2006 JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

I V B.TECH I I SEMESTER SUPPLEMENTARY EXAMINATIONS
REAL TIME CONTROL OF POWER SYSTEMS
(ELECTRICAL & ELECTRONIC ENGINEERING)

APRIL/MAY 2006

TIME 3 HOURS
MARKS: 80

Answer any FIVE Questions
All Questions carry equal marks

1. (a) Explain the construction and functioning of mimic boards.

(b) With neat diagram explain the functioning of traditional control rooms with mimic boards.

2. (a) With neat sketch explain indications from level monitoring.

(b) Explain trend monitoring.

3. (a) Why it is necessary of subdivision of system parts at Operator's console? And how it is sub divided?

(b) What are the different alarms provided in Operator's console room? What is function of them?

4. (a) Explain the structure of real time computer control system.

(b) Explain the general construction of single chip computer.

5. (a) What is interconnected energy accounting? How it is helpful in economics of power system operation.

(b) Explain spinning reserve and operating reserve.

6. (a) What are the different approaches in load prediction technique?

(b) What is B-coefficient method? What are the assumptions made in this method?

7. (a) Explain consumer interface automation?

(b) What are the purposes served by DA apart from distribution and control of power.

8. (a) What are the different means of electricity theft? Give some suggestion to prevent power theft.

(b) What is High Voltage Distribution Circuit? What is its importance in today's distribution system?