PVP 17

Code: 17**EEPC2T3**

I M.Tech - II Semester - Regular Examinations - AUGUST 2018

REAL TIME CONTROL OF POWER SYSTEMS
(POWER SYSTEM & CONTROL)

Duration: 3 hours Max Marks: 60

Answer the following questions.

1. a) Explain weighted least square method of state estimation in power systems. 10 M

   b) Mention few limitations of static state estimation in real time monitoring of power systems. 5 M

(OR)

2. a) Describe the role of state estimation in carrying out EMS functions in a power system. 5 M

   b) Explain detection and identification of bad data in state estimation. 10 M

3. List & explain the major functions of power system security. 15 M

(OR)

4. a) Define & explain security assessment in power systems. 5 M

   b) Explain Contingency analysis by DC model. 10 M

5. a) Explain the need of real time control of power systems. 8 M

   b) Mention the functions of power system control centers. 7 M

(OR)

6. a) Explain the role of SCADA in real time control of power systems. 10 M

   b) Mention few limitations of SCADA systems. 5 M

7. a) Explain the need of synchronized phasor measurements in power systems. 10 M

b) List few applications of PMU in power systems. 5 M

(OR)

8. a) State & explain the steps to be taken to prevent voltage collapse. 8 M

b) Explain voltage stability analysis using PV curves. 7 M