Code No: 126ER

R13

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech III Year II Semester Examinations, December - 2017
SOFTWARE TESTING METHODOLOGIES
(Common to CSE, IT)

Time: 3 hours **Max. Marks: 75**

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART - A

(25 Marks)

1.a)	Define structural testing.	[2]
b)	What are remedies for test bugs? Explain.	[3]
c)	Give an example of forgiving Data Flow anomaly state graph.	[2]
d)	Explain about path selection in transaction-flow testing.	[3]
e)	What is domain testing?	[2]
f)	Where do domains come from?	[3]
g)	Write absorption rule.	[2]
h)	What goes wrong with predicates?	[3]
i)	What is the problem with pictorial graphs?	[2]
j)	Explain state-transition table with example.	[3]

PART - B

(50 Marks)

2.a)	Explain link markers and link counters with example.	
b)	Discuss about integration, interface and system bugs.	[5+5]

OR

3.a)	What are cases for single loop? Explain with examples.	
b)	Distinguish between testing and debugging.	[5+5]

4.a)	Why isn't static analysis enough? Why is testing required? Could not a vastly expanded language processor detect anomalies?	
b)	Explain about sensitization in transaction-flow testing.	[5+5]

OR

5.a)	Describe application, tools and effectiveness of data-flow testing.	
b)	Discuss about transaction-flow structure.	[5+5]

6.a)	Explain about testing two-dimensional domains.	
b)	Discuss about closer compatibility and span compatibility.	[5+5]

OR

7.a)	What are ugly domains? How testers and programmers treat them.	
b)	Explain about linearizing and coordinate transformations.	[5+5]

8.a)   Explain loop term step in a reduction procedure with example.
  b)   Discuss about decision tables and structure with example.   [5+5]

OR

9.a)   Describe lower path count arithmetic with example.
  b)   Write motivational overview of logic-based testing.   [5+5]

10.a) What is equivalent state? Explain in detail.
   b) Explain about node-reduction algorithm.   [5+5]

OR

11.a) Give an example to illustrate how to convert a specification into a state graph and how
       contradictions can come about.
   b) Discuss about win-runner testing tool.   [5+5]

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