

Date:01.10.24 GRADE: XI

TERM 1 Examination (2024-25) ECONOMICS

Max marks: 80 Time: 3 Hours

General Instructions:

I. This question paper contains two sections:

Section A- Statistics

Section B- Microeconomics

- II. This paper contains 20 Multiple Choice Type Questions of 1 mark each.
- III. This paper contains 4 Short Answer Type Questions of 3 marks each to be answered in 60-80 words.
- IV. This paper contains 6 Short Answer Type questions of 4 marks each to be answered in 80-100 words.
- V. This paper contains 4 Long Answer Type Questions of 6 marks each to be answered in 100 to 150 words.

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Qn. No	SECTION A- STATISTICS	Marks allocated
1	A) Primary data is collected firsthand, secondary data is collected from existing sources.	1
2	B) Sample survey	1
3	D) All of the above	1
4	A) Both assertion and reason are correct	1
5	B) Frequency table	1
6	C) To organize data	1
7	C) To organize data	1
8	A) Both assertion and reason are correct	1
9	A) Bar chart B) Pie chart	1

10	B) To provide context	1
11 (A)	Surveys	3
(B)	 Questionnaires (online, paper-based, or telephone) Interviews (structured, semi-structured, or unstructured) Focus groups Observational Studies 	3
	Participant observationNon-participant observationCase studiesOR	
	Misinterpretation and Misrepresentation Measurement errors - Sampling biases - Data quality issues	
	- Correlation vs. causation - Overreliance on statistical significance - Ignoring contextual factors	
12 (a)	Collection method: Primary data is collected directly, while secondary data is obtained from existing sources. 2. Purpose: Primary data is collected for a specific research	1
(b)	question, while secondary data may have been collected for a different purpose. 3. Originality: Primary data is original, while secondary data is preexisting.	2
	4. Control: Researchers have control over primary data collection, but not over secondary data.5. Time and cost: Primary data collection can be time-consuming and costly, while secondary data is often readily available.	
13 (A)	Title: Briefly describes the table's content.	4
(B)	Headers (Column Headings): Label each column. Clearly define the data within.	4
	1. Rows: Horizontal arrangement of data.	

1. Columns: Vertical arrangement of data. Cells: Individual data points, intersecting rows and columns. Stub (Row Labels): - Label each row. - Identify the data within. Footnotes (Optional): - Clarify or provide additional context. - Explain abbreviations or symbols . Source (Optional): - Credits the original data source. OR Quantitative Classification - Focuses on numerical data - Analyzes data using statistical methods - Seeks to identify patterns, trends, and correlations Typically uses large sample sizes Qualitative Classification - Focuses on non-numerical data (text, images, observations) - Analyzes data using thematic analysis, content analysis, or codina - Seeks to understand meanings, themes, and concepts - Typically uses smaller, more in-depth sample sizes 14 Merits of Sampling: 4 (A) 1. Cost-Effectiveness: Sampling reduces data collection costs. 2. Time-Efficiency: Sampling saves time compared to census. (B) 3. Increased Accuracy: Sampling can reduce non-sampling errors. 4. Improved Representation: Sampling ensures representation from diverse groups. 5. Enhanced Analytical Flexibility: Sampling allows for statistical analysis. 6. Reduced Data Volume: Sampling manages large datasets.

Demerits of Sampling: 1. Sampling Error: Risk of inaccurate representation. 2. Bias: Sampling frame or methodology errors. 3. Limited Generalizability: Results may not apply to entire population. 4. Non-Response Errors: Missing data from selected units. 5. Complexity: Sampling methods require expertise. 6. Interpretation Challenges: Results require statistical analysis. OR Population: 1. Entire group of individuals, objects, or events. 2. Defined by specific characteristics (age, location, industry). 3. Typically large, diverse, and inclusive. 4. Represents the entire scope of the research. Example: All students enrolled in a university. Sample: 1. Subset of individuals, objects, or events from the population. 2. Selected using statistical methods (random, stratified, etc.). 3. Representative of the population, but smaller. 4. Used to make inferences about the population. 15 A variable is a characteristic or attribute that can take on different values or levels. Variables are used to measure, describe, or explain phenomena in research, statistics, and data analysis. 4 Types of Variables: 1. Quantitative (Numerical): Takes numerical values. 2. Qualitative (Categorical): Takes non-numerical values. **Quantitative Variables:** 1. Discrete Variable: Takes distinct, countable values. - Example: Number of children (0, 1, 2, 3, ...)

