# KOTHARI INTERNATIONAL SCHOOL, NOIDA 

ANNUAL EXAMINATION, SESSION 2023-24
GRADE: 11 SUBJECT: ECONOMICS (030)
SET B
DAY\& DATE: FRIDAY - FEBRUARY 09, 2024
MAXIMUM MARKS: 80
NAME:
TIME ALLOWED: 3 HOURS ROLL NO:

## GENERAL INSTRUCTIONS:

This Question Paper contains 34 questions.
1-mark questions are Very Short Answer Type Questions and are to be answered in 20-30 words/ Multiple
Choice Questions
3 marks questions are Short Answer Type Questions and are to be answered in 50-80 words.
4 marks questions are Short Answer Type Questions and are to be answered in 60-90 words.
6 marks questions are Long Answer Type Questions and are to be answered in 80-120 words.

## SECTION A - STATISTICS

Q1. For a skewed distribution, median=20.6 and mode=26. Find the mean.
Q2 Can 2020 be taken as the base year for computation of index
number? Give reason
Q3 Choose the correct word to fill in the blank.
Suppose you have to select 10 out of 100 households in a locality. You have to decide which household to select and which to reject. You may select the households conveniently situated or the households known to you or your friend. In this case, you are using your judgement (bias) in selecting 10 households. This way of selecting 10 out of 100 households is called a (random/ non-random) sampling.

Take Year on the X-Axis and Sales and Profits (in Rs lakhs) on Y Axis. Represent the Data in a Time Series Graph

| Year | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Sales (Rs lakh) | 25 | 30 | 40 | 35 | 50 | 55 |
| Profit (Rs <br> lakhs) | 7 | 10 | 15 | 10 | 20 | 25 |

Q5 Give an example of an attribute.
Q6 My friend, Rohan is a singer. Look at his daily routine given below:
(i) In the morning He perform stage show for singing and get 10000 as a fee.
(ii) In the evening he celebrates his 4 years daughter's birthday at home and he sang a song for her from the above information, state which of the following statements is true.

From the above information, state which of the following statements is true.
(a) Activity (i) is an economic activity and (ii) is a non-economic activity.
(b) Activity (i) is a non-economic activity and (ii) is an economic activity
(c) Both (i) and (ii) are economic activities.
(d) Both (i) and (ii) are non-economic activities.

Q7 Calculate the mode from the following data of the marks obtained by 10 students by inspection method.
$10,27,24,12,27,27,20,18,15,30$

Q8 The amount of non-responses is maximum in
(a) Mailing questionnaire surveys
(b) Interview method
(c) Observation method
(d) All of these

Q9 A contractor employs three types of workers-male, female and children. To a male he pays 400 per day, to a male worker 320 per day and to a child worker ₹ 150 per day. What is the average wage per day paid by the contractor, if the number of male, female and child workers employed are 20,15 and 5 respectively?

Q10 Data collected from NSSO (National Sample Survey Organisation) are called:
(a) Primary data
(b) Secondary data
(c) Primary and secondary data both
(d) None of these

Q11 Compute the mode graphically.

| Daily Earning (Rs) | No of Wage Earners |
| :--- | :--- |
| $44.5-49.5$ | 2 |
| $49.5-54.5$ | 3 |
| $54.5-59.5$ | 5 |
| $59.5-64.5$ | 3 |
| $64.5-69.5$ | 6 |
| $69.5-74.5$ | 7 |
| $74.5-79.5$ | 12 |
| $79.5-84.5$ | 13 |
| $84.5-89.5$ | 9 |
| $89.5-94.5$ | 7 |
| $94.5-99.5$ | 6 |
| $99.5-104.5$ | 4 |
| $104.5-109.5$ | 2 |
| $109.5-114.5$ | 3 |
| $114.5-119.5$ | 3 |

Q12 The frequency distribution of the number of persons and their respective incomes are given below.
Calculate the median income and interpret the result.

| Income | 100 | 200 | 300 | 400 |
| :--- | :--- | :--- | :--- | :--- |
| No. of persons | 2 | 4 | 10 | 4 |

Q13 Calculate correlation coefficient (Karl Pearsons method) between x and y . Taking assumed mean as 5 , comment on their relationship.

| x | 1 | 3 | 4 | 5 | 7 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| y | 2 | 6 | 8 | 10 | 14 | 16 |

Q14 Calculate the value of mode or the following data by grouping method and analysis table.

