Code No: 126VR **R15**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech III Year II Semester Examinations, December - 2018
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)	What are feature bugs?	[2]
b)	Distinguish between builder and buyer.	[3]
c)	What is Petri net?	[2]
d)	Explain about data flow anomaly graph with example.	[3]
e)	What is domain span?	[2]
f)	Discuss about domain dimensionality.	[3]
g)	Define silicon compilers.	[2]
h)	Write eight steps in a reduction procedure.	[3]
i)	What is impossible state?	[2]
j)	Distinguish between manual testing and automated testing.	[3]

PART - B

(50 Marks)

2.a)	What are structural bugs? Explain.	
b)	Describe notational evolution of control flow graph with example.	[5+5]
	OR	
3.a)	Explain heuristics procedures for sensitizing paths.	
b)	Is testing is everything? Explain.	[5+5]
4.a)	Discuss about the data flow model.	
b)	Explain transaction-flow graph implementation with example.	[5+5]
	OR	
5.a)	What are the structural test strategies based on the program's control flowgraph? Explain.	
b)	Discuss about complication in transaction-flow testing.	[5+5]
6.a)	Explain about testing one-dimensional domains.	
b)	Write about restrictions of domain testing.	[5+5]
	OR	
7.	Define domain testing. Explain about nice domains in detail.	[10]

8.a) Describe the mean processing time of a routine with example.
b) Write rules of Boolean algebra. [5+5]

OR

9.a) Briefly explain about regular expressions and flow-anomaly detection.
b) Write the procedure for specification validation. [5+5]

10.a) What are some situations in which state testing may prove useful? Explain.
b) What are properties of relations? Explain. [5+5]

OR

11.a) Explain software implementation of state graphs.
b) Discuss about matrix representation software. [5+5]

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