| SET | A |
| :---: | :---: |

INDIAN SCHOOL MUSCAT FINAL EXAMINATION 2023

ECONOMICS 030

CLASS : XI
DATE: 21.02.2023

TIME ALLOTED : 3 HRS.
MAXIMUM MARKS: 80

## GENERAL INSTRUCTIONS:

1. This question paper contains two parts:

Part A - Statistics for Economics (40 marks)
Part B - Introductory Microeconomics (40 marks).
2. Marks for questions are indicated against each question.
3. Question No. 1-10 and Question No. 18 - 27 are 1 mark questions and are to be answered in one word/sentence.
4. Question No. 11-12 and Question No. 28 - 29 are 3 marks questions and are to be answered in $60-80$ words each.
Case Based Questions (CBQ's) are Question No. 13 and Question No. 31.
5. Question No. 14-15 and Question No. 31-32 are 4 marks questions and are to be answered in 80-100 words each.
6. Question No. 16-17 and Question No. 33 - 34 are 6 marks questions and are to be answered in 100-150 words each.
7. Answers should be brief and to the point and the above word limit be adhered to as far as possible.

## SECTION - A -STATISTICS FOR ECONOMICS

Q.No

Marks

1. Which of the following is a merit of a good questionnaire?(Choose the correct alternative)
(A) Difficulty
(B) Less number of questions
(C) Not in proper order
(D) Invalid questions
2. Range is the: $\qquad$ (Choose the correct alternative)
(A) Difference between the largest and the smallest observations
(B) Difference between the smallest and largest observations
(C) Average of the largest and smallest observations
(D) Ratio of the largest to the smallest observation
3. is the root of all economic problems. (Choose the correct alternative)
(A) Abundance
(B) Allocation
(C) Wants
(D) Scarcity
4. The total angular movements in a Pie - diagram is: (Choose the correct alternative)
(A) $100^{\circ}$
(B) $180^{\circ}$
(C) $360^{\circ}$
(D) $90^{\circ}$

## OR

Bar diagram is a: (Choose the correct alternative)
(A) Two dimensional diagram
(B) One dimensional diagram
(C) Three dimensional diagram
(D) Fur dimensional diagram
5. Raw data is an/a $\qquad$ mass of various items. (Choose the correct alternative)
(A) Organized
(B) Structured
(C) Unorganized
(D) Classified
6. From the following questions, a statement of Reason(R) follows statement of Assertion (A).

Choose the correct alternative among those given below:
Assertion (A): Arithmetic mean is a stable measure of central tendency
Reason (R): Changes in the sample of a series have minimum effect on the arithmetic average. 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
7. Which is not a method to find arithmetic mean? (Choose the correct alternative)
(A) Direct method
(B) Assumed Mean method
(C) Step-Deviation method
(D) Karl Pearson's method
8. The degree of perfect positive correlation is: (Choose the correct alternative)
(A) Zero
(B) +1
(C) -1
(D) 0 to 1
9. Index number for the base year period is: (Choose the correct alternative)
(A) 1
(B) Zero
(C) 100
(D) None of these
10. The technique of measuring relative changes in variable related to base year: (Choose the correct alternative)
(A) Index number
(B) Standard deviation
(C) Correlation
(D) Dispersion
11. Present the following data on the production of food grains in the form of a component bar diagram.

| Year | Wheat | Rice | Gram | Total |
| :---: | :---: | :---: | :---: | :---: |
| 2020 | 30 | 20 | 10 | 60 |
| 2021 | 45 | 30 | 15 | 90 |

OR
Present the data given in the table below with the help of a histogram

| Marks | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ | $60-70$ | $70-80$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 4 | 10 | 16 | 22 | 20 | 18 | 8 | 2 |

12. Tabulate and summarize the degrees of correlation
13. Read following case study carefully and answer the questions on the basis of the same:

Suppose, you want to know about the popularity of a film star among school students. For this, you will have to enquire from a large number of school students, by asking questions from them to collect the desired information. Data you get is an example of primary data. If the data has been collected and processed (scrutinized and tabulated) by some other agency, they are called secondary data. They can be obtained either from published sources or from any other source. Thus, the data are primary to the source that collects and processes them for the first time and secondary for all sources that later you such data. Use of secondary data saves time and cost. For example, after collecting the data on the popularity of this film star among students can you publish a report? If somebody uses that data collected by you for a similar study, it becomes secondary data.
13.1 $\qquad$ do not offer firsthand information related to the statistical study under consideration. (Choose the correct alternative)
(A) Primary sources
(B) Secondary Sources
(C) Direct Sources
(D) Both (a) and (c)
13.2 Which of the following is a method of collecting primary data?
(A) Enumerator's method
(B) Telephonic Interviews
(C) Indirect Oral Investigation
(D) All of these
13.3Which of the following is a source of secondary data?
(A) Census report
(B) Journal
(C) Newspaper
(D) All of these
13.4Read the following statements carefully and choose the correct alternative amount those given below:
Statement 1: Interview method is a method of collecting primary data
Statement 2: A schedule is generally filled by a researcher.
(A) Both the statements are true
(B) Both the statements are false
(C) Statement one is true and statement is false
(D) Statement 2 is true and statement one is false
14. Find mode graphically using the data given below. Verify the result by using the formula to calculate mode.

