Roll No ....

CS-4002-CBGS

B.E. IV Semester

Examination, June 2020

Choice Based Grading System (CBGS)
Computer System Organization

Time : Three Hours

Maximum Marks : 70

Note: i)   Attempt any five questions.
ii) All questions carries equal marks.

1. a)   What is Instruction cycle? Explain different phases of instruction cycle and show flow chart for instruction cycle.

   b)   Draw and explain typical hardwired control unit.

2. a)   What do you mean by Addressing modes? Explain various categories of addressing modes with example of each.

   b)   Draw the functional and structural views of a computer system and explain in detail.

3. Explain PUSH and POP instructions. Differentiate infix and postfix notation with an example.

4. If cache access time is 100ns, main memory access time is 1000ns and the hit ratio is 0.9. Find the average access time and also define hit ratio.

5. Describe the Von Neumann Model and explain the functioning of its components.

6. Explain various types of addressing modes with an example.

7. a) Define micro program sequencer. What are its functions? Differentiate hardwired and micro programmed control unit.

   b) Explain the process of 2's complement method of subtraction with a suitable example.

8. Write short notes on any two of the following
   a) Cache mapping schemes
   b) PCI and SCSI bus
   c) Reverse Polish notation
   d) Flynn's taxonomy

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