C 261B2 Total pages: 2

Register No:	Name:

SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

EIGHTH SEMESTER INTEGRATED MCA DEGREE EXAMINATION(R), MAY 2024 (2020 SCHEME)

Course Code : 20IMCAT406

Course Name : Research Methodology

Max. Marks : 60 Duration: 3 Hours

PART A

(Answer all questions. Each question carries 3 marks)

- 1. List out any four objectives of research.
- 2. Write a short note on hypothesis-testing.
- 3. Illustrate and explain Completely Randomized (C.R) Design.
- 4. Describe the three methods of research design.
- 5. How is primary data collected through schedules?
- 6. Differentiate primary and secondary data with an example.
- 7. Why is tabulation important? How would you justify its significance?
- 8. Write a short note on measures of dispersion.
- 9. Write a short note on popular report.
- 10. Why is interpretation necessary in the research process? Explain in detail.

PART B

(Answer one full question from each module, each question carries 6 marks) MODULE I

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11. Write a short note on

- a)Quantitative approach vs Qualitative approachb) Significance of research
 - OR
- 12. "Empirical research in India in particular creates many problems for the researchers". State the 6 problems faced by such researchers.

MODULE II

- 13. Write a comprehensive note on:
 - (a) Necessity of defining a research problem
 - (b)Experience Survey
 - (c)Pilot Survey.

OR

- 14. Write a short note on:
 - (a) Extraneous variables
 - (b)Dependant and Independent variable
 - (c)Cofounded Relationship.

MODULE III

15. Describe the selection of appropriate method for data collection in detail. 6 16. Write a short note on secondary data and its collection methods. 6 **MODULE IV** 17. The mean and variance of seven observations are 8 and 16 respectively. If five of these are 2, 4, 10, 12 and 14, then find the remaining two observations. 18. For 5 pairs of observations the following results are obtained $\Sigma X=15$, $\Sigma Y=25$, $\Sigma X^2=55$, $\Sigma Y^2=135$, $\Sigma XY=83$. Find the equation of the lines of regression and estimate the value of X on the first line when Y=12 and value of Y on the second line if X=8. **MODULE V** 19. Describe in detail the layout of a research report. 6 OR 20. Why is peer review important in the process of writing a research report. How can researchers benefit from it?
