CS-74

BACHELOR OF COMPUTER APPLICATIONS
(BCA) (Pre-Revised)
Term-End Examination

�□□5Ɓ1   June, 2017

CS-74 : INTRODUCTION TO INTERNET PROGRAMMING

Time : 2 hours   *Maximum Marks : 60*

Note : *Question number 1 is **compulsory**. Attempt any **two** questions from the rest.*

1. (a) What gets printed on the standard output when the class below is compiled and executed by entering "Java test lets see what happens" ?   2

    public class test {

        public static void main (String args[ ])

        {   System.out.println(args [0]+" "+

                            args[args.length − 1]);

        }

    }

(b) Which line contains a constructor in the following definition ? 2

```
public class counter { //(1)
    int current, step;
    public counter (int StartValue,
                        int StepValue){ //(2)
        set(StartValue);
        setStepValue (StepValue);
    }
    public int get() {return current;} //(3)
    public void set (int value) {current = value;} //(4)
    public void setStepValue (int StepValue)
    {
    step = StepValue;} //(5)
}
```

(c) What is abstraction ? Explain with an example. 3

(d) What will be the result of attempting to compile and run the following code ? 2

```
public class test extends thread
{
    public void run()
    {
        system.out.println("Before start method");
        this.stop ();
        system.out.println("After stop method");
    }
    public static void main (string[] args)
    {
        test t = new test();
        t.start();
    }
}
```

(e) What is a stream ? Differentiate between stream source and stream destination. **4**

(f) Differentiate between the following using Java code fragment : **6**

(i) notify() and notify All( )

(ii) throws and throw

(iii) >> and >>> operators

(g) What is a package ? How are packages imported in a Java program ? **4**

(h) Write a Java program to check if a number is odd or even. Give descriptive comments in your code. **7**

2. (a) Describe the structure of an Applet, explaining its different methods and their sequence of execution. **5**

(b) What are threads ? How can they be created ? **5**

(c) Why do we use super() in Java ? Write a program fragment to illustrate the effect of using super(). **5**

3. (a) What is built-in exceptions in Java ? Explain the use of any one of them with the help of a suitable example. **5**

(b) Write a Java program to read 10 numbers from the keyboard and sort them in descending order. **4**

(c) What are the various colour constructors ? **2**

(d) Write the output of the following statements : **4**

int a = − 4, b = 8

(i) a ^ b

(ii) a << 2

4. (a) Write a program to accept two numbers at the command line and print out their sum. **6**

(b) Why does one sometimes need to override a method of the parent class in its subclass ? Write a program fragment to suitably override the method "volume()" of class solid in its subclass sphere. **6**

(c) What is the 'Final' keyword in front of

(i) a variable ?

(ii) a method ?

(iii) a class ? **3**

5. (a) What is compile-time polymorphism ? How does it differ from run-time polymorphism ? **5**

(b) What do you mean by a layout manager ? Explain GridBagLayout in detail with an example. **6**

(c) Why is Java called Architecture-neutral ? Explain. **4**