

EX-702

B. E. (Seventh Semester) EXAMINATION, Dec., 2011

(Electrical & Electronics Engg. Branch)

COMPUTER APPLICATION TO POWER SYSTEM

Time : Three Hours Maximum Marks : 100 Minimum Pass Marks : 35

Note: Attempt any five questions. All questions carry equal marks

1. (a) Write a brief note on line loadability.
(b) What do you understand by capability curves of alternator ?
2. (a) How do you control the load bus voltage using reactive power control devices ?
(b) Write short notes about the following :
 - (i) SVC
 - (ii) SVS
3. (a) What do you understand by regulated shunt compensation ?
(b) Distinguish between series and shunt compensation.
4. (a) Explain general sensitivity relations,
(b) Write short notes about the following :
 - (i) Generation shift distribution factor
 - (ii) Line outage distribution factor
5. (a) What do you understand by power system security ?
(b) Describe contingency analysis.
6. (a) Discuss the voltage and angle stability.
(b) Explain the PV curve for voltage stability assessment.
7. (a) How does the series compensation affect the voltage stability ?
(b) Explain the effect of load models on voltage stability.
8. Write short notes about the following :
 - (i) Pre and Post Contingency
 - (ii) Corrective load re-scheduling.
 - (iii) Security level