Roll No. ....

ED–2874

B. C. A. (Part III) EXAMINATION, 2021

Paper Fourth

(Programming in JAVA)

Time : Three Hours

Maximum Marks : 100

Note : Attempt any *two* questions from each Unit. All questions carry equal marks.

Unit—I

1. (a) Explain the following types of classes and their uses :

   (i) inner class

   (ii) final class, and

   (iii) wrapper class ?

   (b) How is Java different from a structured programming language ?

   (c) Write a program to find the transpose of a given matrix.

Unit—II

2. (a) What is the difference between method overriding and method overloading ?

P. T. O.

(b) How to create a package ? Explain with example.

(c) How to add class or interface to a package ?

Unit—III

3. (a) Explain the following terms with respect to exception handling.

  (i)   try

  (ii) catch

  (iii) throw

  (iv) finally

(b) Discuss about suspending, resuming and stopping thread in brief.

(c) What is Java thread model ? Discuss about creation of threads in Java.

Unit—IV

4. (a) Write a program to implement the operations of random access file.

(b) Explain the types of drivers used in JDBC.

(c) Define stream. Explain Byte and character stream in Java.

Unit—V

5. (a) What is an applet ? How it different from an application ?

(b) Describe about various components in AWT.

(c) Write an applet for each of following graphics methods.

    (i)   drawoval()

    (ii)   drawrect()

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