

Code No: RT41054

**R13**

**Set No. 1**

IV B.Tech I Semester Regular/Supplementary Examinations, Jan/Feb – 2022

**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) Write various definitions of software testing. [4]
- b) What are activities of verification and validation? [4]
- c) Explain about mutation testing. [4]
- d) What are objectives of regression testing? Explain. [4]
- e) Explain about quality control and quality assurance. [3]
- f) What are challenges in testing for Web-based Software? [3]

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

2. a) With a neat diagram, explain about software testing model. [8]
- b) Discuss about software testing life cycle. [8]
3. a) Explain about verification of high-level design. [8]
- b) Discuss in detail about state table-based testing. [8]
4. a) Define white-box testing. Explain dataflow testing with example. [8]
- b) What is static testing? Explain about inspections in static testing. [8]
5. a) Explain in detail about system testing. [8]
- b) When is regression testing done? Explain about regression testing types. [8]
6. a) Discuss in detail about quality management and quality factors. [8]
- b) What are SQA models? Explain. [8]
7. a) Give an overview of some commercial testing tools. [8]
- b) Write basics of OOT and explain. [8]