condition is achived where MC=MR

(iii) Its total revenue is 50 × 10 = 500 Its total cost is 50 × 8 = 400. Therefore, its total profit is 500 – 400 = 100.

The third part :

(i) Firm's cost curve is above the price line.

(ii) AC > AR Its total revenue is 50 × 10 = 500 Its total cost is 50 × 12 = 600 Therefore, its total loss is 600 – 500 = 100.

(OR)

(b) (i) According to schumpeter, profits are the reward for innovation.

(ii) He uses innovation to explain the emergence of profit.

(iii) An innovation is something more than an invention.

(iv) Innovation includes introduction of new goods, new method of production, open a new market, discovery of new raw materials.

(v) Innovation is introduced by an entrepreneur.

(vi) Profit is the reward for dynamic changes in society.

Criticism :

(i) This theory ignores the element of risk taking, uncertainty and dynamic changes.

(ii) It does not explain the monopoly profit.

45. (a) 1. **India has a mixed economy:**

(i) Indian economy is a typical example of mixed economy.

(ii) This means both private and public sectors co-exist and function smoothly.

2. **Agriculture plays the key role :**

(i) Agriculture being the maximum pursued occupation in India, it plays an important role in its economy as well.

(ii) Around 60% of the people in India depend upon agriculture for their livelihood. In fact, about 17% of our GDP today is contributed by the agricultural sector.

3. **An emerging market:**

(i) India has emerged as vibrant economy sustaining stable GDP growth rate even in the midst of global downtrend.

(ii) This has attracted significant foreign capital through FDI and FII.

4. **Emerging Economy:**

Emerging as a top economic giant among the world economy, India bags the seventh position in terms of nominal Gross Domestic Product (GDP) and third in terms of Purchasing Power Parity (PPP).

5. **Fast Growing Economy:**

(i) India's economy is well known for high and sustained growth.

(ii) It has emerged as the world's fastest growing economy in the year 2016-17 with the growth rate of 7.1% in GDP next to People's Republic of China.

(OR)

(b) The concept of economic planning in India was the limited natural resources are utilized skillfully so as to achieve the desired goals.

(i) First Five Year Plan (1951 - 1956) :

Agriculture development of the country.

(ii) Second Five Year Plan (1956 - 1961) :

Industrial Development of the country.

(iii) Third Five Year Plan (1961 - 1966) :

To make the economy independent and to reach self active position to take off.

(iv) Fourth Five Year Plan (1969 - 1974) :

The two main objectives of this plan growth with stability and progressive achievement of self reliance.

(v) Fifth Five year Plan (1974 - 1979) :

In this plan top priority was given to agriculture, next cement industry and mines.

(vi) Sixth Five Year Plan (1980 - 1985) :

Poverty eradication and technological self reliance was the main objective of this plan.

(vii) Seventh Five Year Plan (1986 - 1991) :

The establishment of the self sufficient economy opportunities for productive employment.

(viii) Eight Five Year Plan (1992 - 1997) :

The top priority was given to development of human resources, employment, education and public health.

(ix) Ninth Five Year Plan (1997 - 2002) :

The main focus of this plan growth with justice and equity.

(x) Tenth Five Year Plan (2002 - 2007) :

To double the per capita income of India next 10 years.

(xi) Eleventh Five Year Plan (2007 - 2012) :

"Faster and more inclusive growth was the main aim of this plan".

(xii) Twelth Five Year Plan (2012 - 2017) :

Its main aim is "Faster, more inclusive and sustainable growth".

46. (a) The new EXIM policy has been formulated focusing on increasing in export scenario, boosting production and supporting the concepts like Make in India and Digital India.

Salient Features :

(i) Two new schemes namely "Merchandise Exports from India Scheme (MEIS)" and "Service Exports from India Scheme (SEIS)" have been introduced.

(ii) Reduce Export obligation by 25% and boot to domestic manufacture.

(iii) MEIS to promote export of notified goods and market.

(iv) MEIS and SEIS firm will get subsidized office spaces in SEZs.

(v) Duty credit scripts to be freely transferable and usable for payments of custom duty, excise duty and service tax.

(vi) Online procedure to upload digitally signed document by CA/CS/Cost accountant are developed and further mobile app for filling tax, stamp duty has been developed.

(vii) Export obligation period for export items related to defence, military store, aerospace and unclear energy to 24 months.

(viii) Exporter and Importer profile are not required.

(ix) EXIM policy 2015 - 2020 is expected to double the share of India in world trade.

(OR)

(b) (a) **Village is an Institution :**

The village is a primary Institution and it satisfies almost all the needs of the rural community.

(b) **Dependence on Agriculture :**

The rural economy depends much on nature and agriculture and its allied activities are the main occupation.

(c) **List of Rural people :**

(i) Life styles in villages are very simple.

(ii) Public services like education, housing, health and sanitation, transport and communication, banking, roads and markets are limited and unavailable.

(d) **Population Density :**

Number of persons living per. sq. km. is very low and houses are scattered in the entire villages.

(e) **Employment :**

There exists unemployment, seasonal unemployment and under employment in rural areas.

(f) **Poverty :**

Poverty is a condition where the basic needs of the people like food, clothing and shelter are not sufficient.

(g) **Rural Income :**

The income of the rural people is not sufficient.

(h) **Dependency :**

Rural households are dependent on social grants and remittances.

(i) **Inequality :**

The distributions of income, wealth and assets are highly skewed among rural people.

(j) **Migration :**

Rural people are forced to migrate from villages to urban areas in order to seek gainful employment.

47. (a) (a) **Sex Ratio (No. of Female per 1000 males)**

(i) Balanced sex ratio implies improvement in quality of life of female population.

(ii) The sex ratio in Tamil Nadu is nearing balance with 996 which is far better compared to most of the states and all India level.

(iii) Tamil Nadu stands third next to Kerala state and Puduchery Union Teritory in sex ratio.

(b) **Infant Mortality Rate (Mortality before completing 1 year)**

(i) Tamil Nadu is well ahead of National average and other states in IMR.

(ii) According To NITIAAYOG, the IMR is 17 (per 1000) for Tamil Nadu is half of national average of 34 as on 2016.

(c) **Maternal Mortality Rate (MMR) (Mother's death at the time of delivery per 1 lakh)**

(i) Tamil Nadu has a good record of controlling MMR ranking third with 79 (Kerala - 61, Maharashtra - 67).

(ii) It is against national average of 159 half of national average.

(d) **Life expectancy at birth :**

(i) The average period that a person may expect to live is called life expectancy.

(ii) Life expectancy in India still falls short of most developed and developing nations.

(iii) The average life expectancy in India is 67.9 years where in Tamil Nadu 70.6 years.

(e) **Literacy :**

(i) The literacy rate of Tamil Nadu in 2011 has increased to 80.33% from 73.45% in the 2001 census.

(ii) Among the males 86.81% are literates whereas among the females is 73.86%

(OR)

(b) Elasticity of demand = η

$$\eta d = \frac{dp}{dq}$$

$$P \quad = \quad 60 - 0.2Q$$

$$\frac{dp}{dq} = -0.2$$

$$\boxed{\eta d = \frac{-q}{p}\frac{dp}{dq}}$$

$$\eta d = \frac{-q}{60-0.2q}(-0.2)$$

$$= \frac{0.2q}{60-0.2q}$$

when $q = 0$

$$= \frac{0.2(0)}{60-(0.2)(0)} = 0$$

when $q = 20$

$$\eta d = \frac{0.2\,(20)}{60 - (0.2)\,(20)}$$

$$= \frac{4.0}{60-4}$$

$$= \frac{\cancel{4}^{\,2^{1}}}{\cancel{56}_{\,28_{14}}} = \frac{1}{14}$$

$$\eta d = \mathbf{\frac{1}{14}}$$

when $q = 40$

$$\eta d = \frac{0.2\,(40)}{60 - (0.2)\,(40)}$$

$$= \frac{8}{60-8}$$

$$= \frac{\cancel{8}^{\,\cancel{4}^{\,2}}}{\cancel{52}_{\,26_{13}}} = \frac{2}{13}$$

$$\eta d = \mathbf{\frac{2}{13}}$$

q	0	20	40
ηd	0	$\frac{1}{14}$	$\frac{2}{13}$

❖ ❖ ❖

11th STD. SURA'S MODEL QUESTION PAPER - 1

(WITH ANSWER KEY)

Time : 2.30 Hours **ECONOMICS** **Total Marks : 90**

PART - A **[20 × 1 = 20]**

Answer the following questions.

