8. Explain delta method interval. How is it different from other intervals. **6**

Or

Differentiate between point estimation and interval estimation with the help of examples.

9. What is T-Test ? Explain it with some example. **6**

Or

Explain two-sample test for Gaussian parameters in detail.

Section D

10. Explain the various types of sources of data in detail. **8**

Or

Explain regression and their types in detail.

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B.C.A. EXAMINATION, 2026

(Fourth Semester)

(From 2020-21 Onwards)

(Re-appear Only)

COMPUTER ORIENTED STATISTICAL METHODS

BCA-19-42

Time : 3 *Hours*] [*Maximum Marks :* 80

Before answering the question-paper, candidates must ensure that they have been supplied with correct and complete question-paper. No complaint, in this regard will be entertained after the examination.

Note : Attempt all questions.

Section A

1. (i) What do you mean by Probability ? **1**

(ii) Define correlation coefficient. **1**

(iii) Define data type. **1**

(iv) What is stratified sampling ? **1**

(v) Define Sampling. **1**

(vi) What do you mean by error ? **1**

(vii) Define Interference. **1**

(viii) Define bias condition. **1**

(ix) What is interval estimation ? **1**

(x) What do you mean by hypothesis ? **1**

(xi) What do you mean by ANOVA ? **1**

(xii) Define single sample test. **1**

Section B

2. Explain Data summarization in detail. **3**

3. Differentiate between systematic sampling and cluster sampling. **3**

4. What do you understand by Wald intervals ? **3**

5. Explain two-way ANOVA in detail. **3**

Section C

6. What do you mean by probability ? Explain various types of probability rules in detail. **6**

Or

Differentiate between expected values and bivariate expected values.

7. Explain Markov Chain Monte Carlo method in detail. **6**

Or

Differentiate between line intercept sampling and panel sampling.

Or

What do you mean by Hypothesis testing ? Explain any three tests with the help of examples.

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11. What do you mean by cluster sampling ? How is it different from other sampling methods ? **8**

Or

Explain the various types of sampling errors in detail.

12. What do you mean by point estimation ? Explain Weighted least square method in detail. **8**

Or

Explain the following :

(a) Confidence Interval

(b) Bootstrap Interval.

13. Explain F-Test technique with some examples. **8**