GUJARAT TECHNOLOGICAL UNIVERSITY
MCA – SEMESTER II- EXAMINATION –SUMMER-2025

Subject Code: 629406   **Date: 05/06/2025**
Subject Name: Software Testing
Time:10:30 AM TO 01:00 PM   **Total Marks: 70**
Instructions:

   1. **Attempt all questions.**
   2. **Make Suitable assumptions wherever necessary.**
   3. **Figures to the right indicate full marks.**
   4. **Use of simple calculators and non-programmable scientific calculators are permitted.**

Q.1	**(a)**	Answer the following questions.	**07**
		1. What is Glass box testing?	
		2. Define Software Quality.	
		3. Distinguish between Validation and Verification.	
		4. Why there is need of Software Testing.	
		5. Explain Software Quality Controls.	
		6. Difference between Software Errors, Fault, Failure.	
		7. List out the Software testing objectives.	
	(b)	Explain the Classification of Software Quality Factors?	**07**
Q.2	**(a)**	What is Software quality assurance? Discuss the Software quality Challenges.	**07**
	(b)	Explain the Difference between Procedure and Work Instructions.	**07**
		OR	
	(b)	What is Alpha Site and Beta Site Testing? Discuss their Advantages and Disadvantages.	**07**
Q.3	**(a)**	Describe the concept of black box testing and white box testing, and discuss their advantages and disadvantages.	**07**
	(b)	Discuss between bottoms-up and top-down testing strategies in Details.	**07**
		OR	
Q.3	**(a)**	Discuss the Contract review, Development and quality plans.	**07**
	(b)	1. Define CASE tool?	**07**
		2. Explain Software Testing Life Cycle.	
Q.4	**(a)**	What is Automation Testing? List the main type of automated software test and discuss it.	**07**
	(b)	Describe the process of defining a new Software Quality Metric.	**07**
		OR	
Q.4	**(a)**	Explain direct and indirect objectives of the review methodologies.	**07**
	(b)	1. List the different Types of software quality assurance.	**07**
		2. Define Document Control Procedure.	
Q.5	**(a)**	Explain Corrective and Preventive action process.	**07**
	(b)	Describe the various software development models in details.	**07**
		OR	
Q.5	**(a)**	Discuss the main objectives of Training and Certification.	**07**
	(b)	Describe the classical model of Cost of Software Quality?	**07**

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