GUJARAT TECHNOLOGICAL UNIVERSITY
MCA - SEMESTER–III • EXAMINATION – SUMMER- 2014

Subject Code: 630002   **Date: 29-05-2014**
Subject Name: Fundamentals of Java Programming
Time: 02:30 pm - 05:00 pm   **Total Marks: 70**
Instructions:
  1. **Attempt all questions.**
  2. **Make suitable assumptions wherever necessary.**
  3. **Figures to the right indicate full marks.**

Q.1	**(a)**	1. Explain any three features of Java.	**03**
		2. Discuss pass by value and pass by reference in Java with proper example.	**04**
	(b)	1. Describe any three methods of Pattern class.	**03**
		2. Explain the use of synchronized keyword with example.	**04**
Q.2	**(a)**	Explain Event delegation model with proper example.	**07**
	(b)	1. What is thread? Differentiate between daemon and non-daemon threads.	**03**
		2. Discuss enum type with example.	**04**

OR

	(b)	1. What is stream? Differentiate between Byte Stream and Character Stream.	**03**
		2. Explain the use of anonymous inner class with example.	**04**
Q.3	**(a)**	1. Differentiate between abstract classes and interfaces.	**03**
		2. Explain the use of finalize method with example.	**04**
	(b)	What is exception handling? Discuss the uses of "try", "catch" and "finally" with example.	**07**

OR

Q.3	**(a)**	What is JOptionPane? Discuss in brief the methods of JOptionPane for showing different kinds of Dialog.	**07**
	(b)	What is Collection framework? Explain the methods of Iterator with example.	**07**
Q.4	**(a)**	Explain the uses of static variables and methods with example.	**07**
	(b)	What is Object class? Explain the hashCode(), equals() and toString() methods of Object class with example.	**07**

OR

Q.4	**(a)**	Define type conversion. Explain the narrowing, widening and mixed conversion for numeric types with example.	**07**
	(b)	What is method overriding? Explain the uses of this and super keyword with example.	**07**
Q.5	**(a)**	Define Multi-threading. State two different ways for creating new thread of execution with appropriate code.	**07**
	(b)	Make a frame that contains three scroll-bars for "Red", "Green" and "Blue" color. As user adjust the value in the scroll-bars, the background color of the frame is set according to the adjusted value.	**07**

OR

Q.5	**(a)**	Write a program that copies all the content from one file to another. Pass the file names using command line argument.	**07**
	(b)	What is Applet? Discuss in brief different attributes of Applet tag.	**07**

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