

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA INTEGRATED– SEMESTER VII- EXAMINATION –WINTER-2022

Subject Code: 4470631**Date: 05/01/2023****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.

- Q.1 (a)** Answer all the questions below.
1. Differentiate Failure, Defect and Error? **02**
 2. Define appraisal cost. **01**
 3. Code review is _____ type of testing. **01**
 4. What do you mean by Acceptance Testing? **01**
 5. What is defect density? How is it calculated? **02**
- (b)** Describe in detail about software testing life cycle. **07**
- Q.2 (a)** Why Verification and Validation is important in testing? List various validation and verification activities. What comes first, Verification or Validation and why? **07**
- (b)** Why do bugs occur? Classify bugs based on SDLC. **07**
- OR**
- (b)** What is Requirement Traceability matrix? Write about the requirement traceability matrix and its role in software testing. **07**
- Q.3 (a)** What is black box testing? Write about decision table-based testing and cause-effect based testing. **07**
- (b)** Describe in detail - Performance Testing, Regression Testing and COTS Testing. **07**
- OR**
- Q.3 (a)** Write short notes on : **07**
- a) Principles of Software Testing
 - b) Salient features of good Testing
- (b)** Write about Proposal Testing, Dynamic Testing, Mutation Testing. **07**
- Q.4 (a)** Describe in detail how cost of quality can help in improving or maintaining quality of product. **07**
- (b)** List out various reports that need to be generated in testing process. Explain any two reports of your choice. **07**
- OR**
- Q.4 (a)** What do you mean by test metric? Explain how Efficiency and Productivity measurements are done. **07**
- (b)** Shortly write about test planning. Describe the things to be taken care of in this. **07**
- Q.5 (a)** Write about test management tools: TFS and Jira. **07**
- (b)** Shortly describe Orthogonal Defect Classification. **07**
- OR**
- Q.5 (a)** Explain Waterfall model and Scrum model in brief. **07**
- (b)** Write about the roles of Quality assurance engineer and Tester. **07**
