CS-74

BACHELOR OF COMPUTER APPLICATIONS (BCA) (Pre-Revised)

Term-End Examination

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 is a static method in java? Explain why the main method in java is always static.   5

    b. What is polymorphism? What are the differences between compile - time and run - time polymorphism? Explain with an example.

    5

    c. What is inheritance? Write a Java program to illustrate the use of inheritance.   5

    d. Write a java program to generate the following output, using a two dimensional array: 7

    a

    a b

    a b c

    a b c d

e. Differentiate between the following- 2x3=6

(i) Constructor and method

(ii) Transient and volatile

(iii) Abstract class and interface

f. Write the output of the following: 2

```
if ("String". to String() == "String");
{
System.out.println("Equal");
}
else
{
System.out.println("Not equal");
}
```

2. a. What is a thread? What is the difference between process and a thread in Java? Why do we need to run () and start () methods? Can we achieve the objective with only the run() method? 8

b. What is the result of the following operation? 2

```
System.out.println(4/3);
```

c. What is an applet? Explain how to implement an applet on a webpage using the <applet> tag. 5

3. a. What is a stream? Differentiate between stream source and stream destination. Which class would you use for reading from the console? 6

b. What is the output of the following code? 2

String str = "Welcome";

str.concat("to Java");

System.out.println(str);

c. What is the utility of the "throws" keyword in Java? 2

d. Write a program that accepts the name of a file on the command line and displays its contents.

5

4. a. Define Layout Manager. Explain Grid Bag Layout in detail with an example. 6

b. How is a constant defined in Java? 2

c. Define class. What type of variables can a class contain? 4

d. How many listeners are there for detecting mouse movements? Explain briefly. 3

5. a. Write a java program to accept two numbers on the command line and print out their sum.

5

b. Define an access Specifier. Give a suitable example. 3

c. When do we use the parseInt() function? Explain. 5

d. What is type casting? Explain. 3

—x—