Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

ME SEMESTER II EXAMINATION – SUMMER 2017

Subject Code: 2720215 **Date: 31/05/2017**
Subject Name: OOP with JAVA
Time:02:30 PM to 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)**	Answer the following: i) Discuss multilevel inheritance with an example in java. ii) What is function overloading? Demonstrate it with an example.	**07**
	(b)	What is the difference between the Reader/Writer class hierarchy and the InputStream/OutputStream class hierarchy?.	**07**
Q.2	**(a)**	Explain following with example i)super keyword ii) final keyword	**07**
	(b)	Explain the need of Interfaces. What are various types of interfaces in Java, brief about them. How a new interface is created?	**07**
		OR	
	(b)	Explain following: 1. Purpose of 'final' keyword with respect to i) variable ii) method iii) class. 2. Purpose of 'super' keyword with an example.	**07**
Q.3	**(a)**	Define concept of streams. What are the types of streams. Explain in brief different classes of stream.	**07**
	(b)	What is abstract class? Show it's usage in run time polymorphism.	**07**
		OR	
Q.3	**(a)**	What do you mean by exception in java? Show following with example: i. Nested try statements, ii. For single try, multiple catch clauses.	**07**
	(b)	Write function (with proper syntax) for the following tasks: i. To convert String to equivalent double ii. To convert string to the lower case. iii. To concatenate two Strings iv. To remove trailing and leading spaces from the String	**07**
Q.4	**(a)**	What is Delegation Event Model? Explain the Java event handling with Appropriate example.	**07**
	(b)	Write a program to create two threads, one thread will print odd numbers and second thread will print even numbers between 1 to 50 numbers	**07**
		OR	
Q.4	**(a)**	Discuss private, default, protected and public access of class members for different cases.	**07**
	(b)	What is a thread? Describe the complete life cycle of thread with example.	**07**
Q.5	**(a)**	What is AWT? Explain delegation event model and draw class hierarchy for Panel and Frame.	**07**

	(b)	Discuss Synchronization process in multithreading. Demonstrate its usage with a small example	**07**

OR

Q.5	**(a)**	Write a program to demonstrate the use of following methods: mark (int readAheadLimit) boolean markSupported() void reset()	**07**
	(b)	Write an application that reads a file and counts the number of occurrences of digit 5. Supply the file name as a command-line argument.	**07**

****