Code: 13A05605 **R13**

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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Code: 13A05605 **R13**

B.Tech III Year II Semester (R13) Regular & Supplementary Examinations May/June 2017

SOFTWARE TESTING METHODOLOGIES

(Computer Science & Engineering)

Time: 3 hours Max. Marks: 70

PART - A

(Compulsory Question)

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1 Answer the following: (10 X 02 = 20 Marks)

(a) Define the terms verification & validation.
(b) What is path testing?
(c) Explain transaction flow.
(d) Write about dataflow testing.
(e) Describe domain testing.
(f) Discuss testability.
(g) Comment on path products.
(h) Explain KV charts.
(i) Design state graphs.
(j) Describe relations.

PART - B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT - I

2 (a) Explain the different phases in Tester's Mental life.
(b) What are the applications of Path Testing? Explain.

OR

3 (a) What are the factors that determine the importance of a Bug? Explain.
(b) Define Testing Blindness? Explain the three types of Testing Blindness.

UNIT - II

4 (a) Explain about transaction flow testing techniques.
(b) What are the different types of complications in Transaction flows? Explain.

OR

5 (a) Discuss strategies in dataflow testing.
(b) Describe in detail about the Data Flow Anomaly State Graph.

UNIT - III

6 Describe nice & ugly domains.
Discuss in detail about the Domain closure and Domain Dimensionality.

OR

7 Explain domain and interface testing. Discuss various applications of domain testing.

UNIT - IV

8 Analyze reduction procedure. Write short notes on KV charts.

OR

9 Design decision tables. Discuss how the decision tables can be Basis for test case design.

UNIT - V

10 Describe good and bad state graphs. Describe the basic principles of Graph Matrix.

OR

11 Explain about node reduction algorithm with an example..

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