U.S.N.										

B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

July 2023 Semester End Main Examinations

Programme: B.E. **Semester: VI**
Branch: Institutional Elective **Duration: 3 hrs.**
Course Code: 20CS6OEJVP **Max Marks: 100**
Course: Java Programming **Date: 07.07.2023**

Instructions: 1. Answer any FIVE full questions, choosing one full question from each unit.
2. Missing data, if any, may be suitably assumed.

Important Note: Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.

		UNIT - I	CO	PO	Marks
1	a)	Justify the benefits of Java bytecode.	*CO2*	*PO2*	**4**
	b)	Create a class to represent matrix and then define a multiplication method to multiply two matrics. Complete Java program to multiply one matrix with another.	*CO3*	*PO3*	**8**
	c)	Write a Java program using Java classes that accepts 3 student's names, ids, and marks and displays details of those students who have scored highest and lowest.	*CO1*	*PO1*	**8**
		UNIT - II			
2	a)	With an example code snippet explain the usage final keyword.	*CO1*	*PO1*	**4**
	b)	Demonstrate the simple bank account balance displaying function using packages. Explain its procedure of implementation.	*CO1*	*CO1*	**8**
	c)	Applying interfaces, develop an implementation of stack that uses fixed storage.	*CO1*	*PO1*	**8**
		UNIT - III			
3	a)	With an example infer that Java enumeration is a class type.	*CO2*	*PO2*	**6**
	b)	Write a Java program to copy alternate characters from one file to another file.	*CO3*	*PO3*	**7**
	c)	Write a Java program to find duplicate character in a string and count the number of occurrences.	*CO3*	*PO3*	**7**
		UNIT - IV			
4	a)	Differentiate the purpose of the keywords used to manage Java exception handling.	*CO2*	*PO2*	**5**
	b)	Analyse the given code snippet identify the exception raised and write the correct complete program.	*CO2*	*PO2*	**5**

			int z = args.length;
			System.out.println("z = " + z);
			int b = 42 / z;
			int c[] = { 5 };
			c[42] =999;			

		c)	Develop a Java program to implement a producer and consumer problem.	*CO3*	*PO3*	**10**
			OR			
	5	a)	Distinguish between calling wait () and sleep () method in Java multithreading?	*CO3*	*PO3*	**5**
		b)	Show the ways to create Java thread? Give example for each.	*CO2*	*PO2*	**5**
		c)	Write a Java program to read even number and print it. If an odd number is input then raise an odd_number exception and display appropriately.	*CO3*	*PO3*	**10**
			UNIT - V			
	6	a)	Compare the methods paint(), repaint() and update(). Write a Java program to demonstrate any 5 drawing methods.	*CO3*	*PO3*	**10**
		b)	Write a program to demonstrate the usage of mouse event class.	*CO3*	*PO3*	**10**
			OR			
	7	a)	Discuss the class Frames constructors. write a program to demonstrate setting the windows dimension	*CO1*	*PO1*	**10**
		b)	Explain Delegation Event Model. Compare any 5 event, event source and listener	*CO2*	*PO2*	**10**

****