



24/3/2018

DOON UNIVERSITY, DEHRADUN

Department of Computer Science, School of Physical Sciences

Integrated M.Sc. (Computer Science), Second Semester

Mid Semester Examination, 2018

CSC-152: Computer Architecture

Time Allowed: 2 Hours

Maximum Marks: 30

SECTION: A (Short Answer Type Questions)

(Total Marks: 3X2=6)

Q.1 Attempt any three questions.

- What is register transfer language?
- What is an immediate addressing?
- What is the role of Program counter?
- What are overflow and underflow conditions for adding two integers in 2's complement representation?

SECTION: B (Long Answer Type Questions)

(Total Marks: 3X4=12)

Q.2 Attempt any three questions.

- What do you mean by floating point arithmetic?
- Explain Von Neumann computer architecture.
- Discuss common bus system with its hardware implementation.
- What is instruction format?

SECTION: C (Very Long Answer Type Questions)

(Total Marks: 2X6=12)

Q.3 Attempt all questions.

- Explain Booth's multiplication algorithm with a suitable example.
- Explain Arithmetic, logic and shift micro-operations.