| Wages $(₹)$ | $0-100$ | $100-200$ | $200-300$ | $300-400$ | $400-500$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| No. of workers | 5 | 10 | 25 | 15 | 5 |

15. Prepare both types of Ogives (less than and more than) from the following data: (use graph sheet for diagram)

| Weight (kg) | $30-34$ | $35-39$ | $40-44$ | $45-49$ | $50-54$ | $55-59$ | $60-64$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 3 | 5 | 12 | 18 | 14 | 6 | 2 |

OR
Show the following data in a pie diagram:

| Items | Labour | Bricks | Cement | Steel | Timber | Supervision |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Expenditure | $25 \%$ | $15 \%$ | $20 \%$ | $15 \%$ | $10 \%$ | $15 \%$ |

16. Following are the marks obtained by 100 students in Economics. Calculate the average marks by using:
a) Direct method
b) Assumed mean method.

| Marks | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of students | 5 | 10 | 25 | 30 | 20 | 10 |
| OR |  |  |  |  |  |  |

Calculate coefficient of rank correlation for series X and Y .

| X | 55 | 45 | 50 | 10 | 25 | 25 | 75 | 40 | 25 | 67 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Y | 12 | 12 | 40 | 6 | 20 | 4 | 30 | 9 | 6 | 25 |

17. Compute index numbers by
a) Laspeyre's method
b) Paasche's method

| Commodities | A | B | C |
| :--- | :---: | :---: | :---: |
| Price in 2019(₹) | 2 | 3 | 5 |
| Quantity in 2019(units) | 10 | 20 | 30 |
| Price in 2021(₹) | 4 | 5 | 8 |
| Quantity in 2021 (units) | 12 | 25 | 10 |

## SECTION-B (MICROECONOMICS)

18. The law of scarcity: (Choose the correct alternative)
(A) Does not apply to rich, developed countries
(B) Applies only to the less developed countries
(C) Implies that consumers want will be satisfied in a socialistic system
(D) Implies that consumer's wants will never be completely satisfied.
19. $\qquad$ measures the slope of indifference curve. (Choose the correct alternative)
(A) Budget line
(B) Marginal Rate of Substitution
(C) Marginal Rate of Transformation
(D) Budget set

## OR

Which of these is not a property of indifference curve?
(A) Indifference curve slopes downwards
(B) Indifference curve is concave to the origin
(C) Two indifference curves cannot intersect each other
(D) Higher indifference curve represents higher level of satisfaction
20. If due to fall in the price of good X , demand for good Y rises, the two goods are: (Choose the 1 correct alternative)
(A) Substitutes
(B) Complements
(C) Not related
(D) Competitive
21. When MP is zero, what can you say about TP? (Choose the correct alternative)
(A) TP is increasing
(B) TP is maximum
(C) TP is falling
(D) TP is zero

## OR

Which is the correct option : (Choose the correct alternative)
(i) $\mathrm{TR}=\Sigma \mathrm{MR}$
(ii) $\mathrm{TC}=\Sigma \mathrm{MC}$.
(A) Both (i) and (ii) are correct
(B) Only (ii) is correct
(C) Only (i) is correct
(D) Both are incorrect
22. Read the following statements Assertion (A) and Reason (R). Choose one of the most correct alternatives given below:
Assertion(A): An individual supply curve slope upwards
Reason(R): There exists positive relationship price and quantity supplied.
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
23. What happens to AP, when MP is more than AP? (Choose the correct alternative)
(A) AP rises
(B) AP falls
(C) AP remains constant
(D) None of these
24. When MR remains same, TR increases at a: (Choose the correct alternative)
(A) Constant rate
(B) Decreasing rate
(C) Increasing rate
(D) Remains zero
25. The total cost at 5 units of output is $₹ 20$. The fixed costs is $₹ 5$. The average variable cost at 5 units of output is: (Choose the correct alternative)
(A) ₹ 25
(B) ₹6
(C) ₹5
(D) ₹ 1
26. $\qquad$ refers to fixing the maximum price of a commodity at a level lower than the equilibrium price. (Choose the correct alternative)
(A) Price ceiling
(B) Minimum support price
(C) Excess supply
(D) Excess demand

At a price higher than the equilibrium price, there is an excess demand.
28. Define the following:
a) Average cost
b) Marginal cost
c) Total cost
29. Define Marginal opportunity with a PPC

## OR

Explain the relationship between Total Utility and Marginal Utility
30. When the price of a good falls from ₹8 per unit to ₹ 6 per unit, its supply falls by 25 units from 125 units. Calculate price elasticity of supply (Es) by percentage method.

