CBCS SCHEME

22MCA344

Third Semester MCA Degree Examination, Dec.2023/Jan.2024
Software Testing

Time: 3 hrs.

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.

			M	L	C
Module – 1					
Q.1	a.	What are error, faults and failures in testing? Explain with a neat diagram.	10	L2	CO1
	b.	Briefly explain the software quality attributes of software testing.	10	L2	CO1
OR					
Q.2	a.	What are test metrics? Explain various types of metrics used in software testing.	10	L2	CO1
	b.	How defect management is handled in software testing? Explain.	10	L2	CO1
Module – 2					
Q.3	a.	What are Test Cases? Explain with the help of Venn Diagram.	10	L2	CO1
	b.	List out and explain the error and fault taxonomies.	10	L2	CO1
OR					
Q.4	a.	How SATM system communicates with Bank customers? Explain with a neat diagram.	10	L2	CO1
	b.	Write a program for triangle problem with data flow diagram.	10	L2	CO1
Module – 3					
Q.5	a.	Briefly explain BVA for 2 variables with graph and limitations of BVA.	10	L2	CO2
	b.	Explain Decision Table-Based Testing with respect to triangle problem.	10	L2	CO2
OR					
Q.6	a.	Discuss equivalence class test cases for the Next Date Function.	10	L2	CO2
	b.	Explain BVA Best case Worst case, robust case, robust worst case with graph.	10	L2	CO2
Module – 4					
Q.7	a.	What are DD paths? Explain DD path graph for the triangle problem.	10	L2	CO3
	b.	Briefly explain traditional view of testing levels with the examples of partial functional decomposition of the SATM system.	10	L2	CO3
OR					
Q.8	a.	Define du-path. Explain the same with respect to total locks in the communication problem.	10	L2	CO3
	b.	Explain the role of alternative life cycle model in levels of testing.	10	L2	CO3
Module – 5					
Q.9	a.	Discuss the hypothesis and terminologies in fault-based testing.	10	L2	CO4
	b.	Define scaffolding. Explain the same with respect to generic and specific.	10	L2	CO4
OR					
Q.10	a.	How Test and Analysis strategies are implemented in software testing?	10	L2	CO4
	b.	Explain the Test Design Specification Documents in software testing.	10	L2	CO4

* * * * *