| Size | $0-5$ | $5-10$ | $10-15$ | $15-20$ | $20-25$ | $25-30$ | $30-35$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Frequency | 1 | 2 | 10 | 4 | 10 | 9 | 2 |

Q15 Follow the instructions logically and compute the desired results for this data

| Marks | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| No. of students | 2 | 4 | 20 | 4 | 12 | 14 |

Logical instruction:
Step1: Draw Ogive by less than method.
Step 2: Plot the values of the variable on $x$-axis and cumulated values (less than ) on the $y$-axis
Step 3: Find the median item as size of ( $\mathrm{N} / 2$ )th item. Find lower quartile item Q 1 as size of ( $\mathrm{n} / 4$ )th item. Find upper quartile item Q3 as size of 3(N/4)th item.

Step 4: Locate Q1, median and Q3 items on the y-axis, and from those points draw a line parallel to the x - axis to intersect the ogive.

Step 5: Draw perpendicular lines from these points of intersection on the $x$-axis. Q1, median and Q3 are located at the points where the perpendiculars touch the $y$-axis.

Step 6: Determine the values of median and quartiles from the Ogives as instructed for the given data.

Q16 Obtain the rank correlation coefficient between the variables $x$ and $y$ from the following pairs of observed values. You are required to rank the lowest value as 1 and the next higher as 2 and so on.

| x | 19 | 24 | 12 | 23 | 19 | 16 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| y | 9 | 22 | 20 | 14 | 22 | 18 |

Q17 Calculate Fisher's index number.

| Commodity | Base period |  | Current period |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Price | Quantity | Price | Quantity |
| A | 2 | 10 | 4 | 5 |
| B | 5 | 12 | 6 | 10 |
| C | 4 | 20 | 5 | 15 |
| D | 2 | 15 | 3 | 10 |

## SECTION B - MICRO ECONOMICS

Q18 A farmer invests his own savings in doing farming and hires labor to do work. Identify implicit cost.
The law of indifference curve is based upon $\qquad$ utility approach.
a) Cardinal
b) Ordinal
c) Both a) and b)
d) None of these

When average product increases, the marginal product is
a) less than average product
b) equal to the average product
c) more than average product
d) None of these

Q21 Producer's Equilibrium under MR - MC approach is achieved when:
a) $\mathrm{MR}=\mathrm{MC}$
b) MC > MR after the equality between MR and MC
c) Either a) or b)
d) Both a) and b)

Q22 What changes will take place in TU, when MU curve remains positive?
Q23 Why coefficient sign of price elasticity of supply is positive and price elasticity of demand is negative

Q24 The ratio of change in price to original price for a good is 0.8 . If price elasticity of supply is 2.5 , Find the percentage change of supply.
a) $100 \%$
b) $150 \%$
c) $200 \%$
d) $120 \%$

Q25 What is an economic problem?
Q26 Assertion (A). Cross demand is positive in case of substitute goods.
Reason (R). An increase in price of substitute goods leads to a decrease in demand for given commodity.

## 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.

Q30
Complete the following cost schedule.

| Quantity | TC | TVC | AVC |
| :--- | :--- | :--- | :--- |
| 0 | 200 | 0 | .. |
| 1 | .. | .. | 100 |
| 2 | .. | 180 | .. |
| 3 | .. | .. | 80 |
| 4 | 490 | .. | .. |

Q31 Explain the given feature of a perfectly competitive market highlighted in the picture. Also explain its implications.


Read the text given below and answer the questions that follow.

A price floor is a government-imposed price control or limit on how low a price can be charged for a product, good, commodity, or service. It is a type of price support; other types include supply regulation and guarantee government purchase price. A price floor must be higher than the equilibrium price in order to be effective. The equilibrium price, commonly called the "market price", is the price where economic forces such as supply and demand are balanced and in the absence of external influences the equilibrium values of economic variables will not change, often described as the point at which quantity demanded and quantity supplied are equal (in a perfectly competitive market). Governments use price floors to keep certain prices from going too low.

Answer the questions given below:
(a) Explain any two examples of imposition of price floor by the government. (2)
(b) Explain the concept of price floor with the help of a diagram. (2)

Q33 What are the factors affecting individual demand of a commodity?
Q34 What is the impact on the equilibrium price and quantity when the percentage increase in demand is less than the percentage decrease in supply? Give diagram.

