



**MANIPAL INSTITUTE OF TECHNOLOGY**

**MANIPAL**

*(A constituent unit of MAHE, Manipal)*

**I SEMESTER M.TECH.**

**(COMMON TO ALL BRANCHES)**

**END SEMESTER EXAMINATIONS NOVEMBER 2019**

**SUBJECT: RESEARCH METHODOLOGY AND TECHNICAL**

**COMMUNICATION [HUM 5151]**

**Date of Exam: 26/11/2019    Time of Exam: 2 PM - 4 PM    Max. Marks: 30**

**Instructions to Candidates:**

- ❖ Answer **ALL** the questions.
- ❖ Missing data, if any, may be suitably assumed.

<b>1.</b>	Explain the 8-step research process.	<b>[6]</b>
<b>2.</b>	Describe the steps of reviewing the literature.	<b>[4]</b>
<b>3.</b>	Why problem formulation is an important step in research?	<b>[5]</b>
<b>4.</b>	Explain variables from a viewpoint of causal relationships and study design.	<b>[5]</b>
<b>5.</b>	Discuss Hypotheses testing.	<b>[4]</b>
<b>6.</b>	What is the need for sampling? Discuss the various probability sampling techniques.	<b>[6]</b>