4. Explain the meaning and significance of a Research design. What are the items that a research plan should have? 5+9=14

UNIT-III

- 5. What is the meaning of measurement in research? Point out the possible sources of error in measurement. Describe the tests of sound measurement. 2+4+8=14
- 6. Describe briefly the different types of data collection for a research work. "Processing of data implies editing, coding, classification and tabulation". Describe in brief these fouroperations pointing out the significance of each in context of research study.

 6+8=14

UNIT-IV

- 7. "Interpretation is a fundamental component of research process", Explain. Why so? Describe the precautions that the researcher should take while interpreting his findings.

 7+7=14
- 8. Explain the significance of a research report and narrate the various steps involved in writing such a report.

 4+10=14

UNIT-V

- 9. What stand for IPR? Why is it necessary to have IPR? What is patent? What are the requirement of applying for patent? What are the different types of patent? 2+3+2+3+4=14
- 10. Discuss briefly about trade secret and trade mark. Write a short note on IPR in India. 8+6=14

2023/ODD/12/33/MECE-105/024

M. Tech Odd Semester Examination, February, 2023

Electronics & Communication Engineering

(1st Semester)

Course No.: MECE-105 (Research Methodology & IPR)

Full Marks: 70 Pass Marks: 28

Time: 3 hours

Note: 1. Attempt 05 (Five) questions by taking one form each unit.

- 2. Begin each answer in a new page.
- 3. Answer parts of a question at a place.
- 4. Assume reasonable data wherever required.
- 5. The figures in the right margin indicate full marks for the question.

UNIT-I

1. What do you mean by research? What are the objectives of research? What are the different types of research? Explain them with example.

2+3+2+7=14

2. List out the qualities of a good research. Briefly describe the different steps involved in a research process. 4+10=14

UNIT-II

3. What is research problem? Describe fully the techniques of defining a research problem. Define the main issues which should receive the attention of the researcher in formulating the research problem. 2+7+5=14