

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B.E SEM-VII Examination-Nov/Dec.-2011

Subject code: 173102

Date: 29/11/2011

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.

Q.1 (a) What is Testing? Briefly Explain the Test Levels of Testing **07**
(b) Briefly Explain the Static unit testing **07**

Q.2 (a) What is an Ishikawa Diagram? When should the ishikawa diagram to be used? Write an Procedure to construct an Ishikawa Diagram. **07**

(b) (1)Definition of Closed Boundary with example **03**
(2)Definition of Closure error with example **03**
(3)What is closed domain? **01**

OR

(b) (1)Definition of Open boundary with example. **03**
(2)Definition of Shifted boundary error with example. **03**
(3)What is Open domain? **01**

Q.3 (a) Briefly Explain the Branch Coverage Criteria with example. **07**

(b) `Int binsearch (int x, int v [], int n) {` **07**
`Int low, high, mid;`
`low=0;`
`high=n-1;`
`While (low<=high)`
`mid= (low+ high)/2;`
`If(x<V [mid])`
`high=mid-1;`
`Else if(x>V [mid])`
`low=mid+1;`
`Else`
`Return mid;`
`}`
`Return -1;`
`}`

Find the set of complete paths satisfying all- c uses selection criterion with respect to variable mid.

OR

- Q.3 (a)** In the Above question find the set of complete paths satisfying all-p uses selection criterion with respect to variable mid. **07**
- (b)** Briefly Explain the UIO Method. **07**
- Q.4 (a)** Define the Test Selection Criterion for the Domain Errors (any four) **07**
- (b)** Discuss the advantages and disadvantages of Top down and bottom up approaches to Integration Testing. **07**
- OR**
- Q.4 (a)** Briefly Explain the DCA **07**
- (b)** Briefly Explain Mc call's quality Factors. **07**
- Q.5 (a)** Briefly Explain the GUI test. **07**
- (b)** Explain Advantages and Disadvantages of Random Testing **07**
- OR**
- Q.5 (a)** What are the Objectives of the first, Second and third system testing? **07**
- (b)** Briefly Explain the Requirement Identification. **07**
