

Code No: RT41054

**R13**

**Set No. 1**

**IV B.Tech I Semester Supplementary Examinations, March - 2021**  
**SOFTWARE TESTING METHODOLOGIES**  
(Computer Science and Engineering)

**Time: 3 hours**

**Max. Marks: 70**

*Question paper consists of Part-A and Part-B*  
*Answer ALL sub questions from Part-A*  
*Answer any THREE questions from Part-B*

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**PART-A (22 Marks)**

1. a) Describe software testing myths and facts. [3]
- b) Explain about expanding immaterial cases in decision table. [3]
- c) Write the terminology used in data flow testing. [4]
- d) Explain about call graph-based integration. [4]
- e) Write a short note on correcting bugs. [4]
- f) Explain in detail about state-base testing. [4]

**PART-B (3x16 = 48 Marks)**

2. a) Write definitions of software testing. Explain software testing model. [8]
- b) What are software resting principles? Explain in detail. [8]
3. a) Explain state table based testing and equivalence class testing. [8]
- b) What is the need for validation? Explain about validation activities. [8]
4. a) Define white-box testing. Explain logic coverage criteria. [8]
- b) What is static testing? Explain technical reviews in detail. [8]
5. a) What are categories of system tests? Explain. [8]
- b) How does regression testing help in producing quality software? Why is regression testing a problem? [8]
6. a) Explain about measuring the effectiveness of a prioritized test suite. [8]
- b) Discuss about software total quality management and six sigma. [8]
7. a) What is the need of automation in testing? Explain the guidelines of automated testing. [8]
- b) Describe analysis and design of Web-based systems. [8]