DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE - RAIGAD - 402 103 Summer Semester Examination - May - 2018

Branch: M.Tech. (Electrical Power System) Semester: II Subject with Subject Code:- Power System Dynamics and Control (MTEPS201) Time:3 Hrs. Date:- 14/05/2018 Marks: 60 **Instructions to the Students** 1. Each question carries 12 marks. 2. Attempt all questions. (Marks) **Q.1.** Draw the functional block diagram of excitation system and explain all the elements in detail. (12)Q.2. Derive stator equations for small signal stability analysis of single machine infinite bus (12)System. **Q.3.** What is power system stabilizer? Why is it used? Explain its tuning procedure. (12) **Q.4.** Explain in detail the effect of AVR on synchronizing and damping torque components. (12)OR (12)**7.4.** Explain any one technique of analysis of very large systems. Q.5. Explain operation of delta - omega and delta - P - omega stabilizers in detail and (12)compare them. OR **O.5.** Explain various design criteria in connection with digital stabilizer. (12)