

Model Question Paper Seventh Semester B.E Degree Examination Jan/Feb 2027 Software Testing

Time: 3 Hours

Max. Marks: 100

**Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M: Marks, L: RBT (Revised Bloom's Taxonomy) level, C: Course outcomes.**

Module -1			M	L	C
Q1	a.	Discuss the various Approaches to Testing. Compare and contrast the characteristics of Black-box, White-box, and Gray-box testing strategies.	10	L2	CO1
	b.	Explain the fundamental Principles of Testing and describe why exhaustive testing is considered impossible in a real-world software environment.	10	L2	CO1
OR					
Q2	a.	Describe the Software Testing Process in detail. How do Test Policy and Test Planning contribute to the success of a testing cycle?	10	L2	CO1
	b.	Analyze the Cost Aspect of Testing. Explain how early defect detection influences the overall cost of software development.	10	L2	CO1
Module- 2					
Q3	a.	What is Boundary Value Analysis? Derive test cases for the triangle problem using Boundary Value Analysis.	10	L3	CO2
	b.	Discuss about Worst-Case Boundary Value Testing and illustrate when this technique should be preferred over basic boundary value testing.	10	L3	CO2
OR					
Q4	a.	Illustrate variants of Equivalence Class Testing using the case of Next Date problem.	10	L3	CO2
	b.	Derive various test cases for the triangle problem using Equivalence Class testing.	10	L3	CO2
Module - 3					
Q5	a.	Construct the program graph for the Triangle problem.	10	L3	CO3
	b.	Illustrate McCabe's basis path method with an example.	10	L3	CO3
OR					
Q6	a.	Construct DD-path graph for the triangle program.	10	L3	CO3
	b.	Illustrate the concept of Slice based testing with an example.	10	L3	CO3
Module - 4					
Q7	a.	Distinguish between a Test Policy and a Test Strategy. Explain the essential components of a comprehensive Test Strategy document.	10	L2	CO4
	b.	Describe the structure of a Test Plan. Using a standard template, illustrate the significance of Test Deliverables and Suspension/Resumption Criteria.	10	L3	CO4
OR					
Q8	a.	Describe the process of building Test Data and Test Cases. Differentiate between a Test Scenario and a Test Case, providing an example for each.	10	L2	CO4
	b.	Illustrate how a Test Management Software helps in organizing and executing the testing lifecycle.	10	L3	CO4

Module - 5

Q9	a.	Describe the fundamental differences between a Selenium Test Case and a Selenium Test Suite.	10	L2	CO5
	b.	Illustrate the process of recording a script using Selenium IDE and discuss the significance of the Format menu in the IDE.	10	L3	CO5
OR					
Q10	a.	Interpret the structure of a Selenium Test Case written in HTML format. What are the three main components of a Selenese command?	10	L2	CO5
	b.	Discuss the role of a Test Automation Environment and illustrate how applying CSS selectors can improve the reliability of a Selenium Test Case.	10	L3	CO5