Choose the best answers

1. Author of "An inquiry into the Nature and causes of wealth of Nations"
   (a) Alfred Marshall (b) Adam Smith
   (c) Lionel Robbins (d) Paul A Samuelson
2. Formula for calculating AP is
   (a) $\frac{\Delta TP}{N}$ (b) $\frac{\Delta TP}{\Delta N}$ (c) $\frac{TP}{MP}$ (d) $\frac{TP}{N}$
3. The advocate of democratic socialism was _____.
   (a) Jawaharlal Nehru (b) P.C. Mahalanobis
   (c) Dr. Rajendra Prasad (d) Indira Gandhi
4. Indifference curve approach is based on
   (a) Ordinal approach
   (b) Cardinal approach
   (c) Subjective approach
   (d) Psychological approach
5. Ryotwari system was initially introduced in _____.
   (a) Kerala (b) Bengal
   (c) Tamil Nadu (d) Maharastra
6. Suppose D = 150 – 50P. Then, the slope is
   (a) –5 (b) 50 (c) 5 (d) –50
7. Tamil Nadu is rich in _____.
   (a) Forest resource (b) Human resource
   (c) Mineral resource (d) All the above
8. How do you term people employed in excess over and above the requirements?
   (a) Unemployment
   (b) Underemployment or Disguised Unemployment
   (c) Full employment
   (d) Self employment
9. Find total cost where TFC = 100 and TVC = 125.
   (a) 125 (b) 175 (c) 225 (d) 325
10. _____ is the formula for calculating per capita income.
    (a) $\frac{\text{National Income}}{\text{Total Population}}$ (b) $\frac{\text{Total Population}}{\text{National Income}}$
    (c) $\frac{\text{GST}}{\text{Total Population}}$ (d) $\frac{\text{Tax}}{\text{Price}}$
11. Foreign investment includes _____
    (a) FDI only (b) FPI and FFI
    (c) FDI and FPI (d) FDI and FFI
12. Division of labour means _____.
    (a) Dividing the process of production
    (b) Dividing labours into age groups
    (c) Dividing wages to the labour
    (d) None of these
13. $(y - y_1) = M(x - x_1)$ gives the
    (a) Slope (b) Straight line
    (c) Constant (d) Curve
14. In which of the following is not a type of market structure price will be very high?
    (a) Perfect competition
    (b) Monopoly
    (c) Duopoly
    (d) Oligopoly
15. According to the Loanable Funds Theory, supply of loanable funds is equal to _____.
    (a) S + BC + DH + DI (b) I + DS + DH + BM
    (c) S + DS + BM + DI (d) S + BM + DH + DS
16. The First large scale plant was _____
    (a) TISCO (b) IISCO
    (c) SAIL (d) All of these
17. A shop keeper sold 20 bags with the price of Rs. 100 each. The total revenue of the seller is Rs. _____.
    (a) 200 (b) 20 (c) 2000 (d) 1500
18. Economists like Joan Robinson and Boulding have contributed their ideas for the determination of rent, which is known as _____.
    (a) Ricardo theory of rent
    (b) Quasi - Rent
    (c) Modern theory of Rent
    (d) All of these
19. General theory of 'Employment Interest and Money' published in _____
    (a) 1930 (b) 1936 (c) 1988 (d) 1990
20. Group of firm is known as _____.
    (a) Firm (b) Industry
    (c) Market (d) None of these

PART - B **[7 × 2 = 14]**

Answer any seven in which question No. 30 is compulsory.

21. Distinguish goods from services.
22. What is meant by sunk cost?
23. State any two features of developed economy.
24. What are the nuclear power plants in Tamil Nadu?
25. Mention the classification of wants.
26. What is the difference between HDI and PQLI?
27. Define 'Rent'.
28. Rural Poverty - Define.
29. Who is price-taker?
30. Find the average cost function where $TC = 60 + 10x + 15x^2$.

PART - C **[7 × 3 = 21]**

Answer any seven questions' in which question No. 40 is compulsory.

31. Explain different types of economic activities.
32. List out the kinds of wages.
33. Write any three objectives of Industrial Policy 1991.
34. State the features of duopoly.
35. Describe development of textile industry in Tamil Nadu.
36. List out the features of new trade policy.
37. Bring out the relationship among Total, Average and Marginal Products.
38. State the importance of Rural Development.
39. Write the strategy of Jawaharlal Nehru in India's planning.
40. If $TC = 2.5q^3 - 13q^2 + 50q + 12$ derive the MC function and AC function.

PART - D **[7 × 5 = 35]**

Answer all the questions

41(a) Explain various divisions of Economics.

(OR)

(b) If total cost = $10+ Q^3$, find out AC, AVC, TFC, AFC when Q = 5.

42(a) Write a brief note on the Gandhian economic ideas.

(OR)

(b) Explain the law of Equi - marginal utility.

43(a) 'The features of Rural Economy are peculiar'-Argue.

(OR)

(b) Explain about the natural resources.

44(a) Explain the internal and external economies of scale.

(OR)

(b) The demand and supply functions are $P_d = 1600 - x^2$ and $P_s = 2x^2 + 400$ respectively. Find the consumer's surplus and producer's Surplus at equilibrium point.

45(a) Illustrate the Ricardian Theory of Rent.

(OR)

(b) Explain the objectives and characteristics of SEZs.

46(a) Discuss about the Indian Economy during British Period.

(OR)

(b) Explain the various sources of energy in Tamil Nadu.

47(a) Describe the features of oligopoly.

(OR)

(b) Calculate the elasticity of demand for the demand schedule by using differential calculus method P = 60 – 0.2Q where price is (i) zero (ii) Rs. 20 (iii) Rs. 40.

ANSWER

PART - A

1. (b) Adam Smith
2. (d) $\frac{TP}{N}$
3. (a) Jawaharlal Nehru
4. (a) Ordinal approach
5. (c) Tamil Nadu
6. (d) –50
7. (b) Human resource
8. (b) Underemployment or Disguised Unemployment
9. (c) 225
10. (a) $\frac{\text{National Income}}{\text{Total Population}}$
11. (c) FDI and FPI
12. (a) Dividing the process of production
13. (b) Straight line
14. (b) Monopoly
15. (a) S + BC + DH + DI
16. (a) TISCO
17. (c) 2000
18. (c) Modern theory of Rent
19. (b) 1936
20. (b) Industry

PART - B

21.

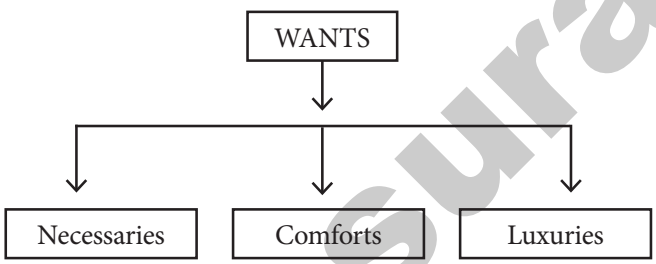
S. No.	Goods	Services
1	Goods are produced	Services are performed
2	Goods are tangible and homogeneous in nature	Services are intangible and heterogeneous in nature
3	Goods are physical things and involves production	Services are more like a process

22. (i) A cost incurred in the past and cannot be recovered anymore in future is called as sunk cost.
(ii) This is historical but irrelevant for future business.

23. (i) High National Income
(ii) High percapita Income

24. The Kalpakkam Nuclear Power Plant, the Koodankulan Nuclear Power Plant are the major Nuclear energy plants for the energy grid.

25. Goods (or) wants are broadly classified into three categories. They are,



26. (i) HDI helped the government to the real uplifting of standard living of the people.
(ii) PQLI is a measure to calculate the quality of life (well being of a country).

27. Rent is that portion of the produce of the earth which is paid to the landlord for the use of the original and indestructible powers of the soil.

28. (i) Rural poverty refers to the existence of poverty in rural areas.
(ii) Poverty in India has been defined as the situation in which an individual fails to earn sufficient income to buy the basic minimum of subsistence.

29. (i) A firm under perfect competition is a price taker, not a price-maker.
(ii) It takes the price of the product from the industry.

30. ***Solution :***

$TC = 60 + 10x + 15x^2$

$$\boxed{\text{Formula} = \frac{TC}{x}}$$

Average cost function $= \frac{60}{x} + \frac{10\cancel{x}}{\cancel{x}} + \frac{15\cancel{x^2}}{\cancel{x}}$

$$= \boxed{\frac{60}{x} + 10 + 15x}$$

PART - C

31. Economic activities are related to Production, Distribution, Exchange and Consumption of goods and services.
(i) Consumption : It serves as the starting point of economic activity.
(ii) Production : The primary aim of the economic activity is the production of goods and services make them available to consumer.
(iii) Exchange : "Human activities which are performed in exchange for money".
(iv) Distribution : The produced wealth has to be distributed among the cooperating factors.

32. Kinds of wages :
Wages are divided into four types. They are,
(1) Nominal Wages (or) Money Wages :
Nominal wages are reffered to the wages paid in terms of money.
(2) Real Wages :
(i) Real wages are the wages paid in terms of goods and services.
(ii) Real wages are the purchasing power of money wages.
(3) Piece Wages :
Wages that are paid on the basis of quantum of work.
(4) Time Wages :
Wages that are paid on the basis of the amount of time that the worker works.

33. (i) To develop both small scale industries and large scale industries.
(ii) To develop a weak and shallow industries in to a strong and solid industries.
(iii) This policy aimed to protect cottage and small scale industries.

34. (i) Duopoly is a special theory of oligopoly.
(ii) There are only two sellers.
(iii) The sellers are completely independent and no agreement exists between them.
(iv) Each seller is fully aware of his rival's motive and actions.

(v) Both sellers may collude.
(vi) They may enter into cut-throat competition.
(vii) No product differentiation.
(viii) They fix the price for their product.

35. (i) Tamil Nadu is the largest textile hub of India.
(ii) Tamil nadu is known as the "Yarn Bowl" of the India.
(iii) The textile industry plays a significant role in the Indian economy by providing direct employment to an estimated 35 million people.
(iv) Therefore it contributing 4% of GDP and 35% of gross export earnings.
(v) The textile sector contributes to 14% of the manufacturing sector.

