

Registration No. :

--	--	--	--	--	--	--	--	--	--

Total number of printed pages – 2

B. Tech
PCIT 4303

Fifth Semester Examination – 2013

JAVA PROGRAMMING

BRANCH : IT, CSE

QUESTION CODE : C-378

Full Marks – 70

Time : 3 Hours

*Answer Question No. 1 which is compulsory and any **five** from the rest.
The figures in the right-hand margin indicate marks.*

1. Answer the following questions :

2 × 10

- (a) Assume `double[][] x = new double[4][5]`, what are `x.length` and `x[2].length` ?
- (b) What are the default values for data field of a Boolean type and object type in java ?
- (c) Differentiate between String and StringBuffer classes ?
- (d) To draw graphics which class is extended and which method is overridden ?
- (e) What exception type does the following program throw ?
- ```
public class Test {
 public static void main(String[] args) {
 String s = "abc";
 System.out.println(s.charAt(3));
 }
}
```
- (f) Which method belongs to every event object ?
- (g) Differentiate between a java application and an applet.
- (h) List two properties of JScrollBar and JSlider.
- (i) Which methods in the Thread class are deprecated ?
- (j) What are the two use of the keyword super ?

P.T.O.

2. (a) What is function overloading ? What are the various ways of overloading a constructor ? Explain. 5
- (b) Define inheritance. How the access specifiers modify the behavior of java program implementing Inheritance ? Explain. 5
3. (a) How a class is related to a package ? What are the categories of visibility for class members in a package hierarchy ? 5
- (b) What is the difference between an abstract class and an interface and when should you use them ? 5
4. (a) How can threads communicate with each other ? How would you implement a producer (one thread) and a consumer (another thread) passing data (via stack) ? 5
- (b) How errors are handled in java ? What is a user defined exception ? 5
5. (a) Explain different ways of creating a thread. 5
- (b) What is the difference between AWT and Swing ? Explain with an example. 5
6. (a) Draw a Smiley using java applet to represent on a browser. 5
- (b) Write down a java program to get X and Y coordinates of JTextField. 5
7. (a) Write down a java program using wrapper classes to convert a hexadecimal number into a decimal number. 5
- (b) What is the order of method invocation in an applet ? 5
8. Write short notes on any **two** : 5×2
- (a) TCP/IP Server Socket
- (b) Layout Managers
- (c) Remote Method Invocation(RMI)
- (d) JDBC.