

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-VII • EXAMINATION – WINTER • 2014

Subject Code: 173102**Date: 29-11-2014****Subject Name: Software Testing and Quality****Time: 10:30 am - 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.

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|------------|------------|---|----|
| Q.1 | (a) | What is Testing? Briefly Explain the Test Levels of Testing | 07 |
| | (b) | Explain development & testing phases in the V model | 07 |
| Q.2 | (a) | Define following terms : (1) Verification (2) Validation (3) Failure (4) Error (5) Fault (6) Defect (7) CFG | 07 |
| | (b) | Differentiate white box & black box testing | 07 |
| | | OR | |
| | (b) | What is Data Flow Anomaly? Explain three types of abnormal situations concerning the generation and use of data values. | 07 |
| Q.3 | (a) | Briefly Explain the Static unit testing | 07 |
| | (b) | List and explain three approaches to debugging by myers | 07 |
| | | OR | |
| Q.3 | (a) | What is Domain Error? List and explain types of domain error. | 07 |
| | (b) | Discuss On and OFF data points near domain boundaries | 07 |
| Q.4 | (a) | What is Control Flow Graph (CFG)? Explain symbols used in CFG with example. | 07 |
| | (b) | Explain incremental approach for the system integration techniques. | 07 |
| | | OR | |
| Q.4 | (a) | Define McCall's quality factors | 07 |
| | (b) | Discuss the advantages and disadvantages of Top down and bottom up approaches to Integration Testing. | 07 |
| Q.5 | (a) | Briefly Explain the Requirement Identification | 07 |
| | (b) | Briefly Explain the GUI test. | 07 |
| | | OR | |
| Q.5 | (a) | Define software quality. List and explain FIVE views of quality. | 07 |
| | (b) | Explain sandwich approach for the system integration techniques | 07 |
