

TDC (CBCS) Odd Semester Exam., 2020
held in March, 2021

STATISTICS

(5th Semester)

Course No. : STSSEC-501T

(Statistical Techniques for Research Method)

Full Marks : 50

Pass Marks : 20

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

SECTION—A

Answer any *fifteen* of the following questions as
directed : $1 \times 15 = 15$

1. Is sampling method a type of research?
2. What is sampling frame?
3. Questionnaire is a tool for collecting _____ data.

(Fill in the blank)

4. What is data cleaning?
5. What is applied research?
6. Descriptive research and causal research are different types of _____ research.
(Fill in the blank)
7. What is sampling design?
8. What is a research report?
9. What is a hypothesis?
10. Name two types of hypotheses.
11. What is a dependent variable?
12. What is a correlation coefficient?
13. What is a research problem?
14. State two features of good research.
15. What is data mining?
16. Pie-chart is used to represent _____.
(Fill in the blank)
17. Radar chart can be used for the representation of univariate / bivariate / multivariate data.

(Choose the correct option)

(3)

18. Write two characteristics of a good research report.
19. Write two reasons why we encounter missing data.
20. What is data coding?
21. Name one statistical package.
22. What is non-sampling error?
23. Write the names of two non-probability sampling.
24. What is content analysis?
25. If the rank correlation between X and Y is 0.67, what do you interpret?
26. Write two reasons of non-response in surveys.
27. What is scaling technique?
28. What is dichotomous question in the context of a survey?
29. What is population survey?
30. Name two types of sampling error.

(4)

SECTION—B

Answer any *five* of the following questions : $2 \times 5 = 10$

31. Explain the difference between questionnaire and schedule.
32. What is validity of an experimental research?
33. Write two problems related to secondary data.
34. What is a focus group interview?
35. What is a snowball sampling?
36. Write the test statistic that is used for testing the significance of the regression coefficient.
37. Explain 'out of range' data with an example.
38. In the absence of sampling frame, which sampling method is recommended?
39. What are the types of error encountered in surveys?
40. If $\bar{x} = 17$, $\bar{y} = 32$ and $s_x = 4$, $s_y = 16$, where x and y represent runs scored by two batsmen A and B , what is your interpretation?

(5)

SECTION—C

Answer any *five* of the following questions : 5×5=25

41. Write brief notes on any two methods of collecting primary data.
42. What is research? Explain how to determine the objective of a research.
43. In surveys, explain how you can encounter the problem of non-response.
44. Explain any one formula for determining the sample size.
45. Write names of five methods of probability sampling.
46. What types of diagrams/graphs are used for the representation of time series data? Explain.
47. Why data cleaning is necessary? Write two of the common problems encountered while data cleaning.
48. Write briefly the main steps of the structure of a research report.
49. Explain the different types of research report.
50. Write a short note on exploratory research.

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