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Total No. of Pages : 01

Total No. of Questions : 08

M.Tech. (EE) (2018 & Onwards) (Sem.-1)

**POWER SYSTEM ANALYSIS**

Subject Code : MTEE-101-18

M.Code : 75215

Time : 2 Hrs.

Max. Marks : 30

**INSTRUCTIONS TO CANDIDATES :**

1. Attempt any FIVE question(s), each question carries 6 marks.

1. Discuss in brief the Gauss-Seidel method for load flow studies with its merits and demerits.
2. Explain in details how discrete variables in load flow are handled?
3. Write a detailed note on generalized method of fault analysis.
4. What do you mean by security state diagram? Explain how contingency analysis is carried out for enhancing the security of the system?
5. Define Line Outage Distribution Factor and Overload Index Ranking with suitable examples.
6. What's the need of State Estimation? Discuss different sources of errors in measurement.
7. What are main reasons for collapse of voltage in a power system? How the voltage collapse is avoided in the system? Discuss.
8. Write short notes on the following :
  - a) Bad data correction
  - b) Voltage collapse proximity indices