## OR

The supply for a good rise to 850 units in response to rise in price by ₹1. If the original supply was 600 units at the price of ₹4, calculate price elasticity of supply.
31. Read the following hypothetical case study carefully and answers the question given below:

Demand refers to various quantities of a commodity that all the buyers are willing to buy at given prices during a given period of time. Not only own price of a commodity but also many other factors also affect the demand of a commodity. Such as price of the related goods-there are two types of related goods 1 . Substitute goods 2 . Complementary goods. In these cases, change in the price of one good also affects the demand of related good. Income of the consumers- on the basis of income, there are two types of goods-normal good and inferior goods. Economists say that there is no inferior or normal goods. It depends on the income level of the consumer. One good may be inferior for one person but the same good may be normal for another person. Normal goods are those goods whose demand increases with an increase in the income of consumer and vice -versa. Reverse happens in case of inferior goods. Taste and preference of the consumer, size of the population and government policy also affect the demand of a commodity, which is known as determinants of demand.
31.1 There is $\qquad$ (direct/inverse) relationship between price of a commodity and its demand. (Choose the correct alternative)
31.2 If the price of X good rises then the demand of Y good also rises then both goods are $\qquad$ (Complementary/Substitute). (Choose the correct alternative)
31.3 Demand for inferior good rises due to $\qquad$ (Fall/Rise) in the income of the consumer. (Choose the correct alternative)
31.4 Which are not determinants of demand of a commodity?
(A) Own price of a commodity
(B) Income of the consumer
(C) Nature of a commodity
(D) Size of population
32. Explain the degrees of Elasticities of Demand with diagram.( Any four)

Complete the following :

| Output(units) | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TC $(₹)$ | -- | -- | 100 | -- | -- | 130 | 150 |
| TFC $(₹)$ | -- | -- | -- | -- | 60 | -- | -- |
| TVC $(₹)$ | -- | 20 | -- | 51 | 56 | -- | -- |

OR
Complete the following table

| Variable Factor | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TP(in units) | -- | -- | -- | -- | 25 | -- | -- | -- |
| AP(in units) | -- | 5 | -- | -- | -- | -- | -- | -- |
| MP(in units) | -- | -- | 8 | 4 | -- | 5 | 0 | -4 |

With help of the diagram, explain the following kinds of elasticities of supply.
(A) Perfectly Elastic Supply
(B) High Elastic Supply
(C) Unitary Elastic Supply

| ROLL <br> NUMBER |  |  |  |
| :--- | :--- | :--- | :--- |

# INDIAN SCHOOL MUSCAT <br> FINAL EXAMINATION 2023 <br> ECONOMICS 030 

TIME ALLOTED : 3 HRS.
CLASS : XI
DATE: 21.02.2023

| SET | B |
| :---: | :---: |

## GENERAL INSTRUCTIONS:

1. This question paper contains two parts:

Part A - Statistics for Economics (40 marks)
Part B - Introductory Microeconomics (40 marks).
2. Marks for questions are indicated against each question.
3. Question No. 1-10 and Question No. 18-27 are 1 mark questions and are to be answered in one word/sentence.
4. Question No. 11-12 and Question No. 28 - 29 are 3 marks questions and are to be answered in $60-80$ words each.
5. Case Based Questions (CBQ's) are Question No. 13 and Question No. 31.
6. Question No. 14-15 and Question No. 31 - 32 are 4 marks questions and are to be answered in 80-100 words each.
7. Question No. 16-17 and Question No. 33-34 are 6 marks questions and are to be answered in 100-150 words each.
8. Answers should be brief and to the point and the above word limit be adhered to as far as possible.

## SECTION- A <br> STATISTICS FOR ECONOMICS

Q. No

Marks

1. Statistics is the study of $\qquad$ facts. (Choose the correct alternative)
(A) Quantitative
(B) Qualitative
(C) Both quantitative and qualitative
(D) Aggregate
2. Which method is suitable to collect data on population of a country? (Choose the correct 1 alternative)
(A) Census
(B) Sample
(C) Neither of the above
(D) Both (a) and (b)

Factor which determine the size of a sample: (Choose the correct alternative)
(A) Size of universe
(B) Nature of study
(C) Degree of universe
(D) All of these
3. State True or False:

Width of bars in a bar diagram need not be equal.
4. In chronological classification, data are classified on the basis of $\qquad$ (Choose the correct alternative.)
(A) Area
(B) Time
(C) Attributes
(D) Place
5. Range is the: $\qquad$ . (Choose the correct alternative.)
(A) Difference between the largest and the smallest observations
(B) Difference between the smallest and largest observations
(C) Average of the largest and smallest observations
(D) Ratio of the largest to the smallest observation
6. A histogram is a graphical presentation of a frequency distribution of a: (Choose the correct alternative.)
(A) Individual series
(B) Discrete series
(C) Continuous series
(D) None of these
7. From the set of statements given in Column I and Column II, Choose the correct pair of statements.

