

# GUJARAT TECHNOLOGICAL UNIVERSITY

MCA INTEGRATED – SEMESTER VII- EXAMINATION –SUMMER-2025

**Subject Code: 4470631**

**Date: 11/06/2025**

**Subject Name: Software Testing**

**Time:02:30 PM TO 05:00 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) Do as directed. 07**
- Define Terms : Cost of Quality, Usability testing
  - TDD stands for \_\_\_\_\_
  - State one role of Scrum Master.
  - Give one difference between product and process metric.
  - Define regression testing?
  - What is sprint?
  - Define milestone.
- (b) Discuss importance of testing during SDLC. 07**
- Q.2 (a) Explain Requirement Traceability matrix with its importance in software Testing 07**  
using suitable example.
- (b) What is testing? Explain STLC process in detail. 07**
- OR**
- (b) Differentiate Verification & Validation. Explain importance of verification & 07**  
validation in testing.
- Q.3 (a) Explain Big Bang testing, Smoke testing & sanity testing. 07**
- (b) Discuss test case template. Write any two test scenarios and test cases for 07**  
shopping cart.
- OR**
- Q.3 (a) Discuss defect density, MTBF & MTTR metrics with example. 07**
- (b) Discuss any seven guidelines for test case design. 07**
- Q.4 (a) What is automation testing? Discuss the Process of procurement of COTS tools 07**  
for automation testing.
- (b) What is behavioral testing? Explain any one black box testing technique with 07**  
example.
- OR**
- Q.4 (a) Discuss the guidelines to select automation testing tools. 07**
- (b) Define Glass box testing. Explain basis path testing technique with example. 07**

- Q.5 (a)** Explain Scrum model for software testing in detail. **07**  
**(b)** Write a short note on ODC. **07**

**OR**

- Q.5 (a)** Write a short note on DevOps. **07**  
**(b)** Discuss the roles and responsibilities of software tester and software manager for software quality profession. **07**

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