ST. MARGARET SR. SEC. SCHOOL
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ANNUAL EXAMINATION SAMPLE PAPER 2023-24
SUBJECT: ECONOMICS
CLASS: XI
SET-A
M.M: $\mathbf{8 0}$

Time: 3 Hrs

## GENERAL INSTRUCTIONS:

1. This question paper contains two sections:

Section A - Introductory Microeconomics
Section B - Statistics for Economics
2. This paper contains 20 Multiple Choice Questions type questions of 1 mark each.
3. This paper contains 4 Short Answer Questions type questions of 3 marks each to be answered in 60 to 80 words.
4. This paper contains 6 Short Answer Questions type questions of 4 marks each to be answered in 80 to 100 words.
5. This paper contains 4 Long Answer Questions type questions of 6 marks each to be answered in 100 to 150 words.

## SECTION A: INTRODUCTORY MICROECONOMICS

Q. 1 Identify, which one of the following is not an essential determinant of supply?
(a) Price of commodity
(b) Period of time
(c) Willingness to buy
(d) Quantity of the commodity
Q. 2 When the quantity supplied of a commodity does not show any predictable behaviour with respect to a given change in the price of the commodity, this type of supply is known as-
(a) Perfectly elastic supply
(b) Perfectly inelastic supply
(c) Relatively elastic supply
(d) Relatively inelastic supply
Q. 3 Identify, which of the following statement is not incorrect?
(a) Supply does not depend on the government's taxation policy.
(b) Stock refers to the quantity which comes to the market for sale.
(c) There is a difference between stock and supply
(d) Stock and supply are always equal
Q. 4 Due to $10 \%$ fall in the price of a commodity, its quantity demanded rises from 400 units to 450 units. Which of the following value represent the value of price elasticity of demand?
(a) 1
(b) 1.25
(c) 1.50
(d) 0.75
Q. 5 Under perfect competition, identify which of the following is not true:
(a) price remains constant
(b) selling costs are huge
(c) there exists freedom of entry of firms
(d) both demand and supply determine equilibrium price
Q. 6 Read the following statement -Assertion (A) and Reason (R). Choose one of the correct alternatives given below:
Assertion (A): If the income of the consumer changes and prices of the two goods remain unchanged, a new budget line will be formed which will be parallel to the original line.
Reason ( $R$ ): Budget line changes with the change in prices not with the change in income.
Alternatives:
(a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).
(b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A).
(c) Assertion (A) is true but Reason (R) is false.
(d) Assertion (A) is false but Reason (R) is true.
Q. 7 Identify the correct sequence of alternatives given in column II by matching them with respective items in column I:

| Column I |  | Column II |
| :--- | :---: | :--- |
| (a)TU | I. | TUn - TUn-1 |
| (b) MU | II. | $\mathrm{MU}=$ price |
| (c) Single commodity | III. | $\mathrm{MUx} / \mathrm{Px}=\mathrm{MUy} / \mathrm{Py}$ |
| (d)Two commodity | IV. | $\sum M U$ |

(a) A-II, B-III, C-I, D-IV
(b) A-IV, B-I, C-III, D-II
(c) A-II, B-III, C-IV, D-I
(d) A-III, B-IV, C-I, D-II
Q. 8 Given below are two statements:

Statement I: Marginal Opportunity cost can be defined as cost of next best alternative foregone. Statement II: When production of Good-X increases from 10 units to 11 units and that of GoodY decreases from 40 units to 35 units, marginal opportunity cost equals one unit.
In the light of the above statements, choose the most appropriate answer from the options:
(a) Both Statement I and Statement II are correct.
(b) Both Statement I and Statement II are incorrect.
(c) Statement I is correct but Statement II is incorrect.
(d) Statement I is incorrect but Statement II is correct.
Q. 9 Given below are two statements:

Statement I: Cardinal analysis of consumer equilibrium assumes that utility can be expressed in terms of cardinal numbers which is a major limitation of it.
Statement II: The law of diminishing marginal utility states that an increase in price of a commodity results in decrease in its marginal utility.
In the light of the above statements, choose the most appropriate answer from the options:
(a) Both Statement I and Statement II are correct.
(b) Both Statement I and Statement II are incorrect.
(c) Statement I is correct but Statement II is incorrect.
(d) Statement I is incorrect but Statement II is correct.
Q. 10 When MR and AR both are declining then
(a) MR Curve remains above the AR Curve
(b) MR Curve remains below the AR Curve
(c) MR Curve and AR Curve coincide
(d) MR Curve and AR Curve become parallel to the x-axis
Q. 11 Explain the problem of What to Produce and in what quantity.
Q. 12 In a perfectly competitive market, there exists no barriers to entry or exit. Do you agree? Give reasons in support of your answer.

