Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA - SEMESTER– III EXAMINATION – SUMMER 2016

Subject Code: 630002 **Date:03-06-2016**

Subject Name: Fundamentals of Java Programming

Time: 02.30p.m. To 05.00p.m. **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)**	Explain the features of java in detail. Emphasis on why java is platform independent?	**07**
	(b)	Explain various type conversion mechanisms available in Java.	**07**
Q.2	**(a)**	List the various elements that can be defined within a java class. Briefly explain each.	**07**
	(b)	Explain the process of method binding and variable binding with example.	**07**
		OR	
	(b)	Explain the process of creation and use of Arrays in java. Give Example.	**07**
Q.3	**(a)**	Explain the importance of interface. Differentiate it with abstract class.	**07**
	(b)	Explain the process of creating and using user defined package in java. Give Example.	**07**
		OR	
Q.3	**(a)**	Differentiate between String and String Buffer Class. Explain any 3 methods of String class.	**07**
	(b)	Give differences between Comparable and Comparator interface. Also give example.	**07**
Q.4	**(a)**	Give a list of available wrapper classes and explain any two in detail.	**07**
	(b)	Explain exception handling mechanism of java with example.	**07**
		OR	
Q.4	**(a)**	Define enum type. Explain enum type with example.	**07**
	(b)	Define custom exception. Differentiate between checked and unchecked exception (Reported and Unreported exception).	**07**
Q.5	**(a)**	Discuss how thread can be created and used in Java. Give example.	**07**
	(b)	Explain piped stream and object stream.	**07**
		OR	
Q.5	**(a)**	Explain character stream class hierarchy.	**07**
	(b)	Explain thread synchronization.	**07**

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