Seat No.: _____   Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
ME - SEMESTER– II(New course) • EXAMINATION (Remedial) – WINTER- 2015

Subject Code: 2720215   **Date: 14/12/2015**
Subject Name: OOP WITH JAVA
Time:2:30 pm to 5:00 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)**	Explain the scope visibility of class members in java- with in the same package and outside the package.	**07**
	(b)	Explain following : 1. Garbage collection in Java. 2. Inheritance	**07**
Q.2	**(a)**	Explain following: 1. Interface 2. Wrapper class	**07**
	(b)	What is function overriding? Write a program to demonstrate function overriding.	**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)**	Discuss following functions with example of each, with respect to String class: i. substring ii. length iii. compareTo iv. charAt	**07**
	(b)	Write function (with proper syntax) for the following tasks: i. To convert String to equivalent double ii. To concatenate two strings iii. To delete all trailing and leading spaces iv. To replace all occurrences of a character ‑x‑ by another character ‑y‑	**07**

OR

Q.3	**(a)**	What is the difference between the Reader/Writer class hierarchy and the InputStream/OutputStream class hierarchy?	**07**
	(b)	What is Applet? Write a program to draw rectangle, oval, arc line, rectangle with rounded corners using an applet.	**07**
Q.4	**(a)**	Explain the functioning of Input file stream and Output file stream for text files.	**07**
	(b)	What is the benefit of Exception handling in java? Write one program to show the functionality of all the keywords: try, catch, finally and throw.	**07**

OR

Q.4	**(a)**	What are threads? Explain the differences between a thread and a process. Describe two possible ways to create threads in Java.	**07**
	(b)	What is Delegation Event Model? Explain the Java event handling with appropriate example.	**07**

Q.5 **(a)** Discuss Synchronization process in multithreading. Demonstrate its usage with a small example. **07**

(b) Explain following: **07**
   1. Compare if...else and switch statements.
   2. What is Package in java? How can it be accessed? Name at least 4 standard packages used in Java.

OR

Q.5 **(a)** Compare and contrast procedure oriented and object oriented programming. Also state the benefits of OOP. **07**

(b) What is AWT? Explain delegation event model and draw class hierarchy for Panel and Frame. **07**

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