Code No:**RT41054** **R13** **Set No. 1**

IV B.Tech I Semester Regular Examinations, November - 2016

SOFTWARE TESTING METHODOLOGIES

(Computer Science and Engineering)

Time: 3 hours **Max. Marks: 70**

Question paper consists of Part-A and Part-B

Answer ALL sub questions from Part-A

Answer any THREE questions from Part-B

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PART–A *(22 Marks)*

1. a) List any two goals of software testing. [3]
   b) State at least two differences between verification and validation. [4]
   c) Define basis path testing. [4]
   d) Illustrate functional testing. [4]
   e) Describe on test suit prioritization. [4]
   f) List any two commercial software testing tools. [3]

PART–B *(3x16 = 48 Marks)*

2. Explain the model of testing in detail. Also render software testing life cycle model. Justify whether complete testing is possible or not. [16]

3. a) Illustrate on Decision table based testing and Graph based testing. [8]
   b) Explore on verification of requirements. [8]

4. a) Differentiate between white box testing and black box testing. [8]
   b) Briefly discuss the pros and cons of Inspections and Structured Walkthroughs. [8]

5. Explain in detail about various validation techniques with examples. [16]

6. a) Discuss on how to minimize the test suit and its benefits. [8]
   b) Discuss on SQA models. [8]

7. a) Testing a web based system is a tedious job. Do you agree? Justify. [8]
   b) List various guidelines for automated testing process. [8]

Code No:**RT41054** **R13** **Set No. 2**

IV B.Tech I Semester Regular Examinations, November - 2016

SOFTWARE TESTING METHODOLOGIES

(Computer Science and Engineering)

Time: 3 hours **Max. Marks: 70**

Question paper consists of Part-A and Part-B
Answer ALL sub questions from Part-A
Answer any THREE questions from Part-B

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PART–A *(22 Marks)*

1.	a)	Define a model for software testing.	[3]
	b)	List any two activities of validation testing.	[4]
	c)	Illustrate an example for loop testing.	[4]
	d)	State the objectives of regression testing.	[4]
	e)	Differentiate between bug and error.	[4]
	f)	Briefly list any three challenges in testing web based software.	[3]

PART–B *(3x16 = 48 Marks)*

2.	a)	State the myths and facts about software testing.	[8]
	b)	Explore on software testing methodology in detail.	[8]
3.	a)	Illustrate on Boundary Value Analysis and Equivalence class Testing techniques.	[8]
	b)	Explain in detail on how the verification of a code takes place.	[8]
4.	a)	Discuss on Basis path testing with a neat sketch.	[8]
	b)	How do you represent Graph matrices for testing process? Device the same with example.	[8]
5.	a)	Differentiate between progressive and regressive testing process.	[8]
	b)	List various regression testing techniques.	[8]
6.		Describe various measures to prioritize test suit. Also explain about basics of testing management.	[16]
7.	a)	Categorize various testing tools necessary for testing.	[8]
	b)	Explore on testing mobile systems.	[8]

Code No: **RT41054** **R13** **Set No. 3**

IV B.Tech I Semester Regular Examinations, November - 2016

SOFTWARE TESTING METHODOLOGIES

(Computer Science and Engineering)

Time: 3 hours **Max. Marks: 70**

Question paper consists of Part-A and Part-B

Answer ALL sub questions from Part-A

Answer any THREE questions from Part-B

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PART–A *(22 Marks)*

1.	a)	Briefly describe software testing life cycle.	[4]
	b)	Describe how does the verification of a code is done.	[4]
	c)	Discuss on technical reviews.	[3]
	d)	Define unit testing.	[4]
	e)	State prioritization techniques.	[3]
	f)	Explain in brief about object oriented software testing.	[4]

PART–B *(3x16 = 48 Marks)*

2.	a)	List the goals of software testing	[8]
	b)	Explain in detail about the model of software testing.	[8]
3.		Explore in detail about black box testing techniques with examples and neat sketch.	[16]
4.	a)	Differentiate between dynamic testing and static testing.	[8]
	b)	List the features of Technical reviews.	[8]
5.	a)	Define regression. Device the template for regression testability.	[8]
	b)	Explain about functional testing in detail.	[8]
6.	a)	Explain in detail about software quality metrics.	[8]
	b)	How is debugging different from testing. Illustrate with an example.	[8]
7.	a)	Discuss on cost issues incurred in selection of testing tools.	[8]
	b)	Explain about testing of web based systems.	[8]

Code No: **RT41054** **R13** **Set No. 4**

IV B.Tech I Semester Regular Examinations, November - 2016

SOFTWARE TESTING METHODOLOGIES

(Computer Science and Engineering)

Time: 3 hours **Max. Marks: 70**

Question paper consists of Part-A and Part-B

Answer ALL sub questions from Part-A

Answer any THREE questions from Part-B

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PART–A*(22 Marks)*

1.	a)	Differentiate effective and exhaustive software testing.	[4]
	b)	Device the layout for boundary value analysis.	[3]
	c)	Define mutation testing.	[3]
	d)	State any two regression testing types.	[4]
	e)	State any three Software Quality metrics.	[4]
	f)	List any two guidelines for automated testing.	[4]

PART–B*(3x16 = 48 Marks)*

2.	a)	Explain in detail the relationship between software test life cycle and software development life cycle.	[8]
	b)	Describe the features of software testing methodology.	[8]
3.	a)	Differentiate between verification and validation.	[8]
	b)	Explore on State Table based testing and Error guessing.	[8]
4.	a)	Discuss on Loop testing and data flow testing techniques in detail.	[8]
	b)	Explain about basis path testing with an example.	[8]
5.	a)	Explain about unit testing with an example.	[8]
	b)	Discuss on Objectives of regression testing.	[8]
6.		Explain various types of bugs. Many different bugs might result in domain errors. Justify.	[16]
7.	a)	Describe the testing process in object oriented structures.	[8]
	b)	List various types of testing tools with examples.	[8]