36. The main features of the new trade policy :
(i) Free imports and exports
(ii) Rationalization of tariffs structure and removal of quantitative restrictions.
(iii) Trading Houses.
(iv) Export and Import policy.

37. Relationship among Total, Average and Marginal Products.

Stages	Total Product	Marginal Product	Average Product
Stage - I	Initially it increases at an increasing rate and then increases at a decreasing rate.	At the begining it increases, then reaches a maximum and starts to decrease	At the first instant it increases, then attains maximum
Stage - II	It continues to increase at a diminishing rate and reaches maximum	It continues to diminish and becomes equal to zero	It is equal to MP and then begins to diminish
Stage - III	It diminishes	It becomes negative	It continues to diminish but always greater than zero (positive)

38. Rural development is very urgent in the context for overall growth and development of Indian economy due to the following reasons.
(i) A major share of population lives in rural areas, and their development and contributions are very much supportive for nation building activities.
(ii) It supports the urban sectors by way of supplying drinking water, food and raw materials.
(iii) Development of agriculture and allied activities for gainful employment.
(iv) Improvements in education, health and sanitation in villages can help avoid many urban problems namely begging, rack picking and road side slumming.
(v) In order the better utilise the unused and under-utilised resources, there is a need to develop the rural economy.

39. (i) Jawaharlal Nehru was responsible for the introduction of planning in our country.
(ii) To Jawaharlal Nehru, the plan was essentially an integrated approach for development.
(iii) He said, "the essence of planning is to find the best way to utilize all resources of man power, of money and so on. Planning for Nehru was essentially linked up with industrialization and eventual self reliance for the country's economic growth on a self - accelerating growth".
(iv) Nehru carried through this basic strategy of planned development.

40. ***Solution :***

$\boxed{\frac{dc}{dq} = \text{M.C},}$ $\boxed{\text{A.C} = \frac{\text{Total cost}}{\text{output}}}$

$$\frac{dc}{dq} = 2.5\,(3)\,q^2 - (13 \times 2)\,q + 50$$

$$\boxed{\text{M.C} = 7.5q^2 - 26q + 50}$$

$$\text{A.C} = \frac{2.5\,q^3 - 13q^2 + 50q + 12}{q}$$

$$= \frac{2.5\,q^{3^2}}{\cancel{q}} - \frac{13q^{\cancel{2}}}{\cancel{q}} + \frac{50\cancel{q}}{\cancel{q}} + \frac{12}{q}$$

$$\boxed{\therefore \textbf{A.C} = \mathbf{2.5q^2 - 13q + 50 + \frac{12}{q}}}$$

PART - C

41(a) Consumption, Production, Distribution, Exchange are the main divisions of economics.

Consumption :

(i) Human wants coming under consumption.
(ii) It serves as the starting point of economic activity.
(iii) Characteristics of human wants based on the behaviour of the consumer, the diminishing utility and consumer surplus are dealt with.

Production :

(i) It is the process of transformation of inputs into output.

(ii) This division covers the role of the factors of production.

Exchange :

(i) It is concerned with price determination in different market forms.

(ii) It covers trade and commerce.

Distribution :

(i) The produced wealth has to be distributed among the co operating factors.

(ii) Distribution studies about the pricing of factors of production.

(OR)

(b) $\boxed{TC = TFC + TVC}$

$\boxed{AVC = \frac{TVC}{Q}}$

$\boxed{AFC = \frac{TFC}{Q}}$

$\boxed{AC = \frac{TC}{Q}}$

(i) $TC = 10 + Q^3$. Total cost has two components TFC and TVC.

(ii) TFC = is the total fixed cost which does not change with the level of output.

(iii) It is determined by putting the value of Q.

(iv) Given the total cost function

$TC = 10 + Q^3$

Q = units of output where Q = 5

Here TFC = 10 (TFC will not change when output changes)

$TC = 10 + (5)^3$

$TC = 10 + 125$

$TC = 135$ $\quad 135 = 10 + TVC$

$135 - 10 = TVC$

$\boxed{125 = TVC}$

TVC = 125, TC = 135 ∴ TFC = ?

$TC = (TFC + TVC)$

$135 = x + 125$

$135 - 125 = 10$

$\boxed{\therefore TFC = 10}$

$AFC = \frac{TFC}{Q}$ $\quad TFC = 10, Q = 5$

$AFC = \frac{10}{5} = 2$

$\boxed{AFC = 2}$

$AVC = \frac{TVC}{Q}$ $\quad TVC = 125, Q = 5$

$AVC = \frac{125}{5} = 5$

$\boxed{AVC = 25}$

$AC = \frac{TC}{Q}$ $\quad TC = 135, Q = 5$

$AC = \frac{135}{5} = 27$

(or)

$AC = AFC + AVC$

$AC = 2 + 25$

$\boxed{AC = 27}$

42(a) Gandhian economics is based on ethical foundations. Salient features of Gandhian Economic thought :

(1) Village Republics :

(i) Gandhi was interested in developing the villages as self - sufficient units.

(ii) He opposed extensive use of machinery urbanization and industrialization.

(2) On Machinery :

(i) Gandhi described machinery as "great sin".

(ii) He said that "Books could be written to demonstrate its evils"..... It is necessary to realize that machinery is bad.

(3) Industrialism :

Gandhi considered industrialism as a curse on mankind.

(4) Decentralization :

He advocated a decentralized economy. (i.e.) production at a large number of places on a small scale (or) production in the people's home.

(5) Village Sarvodaya :

(i) Real India was to be found in villages and not in towns or cities.

(ii) So Gandhi suggested the development of self - sufficient, self - dependent villages.

(6) Bread Labour :

(i) Gandhi realized the dignity of human labour.

(ii) He believed that God created man to eat his bread by sweat of his brow.

(7) On population :

Gandhi considered self-control and Brahmacharya are sovereign remedy to the problem of over-population.

(OR)

(b) (i) The law of diminishing marginal utility extended and is called "Law of equi - marginal utility".

(ii) It is also called 'Law of substitution' 'Law of consumers equilibrium', 'Gossen Second Law' and 'Law of maximum satisfaction'.

Definition :-

Marshall defined as "If a person has a thing which can put to several uses, he will distribute it among these uses in such a way that it has the same marginal utility in all."

Assumption :-

(i) The consumer is rational so he wants to get maximum satisfaction.
(ii) The utility is measurable.
(iii) Money remains constant.
(iv) The income of the consumer is given.
(v) There is perfect competition in the market.
(vi) The prices of the commodities are given.
(vii) The Law of diminishing marginal utility operates.

Explanation :-

(i) Consumer wants to spend his limited income on Apple and Orange.
(ii) He is said to be in equilibrium, only when he gets maximum satisfaction with his limited income.
(iii) $$\frac{\text{Marginal Utility of Apple}}{\text{Price of Apple}} = \frac{\text{Marginal Utility of Orange}}{\text{Price of Orange}} = K$$

$$\text{ie } \frac{MU_A}{P_A} = \frac{MU_O}{P_O} = K$$

(iv) He wants to spend his entire income on Apple and Orange.
(v) The price of an Apple and Orange is Rs. 1 each.

Table

Apple			Orange	
Units of commodities	Total utility	Marginal utility	Total utility	Marginal utility
1	25	25	30	30
2	45	20	41	11
3	63	18	49	8
4	78	15	(54)	5
5	88	10	58	4
6	92	4	61	3

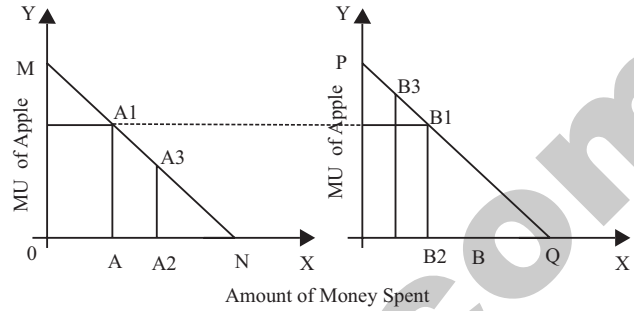


Diagram Explanation

(vi) If the consumer wants to attain maximum utility he should buy 6 units of Apples and 5 units of Oranges.

ie $\frac{4}{1} = \frac{4}{1}$

(vii) X - axis represent amount of money spent and Y - axis represent Marginal Utilities of Apple and Orange.

43(a) (a) **Village is an Institution :**

The village is a primary Institution and it satisfies almost all the needs of the rural community.

(b) **Dependence on Agriculture :**

The rural economy depends much on nature and agriculture and its allied activities are the main occupation.

(c) **List of Rural people :**

(i) Life styles in villages are very simple.
(ii) Public services like education, housing, health and sanitation, transport and communication, banking, roads and markets are limited and unavailable.

(d) **Population Density :**

Number of persons living per. sq. km. is very low and houses are scattered in the entire villages.

(e) **Employment :**

There exists unemployment, seasonal unemployment and under employment in rural areas.

(f) **Poverty :**

Poverty is a condition where the basic needs of the people like food, clothing and shelter are not sufficient.

(g) **Rural Income :**

The income of the rural people is not sufficient.

(h) **Dependency :**

Rural households are dependent on social grants and remittances.

(i) **Inequality :**

The distributions of income, wealth and assets are highly skewed among rural people.

