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**Eighth Semester B.E. Degree Examination, June/July 2017**  
**Software Testing**

Time: 3 hrs.

Max. Marks:100

**Note: Answer FIVE full questions, selecting  
at least TWO questions from each part.**

**PART – A**

- 1 a. Explain the perspective testing definitions of the following:
 

i) Errors	ii) Fault	iii) Failure
iv) Incident	v) Test	vi) Test case

 and draw the flow diagram of a testing life cycle. (10 Marks)
- b. Explain in details about functional testing and structural testing. (10 Marks)
- 2 a. Explain about equivalence class testing with respect to:
 

i) Weak normal	ii) Strong normal
iii) Weak robust	iv) Strong robust

(04 Marks)
- b. With examples, explain boundary value analysis with respect to:
  - i) Generalizing boundary value
  - ii) Limitations of boundary value(08 Marks)
- c. Explain test cases for the triangle problem with respect to decision table based testing with examples. (08 Marks)
- 3 a. Explain in details about McCabe's basis path method using graph theory. (10 Marks)
- b. Explain about slice based testing in a data flow testing. (10 Marks)
- 4 a. Draw the display screens of both Simple Automatic Teller Machine (SATM) terminal and built with fifteen screens for the SATM system. (10 Marks)
- b. Explain about decomposition based integration with respect to integration testing. (10 Marks)

**PART – B**

- 5 a. Explain about three basic concept are derived from functional strategies for thread testing in a system testing. (10 Marks)
- b. Explain about client/server testing with respect to interaction testing. (10 Marks)
- 6 a. Draw the block diagram of relation of verification and validation activities with respect to artifacts produced in a software development project. (10 Marks)
- b. Illustrate the relation among dependability properties in a test analysis within a software process. (10 Marks)
- 7 a. Explain about assumptions in fault-based testing and mutation analysis terminology. (10 Marks)
- b. Explain in details about: i) Scaffolding, ii) Test oracles. (10 Marks)
- 8 Write short notes on the following:
  - a. Quality and process
  - b. The quality team
  - c. Organizing documents
  - d. Test design specification documents. (20 Marks)

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