| Column I | Column II |
| :--- | :--- |
| a. Scattered diagram | (i) Measure the precise extent of correlation |
| b. Positive correlation | (ii) Relationship between price and demand |
| c. Correlation | (iii) Shows the direction and degree of relationship <br> between the variables |
| d. Degree of correlation | (iv) Ranges from 0 to 100 |

Alternatives:
(A) $\mathrm{a}-\mathrm{i}$,
(B) b - ii
(C) c - iii
(D) d - iv
8. In Laspeyre's method, weights are represented by the quantities by the quantities of the commodities in $\qquad$ . (Choose the correct alternative)
(A) Current year
(B) Base year
(C) Both (a) and (b)
(D) Neither of the two

OR
A scatter diagram: $\qquad$ . (Choose the correct alternative)
(A) Does not measure the precise extent of correlation
(B) Gives only an approximate idea of the correlation
(C) Offers only a qualitative expression of the quantitative change
(D) All of these
9. From the following questions, statement of Assertion (A) is followed by a statement of Reason (R). Choose the correct alternative among those given below:

Assertion (A): Laspeyre's method uses base year quantities as weight while constructing index numbers.
Reason (R): Paasche's method uses base year quantities as weight while constructing index numbers.
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
10. Index number for the base year period is: (Choose the correct alternatives)
(A) 1
(B) Zero
(C) 100
(D) None of these
11. Prepare a frequency distribution by inclusive method taking class interval of 7 from the following data.

| 28 | 17 | 15 | 22 | 29 | 21 | 23 | 27 | 18 | 12 | 7 | 2 | 9 | 4 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 8 | 3 | 10 | 5 | 20 | 16 | 12 | 8 | 4 | 33 | 27 | 21 | 15 | 9 |
| 3 | 36 | 27 | 18 | 9 | 2 | 4 | 6 | 32 | 31 | 29 | 18 | 14 | 13 | 15 |
| 11 | 9 | 7 | 1 | 5 | 37 | 32 | 28 | 26 | 24 | 20 | 19 | 25 | 19 | 20 |

OR
Make a bar diagram of the following data on India's population:

| Year | 1961 | 1971 | 1981 | 1991 | 2001 | 2011 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Population | 45.5 | 55 | 68.5 | 85.5 | 102.5 | 121.5 |

12. Calculate coefficient of rank correlation from the ranks given below:

| Ranks given by Judge 1 | 4 | 2 | 6 | 3 | 1 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Ranks given by Judge 2 | 6 | 4 | 5 | 2 | 3 | 1 |

13. Read following case study carefully and answer the questions on the basis of the same:

Suppose, you want to know about the popularity of a film star among school students. For this, you will have to enquire from a large number of school students, by asking questions from them to collect the desired information. Data you get, is an example of primary data. If the data has been collected and processed (scrutinized and tabulated) by some other agency, they are called secondary data. They can be obtained either from published sources or from any other source. Thus, the data are primary to the source that collects and processes them for the first time and secondary for all sources that later you such data. Use of secondary data saves time and cost. For example, after collecting the data on the popularity of this film star among students can you publish a report? If somebody uses that data collected by you for a similar study, it becomes secondary data.
13.1 Who is an investigator?
13.2 Which of the following data is more reliable?
(A)Primary data
(B) Secondary data
13.3 $\qquad$ do not offer firsthand information related to the statistical study under consideration.
(A) Primary sources
(B) Secondary sources
(C) Direct sources
(D) Both (a) and (c)
13.4 Which of the following is a source of secondary data?
(A) Census report
(B) Journal
(C) Newspaper
(D) All of these
14. Calculate mode by using graphical method.(Use graph)

| X | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Y | 2 | 6 | 20 | 6 | 3 |

Calculate the mean farm size of cultivating households in a village for the following data by short cut method.

| Farm size(in acres) | 64 | 63 | 62 | 61 | 60 | 59 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of cultivating households | 8 | 18 | 12 | 9 | 7 | 6 |

15. Prepare a pie-diagram to present following data.

| S.No | Sector | Output \% |
| :---: | :--- | :---: |
| 1 | Industry | 30 |
| 2 | Irrigation | 25 |
| 3 | Transport and Communication | 10 |
| 4 | Power | 25 |
| 5 | Agriculture | 10 |

16. Following are the marks obtained by 100 students in Economics. Calculate the average marks by using:
a) Direct method
b) Assumed mean method.

| Marks | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of students | 5 | 10 | 25 | 30 | 20 | 10 |

