

USN

--	--	--	--	--	--	--	--

15IS63

Sixth Semester B.E. Degree Examination, July/August 2021 Software Testing

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions.

- 1 a. Explain Software Testing Life Cycle, with a neat diagram. (08 Marks)
b. Explain the SATM system. (08 Marks)

- 2 a. Explain different Software Quality attributes in detail. (08 Marks)
b. Explain Functional and Structural testing. (08 Marks)

- 3 a. Explain Boundary Value Analysis. Mention its limitations. Derive BVA test cases for triangle problem. (08 Marks)
b. Explain different equivalence class testing with an example. (08 Marks)

- 4 a. Define Fault Based Testing. What are the assumptions in Fault Based Testing? (08 Marks)
b. Design , develop a program in C language to implement the Next Date function. Analyse it from the Perspective boundary value testing. Derive different test cases. Explain these test cases and discuss the test results. (08 Marks)

- 5 a. Explain about slice based testing in a data flow testing by taking commission problem. (08 Marks)
b. Write a note on : i) Statement testing ii) Branch testing. Also explain Scaffolding and Test oracles in brief. (08 Marks)

- 6 a. What is Basis Testing? Explain McCabe's basis path testing with a neat diagram. (08 Marks)
b. Design and develop C language program to solve the Commission problem. Assumption price for lock = 45.0 , stock = 30.0 and barrels = 25.0 production limit could sell in a month 70 locks , 80stocks and 90 barrels , Commission on sales = 10% <= 1000 and 15% on 1000 to 1800 and 20% on above 1800. Write all the possible DD Paths , du – Paths along with data flow diagram. (08 Marks)

- 7 a. Explain the following :
i) Sensitivity ii) Redundancy iii) Visibility iv) Partition. (08 Marks)
b. List and explain different types of Risk Planning. (08 Marks)

- 8 a. Briefly explain Test design Specification documents. (08 Marks)
b. Discuss the Dependability properties. (08 Marks)

- 9 a. Explain about Client / Server testing, with respect to Interacting testing. (08 Marks)
b. Draw the display screens of both Simple Automatic Teller Machine (SATM) Terminal and built with fifteen screens for the SATM system with respect to context diagram. (08 Marks)

- 10 a. Explain Decomposition based Integration testing. (08 Marks)
b. Compare System , Acceptance and Regression testing. (08 Marks)

* * * * *

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.