(i) Printed Pages : 2   Roll No. ....

(ii) Questions   : 9   Sub. Code : | 0 | 9 | 4 | 9 |
                                Exam. Code : | 0 | 0 | 3 | 1 |

Bachelor of Computer Applications 5th Semester

(2123)

JAVA PROGRAMMING

Paper : BCA-16-503

Time Allowed : Three Hours]   **[Maximum Marks : 65**

Note :— Attempt any **ONE** question each from Units I-IV. Unit **V** is compulsory.

UNIT–I

1. What are various types of Inheritance in Java ? Write a program in Java to illustrate the concept of Multilevel Inheritance.   13

2. (a) What is method overloading ? Write a program in Java to illustrate the concept of method overloading.   9

    (b) Explain the concept of dynamic method dispatch and Java virtual machine.   4

UNIT–II

3. (a) What is Interface ? How multiple inheritances can be achieved using Interface ? Explain with suitable example.   9

    (b) Explain any two functions of String class.   4

4. (a) What are the types of packages ? Discuss the access protection in package with a program. 9

   (b) Write short note on two-dimensional Arrays and Streams. 4

UNIT–III

5. (a) What are the different techniques for creating threads ? Which one is better ? 9

   (b) What are the features of Applets ? 4

6. How Exceptions can be handled in Java ? Using an example explain how try-catch block handles exceptions. 13

UNIT–IV

7. Discuss the various layout managers supported by Java. What is the benefit of using them ? 13

8. Broadly explain the concept of JDBC with suitable examples. 13

UNIT–V

9. (a) Why is main method declared static ? 2

   (b) When should one make a class final ? 2

   (c) How do applets differ from application programs ? 2

   (d) What is the difference between finally and final ? 2

   (e) What is the purpose of super keyword ? 2

   (f) What is the functionality of static class ? 3