

(7 pages)

Reg. No. :

Code No. : 10532 E Sub. Code : CMEC 12

B.A. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2022.

First Semester

Economics – Core

STATISTICS FOR ECONOMICS – I

(For those who joined in July 2021 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. A study which involves each and every unit of the universe is called _____ method.
 - (a) Complete enumeration
 - (b) Sampling
 - (c) Interview
 - (d) Questionnaire

2. Random Sampling is also referred as _____ sampling.
 - (a) Probability
 - (b) Judgement
 - (c) Non-Probability
 - (d) Stratified
3. A table is a systematical arrangement of statistical data in _____.
 - (a) Rows
 - (b) Columns
 - (c) Columns and Rows
 - (d) Schedule
4. A picture is worth _____ words.
 - (a) 10
 - (b) 100
 - (c) 1000
 - (d) 10000
5. The sum of deviations taken from arithmetic mean is
 - (a) Zero
 - (b) One
 - (c) Maximum
 - (d) Minimum
6. Calculate Median marks from the following data:
5, 12, 15, 8, 20, 32, 25, 40
 - (a) 8
 - (b) 20
 - (c) 17.5
 - (d) 14

7. If the coefficient of variation of a distribution is 50 and its standard deviation is 20, the arithmetic mean shall be _____.
- (a) 40 (b) 10
(c) 2.5 (d) 0.4
8. Standard deviation can be calculated from
- (a) Arithmetic mean (b) Median
(c) Any average (d) Mode
9. If $\beta_2 < 3$, the distribution is _____.
- (a) Platykurtic (b) Mesokurtic
(c) Leptokurtic (d) Symmetrical
10. If a frequency distribution is positively skewed, the mean of the distribution is
- (a) greater than the Mode
(b) less than the Mode
(c) equal to the Mode
(d) equal to the median

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).
Each answer should not exceed 250 words.

11. (a) Summarise the importance of statistics.
- Or
- (b) What is Data? Distinguish between primary and secondary data.

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12. (a) Write the requisites of a good table.
- Or
- (b) Analyse the merits and demerits of graphic presentation of statistical data.
13. (a) Explain the characteristics of a good average.

Or

- (b) Compute median from the following data :
- | | | | | | | | | |
|-------------|------|-------|-------|-------|-------|-------|-------|-------|
| Value : | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 |
| Frequency : | 4 | 12 | 24 | 36 | 20 | 16 | 8 | 5 |

14. (a) Calculate quartile deviation and its coefficient from the following data.
- | | | | | | | | | |
|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| Height of students (in cms) | 120 | 122 | 124 | 126 | 130 | 140 | 150 | 160 |
| No. of students : | 1 | 3 | 5 | 7 | 10 | 3 | 1 | 1 |

Or

- (b) Write short note on Lorenz Curve.
15. (a) Calculate Kurtosis from the following data.
9, 18, 7, 11, 4, 6, 8.
- Or
- (b) Explain the different types of skewness through diagram.

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PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Describe the important functions of statistics.

Or

- (b) Discuss the methods of collecting primary data.

17. (a) Explain the general rules for drawing a diagram.

Or

- (b) Describe the types of classification with example.

18. (a) Find the value of mode for the following data:

Marks : 10 15 20 25 30 35 40

Numbers : 8 12 36 35 28 18 9

Or

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- (b) Find the missing frequency from the following data. The arithmetic mean is 34 marks.

Marks : 0-10 10-20 20-30 30-40 40-50 50-60

No. of students : 5 15 20 . 20 10

19. (a) Calculate mean and standard deviation of the following frequency distribution of marks.

Marks : 0-10 10-20 20-30 30-40 40-50 50-60 60-70

No. of students : 5 12 30 45 50 37 21

Or

- (b) Goals scored by two teams in a football match were as follows.

No. of Goals scored in a football match	No. of Football matches played	
	Team 'A'	Team 'B'
0	15	20
1	10	10
2	7	5
3	5	4
4	3	2
5	2	1
Total	42	42

Calculate coefficient of variation and state which team is more consistent.

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20. (a) Compute Karl Pearson's coefficient of Skewness from the following data :

Profit (Rs. Lakhs) :	70-80	80-90	90-100	100-110
No. of companies :	12	18	35	42
Profit (Rs. Lakhs) :	110-120	120-130	130-140	140-150
No. of companies :	50	45	30	8

Or

(b) Find coefficient of Skewness based on quartiles and median from the following data:

Variable :	Less than 10	10-20	20-30	30-40	40-50	50-60	More than 60
Frequency :	12	28	50	66	18	16	10