

TDC Odd Semester Exam., 2020
held in July, 2021

COMPUTER SCIENCE

(Honours)

(5th Semester)

Course No. : BCSH-501

(Programming in JAVA)

Full Marks : 35

Pass Marks : 12

Time : 2 hours

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

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

UNIT—I

1. (a) Describe Java Virtual Machine (JVM). 3
(b) What are the features of Java? Explain. 4
2. (a) Why is Java known as platform-independent language? 3
(b) Explain automatic-type conversion and casting with suitable example. 4

UNIT—II

3. (a) Write the differences between overloading and overriding methods with a code segment. 4
(b) Differentiate among the following terms : 3
‘final’, ‘finally’ and ‘finalize’
4. (a) Define Java Package with example. What are the advantages of Java Package? 3
(b) Distinguish between abstract class and interface. 4

UNIT—III

5. (a) Describe the complete life cycle of a thread. 5
(b) What is the significance of random access file? 2
6. (a) What is an exception in Java? 1
(b) Write a program to create a try block that is likely to generate three types of exception and then incorporate necessary catch block to catch and handle them appropriately. 6

(3)

UNIT—IV

7. Define applet. Write the steps involved in developing and running an applet program. 1+6=7
8. (a) What is layout manager? What are the different types of layout manager in JDK? 1+2=3
- (b) What is swing? Write the differences between swing and AWT. 1+3=4

UNIT—V

9. Define JDBC. How is a statement created and executed in JDBC? 2+5=7
10. (a) How many types of JDBC drivers are there? Mention all the names. 2
- (b) How can a database connection be established or opened in Java? 5

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