

(i) Printed Pages : 2

Roll No.

(ii) Questions : 9 Sub. Code :

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Exam. Code :

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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