

BACHELOR OF COMPUTER APPLICATIONS

(BCA) (Pre-Revised)

00605

Term-End Examination

June, 2018

**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) Explain the following keywords with examples : $4 \times 3 = 12$
- (i) extends
 - (ii) synchronized
 - (iii) protected
 - (iv) implements

- (b) The following program is in file Test.java. What would be the output of compiling and running this program ?

2

```
public class Test {
    public static void main (String st[ ])
    {
        String S1 = "java";
        String S2 = "java";
        String S3 = "JAVA";

        S2.toUpperCase( );
        S3.toUpperCase( );

        boolean b1 = S1 == S2;
        boolean b2 = S1 == S3;

        System.out.println(b1);
        System.out.println(" " + b2);
    }
}
```

- (c) Write an Applet showing the sequence of method executed during the life-cycle of an Applet.

5

- (d) If you run the code below, what gets printed out ?

2

```
String S = new String ("Bicycle");
int iBegin = 1;
char iEnd = 3;
System.out.println(S.substring(iBegin, iEnd));
```

- (e) What is a Method ? How is a method defined in Java ? Explain with appropriate Java code. 5
- (f) What happens if an abstract modifier is applied to a class ? Explain. 4
2. (a) How are thread priorities used in Java ? Explain with a suitable example. 5
- (b) Differentiate between call-by-value and call-by-reference with the help of suitable examples. 6
- (c) What is a Java Package and how is it used ? 2
- (d) How is super() used with constructors ? 2
3. (a) Explain the concept of an interface. What is the scope and nature of variables and methods defined in an interface ? 4
- (b) What is Typecasting ? Write the syntax to convert strings to numbers in Java and explain. 5
- (c) What is the method of retrieval of colour of the text ? Write a program to retrieve RGB values in a given colour. 6

4. (a) What do you mean by a Layout Manager ? Explain Grid Layout with an example. 5
- (b) What is the difference between a constructor and a method ? Explain with an example. 5
- (c) State the purpose of Finalize() method in Java. With an example, explain how the Finalize() method can be used in a Java program. 5
5. (a) What is meant by Stream ? What are the types of streams and classes ? Explain in detail. 7
- (b) Why do we need both run() and start() methods ? Can we achieve it with only run() method ? 3
- (c) Write a program to accept two numbers at the command line and print out their product. 5
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