

GUJARAT TECHNOLOGICAL UNIVERSITY**M.C.A. Sem-III - Examination –June- 2011****Subject code: 630002****Subject Name: Fundamentals of Java Programming****Date:14/06/2011****Time: 02.30 pm – 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) (i) Define Bytecode. **02**
(ii) What is Class Initializer block? **02**
(iii) Which of the following are Java key words? **02**
(1) double (2) Switch (3) then (4) instanceof
(iv) Which class contains ordered elements in a collection? **01**
(1) java.util.Set (2) java.util.ArrayList
(3) java.util.Map (4) java.util.Observable
- (b) (i) Is Iterator a Class or Interface? State its usage? **02**
(ii) Explain shadow and static variable. **02**
(iii) Which of the following are correct event handling methods? **02**
(1) mousePressed(MouseEvent e){}
(2) MousePressed(MouseClick e){}
(3) functionKey(KeyPress k){}
(4) componentAdded(ContainerEvent e){}
- (iv) Differentiate Panel and Frame. **01**
- Q.2**
- (a) (i) Differentiate String and StringBuffer Class with example. **02**
(ii) Define deadlock and notify. **02**
(iii) Explain Comparator interface with required code. **03**
- (b) What is abstract class? Differentiate it from interface. **07**
- OR**
- (b) Define package. State different steps for making and importing user defined package in java application with required code. **07**
- Q.3**
- (a) Discuss the concept of super and final Keyword with example. **05**
(b) Discuss BufferedWriter and the BufferedReader class of java I/O with example. **05**
(c) Write a short note on matcher class. **04**
- OR**
- Q.3**
- (a) Discuss FileOutputStream and FileInputStream class of java I/O with example. **05**
(b) Define abnormal condition. Differentiate throw and throws with example. **05**
(c) Discuss enum type with example. **04**
- Q.4**
- (a) Explain thread. Describe different ways to implement multitasking with suitable illustration. **05**
(b) Explain event delegation model with example. **05**
(c) What is applet? Explain its life cycle with example. **04**

OR

- Q.4** (a) Explain Adapter class with example. **06**
(b) What is collection framework? State its component and explain List interface with illustration. **06**
(c) Read this piece of code carefully **02**

```
public class Test
{
    public static void main(String args[])
    {
        if( "STRING".toUpperCase() == "STRING")
            System.out.println("Equal");
        else
            System.out.println("Not Equal");
    }
}
```

Give the Output.

- Q.5** (a) Explain various practices available to arrange components on a container. **06**
(b) Define synchronization. Explain synchronized statement with example. **06**
(c) Read this piece of code carefully **02**

```
public class Test
{
    public static void main(String args[])
    {
        System.out.println("Before Try");
        try {
        }
        catch(Throwable t)
        {
            System.out.println("Inside Catch");
        }
        System.out.println("At the End");
    }
}
```

Give the Output.

OR

- Q.5** (a) Differentiate AWT and Swing. **05**
(b) Write a short note on MVC architecture. **05**
(c) Explain getCodeBase and getDocumentBase methods with Example. **04**
