

Reg. No. :

--	--	--	--	--	--	--	--	--	--

Question Paper Code: 52606

M.E. DEGREE EXAMINATION, MAY 2017

Elective

Structural Engineering

15PSE601 – RESEARCH METHODOLOGY

(Regulation 2015)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (5 x 20 = 100 Marks)

1. (a) How do you define research problem? Explain the various techniques used in defining a problem. (20)

Or

- (b) (i) List out the variables generally used in hypothesis generation of research problem definition. (5)
- (ii) Explain in detail the types of research. (15)

2. (a) Write a note on how a research plan will be developed from exploration to experimentation. (20)

Or

- (b) Explain the meaning of the following in the context of Research Design
- (i) Extraneous Variables (5)
- (ii) Confounded relationship (5)
- (iii) Research hypothesis (5)
- (iv) Experimental and control groups (5)

3. (a) Discuss about the various techniques used for data collection. (20)

Or

(b) Explain the following sample designs

(i) Deliberate Sampling (5)

(ii) Systematic Sampling (5)

(iii) Stratified Sampling (5)

(iv) Cluster and area Sampling (5)

4. (a) Explain the various types of research reports with examples. (20)

Or

(b) Explain the different types of research reports. (20)

5. (a) Explain how the copy right and royalty can be obtained using the IPR and Patent Law. (20)

Or

(b) How the published material can be reproduced and explain plagiarism. (20)