Calculate coefficient of rank correlation for series X and Y .

| X | 55 | 45 | 50 | 10 | 25 | 25 | 75 | 40 | 25 | 67 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Y | 12 | 12 | 40 | 6 | 20 | 4 | 30 | 9 | 6 | 25 |

17. Construct index numbers pf price from the following data by the following :
(i) Laspeyre's method
(ii) Paasche's method

| Commodities | A | B | C | D |
| :--- | :---: | :---: | :---: | :---: |
| Base year price $(₹)$ | 2 | 4 | 1 | 5 |
| Base year quantity | 20 | 4 | 10 | 5 |
| Current year price $(₹)$ | 5 | 8 | 2 | 10 |
| Current year quantity | 15 | 5 | 12 | 6 |

## SECTION - B <br> MICROECONOMICS

18. PPF is concave to the origin because of: (Choose the correct alternative)
(A) Increasing MRT
(B) Diminishing MRT
(C) Constant MRT
(D) None of these
19. If the consumption of an additional unit of a commodity causes no change in TU , then the resultant MU is: (Choose the correct alternative)
(A) Zero
(B) Positive
(C) Negative
(D) Constant
20. There will be a ___ in the demand curve of cars with an increase in the price of petrol: 1 (Choose the correct alternative)
(A) Rightward Shift
(B) Upward Movement
(C) Leftward Shift ward
(D) Downward Movement
21. If the percentage increase in the quantity demanded of a commodity is less than the percentage fall in its price, then elasticity of demand is: (Choose the correct alternative)
(A) $>1$
(B) $=1$
(C) $<1$
$(D)=0$
22. Read the following statements carefully and choose the correct alternative from the following:

Statement 1: The second phase of Law of Variable Proportions ends when MP is zero and TP is maximum
Statement 2: A rational producer always seeks to operate in Phase III of Law of Variable Proportions.
Alternatives:
(A) Both the statements are true
(B) Both the statements are false
(C) Statement 1 is true and Statement 2 is false
(D) Statement 2 is true and Statement 1 is false
23. Area under MC curve is equal to: (Choose the correct alternative)
(A) TVC
(B) AFC
(C) AVC
(D) AC

## OR

What happens to TR when MR is positive? (Choose the correct alternative)
(A) TR increases
(B) TR decreases
(C) TR is maximum
(D) TR remains same
24. If MR is more than MC at a particular level of output for a perfectly competitive firm, then producer will: (Choose the correct alternative)
(A) Reduce production
(B) Increase production
(C) Keep the production at current level
(D) None of these
25. If the percentage change in quantity supplied of commodity $X$ is more than the percentage change in price of the commodity X , the coefficient of price elasticity of supply would be
$\qquad$ . (Choose the correct alternative)
(A) $\mathrm{Es}=1$
(B) $\mathrm{Es}<1$
(C) $\mathrm{Es}=0$
(D) Es $>1$

## OR

In case of $\qquad$ , supply falls at the same price. (Choose the correct alternative)
(A) Decrease in supply
(B) Contraction in supply
(C) Increase in supply
(D) Expansion in supply
26. Change in the price of given commodity will lead to: (Choose the correct alternative)
(A) Expansion in Supply
(B) Either (a) or (c)
(C) Contraction in Supply
(D) Neither (a) nor (b)
27. Read the following statements: Assertion(A) and Reason(R).Choose one of the correct alternative given below:
Assertion (A): Price Ceiling involves imposition of upper limit on the price of a good by the government.
Reason (R): Government intervenes through Price Ceiling when the equilibrium price determined by free play of demand and supply is not remunerative from the producer's point of view.
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
28. Differentiate between Positive Economics and Normative Economics (any three points)
29. Define the following:
a) Average cost
b) Marginal cost
c) Total cost
30. Explain the degrees of Elasticities of Demand with diagram.( Any four)
31. Read the following hypothetical case study carefully and answers the question given below:

Demand refers to various quantities of a commodity that all the buyers are willing to buy at given prices during a given period. Not only own price of a commodity but also many other factors also affect the demand of a commodity. Such as price of the related goods-there are two types of related goods 1 . Substitute goods 2 . Complementary goods. In these cases, change in the price of one good also affects the demand of related good. Income of the consumers- on the basis of income, there are two types of goods-normal good and inferior goods. Economists say that there is no inferior or normal goods. It depends on the income level of the consumer. One good may be inferior for one person but the same good may be normal for another person. Normal goods are those goods whose demand increases with an increase in the income of consumer and vice -versa. Reverse happens in case of inferior goods. Taste and preference of the consumer, size of the population and government policy also affect the demand of a commodity which is known as determinants of demand.
31.1 There is $\qquad$ (direct/inverse) relationship between price of a commodity and its demand. (Choose the correct alternative)
31.2 If the price of X good rises then the demand of Y good also rises then both goods are $\qquad$ (Complementary/Substitute). (Choose the correct alternative)
31.3 Demand for inferior good rises due to $\qquad$ (Fall/Rise) in the income of the consumer. (Choose the correct alternative)
31.4 Which are not determinants of demand of a commodity?
(A) Own price of a commodity
(B) Income of the consumer
(C) Nature of a commodity
(D) Size of population
32. As the price of a commodity falls from ₹ 8 to ₹ 6 , its demand rises from 100 units to 125 units. Find out the price elasticity of demand by percentage method.