## OR

Explain the implication of homogeneous products in a perfectly competitive market.
Q. 13 Read the following text carefully and answer the given question on the basis of the same and common understanding:
In the market for any particular product, the decisions of buyers interact simultaneously with the decisions of sellers. When the demand for good $X$ equals the supply of good $X$, the market for good $X$ is said to be in equilibrium. Associated with any market equilibrium will be an equilibrium quantity and an equilibrium price. The equilibrium quantity of good $X$ is that quantity for which the quantity demanded of good $X$ exactly equals the quantity supplied of good $X$. The equilibrium price for good $X$ is that price per unit of good $X$ that allows the market to "clear"; that is, the price for which the quantity demanded of good $X$ exactly equals the quantity supplied of good $X$. The determination of equilibrium quantity and price, known as equilibrium analysis.
Suppose, we have a product with the situation shown in the graph below. The equilibrium price is $\$ 1.00$ per unit.


Suppose in the above market for product $X$, government imposes a Sales Tax and the burden of the tax is to be borne by the seller. For every $\$ 1.00$ of sales, assume that the seller must pay $\$ 0.07$ to the government.
Consumers do not pay sales taxes. The store pays the sales tax to the government. From the point of view of the seller, this is an additional cost of production. In addition to all other costs, the seller must also pay the sales tax.
Discuss the impact of the imposition of sales tax by the government affect the market equilibrium. Explain using chain effect mechanism.
Q. 14 A consumer is consuming two goods $X$ and $Y$ whose prices are Rs. 4 and Rs. 5 per unit respectively. If the consumer chooses a combination of two goods with Marginal Utility of $X$ equal to Rs. 5 and that of $Y$ equal to Rs. 4, is the consumer in equilibrium? Give reasons. Discuss the reaction of a rational consumer in this situation.

## OR

State whether the following statements are True or False. Justify your statement.
(a) Shift in demand curve is not related to price- demand relationship of a commodity.
(b) A vertical straight line demand curve shows that demand rises to infinity even when price remains constant.
Q. 15 TVC increase at a decreasing rate in the initial stages of production. Do you agree? Give reasons in support of your answer.
Q. 16 Explain the relationship between total product, marginal product and average product using a suitable diagram.

## OR

"In a state of equilibrium price greater than Marginal Cost is ruled out for a competitive firm. " Do you agree?
Give reasons in support of your answer.
Q. 17 Read the following text carefully and answer the questions on the basis of the same:

If our income rises, we generally tend to buy more of the goods. More income would mean more pens, more shirts, more shoes, more cars and so on. But there are exceptions. If initially, you are buying coarse grain, how would you take your increase in income now? Perhaps, as a first step, you would discard the consumption of inferiors. Surely, this happens in the deserts of Rajasthan where the rich minority eats wheat while the poor majority eats Bajra as their staple food.
(a) Outline and discuss the two types of goods and the change in their demand with the change in income.
(b) "Change in income would lead to a movement along the demand curve."

Defend or refute the statement, giving reasons in support of your answer.