(j) **Migration :**
Rural people are forced to migrate from villages to urban areas in order to seek gainful employment.

(OR)

(b) (i) Goods and services provided by the nature are called as natural resources.
(ii) In other words, any stock or reserve that can be drawn from nature is a natural resources.

Land resources :
The area operated by large holdings (above 10 hectares) and the area operated under marginal holding (less than one hectare) has increased. This indicates is being fragmented.

Forest Resources :
India's forest cover in 2001 is 69.09 million hectare which 21.02 percent of the geographical area, of this 8.35 million hectare is very dense forest, 31.90 million moderately dense rest of the 28.84 million hectare is open forest.

Important Mineral :
India possesses high quality iron - ore in abundance. The total reserves of iron - ore in the country are about 14.630 million tonnes of haematiteand 10,619 million tonnes of magnetite

Coal and lignite :
Coal is the largest available mineral resources. India ranks third in the world after China and USA in the real of coal production.

Bauxite :
Bauxite is a main source of metal like aluminium.

Mica :
India stands first in sheet mica production and contributes 60% of mica trade in the world.

Crude Oil :
Oil is being explored in India at many places.

Gold :
India possesses only a limited gold reserve. There are only 3 main gold mine regions in our country.

Diamond :
As per UNECE the total reserves of diamond is estimated at around 4582, thousand carats which are mostly available in panna, Madhya Pradesh, Rammallakota of kunnur district of Andra Pradesh and also in the Basin of Krishna River.

44(a) **I. Internal economies of scale :**
(i) Internal economics of scale refers to the advantage enjoyed by the production unit.
(ii) For example a firm enjoying the advantage of an application of most modern machinery.
(a) Technical economies : When the size of the firm is large, large amount of capital can be used.
(b) **Financial economies :**
(i) Big firms can float shares in the market for capital expansion.
(ii) while small firms cannot easily float shares in the market.
(c) **Labour Economies :**
(i) Large scale production implies greater and minute division of labour.
(ii) This leads to specialisation which enhances the quality.
(d) **Managerial Economies :**
Large scale production facilitates specialisation and delegation.
(e) **Marketing Economies :**
In the context of large scale production, the producers can both buy raw - materials at cheaper cost.
(f) **Economies of survival :**
(i) Product diversification is possible when there is large scale production.
(ii) This reduces the risk in production.

II. External Economies of scale :
(i) External economies of scale refer to changes, in any factor outside the firm causing an improvement in the production process.
(ii) These are the advantages enjoyed by all the firms in the industry due to the structural growth.
(iii) Important external economies of scale are listed below.
(1) Increased transport facilities.
(2) Banking facilities.
(3) Development of townships.
(4) Development of information and communication.

(OR)

(b) $P_d = 1600 - x^2$

$P_s = 2x^2 + 400$

$P_d = Ps$

$\rightarrow 1600 - x^2 = 2x^2 + 400$

$1600 - x^2 - 2x^2 - 400 = 0$

$-3x^2 + 1200 = 0$

$+3x^2 = +1200$

$x^2 = \frac{\cancel{1200}^{400}}{\cancel{3}_1}$

$$x = \pm\sqrt{400}$$

$$\boxed{x_0 = 20}$$

When $x_0 = 20$, $P_0x_0 = 1600 - x_0^2$

$$= 1600 - (20)^2$$

$$= 1600 - 400$$

$$\boxed{P_0 = 1200}$$

$$P_0x_0 = 1200 \times 20$$

$$= 24000$$

Consumer Surplus C.S.

$$= \int_0^{x_0} f(x)\,dx - P_0x_0$$

$$= \int_0^{20} (1600 - x^2)\,dx - 24000$$

$$= \left[1600x - \frac{x^3}{3}\right]_0^{20} - 24000$$

$$= \left[1600\,(20) - \frac{(20)^3}{3}\right]^0 - 24000$$

$$= 32000 - \frac{8000}{3} - 24000$$

$$(32000 - 24000) = 8000$$

$$= 8000 - \frac{8000}{3} = \frac{24000 - 8000}{3}$$

$$\boxed{C.S = \frac{16000}{3} = 5333.3}$$

Producer Surplus P. S.

$$= P_0x_0 - \int_0^{x_0} g(x)dx$$

$$= 24000 - \int_0^{20} (2x^2 + 400)\,dx$$

$$= 24000 - \left(\frac{2x^3}{3} + 400x\right)_0^{20}$$

$$= 24000 - \left(\frac{2(20)^3}{3} + 400(20)\right)_0^2$$

$$= 24000 - \left(\frac{2 \times 8000}{3} + 8000\right)$$

$$= 24000 - \frac{16000}{3} - 8000$$

$$= 16000 - \frac{16000}{3}$$

$$= \frac{48000 - 16000}{3}$$

$$P.S. = \frac{32000}{3} = 10666.67$$

45(a) The classical economist David Ricardo explained the theory of rent is called "Ricardian theory of rent".

Definition :

"Rent is that portion of the produce of the earth which is paid to the landlord for the use of the original and indestructible power of the soil.

Assumption :

(i) Land differs in fertility.
(ii) The law of diminishing returns operates in agriculture.
(iii) Theory assumes perfect competition.
(iv) It is based on long period.
(v) Land is used for cultivation only.
(vi) Most fertile lands are cultivated first.

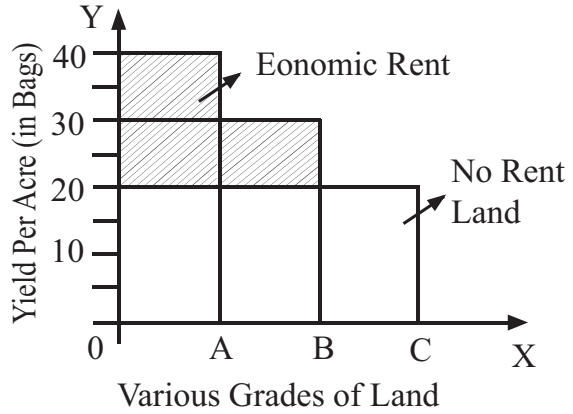
Statement of the theory with illustration :

(i) There are three grades of land namely A, B and C.
(ii) 'A' being most fertile, 'B' less fertile and 'C' the least fertile land.
(iii) They will first cultivate all the most fertile land.
(iv) Given a certain amount of labour and capital 'A' grade land produce 40, B - 30 and C - 20 bags of paddy.
(v) Suppose another group of people goes and settle down in the same island after some time 'B' grade brought under cultivation.
(vi) 'A' grade land yield 40 bags of paddy and 'B' grade land yield 30 bags of paddy. The surplus of 10 bags per acre appear on 'A' grade land.
(vii) This is "Economic Rent"
(viii) Suppose another group of people goes and settle down in the same island after some time 'C' brought under cultivation.
(ix) 'C' grade land, cost of production is just equal to the price of its production (20-20)
(x) Hence 'C' grade land is called "no rent land or marginal land.

Grades of lands and their Productions

Grades of Lands	Production (in bags)	Surplus (i.e., Rent in bags)
A	40	40 – 20 = 20
B	30	30 – 20 = 10
C	20	20 – 20 = 0

Ricardian Theory of Rent



(xi) 'A' and 'B' grade lands are "intra marginal lands".

(xii) The economic rent yielded by 'A' and 'B' grade lands.

(xiii) This grade land is "No rent land".

Criticism :

(i) Cultivation from most fertile to least fertile lands is historically wrong.

(ii) He has ignored the alternatives of uses of land.

(iii) This theory assumes that rent does not enter into price but in reality, rent enters into price.

(OR)

(b) **Major objectives of SEZ :**

(i) To enhance foreign investment especially to attract foreign direct investment (FDI) and thereby increasing GDP.

(ii) To increase shares in global export.

(iii) To generate additional economic activity.

(iv) To create employment opportunities.

(v) To develop infrastructure facilities.

(vi) To exchange technology in global market.

Main characteristics of SEZ :

(i) Administrated by single body authority.

(ii) Having separate custom area.

(iii) Geographically demarked area with physical security.

(iv) Stream lined procedures.

(v) Governed by more liberal economic laws.

46(a) **(1) Introduction :**

(i) Britain had exploited India over a period of two countries of its colonial rule.

(ii) The Indian, economic historians have divided the whole period into three phases.

(iii) Namely the period of merchant capital, the period of industrial capital, the period of finance capital.

(2) Period of Merchant Capital :

(i) British captured political power to secure maximum goods for minimum payments.

(ii) The land revenue was an instrument of plundering the peasant.

(iii) The corrupt and unscrupulous officers of the east Indian Company adopted all possible means to make large fortunes.

(3) Period of Industrial Capital :

(i) British products were both inferior and costly, and thus failed to penetrate Indian markets.

(ii) To protect the textile Industry in England from Indian competition, the British Government levied a heavy customs duty of 78% on imports of Indian product.

(iii) The British goods imported in India were, however, kept duty free.

(iv) So India had imbalance in its receipts and expenditure in this phase.

(4) Period of Finance Capital :

(i) The third phase was the period of finance capital starting from the closing years of the 19th century and continuing till independence.

(ii) During this period, finance imperialism began to entrench itself through the managing agency firms, export – import firms, exchange banks and some export of capital.

(5) Decline of Indian Handicrafts :

(i) Through discriminatory tariff policy, the British Government successfully destroyed the demand for handicrafts.

