

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATIONS- 2026

B.Tech-III Semester (CSE/IT/BT/ECE/CE)

COURSE CODE (CREDITS): 18B11CI311

MAX MARKS: 25

COURSE NAME: Object-Oriented Systems & Programming

COURSE INSTRUCTOR: Dr. Ruchi Verma

MAX. TIME: 1 Hour 30 Min

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	Differentiate between function templates and class templates.	CO3	2
Q2	Write a C++ class template for a class Calculator that can add two numbers of any data type.	CO4	3
Q3	Write a C++ program using a function template to swap two variables. Also explain how the same function works for different data types.	CO3	5
Q4	Explain the features of Java, platform independence and object-oriented with examples .	CO4	2
Q5	Write a Java program to define a class Student with attributes and a method to display details	CO3	3
Q6	Explain wrapper classes and their need in Java. Give examples.	CO3	2
Q7	What are packages in Java? Explain how to create and use a package with a simple example.	CO4	3
Q8	Differentiate between checked and unchecked exceptions.	CO3	2
Q9	Write a Java program demonstrating multiple catch blocks for exception handling	CO4	3