Database Testing

Module 1: Introduction to Database Testing

- Definition and Importance
- Key Concepts and Benefits

Module 2: Types of Database Testing

- Structural Testing
- Functional Testing
- Non-Functional Testing

Module 3: Database Testing Fundamentals

- Data Integrity Testing
- Schema Testing
- Stored Procedures Testing
- Triggers and Constraints Testing

Module 4: Database Testing Techniques

- CRUD Operations Verification
- Data Validity Testing
- Data Consistency and Accuracy
- ACID Property Verification

Module 5: Test Environment Setup for Database Testing

- Database Test Requirements
- Test Data Creation and Management
- Environment Configuration and Tools

Module 6: Common Database Testing Tools

- Overview of Popular Tools
- Tool Selection Criteria

Module 7: Database Testing Process

- Planning and Preparation
- Test Case Design and Execution
- Result Analysis and Reporting

Module 8: Best Practices in Database Testing

- Tips for Effective Testing
- Challenges and Mitigation Strategies

Module 9: Case Studies and Examples

• Practical Scenarios and Example Test Cases

Module 10: Advanced Topics in Database Testing

- Performance and Load Testing for Databases
- Security Testing in Databases