(ii) The introduction of railways in India increased the domestic market for the British goods.

(6) The land tenure system in India :

(i) Zamindari system or the land-lord-tenant system.

(ii) Mahalwari system (or) Communal system of farming.

(iii) Ryotwari system or the owner cultivator system.

(7) Problems of British Rule on economic conditions:

(i) The British rule stunted the growth of Indian enterprise.

(ii) Indian agriculture sector became stagnant and deteriorated, but large number of Indians were dependent on agriculture for subsistence.

(OR)

(b) **Energy :**

(i) Tamil Nadu tops in power generation among the southern states as seen in the following table.

State	Units	Ranks
Andhra Pradesh	15301 MW	III
Telengana	11563 MW	IV
Karnataka	17853 MW	II
Kerala	4172 MW	V
Tamil Nadu	26630 MW	I

(ii) The Tamil Nadu Development Agency (TEDA) is a Tamil Nadu Government promoting renewable energy sources and energy conversation activities.

(ii) The agency has largely been responsible for instigating the tremendous growth of Tamil Nadu in the development of wind power.

(iii) Muppandal wind farm is a renewable energy source, supplying the villagers with electricity work.

Nuclear :

The Kalpakkam and the Koodankulam Nuclear power plant are the major nuclear energy plants for the energy grid.

Thermal Power :

(i) The share of thermal power in total energy sources is very high in Tamil Nadu.

(ii) It available at Athipattu, Ennore, Mettur, Neyveli and Tuticorin.

(iii) Tamil Nadu ranks first nation wide in diesel-based thermal electricity generation with national share of over 34%.

Hydel :

(i) The Mettur Dam is one of the largest dams in India. It was completed in 1936.

(ii) The total length of the dam is 1700 meters.

(iii) It is also called stanley Reservoir.

(iv) The Mettur Hydro Electrical Power project is also quite large in mettur dam.

Bio - Diesel :

(i) Tamil Nadu at this time is the only state to have a formal Bio - Diesel policy to use jatropha crops as a source of bio fuel.

(ii) Bio diesel distribute wasteland to the poor farmers for the planting of those crops.

Solar and Wind :

(i) In June 2008, Moser Baer linked a Mou with the state government to build INR 20 billion plant for manufacturing of silicon-based photo voltage thin film modules.

(ii) The allied products in the products in the Oragadam special economic zone which is closer to the signet solar's plant in Sriperambudur.

47(a) **Oligopoly :**

Oligopoly is a market situation in which there are a few firms selling homogeneous or differentiated products.

Features of Oligopoly :

(i) Few large firms : Very few big firms own the major control of the market.

(ii) Interdependence among firms : The price and quantity decisions of a particular firm are dependent of the rival firms.

(iii) Group behaviour : Oligopoly realise the importance of mutual co-operation.

(iv) Advertisement Cost : The Oligopoly could raise advertisement cost.

(v) Differentiate product : Oligopolists produce differentiate products.

(vi) Price rigidity : Price rigidity is one of the important feature of oligopoly.

(OR)

(b) Elasticity of demand = η

$$\eta d = \frac{dp}{dq}$$

$$P = 60 - 0.2Q$$

$$\frac{dp}{dq} = -0.2$$

$$\boxed{\eta d = \frac{-q}{p}\frac{dp}{dq}}$$

$$\eta d = \frac{-q}{60-0.2q}(-0.2)$$

$$= \frac{0.2q}{60-0.2q}$$

when q = 0

$$= \frac{0.2(0)}{60-(0.2)(0)} = 0$$

when q = 20

$$\eta d = \frac{0.2\,(20)}{60 - (0.2)\,(20)}$$

$$= \frac{4.0}{60-4}$$

$$= \frac{\cancel{4}^{\,2^{1}}}{\cancel{56}_{\,28_{14}}} = \frac{1}{14}$$

$$\eta d = \mathbf{\frac{1}{14}}$$

when q = 40

$$\eta d = \frac{0.2\,(40)}{60 - (0.2)\,(40)}$$

$$= \frac{8}{60-8}$$

$$= \frac{\cancel{8}^{\,\cancel{4}^{\,2}}}{\cancel{52}_{\,26_{13}}} = \frac{2}{13}$$

$$\eta d = \mathbf{\frac{2}{13}}$$

q	0	20	40
ηd	0	$\frac{1}{14}$	$\frac{2}{13}$

❖ ❖ ❖

11th STD.

SURA'S MODEL QUESTION PAPER - 2

(WITH ANSWER KEY)

Time : 2.30 Hours **ECONOMICS** **Total Marks : 90**

PART - A **[20 × 1 = 20]**

Answer the following questions.

Choose the best answers

1. Micro Economics is concerned with ____
   (a) The economy as a whole
   (b) Different sectors of an economy
   (c) The study of individual economic units behaviour
   (d) The interactions within the entire economy
2. Who said, that one of the key of an entrepreneur is "uncertainty -bearing"
   (a) J.B. Clark (b) Schumpeter
   (c) Knight (d) Adam Smith
3. In which year the population of India crossed one billion mark ?
   (a) 2000 (b) 2001 (c) 2005 (d) 1991
4. Given potential price is Rs. 250 and the actual price is Rs. 200 find the consumer surplus.
   (a) 375 (b) 175
   (c) 200 (d) 50
5. The arrival of Vasco da Gama in Calicut, India ____.
   (a) 1498 (b) 1948
   (c) 1689 (d) 1849
6. Suppose D=50 – 5P when D is zero then
   (a) P is 10 (b) P is 20
   (c) P is 5 (d) P is –10
7. In literacy rate, TN ranks
   (a) second (b) fourth (c) sixth (d) eighth
8. What is the term used to denote the coexistence of two different sectors in an economy?
   (a) Technology (b) Dependency
   (c) Dualism (d) Inequality
9. Identify the formula of estimating average cost.
   (a) AVC/Q (b) TC/Q
   (c) TVC/Q (d) AFC/Q
10. Tamil Nadu is the 2nd largest contributor to India's GDP with ____ share
    (a) 8.4% (b) 16.1% (c) 4.2% (d) 6%
11. The Special Economic Zones policy was announced in ____.
    (a) April 2000 (b) July 2000
    (c) April 1980 (d) July 1970
12. ____ represent Human capital.
    (a) Money (b) Efficiency
    (c) Hard work (d) All the above
13. The construction of demand line or supply line is the result of using
    (a) Matrices (b) Calculus
    (c) Algebra (d) Analytical Geometry
14. Equilibrium condition of a firm is _____.
    (a) MC = MR (b) MC > MR
    (c) MC < MR (d) MR = Price
15. Original and indestructible power of the soil is the term used by _____.
    (a) J.S. Mill (b) Walker
    (c) Clark (d) Ricardo
16. Steel Authority of India Ltd (SAIL) was established in ____.
    (a) 1864 (b) 1854 (c) 1818 (d) 1974
17. Find Total Variable Cost where TC = 200 and TFC = 50.
    (a) 50 (b) 150 (c) 200 (d) 250
18. The average wage of a worker can be calculated by using _____ formula.
    (a) Average Wage per Worker = $\frac{\text{Total Wage Fund}}{\text{No. of Workers}}$
    (b) Marginal Wage of Worker = $\frac{\text{Total Wage}}{\text{No. of Workers}}$
    (c) Average Wage per Worker × Price
    (d) Average Wage × Output
19. Environmental economics is a study of inter disciplinary tools for the problems of ____
    (a) Ecology (b) Economy
    (c) Environment (d) All of these
20. Group of firm is known as ____.
    (a) Firm (b) Industry
    (c) Market (d) None of these

PART - B **[7 × 2 = 14]**

Answer any seven in which question No. 30 is compulsory.

21. What are goods?
22. Define cost.
23. Write the short note on natural resources.
24. What is heritage tourism?
25. Name the basic approaches to consumer behaviour.

26. Name out the different types of land tenure existed in India before Independence.
27. Distinguish between real and money wages.
28. What do you mean by Micro Finance?
29. What is selling cost?
30. If $62 = 34 + 4x$ what is x?

PART - C **[7 × 3 = 21]**

Answer any seven questions' in which question No. 40 is compulsory.

31. Elucidate different features of services.
32. Distinguish between rent and quasi-rent.
33. Explain about the Period of Merchant Capital.
34. Specify the nature of entry of competitors in perfect competition and monopoly.
35. Compare productivity of any two food crops between Tamil Nadu and India.
36. Mention the functions of APMC.
37. What are the characteristics of land?
38. Mention the features of SHGs.
39. Write a short note on Welfare Economics given by Amartya Sen.
40. What are the steps involved in executing a MS Excel sheet?

PART - D **[7 × 5 = 35]**

Answer all the questions.

41(a) Compare and contrast various definitions of Economics.

(OR)

(b) Bring out the relationship between AR and MR curves under various price conditions.

42(a) Write the importance of mineral resources in India.

(OR)

(b) What are the methods of measuring elasticity demand?

43(a) Analyses the causes for Rural Indebtedness.

(OR)

(b) Explain various sources of energy.

44(a) Elucidate the Laws of Returns to scale. Illustrate.

(OR)

(b) Calculate the elasticity of demand for the demand schedule by using differential calculus method P = 60 – 0.2Q where price is (i) zero (ii) Rs. 20 (iii) Rs. 40.

