

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

Term-End Examination

December, 2020

**CS-74 : INTRODUCTION TO INTERNET
PROGRAMMING**

Time : 2 Hours

Maximum Marks : 60

Note : *Question No. 1 is compulsory. Attempt any
three questions from the rest.*

1. (a) Explain the following keywords of JAVA with the help of an example each :

$4 \times 3 = 12$

(i) Private

(ii) Static

(iii) Float

(iv) Final

- (b) What is type casting in the context of JAVA ? Explain how will you convert a string containing value "2345" into number. 5

- (c) The following program is stored in a JAVA file testing.java. What would be the output of compiling and running the following program ? 2

```
public class Testing {  
    public static void main (string args[ ])  
    {  
        int i = 5;  
        double x = 2.7;  
        int k;  
        k = i + x;  
        system.out.println ("i + x is" + k);  
        k = i * x;  
        system.out.println ("i × x is" + k);  
    }  
}
```

- (d) Explain the differences between applets and applications in the context of JAVA. 5
- (e) If the following code is compiled and executed, then under what condition the output will be "Thank you" ? 2

```
class check {  
    public static void main (string args [ ])  
    {  
        if (args, length > 0)  
        {
```

```
        system.out.println ("Hello" + args [0]);  
    }  
    else  
        system.out.println ("Thank You");  
    }
```

- (f) What is an exception in JAVA ? Explain the following built in exceptions : 4
- (i) ArithmeticException
 - (ii) ArrayIndexOutOfBoundsException
2. (a) What is a constructor in JAVA ? Explain with the help of an example. Explain the use of “super” in the context of constructors. 5
- (b) Explain the purpose of using try and catch block in JAVA with the help of an example. Why do you throw an exception in JAVA ? Give example of throwing exceptions in Java. 5
3. (a) What is the need of Interfaces in JAVA ? What is the use of “implements” keyword in this context ? Explain with the help of an example. 4
- (b) What is an array ? How can you declare and initialise an array in JAVA ? Explain with the help of an example. 3

- (c) What is byte code in the context of JAVA ?
What are the advantages of using byte code ? 3
4. (a) What is Inheritance ? How is inheritance implemented in Java using “extends” keyword ? Explain with the help of an example. 6
- (b) What is package in the context of JAVA ?
How packages are imported in JAVA ?
Explain with the help of an example. 4
5. Explain the following data types/operators/programming constructs in JAVA with the help of an example each : 10
- (a) Logical operators
 - (b) Byte and short data types
 - (c) For Loop
 - (d) Switch case statement
 - (e) Instance of operator