JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
SUMMER MID TERM EXAMINATION- JUNE -2018
B.Tech VI Semester

COURSE CODE: 10B11CI613   MAX. MARKS: 50

COURSE NAME: Computer Organization & Architecture

COURSE CREDITS: 04   MAX. TIME: 2 HRS

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.

1. What do you mean by ENIAC and EDVAC? How they differ with each other? Give example of two most intelligent computing machines. Explain John Von Neumann model of computers with suitable diagram. [2+2+6]

2. State and explain Amdahl's law with suitable mathematical derivation. What is law of diminishing returns? [7+3]

3. What do you mean by a system bus? Explain the role of data, address and control bus in a computer functioning. How width of data and address bus signifies the word length and memory capacity in a computer system? [2+5+3]

4. What is instruction execution cycle? Explain all its stages with suitable diagram. [3+7]

5. What do you mean by an interrupt? How multiple interrupts are handled in computers? [3+2]

6. Differentiate between a. computer organization and computer architecture b. hardwired and micro programmed control [2.5+2.5]