

CMR ENGINEERING COLLEGE: : HYDERABAD

UGC AUTONOMOUS

I-M.TECH-I-Semester End Examinations (Regular) - March- 2025

RESEARCH METHODOLOGY & IPR

(VLSISD, CSE)

[Time: 3 Hours]

[Max. Marks: 60]

Note: This question paper contains two parts A and B.

Part A is compulsory and carries 10 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub-questions.

PART-A**(10 Marks)**

1. a) State the objectives of the research problem. [1M]
- b) What are the various instruments used to interpret data? [1M]
- c) What are the effective literature study approaches? [1M]
- d) What is ethics in research? [1M]
- e) Mention the steps of writing a research report. [1M]
- f) What are the necessary guidelines to be followed in writing a Research Proposal? [1M]
- g) What is IPR? Give examples. [1M]
- h) Differentiate the copyrights and Trade. [1M]
- i) How to file a patent? [1M]
- j) State the scope of patent rights. [1M]

PART-B**(50 Marks)**

2. How do you define a research problem? Explain different sources of Research problems by giving suitable examples. [10M]
- OR**
- 3.a) List and explain the various types of research. [5M]
 - b) Illustrate the Data Analysis and Interpretation. [5M]
4. What is plagiarism? Explain various types of plagiarism and the Research Ethics. [10M]
- OR**
5. What are the various methods for detecting plagiarism? Explain in detail. [10M]
6. Examine the basic principles and techniques of writing the research proposal and brief on the various stages, and criteria for a good research report. [10M]
- OR**
7. Explain the essential features of report writing and highlight the importance and implication of research outcomes. [10M]
- 8.a) Explain the scope of patent rights. [5M]
 - b) Elaborate the process of patenting. [5M]
- OR**
- 9.a) Discuss briefly how the online patent data is organized. [5M]
 - b) Discuss the structure and content of a patent document in general. [5M]

- 10.a) Elaborate licensing and Transfer of Technology in IITs, IISc, MIT, and Utah State University. [5M]
- b) Why do geographical indications need protection? How are geographical indications protected? [5M]

OR

- 11.a) Discuss the administration of the Patent system [5M]
- b) How IPR are developed in computer software? Explain with a case study [5M]
