

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

**M.Tech I Year I Semester Regular & Supplementary Examinations February-2025**  
**RESEARCH METHODOLOGY AND IPR**

**Time: 3 Hours****Max. Marks: 60**

(Answer all Five Units 5 x 12 = 60 Marks)

**UNIT-I**

- 1 a What do you mean by research? Explain its significance in modern times. CO1 L1 6M
- b What do you understand by term Research Problem? What are the objectives of Research Problem? CO1 L2 6M

**OR**

- 2 a Explain the terms Fundamental Research, Basic Research, Applied Research and Industrial Research with suitable examples. CO1 L2 6M
- b Explain different sources of research problem by giving suitable examples under source. CO1 L3 6M

**UNIT-II**

- 3 a What is research design? Give a brief description of various research designs. CO2 L2 6M
- b Literature review helps in identifying a suitable research problem. Comment. CO2 L4 6M

**OR**

- 4 a What are the various means of conducting literature survey in modern times? CO2 L2 6M
- b Give a detailed description on maintenance of ethics in research work. CO2 L3 6M

**UNIT-III**

- 5 a "Empirical research in India in particular creates so many problems for researchers." State the problems that are usually faced by such researchers. CO3 L4 6M
- b Discuss the importance of critical literature review and its uses in planning innovation research. CO3 L3 6M

**OR**

- 6 a Explain essential features of report writing highlighting the importance and implication of research outcomes. CO3 L2 6M
- b How do you go about formulating research problem? How do you organize your research work? CO3 L2 6M

**UNIT-IV**

- 7 a What is innovation? Elucidate on various type of innovation. CO4 L2 6M
- b Discuss Radical Innovation and Incremental Innovation by quoting real time examples. CO4 L3 6M

**OR**

- 8 a Write short notes on  
(i) Patents (ii) Copyrights (iii) Trademarks (iv) Designs CO4 L1 6M
- b Discuss the significance of Intellectual Property rights in modern day context. CO4 L4 6M

**UNIT-V**

- 9 a What do you mean by patent right? What rights does a patent owner have? **CO5 L2 6M**
- b What does it mean to “Licence a Patent” and why is it done? **CO5 L3 6M**
- OR**
- 10 a How are patent rights enforced? Explain in detail. **CO5 L3 6M**
- b Why should I care about patent information? Where can I find patent information? **CO5 L4 6M**

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