

BACHELOR OF COMPUTER APPLICATIONS

(BCA) (Pre-Revised)

Term-End Examination

June, 2015

02483

**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 will be the result of the following code? 2

```
int b = 10;
```

```
System.out.println ((b = 3) + b);
```

- (b) Given that Product is a class, how many objects and how many reference variables are created by the following code? 2

```
Product item, stuff;
```

```
item = new Product( );
```

```
Product entity = new Product( );
```

(c) State whether *True* or *False* for the following statements :

5

- (i) An object is an instance of a class.
- (ii) An empty file is a valid source file.
- (iii) A Java source file can contain more than one class definition.
- (iv) Constructor name must be the same as the class name.
- (v) Native methods are also called foreign methods.

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

2

```
public class A {  
  
    public static void main (String[] args){  
  
        int X, Y, Z;  
  
        Y = 10;  
  
        X = Y = Z = 20;  
  
        System.out.println(X);  
  
    }  
  
}
```

- (e) Explain the difference between the following, using code fragments where appropriate : 9
- (i) equals() and ==
 - (ii) Volatile and Transient
 - (iii) Abstract class and Interface
- (f) What is a wrapper class ? List the eight primitive wrapper classes. 4
- (g) What is a constructor ? What is the purpose of default constructor ? Does constructor return any value ? Write a constructor for a class Area that is used to calculate the area of a figure. 6
2. (a) What is a Local class ? What are the restrictions that apply to local classes ? 6
- (b) What is Typecasting ? Illustrate with the help of an example. 4
- (c) What is the difference between build path and classpath ? 2
- (d) How do we define a constant variable in Java ? 3
3. (a) Explain the Applet life cycle. 6
- (b) How would you initialize an array of long with five elements ? 2
- (c) Explain Java Thread Model with diagram. 7

4. (a) What is inheritance ? Give an example of a class and a subclass. Which class is the superclass for every class ? 4
- (b) What is a package ? Which package is imported by default in Java program ? 4
- (c) What are Final classes ? Give two examples of Final classes defined in Java API. 4
- (d) What are the restrictions imposed on a static method or a static variable ? 3
5. (a) With the help of examples, explain the difference between If statement and Switch statement. 8
- (b) Write a Java program to set the color of a string to blue ? Give descriptive comments in your code. 7
-