OR
Supposing the initial demand was 100 units. With the rise in price by ₹5, the quantity demanded decreases by 5 units. Price Elasticity of Demand is known to be 1.2. Find out the price before the change in demand.
33. With help of the diagram, explain the following kinds of Elasticity of supply.
a) Perfectly elastic supply
b) Less Elastic Supply
c) Unitary Elastic supply
34. Complete the following:

| Output (units) | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TC $(₹)$ | 50 | -- | 100 | -- | -- | -- | -- |
| AC $(₹)$ | -- | -- | -- | -- | -- | -- | -- |
| MC $(₹)$ | -- | 20 | -- | 51 | 56 | 60 | 70 |
| OR |  |  |  |  |  |  |  |

Complete the following:

| Variable Factor | 0 | 1 | 2 | 3 | 4 | 5 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| TP(units) | -- | --- | 10 | -- | 24 | -- |
| AP(units) | -- | -- | -- | 6 | -- | 5 |
| MP(units) | -- | 4 | -- | -- | -- | -- |


| ROLL |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| NUMBER |  |  |  |  |


| SET | C |
| :---: | :---: |

# INDIAN SCHOOL MUSCAT FINAL EXAMINATION 2023 <br> ECONOMICS 030 

TIME ALLOTED : 3 HRS.
MAXIMUM MARKS: 80

## GENERAL INSTRUCTIONS:

1. This question paper contains two parts:

Part A - Statistics for Economics (40 marks)
Part B - Introductory Microeconomics (40 marks).
2. Marks for questions are indicated against each question.
3. Question No. 1-10 and Question No. 18-27 are 1 mark questions and are to be answered in one word/sentence.
4. Question No. 11-12 and Question No. 28 - 29 are 3 marks questions and are to be answered in $60-80$ words each.
5. Case Based Questions (CBQ's) are Question No. 13 and Question No. 31.
6. Question No. 14-15 and Question No. 31 - 32 are 4 marks questions and are to be answered in 80-100 words each.
7. Question No. 16-17 and Question No. 33 - 34 are 6 marks questions and are to be answered in 100-150 words each.
8. Answers should be brief and to the point and the above word limit be adhered to as far as possible.

SECTION A
Marks
STATISTICS FOR ECONOMICS

1. Range is the: (Choose the correct alternative)
(A) Difference between the largest and the smallest observations
(B) Difference between the smallest and largest observations
(C) Average of the largest and smallest observations
(D) Ratio of the largest to the smallest observation
2. The total angular movements in a Pie - diagram is: (Choose the correct alternative)
(A) $100^{\circ}$
(B) $180^{\circ}$
(C) $360^{\circ}$
(D) $90^{\circ}$

Bar diagram is a : $\qquad$ (Choose the correct alternative)
(A) Two dimensional diagram
(B) One dimensional diagram
(C) Three dimensional diagram
(D) Fur dimensional diagram
3. From the following questions statement of Assertion (A) is followed by a statement of Reason (R). Choose the correct alternative among those given below:

Assertion (A): Arithmetic mean is a stable measure of central tendency
Reason (R): Changes in the sample of a series have minimum effect on the arithmetic average. 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
4. The degree of perfect positive correlation is: (Choose the correct alternative)
(A) Zero
(B) +1
(C) -1
(D) 0 to 1
5. The technique of measuring relative changes in variable related to base year: (Choose the correct alternative)
(A) Index number
(B) Standard deviation
(C) Correlation
(D) Dispersion
6. Statistics is the study of $\qquad$ facts. (Choose the correct alternative)
(A) Quantitative
(B) Qualitative
(C) Both quantitative and qualitative
(D) Aggregate
7. State True or False:

Width of bars in a bar diagram need not be equal.
8. A histogram is a graphical presentation of a frequency distribution of a: (Choose the correct alternative)
(A) Individual series
(B) Discrete series
(C) Continuous series
(D) None of these
9. From the set of statements given in Column I and Column II, Choose the correct pair of statements.

| Column I | Column II |
| :--- | :--- |
| a. Scattered diagram | (i) Measure the precise extent of correlation |
| b. Positive correlation | (ii) Relationship between price and demand |
| c. Correlation | (iii) Shows the direction and degree of relationship between <br> the variables |