45(a) Elucidate the Loanable Funds Theory of Interest.

(OR)

(b) Describe the salient features of EXIM policy (2015 – 2020)

46(a) Explain the objectives of nationalization of commercial banks.

(OR)

(b) Explain the public transport system in Tamil Nadu.

47(a) Illustrate price and output determination under Monopoly.

(OR)

(b) Find the solution of the equation system.

$$\begin{aligned} 7x_1 - x_2 - x_3 &= 0 \\ 10x_1 - 2x_2 + x_3 &= 8 \\ 6x_1 + 3x_2 - 2x_3 &= 7 \end{aligned}$$

ANSWER

PART - A

1. (c) The study of individual economic units behaviour
2. (c) Knight
3. (b) 2001
4. (d) 50
5. (a) 1498
6. (a) P is 10
7. (d) eighth
8. (c) Dualism
9. (b) TC/Q
10. (a) 8.4%
11. (a) April 2000
12. (a) Money
13. (d) Analytical Geometry
14. (a) MC = MR
15. (d) Ricardo
16. (d) 1974
17. (b) 150
18. (a) $\text{Average Wage per Worker} = \frac{\text{Total Wage Fund}}{\text{No. of Workers}}$
19. (d) All of these
20. (b) Industry

PART - B

21. (i) Goods are also called 'products', 'commodities', 'things' etc.
    (ii) In Economics, the term 'goods' and 'services' also implies, unless specified otherwise.
    (iii) Goods and services satisfies human wants.
22. (i) Cost refers to cost of production.
    (ii) Which means the total expenses incurred in the production of a commodity.
    (iii) Cost analysis refers to the study of behavior of cost in relation to one or more production criteria, namely size of output, scale of production, prices of factors etc.

23. (i) Any stock or reserve that can be drawn from nature is a Natural resources.
(ii) The major natural resources are land, forest, water, mineral and energy.
(iii) India is rich in natural resources.

24. Meenakshi Amman temple at Madurai, Sri Ranganatha Swamy temple at Srirangam, Brihadisvara temple in Thanjavur and Monuments in Mahabalipuram are world Heritage sites declared by UNESCO.

25. The basic approaches to consumer behaviour are
(i) Cardinal Approach
(ii) Ordinal Approach

26. (i) The three different types of land tenure existed in India before independence.
(ii) They were Zamindari system, Mahalwari system and Ryotwari system.

27. (i) Nominal wages are reffered to the wages paid in terms of money.
(ii) Money wages also called as nominal wages.
(iii) Real wages are the wages paid in terms of goods and services.

28. (i) Micro finance, also known as micro credit.
(ii) It is a financial service that offers loans, saving and insurance to entrepreneurs and small business owners who don't have access to traditional sources of capital, like banks or investors.

29. (i) We can infer that the producer under monopolistic competition has to incure expenses to popularise his brand.
(ii) The expenditure involved in selling the product is called selling cost.
(iii) The cost incurred in order to alter "the position or shape of the demand curve for a product"

30. ***Solution :***

$62 = 34 + 4x$

$62 - 34 = 4x$

$28 = 4x$

$x = \frac{\cancel{28}^{7}}{\cancel{4}_{1}}$

$\therefore x = 7$

PART - C

31. Four features of services are,
(i) Intangible : Intangible things are not physical objects but exist in connection to other things.
For Example : Brand Image, Goodwill etc.
(ii) Heterogeneous : A single type services yields multiple experiences
For Example : Music etc.
(iii) Inseparable from their makers : Services are inextricably connected to their makers.
For Example : Labour
(iv) Perishable : Services cannot be stored as inventories.
For Example : Cricket Match.

32.

Sl. No.	Rent	Quasi Rent
1	Rent accures to land.	Quasi - Rent accures to man made appliances.
2	The supply of land is fixed for ever.	The supply of man made appliances is fixed for a short period only.
3	It enters into price.	It does not enter into price.

33. (i) The land revenue was an instrument of plundering the peasant.
(ii) The East India Company had captured political power to secure maximum goods for minimum payments.
(iii) The land revenue collections were treated as the profit of the company.
(iv) The east India Company adopted all possible means to make large fortunes.

34. Nature and entry of perfect competition :
(i) Large number of buyers and sellers. Which implies that share of each individual seller is a very, very small quantum of a product. He has no power to fix the price of the product.
(ii) Homogeneous product and uniform price.
(iii) Free entry and exit.
(iv) Absence of transport cost.
(v) Perfect mobility of factors of production.
(vi) All buyers and sellers have a through knowledge of the quality of the product, prevailing price etc.
(vii) There is no government regulation on supply of raw materials, and in the determination of price etc.

Features of Monopoly :
(i) There is a single seller of a product.
(ii) The product of a monopolist is unique and has no close substitute.
(iii) There is strict barrier for entry of any new firm.
(vi) The monopolist is a price-maker.
(v) The monopolist earns maximum profit / abnormal profit.

35. (i) The Government of Tamil Nadu lays emphasis on agricultural production and productivity.
(ii) As a reult, Tamil Nadu tops in productivity in food crops as well as non food crops among the states in India.
(iii) Tamil Nadu ranks first in maize, cumbu, groundnut, oil seeds and cotton, second in rice and coconut, Third in Sugarcane, Sunflower and Jowar.

Crop	Position of Tamil Nadu at National Level	Yield in Tamil Nadu (Kg /ha)	All India Average Yield (Kg/ha)
Maize	1	5360	2557
Cumbu	1	2881	1272
Groundnut	1	2699	1400
Total Oil Seeds	1	2294	1037
Cotton	1	718	461
Coconut	2	10236	7164
Rice	2	3191	2390

36. Functions of APMC :
(i) To promote public private partnership in the ambit of agriculture markets.
(ii) To provide market led extension services to farmer.
(iii) To ensure payments to the farmers for the sale of agricultural produces on the same day.
(iv) To promote agricultural activities.
(v) To display data on arrivals and rates of agricultural produce from time to time into the market.

37. (i) Land is a primary factor of production.
(ii) Land is a passive factor of production.
(iii) Land is the free gift of nature.
(iv) Land has no cost of production.
(v) Land is fixed or inelastic in supply.
(vi) Land is permanent.
(vii) Land is immovable.
(viii) Land is heterogeneous as it differs infertility

38. (i) Self help groups are informal voluntary association of poor people.
(ii) Socio - Economic background, up to 20 women come together for the purpose of solving their common problems through self help and mutual help.
(iii) The SHGs promotes small saving among its members the amount of ` 10 to ` 50 a month.
(iv) The savings are kept with a bank.
(v) After saving 6 months, they lend small amount to their members for interest.
(vi) They are linked with the bank for further assistance under SHG Bank linked program.
(vii) It is a holistic programme of micro enterprises covering all aspects of self employment organization of the rural poor.

39. (i) Amartya Sen was awarded the nobel prize "for his contributions to welfare economics".
(ii) Amartya Sen occupies a unique position among modern economics.
(iii) He is an outstanding economic theorist, a world authority on social choice and welfare economics.
(iv) The major contributions of Amartya Sen have come in the field of social welfare and development economics.

40. (i) Plan the keystrokes needed to complete the tasks.
(ii) Click Tools.
(iii) Assign a Name for the Macro.
(iv) Assign a shortcut key for the Macro.
(v) Click Ok.
(vi) Perform the steps needed to create your report.
(vii) Click on the stop button on the Macro toolbar to stop recording and save the Macro.

PART - D

41(a) Marshall's Definition vs. Robbin's Definition

Marshall's Definition	Robbin's Definition
"Economics is the study of man in the ordinary business of life." It examines that part of individual and social action, which is most closely connected with the attainment and with the use of material requisites of well being.	"Economic is the science which studies human behaviour as a relationship between multiple ends and scarce means, which have alternative uses".

Similarities between Robbins & Marshall's Definition.

Human Behaviour :

(i) Both the definitions are concerned with human behaviour.
(ii) Marshall's and Robbin's definitions are concentrate on optimization.
(iii) According to Marshall, wealth is the basic source of maximisation of material welfare. Robbins is of the opinion that maximize our satisfaction by scarce resources.

Differences between Marshall's & Robbins Definition.

Economic activity - Material / Immaterial :

(i) Marshall believes in only material activities which promote material welfare.
(ii) Robbins believes in both material and immaterial activities to tackle the problem of choice.

Social Science / Natural Science :

(i) Marshall economics is a social science.

(ii) Robbins Economics is natural science like Physics, Chemistry etc.

Practical / Theoretical :

(i) Marshall's definition is practical in nature.

(ii) Robbins definition is theoretical in nature.

Welfare / Scarcity :

(i) Marshall's definition is based on human material welfare.

(ii) Robbins definition is based on scarcity resources.

(OR)

(b) (i) If a firm is able to sell addition unit at the same price then AR and MR will be constant.

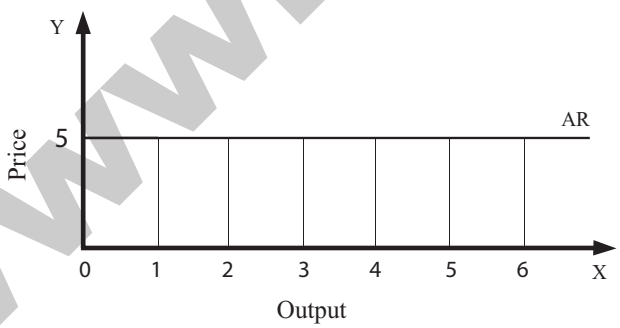
(ii) If the firm is able to sell additional units only by reducing the price then both AR and MR will fall.

