JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT
TEST -1 EXAMINATION- 2025
BCA-I SEMESTER

COURSE CODE (CREDITS):25BC1MA111

MAX. MARKS: 15

COURSE NAME: DIGITAL LOGIC

COURSE INSTRUCTORS:SRT

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

Q.No	Question	CO	Marks
Q1.	Define the following terms- a. Digital circuits and Analog circuits b. States in a digital system c. Mechatronics	CO-1	3
Q2.	Convert the following decimal numbers to their binary equivalent- a. $(82)_{10}$ b. $(160)_{10}$ c. $(54.6875)_{10}$ d. $(27.1875)_{10}$	CO-1	4
Q3.	Convert the following fractional binary numbers to their decimal equivalent- a. $(110011.10011)_2$ b. $101010101010.1)_2$	CO-1	4
Q4.	Convert the following decimal numbers to its octal equivalent- a. $(1265)_{10}$ b. $(572)_{10}$	CO-1	2
Q5.	Convert the following decimal numbers to its hexadecimal equivalent- a. $(3479)_{10}$ b. $(1,048,576)_{10}$	CO-1	2