Alternatives:
(A) $\mathrm{a}-$ (i),
(B) b - (ii)
(C) $\mathrm{c}-$ (iii)
(D) None of these
10. In Laspeyre's method, weights are represented by the quantities by the quantities of the commodities in: (Choose the correct alternative)
(A) Current year
(B) Base year
(C) Both (a) and (b)
(D) Neither of the two

OR
Which is not a method to find arithmetic mean? (Choose the correct alternative)
(A) Direct method
(B) Assumed Mean method
(C) Step-Deviation method
(D) Karl Pearson's method
11. Prepare a frequency distribution by inclusive method taking class interval of 7 from the following data.

| 28 | 17 | 15 | 22 | 29 | 21 | 23 | 27 | 18 | 12 | 7 | 2 | 9 | 4 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 8 | 3 | 10 | 5 | 20 | 16 | 12 | 8 | 4 | 33 | 27 | 21 | 15 | 9 |
| 3 | 36 | 27 | 18 | 9 | 2 | 4 | 6 | 32 | 31 | 29 | 18 | 14 | 13 | 15 |
| 11 | 9 | 7 | 1 | 5 | 37 | 32 | 28 | 26 | 24 | 20 | 19 | 25 | 19 | 20 |

Make a bar diagram of the following data on India's population:

| Year | 1961 | 1971 | 1981 | 1991 | 2001 | 2011 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Population | 45.5 | 55 | 68.5 | 85.5 | 102.5 | 121.5 |

12. Tabulate and summarize the degrees of correlation
13. Read following case study carefully and answer the questions on the basis of the same: this, you will have to enquire from a large number of school students, by asking questions
from them to collect the desired information. Data you get, is an example of primary data. If the data has been collected and processed (scrutinised and tabulated) by some other agency, they are called secondary data. They can be obtained either from published sources or from any other source. Thus, the data are primary to the source that collects and processes them for the first time and secondary for all sources that later you such data. Use of secondary data saves time and cost. For example, after collecting the data on the popularity of this film star among students can you publish a report. If somebody uses that data collected by you for a similar study, it becomes secondary data.
13.1 Who is an investigator?
13.2 Which of the following data is more reliable?
(A)Primary data
(B) Secondary data
13.3 $\qquad$ do not offer firsthand information related to the statistical study under consideration.
(A) Primary sources
(B) Secondary sources
(C) Direct sources
(D) Both (a) and (c)
13.4 Which of the following is a source of secondary data?
(A) Census report
(B) Journal
(C) Newspaper
(D) All of these
14. Find mode graphically using the data given below. Verify the result by using the formula to calculate mode. (Use graph sheet)

| Wages $(₹)$ | $0-100$ | $100-200$ | $200-300$ | $300-400$ | $400-500$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| No. of workers | 5 | 10 | 25 | 15 | 5 |

15. Prepare both types of Ogives (less than and more than) from the following data: (use graph sheet for diagram)

| Weight (kg) | $30-34$ | $35-39$ | $40-44$ | $45-49$ | $50-54$ | $55-59$ | $60-64$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 3 | 5 | 12 | 18 | 14 | 6 | 2 |

## OR

Show the following data in a pie diagram:

| Items | Labour | Bricks | Cement | Steel | Timber | Supervision |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Expenditure | $25 \%$ | $15 \%$ | $20 \%$ | $15 \%$ | $10 \%$ | $15 \%$ |

16. Compute index numbers by (i) Laspeyre's method (ii) Paasche's method

| Commodities | A | B | C |
| :--- | :---: | :---: | :---: |
| Price in 2019(₹) | 2 | 3 | 5 |
| Quantity in 2019(units) | 10 | 20 | 30 |
| Price in 2021(₹) | 4 | 5 | 8 |
| Quantity in 2021 (units) | 12 | 25 | 10 |

17. Following are the marks obtained by 100 students in Economics. Calculate the average marks by using:
a) Direct method
b) Assumed mean method.

| Marks | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of students | 5 | 10 | 25 | 30 | 20 | 10 |

## OR

Calculate coefficient of rank correlation for series X and Y .

| X | 55 | 45 | 50 | 10 | 25 | 25 | 75 | 40 | 25 | 67 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Y | 12 | 12 | 40 | 6 | 20 | 4 | 30 | 9 | 6 | 25 |

## SECTION B

## MICROECONOMICS

18. PPF is concave to the origin because of: (Choose the correct alternative)
(A) Increasing MRT
(B) Diminishing MRT
(C) Constant MRT
(D) None of these
19. $\qquad$ measures the slope of indifference curve. (Choose the correct alternative)
(A) Budget line
(B) Marginal Rate of Substitution
(C) Marginal Rate of Transformation
(D) Budget set

