R13

Code No: 811AB

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MCA I Semester Examinations, August - 2017
COMPUTER ORGANIZATION

Time: 3hrs **Max.Marks:60**

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 20 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 8 marks and may have a, b, c as sub questions.

PART - A

5 × 4 Marks = 20

1.a) What is the use of K-map? Give example. [4]
b) What is ROM? List and explain different types of ROM. [4]
c) Define interrupt. How are interrupts handled? [4]
d) What is the difference between memory mapped I/O and isolated I/O? [4]
e) What is an Inter process communication? How multiprocessors communicate each other? [4]

PART - B

5 × 8 Marks = 40

2. What do you mean by decoder? Explain about three-eight- line and two-four-line decoders with their logic diagrams and truth tables. [8]

OR

3.a) What is a flip-flop? List and explain some of the flip-flops.
b) What is shift register? Explain bidirectional shift register with parallel load. [4+4]

4. Explain in detail about memory connection to CPU. [8]

OR

5. Write short notes on:
a) Direct mapping
b) Set-associative mapping. [4+4]

6. Explain different data transfer instructions for 8086 microprocessor. [8]

OR

7. Discuss about assembler directives. [8]

8. Discuss about programmed I/O and interrupt driven I/O. [8]

OR

9. Explain briefly about priority interrupts. [8]

10. Write short notes on:
a) RISC pipeline
b) Vector processing. [4+4]

OR

11. Explain the concept of pipelining. [4+4]

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