

B.Tech IV Year I Semester (R13) Supplementary Examinations June 2017  
**SOFTWARE TESTING METHODOLOGIES**  
(Information Technology)

Time: 3 hours

Max. Marks: 70

**PART – A**  
(Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Describe the purpose and goal of testing.
  - (b) Define path testing and control flow graph.
  - (c) What are the three different possible interpretations of the decision symbol?
  - (d) Outline the two types of data flow machines with different architectures.
  - (e) List the examples of domain errors.
  - (f) Outline the generic domain bugs.
  - (g) Identify the examples of path product and path sum.
  - (h) Define decision table and its application.
  - (i) Distinguish between a state graph and a state table.
  - (j) Write the importance of the matrix of a graph.

**PART – B**  
(Answer all five units, 5 X 10 = 50 Marks)

**UNIT – I**

- 2 Explain some dichotomies of software testing.
- OR**
- 3 Discuss various flow graph elements with their notations.

**UNIT – II**

- 4 What is meant by transaction flow testing? Discuss its significance.
- OR**
- 5 What is meant by data flow model? Discuss various components of it.

**UNIT – III**

- 6 With a neat diagram, explain the schematic representation of domain testing.
- OR**
- 7 Discuss in detail about the domains and interface testing.

**UNIT – IV**

- 8 Write short notes on Distributive laws, Absorption Rule and Loops.
- OR**
- 9 What are decision tables? Illustrate the, applications of decision tables with examples.

**UNIT – V**

- 10 Explain about good state and bad state graphs.
- OR**
- 11 Discuss node reduction algorithm. What are graph matrices and applications?

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