

Total No. of Questions : 7]

SEAT No. :

**P5207**

[Total No. of Pages : 2

**[5671]-231**

**M.E. (Electronics) (E & TC)  
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 indicate full marks.*
- 4) *Assume suitable data, if necessary.*

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

b) How to develop theoretical and conceptual framework from reviewed literature. **[5]**

**Q2) a)** Define hypotheses and state the functions of a hypotheses in research. **[5]**

b) How to formulate and test the hypotheses? **[5]**

**Q3) a)** Explain regression analysis with suitable example? **[5]**

b) Explain important characteristics of multivariate techniques, list multivariate techniques? **[5]**

**Q4) a)** What do you mean by principle component analysis explain in details. **[5]**

b) Describe in brief Layout of Research report covering all relevant points. **[5]**

**Q5) a)** Write a short note on correlation. **[5]**

b) Explain in brief 'Interpretation' in the contest of research methodology. **[5]**

**P.T.O.**

- Q6)** a) Explain different types of descriptive research design. [5]  
b) Justify the need of statistics for advance data analysis. [5]

**Q7)** Write Short Note on

- a) Objectives of Research [5]  
b) Data collection using digital computer system. [5]

**\*\*\* END \*\*\***