Constant AR and MR (at fixed price)

(i) When price remains constant or fixed, the MR will also constant and will coincide with AR.

(ii) Under perfect competition as the price is uniform and fixed, AR is equal to MR and their shape will be a straight line horizontal to X- axis.

Qty Sold (Q)	Price (P) Rs.	Total Revenue (TR) Rs.	Average Revenue (AR) Rs.	Marginal Revenue (MR) Rs.
1	5	5	5	5
2	5	10	5	5
3	5	15	5	5
4	5	20	5	5
5	5	25	5	5
6	5	30	5	5



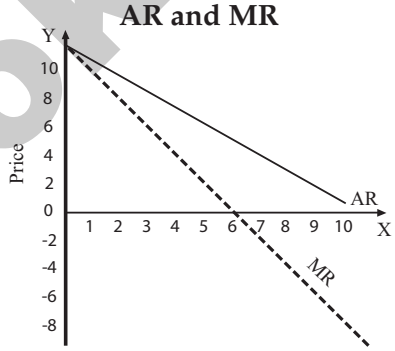
Declining AR and MR (at Declining Price)

When a firm sells large quantities at lower prices both AR and MR will fall but the fall in MR will be more steeper the fall in the AR.

Table 4.11

Quantity Sold (Q)	Price (P)/ Average Revenue (AR) Rs.	Total Revenue (TR) Rs.	Marginal Revenue (MR) Rs.
1	10	10	10
2	9	18	8
3	8	24	6
4	7	28	4
5	6	30	2
6	5	30	0
7	4	28	–2
8	3	24	–4
9	2	18	–6
10	1	10	–8

AR and MR



(i) It is to be noted that MR will be lower than AR

(ii) The MR curve divides the distance between AR curve and Y axis into equal parts.

(iii) The decline in AR need not be a straight line or linear, if the prices are diclining with increase in quantity sold.

(iv) The AR can be non-liner taking a shape of concave or convex to the origin as shown in the diagram.

42(a) (i) India possesses high quality iron-ore in abundance.

(ii) The major deposit of magnetite iron is available at western coast of Karnataka some deposit of iron ore are also found in Kerala, Tamil Nadu and Andhra Pradesh.

Coal and Lignite :

(1) Coal is the largest available mineral resource.

(2) The main centres of Coal in India are the West Bengal, Bihar, Madhya Pradesh, Maharastra, Odisha and Andra Pradesh.

(3) Bulk of the Coal production comes from Bengal, Jharkhand Coal fields.

Bauxite :

(1) Bauxite is a main source of metal like aluminium.

(2) Major reserves are concentrated in the east coast.

(3) Bauxite deposits of Odisha and Andra Pradesh

Mica : India stands first in sheet mica production and contributes 60% of mica trade in the world.

Crude Oil :
Oil is being explored in India at many places of Assam and Gujarat.

Gold :
(1) India posseses only a limited gold reserve.
(2) There are only three main gold mine region - Kolar gold field, Kolar district and Hutti gold field in Raichur district.

Diamond :
As per UNECE the total reserve of diamond is estimated at round 4582, thousand carats which are mostly available in panna (Madhya Pradesh), Rammallakota of Kurnur District of Andra Pradesh and also in the Basin of Krishna River.

(OR)

(b) There are four methods of measuring price elasticity of demand.

(i) **The Percentage Method :-**

(1) $$EP = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$$

(2) This method is also known as ratio method.

(3) $EP = \frac{\%\Delta Q}{\%\Delta P}$ = $\%\Delta Q$ = percentage change in demand
$\%\Delta P$ = percentage change in price

(ii) **Total Outlay Method :-**

(1) Marshall suggested that demand is elastic or inelastic is to examine the change in total outlay of the consumer.

(2) Total Revenue = Price × Quantity

(3) TR = P × Q

Price	Quantity Demanded	Total outlay	Elasticity
150	3	450	e > 1
125	4	500	e = 1
100	5	500	e < 1
75	6	450	

(iii) Point (or) Geometrical Elasticity :-

(1) The point elasticity of linear demand curve is shown by the ratio of the segments of the line to the right and left of the particular point.

(2) The demand curve is a straight line, it is said to be linear.

(3) The demand for a commodity can be elastic in one price and in elastic in another.

(4) Point elasticity = Lower segment of the demand curve below the given point / Upper segment of the demand curve above the given point

$ep = \frac{L}{U}$ L = Lower Segment, U = Upper Segment

(iv) **Arc Method :-**

(1) Segment of the demand curve between two points is known as an Arc method.

(2) $$EP = \frac{Q_1 - Q_2}{Q_1 + Q_2} \div \frac{P_1 - P_2}{P_1 + P_2}$$

$$= \frac{\Delta Q}{Q_1 + Q_2} \div \frac{\Delta P}{P_1 + P_2} \uparrow\downarrow$$

$$= \frac{\Delta Q}{Q_1 + Q_2} \times \frac{P_1 + P_2}{\Delta P}$$

$$EP = \frac{\Delta Q}{\Delta P} \times \frac{P_1 + P_2}{Q_1 + Q_2}$$

Q_1	= Original Quantity
Q_2	= New Quantity
Δ	= Change
P_1	= Original Price
P_2	= New Price

43(a)(i) Rural indebtedness refers to the situation of the rural people unable to repay the loan accumulated over period.

(ii) Existence of the rural indebtedness indicates the weak financial infrastructure, landless people and agricultural wage labourers.

(iii) Indebtedness is attributed to the causes like poverty, ancestral debt, illiteracy and ignorance.

(iv) Indebtedness has the harmful impacts such as low standard of living, health problem, decline in productivity, suicides etc.

(v) The farmers borrow loan for various purpose like agricultural operations, supporting the family in the lean season, purchase of equipments, celebrations, liquor consumption and so on.

(vi) Due to lower income the villagers are unable to repay the loans and pending of interest on the principal amount.

(vii) The date of the National sample survey organisation reveals that about 30% of the poor borrows get credit from the formal sector banks. This will reduces the indebtedness of the farmer.

(OR)

(b) (i) Electrical energy is one of the necessary components of our life.

(ii) Now-a-days, without electricity, we cannot survive in this world of technology.

Classifications of energy :

The energy sources are classified under two heads. They are,

(a) Non-renewable energy sources

(b) Renewable energy sources

(a) Non-renewable energy Sources :

(i) The sources of energy which cannot be renewed (or) re-used are called non-renewable energy sources.

(ii) This energy sources which will get exhausted over a period of time.

(iii) For example : coal, oil, gas etc.

(b) Renewable energy Sources :

(i) The sources energy which can be renewed or re-used again and again are called renewable energy sources.

(ii) These kinds of materials do not exhaust (or) these are available in abundant (or) infinite quantity.

(iii) For example : Solar energy, Wind energy, Tidal energy, Geothermal energy and Biomass energy.

(iv) Sometimes renewable sources are also called non-conventional sources of energy.

44(a) **Laws of return to scale**

(i) In the long - run, there is no difference between fixed factor and variable factor in the sense that all factors are variable.

(ii) The Laws of returns to scale explain the relationship between output and the scale of inputs in the long run when all the inputs are increased in the same proportion.

Assumptions :

(i) All the factors of production are variable but organization is fixed.

(ii) There is no change in technology.

(iii) There is perfect competition in the market.

(iv) Outputs or returns are measured in physical quantities.

Three Phases of Return to Scale :

(A) Increasing returns to scale:
In this case if all inputs are increased by one percent, output increase by more than one percent.

(B) Constant returns to scale:
In this case if all inputs are increased by one percent, output increasing exactly by one percent.

(C) Diminishing returns to scale:
In this case if all inputs are increased by one percent, output increases by less than one percent.

Explanation :

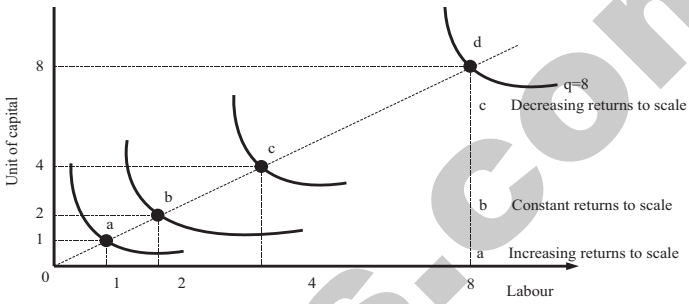
(i) In the above figure the movement from point 'a' to point 'b' represents **increasing returns** to scale.

(ii) It produces more than double from q = 1 to q =3 when 2 units of labour and 2 units of capital are used.

(iii) The law of **constant returns** to scale is implied by the movement from the point b to point c.

(iv) **Decreasing returns** to scale are denoted by the movement from the point c to point d since doubling the factors from 4 units to 8 units.

