

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
 (AUTONOMOUS)

MCA I Year I Semester Regular Examinations December-2025
RESEARCH METHODOLOGY AND IPR

Time: 3 Hours**Max. Marks: 60**(Answer all Five Units $5 \times 12 = 60$ Marks)**UNIT-I**

1 a Apply data interpretation methods to a hypothetical dataset.
 b Describe the role of instrumentation in research.

 CO1 L3 6M
 CO1 L2 6M
OR

2 a Explain common errors made in selecting a research problem.
 b Illustrate the scope and objectives of a research problem with an example.

 CO1 L2 6M
 CO1 L2 6M
UNIT-II

3 a Differentiate between technical writing and general writing.
 b Explain the structure of a standard research paper.

 CO2 L4 6M
 CO2 L2 6M
OR

4 a Justify why research proposals must undergo committee review before approval.
 b Design a checklist for plagiarism-free research writing.

 CO2 L5 6M
 CO2 L6 6M
UNIT-III

5 a Explain patents with suitable examples.
 b Differentiate between patents, designs, trademarks, and copyrights.

 CO3 L2 6M
 CO3 L2 6M
OR

6 a Identify the requirements for filing a patent application.
 b Evaluate the importance of copyrights in academic research.

 CO3 L1 6M
 CO3 L5 6M
UNIT-IV

7 a Define patent rights and explain their importance.
 b List the scope and limitations of patent rights.

 CO4 L1 6M
 CO4 L1 6M
OR

8 a Apply licensing principles to a real-world industrial example.
 b Evaluate the role of geographical indications in rural development.

 CO4 L3 6M
 CO4 L5 6M
UNIT-V

9 a Explain new developments in IPR related to biological systems.
 b Describe the application of IPR in computer software.

 CO5 L2 6M
 CO5 L2 6M
OR

10 a Design a framework for protecting indigenous knowledge in your region.

CO5 L6 6M

b Propose strategies for effective IPR administration in academic institutions.

CO5 L6 6M

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