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Question Paper Code: 51U01

Ph.D. COURSE WORK EXAMINATION, NOV 2018

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) Define review of literature. Discuss its purposes, uses and methods of writing a literature review. CO1- U (20)

Or

(b) Explain in detail the types of research. CO1- U (20)

2. (a) Write a note on how a Research plan will be developed from Exploration to Experimentation? CO2- App (20)

Or

(b) Explain the meaning of the following in the context of Research Design CO2- U (20)

- a) Extraneous Variables
- b) Confounded relationship
- c) Research hypothesis
- d) Experimental and control groups
- e) Treatments

3. (a) Where analysis of variance (ANOVA) is used. Explain with suitable examples. Also explain how the multivariate ANOVA is different from simple ANOVA CO3- U (20)

Or

- (b) Discuss about the various techniques used for data collection. CO3- U (20)
4. (a) Write the different steps involved in writing the research reports and give the layout of research report. CO4- U (20)
- Or
- (b) Explain the different types of research reports. CO4- U (20)
5. (a) How the published material can be reproduced and explain plagiarism. CO5- U (20)
- Or
- (b) Explain how the copy right and royalty can be obtained using the IPR and Patent Law. CO5- U (20)