Seat No.:	Enrolment No.

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

ME - SEMESTER- II (Old course) • REMEDIAL EXAMINATION - SUMMER 2015 Date:18/05/2015 Subject Code: 1722310 **Subject Name: Object Oriented Programming** Time: 02:30 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. Draw the Class Diagram of College Management System. Q.1 **07** (a) Explain control statements in JAVA with example. 07 **(b) Q.2** Explain Inheritance with syntax and a suitable example. 07 (a) What is encapsulation? Explain how encapsulation provides modularity and 07 (b) information hiding with example. OR What is package? Explain use of packages with suitable example. **07** (b) Q.3 Write a java class CountAndPrint to print the number of arguments passed on 07 the command line arguments as well as print the first letter of the arguments. For example if the command line arguments are : õGujarat Technological Universityö then the output will be: No. of arguments: 3 GTU **(b)** What is the difference between interface and abstract class? What is the 07 purpose of garbage collection in JAVA and when it is used? **Q.3** Write a java program that reads any paragraph and print the number of letters, **07** (a) number of words and number of lines in a given paragraph. What are constructors? What is meant by constructor overloading? Explain 07 **(b)** with an example. **Q.4** What is the checked and unchecked exception? Describe with proper example. 07 What is the completer life cycle of a thread? What is synchronization? When it 07 **(b)** is used? What is the difference between final, finally and finalize? Explain with example. **Q.4 07** (a) What is the need of the synchronized block? Illustrate with an example. **07** (b) Write an applet in java that will have two buttons RED and GREEN. If user Q.5 (a) 07 clicks on RED button the background of the applet will be painted with RED color or if user clicks on GREEN button the background of the applet will be painted with GREEN color. **(b)** Describe different stages in the life cycle of an applet. Distinguished between 07 init () and start () methods. OR **Q.5** Write an applet in java that will have three Textboxes and a button. When the 07 user clicks on the button it merges the strings entered in two Textboxes and displays it in the third Textbox. What is an event? What is event handling? What is the role of event listeners in **07** this regard?