

CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS

I–M.TECH–I–Semester End Examinations (Regular) - February- 2026

RESEARCH METHODOLOGY & IPR

(Common for VLSI SD, CSE)

[Time: 3 Hours]

[Max. Marks: 60]

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

Part A is compulsory which 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) What do you understand by term Research Problem? What are the objectives of Research Problem? [2M]
- b) List and explain the characteristics of good research problem. [2M]
- c) What are the various means of conducting literature survey in modern times? [2M]
- d) What are the items in a research report? Explain them in brief. [2M]
- e) Write the difference between descriptive and analytical research. [2M]

PART-B

(50 Marks)

2. List and elaborate various methods of collecting primary data. [10M]
- OR**
3. Discuss various issues involved in selecting a research problem. Also elaborate important features of a good research design. [10M]
 4. Describe Effective Literature Studies Approach. [10M]
- OR**
5. Discuss the importance of critical literature review and its uses in planning innovation research. [10M]
 6. Explain essential features of report writing highlighting the importance and implication of research outcomes. [10M]
- OR**
7. What are the items in a research report? Explain them in brief. [10M]
 8. Explain new developments in Intellectual Property Rights. [10M]
- OR**
9. Explain the meaning of sampling and non-sampling errors. What are the various sources of these errors? Elaborate in detail. [10M]
 10. Define intellectual property in research. Explain different types of intellectual property. [10M]
- OR**
11. Explain the expectation and limitation on exclusive rights of the patent. [10M]
