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10EE761

Seventh Semester B.E. Degree Examination, June/July 2018
Power System Planning

Time: 3 hrs.

Max. Marks:100

Note: *Answer FIVE full questions, selecting*
at least TWO questions from each part.

PART – A

1 a. Briefly explain the points to be explored for power system planning. **(08 Marks)**
   b. Write a note on Detailed Project Report. **(06 Marks)**
   c. Discuss in brief the Indian Electricity Rules 1956. **(06 Marks)**

2 a. Briefly explain the desirable options for national action plan. **(10 Marks)**
   b. Define power pooling and mention its advantages and constraints. **(07 Marks)**
   c. What do you understand by power trading? Briefly explain. **(03 Marks)**

3 a. What are the components of rural electrification planning? Briefly explain. **(08 Marks)**
   b. Explain the broad options available for funding by various financial institutions. **(12 Marks)**

4 a. Define algorithm used in computer aided planning. **(02 Marks)**
   b. Briefly explain the important features of algorithm. **(06 Marks)**
   c. What is green house effect? And explain how green houses work. **(04 Marks)**
   d. What are the green house gases? Briefly explain. **(08 Marks)**

PART – B

5 a. Explain the concept of load prediction using regression analysis. **(10 Marks)**
   b. Explain the important aspects of online power flow studies. **(10 Marks)**

6 a. Write a note on computerized management. **(08 Marks)**
   b. Define and explain with schematic diagram the power system simulator. **(12 Marks)**

7 a. Develop an IGA (Improved Generic Algorithm) and its application to least cost generation expansion planning. **(12 Marks)**
   b. What are the constraints observed during optimization process of power system expansion planning? **(08 Marks)**

8 a. Explain the generation expansion planning strategies on power system. **(12 Marks)**
   b. Write note on optimization techniques. **(08 Marks)**

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