

7E7041	Roll No. <u>14EEBEED060</u>	Total No of Pages: <u>3</u>
	7E7041 B. Tech. VII Sem. (Main/Back) Exam., Nov. – Dec. - 2017 Electrical & Electronics Engineering 7EX1A Power System Planning EE, EX	

Time: 3 Hours

Maximum Marks: 80
Min. Passing Marks: 26

Instructions to Candidates:

Attempt any five questions, selecting one question from each unit. All questions carry equal marks. Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly.

Units of quantities used/calculated must be stated clearly.

*Use of following supporting material is permitted during examination.
(Mentioned in form No. 205)*

1. NIL

2. NIL

UNIT-I

Q.1 (a) Mention and Explain factors affecting the load of utility in forecasting modeling. [8]

(b) Explain strategic planning, long term planning and short term planning? [8]

OR

Q.1 (a) Explain Integrated Resource planning with respect to power generation planning. [8]

(b) Explain the power system planning process. Enumerate the cyclical component of planning. [8]

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UNIT-II

- Q.2 (a) Write a note on Reactive load forecast. [8]
(b) Explain the concept of dispatchability in power system planning. [8]

OR

- Q.2 (a) Discuss in brief Rational Tariff [8]
(b) Explain the strategies for transmission system Expansion in India [8]

UNIT-III

Q.3 Write down short notes on:

- (a) Computerized management [4]
(b) Load prediction [4]
(c) Reactive power balance [4]
(d) Load management [4]

OR

- Q.3 Explain Quality of supply for power system planning. [16]

UNIT-IV

- Q.4 Explain the green house effect and its technological Impacts. [16]

OR

- Q.4 What is Insulation coordination? Explain the principles of Insulation coordination [16]

UNIT-V

Q.5 Explain the strategy for transmission. Expansion in a power system

[16]

OR

Q.5 Write short notes on:

(a) Operating and maintenance cost of candidate plant

[8]

(b) Least cost optimization problem for thermal plant

[8]

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