

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-V- EXAMINATION – SUMMER 2016****Subject Code: 150704****Date: 06/05/2016****Subject Name: Object Oriented Programming 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) Explain use of final, static and super keyword by giving examples. **07**
(b) Explain method overriding and method overloading with the help of examples. **07**

- Q.2** (a) Explain : Abstract Class and Interface with example. Compare Both. **07**
(b) Differentiate the followings: **07**
i) Applet and Application
ii) String class and StringBuffer class
iii) Constructor and Method

OR

- (b) Define generics in java. Write a program to demonstrate generic interface and generic method. **07**

- Q.3** (a) What is collection in Java? Differentiate between Vector and ArrayList. **07**
(b) What is Wrapper class in Java? Explain with examples. **07**

OR

- Q.3** (a) Draw and explain lifecycle of Applet. **07**
(b) Explain wait, notify, notifyall, synchronized methods in thread. **07**

- Q.4** (a) Draw and explain life cycle of Thread. Also list and explain various methods of thread. **07**
(b) What is package? Explain steps to create package with example. **07**

OR

- Q.4** (a) What is inheritance in java? Explain different types of inheritance with proper example partial code. **07**
(b) Describe abstract class called Shape which has three subclasses say Triangle, Rectangle and Circle. Define one method area() in the abstract class and override this area() in these three subclasses to calculate area for specific class' object. **07**

- Q.5** (a) What is Exception? Explain various Built-in exceptions in java. Also give difference between throw and throws keywords. **07**
(b) Write a Java program to copy content of file1.txt to file2.txt using Java file handling. **07**

OR

- Q.5** (a) Explain Event Handling in java and describe methods of mouse event and key event. **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 100 numbers. **07**
