

Code No: **RT41054****R13****Set No. 1****IV B.Tech I Semester Supplementary Examinations, February/March - 2018****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*

PART-A (22 Marks)

1. a) List and explain reasons for testing. [4]
b) Write about verification and validation goals. [3]
c) List and Explain various types Mutation Testing. [4]
d) Discuss about graph matrices. [3]
e) Why should integrate JIRA with QTest? Explain briefly. [4]
f) List and Explain categories of System Testing. [4]

PART-B (3x16 = 48 Marks)

2. a) Explain fundamental principles of testing. [8]
b) Discuss reasons for different levels of testing and characteristics of good testing in life cycle model. [8]
3. a) Discuss in detail static and dynamic verification and validation. [8]
b) Explain black box testing in detail. [8]
4. a) What is static testing? Discuss in detail about parts of static testing. [8]
b) Define basis path testing. Explain various steps to calculate the independent paths. [8]
5. What are the different regression testing tools and techniques? Explain in detail. [16]
6. a) Discuss the minimization of test suite with an example. [8]
b) Explain how to eliminate defects using fix backlog and backlog management index. [8]
7. a) Explain fundamental attributes of good automated test cases. [8]
b) Write about
i. Web based system testing
ii. Mobile system testing [8]