(5,5)

Exam. Code: 0921 Sub. Code: 6836

## 1128

## Bachelor of Engineering (Information Technology) 3<sup>rd</sup> Semester

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

Time allowed: 3 Hours Max. Marks: 50 Note: Attempt any five questions, including Question No. 1 which is compulsory and selecting two questions each from Unit I-II. I. Attempt the following questions: Differentiate between Direct and Indirect address. a) What are the various instruction formats? b) c) Explain the terms hardwired and microprogrammed control. d) Explain the term microinstruction and microprogram. e) What is the purpose of various addressing modes? f) Explain the terms strobe and handshaking. Define the term locality of reference. g) h) Define the term virtual memory. i) Define the term Associative memory. What are the various interconnection structures?  $(10 \times 1)$ j) UNIT-I II. Write notes on the following:a) Common Bus System b) General Register Organization. (5,5)III. a) What do you understand by RISC? What are the characteristics of these systems? What is the purpose of addressing modes? Explain various addressing b) techniques. (5,5)IV. a) What are the various Data Transfer and Data Manipulation instruction? b) Explain the block diagram for a Microprogram sequencer. (5,5)UNIT-II V. a) What is associative memory? Explain the Block diagram of associative memory. b) Explain the Daisy Chaining Priority in detail. (5,5)VI. Explain the time-shared common bus interconnection structures. a) b) What is memory management Hardware? (5,5)VII. Write notes on the following:a) Interrupt initiated I/O

b)

Virtual Memory