

Total No. of Questions : 8]

SEAT No. :

P4367

[Total No. of Pages : 2

[5462] - 544

M.E. (Civil) (Structures)
RESEARCH METHODOLOGY
(2017 Pattern) (Semester - III)

Time :3 Hours]

[Max. Marks : 50

Instructions to the candidates:

- 1) *Q.1 or Q.2, Q.3or Q.4, Q.5or Q.6, Q7or Q8.*
- 2) *Figures to the right indicates Full marks.*

Q1) a) Explain characteristics of research which uses scientific method. [4]

b) Explain secondary sources of data and explain its limitations. [5]

OR

Q2) a) Explain the research problem in a flowchart. [5]

b) Explain the characteristics of hypothesis. [4]

Q3) a) Interpretation is fundamental component of research process: explain [5]

b) Write a note advantages and disadvantages of simple regression analysis. [4]

OR

Q4) a) Explain the merits and demerits of collection of data through observations. [4]

b) Mention the methods of factor analysis. Explain any one method in detail. [5]

Q5) a) Explain in detail “Multi-collinearity and Regression”. [8]

b) Enlist and explain ‘non-parametric tests for hypothesis testing’. [8]

OR

Q6) a) Enlist and explain “parametric tests for hypothesis testing”. [8]

b) Write a detail note on “Agglomerative Clustering: Combining Clusters and Using SPSS” with suitable example. [8]

P.T.O.

- Q7) a)** Write down the characteristics of good Abstract, Introduction, Research Methods and Research Methodology [8]
- b)** Write a research proposal for a suitable research problem (any problem related to Civil engineering can be considered) to a funding agency with reference to the following terms: Title, Introduction, origin of the problem, expected outcome, literature review, Significance of the study in the context of current status, objectives, methodology. year wise plan. [8]

OR

- Q8) a)** Discuss the importance of research report writing. And Write a note on steps involved in presenting research paper. [8]
- b)** Write a research proposal for a suitable research problem (any problem related to Structural engineering can be considered) to a funding agency with reference to the following terms: Title, Introduction, origin of the problem, expected outcome, literature review, Significance of the study in the context of current status, objectives, methodology, year wise plan. [8]

