

[Total No. of CO's 04]

Seat No:

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**G. H. Raisoni College of Engineering and Management, Pune.**  
(An Autonomous Institution Affiliated to Savitribai Phule Pune University)  
**S.Y B. Tech (Computer ) (Term-III)**  
**Vacation Exam Winter-2020 (2019 Pattern)**  
**COMPUTER ARCHITECTURE & ORGANIZATION (BCOL19201)**

[Time:1.5 Hours]

[ Max. Marks 30]

**COURSE OUTCOME:**

1. Describe fundamental units of Computer System
2. Analyze organization and design of memory system
3. Identify different ways of communicating with I/O devices and interfaces
4. Analyze the working of serial and parallel system

**Instructions to the candidates:**

- 1) (CO1/CO2/CO....)at the beginning of question/sub question indicates the course outcome related to the question.
- 2) All questions compulsory.
- 3) Neat diagrams must be drawn wherever necessary.
- 4) Figures to the right indicate full marks.
- 5) Assume suitable data, if necessary.

CO1 a) Draw and explain in details Instruction execution Cycle? [5]

a) List out Addressing mode and explain any 4 modes with examples? [5]

CO2 b) Demonstrate Booths multiplication for given example? e.g.  $(-6 \times 3)$  [4]

c) Solved example using Single and double precision  $(10.125)_2$ ? [4]

CO3 a) Differentiate between Hardwired and micro programmed control unit? [4]

b) Draw and explain working of Symmetric multiprocessor? [4]

CO4 a) Describe and explain working of RISC processor? [4]