

USN

--	--	--	--	--	--	--	--	--	--

10EE761

Seventh Semester B.E. Degree Examination, Dec.2017/Jan.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. Discuss the different planning tool in detail. (10 Marks)
b. Describe the structure of power system indicating the power system components and types. (10 Marks)
- 2 a. Explain National action plan goal briefly. (10 Marks)
b. What is co-generation? Describe the two technique of co-generation. (10 Marks)
- 3 a. What is the need for private participation in generating planning? How can it improve the power situation in India? (10 Marks)
b. Explain the concept of rational tariff in detail. (10 Marks)
- 4 a. Explain the effect of power generation on environment. (10 Marks)
b. Write a note on "Greenhouse Effect". (10 Marks)

PART - B

- 5 a. Explain the load management with diagram. (10 Marks)
b. Write a note on power system simulator. (10 Marks)
- 6 a. Explain in detail reliability planning. (10 Marks)
b. With diagram, explain computerized management. (10 Marks)
- 7 a. Explain the optimization technique for solution, (i) linear programming method (ii) non linear programming method. (10 Marks)
b. Explain least cost optimization problem. (10 Marks)
- 8 a. Explain operating and maintenance cost of thermal power plant using least cost optimization technique. (06 Marks)
b. What are the constraints observed during optimization process of power system expansion planning? (08 Marks)
c. Develop mathematical objectives function of power system expansion planning. (06 Marks)

CMRIT LIBRARY
BANGALORE - 560 037

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.