INDIAN SCHOOL SOHAR
TERM II EXAMINATION (2022-2023)
ECONOMICS (030)
MAX MARKS: - 80
DATE: 05/03/2023
TIME : 3 HRS

## General Instructions:

Read the following instructions very carefully and strictly follow them:
A. This question paper comprises two sections $\mathbf{A}$ and $\mathbf{B}$.
B. All questions are compulsory. Marks are indicated against each question.
C. Question numbers $1-10$ and $18-27$ are very short-answer questions carrying 1 mark each. They are required to be answered in one word or one sentence each.
D. Question numbers $11-12$ and 28-29 are short-answer questions carrying 3 marks each. Answers to them should not normally exceed $60-80$ words each.
E. Question numbers 13-15 and 30-32 are also short-answer questions carrying 4 marks each. Answers to them should not normally exceed 80-100 words each.
F. Question numbers $16-17$ and $33-34$ are long answer questions carrying 6 marks each. Answers to them should not normally exceed $100-150$ words each.
G. There is no overall choice. However, an internal choice has been provided in 2 questions of one mark, 2 questions of three marks, 2 questions of four marks and 2 questions of six marks. Only one of the choices in such questions must be attempted.

## SECTION A: STATISTICS FOR ECONOMICS

1. One of the drawbacks of the Direct personal investigation method is $\qquad$ .
A. It is very costly and time taking process.
B. It lacks reliability.
C. Questions might be misinterpreted.
D. Difficult to get original data
2. Mean marks obtained by 200 students are 80 . Later, it was found one value was read as 166 instead of 106. The correct Arithmetic mean of the data will be $\qquad$ .
A. 79.00
B. 70.90
C. 77.90
D. 79.70

Weighted mean of three values $10,20,30$ will be $\qquad$ if they are given $1,2,3$ as weights respectively. Choose the correct alternative:
A. 22.3
B. 23.2
C. 23.3
D. 33.2
3. Identify the correct sequence of alternatives given in Column II by matching them with respective items in Column I.

| Column I | Column II |
| :--- | :---: |
| a. Statistics | i. $\quad$ Array of data and tally bars |
| b. Production | ii.Technique used for the collection, organization, and presentation <br> of data |
| c. Organization of data | iii. $\quad$ Process of converting raw material into goods. |
| d. Statistical tools | iv. Quantification of the facts and findings |

Alternatives:
A. $a-i v, b-i i i, c-i, d-i i$
B. $a-i i i, b-i v, c-i, d-i i$
C. $a-i, b-i i i, c-i v, d-i i$
D. $a-i v, b-i i, c-i, d-i i i$
4. The pie chart shows the component of expenditure for the cost of sugar.


What will be the angle representing the cost of raw material of sugar?
A. $80^{\circ}$
B. $52^{\circ}$
C. $84^{\circ}$
D. $25^{\circ}$
5. Read the following statements: Assertion (A) and Reason (R). Choose one of the correct alternatives given below:

Assertion(A): In inclusive series, there is a gap between the upper limit of a class interval and the lower limit of the next class interval.

Reason (R): In an open-end series, lower limit of the first class interval and the upper limit of the last class is the same

## Alternatives:

A. Both Assertion (A) \& Reason (R) are True \& Reason (R) is the correct explanation of Assertion
(A)
B. Both Assertion (A) \& Reason (R) are True \&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.
6. Mean of 80 items is 45 . It was discovered that three items which should have been $50,70,80$ were wrongly read as $30,40,50$ respectively. The correct mean is.
A. 46
B. 43
C. 44
D. 49

Study the following data carefully and answer question 7 and 8 based on the same:

| $\sum \mathrm{p}_{1} \mathrm{q}_{0}$ | $\sum \mathrm{p}_{0} \mathrm{q}_{0}$ | $\sum \mathrm{p}_{1} \mathrm{q}_{1}$ | $\sum \mathrm{p}_{0} \mathrm{q}_{1}$ |
| :---: | :---: | :---: | :---: |
| 235 | 187 | 250 | 233 |

7. The value of index number for the above data using Laspeyre's method is $\qquad$ .
A. 125.67
B. 107.29
C. 116.12
D. 135.8
8. Index number for the base year is always considered as $\qquad$ .
A. 100
B. 1000
C. 10
D. 1
9. Diagrams which show total value of a set of data simultaneously are known as
a. percentage bar graph
b. deviation bar diagram
c. differential bar diagram
d. multiple bar diagram
10. Match the statements given under column I with the correct option given under Column II.

