Half Yearly Examination 2020-21
BSc 2nd Year (Computer Science)
Hardware
Paper First

Max.M. = 50

Note: - Attempt any two questions in each unit. Each question has equal marks.

Unit I
1. Define analog and digital computer. Write the characteristic of computer.
2. What is the purpose of providing registers in a CPU? Explain its various types.
3. Define the following with suitable example (any two) :-
   a) Word length and processing speed
   b) Flynn's classification
   c) Discuss terminals
   d) Parallel processing

Unit II
1. Write short notes on the following:
   a) Discuss interrupts
   b) Instruction format
   c) Structure of CPU organization.
2. Draw and explain the timing diagram for memory write cycle for INTEL 8085
3. What do you mean by addressing mode? Explain any four addressing modes.

Unit III
1. What do you mean by cache memory? Explain utility of virtual memory.
2. Compare primary memory and secondary memory with suitable example.
3. Explain the following terms(any two) :
   a) MMU
   b) memory controller
   c) Semiconductor memory

Unit IV
1. What do you mean by processor? Explain arithmetic processor in brief.
2. What are the different types of plotters? Discuss their working principal.
3. Write short notes on the following(any two):
   a) printer
   b) Microcontroller
   c) Serial data transfer

Unit V
1. What is software? Explain software development process.
2. What is operating system and describe the types and function of O/S?
3. Write short notes on the following(any two):
   a) Computer language
   b) Flow chart
   c) Debugging
   d) Program design.

===0===