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Name.....

Reg. No.....

**THIRD SEMESTER (CBCSS-UG) DEGREE EXAMINATION
NOVEMBER 2021**

B.C.A.

BCA 3C 05—COMPUTER ORIENTED NUMERICAL AND STATISTICAL METHODS
(2019—2020 Admissions)

Time : Two Hours

Maximum : 60 Marks

Section A

*Answer atleast eight questions.
Each question carries 3 marks.
All questions can be attended.
Overall ceiling 24.*

1. Define Mean Deviation.
2. Write Newton Raphson Formula.
3. What are Positional Averages?
4. Calculate Geometric Mean of 2574, 475, 75, 0.8, .005
5. Mean and Median calculated for a Statistical data are 14.92 and 15.83. Find Mode ?
6. Distinguish between continuous and discrete random variables ?
7. State Simpson's (1/3)rd Rule.
8. Find the difference $\sqrt{6.37} - \sqrt{6.36}$ to three significant figures ?
9. Distinguish between Positive and Negative Correlation ?
10. Define Regression Analysis.
11. Define Event with an example.
12. What is Absolute measure of Dispersion?

(8 × 3 = 24 marks)

Section B

*Answer atleast five questions.
Each question carries 5 marks.
All questions can be attended.
Overall ceiling 25.*

13. What are the desirable properties of a good measure of Dispersion ?
14. For the following data calculate Standard Deviation :

Marks	:	2	4	6	8	10
No.of students	:	8	10	16	9	7

Turn over

15. From the following data of values of x and y , Find the regression equation of y on x :

X :	2	3	4	5	6
Y :	3	5	4	8	9

16. Compare Mean, Median and Mode.

17. From the following table find the value of $x = 31.5$:

X :	31	32	33	34	35	36
Y :	2.49	2.50	2.51	2.53	2.54	2.56

18. Define the terms : (1) Mutually Exclusive Event ; (2) Exhaustive Events and (3) Dependent Events.

19. What are the merits and demerits of harmonic Mean ?

(5 × 5 = 25 marks)

Section C

*Answer any one questions.
Each question carries 11 marks.*

20. From the following table of marks obtained by two students A and B in 10 tests of 100 marks each, Find out who is more intelligent and who is more consistent.

A :	25	50	45	30	70	42	36	48	34	60
B :	10	70	50	20	95	55	42	60	48	80

21. Find the root of the equation $x - \cos x = 0$ by Bisection Method.

(1 × 11 = 11 marks)