BANGALORE INSTITUTE OF TECHNOLOGY

An Autonomous Institution under Visvesvaraya Technological University, Belagavi
K. R. Road, V. V. Puram, Bengaluru - 560004

DEPARTMENT OF CS&E/IS&E/AI&ML/CSE(DS)

MODULE-WISE QUESTION BANK

Academic Year:	2026-27	**Batch:**	2025
Course Code:	1BCS302	**Course Title:**	Object Oriented Concepts with Java
Credits:	4	**Course Coordinator:**	Prof. Prathima M G
Total Contact Hours:	42	**Total Hours of Pedagogy:**	42:0:28:50=120
Faculty In-charge:	Prof. Yamini Sahukar P.	**Semester & Section**	CSE& Allied Branches

MODULE - 3: Exception Handling and Multithreaded Programming

Q. No.	Question	CO	RBL
1	Explain exception-handling fundamentals in Java and describe the purpose of try, catch, throw, throws and finally.	4	L2
2	Explain the Java exception hierarchy. Differentiate checked and unchecked exceptions with examples.	4	L2
3	What is an uncaught exception? Explain its effect on program execution with an example.	4	L2
4	Write a Java program to handle division by zero using try and catch.	4	L3
5	Explain multiple catch clauses with a Java program that handles ArithmeticException and ArrayIndexOutOfBoundsException.	4	L3
6	Explain nested try statements with a suitable Java program.	4	L3
7	Differentiate throw and throws with suitable Java examples.	4	L2
8	Explain the purpose of the finally block. Write a program showing its execution when an exception occurs.	4	L3
9	Describe any four built-in Java exceptions and state when they occur.	4	L2
10	Write a Java program to create and use a custom exception for an invalid age.	4	L3
11	What are chained exceptions? Explain how to set and retrieve the cause of an exception with an example.	4	L2
12	Explain the throw keyword in Java with syntax and an example.	4	L2
13	Write a Java program that uses throw to reject an invalid age entered by a user.	4	L3
14	Explain the throws clause in Java. Differentiate between throw and throws with examples.	4	L2
15	Write a Java program in which a method declares an exception using throws and the calling method handles it.	4	L3
16	Explain the purpose of the finally block. Illustrate its execution when an exception occurs and when no exception occurs.	4	L2
17	Write a Java program using try, catch and finally to demonstrate that the finally block executes after exception handling.	4	L3
18	List and explain any four built-in exceptions in Java with situations in which they occur.	4	L2

19	Write a Java program to demonstrate handling of NumberFormatException and NullPointerException.	4	L3
20	Explain how to create a user-defined exception subclass in Java with a suitable example.	4	L2
21	Develop a Java program for voter eligibility that throws a user-defined exception for an age below 18 and displays a completion message using finally.	4	L3
22	What are chained exceptions in Java? Explain how to associate an original cause with another exception using a suitable example.	4	L2
23	Analyze the flow of execution when an exception is thrown inside a try block and matching catch and finally blocks are present.	4	L4
24	A banking application accepts an account balance and a withdrawal amount. Write a Java program to create an InsufficientBalanceException, throw it when the withdrawal amount exceeds the balance, and display the remaining balance after a successful withdrawal.	4	L3
25	A college result-processing application accepts student marks as strings. Write a Java program to convert the marks into integers, handle NumberFormatException for non-numeric input, and throw a user-defined InvalidMarksException if a mark is outside the range 0 to 100.	4	L3
26	An online shopping application calculates the total bill using the price and quantity entered by a user. Write a Java program using multiple catch blocks to handle invalid numeric input and division by zero while calculating the average price per item, and use finally to display a completion message.	4	L3

Faculty In-charge

Course Coordinator **Module Coordinator** **IQAC** **Program Coordinator**