

Roll No. ....

Total No. of Questions : 08]

[Total No. of Pages : 01

## Paper ID [IE502]

(Please fill this Paper ID in OMR Sheet)

M.Tech. (Sem. - 1<sup>st</sup>)

### RESEARCH METHODOLOGY (IE-502)

Time : 03 Hours

Maximum Marks : 100

#### Instruction to Candidates:

- 1) Attempt any **Five** questions.
- 2) **All** questions carry equal marks.

- Q1)* What is a research design? Explain the objectives of research. Also distinguish between historical and experimental research.
- Q2)* How a research problem is defined? Describe the criteria of a good hypothesis alongwith the advantages of hypothesis.
- Q3)* What do you understand by sampling? Explain various sampling techniques.
- Q4)* What is meant by measurement. As a researcher what indicators of measurement accuracy would you insist on in a research report? Describe them.
- Q5)* What do you mean by probability distribution? How exponential and normal distribution is applied in statistical analysis? Explain.
- Q6)* What is analysis of variance? Write a note on regression and correlation analysis.
- Q7)* What is editing and its necessity? Discuss the use of different software for statistical analysis.
- Q8)* Write notes on :
- (a) Report writing.
  - (b) Design of experiments.



MAY 2008

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