PVP23

Code No: 23CS4601A

PVP SIDDHARTHA INSTITUTE OF TECHNOLOGY

(Autonomous)

SOFTWARE TESTING METHODOLOGIES

(CSE)

Duration: 3 Hours **Max. Marks: 70**

Note: 1. This question paper contains two Parts A and B.
2. Part-A contains 10 short answer questions. Each Question carries 2 Marks.
3. Part-B contains 5 essay questions with an internal choice from each unit. Each question carries 10 marks.
4. All parts of Question paper must be answered in one place

Part - A

10 x 2 = 20 Marks

		Blooms Level	CO
1 a)	What is meant by Benign bug hypothesis?	L2	CO1
1 b)	What is metric for the measurement of bug importance?	L2	CO1
1 c)	Define Transactional flow graph.	L2	CO1
1 d)	Define Dead Variable.	L2	CO1
1 e)	Define predicate.	L2	CO1
1 f)	List the any four domain errors.	L2	CO1
1 g)	Define path product.	L2	CO1
1 h)	Define Structured flow graph.	L2	CO1
1 i)	Define Equivalent states.	L2	CO1
1 j)	Define Dead state.	L2	CO1

Part –B

5 x 10 = 50 Marks

			Blooms Level	CO	Max. Marks
UNIT-I					
2	(a)	Illustrate the consequences of bugs.	L2	CO1	5M
	(b)	Summarize the different kinds of testing on a typical software system.	L4	CO4	5M
OR					
3	(a)	Describe the model for testing.	L2	CO1	5M
	(b)	Is complete testing possible? Justify your answer.	L4	CO4	5M
UNIT-II					
4	(a)	Relate the strength of structural test strategies.	L2	CO2	5M
	(b)	Illustrate the Forgiving data flow anomaly state graph.	L2	CO2	5M
OR					
5	(a)	Analyze the steps that a transaction of an online information retrieval system might contain.	L4	CO4	5M
	(b)	Illustrate the various notations of data flow anomalies.	L2	CO2	5M

UNIT-III					
6	(a)	Analyze the testing of one dimensional domains.	L4	CO4	5M
	(b)	Illustrate the methods to convert nonlinear boundaries to equivalent linear boundaries.	L2	CO2	5M
OR					
7	(a)	Analyze the testing of two dimensional domains.	L4	CO4	5M
	(b)	Illustrate Domain ambiguities and contradictions.	L2	CO2	5M
UNIT-IV					
8	(a)	Illustrate the Conversion of a flow graph to a path expression using reduction procedure with an example.	L3	CO3	10M
OR					
9	(a)	Illustrate the Data flow testing with an example.	L3	CO3	10M
UNIT-V					
10	(a)	Analyze various improper state graphs	L4	CO4	5M
	(b)	Analyze the situations in which state testing may prove useful.	L4	CO4	5M
OR					
11	(a)	Illustrate the procedures to recognize the equivalent states.	L3	CO3	10M