

Code: **EEPC2T1**

I M.Tech - II Semester - Regular Examinations – AUGUST 2016

**POWER SYSTEM DYNAMICS & STABILITY
(POWER SYSTEM CONTROL AND AUTOMATION)**

Duration: 3 hours

Max. Marks: 70

Answer any FIVE questions. All questions carry equal marks

1. Briefly explain the computer representation for excitation and governor systems. 14 M
2. Define steady state stability. Distinguish between steady state and transient stability. 14 M
3. Explain the state space representation of synchronous machine connected to infinite bus and discuss its stability by eigen value approach. 14 M
4. Briefly explain the Digital Simulation of transient stability. 14 M
5. Briefly explain the multi machine transient stability under different faulted conditions. 14 M
6. Discuss about effect of governor action and exciter on power system stability. 14 M

7. Explain the Rotating main and pilot Exciters with indirect acting Rheostatic type voltage Regulator. 14 M
8. Write short notes on 14 M
- a) Static excitation scheme
 - b) Brushless excitation system.