## Sixth Semester B.E. Degree Examination, June/July 2018 Software Testing

Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions, selecting atleast TWO questions from each part.

## PART - A

- Explain with diagram different steps involved in Testing life cycle. (06 Marks) Explain in detail Fundamental approaches used to identify Test Cases. (06 Marks) b. State the triangle problem with all conditions and also explain its traditional and its (08 Marks) structural implementation. (10 Marks) (ii) Worst Case Testing. Explain: (i) Robustness Testing a. Explain the need of equivalence class testing and its four different types of equivalence class (10 Marks) testing.
- What are Structured Constructs? How do you condenses a graph with the use of structured (10 Marks) programming constructs. (10 Marks)
  - (ii) Slice Based Testing Explain: (i) Basis Path Testing

Explain Alternative life cycle models. Explain Top Down and Bottom Up integration. b.

(10 Marks) (10 Marks)

## PART - B

- Explain Structured Strategies for Thread Testing. (10 Marks) 5 a. (10 Marks) Explain static interaction in single and multiple processors b.
- (10 Marks) Explain any 5 principles for analysis and testing. 6 a. Illustrate the Relation among dependability properties with diagram. (10 Marks)
- Define Fault based Testing. What are the assumptions in Fault Based Testing? (05 Marks) a. (05 Marks)
  - Explain Generic and Specific Scaffolding. b. (10 Marks)
  - Explain Test Oracles with neat diagram.
  - Write short notes on:
    - Clear Room Process Model
    - Software Reliability Engineering Testing
    - Organizing Documents
    - Test and Analysis Reports.

(20 Marks)

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2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice. Important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.