

Eighth Semester B.E. Degree Examination, June/July 2019

Software Testing

Time: 3 hrs.

Max. Marks:100

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

PART – A

- 1 a. Define the following interms of software testing:
 (i) Error (ii) Fault (iii) Failure (iv) Incident (v) Test case (05 Marks)
- b. Explain functional and structural testing. (05 Marks)
- c. Write a program for commission problem, problem statement is defined as follows:
 Rifle sales person in former Arizona territory sold rifle locks, Stocks and Barrels. Locks cost \$45, Stock cost \$30, and Barrels cost \$25. Sales person had to sell at least one complete rifle per month and production limits where such that the sales person could sell in month was 70 locks, 80 stocks and 90 Barrels. At the end of the month sales person sent a very short telegram showing locks sold to indicate completion of sale. The commission is as follows : 10% upto \$1000, 15% on the next \$800 and 20% on any sales of excess of \$1800. (10 Marks)
- 2 a. Explain weak normal, strong normal, weak robust and strong robust equivalence class techniques by considering Nextdata function as an example with test cases for each of the above. (10 Marks)
- b. Explain Robustness, worst case testing in the context of boundary value analysis. (10 Marks)
- 3 a. Write structured triangle program, draw the program graph of triangle program. (10 Marks)
- b. Define DD-paths and find all the paths for given graph using McCabe's basis path method. [Refer Fig.Q3(b)] (10 Marks)

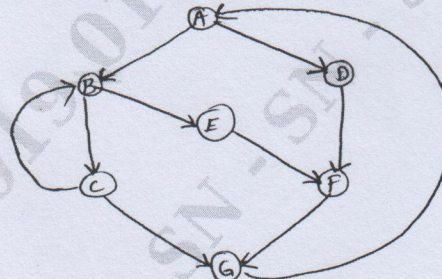


Fig.Q3(b)

- 4 a. With an example explain topdown integration and bottom up integration testing. (10 Marks)
- b. Briefly explain about SATM system. Also draw context and ER diagram. (10 Marks)

PART – B

- 5 a. Explain about Client server testing. (10 Marks)
- b. Briefly explain about functional strategies for thread testing. (10 Marks)
- 6 a. With neat diagram, explain validation and verification activities. (08 Marks)
- b. Explain the basic principles process frame work. (12 Marks)

- 7 a. Define scaffolding, explain in detail distinguish between generic and specific scaffolding. (10 Marks)
- b. Write short note on:
 - (i) Test oracles
 - (ii) Capture and Replay (10 Marks)

- 8 Write short notes on:
 - a. Monitoring the process
 - b. Organizing the documents
 - c. Risk planning
 - d. Test and analysis reports (20 Marks)

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