Enrolment No. /Seat No.: _____

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA INTEGRATED – SEMESTER VI- EXAMINATION –SUMMER-2025

Subject Code: 2668602   **Date: 03/06/2025**
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)**	Define software, software quality and software quality assurance. Also describe the Software quality challenge.	**07**
	(b)	Explain classification of the causes of software errors.	**07**
Q.2	**(a)**	List out components of SQA. Explain pre-project software quality components in detail.	**07**
	(b)	Write a detail note on SQA Architecture.	**07**
		OR	
	(b)	Define Test Metric. Discuss the difference between Product Metrics and Process Metrics. Discuss various aspects of efficiency in software metrics.	**07**
Q.3	**(a)**	Explain structure of McCall`s classic factor model.	**07**
	(b)	Explain elements of a software quality plan.	**07**
		OR	
Q.3	**(a)**	Discuss the roles and responsibilities of QA manager and software tester during software testing activities.	**07**
	(b)	Explain elements of a software development plan.	**07**
Q.4	**(a)**	Write a note on levels of testing.	**07**
	(b)	What is black box testing? Write a note on techniques of black box testing.	**07**
		OR	
Q.4	**(a)**	Write a short note on procedures and work instructions.	**07**
	(b)	What is white box testing? Write a note on techniques of white box testing	**07**
Q.5	**(a)**	List out types of CASE Tools. Discuss advantages and disadvantages to use CASE tools.	**07**
	(b)	Write a note on training and document process in detail.	**07**
		OR	
Q.5	**(a)**	Discuss external participants' contribution in SQA activities	**07**
	(b)	Differentiate between manual and automation testing. When should one use automation testing?	**07**

****