



End Semester/Reappear (Semester IV) Examination May 2025

Programme: B. Tech (CSE)

Course: Object Oriented Programming with Java

Course Code:3PCCCS203

Enrolment no. _____

Full Marks: 70

Time: 3 Hrs.

Q.No.	Questions	CO	Bloom Taxonomy Category	Marks
Section I				
1	Short Answer type questions.			
a	Java is called platform independent. Briefly explain it.	CO1	Understand	4 x 5 = 20
	or			
b	Write a simple Java program that declares and initializes variables of different data types and performs arithmetic operations on them.	CO1	Apply	
	or			
c	Describe the purpose of the switch statement in Java and write a simple switch statement that prints the name of the day based on the integer value.	CO1	Understand	
	or			
d	Write a simple Java program that uses a for loop to print the numbers from 3 to 33. Explain how the loop works in your program.	CO1	Apply	
	or			
c	How the string literal stored in Java? Write down three methods of String class.	CO2	Understand	
	or			
d	Differentiate between class and interface.	CO2	Understand	
	or			
d	Write a simple Java program to create a new thread that prints all the odd numbers from 1 to 20. Explain the code briefly.	CO3	Apply	
	or			
	What is multithreading in Java? When thread is blocked?	CO3	Understand	
Section II				
	Long Answer type questions.			
2	"Explain the scope of variables in Java and differentiate between local, instance, and class variables.	CO1	Evaluate	3 x 10 = 30
	or			
3	Write a Java program that demonstrates the use of different types of operators: arithmetic, relational, and bitwise. Explain how each operator works with examples from your program.	CO1	Evaluate	
	or			
3	Create a Java class named Student with attributes for storing a student's name and marks in three subjects. Implement methods to compute the total and average marks, and display the student's details. Write a Java program to instantiate a Student object, input details, and present the calculated results.	CO2	Apply	
	or			
	What is method overloading in Java? Write a simple Java class with two overloaded methods named print that print different messages.	CO2	Apply	

4	Explain setBounds() method in Java Program. How it is different from layout managers available in java AWT?	CO4	Understand	
	or			
	Write a swing program to create a button in a JFrame.	CO4	Understand	
Section III				
	Application based questions			1 x 20 = 20
5	Explain the compareTo() method in Java and provide a well-commented Java program that checks whether a user-entered string is a palindrome.	CO1	Create	
	or			
	"Create a Java program that takes a line of text as input and counts the number of vowels, words, and characters in it.	CO1	Create	

COURSE OUTCOME

After the successful completion of the course, the students will be able to:

CO1 Use the syntax and semantics of java programming language and basic concepts of OOP.

CO2 Develop reusable programs using the concepts of inheritance, polymorphism, interfaces and packages.

CO3 Apply the concepts of Multithreading and Exception handling to develop efficient and error free codes.

CO4 Design event driven GUI and web related applications which mimic the real word scenarios.