



VINAYAKA MISSION'S RESEARCH FOUNDATION, SALEM

(Deemed to be University under Section 3 of the UGC Act, 1956)

Pre – Ph.D. Written Examination – November – 2021

ENGINEERING & TECHNOLOGY

Paper I: Research Methodology

Time: 1 ½ Hours

Marks: 50

PART –A

(5*1= 5)

Write Brief notes about the following

Answer all questions

All questions carry equal marks

1. Define applied research.
2. Why do you need to review the existing literature?
3. Define interval sampling.
4. What is meant by informational reports?
5. Define research integrity.

PART – B

(5*3=15)

Write Short answers to the following

Answer all questions choosing either a or b

All questions carry equal marks

1. a. Distinguish between applied versus fundamental research.
Or
b. Distinguish between conceptual versus empirical research.
2. a. List out the components of a research problem.
Or
b. What are the things to be observed by a researcher in selecting a research problem or a subject for research?
3. a. List out the characteristics of hypothesis.
Or
b. List out the steps involved in the technique of interpretation.



VINAYAKA MISSION'S RESEARCH FOUNDATION, SALEM

(Deemed to be University under Section 3 of the UGC Act, 1956)

Pre – Ph.D. Written Examination – November – 2021

4. a. What are the uses of visual aids in preparing a presentation?

Or

- b. List out the importance of effective communication in making presentation.

5. a. What is meant by falsification fabrication and plagiarism FFP?

Or

- b. What are the different forms of duplication? Compare them.

PART – C

(3*10=30)

Answer any three essay type questions

All questions carry equal marks

1. Distinguish in detail between research methods and research methodology.
2. What is a research problem? Briefly discuss about the steps involved in selecting the research problem.
3. Briefly discuss about how you perform data analysis through statistical packages
4. Mention the different types of report, particularly pointing out the difference between a technical report and a popular report.
5. Briefly discuss about the various forms of redundant publications.

