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

Autonomous Institute Affiliated to VTU

December 2019 / January 2020 Semester End Main Examinations

Programme: B.E. **Semester: III**
Branch: Computer Science And Engineering **Duration: 3 hrs.**
Course Code: 19CS3PCOOJ **Max Marks: 100**
Course: Object Oriented Java Programming **Date: 21.12.2019**

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

1	a)	List and explain any four primitive data types.	06
	b)	Distinguish one dimensional and Multidimensional array. Support your answer using a suitable example program.	07
	c)	Explain the process of compiling and running the Java application, with the help of "Hello world" program. Discuss about every keyword used in your program.	07

UNIT - II

2	a)	Define Class. Give the general form of class. Consider a class Box with members width, height, depth. Write a Java Program to calculate the volume of a box.	07
	b)	Illustrate the usage of Parameterized Constructors using an example program.	06
	c)	Consider a class Student with members Id, name and three marks. Develop a Java Program to define methods that set the details of each student to the given values and calculate the average marks. Create n Student objects.	07

UNIT - III

3	a)	Define Inheritance. Illustrate the program of Inheritance.	06
	b)	Distinguish between method overloading and method overriding. Support your answer using a suitable example program	07
	c)	Write a Java Program considering a superclass variable referencing a subclass object.	07

UNIT - IV

4	a)	Discuss the procedure on how the Java run-time system know where to look for packages that we create. Explain with an example program.	10
	b)	Illustrate the program that includes a try block and a catch clause that processes the ArithmeticException generated by the division-by-zero error. Demonstrate the usage of throws keyword in the same program.	10

OR

5	a)	Write the syntax of exception handling block. Explain the types of exception. Develop a Java program that demonstrate multiple catch statements.	10
	b)	Define Interface. Write a program to create a class called Fixedstack that implements a fixed length version of an integer stack.	10

UNIT - V

6	a)	Discuss about multithreaded programming. Demonstrate the different ways of creating a thread using an example program.	07
	b)	Discuss about delegation event model. Demonstrate the significance of WindowAdapter class with an example program creating a Frame from an Applet.	07
	c)	Develop a Java program that demonstrates synchronization with wait and notify methods.	06

OR

7	a)	Develop a Java program that implements the listeners associated with mouse.	07
	b)	Illustrate the program that uses join() to ensure that the main thread is the last to stop. Demonstrate isAlive() method.	07
	c)	List any four builtin graphics methods. Discuss their functionalities with their syntax.	06

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