| Column I | Column II |  |
| :--- | :--- | :--- |
| a. Classification | i. | Number of times a given value appears in a distribution |
| b. Individual series | ii. | process of arranging data into groups as per common characteristics |
| c. variable | iii. | Series in which items are listed singly |
| d. frequency | iv. | Attribute whose value varies from one investigation to another |

Alternatives:
A. $a-i i, b-i i i, c-i v, d-i$
B. $a-i, b-i i i, c-i v, d-i i$
C. $a-i i, b-i, c-i v, d-i i i$
D. $a-i, b-i i, c-i, d-i v$
11. A school organized an inter school competition for two consecutive years. In 2018, out of a total of 1000 students, 775 participated in an Inter school competition. The number of girls were 125, out of which 100 did not participate. In 2019, the number of students participated in inter school competition were 850 out of which 800 were boys. The number of non-participants was 190 among which 75 were girls. Tabulate the above information
12. Describe the questionnaire method of collecting primary data. What precautions must be taken while preparing a questionnaire?

## OR

Differentiate between
A. census method and sample method
B. histogram and bar graph
13. The following information shows the number of students studying in various faculties in three academic years. Draw a percentage bar diagram.

| Year | No. of students |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Fine arts | Science | Commerce | Humanities |
| $2013-2014$ | 400 | 800 | 500 | 300 |
| $2014-2015$ | 400 | 1200 | 800 | 400 |
| $2015-2016$ | 300 | 1500 | 1000 | 500 |

14. Define statistics in the singular sense. Identify and explain the stages of statistical study.

OR
Suppose30\% rise in prices have been due to several causes, like reduction in supply, increase in demand, shortage of power, rise in wages, rise in taxes etc. Which feature of statistics does it indicate?

Explain any three other features of statistics
15. From the following table, find out Median and Mode:

| Income (in ₹ ) | $100-200$ | $100-300$ | $100-400$ | $100-500$ | $100-600$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| No of Persons | 15 | 33 | 63 | 83 | 100 |

16. Calculate coefficient of correlation between the age of husbands and wives. Use direct method.

| Age of husband (years) | 21 | 22 | 28 | 32 | 35 | 36 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Age of wives (years) | 18 | 20 | 25 | 30 | 31 | 32 |

Calculate coefficient of correlation between the price and quantity supplied. Use short cut method.

| Price | 4 | 6 | 8 | 15 | 20 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Supply(kg) | 10 | 15 | 20 | 25 | 30 |

17. From the following data calculate the cost-of-living index number for 2021 based on 2011 using
i. Aggregate expenditure method
ii. Family budget method

| Commodity | Quantity consumed in | Prices |  |
| :--- | :--- | :--- | :--- |
|  | 2011 | 2011 | 2021 |
| Wheat | 2 qt | 75 | 125 |
| Rice | 20 kg | 12 | 16 |
| Sugar | 10 kg | 12 | 16 |
| Ghee | 5 kg | 10 | 15 |
| Clothing | 25 m | 4.5 | 5 |
| Fuel | 40 kg | 10 | 12 |
| Rent | 1 | 25 | 40 |

SECTION B: INTRODUCTORY MICROECONOMICS
18. Suppose total revenue is rising at a constant rate as more and more units of a commodity are sold, marginal revenue would be : (choose the correct alternative)
A. Greater than average revenue
B. Equal to average revenue
C. Less than average revenue
D. Rising
19. Which of the following diagram correctly represents the relationship between TC, TVC and TFC?
A.
20. If $X$ and $Y$ are complementary goods, then with the increase in price $X$ :
A. Demand of $X$ will decrease, and demand of $Y$ will increase.
B. Demand of $X$ will increase, and demand of $Y$ will decrease.
C. Demand of $X$ and $Y$ will increase.
D. Demand of $X$ and $Y$ will decrease
21. A firm reaches shut down point when.
A. $T R=T C$
B. $T C>T R$
C. $T R>T C$
D. $M C=A C$
22. A point outside the PPF indicates:
A. Fuller utilization of resources
B. Unattainable combination
C. Attainable combination
D. Underutilization of resources

Which of the following illustrates a decrease in the unemployment using the PPC?
A. A movement from a point inside the PPC to a point towards the PPC
B. A movement from a point on the PPC to a point inside the PPC
C. A movement down along the PPC
D. A rightward shift of the PPC
23. Ram opens a new factory for which he takes a building on rent. He manages the factory himself.