Laws of Returns to Scale



(OR)

(b) Elasticity of demand = η

$$\eta d = \frac{dp}{dq}$$

$$P = 60 - 0.2Q$$

$$\frac{dp}{dq} = -0.2$$

$$\boxed{\eta d = \frac{-q}{p}\,\frac{dp}{dq}}$$

$$\eta d = \frac{-q}{60-0.2q}(-0.2)$$

$$= \frac{0.2q}{60-0.2q}$$

when q = 0

$$= \frac{0.2(0)}{60-(0.2)(0)} = 0$$

when q = 20

$$\eta d = \frac{0.2\,(20)}{60 - (0.2)\,(20)}$$

$$= \frac{4.0}{60-4}$$

$$= \frac{\cancel{4}^{\,2^{1}}}{\cancel{56}_{\,28_{14}}} = \frac{1}{14}$$

$$\eta d = \mathbf{\frac{1}{14}}$$

when q = 40

$$\eta d = \frac{0.2\,(40)}{60 - (0.2)\,(40)}$$

$$= \frac{8}{60-8}$$

$$= \frac{\cancel{8}^{\,\cancel{4}^{\,2}}}{\cancel{52}_{\,26_{13}}} = \frac{2}{13}$$

$\eta d = \frac{2}{13}$

q	0	20	40
ηd	0	$\frac{1}{14}$	$\frac{2}{13}$

45(a)(i) The loanable fund theory, also known as the 'Neo - classical theory'.

(ii) This theory was developed by Swedish economists like Wicksell, Berlin, Ohlin, Viner, Gunnar Myrdal and others.

Definition :

According to this theory, interest is the price paid for use of the loanable funds. The rate of interest is determined by the equilibrium between demand for and supply of loanable funds.

Demand for Loanable Funds :

The demand for loanable funds depends upon

(1) Demand for investment (I)
(2) Demand consumption (C)
(3) Demand for Hoarding (H)

Demand for loanable funds vary inversely with the interest rate.

Supply of Loanable Funds :

Supply of loanable funds depend up,

(1) Saving (S)
(2) Bank Credit (BC)
(3) Dishoarding (DH)
(4) Disinvestment (DI)

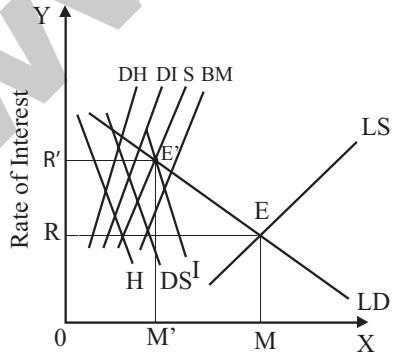
Supply of loanable funds very directly with the interest rate.

Equilibrium of Classical Theory of Interest :

According to classical theory equilibrium is determined by the intersection of demand and supply of loanable fund. (S = I)

Supply and Demand for loanable funds :

Supply of loanable funds = Saving + Bank Money + Dishoarding + Disinvestment = S + Bm + DH + DI
Demand for loanable funds = Investment + Consumption + Hoarding. Lonable funds Theory of Interest



Demand for Loanable Funds and Supply of Loanable Funds

Diagram Explanation :

(i) X - axis represent demand and supply of loanable fund Y - axis represent Rate of Interest.
(ii) The LD and LS curves intersect at point 'E' is called equilibrium point.
(iii) At this point OR - rate of interest, OM amount of loanable funds are determined.

Criticism :

(i) This theory is "indeterminate" unless the income level is already known.
(ii) It is very difficult to combine real factors with monetary factors.

(OR)

(b) The new EXIM policy has been formulated focusing on increasing in export scenario, boosting production and supporting the concepts like Make in India and Digital India.

Salient Features :

(i) Two new schemes namely "Merchandise Exports from India Scheme (MEIS)" and "Service Exports from India Scheme (SEIS)" have been introduced.
(ii) Reduce Export obligation by 25% and boot to domestic manufacture.
(iii) MEIS to promote export of notified goods and market.
(iv) MEIS and SEIS firm will get subsidized office spaces in SEZs.
(v) Duty credit scripts to be freely transferable and usable for payments of custom duty, excise duty and service tax.
(vi) Online procedure to upload digitally signed document by CA/CS/Cost accountant are developed and further mobile app for filling tax, stamp duty has been developed.
(vii) Export obligation period for export items related to defence, military store, aerospace and unclear energy to 24 months.
(viii) Exporter and Importer profile are not required.
(ix) EXIM policy 2015 - 2020 is expected to double the share of India in world trade.

46(a) The main objective of nationalization was to attain social welfare.

(i) Sector such as agriculture, small and village industries were in need of funds for their expansion and further economic development.
(ii) It helps to curb private monopolies in order to ensure smooth supply of credit.
(iii) It is needed to encourage the banking habit among the rural population because 70% of the people lived in rural areas.
(iv) Nationalization banks were required to reduce the regional imbalances.
(v) Bank created credit facilities mainly to the agriculture sector and its allied activities.

(OR)

(b) **Transport :**

(i) Tamil nadu has a well established transportation system that connects all parts of the state.

(ii) TN is served by an extensive road network in terms of its spread and quality, providing links between Urban Centres, agricultural market places and rural habitations in the countryside.

(a) Road Transport :

(i) There are 28 national highwasy in the state, covering a total distance of 5,036 km.

(ii) CMBT and Erode Central Bus Terminus are the largest and second largest bus Terminal in Tamil Nadu.

(b) Rail Transport :

(i) Tamil Nadu southern has a total railway track length of 6,693 km and there are 690 railway station in the state.

(ii) This system connects it with most major cities in India.

(c) Air Transport :

(i) Tamil Nadu has four major international airports.

(ii) Chennai International Airport is currently the third largest airport in India after Mumbai and Delhi.

(iii) Other international airports in Tamil Nadu include Coimbatore International Airport, Madurai International Airport and Tiruchirapalli International Airport.

47(a)(i) A monopoly is a one firm industry with no close substitute products.

(ii) It faces a downward sloping demand curve or AR curve.

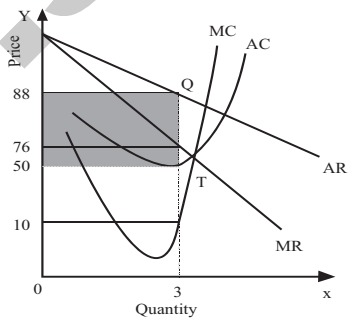
(iii) MR lines below the AR curve (MR<AR).

(iv) The monopolist will continue to sell his product as long as MR>MC.

(v) Beyond this point the product will experience loss and hence will stop selling.

Price and output determination under monopoly

(vi) From above diagram he sells 3 units output MR>MC.



(vii) Monopoly firm will be in equilibrium where MC=MR.

(viii) At equilibirium, level of output = 3, AR = 88, AC = 50

$\boxed{88 - 50 = 38}$ – profit per unit

(ix) Total Profit = (AR – AC) × Total output

= (88–50) × 3 = 38 × 3 = 114

$\boxed{\therefore \text{Total Profit} = 114}$

(OR)

(b) ***Solution :***

The matrix form of the given equation is written as

$$\begin{bmatrix} 7 & -1 & -1 \\ 10 & -2 & +1 \\ 6 & 3 & -2 \end{bmatrix} \begin{bmatrix} x_1 \\ x_2 \\ x_3 \end{bmatrix} = \begin{matrix} 0 \\ 8 \\ 7 \end{matrix}$$

$$\Delta = \begin{bmatrix} 7 & -1 & -1 \\ 10 & -2 & +1 \\ 6 & 3 & -2 \end{bmatrix}$$

$= 7(4-3) - (-1)(-20-6) + (-1)(30+12)$

$= 7(1) + 1(-26) - 1(42)$

$= 7 - 26 - 42$

$= 7 - 68$

$\boxed{\Delta = -61}$

$$\Delta x_1 = \begin{bmatrix} 0 & -1 & -1 \\ 8 & -2 & +1 \\ 7 & +3 & -2 \end{bmatrix}$$

$= 0(-4-3) - (-1)(-16-7) + (-1)(+24+14)$

$= 0 + 1(-23) - 1(38)$

$= 0 - 23 - 38$

$\boxed{\Delta x_1 = -61}$

$$\Delta x_2 = \begin{bmatrix} 7 & 0 & -1 \\ 10 & 8 & +1 \\ 6 & 7 & -2 \end{bmatrix}$$

$= 7(-16-7) - (0)(-20-6) + (-1)(70-48)$

$= 7(-23) + 0(-26) - 1(22)$

$= -161 + 0 - 22$

$\boxed{\Delta x_2 = -183}$

$$\Delta x_3 = \begin{bmatrix} 7 & -1 & 0 \\ 10 & -2 & 8 \\ 6 & 3 & 7 \end{bmatrix}$$

$= 7(-14-24) - (-1)(70-48) + 0(30+12)$

$= 7(-38) + 1(22) + 0(42)$

$= -266 + 22 + 0$

$\boxed{\Delta x_3 = -244}$

$$x_1 = \frac{\Delta x_1}{\Delta} = \frac{\cancel{-61}}{\cancel{-61}} = 1$$

$$x_2 = \frac{\Delta x_2}{\Delta} = \frac{\cancel{-183}^{3}}{\cancel{-61}_{1}} = +3$$

$$x_3 = \frac{\Delta x_3}{\Delta} = \frac{\cancel{-244}}{\cancel{-61}} = 4$$

$\boxed{\begin{matrix} x_1 = 1 \\ x_2 = 3 \\ x_3 = 4 \end{matrix}}$

❖ ❖ ❖