6E3204

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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 complication errors. Debug the code and correct the problem.   4

```
Class NumberValue
  {
    Public static void main (string [] args)
      {
        int number=3;
          switch (number)
            {
                Case o;
                    System.out.println ("Number is o");
                      break ;
                      Case1:
                          System.out.prinln ("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 arrayOutOfBound exception. 8

(b) Write java program to read primitive data from the file and write primitive data to the file.

8

Or

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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