B.E. (Electrical Engineering (Electronics & Power)) Seventh Semester (C.B.S.)

Elective – I : IT and its Applications in Power System Control

P. Pages : 2 **TKN/KS/16/7548**

Time : Three Hours * 1 0 3 8 * Max. Marks : 80

Notes :
1. Solve Question 1 OR Questions No. 2.
2. Solve Question 3 OR Questions No. 4.
3. Solve Question 5 OR Questions No. 6.
4. Solve Question 7 OR Questions No. 8.
5. Solve Question 9 OR Questions No. 10.
6. Solve Question 11 OR Questions No. 12.
7. Assume suitable data whenever necessary.
8. Diagrams and chemical equations should be given whenever necessary.
9. Illustrate your answers whenever necessary with the help of neat sketches.
10. Use of non programmable calculator is permitted.

1. a) What are the different Intelligence tools for monitoring power system. **6**

b) How communication helps in Industrial Automation system. **7**

OR

2. a) How Power flow can be controlled in real time process. **7**

b) How supervisory control helps in power system. **6**

3. a) Explain the role of Energy auditing in power system. **7**

b) Write in detail, lux meter & thermocouple based temperature indicator in case of Energy auditing. **7**

OR

4. a) What are the different procedure for carrying out of Energy Audit. **7**

b) On what parameter any industrial energy audit is done. **7**

5. Explain objective of Energy management for Energy Conservation. Explain in detail what are the multi – objective scheme for Energy management. **13**

OR

6. a) Explain objective of Energy management for Energy Conservation. **7**

b) Explain energy conservation & management in Unix Software. **6**

7. Explain IEEE – 488 protocol in detail. **14**

OR

8.	a)	Explain data communication using RS232 based system.	**7**
	b)	Explain Distributed measurement system in detail.	**7**
9.	a)	What are the IEEE – 802 standards available for LAN.	**6**
	b)	What is ALOHA? Explain CSMA protocol in detail.	**7**

OR

10.	a)	Explain LAN in detail.	**7**
	b)	What are different topologies available for LAN.	**6**
11.	a)	Write in brief note on microprocessor based control of instrumentation in Industrial application.	**7**
	b)	Explain advantage & disadvantages of Data acquisition system for industrial application.	**6**

OR

12.		Explain various data Acquisition system in power system control.	**13**

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