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Total No. of Pages : 01

Total No. of Questions : 08

**M.Tech. (Civil Engineering / Geotechnical Engineering) (Sem.–1)**

**RESEARCH METHODOLOGY AND IPR**

**Subject Code : MTGT114-18**

**M.Code : 93279**

**Date of Examination : 27-01-23**

**Time : 3 Hrs.**

**Max. Marks : 60**

**INSTRUCTIONS TO CANDIDATES :**

**1. Attempt any FIVE questions out of EIGHT questions.**

**2. Each question carries TWELVE marks.**

1. Define and explain the term “Research”. What are the characteristics and functions of a research?
2. What is ethics in research? What are ethical issues concerning the research participants of a research activity? Explain
3. Explain the steps to be followed in writing a research report.
4. What is the need for review of literature? What are the steps involved to conduct literature review for research and explain each one briefly.
5. What is Hypothesis? What is the significance of formulating the hypothesis in research work?
6. What is data collection? Classify data based on the nature of data collection. How data quantification can be done in research fields?
7. Explain the process of patenting. What kind of information is presented in a typical patent document?
8. **Write short notes on the following :**
  - a) Patents
  - b) Designs
  - c) Trade Marks
  - d) Copyright

**NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.**