

Exam.Code:0921

Sub. Code: 6836

1129

B.E. (Information Technology)

Third Semester

ITE-375/344/304: Computer Architecture and Organization

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

I. Explain following terms:-

- a) SELD
- b) Memory mapped I/O
- c) DMA controller
- d) Program Interrupt
- e) Effective address

(5x2)

UNIT - I

- II. Explain with the help of flowchart how particular type of instruction can be determined. (10)
- III. With the help of circuit diagram explain the working of microprogram sequencer for control memory. (10)
- IV. a). Evaluate the arithmetic expression. $X=(A+B)*(C+D)$ using
 - i) one address instruction
 - ii) Two address instruction
 - iii) Zero address instruction
 b) Differentiate between RISC and CISC processors. (6,4)

UNIT - II

- V. Explain in detail the various methods used to establish priority of simultaneous interrupts. (10)
- VI. Under what situation virtual memory is needed? How address mapping is done using pages in case of virtual memory? (10)
- VII. How multistage switching network can be constructed? How path from source to destination is determined in multistage switching network? (10)

x-x-x