## ANNUAL EXAMINATION

## EC XI -M2

## Class 11 - Economics

Time Allowed: 3 hours

## General Instructions:

1. This question paper contains two sections:

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

## Section A

1. The method in which information is collected from third party is known as $\qquad$ .
a) Indirect Oral Investigation
b) Information through correspondents
c) Mailed questionnaire method
d) Direct personal interviews
2. Who among the following is not engaged in an economic activity?
a) A doctor or a porter
b) A devotee visiting a pilgrimage
c) A farmer or a manufacturer
d) Buying goods for family needs
3. A person is interested in socio-economic status of students of class XI who secured the first position in their matriculation examination. He collected information regarding their pocket allowances, their family income, educational status, their family members, and the like. All this information will be termed as
a) Annual Data
b) Uniform Data
c) Primary data
d) Secondary data
4. As per the pictograph given below how many fewer fishing licenses were sold in Hamilton Country than Clinton Country

a) 6000
b) 2000
c) 4000
d) 3000
5. Refer the table given below calculate that how many workers get a daily wages of 109 and below. Options are

| Daily wages (Rs) | No. of workers |
| :---: | :---: |
| $90-99$ | 5 |
| $100-109$ | 9 |
| $110-119$ | 3 |

a) 5
b) 9
c) 14
d) 17
6. Which of the following is affected by extreme values?
a) Mean
b) Median
c) Mode
d) Index number
7. When $r=1$, all the points in a scatter diagram would lie:
a) Both (On a straight line directed from lower left to upper right) and (On a straight line)
c) On a straight line directed from lower left to upper right
b) On a straight line
d) On a straight line directed from upper left to lower right
8. The given diagram represents

a) moderate degree of positive correlation
b) low degree of positive correlation
c) high degree of positive correlation
d) perfect positive correlation
9. Assertion (A): Less then or more than ogive can be used to calculate correlation.

Reason ( $\mathbf{R}$ ): When changes in two related variables are in the same ratio, then it is a case of perfect correlation.
a) Both $A$ and $R$ are true and $R$ is the correct
b) Both A and R are true but R is not the
explanation of A .
c) $A$ is true but $R$ is false.
correct explanation of A.
d) $A$ is false but $R$ is true.
10. Suppose we want to know the average changes in the price of a set of commodities in 2010 with respect to the prices of same set of commodities in 2008. In this case what will be the base year?
a) 2010
b) 2000
c) 2008
d) None
11. Calculate Arithmetic Mean by assumed mean method from the data given in previous example.
12. For a data Lasperey's index number is 120 and fisher's index number is 125 . Calculate Paasche's index number.

OR
Using the simple aggregative method, calculate the index number for the given data.

|  | $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ |
| :---: | :---: | :---: | :---: | :---: |
| $\mathrm{P}_{1}$ | 15 | 22 | 20 | 27 |
| $\mathrm{P}_{0}$ | 10 | 20 | 18 | 25 |

13. Differentiate between sub divided and percentage bar diagram.
14. Calculate coefficient of correlation between the price and quantity demanded.

| Price(in Rs) | 5 | 10 | 15 | 20 | 25 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Demand(in kg) | 40 | 35 | 30 | 25 | 20 |

OR
Five competitors in a beauty contest are ranked by three judges in the following order.

| Rank by Judge-A | 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Rank by Judge-B | 2 | 4 | 1 | 5 | 3 |
| Rank by Judge-C | 1 | 3 | 5 | 2 | 4 |

Using rank correlation coefficient, determine which pair of judges has a common perception of beauty.
15. Calculate weighted index number for 2016 by weighted average of relative method for the following data.

| Items | Weight | Price in 2015 (Rs.) | Price in 2016 (Rs.) |
| :---: | :---: | :---: | :---: |
| A | 10 | 100 | 161 |
| B | 7 | 200 | 210 |
| C | 15 | 50 | 60 |
| D | 9 | 20 | 30 |
| E | 10 | 10 | 14 |

16. Use the data in the given table that relate to monthly household expenditure (in Rs.) on food of 50 households and
i. Obtain the range of monthly household expenditure on food.
ii. Divide the range into appropriate number of class intervals and obtain the frequency distribution of expenditure.
iii. Find the number of households whose monthly expenditure on food is
a. less than Rs.2,000
b. more than Rs.3,000
c. between Rs.1,500 and Rs. 2,500

Monthly Household Expenditure (in Rs.) on Food of 50 Households

| 1904 | 1559 | 3473 | 1735 | 2760 |
| :---: | :---: | :---: | :---: | :---: |
| 2041 | 1612 | 1753 | 1855 | 4439 |
| 5090 | 1085 | 1823 | 2346 | 1523 |
| 1211 | 1360 | 1110 | 2152 | 1183 |
| 1218 | 1315 | 1105 | 2628 | 2712 |
| 4248 | 1180 | 1583 | 1324 | 1133 |
| 1007 | 1832 | 1962 | 2621 | 1171 |
| 2025 | 1365 | 1146 | 32277 | 2575 |
| 1397 | 1293 |  |  | 1396 |

