

Code No: 815BE

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**MCA V Semester Examinations, August - 2017****SOFTWARE TESTING METHODOLOGIES****Time: 3 Hours****Max. Marks: 60****Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 20 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 8 marks and may have a, b, c as sub questions.

PART - A**5 × 4 Marks = 20**

- 1.a) What is the purpose of Link markers and link counters in path instrumentation of flow graphs and path testing? [4]
- b) Write the significance of transaction flow testing. [4]
- c) Write the applications of domain testing. [4]
- d) Describe the usage of decision table with an example. [4]
- e) What are the advantages of matrix representations in software testing? [4]

PART - B**5 × 8 Marks = 40**

- 2.a) Is prevented bug better than a detected and corrected bug? Justify.
 - b) State and explain various dichotomies in software testing. [4+4]
- OR**
- 3.a) Discuss the path sensitization in flow graph and path testing.
 - b) What is Co-incidental Correctness? Describe with an example. [4+4]
4. What are data flow anomalies? How data flow testing can explore them? [8]
- OR**
5. State and explain various transaction flow complications. [8]
 6. With a neat diagram, explain the schematic representation of domain testing. [8]
- OR**
7. What is path expression? Explain its reduction procedure. [8]
 8. What are the principles of state testing? Write the software implementation issues in state testing. [8]
- OR**
9. Discuss three variable and four variable KV chart with examples. [8]
 10. Explain cross-term reduction and node term reduction optimization. [8]
- OR**
11. What are graph matrices? Discuss the matrix operations in tool building. [8]

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