

**2023/TDC(CBCS)/ODD/SEM/
BVOC(IT) GE-303T/436**

TDC (CBCS) Odd Semester Exam., 2023

BVOC (Information Technology)

(3rd Semester)

Course No. : BVOC(IT) GE-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 any one question from each Unit

UNIT—I

1. (a) What is object-oriented programming?
What are the benefits of object-oriented
programming language? 2+4=6
- (b) Define the following : 2×4=8
- (i) Data encapsulation
 - (ii) Data abstraction
 - (iii) Inheritance
 - (iv) Keywords and identifiers

(2)

2. (a) Explain the following control structures with example : 8
- (i) IF statement
- (ii) Switch statement
- (b) How can you give values to variable in Java? Explain briefly. 6

UNIT—II

3. (a) Define class. How are field and method declared in Java? 6
- (b) Explain method overloading in Java with example. 6
- (c) Define 'this' keyword with respect to Java. 2
4. (a) Write short notes on the following : 6
- (i) Final variable and method
- (ii) Abstract methods and classes
- (b) Write a simple Java program to calculate sum of two numbers using constructor. 6
- (c) Define Java API packages. 2

(3)

UNIT—III

5. Define exception. Describe exception handling mechanism with example. $2+12=14$
6. (a) Distinguish 'throw' and 'throws' keywords in Java. $2+2=4$
- (b) Define isAlive() and join() method. 2
- (c) Define multithreading. How are threads in Java created using runnable interface? $2+6=8$

UNIT—IV

7. Define container. How do you create the following user interface components in Java? $2+12=14$
- (a) Labels
- (b) Buttons
- (c) Check boxes
8. Define Applet. How does applet differ from application program? Briefly explain the life cycle an Applet. $2+4+8=14$

(4)

UNIT—V

9. (a) What is event in Java? What are the different categories of event? 2+4=6
- (b) How does Java handle events? Explain. 8
10. (a) Define JDBC. Write down the steps for connecting Java program with database. 2+8=10
- (b) Define commit () and rollback () methods. 4

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