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TB243622U

Reg. No :.....

Name :.....

BACHELOR'S DEGREE (C.B.C.S) EXAMINATION, NOVEMBER 2024

2023 ADMISSIONS REGULAR

SEMESTER III - COMPLEMENTARY COURSE 2 STATISTICS

ST3B03B23 - Basic Statistics

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

Part A

I. Answer any Ten questions. Each question carries 2 marks **(10x2=20)**

1. Distinguish between quantitative data and qualitative data with examples.
2. What are the functions of statistics?
3. What do you mean by distrust of Statistics?
4. Explain proportionate and non-proportionate stratified random samples.
5. How is a stratified random sample selected?
6. Distinguish between exclusive and inclusive classes.
7. What are the characteristics of a good classification?
8. What are the different parts of a Statistical table?
9. Name the different absolute measures of dispersion and their corresponding relative measures.
10. Show that the mean of the deviations of a set of observations from their arithmetic mean is zero.
11. Define co-efficient of variation.
12. Give the formula for finding the combined mean of 3 sets of observations.

Part B

II. Answer any Six questions. Each question carries 5 marks **(6x5=30)**

13. Distinguish between questionnaire and schedule. In which situation is schedule advantageous over questionnaire?
14. Describe any two methods of collecting Primary data.
15. Distinguish between sampling error and non sampling error.
16. What are the essential qualities of a good sample?
17. Explain the procedure of drawing a less than ogive.
18. Explain the construction of a Pie-diagram.
19. Compare the variability in the two groups using Quartile deviation

Group I:	20	22	17	23	26
Group II:	10	20	18	12	15

20. Find Standard deviation

Marks	10-20	20-30	30-40	40-50	50-60
No. of students	12	18	29	22	19

21. The first of two groups has 100 items with a mean of 13. If the combined group has 250 items and a mean of 15.6, find the mean in the second group.

Part C

III. Answer any Two questions. Each question carries 15 marks **(2x15=30)**

22. Explain the different methods of collecting primary data bringing out the advantages and limitations of each method.

23. Draw less than and greater than ogives for the following data and hence find the median.

class	0-20	20-40	40-60	60-80
frequency	7	16	13	4

24. Compute mean,median ,mode and Standard deviation from the following data

Marks	No. of students
10-20	12
20-30	18
30-40	29
40-50	22
50-60	19

25. Find mean,median and mode for the following data

Classes	0-50	50-100	100-150	150-200	200-250	250-300	300-350
Frequency	2	3	5	6	5	3	1