

R18

Code No: 156CW

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year II Semester Examinations, July - 2023

SOFTWARE TESTING METHODOLOGIES

(Common to CSE, IT, ITE, CSE(DS), CSE(IOT))

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) List the criteria for path selection. [2]
- b) Compare testing and debugging. [3]
- c) Outline the usage of transactional graph. [2]
- d) Differentiate slicing and dicing. [3]
- e) What is path expression? [2]
- f) Why is regular expression important in STM? [3]
- g) Define absorption rule. [2]
- h) Describe state graph. [3]
- i) Infer the problem with pictorial graph. [2]
- j) How the graph is represented in matrix? [3]

PART - B

(50 Marks)

- 2.a) Examine flow graph elements in detail.
 - b) Explain path sensitizing in detail. [5+5]
- OR**
- 3.a) Identify path testing criteria in detail.
 - b) Discover the importance of bugs. [5+5]
- 4.a) Explain the model of domain testing in detail.
 - b) Analyze transactional flow testing techniques. [5+5]
- OR**
- 5.a) Compare nice and ugly domain.
 - b) Estimate the restriction of domain testing. [5+5]
6. Experiment with reduction procedure algorithm with example. [10]
- OR**
- 7.a) Inspect the functions of KV charts for two variable.
 - b) Identify the usage of decision table in testing with example. [5+5]

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8.a) Infer the principles of state testing.

b) Write short notes on:

i) Transition Bugs

ii) Unreachable states

iii) Dead States.

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QA QA

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[5+5]

OR

9.a) Compare essential and inessential of finite state behavior.

b) Discover the steps to convert specification into state-graph.

[5+5]

10. Demonstrate partition algorithm in detail.

OR

11.a) Discover the properties of relations.

b) Identify the features of JMeter tool. How it will assist the tester?

[10]

[5+5]

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