2. Continuous Variable: Takes any value within a range. - Example: Height (170.5 cm, 171.2 cm, etc.) Discrete Variable: - Countable values - Distinct, separate values - No intermediate values - Can be represented as whole numbers Examples: - Number of siblings - Number of cars owned Educational level (high school, college, graduate) Continuous Variable: - Uncountable values - Can take any value within a range - Has intermediate values - Can be represented as decimal numbers OR Cost-Effective: Quota sampling reduces data collection costs. 2. Time-Efficient: Quota sampling saves time compared to probability sampling. 3. Representation: Quota sampling ensures representation from diverse groups. 4. Easy Implementation: Quota sampling is simple to design and execute. 5. Flexibility: Quota sampling allows for adjustments during data collection. 16 3+3 (A) Statistic (singular): A numerical value describing a characteristic. - Statistics (plural): The field of study and practice of data analysis. . Formulation of the Problem, Collection of Data, Analysis of Data, (B) Interpretation of Results, Presentation and Communication

OR

Stratified random sampling is a probability sampling method that:

- 1. Divides the population into distinct subgroups (strata).
- 2. Ensures each stratum is representative of the population.
- 3. Selects a random sample from each stratum. Systematic Random Sampling:

Systematic random sampling is a probability sampling method that:

- 1. Arranges the population in a list or sequence.
- 2. Selects every nth unit from the list (systematic interval).
- 3. Starts with a random beginning point.

Main Reasons for Statistical Errors:

Sampling Errors:

- 1. Sampling bias (non-representative sample)
- 2. Sampling frame error (inaccurate or incomplete list)
- 3. Non-response error (missing data)
- 4. Response bias (inaccurate or incomplete responses)

Non-Sampling Errors:

- 1. Measurement error (inaccurate data collection)
- 2. Data entry error (incorrect data recording)
- 3. Data processing error (incorrect data analysis)
- 4. Model specification error (incorrect statistical model)

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(A) Draw a Histogram to represent the following data:

3+3

3			
Class interval	frequency	Class interval	frequency
5-10	3	30-35	13
10-15	5	35-40	11
15-20	9	40-45	7
20-25	15	45-50	4
25-30	18		

(B)

On the basis of the following frequency distribution, draw less than cumulative frequency curve:

Marks	No. of students (F	requency)

0.10	_	
	2	
		1
(A) Hashbaireable combination		1
· · · ·	alco	1
Assertion is true but reason is in	dise.	1
B) The utility from the last unit cor	nsumed	1
(c) maximum		1
i) Assertion and Reason are true ar explanation of the Assertion	nd Reason is the correct	1
(D) All the above		1
(B) Substitute goods		1
(iii) Assertion is true but reason is	false	1
(A) Market demand curve		1
An Indifference Curve (IC) slopes of	downward because:	3
2. As consumption of one good inc good decreases.3. Consumer maintains same level	reases, consumption of the other of satisfaction (utility).	
	20-30 30-40 40-50 50-60 60-70 Section MICROECC ii) Both Assertion and Rea (A) Unattainable combination iii) Assertion is true but reason is form B) The utility from the last unit cor (c) maximum i) Assertion and Reason are true are explanation of the Assertion (D) All the above (B) Substitute goods (iii) Assertion is true but reason is (A) Market demand curve An Indifference Curve (IC) slopes of the consumer trades off one good incomposed decreases. 3. Consumer maintains same level An Indifference Curve is convex between the consumer trades of the consumer trad	10-20 20-30 30-40 8 40-50 4 50-60 3 60-70 Section - B MICROECONOMICS ii) Both Assertion and Reason are false. (A) Unattainable combination iii) Assertion is true but reason is false. B) The utility from the last unit consumed (c) maximum i) Assertion and Reason are true and Reason is the correct explanation of the Assertion (D) All the above (B) Substitute goods (iii) Assertion is true but reason is false (A) Market demand curve An Indifference Curve (IC) slopes downward because: 1. Consumer trades off one good for another. 2. As consumption of one good increases, consumption of the other

