

Code No: **R41021****R10****Set No. 1****IV B.Tech I Semester Supplementary Examinations, February/March - 2018****COMPUTER ORGANIZATION**
(Electrical and Electronics Engineering)**Time: 3 hours****Max. Marks: 75****Answer any FIVE Questions**
All Questions carry equal marks

- 1 a) What are different types of computers? Explain applications of each type of computer. [5]
b) What is a bus? What is its use? Explain different types of buses that are used in computers. [5]
c) Explain the floating point representation of numbers. [5]
- 2 a) What are micro operations? Discuss Arithmetic micro operations, Logic micro operation and Shift micro operations. [10]
b) What are registers? Explain the use of accumulator and program counter registers used in computers. [5]
- 3 a) What is a Reduced Instruction set computer? Discuss its properties. [7]
b) What is a stack? What is the need for stack memory in computers? Discuss the organization of stack. [8]
- 4 a) Compare between hardwired control and microprogrammed control. Discuss the use of control memory. [9]
b) What is a micro program? Explain with an example. [6]
- 5 a) Compare between static RAMs and dynamic RAMs. [4]
b) What type of memory used for secondary storage? Why? Explain the construction of hard disk. [4]
c) What is a cache memory? How is it improves the performance of the computers. [7]
- 6 a) What is the need for input output interface? Explain. [4]
b) What are interrupts? Briefly explain. [4]
c) What is DMA? What are its advantages? Explain the working of DMA. [7]
- 7 a) What is parallel processing? Explain the RISC Pipeline. [8]
b) What is Vector Processing? Explain. [7]
- 8 What are advantages and applications of multiprocessor systems? List and explain various interconnection structures for multiprocessors. [15]