[5355]-624

M.E. (Electronics Digital Systems)

(Electronics and Telecommunication - VLSI and Embedded System, Microwave, Signal Processing, Communication Network) 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) How do you define a research problem? Give example to illustrate your answer. **[5]**

b) Explain the meaning of research hypothesis in contest of research design. **[5]**

Q2) a) Compare and contrast the different methods of collecting the data. **[5]**

b) Describe process of data coding and classification with example **[5]**

Q3) a) Explain the meaning of significance of the concept of standard error in sampling analysis in Research. **[5]**

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

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

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

Q5) 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]**

Q6) Write short note on -

    a)   Process of evaluating the Research **[5]**

    b)   Data collection and interpretation of data. **[5]**

Q7) a)   Describe How to prepare research proposal to setup innovation centre in your department? **[5]**

    b)   Describe in brief Bibliography & its importance in context of research report. **[5]**

Q8) a)   How to write literature review to develop conceptual framework for research? **[5]**

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

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