

SUBJECT CODE NO: E-8118
FACULTY OF ENGINEERING AND TECHNOLOGY
M.E. (Electrical Power Systems) Examination Nov/Dec 2017
Elective-II: Special Topics in Power System
(Revised)

[Time: Three Hours]

[Max.Marks:80]

Please check whether you have got the right question paper.

- N.B
- i) Solve any two questions from each section.
 - ii) Assume suitable data, if necessary.
 - iii) All questions carry equal marks.

Section A

- Q.1 a) Define the term power quality & describe in detail power quality problems in distribution system. 10
- b) Define harmonics. Explain in detail harmonics creating loads & harmonics propagation in system. 10
- Q.2 a) Explain in details series & parallel resonance in Power system. 10
- b) Define reliability related to Power system & explain general reliability functions. 10
- Q.3 a) Explain in detail Marko process 10
- b) Explain in detail recursive Techniques 10

Section B

- Q.4 a) Explain in details various functions of SCADA system. 10
- b) Explain in details Various SCADA Configurations. 10
- Q.5 a) Explain in details common features to all SCADA systems. 10
- b) What is SCADA system? Explain in detail its necessity & benefits considering historical review of Power system. 10
- Q.6 a) Explain in detail integration of measurement, Control & Protection functions By SCADA Systems. 10
- b) Explain in detail requirement of alarm function & Controlling actions/ measures By SCADA System. 10