

SATYUG DARSHAN INSTITUTE OF ENGINEERING & TECHNOLOGY, FARIDABAD				
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING				
Lesson Plan / Teaching Plan / Lecture Plan with Progress : BCA - Semester :6th 2025-26				
<u>Course Name</u> (Code) :		BCG-322-V		<u>Faculty : Faculty :</u> <u>Ms.Shivani Bansal</u>
Topics / lectures are arranged in sequence - same - as to be taught in the class. Maintain data related to "Date" in its hard copy.				
S. No.	Lecture No	Topic Description	Teaching Pedagogy	Reference Material
1	1	Introduction to Software Testing	Lecture, PPT	R1,R2
2	2	Errors, Bugs, Defects, Failures	Lecture + Examples	R1,R2
3	3	Verification vs Validation	Lecture + Discussion	R1,R2
4	4	Test Case Design	Lecture + Case Study	R1,R2
5	5	Static Testing	Lecture + Examples	R1,R2
6	6	Dynamic Testing	Lecture + Demo	R1,R2
7	7	Comparison: Static vs Dynamic Testing	Discussion	R1,R2
8	8	Testing Life Cycle	Lecture	R1,R2
9	9	Numerical / Practical Examples	Problem Solving	R1,R2
10	10	Black Box Testing Overview	Lecture	R1,R2
11	11	Equivalence Class Partitioning	Lecture	R1,R2
12	12	Boundary Value Analysis	Lecture + Examples	R1,R2
13	13	White Box Testing Overview	Problem Solving	R1,R2
14	14	Control Flow & Path Testing	Lecture	R1,R2
15	15	Unit Testing	Lecture + Diagrams	R1,R2
16	16	Integration Testing	Lecture	R1,R2
17	17	Acceptance Testing	Lecture	R1,R2
18	18	Validation Activities	Lecture	R1,R2
19	19	Debugging Concepts	Discussion	R1,R2
20	20	Debugging Process	Lecture	R1,R2
21	21	Debugging Approaches	Lecture	R1,R2
22	22	Testing Case Studies	Lecture + Examples	R1,R2
23	23	Numerical / Practice Problems	Case Study	R1,R2
24	24	Unit Test + Revision	Practice	R1,R2
25	25	Introduction to Software Maintenance	Lecture	R1,R2
26	26	Maintenance Categories	Lecture	R3,R2

27	27	Maintenance Models	Lecture	R1,R2
28	28	Regression Testing	Lecture	R1,R2
29	29	Test Case Prioritization	Lecture	R1,R2
30	30	Testing Tools	Lecture	R1,R2
31	31	OO Software Testing	Demo	R1,R2
32	32	Practical Examples	Lecture	R3,R2
33	33	Revision	Discussion	R3,R2
34	34	Unit Test	Interaction	R3,R2
35	35	Quality Concepts	Lecture	R1,R2
36	36	Software Quality Assurance (SQA)	Lecture	R1,R2
37	37	SQA Activities	Lecture	R1,R2
38	38	Formal Approaches to SQA	Lecture	R1,R2
39	39	Statistical Software Quality Assurance	Lecture	R1,R2
40	40	Capability Maturity Model (CMM)	Lecture	R1,R2
41	41	ISO 9126 Standard	Lecture	R1,R2
42	42	Comparison of Quality Models	Discussion	R1,R2
43	43	Revision	Interaction	R1,R2
44	44	Final Assessment	Test	R3,R2
45	45	Interaction	Concept clarity	R3,R2
46	46	Final Assessment	Test	R1,R2

Study Material / Books / Web-resources / Online Courses Links etc.

S. No.	
1	David Gustafson , “Software Engineering “, 2002, T.M.H
2	,Ali Behforooz and Frederick J. Hudson, “Software Engineering Fundamentals”, Oxford University 1995
3	Pankaj Jalote, “An Integrated Approach to software engineering”, 1991 Narosa,
4	Dr. Naresh Chauhan, “Software Testing: Principles and Practices”.
5	Roger S. Pressman, “Software Engineering – A Practitioner’s Approach”, 1996, MGH.