

2020/TDC(CBCS)/ODD/SEM/ STSSEC-501T/121

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)

10-21**/152** (Turn Over)

(2)

- **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)

10-21**/152** (Continued)

(3)

(4)

- **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.

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 $_x$ 4, $_y$ 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: $5 \times 5 = 25$

- **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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