

Reg. No.....

Name.....

**BA, BSC, B.C.OM, B C A DEGREE END SEMESTER EXAMINATION - OCTOBER 2025****UGP (HONS.) SEMESTER - 3: SKILL ENHANCEMENT COURSE****COURSE: 24UBCASEC201: PROGRAMMING IN JAVA***(For Regular 2024 Admission)*

Time: 1.5 Hour

Max. Marks :50

**PART A*****Answer any 5 questions. Each question 2 carries each.***

1. List the important features of Java? (A,CO1)
2. What is an array? Explain different types of arrays in Java? (A,CO2)
3. Differentiate between class, abstract class and interface? (A,CO2)
4. What is JVM? Explain the structure of JVM with a neat diagram? (A,CO1)
5. How to read data in Java file? Discuss. (A,CO3)
6. Explain the use of static keyword with examples? (A,CO2)
7. Give an overview of JButton Class? (A,CO4)

**(2 x 5 10)****PART B*****Answer any 4 questions. Each question carries 5 each.***

8. Explain different types of operators in Java with example programs? (U,CO1)
9. Write a Java program to generate a pyramid of numbers for given number N using for loop? (A,CO1)
10. Discuss in detail Abstract class and interface in Java? (A,CO3)
11. What is Package? How are packages created and accessed in Java? (A,CO4)
12. Define Multithreading? Explain the methods of creating threads in Java with example programs? (A,CO3)

**(5 x 4 = 20)****PART C*****Answer 2 questions. Each question carries 10 marks each.***

13. Distinguish between the following with example programs:  
a. 'super' and 'this'

b. 'final' and 'finally'

(A, CO2)

14. Elaborate on Swing? Compare and Contrast AWT and Swing? Explain in detail about the important components of Swing?

(A, CO4)

15. Explain the following:

- What are exceptions? Which keywords are used to exception handling?
- Write a program that catches negative exception (user defined exception).
- This is caused when user enters a negative number.

(A, CO3)

**(10 x 2 =20)**

CO No.	Expected Course Outcome	CL	Questions	Total Marks
1	Illustrate object-oriented programming using Java, its data types, type conversion, operators	U, A	1,4,8,9	14
2	Develop the Java programmes using defining classes, invoking methods using libraries.	A	2,3,6,13	16
3	Demonstrate the designing, implementing and testing GUI in Java	A	5,10,12,15	22
4	Design GUI applications in Java	A	7,11,14	17