| Seat No.: | Enrolment No. |
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## **GUJARAT TECHNOLOGICAL UNIVERSITY**

BE - SEMESTER-VII • EXAMINATION – WINTER • 2014

|     | v                                 | ject Code: 173102 Date: 29-11-2014  |          |
|-----|-----------------------------------|---|----------|
|     | Tim                               | ject Name: Software Testing and Quality e: 10:30 am - 01:00 pm Inctions:  1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. |          |
| Q.1 | (a)<br>(b)                        | What is Testing? Briefly Explain the Test Levels of Testing Explain development & testing phases in the V model   | 07<br>07 |
| Q.2 | <ul><li>(a)</li><li>(b)</li></ul> | Define following terms: (1) Verification (2) Validation (3) Failure (4) Error (5) Fault (6) Defect (7) CFG Differentiate white box & black box testing  | 07<br>07 |
|     | <b>(b)</b>                        | OR What is Data Flow Anomaly? Explain three types of abnormal situations concerning the generation and use of data values.  | 07       |
| Q.3 | (a)<br>(b)                        | Briefly Explain the Static unit testing List and explain three approaches to debugging by myers OR  | 07<br>07 |
| Q.3 | (a)<br>(b)                        | What is Domain Error? List and explain types of domain error.  Discuss On and OFF data points near domain boundaries  |          |
| Q.4 | (a)<br>(b)                        | What is Control Flow Graph (CFG)? Explain symbols used in CFG with example. Explain incremental approach for the system integration techniques.  OR   | 07<br>07 |
| Q.4 | (a)<br>(b)                        | Define McCall's quality factors Discuss the advantages and disadvantages of Top down and bottom up approaches to Integration Testing.   | 07<br>07 |
| Q.5 | (a)<br>(b)                        | Briefly Explain the Requirement Identification Briefly Explain the GUI test.  OR  | 07<br>07 |
| Q.5 | (a)<br>(b)                        | Define software quality. List and explain FIVE views of quality. Explain sandwich approach for the system integration techniques  | 07<br>07 |

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