

Total No. of Questions : 7]

SEAT No. :

P4377

[Total No. of Pages : 2

[5255]-1044

M.E. (Electronics / Electronics and Telecommunication)

RESEARCH METHODOLOGY

(2017 Pattern)

Time : 3 Hours]

[Max. Marks :50

Instructions to the candidates:

- 1) *Answer any five questions.*
- 2) *Support your answer with neat diagram if necessary.*
- 3) *Figures to the right indicates full marks.*
- 4) *Assume suitable data if necessary.*

Q1) a) Explain briefly the different steps involved in a research Process [5]

b) Describe the difference between an experimental research and survey [5]

Q2) a) Discuss problems encountered by researchers in our country [5]

b) What is research design? Give two functions of research design. [5]

Q3) a) Explain basic instrumentation scheme with example for experimental research. [5]

b) Explain with reference to measurements and statistical analysis - [5]

i) Measures of Skewness and

ii) Measures of Relationship

Q4) a) Explain the meaning of Analysis of variance (ANOVA) and explain eight steps of 'ONE WAY ANOVA' [5]

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- b) With reference to Simple Linear Regression analysis. Explain the terms -[5]
- i) Least Squares Estimation and
 - ii) Coefficients of determination.
- Q5)** a) Explain in brief 'Interpretation' in the contest of research methodology.[5]
- b) Explain the significance of research report and give the various steps in writing research report [5]
- Q6)** a) How to write literature review to develop conceptual framework for research? [5]
- b) Explain the process of formulating the research problem [5]
- Q7)** a) How to prepare Institutional Research Proposal to setup research and development cell in your institute? explain with example [5]
- b) What are the measures of evaluating the research outcome? [5]

