# JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

## TEST-1 – September 2017

### B.Tech CSE 6th Semester

COURSE CODE: 10B11CI613      MAX. MARKS: 15

COURSE NAME: Computer Organisation and Architecture

COURSE CREDITS: 04      MAX. TIME: 1 Hrs

*Note: All questions are compulsory. The carrying of mobile phone during examinations will be treated as a case of unfair means.*

1. (a) What is the difference between Computer Organization and Computer architecture?

   (b) Explain the four main structural components of computer:

       i.    Central Processing Unit (CPU)

       ii.    Main Memory

       iii.    I/O

       iv.    System Interconnection

   (c) Draw and explain the partial flow chart of IAS operation.     [1+2+2]

2. (a) Draw and explain the Possible Organization of an Embedded Systems.

   (b) What is the difference between Acorn RISC Machine and x86 architecture?

   (c) State Amdahl's Law for microprocessors.     [2+2+1]

3. (a) Draw and explain Computer Components: Top Level View

   (b) Explain Instruction Cycle State Diagram

   (c) Explain Instruction Cycle State Diagram With Interrupts.     [2+1+2]

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