

Reg. No. _____

Karunya University

(Declared as Deemed to be University under Sec.3 of the UGC Act, 1956)

End Semester Examination – May / June 2009

Subject Title: ELECTRONICS AND MICROPROCESSORS

Time : 3 hours

Subject Code: EC213

Maximum Marks: 100

Answer ALL questions

PART – A (10 x 1 = 10 MARKS)

1. What is the output frequency in full wave rectifier, if the input frequency is 50 Hz?
2. A transistor has ----- PN junction
3. Define photodiode
4. Sensitivity of a multimeter is given in -----
5. $(100)_{10} = (\text{-----})_{16}$
6. Give the graphic symbol of XOR
7. Define microprocessor
8. What is the format of an Assembly language program ?
9. List out any two Output devices
10. What is DMA?

PART – B (5 x 3 = 15 MARKS)

11. What is the need for filter circuit?
12. What is thermistor?
13. Write the truth table of NOR and AND gate
14. Write a program to add two 8 bit numbers.
15. Define ROM, RAM and EPROM

PART – C (5 x 15 = 75 MARKS)

16. a. Describe the operation of Fullwave rectifier with neat diagram (8)
b. Write short notes on Class B Power amplifier (7)
(OR)
17. Explain the operation of Push full amplifier
18. Describe the working principles of CRO
(OR)
19. With neat block diagram explain working of loud speaker
20. a. Which gates are called as universal gates? Why? Explain with example (8)
b. Explain about Multiplexers (7)
(OR)
21. With neat diagram explain Half Adder and full adder
22. Describe about the different addressing modes of 8085
(OR)
23. Explain the Architecture of 8085 with neat diagram
24. How DMA is used to transfer the data? With neat block diagram Explain DMA.
(OR)
25. How microprocessor is used to control Traffic light? Explain