



(Pages : 2)

6081

Reg. No. :

Name :

**Fifth Semester B.Tech. Degree Examination, November 2011
(2008 Scheme)**

08.504 : INDUSTRIAL ELECTRONICS (MP)

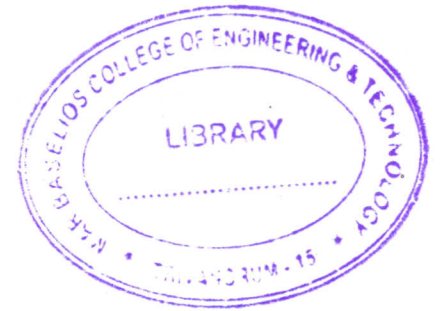
Time : 3 Hours

Max. Marks : 100

PART – A

Answer **all** questions. **Each** question carries **4** marks.

1. Explain the working of SCRs.
2. Explain the working principle of APD.
3. Explain the working of photovoltaic cell
4. Explain the working of LED.
5. Discuss about various addressing modes of 8051.
6. Discuss about different memories used in microcontrollers.
7. Which are the various registers used in microcontrollers ? Explain.
8. Distinguish between open loop and closed loop control system.
9. Distinguish between rise time, delay time and peak time.
10. What is the need for stability of a system ? **(10×4=40 Marks)**



PART – B

Answer **any one** question from **each** Module. **Each** question carries **20** marks.

MODULE – I

11. Explain the structure and working of power B.J.T. Give some applications.
12. Explain the working of single phase bridge convertes with necessary diagram.
13. Explain the principle of induction heating and dielectric heating with necessary diagrams.

P.T.O.



MODULE – II

14. Explain the data acquisition system with the help of block diagram.
15. Explain the architecture of 8051.
16. Explain the working of any one type of ADC.

MODULE – III

17. Find the transfer function of open loop and closed loop control system with the help of example.
18. Explain the principle of PID controller with the help of example.

19. a) Define and explain the term gain margin and phase margin. **10**
- b) With block diagram explain the principle of a closed loop control system. **10**

(3×20=60 Marks)
