

2023/TDC(CBCS)/ODD/SEM/
STSSEC-501T/121

TDC (CBCS) Odd Semester Exam., 2023

STATISTICS

(5th Semester)

Course No.: STSSEC-501T

(Statistical Techniques for Research Methods)

Full Marks : 50

Pass Marks : 20

Time : 3 hours

The figures in the margin indicate full marks
for the questions

SECTION—A

Answer fifteen questions, selecting any three from
each Unit: $1 \times 15 = 15$

UNIT—I

VI—THU

1. What is descriptive research?
2. Define scientific method of investigation.
3. What is fundamental research?
4. What is quantitative research?

UNIT—II

5. Mention two situations where sampling is appropriate.
6. Discuss any two advantages of sample survey over complete enumeration.
7. Describe judgement sampling.
8. Mention any two limitations of sampling.

UNIT—III

9. Mention any two sources of secondary data.
10. What is sampling unit?
11. Mention any two sources of validity.
12. Mention any two sources of non-response error.

UNIT—IV

13. In which situation, mean is an appropriate measure of central tendency?
14. Define skewness.

15. Define Spearman's correlation coefficient.
16. Mention any method of analysis of categorical data.

UNIT—V

17. What is footnote?
18. What does APA mean in the context of referencing?
19. Define scaling technique.
20. What do you mean by data cleaning?

SECTION—B

Answer five questions, selecting one from each
Unit : 2×5=10

UNIT—I

21. Describe any two roles of research methodology in real life.
22. Distinguish between applied and fundamental research.

((4))

UNIT—II

23. What are two major sources of non-sampling errors in a survey?
24. What are the objectives of sample surveys?

UNIT—III

25. Explain any two methods of data collection.
26. What are the important informations required for sample size calculation?

UNIT—IV

27. Under which situation one should report inter-quartile range?
28. Interpret the coefficients of the regression equation :

$$Y = -2.3 + 4.3X$$

UNIT—V

29. What do you mean by abstract?
30. Mention any two methods of presentation of quantitative data.

24J/137

(Continued)

(5)

SECTION—C

Answer *five* questions, selecting *one* from each
Unit : 5×5=25

UNIT—I

31. Describe the steps involved in research process with suitable example.

32. What is the meaning of research? Explain its significance in real life.

UNIT—II

33. Explain the meaning of sampling and non-sampling errors. What are the various sources of these errors?

34. Distinguish between direct personal interview and mailed questionnaire methods.

UNIT—III

35. Describe the steps involved in data collection.

36. Explain a formula to determine sample size for estimating population.

24J/137

(Turn Over)

UNIT—IV

37. Describe any two methods of data analysis by giving an example.

38. Describe any two aspects, which justifies about the precaution in interpretation of data.

UNIT—V

39. Describe the layout of a research article.

40. Describe any three different methods of data cleaning.

UNIT—III

35. Describe the steps involved in data collection.

36. Explain a formula to determine sample size for estimating population.