OR Budget Set: The budget set represents all possible combinations of goods and services that a consumer can buy, given their: 1. Income (or budget) 2. Prices of goods and services It's the set of affordable options. Budget Line (Budget Constraint): The budget line is the boundary of the budget set, representing the maximum amount of goods and services a consumer can buy with their income. 29 3 (A) nferior Good: A good is called inferior when: (B) Its demand decreases as consumer income increases. 3 In other words, as income rises, consumers tend to buy less of inferior goods and more of superior goods (normal goods). Cheap clothing - Discount store products - Basic/low-end electronics OR Here are three determinants of demand for a commodity, excluding its price: 1. Consumer Income: As income increases, demand for normal goods tends to increase, while demand for inferior goods decreases. 1. Consumer Preferences (Tastes): Changes in consumer tastes, fashion trends, or attitudes can significantly impact demand.

	1. Population Size and Demographics: Changes in population size, age distribution, and demographic characteristics (e.g., education level, occupation) can influence demand.	
30 (A)	Producers:	4
	 Scarcity of Resources: Limited availability of factors of production (labor, capital, land, entrepreneurship). Multiple Production Options: Choosing among different production methods, technologies, and inputs. Limited Capacity: Allocating resources efficiently to meet demand. Competing Goals: Balancing profit maximization with other objectives (e.g., market share, social responsibility). 	4
	Consumers:	
	 Limited Income: Restricting consumption choices due to finite financial resources. Unlimited Wants: Numerous goods and services competing for limited income. Scarcity of Time: Allocating time between consumption, leisure, and other activities. Competing Priorities: Weighing importance of different goods and services. OR	
	Suppose a consumer has 10 units of Good X and 5 units of Good Y.nitially, the consumer is willing to give up 2 units of X for 1 additional unit of Y (MRS = 2). - As they substitute more Y for X, the MRS decreases: - 1.5 units of X for 1 unit of Y. - 1 unit of X for 1 unit of Y. - 0.5 units of X for 1 unit of Y.	
31	The PPC is a graphical representation of the various combinations of two goods or services that can be produced given:	4
	 Fixed resources Full employment Efficient allocation. Point Below the Curve: Indicates: 	4

	 Underemployment of resources Inefficient allocation Economic slack Potential for growth	
	 Fixed resources Full employment Efficient allocation Properties of PPF: 	
	 Downward sloping: Trade-offs between goods (opportunity costs) Concave shape: Increasing opportunity costs (diminishing marginal rate of transformation) Intercept on x-axis: Only Good X produced Intercept on y-axis: Only Good Y produced 	
32	Level of analysis (micro: individual, macro: aggregate) 2. Focus (micro: markets, macro: economy-wide issues) 3. Time horizon (micro: short-term, macro: long-term)	4
33 (A) (B)	Downward sloping: Consumer is willing to trade one good for another. 2. Convex to the origin: Diminishing marginal rate of substitution. 3. Non-intersecting: Consumer cannot be indifferent between two combinations on the same curve. 4. Horizontal and vertical intercepts represent: Consumption of only one good.	6 6
	5. Higher curves represent: Greater satisfaction or utility. OR Price Elasticity of Demand measures the responsiveness of the quantity demanded of a good to changes in its price.actors Affecting Price Elasticity of Demand:	

1. Income Effect: Goods with high income elasticity are more responsive to price changes. Luxury goods (e.g., jewelry) - High-income households 1. Availability of Substitutes: Goods with close substitutes have higher elasticity. Coffee vs. tea - Public transportation vs. personal vehicles 34 Read the following passage and answer the questions that follows: (A) The demand for Coca-cola is elastic in the present times. The demand for coca-cola has -----(B) Increased (i) (ii) Decreased (iii) Remained same (iv) Can't say (C) Demand is the want to buy a product backed by purchasing power. What has happened to the demand of zero sugar (D) carbonated drinks? (i) Increased (ii) **Decreased** (iii) Remained same (iv) Can't say (E) The Australian non-alcoholic beverages industry's 2.3% growth rate in overall production suggests that the demand for these beverages is: A) Highly elastic B) Highly inelastic C) Unit elastic D) Income elastic Elasticity of demand measures how responsive the quantity demanded of a good is to changes in:

- Price (price elasticity)
 Income (income elasticity)
 Related goods' prices (cross-price elasticity)