

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***UG/PG DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL/MAY 2026***Third Semester**Computer Science and Engineering***UCST24302 / CS3391 - OBJECT ORIENTED PROGRAMMING****(Common to Biomedical Engineering, Information Technology &****Artificial Intelligence and Data Science)***Regulations – 2024 & 2021**Duration : 3 Hrs**Maximum : 100 Marks****PART – A (ANSWER ALL QUESTIONS) (Marks 10*2=20)***

<i>Q.No</i>	<i>Questions</i>	<i>BTL</i>	<i>CO</i>	<i>Marks</i>
1.	List the features of OOP.	L1	1	2
2.	Assess the error in the following array declaration and rectify them. a. <code>int a[]=new [10]int;</code> b. <code>float []b=new int[10.5];</code>	L3	1	2
3.	What is method overloading? Give an example.	L2	2	2
4.	Differentiate between abstract classes and interfaces.	L3	2	2
5.	What is a user-defined exception?	L1	3	2
6.	What is synchronization in multithreading?	L1	3	2
7.	Differentiate between byte stream and character stream.	L4	4	2
8.	What is the purpose of <code>replace()</code> method in <code>StringBuffer</code> ?	L1	4	2
9.	Name some JavaFX controls.	L1	5	2
10.	What is a <code>MenuBar</code> and <code>MenuItem</code> ?	L2	5	2

PART – B (ANSWER ALL QUESTIONS) (Marks 5*16 = 80)

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
11.	a Describe the various features of the Object Oriented Programming Language. Or b Write a Java program to make the use of control statements and explain its flow.	L2	1	16
12.	a i Write a Java program to create a class known as "BankAccount" with methods called <code>deposit()</code> and <code>withdraw()</code> . Create a subclass called <code>SavingsAccount</code> that overrides the <code>withdraw()</code> method to prevent withdrawals if the account balance falls below one hundred. ii Compare abstract class and interface. Or b List the importance of packages in Java and give an example program for importing user-defined packages.	L3	2	12
		L3	2	4
		L3	2	16

13.	a i	Write a program using multiple catch clauses and explain.	L3	3	8
	ii	Discuss user-defined exceptions with examples.	L2	3	8
		Or			
	b	Write a multithreading program using Thread class and Runnable interface.	L3	3	16
14.	a	Construct a generic class Box<T> with methods to store and retrieve an object, and explain it with Box<Integer> and Box<String>.	L3	4	16
		Or			
	b	Write a java program using string manipulation methods.	L2	4	16
15.	a	Explain JavaFX event-handling basics and mouse handling events with an example program.	L2	5	16
		Or			
	b	Create a JavaFX application using different layout panes to arrange controls and compare their visual behavior.	L3	5	16