

Object Oriented Programming Through Java (25IT303)

Unit wise Question Bank

UNIT-III EXCEPTION HANDLING AND MULTITHREADING				
S.No	Questions	BT	CO	PO
Part – A (Short Answer Questions)				
1	How do we start and stop a thread?	L1	CO3	PO4
2	Write the complete life cycle of a thread.	L1	CO3	PO4
3	What is the benefit of Generics in Collections Framework?	L1	CO3	PO5
4	Differentiate between Enumeration and Iterator interface.	L1	CO3	PO5
5	Define exception.	L2	CO3	PO3
6	Differentiate between a thread and a process.	L1	CO3	PO4
7	What is the difference between error and an exception?	L1	CO3	PO3
8	What is synchronization and why is it important?	L1	CO3	PO2
9	How do we set priorities for threads?	L1	CO3	PO4
10	What are the runtime errors and logical errors in Java?	L1	CO3	PO3
Part – B (Long Answer Questions)				
11	Explain Exception Handling mechanism in Java using try, catch, finally, throw, and throws.	L2	CO3	PO2
12	Explain Multiple Catch blocks and Nested Try blocks with suitable Java programs.	L2	CO3	PO3
13	How do you create User-Defined (Custom) Exceptions? Write a Java program to validate user age using custom exception.	L3	CO3	PO3
14	Describe the Thread Life Cycle in Java with an example state-transition diagram and state explanations.	L2	CO3	PO2
15	Compare creating threads by extending Thread class vs. implementing Runnable interface with complete programs.	L3	CO3	PO3
16	Explain Thread Priorities and control methods: sleep(), join(), yield(), and interrupt().	L2	CO3	PO2
17	Explain Thread Synchronization using synchronized methods/block to prevent race conditions with an example.	L3	CO3	PO3
18	Explain Inter-Thread Communication with a solution to the Producer-Consumer problem using wait() and notify().	L3	CO3	PO3
19	Explain Deadlock in multithreaded applications with an example. How can Deadlock be prevented?	L2	CO3	PO2
20	Write a Java program using multithreading where two threads print Even and Odd numbers concurrently.	L3	CO3	PO3