

Total No. of Questions : 8]

SEAT No. :

P-9564

[Total No. of Pages : 2

[6182]-911

**F.Y. M.E. (Electronics)/(Digital Systems)/(E & TC)
(Microwave)/(E & TC lot and Sensor System)/
(Signal Processing)/(VLSI & Embedded System)/
(Wireless Communication Technology)/
(Communication Network)**

RESEARCH METHODOLOGY

(2017 Pattern) (Semester - I) (504104)

Time : 3 Hours]

[Max. Marks : 50

Instructions to the candidates:

- 1) *Answer any five questions out of eight questions.*
- 2) *Figures to the right indicate full marks.*
- 3) *Assume suitable data if necessary.*
- 4) *Use of scientific calculator is allowed.*

Q1) a) What are Research Characteristics? [5]

b) Compare Research methods verses Research Methodology. [5]

Q2) a) Explain Objectives and types of research. [5]

b) Compare Quantitative Research verses Qualitative Research. [5]

Q3) a) What is significant role of literature review in defining a problem? [5]

b) Identify gap areas from literature review and Explain in detail. [5]

Q4) a) How to Define the research problem? [5]

b) Write short note on to publish a Research patent. [5]

Q5) a) What is need of research design? [5]

b) Explain steps in sample design and criteria for selecting sampling procedure. [5]

P.T.O.

- Q6)** a) Explain technique of developing measurement tool and important scaling technique. [5]
b) Explain methods of data collection in research and types of analysis. [5]
- Q7)** a) Write a different steps in the preparation of thesis writing. [5]
b) Explain any one tool for Documentation and presentation. [5]
- Q8)** a) Write short note on Intellectual property rights and patent law. [5]
b) Explain different types of technical papers. [5]