17. From the following data, determine mode.

| Size | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ | $60-70$ | $70-80$ | $80-90$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Frequency | 4 | 10 | 25 | 15 | 23 | 22 | 12 | 3 |

OR
Calculate the upper and lower quartiles for the following frequency distribution.

| Class Interval | Frequency (f) |
| :---: | :--- |
| $13-25$ | 6 |
| $25-37$ | 11 |
| $37-49$ | 23 |
| $49-61$ | 7 |
| $61-73$ | 3 |
| Total | 50 |

## Section B

18. Using land for the production of wheat implies foregoing the opportunities of using it for the production of rice

It is an example of which cost?
a) Opportunity Cost
b) Variable Cost
c) Average Cost
d) Fixed Cost
19. The consumer is in equilibrium and is consuming commodity- X only. The marginal utility for last unit consumed of commodity- $\mathrm{X}=50$ utils and $\mathrm{MU}_{\mathrm{M}}=10$. Find the price of the commodity-X.
a) ₹ 4
b) ₹ 10
c) ₹ 40
d) ₹ 5
20. Movement along the demand curve occurs due to change in:
a) none of these
b) Determinants of supply
c) own price of the commodity
d) determinants of demand, other than own price of the commodity
21. AVC and AFC always lie below AC because
a) Their sum is equal to AC
b) They are convex
c) They are concave
d) They are always downward sloping
22. Which of the following statement is true?
i. Average Revenue and Marginal Revenue curves have a positive slope.
ii. MR curve lies above AR curve. (AR > MR)
iii. Marginal Revenue falls twice the rate of Average Revenue.
iv. So long as Marginal Revenue decreases and is negative, Total Revenue increases at a diminishing rate.
a) only iii
b) only i
c) only iv
d) only ii
23. Which condition among these is necessary for achieving Producers's equilibrium?
a) MC curve intersects MR curve from below
b) MR curve intersects MR curve from above
c) MR curve intersects MC curve from below
d) MC curve intersects MR curve from above
24. A consumer buys 50 units of a good at Rs. 4/- per unit. When its price falls by 25 percent its demand rises to 100 units then the price elasticity of demand will be
a) 3
b) 6
c) 4
d) 2
25. A state government wants to increase the taxes on cigarettes to increase tax revenue. This tax would only be effective in raising new tax revenues if the price elasticity of demand is:
a) perfectly elastic
b) unity
c) inelastic
d) elastic
26. Assertion (A): There is no restriction on the entry and exit of the firms in the perfectly competitive market.

Reason (R): The perfect competition market is characterised by the sellers being price taker and not a price maker.
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.
27. Assertion (A): Relative prices of goods and services work as a guiding mechanism to the producers and consumers to promote their economic interest.
Reason (R): Free play of market forces implies that the forces of supply and demand are allowed to operate free of any government interference.
a) Both $A$ and $R$ are true and $R$ is the correct
b) Both A and R are true but R is not the
explanation of A .
c) A is true but R is false.
d) $A$ is false but $R$ is true.
28. Why does an economic problem arise? Explain the problem of 'How to Produce'?
29. Icecream sells for ₹ 20 . Priya who likes ice cream has already consumed 4. Her marginal utility of one rupee is
4. Should she consume more ice cream or stop consumption?

OR
A consumer consumes only two goods $x \& y$ State $\&$ explain the conditions of consumer's equilibrium with the help of utility analysis.
30. A good may be inferior for one consumer and normal for another. Do you agree with the statement? Justify.
31. Complete the following table:

| Units of Variable input | TP <br> (Units) | AP <br> (Units) | MP <br> (Units) |
| :---: | :---: | :--- | :--- |
| 1 | - | - | 20 |
| 2 | - | - | 26 |
| 3 | 66 | - | - |
| 4 | - | 19 | - |
| 5 | - | - | 4 |

32. A situation of excess demand or excess supply is automatically corrected under perfect competition. Do you agree? Explain the process of correction.

OR
'There are large number of sellers in a perfectly competitive market' .Explain the significance of this feature.
33. When price of a commodity X falls by $10 \%$, its demand rises from 150 units to 180 units. Calculate its price elasticity of demand. How much should be the percentage fall in its price so that its demand rises from 150 to 210 units?

OR
Price Elasticity of Demand of a good is (-) 3. What is the percentage change in demand, if the price rises from Rs. 10 per unit to Rs. 12 per unit ? Calculate.
34. Complete the following table.

| Output <br> (units) | Total Cost (TC) <br> (Rs) | Average Fixed Cost <br> (AFC) (Rs) | Average Variable Cost <br> (AVC) (Rs) | Marginal Cost <br> (MC) (Rs) |
| :---: | :---: | :---: | :---: | :---: |
| 0 | 36 | - | - | - |
| 1 | - | - | - | 18 |
| 2 | - | - | 16 | 14 |
| 3 | - | - | - | - |
| 4 | - |  |  | 24 |

