JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- 2026

B.Tech-V Semester (ECE)

COURSE CODE (CREDITS): 25B11EC515 (3) MAX. MARKS: 15

COURSE NAME: MICROCONTROLLERS AND COMPUTER ARCHITECTURE

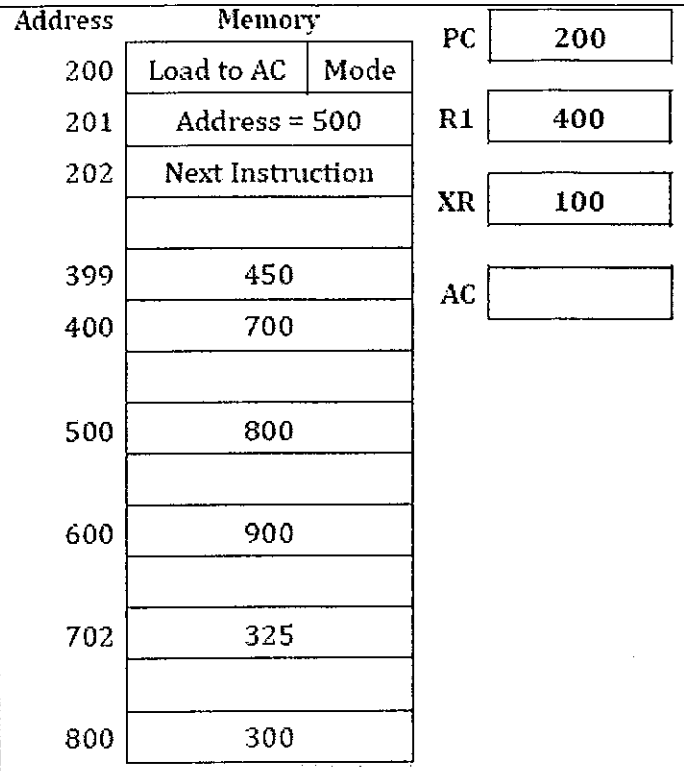
COURSE INSTRUCTOR: Er. Munish Sood MAX. TIME: 1 Hour

Note: *(a) All questions are compulsory.*

(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

(c) Use of calculator is not allowed

Q.No	Question	CO	Marks
Q1	Using common bus system execute the following single operand instruction $Y = (a * b) - (c * d)$ with the help of different registers used in Computer organization.	1	3
Q2	Perform the following shift operations on the word 10101111. a) Arithmetic Shift Right with count 1 b) Rotate right through carry c) Logical Shift Left	1	3
Q3	Consider the current state of a memory stack organization. Memory is having first instruction to load AC. Mode will specify the addressing mode to get operand. Address field of instruction is 500. Find out the effective address of operand and operand value by considering a) Immediate addressing mode. b) Indirect addressing mode. c) Relative addressing mode. d) Index addressing mode. e) Auto-increment addressing mode.	2	5

			
Q4	How are priority interrupts handled in Computer architecture? Differentiate Software polling and daisy chaining method.	2	4