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SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

FIRST SEMESTER M. TECH DEGREE EXAMINATION (Regular), DECEMBER 2022

- (2021 Scheme)
- Course Code: 21GN100

Course Name: Research Methodology

Max. Marks: 60

Duration: 3 Hours

PART A

(Answer all questions. Each question carries 3 marks)

- 1. Distinguish between research methods and research methodology.
- 2. What are the skills demonstrated by a researcher while conducting literature review?
- 3. Explain the significance of a research design.
- 4. Discuss about the various sources of errors in measurements.
- 5. What are the qualities of a good questionnaire?
- 6. Compare MS Word and LaTeX.
- 7. Explain the term 'research hypothesis' with an example.
- 8. How do you avoid plagiarism in a research report or paper?

PART B

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

9. Explain the different types of research, clearly pointing out the (6) difference between an experiment and a survey.

OR

10. Discuss the ethical principles relating to research that various codes of (6) ethics address.

MODULE II

11. What are the factors to be noted while selecting a research problem? (6)

OR

12. Illustrate the various stages involved in defining a research problem? (6)

MODULE III

13. Compare and contrast the research designs in respect of exploratory (6) and descriptive research studies.

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OR

14. Describe the key points to be noted for sample design? What are (6) characteristics of a good sample design?

MODULE IV

15. Differentiate between primary and secondary data. What are the various (6) methods for collection of primary data?

OR

16. Briefly describe the various steps involved in data processing? (6)

MODULE V

17. Outline the structure and components of a typical technical paper. (6) What is the purpose of adding an abstract in a research paper?

OR

Why are appendices appropriate in a research report? Explain the (6) points to be kept in mind while adding an appendix to a research report.

MODULE VI

19. Justify the importance of communication skills in research with (6) examples. List the benefits of oral presentations.

OR

20. "The task of completing a paper writing often follows a sequential (6) pattern". Explain with a flow diagram.

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