2021/TDC/CBCS/ODD/ BVOCGE–303T/447

TDC (CBCS) Odd Semester Exam., 2021 held in March, 2022

INFORMATION TECHNOLOGY

(3rd Semester)

Course No. : BVOCGE–303T

(Introduction to Java Programming)

Full Marks : 70
Pass Marks : 28

Time : 3 hours

The figures in the margin indicate full marks for the questions

Answer **five** questions, selecting **one** from each Unit

UNIT—I

1. *(a)* What is object-oriented programming? What are the advantages of OOP?   2+6=8

    (b) Explain the following :   3+3=6
       (i) Abstraction
       (ii) Polymorphism

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2. (a) Describe the basic features of Java programming. 6

   (b) Explain integer and floating-point data types in Java with examples. 8

UNIT—II

3. (a) Differentiate between method overloading and method overriding. 4

   (b) Describe different forms of inheritance in Java with example. 10

4. (a) Define class. Describe the syntax of defining a class in Java programming. 8

   (b) Write a simple Java program to add two numbers. 6

UNIT—III

5. Define multithreading. Explain the following mechanisms of creating threads in Java : 2+12=14

   (a) Extending the thread class

   (b) Implementing the runnable interface

6. (a) Briefly explain the types of errors occurred in Java programming. 4

   (b) Explain the following : 2+2=4

   (i) Join( )

   (ii) isActive( )

   (c) Explain the exception handling mechanism in Java. 6

UNIT—IV

7. (a) What is an applet in Java? Describe different stages in the life cycle of an applet. 10

   (b) How does applet differ from application program? 4

8. (a) Briefly describe the following layout managers in Java : 3+3+3=9

   (i) Flow layout

   (ii) Grid layout

   (iii) Border layout

   (b) Distinguish between Java AWT and Java Swing. 5

(4)

UNIT—V

9. *(a)* What is event in Java? Briefly explain different types of event.   2+4=6

   (b) What are the two key participants of delegation event model?   4

   (c) Explain the steps involved in event handling.   4

10. *(a)* Define Java database connectivity. Write down the steps for establishing connection between Java program and database.   2+8=10

   (b) Briefly explain the transaction management in JDBC.   4

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