

Roll No. _____

[Total No. of Pages : 2

CAIIS - N 239 B-18
B.C.A. IIIrd Semester Degree Examination
Computer Science
(Foundation course in Statistical Computing)
Paper -BCA - 3.4
(New)

Time : 3 Hours

Maximum Marks : 80

SECTION-A

Answer **All** the questions.

(10×2=20)

1. a) What is Tabulation?
- b) What is Primary data?
- c) Define cumulative frequency.
- d) What is range?
- e) Define standard deviation.
- f) Write the formula of coefficient of quartile deviation.
- g) What is regression?
- h) Define sample space with example.
- i) What is mode?
- j) What do you mean by frequency table?

SECTION-B

Answer Any **FOUR** of the following.

(4×5=20)

2. Define Geometric mean? Write its merits and demerits.
3. Construct discontinuous frequency distribution for the following data.
12, 40, 10, 19, 28, 19, 15,
33, 07, 20, 16, 06, 20, 37,
11, 36, 16, 10, 20, 30, 27,
21, 45, 19, 26, 37, 05, 30,
17, 20.

4. Represent the following data by simple Pie-diagram.
- | | | | | |
|----------------|---|-----|------|------|
| College | : | A | B | C |
| No.Of.Students | : | 900 | 2500 | 1600 |

5. The following table gives the life of 150 electric bulbs.

life in hours	:	0-400	400-800	800-1200	1200-1600
No.Of.bulbs	:	4	12	40	41
		1600-2000	2000-2400	2400-2800	2800-3200
		27	13	9	04

Calculate the mode?

6. Define merits and Demerits of Range.
7. For the following data find the quartile deviation and the co-efficient of quartile deviation.
- 36 43 30 37 38 35
29 38 35 32 35 36.

SECTION-C

Answer Any **FOUR** questions.

(4×10=40)

8. Write C-program to calculate mean.
9. Calculate the standard deviation and co-efficient of variation for the following data.
- | | | | | | | | | |
|----------------|---|-----|-----|-----|-----|-----|-----|-----|
| Height | : | 166 | 167 | 168 | 169 | 170 | 171 | 172 |
| No.of.Students | : | 03 | 06 | 09 | 13 | 08 | 05 | 04 |
10. Find the regression equation of price on demand. Estimate the price when demand is 50.
- | | | | | | | | |
|--------|---|----|----|----|----|----|----|
| Price | : | 10 | 12 | 13 | 12 | 16 | 15 |
| Demand | : | 40 | 38 | 43 | 45 | 37 | 43 |
11. A bag contain 3 White, 4 Red, and 2 Green balls one ball is selected at random from the box. Find the probability when the selected ball is i) White ii) Non-White iii) White or Green balls.
12. State and Prove theorem of total probability
- i) Find the probability that 9 throw of die results is
- a) An ace b) An even number c) Multiples of three.
13. Define the following terms:
- a) Percentiles
b) Scatter diagrams
c) Probability mass function
d) Conditional probability.