

G. H. Raisoni College of Engineering and Management, Pune.  
(An Autonomous Institution Affiliated to Savitribai Phule Pune University)  
S.Y B. Tech (Computer /ENTC Engineering ) (Term-III)  
ESE 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) List out Addressing mode and explain any 4 modes with examples? [5]
- CO2 a) Demonstrate Booths multiplication for given example? e.g.  $(-5 \times -3)$  [5]
- CO2 b) Solved example using Single and double precision  $(12.125)_2$ ? [4]
- CO3 a) Explain working of micro programmed control unit? [4]
- CO3 a) Draw and explain multiprocessor organization? [4]
- CO3 b) Draw and explain working of pipeline of processor? [4]
- CO4 a) Write Difference between RISC and CISC processor? [4]

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