

9. (a) What is ALOHA ? Explain CSMA protocol in detail.

6

(b) Explain LAN in detail.

7

OR

10. (a) Explain TCP/IP model.

7

(b) Explain CSMA/CD protocol.

6

11. Explain various data acquisition systems in power system.

14

OR

12. Design microprocessor based instrument system in power system.

14

Faculty of Engineering & Technology
Seventh Semester B.E. (Electrical Engg.) (C.B.S.)
Examination
ELECTIVE-I : I.T. & ITS APPLICATION IN
POWER SYSTEM CONTROL

Time—Three Hours]

[Maximum Marks—80

INSTRUCTIONS TO CANDIDATES

- (1) All questions carry marks as indicated.
- (2) Solve Question No. **1** **OR** Questions No. **2**.
- (3) Solve Question No. **3** **OR** Questions No. **4**.
- (4) Solve Question No. **5** **OR** Questions No. **6**.
- (5) Solve Question No. **7** **OR** Questions No. **8**.
- (6) Solve Question No. **9** **OR** Questions No. **10**.
- (7) Solve Question No. **11** **OR** Questions No. **12**.
- (8) Assume suitable data wherever necessary.

(9) Illustrate your answers wherever necessary with the help of neat sketches.

(10) Use of non-programmable calculator is permitted.

1. (a) How Data Acquisition and Supervisory Control helps in Power System ? 6
- (b) What are the real time issues on signal transmission and control ? 7

OR

2. (a) What are the different Intelligence System for monitoring of Power System ? 7
- (b) How power flow can be controlled in Real Time Process ? 6
3. (a) Explain the concept of Energy Auditing in modern power system. 7
- (b) Write in detail, lux meter and thermocouple based temperature indicator in case of Energy Auditing. 7

OR

4. (a) What is the need of Energy Conservation and Management ? 7
- (b) Explain terms, Return on Investment and Payback Period related to Energy Conservation. 7
5. (a) Explain objective of Energy Management for Energy Conservation. 6
- (b) Explain Energy Conservation and Management in Unix Software. 7

OR

6. How software plays important role in Energy Management System ? 13
7. (a) Explain data communication using RS 232 based system. 6
- (b) Explain distributed measurement system in detail. 7

OR

8. Explain IEEE-488 protocol in detail. 13