

BCA/M-22**1889****PROGRAMMING IN CORE JAVA****BCA-366**

Time : Three Hours]

[Maximum Marks : 80

Note : Attempt *Five* questions in all. Q. No. 1 is compulsory. Attempt *four* more questions, selecting exactly *one* question from each Unit.

Compulsory Question

1. (a) State the major features of object-oriented programming.
- (b) What is the purpose of labelled break and continue ?
- (c) How can you create a class in Java ?
- (d) State the major difference between String and StringBuffer classes.
- (e) What is meant by inheritance ?
- (f) Name and state purpose of any *two* pre-defined packages.
- (g) What is an exception ?
- (h) State the purpose of AWT. **8×2=16**

Unit I

2. (a) Explain Java Run-Time Environment in detail. 8
(b) Describe various operators in java in brief. 8
3. (a) What are the various features of Java ? Explain in detail. 8
(b) What are the various ways to perform I/O in Java ? 8

Unit II

4. Explain the concept of various types of constructors in java with the help of examples. Also discuss how garbage collection is done in java. 16
5. What is meant by overloading and overriding ? How are these implemented in Java ? Explain both by writing program for both. 16

Unit III

6. Explain multiple inheritance in java by writing a program. 16
7. How can you create a user-defined package in Java ? Explain by creating a package and using that package. 16

Unit IV

8. What is a user-defined exception ? Explain by writing an appropriate example. **16**
9. What is an Applet ? Write a program in java to pass parameters to an applet at run-time. **16**