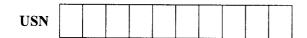
c.



Eighth Semester B.E. Degree Examination, Dec.2016/Jan.2017 Software Testing

Time: 3 hrs. Max. Marks: 100

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

PART - A

a. Explain life cycle model of software testing.
b. Explain the IEEE error and fault taxonomy.
c. With neat diagram, explain the currency converter system.
(06 Marks)
(06 Marks)

2 a. Explain: i) boundary value testing ii) random testing iii) decision table based testing.

b. What is a test case? Explain the equivalence class test cases for the triangle problem.

(10 Marks)

3 a. Discuss test coverage metrics and basis path testing with example.
b. With suitable example, explain use testing and slice based testing.
(10 Marks)
(10 Marks)

4 a. What is water fall spin-off? Explain life cycle based model with build sequence. (10 Marks)

b. Briefly explain about:

i) Top-down integration

ii) Bottom-up integrationiii) Call graph-based integration.

(10 Marks)

PART - B

5 a. Justify strongly the significance of thread based system testing with SATM as example.

(10 Marks)

b. Distinguish between progression and regression testing.

Explain interaction testing with client/server as a classical example.

(04 Marks) (06 Marks)

- 6 a. What are the work products generated by verification and validation process? Explain with
 - suitable diagram. (10 Marks)
 b. Explain the importance of dependability properties in process frame work with neat sketch.
 - b. Explain the importance of dependability properties in process frame work with neat sketch.

 (10 Marks)
- 7 a. Explain below terminology in association with fault based testing:
 - i) original program ii) program location iii) alternative expression iv) distinct behavior of an alternate program. (10 Marks)
 - b. Explain the significance of capture and replay mechanism in software automation testing.

 (10 Marks)
- **8** Write short notes on the following:
 - a. System testing
 - b. Test case template
 - c. Clean room process model by IBM
 - d. Software reliability approach by AT & T.

(20 Marks)

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