

GUJARAT TECHNOLOGICAL UNIVERSITY**MCA Integrated - SEMESTER– VII • EXAMINATION – WINTER 2019****Subject Code: 4470631****Date:22/11/2019****Subject Name: Software Testing****Time:10.30am 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) Do as directed.**
- i) Define Terms (any two) : MTBF, Cost of Quality, Usability testing **02**
 - ii) What is Orthogonal Defect Classification (ODC)? **02**
 - iii) State one role of Scrum Master. **01**
 - iv) Give one difference between Defect Density and Residual Defect Density. **01**
 - v) Who is responsible for Component Testing? **01**
- (b) Say True or False with justification **07****
- i) Unit testing is an example of Black Box testing.
 - ii) Path testing is a structural testing method.
 - iii) All defects result in failure.
 - iv) Static testing is beneficial to check whether coding standards are followed or not.
 - v) Find defect is an Objective of a walkthrough.
 - vi) Big Bang testing is an integration testing strategy.
 - vii) Product owner prioritizes product backlog.
- Q.2 (a) Why Verification and Validation is important in testing? List various validation and verification activities. What comes first Verification or Validation? **07****
- (b) Explain Requirement Traceability matrix with its importance in software Testing using suitable example. **07****
- OR**
- (b) Discuss test case template. Write any two test scenarios and test cases for Shopping cart. **07****
- Q.3 (a) What is COTS testing? Explain process for COTS testing. **07****
- (b) i) Compare Dynamic Testing and Static Testing. **04****
- ii) Explain Terms: Big Bang Testing, Sandwich testing, Critical Path First **03****
- OR**
- Q.3 (a) Explain Smoke Testing and Security Testing with its importance in software testing. **07****
- (b) i) Compare Regression Testing and System Testing. **04****
- ii) Explain Terms: Inspection, Structural walkthrough and Technical Reviews. **03****
- Q.4 (a) Which Software Test Metrics one Should care about and Why? **07****
- (b) i) Discuss guidelines for selecting a testing tool. **04****
- ii) Point out skills required for a tester before using a tool for testing. **03****
- OR**
- Q.4 (a) Discuss similarity and dissimilarity of product and process metrics. **07****
- (b) i) Explain how testing tools increase efficiency? **04****
- ii) What is the importance of test data in testing? **03****
- Q.5 (a) Justify statement: Apply Testing on all phases of SDLC. **07****
- (b) Explain Defect Analysis process for root cause and corrective actions. **07****
- OR**
- Q.5 (a) Discuss various phases of Software Testing Life cycle with its importance. **07****
- (b) Please comment: To ensure effective testing proper test planning is important. **07****
