



2022/TDC/ODD/SEM/CSCHCC-301T/085

TDC (CBCS) Odd Semester Exam., 2022

COMPUTER SCIENCE

(Honours)

(3rd Semester)

Course No. : CSCHCC-301T

(Programming in JAVA)

Full Marks : 50

Pass Marks : 20

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

UNIT—I

1. Answer any two of the following questions :

2×2=4

- (a) What are primitive and non-primitive datatypes in JAVA?
- (b) Why is JAVA called platform independent language?
- (c) Write a code segment which shows the concept of widening type casting.



(2)

2. (a) What is meant by the statement "JAVA is a write once run anywhere programming language"? Also differentiate between JDK, JRE and JVM. $1\frac{1}{2}+4\frac{1}{2}=6$

Or

- (b) Explain the following features of JAVA : $3+3=6$
- (i) Robust
 - (ii) Secured and Portable

UNIT—II

3. Answer any two of the following questions : $2\times 2=4$
- (a) Write the importance of Scanner class.
 - (b) How does String class differ from StringBuffer class?
 - (c) What is dynamic array? How do you create one-dimensional array in JAVA?

4. (a) Write a program which implements the concept of 'object as parameter' and 'object as return type'. $3+3=6$

Or

- (b) Define any two of the following terms : $3\times 2=6$
- (i) Garbage collection
 - (ii) Constructor overloading
 - (iii) Final class

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(Continued)

(3)

UNIT—III

5. Answer any two of the following questions : $2\times 2=4$

- (a) State the differences between abstract class and interface.
- (b) What is package? Which package is implemented by default in JAVA?
- (c) What is wrapper class? Give example.

6. (a) With a code segment, compare method overloading and method overriding. 6

Or

- (b) How does JAVA implement the concept of multiple inheritance? Explain with a program. 6

UNIT—IV

7. Answer any two of the following questions : $2\times 2=4$

- (a) Define exception. How does exception differ from error?
- (b) What are the uses of JDBC?
- (c) What is multithreading? Write two benefits of multithreading.

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(Turn Over)



(4)

8. (a) Discuss the different ways of creating thread in JAVA.

6

Or

- (b) Write down the different steps of database connectivity in JAVA.

6

UNIT—V

9. Define any *two* of the following terms : $2 \times 2 = 4$

(a) AWT

(b) Swing

(c) Even handling

10. (a) With neat diagram, discuss the life cycle of an applet.

6

Or

- (b) Design a simple calculator using JAVA swing.

6
