IV B.Tech - I Semester – Regular Examinations - DECEMBER 2022

SOFTWARE TESTING METHODOLOGIES (COMPUTER SCIENCE & ENGINEERING)

Duration: 3 hours

Max. Marks: 70

Note: 1. This question paper contains two Parts A and B.

- 2. Part-A contains 5 short answer questions. Each Question carries 2 Marks.
- 3. Part-B contains 5 essay questions with an internal choice from each unit. Each question carries 12 marks.
- 4. All parts of Question paper must be answered in one place.

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BL – Blooms	Level		CO – Course Outcome

$\mathbf{PART}-\mathbf{A}$

		BL	CO
1. a)	Describe Software Testing with example.	L2	CO1
1. b)	Define Blackbox testing.	L1	CO1
1. c)	Identify the need of validation.	L2	CO1
1. d)	Explain various test group hierarchy in software	L2	CO1
	testing.	L	
1. e)	Explain cost incurred in software testing.	L2	CO1

PART - B

			BL	СО	Max. Marks	
	UNIT-I					
2	a)	Describe the long-term goals of Software	L2	CO1	6 M	
		Testing.				
	b)	Explain software testing life cycle phases.	L2	CO1	6 M	
	OR					

3	a)	Illustrate the software testing strategies.	L2	CO1	6 M
	b)	Discuss software testing myths and facts.	L2	CO1	6 M
		UNIT-II			
4	a)	What is cyclomatic complexity and	L2	CO1	6 M
		illustrate the methods to calculate the			
		cyclomatic complexity?			
	b)	Describe equivalence class testing in	L2	CO2	6 M
		software testing.			
		OR			
5	a)	Discuss the need for inspections and	L2	CO2	6 M
		technical reviews.			
	b)	Differentiate white box and black box	L2	CO2	6 M
		testing.			
		UNIT-III			
6	a)	Describe about the system testing and	L2	CO2	6 M
		acceptance testing.			
	b)	Illustrate the difference between Unit and	L3	CO2	6 M
		Integration testing.			
		OR			
7	a)	Explain the bottom-up and top-down	L2	CO1	6 M
		integration testing with suitable example.			
	b)	Describe various regression testing	L2	CO2	6 M
		techniques.			
		UNIT-IV			
8	a)	Describe the test organization in software	L2	CO3	6 M
		testing.			
	b)	What is the test plan and explain with a	L2	CO1	6 M
		neat diagram?			
		OR			

9	a)	What is the reason for test suite	L2	CO1	6 M		
		minimization also explain its benefits.					
	b)	Describe the test suite prioritization.	L2	CO3	6 M		
	UNIT-V						
10	a)	Explain the various guidelines for	L2	CO1	6 M		
		automated testing.					
	b)	Describe the various costs incurred in	L2	CO1	6 M		
		Testing tools.					
OR							
11	a)	Explain in detail about the object-oriented	L2	CO1	6 M		
		testing.					
	b)	Explain the overview of the commercial	L2	CO1	6 M		
		testing tools.					