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**Question Paper Code: 52963**

M.E. DEGREE EXAMINATION, NOV 2016

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) (i) Distinguish between research methods and research methodology. (5)
- (ii) How do you define research problem? Explain the various techniques used in defining a problem. (15)

Or

- (b) Define review of literature. Discuss its purposes, uses and methods of writing a literature review. (20)
2. (a) Write a note on how a research plan will be developed from exploration to experimentation. (20)

Or

- (b) What do you mean by 'Sample Design'? What points should be taken into consideration by a researcher in sample design for any research project? (20)
3. (a) Discuss about the various techniques used for data collection. (20)

Or

- (b) Where Analysis Of Variance (ANOVA) is used. Explain with suitable examples. Also explain how the multivariate ANOVA is different from simple ANOVA. (20)

4. (a) Write the different steps involved in writing the research reports and give the layout of research report. (20)

Or

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

5. (a) Identify and explain any six ethical considerations in research. Discuss the possible consequences of violating research ethics. (20)

Or

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