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

Autonomous Institute Affiliated to VTU

June / July 2024 Semester End Make-Up Examinations

Programme: B.E.   **Semester: III**
Branch: Computer Science and Engineering   **Duration: 3 hrs.**
Course Code: 23CS3PCOOJ / 19CS3PCOOJ   **Max Marks: 100**
Course: Object Oriented Java Programming

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

				CO	PO	Marks
			UNIT - I	*CO*	*PO*	**Marks**
1	a)		List and explain the applications of java.	*CO1*	*PO1*	**5**
	b)		Build a java program to print the fibonacci series without using recursion.	*CO3*	*PO3*	**5**
	c)		With an example explain java class and objects.	*CO1*	*PO1*	**5**
	d)		Explain class constructor. With a code snippet explain the types of constructors.	*CO1*	*PO1*	**5**
			UNIT - II			
2	a)		With an example distinguish the different types of inheritance.	*CO2*	*PO2*	**6**
	b)		With an example show how super can be used to refer immediate parent class instance variable and immediate parent class method.	*CO1*	*PO1*	**8**
	c)		Explain generics in java. List the advantages of using java generics.	*CO2*	*PO2*	**6**
			UNIT - III			
3	a)		With an example discuss the java package.	*CO1*	*PO1*	**10**
	b)		Can the interfaces be extended? Justify with the program.	*CO2*	*PO2*	**10**
			OR			
4	a)		What is exception in java? With an example discuss how exception is handled.	*CO3*	*PO3*	**10**
	b)		Does java support works multi-catch block? Justify with an example.	*CO3*	*PO3*	**10**
			UNIT - IV			
5	a)		Construct a program to demonstrate the various ways of creation and working of multithreads.	*CO3*	*PO3*	**10**

		b)	How can one thread know whether another thread has ended? Demonstrate with the program.	*CO3*	*PO3*	**10**
			OR			
	6	a)	Write a java program using threads to print the output in the following order only. [object] [oriented] [java] [programming]	*CO3*	*PO3*	**10**
		b)	Define input stream and output stream of byte stream classes and discuss any four methods of input stream and output stream.	*CO1*	*PO1*	**10**
			UNIT - V			
	7	a)	Develop a program to illustrate mouse handling events.	*CO3*	*PO3*	**10**
		b)	Develop a program to create a frame window and demonstrate usage of any five graphics functions and text capabilities.	*CO3*	*PO3*	**10**

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