GUJARAT TECHNOLOGICAL UNIVERSITY
MCA – SEMESTER – II - EXAMINATION – SUMMER 2022

Subject Code: 629406   **Date: 01/08/2022**
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.**

Q.1	**(a)** Answer the following question	**07**
	1. Difference between Software Errors, Fault, Failure.	
	2. Define Software Quality.	
	3. What are the different challenges of Software Quality?	
	4. Explain Software Quality Controls.	
	5. Why there is need of Software Testing.	
	6. Distinguish between Validation and Verification.	
	7. What are different role of Management in Software Quality?	
	(b) Explain the Classification of Software Quality factors?	**07**
Q.2	**(a)** What are the different components of Software Quality Assurance System?	**07**
	(b) Explain in detail the Pre-Project Software Quality	**07**
	OR	
	(b) What is alpha site and beta site testing? discuss their advantages and disadvantages.	**07**
Q.3	**(a)** Define White Box Testing with its types.	**07**
	(b) Discuss between bottoms-up and top-down testing strategies in details.	**07**
	OR	
Q.3	**(a)** Explain different techniques used in Black Box Testing with example.	**07**
	(b) 1. Define CASE tool?	**03**
	2. Explain Software Testing Life Cycle	**04**
Q.4	**(a)** What is Automated Testing and its types?	**07**
	(b) Describe and explain the pre-maintenance software quality components.	**07**
	OR	
Q.4	**(a)** Explain Corrective and preventive action process.	**07**
	(b) Why there is need of external participant to assured the quality of software and also explain different types of external participants.	**07**

Q.5 **(a)** Explain the main objective of training and certification. **07**

(b) Explain the classification of Software Quality Metrics **07**

OR

Q.5 **(a)** 1. List the different software quality infrastructure components. **04**

2. Define Document Control Procedure. **03**

(b) Describe the classical model of cost of software Quality? **07**

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