JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- September 2019

M.Tech. I Semester

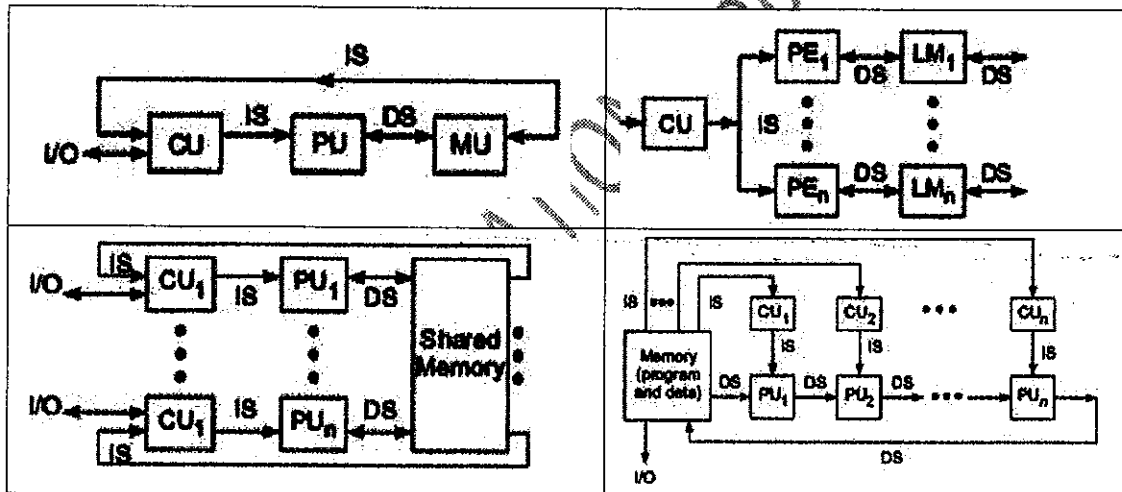COURSE CODE: 10M11CI114   MAX. MARKS: 15

COURSE NAME: HIGH PERFORMANCE COMPUTER ARCHITECTURE

COURSE CREDITS: 03   MAX. TIME: 1 Hr

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

1. (a) What are the Elements of Modem Computers?

   (b) Explain the following Flynn's Classifications of computer architecture.

2. (a) Explain the following System Attributes to Performance
   i. Clock Rate and CPI
   ii. Performance factors versus System Attributes
   iii. MIPS Rate
   (b) What are the two approaches of parallel programing? Explain with flow chart

3. What is the difference between Multiprocessor and Multicomputer? Explain the following architectures:
   i. Two NUMA models for Multiprocessor SYSTEMS
   ii. Generic model a massage passing Multicomputer