## SECTION B: STATISTICS FOR ECONOMICS

Q. 18 Which of the following diagram show total values of a set of data simultaneously?
(a) Percentage bar diagram
(b) Differential bar diagram
(c) Deviation bar diagram
(d) Multiple bar diagram
Q. 19 Which of the following statements about scatter diagrams is true?
(a) Scatter diagrams are used only for categorical data.
(b) In a scatter diagram, the horizontal axis represents the dependent variable.
(c) The strength and direction of the relationship between two variables can be easily determined by the shape of the scatter plot.
(d) Scatter diagrams are primarily used for displaying time series data.
Q. 20 If the value of two series move in the same direction, the correlation is said to be:
(a) Negative
(b) Positive
(c) Zero
(d) Infinite
Q. 21 Arithmetic mean of a series is 15 and if 5 is added in all the items of this series the new arithmetic mean will be:
(a) 5
(b) 20
(c) 15
(d) 10
Q. 22 Data represented through a histogram can help in finding graphically the value of:
(a) Simple Arithmetic Mean
(b) Mode
(c) Median
(d) Weighted Mean
Q. 23 Sum of deviations about mean is:
(a) Zero
(b) Minimum
(c) Maximum
(d) One
Q. 24 Read the following statements Assertion (A) and Reason (R) and choose one of the correct alternatives:
Assertion (A): The collection of primary data is an inexpensive method of collecting data as compared to secondary data.
Reason (R): Primary data is the first-hand information directly collected by the investigator. Alternatives:
(a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A)
(b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)
(c) Assertion (A) is true and Reason (R) is false.
(d) Assertion (A) is false and Reason (R) is true.
Q. 25 Mean wages for 1000 workers in a factory were ₹ 5,000 . The mean wages paid to male \& female workers were ₹ 5,200 \& ₹ 4,200 respectively. Determine the percentage of male \&
female workers employed by the factory.
(a) male- 70\%, Female- 30\%
(b) male- $80 \%$, Female- $20 \%$
(c) male- $50 \%$, Female- $50 \%$
(d) male- 60\%, Female- 40\%
Q. 26 Identify the odd one out:
(a) Tabulation aims to present the classified data in an orderly manner.
(b) Tabulation aims to facilitate statistical analysis as it is a phase between classification and presentation of data.
(c) Tabulation saves space but compromises the quality and quantity of data.
(d) Tabulation aims to provide reference for further studies as data arranged in tables can be easily identified and used.
Q. 27 The bar graph given below shows the sales of books (in thousand number) from six branches of a publishing company during two consecutive years 2000 and 2001.

Sales of Books (in thousand numbers) from Six Branches - B1, B2, B3, B4, B5 and B6 of a publishing Company in 2000 and 2001.


Total sales of branches B1, B3 and B5 together for both the years (in thousand numbers) is?
(a) 560
(b) 310
(c) 435
(d) 250
Q. 28 Differentiate between census and sampling method of collecting data.

OR
Explain the questionnaire method of collecting primary data.
Q. 29 In a trip organized by a college, there were 80 persons, each of whom paid Rs. 15.50 on an average. There were 60 students, each of whom paid Rs. 16. Members of the teaching staff were charged at a higher rate, the number of attendants ( all males) were six, and they were not charged anything. The number of ladies was 20 percent of the total, and there was only one lady staff member. Tabulate this information.
Q. 30 Represent the following information with the help of a pie diagram:

| Expenditure | Food | Housing | Clothes | Education | Others |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Rs. | 180 | 225 | 135 | 90 | 270 |
| OR |  |  |  |  |  |

Present the following data in a suitable bar diagram:

| Items of expenditure | Family A | Family B |
| :--- | :--- | :--- |
| Food | 10000 | 7000 |
| Education | 3000 | 1000 |
| Clothing | 5000 | 1500 |
| Misc. | 2000 | 500 |

Q. 31 Calculate the value of median on the basis of the following data:

| Mid-values | 115 | 125 | 135 | 145 | 155 | 165 | 175 | 185 | 195 |
| :--- | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Frequency | 6 | 25 | 48 | 72 | 116 | 60 | 8 | 22 | 3 |

Q. 32 Calculate the value of index number using Simple Aggregative method from the following data and comment upon the value:

| Item | Price 2018 | Price 2020 |
| :--- | :--- | :--- |
| A | 30 | 47 |
| B | 8 | 12 |
| C | 14 | 18 |
| D | 22 | 15 |
| E | 25 | 30 |

Q. 33 (a) Define correlation.
(2)
(b) Calculate the rank correlation coefficient between $X$ and $Y$ variables:
(a) Calculate the Karl Pearsons coefficient of correlation on the basis of the following data: (4)

| X | 65 | 66 | 57 | 67 | 68 | 69 | 70 | 72 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Y | 67 | 56 | 65 | 68 | 72 | 72 | 69 | 71 |

(b) Correlation implies causation. Defend or refute the statement, giving valid reasons in support of your answer.
Q. 34 (a) Determine the missing frequencies when mode $=36$ and total frequency is 30.

| $X$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| F | -- | 5 | 12 | -- | 2 |

(b) Calculate arithmetic mean from the following data:
(3)

| Age in <br> years | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ | $60-70$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Frequency | 10 | 15 | 25 | 25 | 10 | 10 | 5 |

