

Total No. of Questions – [3]

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G.R. No.	
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Paper Code – U239-144(T1)

OCTOBER 2019/ INSEM (T1)

S. Y. B.TECH. (IT) (SEMESTER – III)

COURSE NAME: COMPUTER ORGANIZATION

COURSE CODE: ITUA21184

(PATTERN 2018)

Time: [1 Hour]

[Max. Marks: 20]

(*) Instructions to candidates:

- 1) All questions are compulsory.
- 2) Figures to the right indicate full marks.
- 3) Use of scientific calculator is allowed.
- 4) Assume suitable data where ever required.

Q 1) Attempt any **one**

- a) Draw Von Neumann Architecture(IAS) and explain it in [8]
detail
- b) Recognize the priority of main structural components [8]
computer and justify it with the help of their functionalities.

Q 2) Attempt any **one**

- a) Multiply -7 and -3 using booth's algorithm. Register size=4 [8]
bits.
- b) Perform the division using restoring division algorithm. [8]
Dividend =1011; Divisor=0011

Q 3) Attempt any **one**

- a) Differentiate between superscalar and super pipelined [4]
- b) Draw and explain the micro programmed control unit with [4]
suitable example.