Bachelor of Computer Applications 5th Semester

(2124)

JAVA PROGRAMMING

Paper : BCA-16-503

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

Note :— The students are required to attempt *one* question each from Sections A to D and the compulsory question.

SECTION—A

1. (a) Discuss characteristics of Java Language in detail.   6

   (b) Define Constructors. What is the purpose of creating it ? Discuss constructor overloading using an example.   7

2. Define the following :

   (a) Dynamic Method Dispatch.   7

   (b) Abstract class.   6

SECTION—B

3. (a) Difference between String and String Buffer class. Discuss its various methods.   6

   (b) What are Packages ? Steps to create a User defined Package with an example.   7

4. Discuss Multiple Inheritance. How to implement it in Java using an example ?   13

SECTION—C

5. What are exceptions ? Elaborate Exception handling model in Java. Also discuss user defined exception by taking an example.   13

6. (a) Discuss Life cycle of an Applet with an example.   6

    (b) What is multithreading ? Discuss different ways to create a thread with examples.   7

SECTION—D

7. What do you mean by AWT Controls ? Design a Student registration form using various AWT controls.   13

8. (a) How to handle events in Java ? Discuss event delegation model with an example.   7

    (b) What are JDBC components ? Discuss steps to connect a database in Java.   6

(Compulsory Question)

9. (a) Explain JVM and Bytecode.   2

    (b) What do you mean by Streams ?   2

    (c) Discuss Scanner class.   2

    (d) Thread Synchronization.   2

    (e) Keyword final.   2

    (f) Garbage Collection.   3