



Third Semester MCA Degree Examination, June/July 2025
Software Testing

Max. Marks: 100

Note 1. Answer any FIVE full questions, choosing ONE full question from each module.

2. *M*: Marks, *L*: Bloom's level, *C*: Course outcomes.

Module – 1			M	L	C
Q.1	a.	Define the term software testing. Write in detail about testing and debugging processes.	10	L1	CO1
	b.	What do you mean by testing adequacy criteria and comparing criteria? Explain about test specifications.	10	L1	CO1
OR					
Q.2	a.	Discuss the different types of test metrics.	10	L1	CO1
	b.	What is Static Testing? What are the methodologies / techniques / process you use in static testing?	10	L1	CO1
Module – 2					
Q.3	a.	Write a program for triangle problem with data flow diagram.	10	L2	CO2
	b.	With a neat diagram, explain about levels of testing. Write a short note on test case.	10	L2	CO2
OR					
Q.4	a.	Write a note on Error and Fault Taxonomics.	10	L2	CO2
	b.	Write a program to compute sales commission.	10	L2	CO2
Module – 3					
Q.5	a.	Write test cases for the next data function using equivalence class techniques.	10	L3	CO3
	b.	Write test case for the triangle problem using decision table approach.	10	L3	CO3
OR					
Q.6	a.	What do you mean by boundary value analysis? Explain robust worst case boundary value testing with neat diagram.	10	L3	CO3
	b.	Write test case for the commission problem using equivalence class approach.	10	L3	CO3

Module – 4				
Q.7	a.	Discuss about the traditional view of testing levels with neat diagram. Explain about any one alternative life cycle model with suitable diagram.	10	L2 CO2
	b.	Draw the content diagram and data flow diagram of the SATM System.	10	L3 CO3
OR				
Q.8	a.	What do you mean by Test Coverage Metrics? Explain all types of metrics based testing with suitable example.	10	L2 CO2
	b.	Distinguish between Integration Testing and System Testing.	10	L3 CO3
Module – 5				
Q.9	a.	What is meant by Fault Based Testing? Mention few assumptions in fault based testing. Explain about fault based adequacy criteria.	10	L3 CO3
	b.	How test design specification documents are organized?	10	L3 CO3
OR				
Q.10	a.	Explain the terminologies in mutation – analysis. Discuss the variations on mutation analysis.	10	L3 CO3
	b.	Discuss any five major activities in a planning and monitoring the process. How do you generate test and analysis reports?	10	L3 CO3

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