Roll No…………………   Total Pages: 3
BCA/M-18
PROGRAMMING IN CORE JAVA
Paper: BCA-366

Time: Three Hours   Maximum Marks: 80

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

1. Answer the following questions in brief :
    (i)   Explain the signature of main method in JAVA.
    (ii)   What is nested class? What is its usage?
    (iii)   Explain the use of static keyword with an example.
    (iv)   What are Command Line Arguments? Explain.
    (v)   Differentiate between interface and abstract class.
    (vi)   What is the purpose of the finally clause of a try catch-finally statement?
    (vii)   What do you mean by polymorphism? How is it achieved in JAVA?
    (viii) What are Container classes? Explain.

UNIT-I

2. (a) What is byte code? How is it related to JVM? How JAVA is platform independent? Explain.
   (b) Explain the concept of identifiers, literals and keywords in JAVA with examples.

2. Explain the following :
        (a) Hierarchy of Arithmetic and Logical Operators
        (b) For and for ………..each statements.

UNIT-II

4. (a) Explain different ways of passing parameters to a method in JAVA programming.

   (b) What do you mean by Constructor? Differentiate between default constructor   and parameterized constructor with an example

5. (a) With the use of 2D array write a Java program to interchange the rows and columns of a given matrix.
   (b) What is a Stringbuffer class and how does it differ from String class? Explain any three methods of class string and string buffer.

6. (a) How do you define and implement interface in JAVA? How can you extend an interface? Explain with an example.

  (b) What is Inheritance? Explain the multilevel inheritance with a suitable example.

7. (a) What is a package? What are the benefits of using packages? Write down the steps in creating a package.

  (b) Explain different access protection which can be used in package.

8. What are Exceptions? Distinguish between checked and unchecked exceptions in JAVA. How can you create your own exception in JAVA? Explain with an example.

9. (a) What is an applet? Explain the methods used in applet with examples.

  (b) Draw and explain the inheritance hierarchy for the component class in AWT.