Identify the explicit cost and implicit cost in the given situation.
24. Read the following statements: Assertion (A) and Reason (R). Choose one of the correct alternatives given below:

Assertion (A): Marginal Utility can never be negative.
Reason ( $\mathbf{R}$ ): Total utility is maximum when Marginal utility is zero.
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) but 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.
25. From the set of statements given in Column I and Column II choose the correct pair of statements.

| Column I | Column II |
| :--- | :--- |
| a. Inelastic demand | i. $\quad$ Demand curve is flatter |
| b. Perfectly elastic demand | ii. Demand curve is a vertical straight line parallel to Y axis |
| c. Highly elastic demand | iii. Demand curve is steeper |
| d. Perfectly inelastic demand | iv. No change in demand with change in price |

A. $a-i$
B. $\mathrm{b}-\mathrm{ii}$
C. $\mathrm{c}-\mathrm{iii}$
D. $\mathrm{d}-\mathrm{iv}$

Read the following passage and answer question 26 and 27 based on the same.
Price floors are usually the minimum price which are determined by the government for some of the products and services which they believe can create a problem in the economy by selling them at the unfair market with excessive low prices. Price floor takes place when the price set by the government exceeds equilibrium prices as such determination do not effect market even if they are set less than the clearing prices of the market.
26. Price floor is used by the government in interest of $\qquad$ .(consumers / producers)
27. There is excess $\qquad$ (supply/demand) in case of price floor.
28. Identify the equilibrium level of output using "marginal cost and marginal revenue" approach. Give reasons for your answer.

| Price (in ₹ lakhs) | Output | Total cost (in ₹ lakhs) | Marginal cost (in ₹ lakhs) |
| :--- | :--- | :--- | :--- |
| 6 | 1 | 10 | 10 |
| 6 | 2 | 15 | 5 |
| 6 | 3 | 21 | 6 |
| 6 | 4 | 28 | 7 |
| 6 | 5 | 37 | 9 |

OR
What are the different phases in the Law of Variable Proportions in terms of Total Product? Give reasons behind each phase. Use diagram.
29. The price elasticity of good $X$ is half the price elasticity of supply of Good $Y$. A $10 \%$ rise in the price of Good $Y$ results in a rise in its supply from 400 units to 520 units. Calculate the percentage change in quantity supplied of good $X$ when its price falls from $₹ 10$ to $₹ 8$ per unit.
30. Assuming that no resource is equally efficient in production of all goods, name the curve which shows production potential of the economy. Explain, giving reasons, its properties.
31. A consumer consumes only two goods, each priced at ₹ one per unit. If the consumer chooses a combination of the two goods with Marginal Rate of Substitution equal to 2 , is the consumer in equilibrium? Give reasons. Explain what a rational consumer will do in this situation.

OR
A consumer consumes only two goods $X$ and $Y$ whose prices are ₹ 2 and ₹ 1 per unit respectively. If the consumer chooses a combination of the two goods with marginal utility of $X$ being 4 and that of $Y$ also being 4, is the consumer in equilibrium ? Give reasons. Explain what a rational consumer will do in this situation. Use Marginal Utility Analysis
32. Why is there is an inverse relationship between price and quantity demand?
33. A. How does change in technology and consequent decline in production cost affect market equilibrium price and quantity. Use diagram.
B. Identify the market form and explain the corresponding feature, as given in the following statement : "The commodity in this market has attributes which are identical for sellers and buyers."
C. Define Price ceiling. State the likely consequence of this type of intervention by the government
34. Complete the following table:

| Output | TC | AVC | MC | AFC |
| :---: | :---: | :---: | :---: | :---: |
| 0 | 30 |  |  |  |
| 1 | --- | --- | 25 | 30 |
| 2 | 78 | --- | --- | --- |
| 3 | --- | 23 | --- | 10 |
| 4 | --- | --- | 23 | --- |
| 5 | 150 | --- | --- | 6 |

A. How does the increase in the number of firms in a market affect the market supply curve?
B. Explain the distinction between "change in quantity supplied" and "change in supply". Use diagram.

