

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

**Sixth Semester B.E. Degree Examination, Dec.2023/Jan.2024**  
**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. Explain the two fundamental approaches used to identify test cases. (08 Marks)
- b. Define the terms : i) Error ii) Fault iii) Failure iv) Incident v) Test case. (05 Marks)
- c. Write Pseudo-code for Commission problem? (07 Marks)
- 2 a. Explain i) Robustness Testing ii) Worst Case Testing. (10 Marks)
- b. Explain the need of Equivalence class testing and its four different types of Equivalence class testing. (10 Marks)
- 3 a. Explain different Test Case coverage metrics. (08 Marks)
- b. Explain different define/use testing definitions. (10 Marks)
- c. Draw diagram for Data flow coverage metrics of Rapps/Weyuker. (02 Marks)
- 4 a. Explain Alternative Life - Cycle models (10 Marks)
- b. Explain Decomposition - Based Integration. (10 Marks)

**PART - B**

- 5 a. Explain Structured Strategies for Thread Testing. (10 Marks)
- b. Explain Static Interaction in Single and Multiple processors. (10 Marks)
- 6 a. Explain : i) Degrees of freedom ii) Sensitivity iii) Redundancy iv) Restriction v) Partition. (10 Marks)
- b. With a neat diagram, explain the Validation and Verification activities check work product against actual user requirements. (10 Marks)
- 7 a. Explain Fault based adequacy criteria. (05 Marks)
- b. Explain Self-checks as Oracles. (05 Marks)
- c. Explain the following : (10 Marks)
  - i) From test case specification to test cases
  - ii) Scaffolding.
- 8 Write a short note on : (20 Marks)
  - a. Quality and Process.
  - b. Test and Analysis Plans.
  - c. Risk Planning.
  - d. Test and Analysis Reports.

**CMRIT LIBRARY**  
BANGALORE - 560 037

\*\*\*\*\*