## OR

Which of these is not a property of indifference curve? (Choose the correct alternative)
(A) Indifference curve slopes downwards
(B) Indifference curve is concave to the origin
(C) Two indifference curves cannot intersect each other
(D) Higher indifference curve represents higher level of satisfaction
20. There will be a ___ in the demand curve of cars with an increase in the price of petrol: 1 (Choose the correct alternative)
(A) Rightward Shift
(B) Upward Movement
(C) Leftward Shift ward
(D) Downward Movement
21. When MP is zero, what can you say about TP? (Choose the correct alternative)
(A) TP is increasing
(B) TP is maximum
(C) TP is falling
(D) TP is zero

## OR

Which is the correct option
(i) $\mathrm{TR}=\Sigma \mathrm{MR}$
(ii) $\mathrm{TC}=\Sigma \mathrm{MC}$.
(A) Both (i) and (ii) are correct
(B) Only (ii) is correct
(C) Only (i) is correct
(D) Both are incorrect
22. If the percentage increase in the quantity demanded of a commodity is less than the percentage fall in its price, then price elasticity of demand is: (Choose the correct alternative)
(A) Greater than unitary
(B) Equal to unitary
(C) Less than unitary
(D) Equal to zero
23. What happens to AP, when MP is more than AP? (Choose the correct alternative)
(A) AP rises
(B) AP falls
(C) AP remains constant
(D) None of these
24. If MR is more than MC at a particular level of output for a perfectly competitive firm, then producer will: (Choose the correct alternative)
(A) Reduce production
(B) Increase production
(C) Keep the production at current level
(D) None of these
25. The total cost at 5 units of output is $₹ 20$. The fixed costs is $₹ 5$. The average variable cost at 5 units of output is: (Choose the correct alternative)
(A) ₹ 25
(B) ₹ 6
(C) ₹ 5
(D) ₹ 1
26. Change in the price of given commodity will lead to: (Choose the correct alternative)
(A) Expansion in Supply
(B) Either (a) or (c)
(C) Contraction in Supply
(D) Neither (a) nor (b)
27. $\qquad$ refers to fixing the maximum price of a commodity at a level lower than the equilibrium price. (Choose the correct alternative)
(A) Price ceiling
(B) Minimum support price
(C) Excess supply
(D) Excess demand
28. Define the following:
a) Average cost
b) Marginal cost
c) Total cost
29. Differentiate between Positive Economics and Normative Economics (any three points)
30. When the price of a good falls from ₹ 8 per unit to ₹ 6 per unit, its supply falls by 25 units from 125 units. Calculate elasticity of supply(Es) by percentage method.

## OR

The supply for a good rise to 850 units in response to rise in price by ₹ 1 . If the original supply was 600 units at the price of ₹4, calculate price elasticity of supply.
31. Read the following hypothetical case study carefully and answers the question given below:

Demand refers to various quantities of a commodity that all the buyers are willing to buy at given prices during a given period of time. Not only own price of a commodity but also many other factors also affect the demand of a commodity. Such as price of the related goods-there are two types of related goods 1 . Substitute goods 2 . Complementary goods. In these cases, change in the price of one good also affects the demand of related good. Income of the consumers- on the basis of income, there are two types of goods-normal good and inferior goods. Economists say that there is no inferior or normal goods. It depends on the income level of the consumer. One good may be inferior for one person but the same good may be normal for another person. Normal goods are those goods whose demand increases with an increase in the income of consumer and vice-versa. Reverse happens in case of inferior goods.

Taste and preference of the consumer, size of the population and government policy also affect the demand of a commodity which is known as determinants of demand.
31.1 There is $\qquad$ (direct/Inverse) relationship between price of a commodity and its demand. (Choose the correct alternative)
31.2 If the price of X good rises then the demand of Y good also rises then both goods are $\qquad$ (Complementary/Substitute).
(Choose the correct alternative)
31.3 Demand for inferior good rises due to $\qquad$ (Fall/Rise) in the income of the consumer. (Choose the correct alternative)
31.4 Which are not determinants of demand of a commodity?
(A) Own price of a commodity
(B) Income of the consumer
(C) Nature of a commodity
(D) Size of population
32. Explain the degrees of Elasticities of Demand with diagram.(Any four)
33. With help of the diagram explain the following kinds of elasticities of supply.
a) Perfectly Elastic Supply
b) Highly Elasticity Supply
c) Unitary Elastic Supply
34. Complete the following :

| Output (units) | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TC $(₹)$ | -- | -- | 100 | -- | -- | 130 | 150 |
| TFC $(₹)$ | -- | -- | -- | -- | 60 | -- | -- |
| TVC $(₹)$ | -- | 20 | -- | 51 | 56 | -- | -- |

OR
Complete the following table:

| Variable Factor | 0 | 1 | 2 | 3 | 4 | 5 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| TP(units) | -- | --- | 10 | -- | 24 | -- |
| AP(units) | -- | -- | -- | 6 | -- | 5 |
| MP(units) | -- | 4 | -- | -- | -- | -- |

