

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATION- 2025

BCA-I Semester

COURSE CODE (CREDITS): 25BC1CI112

MAX. MARKS: 35

COURSE NAME: PROBLEM-SOLVING TECHNIQUE USING C

COURSE INSTRUCTORS:SRT

MAX. TIME: 2 Hours

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.	Explain with proper syntax any 5 string handling functions of your choice.	CO-3	5
Q2.	Define structures with proper syntax? Write a C program that implements the concept of nested structures.	CO-3	5
Q3.	Define a flowchart? And explain the various shapes used in constructing a flowchart?	CO-2	5
Q4.	Explain in detail with proper syntax looping constructs used in C? Write a C program that prints the sum of first 10 natural numbers using a loop of your choice?	CO-2	5
Q5.	Highlight the significance of pointers? Write a C program that accesses array elements through pointers.	CO-3	5
Q6.	Highlight the key differences between call-by-value and call-by-reference functions? Write a C program that swaps two numbers using the call-by-reference method?	CO-3	5
Q7.	Explain the concept of recursion. Write a C program that uses a recursive function to find the Fibonacci series up to user choice?	CO-3	5