## Velegapudi Ramakrishna Siddhartha Engineering College::Vijayawada (Autonomous)

VR2

IV /IV B Tech Degree Examinations(February/2023)

Seventh Semester

## Department of Information Technology 20IT7402A - SOFTWARE TESTING AND AUTOMATION

TT:		2011/402A - SOFT WAKE TESTING AND AUTON	MATION	M M	-1-o.70				
	ne: 3			Max Marks:70					
		is Compulsory							
		one (01) question from each unit of Part $-$ B s to any single question or its part shall be written at one place only							
Cognitive Levels(K): K1-Remember; K2-Understand; K3-Apply; K4-Analyze; K5-Evaluate; K6-Create									
	No	Question	Marks	Course	Cog.				
•		<b>Q</b>		Outcome	Level				
		Part - A		•					
			10X1=10	0X1=10M					
1	a	State the goals of software testing.	1	CO1	K1				
	b	What are different states of a bug?	1	CO1	K1				
	c	Classify the bugs based on criticality.	1	CO1	K1				
	d	Differentiate between effective software testing and exhaustive	1	CO1	K2				
		software testing.	-	004	17.0				
	e	Which type of testing is possible with BVA?	1	CO4	K2				
	f	What are the various phases of TALC? What is the significance of ROI Analysis?	1	CO3	K1 K1				
	g h	Specify different types of Test Automation Frameworks.	1	CO2	K1 K2				
	I	What is Selenium IDE?	1	CO2	K2				
	i	What he difference is between verify and assert?	1	CO4	K2				
	J	Part - B	-		5 = 60M				
		UNIT - I							
2	a	State and explain software testing myths and facts.	8	CO1	K2				
	b	V & V diagram is the basis for every type of testing. Comment of	on 7	CO3	K4				
		this statement.							
(OR)									
3	a	Explain different stages of Software testing life cycle with ne	at 8	CO3	K2				
	b	block diagram.  Discuss briefly the verification and validations activities performed	ed 7	CO3	K2				
	U	at each stage of Software development life cycle with neat diagram		CO3	IX2				
		UNIT - II	•						
4	a	A Program reads three numbers A, B, and C, within the range [1, 50]	0] 8	CO4	K3				
		and prints the largest number. Design test cases for this progra	_						
		using Boundary Value Checking, Robust Testing and Worst-car	se						
		Testing methods.							
	b	Briefly explain State Table-Based Testing.	7	CO2	K2				
-		(OR)		004	17.0				
5	a	Write a program for performing the four basic arithmetic operation using switch case statements	ns 7	CO4	K3				
		i) Draw the DD graph for the program							
		ii) Calculate the cyclomatic complexity of the program							
		iii) List all independent paths							
		iv) Design all test cases from independent paths							
		v) Derive all du-paths and dc-paths using data flow testin	g.						
					<u> </u>				
	b	.Write short notes on	8	CO2	K2				
		i) Data Flow Testing  Wytation Testing							
		ii) Mutation Testing							

UNIT - III									
6	a	Describe the stages of Test Automation Life Cycle.	7	CO3	K2				
	b	Discuss in brief the SWOT analysis of Test Automation.	8	CO3	K4				
(OR)									
7	a	Compare and contrast Waterfall Test Automation development model with W-Model	5	CO3	K2				
	b	Write short notes on	10	CO3	K2				
		i) Agile Automation Challenges							
		ii) Screen Components							
UNIT - IV									
8	a	Explain how to add filters to the name.	5	CO2	K2				
	b	Write short notes on	10	CO2	K3				
		i) CSS Selectors							
		ii) Page Objects							
(OR)									
9	a	Discuss about the architecture of Selenium.	8	CO2	K2				
	b	Explain the rules for automation.	7	CO4	K2				