

**2020/TDC(CBCS)/ODD/SEM/  
BVOCGE-303T/447**

**TDC (CBCS) Odd Semester Exam., 2020  
held in March, 2021**

**B.Voc (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*

**SECTION—A**

**Answer any ten questions of the following :  $2 \times 10 = 20$**

- 1. Mention any two basic features of Java.**
- 2. What is byte code?**
- 3. What is the difference between while and do-while statement in a Java program?**
- 4. Explain switch statement with a Java program.**

5. What is polymorphism?
6. What is method overloading?
7. What is Just-in-time (JIT) compiler?
8. What do you mean by garbage collection?
9. Write a note on the string class.
10. Explain the purpose of the string buffer class.
11. How can interfaces be distinguished from classes?
12. What is an exception in Java?
13. Write how to start a thread.
14. Why are the AWT components called 'heavy weight components'?
15. What is grid layout?
16. Write a note on radio buttons.
17. What is JDBC driver?

18. What is the function of JDBC connection interface?
19. What are the JDBC API components?
20. What are the differences between execute query and execute update?

## SECTION—B

Answer any *five* questions of the following :

10×5=50

21. (a) Write down the basic features of Java.  
(b) What is object-oriented programming (OOP)? What are the advantages of an OOP paradigm? 5+5=10
22. (a) Define different data types in Java.  
(b) Write a Java program to swap a number without using a third variable. 4+6=10
23. What is a constructor? Write a program to illustrate constructor overloading in Java. 2+8=10
24. What is exception handling? Write a program to illustrate exception handling. 2+8=10
25. (a) Explain multithreaded programming in Java.

- (b) Explain the method `getName()`,  
`setPriority(int newPriority)`, `yield()`. 4+6=10
- 26.** Explain the following : 2×5=10
- (a) Text stream
  - (b) Stream tokenizer
  - (c) Buffered stream
  - (d) Print stream
  - (e) String buffer
- 27.** What is an applet in Java? Write a Java program to print "Welcome to the world of Java" in an applet in five different colors. 2+8=10
- 28.** What are the controls that AWT supports? What are the deficiencies in AWT that led to the introduction of Swing in Java? 4+6=10
- 29.** Write a program to illustrate Java database connectivity. 10
- 30.** Write short notes on the following : 2×5=10
- (a) Choice list
  - (b) Radio button
  - (c) Prepared statement
  - (d) Callable statement
  - (e) Statement

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