

**St. Ann's College of Engineering & Technology: Chirala**  
**Department of COMPUTER SCIENCE & ENGINEERING**  
**LECTURE SCHEDULE**

**SUBJECT: Software Testing Methodologies**

**ACADEMIC YEAR: 2017-18**

**NAME: G.**

**PRASUNA**

**YEAR & SEM/SECTION: IV-I/C**

**No. of Lectures per week : 4+1\* (Tutorial)**

S. NO	DATE	UNIT	TOPICS
1	19-Jun-17	<b>UNIT I</b>	<b>Tutorial</b>
2	20-Jun-17		Introduction on Software Testing Methodologies
3	21-Jun-17		Software Myths & Facts
4	22-Jun-17		Software Evolution
5	24-Jun-17		Myths & Facts, Goals
6	27-Jun-17		Psychology , Definition
7	28-Jun-17		Model for testing
8	29-Jun-17		Effective Vs Exhaustive Software Testing
9	01-Jul-17		Software Testing Terminology and Methodology
10	03-Jul-17		<b>Tutorial</b>
11	04-Jul-17		Software Testing Life Cycle
12	05-Jul-17		Software Testing Life Cycle
13	06-Jul-17		Software Testing Methodology
14	10-Jul-17		Tutorial
15	11-Jul-17		<b>UNIT-1 REVISION with PPT OR NPTEL VIDEOS</b>
16	12-Jul-17		<b>Unit – 1 Test</b>
17	13-Jul-17	<b>UNIT II</b>	OT-1, Verification & Validation Activities
18	15-Jul-17		Verification of Requirements
19	17-Jul-17		<b>Tutorial</b>

20	18-Jul-17		High level designs, Low level designs
21	19-Jul-17		How to verify code
22	20-Jul-17		Validation
23	22-Jul-17		Dynamic Testing I: Black Box testing techniques: Boundary Value Analysis
24	24-Jul-17		<b>Tutorial</b>
25	25-Jul-17		Equivalence class Testing
26	26-Jul-17		State Table based testing
27	27-Jul-17		Decision table based testing
28	29-Jul-17		Cause-Effect Graphing based testing
29	31-Jul-17		<b>Tutorial</b>
30	01-Aug-17		Cause-Effect Graphing based testing
31	02-Aug-17		Error guessing
32	03-Aug-17		<b>Unit-2 Test</b>
33	05-Aug-17	<b>UNIT III</b>	OT-2, Dynamic Testing II: White-Box Testing: need, logic coverage criteria
34	07-Aug-17		<b>Tutorial</b>
35	08-Aug-17		Basis path testing, Graph matrices
36	09-Aug-17		Loop testing, Data flow testing
37	10-Aug-17		Mutation testing, Static Testing: Inspections
38	12-Aug-17		Structured Walkthroughs, Technical reviews
39	16-Aug-17	<b>I MID</b>	<b>UNIT-2 REVISION with PPT OR NPTEL VIDEOS</b>
40	17-Aug-17		<b>UNIT-3 REVISION with PPT OR NPTEL VIDEOS</b>
41	19-Aug-17		<b>Revision</b>
42	21-Aug-17		<b>Revision</b>
43	22-Aug-17		<b>Revision</b>

44	23-Aug-17	<b>UNIT IV</b>	Validation activities: Introduction,Unit testing	
45	24-Aug-17		Integration Testing, Function testing	
46	28-Aug-17		<b>Tutorial</b>	
47	29-Aug-17		System testing,Acceptance testing	
48	30-Aug-17		Regression testing:Progressives Vs regressive testing	
49	31-Aug-17		Regression testability, Objectives of regression testing	
50	04-Sep-17		<b>Tutorial</b>	
51	05-Sep-17		Regression testability, Objectives of regression testing	
52	06-Sep-17		When regression testing done?,Regression testing types	
53	07-Sep-17		Regression testing techniques	
54	09-Sep-17		<b>UNIT-4 REVISION with PPT OR NPTEL VIDEOS</b>	
55	11-Sep-17		<b>Tutorial</b>	
56	12-Sep-17		<b>Unit IV Test</b>	
57	13-Sep-17		<b>UNIT V</b>	OT-3,Efficient Test Suite Management: Test case deisgn
58	14-Sep-17			Why does a test suite grow, Minimizing the test suite and its benefits
59	16-Sep-17			test suite prioritization, Types of test case prioritization
60	18-Sep-17	<b>Tutorial</b>		
61	19-Sep-17	prioritization techniques, measuring the effectiveness of a prioritized test suite		
62	20-Sep-17	Software Quality Management: Software Quality metrics		
63	21-Sep-17	SQA models		
64	23-Sep-17	Debugging:process, techniques,correcting bugs		
65	25-Sep-17	<b>Tutorial</b>		
66	26-Sep-17	Basics of testing management tools,Test link and Jira		
67	27-Sep-17	<b>UNIT-5 REVISION with PPT OR NPTEL VIDEOS</b>		

68	03-Oct-17		<b>Unit-V test</b>
69	04-Oct-17	<b>UNIT VI</b>	OT-4, Automation and Testing Tools: need for automation
70	05-Oct-17		categorization of testing tools, selection of testing tools, Cost incurred
71	07-Oct-17		Guidelines for automated testing, overview of some commercial testing tools
72	09-Oct-17		<b>Tutorial</b>
73	10-Oct-17		Testing Object Oriented Software: basics, Object oriented testing
74	11-Oct-17		Testing Web based Systems: Challenges in testing for web based software
75	12-Oct-17		quality aspects, web engineering
76	14-Oct-17		Testing web based systems, Testing mobile systems
77	16-Oct-17		<b>II MID</b>
78	17-Oct-17	<b>Revision</b>	
79	18-Oct-17	<b>Revision</b>	
80	21-Oct-17	<b>Revision</b>	
81	23-Oct-17	<b>Revision</b>	

**Text Books:**

1. Software Testing, Principles and Practices, Naresh Chauhan, Oxford
2. Foundations of Software testing, Aditya P Mathur, 2ed, Pearson
3. Software Testing- Yogesh Singh, CAMBRIDGE

**Reference books:**

1. Software testing techniques - Baris Beizer, International Thomson computer press, second edition.
2. Software Testing, Principles, techniques and Tools, M G Limaye, TMH
3. Effective Methods for Software testing, Willian E Perry, 3ed, Wiley

**FACULTY MEMBER**

**HEAD OF THE DEPARTMENT**