

6E3204**6E3204****B.Tech VI Semester(Main/Back) Exam. May, 2012****Computer Engg.****6CS4 Programming in Java****Common to CS & IT****Time : 3 Hours****Maximum Marks : 80****Min. Passing Marks : 24***Instructions to Candidates:*

Attempt any five questions. Selecting one question from each unit. All Question carry equal marks. Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly.

Units of quantities used/ calculated must be stated clerly.

Use of following supporting material is permitted during examination.

1. Nil 2. Nil

UNIT - I

1. (a) What do you mean by object oriented programming? Explain the basic Features of java with example. 6
- (b) Why java is important for internet ? Explain the role of JVM in java with example. 4
- (c) Write difference between automatic conversion and type casting with suitable example. 6

Or

1. (a) What do you mean by java Buzzwords and java Literals? Explain with example. 8
- (b) Write short notes on the following: 4
 - i) Operator precedence

ii) Short Circuit Logical Operator

- (c) The following code results in compilation errors. Debug the code and correct the problem. 4

```
Class NumberValue
{
    Public static void main (string [] args)
    {
        int number=3;
        switch (number)
        {
            Case 0;
            System.out.println ("Number is 0");
            break ;
            Case1:
            System.out.println ("Number is 1");
            break;
            Case 2:
            Case 3:
            Case 3:
            System.out.println (" Number is 2, 3 or 4");
            break;
            Default:
            System.out.println ("Number is less
            than 0 or greater than 4" );
        }
    }
}
```

UNIT - II

- 2 .(a) Write a Java program to print the pattern. 4

```
$ $ $ $ $
  $ $ $ $
    $ $ $
      $ $
        $
          $
```

- (b) What is multilevel inheritance ? Demonstrate a multilevel inheritance with a program code. 6
- (c) What is dynamic method dispatch in method overriding ? Explain with Example. 6

Or

2. (a) What is the role of a constructor in java? Explain parameterized constructor with an Example. 6
- (b) Explain the use of the following with example
- | | | |
|-------------------|--------------------------|----|
| i) Super | ii) final | |
| iii) this | iv) Iteration statements | |
| v) Abstract class | | 10 |

UNIT - III

3. (a) Define package in java? what are the benefits of using package? Explain with suitable example. 8
- (b) Write all similarities and differences between interfaces and classes with example. 8

Or

3. (a) What is interface? Give an example to defining and implementing a interface. 8
- (b) Write short notes on the following string operation . 8
- | | |
|----------------|-----------------|
| i) CharAt () | ii) indexOf () |
| iii) substring | iv) append |

UNIT - IV

4. (a) What is exception handing? What are the types of exception? write a code to handle arrayOutOfBounds exception. 8
- (b) Write java program to read primitive data from the file and write primitive data to the file. 8

Or

4. Write short notes on the following :

- i) try and catch iii) finally
ii) throws iv) I/O streams

[4X4=16]

UNIT-V

5. (a) What are the difference between threads and processes? How we can extend the thread class ? explain with Example (code). 6
- (b) What is applet ? Describe the complete life cycle of a applet. 6
- (c) Write a applet program for drawing a human face. 4

Or

5. (a) What are the difference between multiprocessing and multithreading? What is to be done to implement these in a program ? 8
- (b) Write a applet program to draw a filled circle with in an oval. 6
- (c) Describe the three ways of drawing polygons. 4