

GUJARAT TECHNOLOGICAL UNIVERSITY
M. E. - SEMESTER – II • EXAMINATION – WINTER 2012

Subject code: 1720109**Date: 03/01/2013****Subject Name: Object Oriented Programming****Time: 10.30 am – 01.00 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) What are the approaches to the software design? List the benefits of the object oriented programming. **07**
- (b) What do you understand by object model? Which aspect of the system it deals? Explain with example. **07**

- Q.2** (a) Describe the following. **07**
1. Application framework in windows environment
 2. Feature of Java
- (b) Define a circle object in the Java with necessary data and function members including constructors. Use it in main to sort the array of circle objects in order of radius. **07**

OR

- (b) Write a Java program to generate first five Pythagorean triplets ($x^2 + y^2 = z^2$). **07**

- Q.3** (a) What is inheritance? Explain it with respect to Java with example. **07**
- (b) Write a simple Java application having a button “OK” which when pressed the application is closed. **07**

OR

- Q.3** (a) What is event handling? How it is done in Java? Give an example. **07**
- (b) Write a GUI program in Java to add two numbers. Use appropriate controls. **07**

- Q.4** (a) What is an applet? Explain the applet lifecycle. **07**
- (b) Explain the thread life cycle and give important thread methods. **07**

OR

- Q.4** (a) What do you mean by exception handling? Explain the try-catch-finally statement with example. **07**
- (b) Explain the string handling in Java with suitable example. **07**

- Q.5** (a) What do you mean by software requirements? How do you identify them? Explain in detail. **07**
- (b) Explain the designing of general class structure for an application. **07**

OR

- Q.5** (a) Explain the role of the object programming in development of web applications. **07**
- (b) What do you mean by software design? Give the design principles. **07**
