



**2022/TDC/ODD/SEM/  
BCACC-501T/021**

**TDC (CBCS) Odd Semester Exam., 2022**

**COMPUTER APPLICATION**

**( 5th Semester )**

**Course No. : BCACC-501T**

**( 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 :  $2 \times 2 = 4$**

**(a) What is byte code?**

**(b) How do you perform type casting in Java?**

**(c) Differentiate between JDK and JRE.**



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2. Answer any *one* of the following : 6
- (a) Discuss the basic features of Java. 6
- (b) (i) Write a command line Java program to print a message "Hello World". 3
- (ii) Write a short note on JVM. 3

UNIT—II

3. Answer any *two* of the following : 2×2=4
- (a) What is the use of scanner class in Java? 2
- (b) What is an array? How do you create an array in Java? 2
- (c) Write down the purpose of 'This' and 'Final' keyword. 2

4. Answer any *one* of the following : 6
- (a) Explain method overloading and method overriding with examples. 6
- (b) How an object can be passed to and return from a function? Explain with a code segment. 6

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UNIT—III

5. Answer any *two* of the following : 2×2=4
- (a) State the difference between abstract class and interface. 2
- (b) Name any two packages and their uses. 2
- (c) What are autoboxing and unboxing? 2
6. Answer any *one* of the following : 6
- (a) Illustrate the concept of multithreading in Java. Show with an example, how multithreading works. 6
- (b) Does Java support multiple inheritance? Write a program to implement single-level inheritance. 6

UNIT—IV

7. Answer any *two* of the following : 2×2=4
- (a) What is exception in Java? What are its different types? 2
- (b) Write the uses of JDBC. 2
- (c) Write down the difference between Thread class and Runnable interface. 2



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8. Answer any *one* of the following : 6

(a) Create a try block that is likely to generate three types of exception and incorporate necessary catch blocks.

(b) How can a connection be established with a database in Java?

UNIT—V

9. Answer any *two* of the following : 2×2=4

(a) How does AWT differ from Swing?

(b) What is applet class?

(c) Write down the functions of 'init' and 'paint' method.

10. Answer any *one* of the following : 6

(a) Discuss the life cycle of applet.

(b) Using Swing, design a calculator.

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