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Total No. of Pages : 01

Total No. of Questions : 08

M.Tech. (EE) (2018 & Onwards EL-II) (Sem.-1)
ELECTRIC POWER DISTRIBUTION SYSTEM

Subject Code : MTEE-104B-18

M.Code : 75222

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. Attempt any FIVE questions out of EIGHT questions.
 2. Each question carries TWELVE marks.
 3. Unless stated otherwise the symbols have their usual meanings in context with subject. Assume suitably and state, additional data required, if any.
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1. Explain the distinctive features of distribution system in India. With the help of schematic diagram explain its salient features. Discuss its merits over transmission system.
 2. a) Classify different types of power loads. Discuss its modeling.
b) Define RTU. Explain various objectives of Distribution Management System.
 3. a) Explain automatic meter reading system with the help of block diagram.
b) Explain Regression analysis and correlation
 4. Explain optimization. Give its significance in context to the power system problems. Enumerate some of the power system optimization problems. Name the techniques to solve these problems. Explain mathematical formulation of power system problem for optimization with at least one objective and different system constraints.
 5. What is the significance of load forecasting? Explain any two techniques of load forecasting.
 6. Explain the network reconfiguration of distribution system with the help of suitable diagram. Formulate optimal switching placement problem for radial distribution system with objective function and its associated constraints.
 7. What is SCADA? Explain different functions of SCADA in power system automation.
 8. Discuss about the following :
 - a) Energy efficiency in electrical distribution and monitoring
 - b) Integration of control and communication devices in smart distribution system.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.