

Code: EEPC2T1

I M.Tech - II Semester - Regular Examinations - December 2013

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

Duration: 3 hours

Marks: 5x14=70

Answer any FIVE questions. All questions carry equal marks

1. Explain computer representation for excitation and governor systems. 14 M
2. Draw system model for single machine and explain analysis of steady state stability. 14 M
3. Discuss synchronous machine stability by eigen value approach. 14 M
4. Derive equations to simulate transient stability. 14 M
5. Discuss about Multi Machine Stability in detail under faulted condition. 14 M
6. Discuss in detail about effect of saturation of stability. 14 M

7. Explain the functioning of rotating self excited exciter with neat diagram. 14 M

8. Discuss about rotating main exciter with neat diagram. 14 M