

Sub Code: AHT-302

ROLL NO.

Model Question Paper

COURSE: M.TECH.

BRANCH: ELECTRICAL ENGINEERING

SEMESTER: 1

SUBJECT: Research Methodology and IPR

Duration: 3:00 hrs

Max marks: 100

Note: Attempt all questions.

1. **Attempt any four parts of the following.**

5x4 = 20

- A. Explain the approaches for investigation of solution in research problem.
- B. Why literature review is necessary for research explain in brief?
- C. Differentiate between research methodology and research methods
- D. List the differences between collection of data through questionnaires and schedules
- E. List and explain the various **steps involved** in conducting a literature review.
- F. What is research problem? What are the routes must be observed while defining a research

2. **Attempt any two parts of the following.**

10x2=20

- A. **Explain** the various steps involved in the sample design.
- B. Explain the various characteristics of a good sample design.
- C. Explain the different steps involved in writing research report.

3. **Attempt any two parts of the following.**

10x2=20

- a) List the different methods of collecting data. Explain the observation method of collecting data with its merits and demerits.
- b) Enumerate the salient features of the design Act 2000.
- c) List all the common rules which all the contracting states must follow for patents

4. **Attempt any two parts of the following.**

10x2=20

- a) List all the issues and features covered under TRIPS agreement. Explain the competing rationales for protection of IPRs.
- b) Explain the three basic principles of experimental design.
- c)

5. **Attempt any two parts of the following.**

10x2=20

- A). Explain the meaning of the following in context of research design:
- i) Extraneous variable
 - ii) Confounded relationship
 - ii) Research hypothesis
 - iv) Experimental and control groups.

(B) Explain the following:

i) Bring clarity and focus to your research problem.

ii) Improve your research methodology

C) write the concept of plagiarism ? and give brief idea about for importance for scholars