Code No: 873AJ

R20

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MCA III Semester Examinations, March/April - 2023
SOFTWARE TESTING METHODOLOGIES

Time: 3 Hours   Max.Marks:75

Note: i) Question paper consists of Part A, Part B.
  ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions.
  iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

PART – A

(25 Marks)

1.a)	Discuss the limitations of testing.	[5]
b)	Specify the properties of ugly and nice domains.	[5]
c)	Write limitations of KV charts.	[5]
d)	Write testers comments about state graphs.	[5]
e)	Illustrate the matrix operations used in tool building?	[5]

PART – B

(50 Marks)

2.a) List and discuss different categories of bugs.
  b) Identify the consequences and the importance of bugs.   [5+5]

OR

3.a) Demonstrate the problem due to co-incidental correctness.
  b) Identify the components of a control flow diagram and compare the same with a flowchart.   [5+5]

4.a) Visualize the transaction flow and data flow in a software system.
  b) Compare and analyze various strategies of data flow testing.   [5+5]

OR

5.a) List and describe the problems due to the incompatibility of domains.
  b) Demonstrate the data flow anomaly state graphs and control flow graphs. [5+5]

6.a) Differentiate between Structured and Un-structured flow graphs.
  b) How to transform specifications into sentences? Justify with your answer. [5+5]

OR

7.a) Differentiate between Decision Table and Decision Tree.
  b) Calculate the probability of paths and discuss the need for finding the probabilities.   [5+5]

8.a) Illustrate software implementation of state graphs.
  b) What are graph matrices and their applications? Explain in detail.   [5+5]

OR

9.a) Discuss in details about state testing.
  b) Explain different phases of tester's mental life.   [5+5]

10.a) Demonstrate the use of Win-runner testing tool.
  b) Give merits and demerits of different Graph Matrix representations.   [5+5]

OR

11.a) Illustrate all the steps in Node Reduction Procedure with help of neat labeled diagrams.
  b) Write about loops in matrix representation.   [5+5]

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