

**B.Tech. ELECTRICAL ENGINEERING
(BTELVI)**

Term-End Examination

December, 2013

BIEEE-010 : POWER SYSTEM RELIABILITY

Time : 3 hours

Maximum Marks : 70

Note : *Attempt any seven questions.*

Each question carry equal marks.

-
-
1. Explain contingency analysis for interconnectors. 10
 2. What are the different components of reliability ? 10
Explain hazard rate.
 3. Explain the basic concept of probability theory. 10
What are the rules combining probabilities of event ? Explain it.
 4. Explain the two systems with Tie - Probability Array Methods. 10
 5. (a) Explain Rapid Start Unit. 7
(b) Explain Hot Reserve. 3
 6. (a) What is Industrial System ? 4
(b) How the security function approach works ? 6
 7. What is Frequency Duration Method ? Explain in detail. 10

8. Write the short notes on the following : **2x5=10**
(a) UC Ricks
(b) PJM Method.
9. What is Generator System Models and why it is required ? Explain the concept of the “ Three Phase Modelling”, **10**
10. How the load transfer effect the power system reliability ? Explain it. **10**
-