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Question Paper Code: 56U01

Ph.D. COURSE WORK EXAMINATION, MAY 2018

Elective

Structural Engineering

15PSE601 – RESEARCH METHODOLOGY

(Common to PED & CAD/CAM)

(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. CO1- U (5)
- (ii) How do you define research problem? Explain the various techniques used in defining a problem. CO1- U (15)
- Or
- (b) (i) List out the variables generally used in hypothesis generation of research problem definition. CO1- U (5)
- (ii) Explain in detail the types of research. CO1- U (15)
2. (a) Write a note on how a research plan will be developed from exploration to experimentation. CO2- U (20)
- Or
- (b) Define research design. Briefly explain about the various types of research designs and the factors influencing the research design. CO2- U (20)
3. (a) Discuss about the various techniques used for data collection. CO3- Ana (20)
- Or
- (b) What is testing of hypothesis? Explain how it is useful for illustrating a research problem with two examples. CO3- U (20)

4. (a) Enumerate briefly the mechanism of report writing and underline the precaution to be taken at the time of report writing. CO4- Ana (20)

Or

- (b) Write the different steps involved in writing the research reports and give the layout of research report. CO4- U (20)

5. (a) Identify and explain any six ethical considerations in research. Discuss the possible consequences of violating research ethics. CO5- Ana (20)

Or

- (b) Write an elaborate note on plagiarism and citation basics. CO5- Ana (20)
