

Lesson Plan

Name of the Faculty:		Ms. Upasana Sood	
Discipline:		B.Tech (CSE)	
Semester:		7th	
Subject:		Software Verification and Validation Technique (PE-CS-D403A)	
Work Load(Lecture/Practical) per week (In hours):		Lecture-3	
S. No	Lecture No.	Theory	Pedagogy (PPT/Chalk and Board/Video Recording /Activity/Case Study)
		Topic(Including Assignment/Test/Quiz)	
1.	L1.	Unit 1 - Introduction to software testing	Chalk-Board
2.	L2.	Introduction : Overview of software evolution	Chalk-Board
3.	L3.	SDLC, Testing Process, Terminologies in testing	PPT
4.	L4.	Error , Fault , Failure , verification	PPT
5.	L5.	What is software testing, why it is so hard?	PPT & Chalk-Board
6.	L6.	Validation , difference between verification and validation	PPT & Chalk-Board
7.	L7.	Test cases , Test Oracles, testing process	PPT & Chalk-Board
8.	L8.	Limitations of testing	PPT
9.		Class Test – Unit-1.	Offline
10.	L9.	Unit 2 – Functional testing	PPT & Chalk-Board
11.	L10.	Boundary value analysis	PPT & Chalk-Board
12.	L11.	Equivalence class testing	PPT & Chalk-Board
13.	L12.	Decision table based testing	PPT & Chalk-Board
14.	L13.	Cause effect graphing technique	PPT & Chalk-Board
15.	L14.	Structural testing : path testing	PPT & Chalk-Board
16.	L15.	DD-paths ,	PPT & Chalk-Board
17.	L16.	Cyclomatic complexity	PPT & Chalk-Board
18.	L17.	Graph metrics,	PPT & Chalk-Board

19.	L18.	Data flow testing	PPT & Chalk-Board
20.	L19.	Mutation testing	PPT & Chalk-Board
21.		Query Session Unit-2	Offline
22.		Assignment -1	Offline
23.	L20.	Unit 3 – Reducing the number of test cases.	PPT
24.	L21.	Prioritization guidelines	PPT & Chalk-Board
25.	L22.	Priority category ,	PPT & Chalk-Board
26.	L23.	Risk analysis ,	PPT & Chalk-Board
27.	L24.	Regression testing	Case Study
28.	L25.	And slice based testing	PPT
29.	L26.	Testing activities : Unit testing , levels of testing	PPT & Chalk-Board/Example
30.	L27.	Integration testing	PPT
31.	L28.	System testing	PPT/Case Study
32.	L29.	Domain testing	PPT
33.		Query Session Unit-3	Offline
34.		Class Test Unit 3	Offline
35.	L30.	Unit 4 – Overview of SQM	PPT/Case Study
36.	L31.	Concepts of Software Quality,	PPT
37.	L32.	Quality Attribute	PPT & Chalk-Board
38.	L33.	Software Quality Models: McCall	PPT & Chalk-Board
39.	L34.	Boehm, ISO-9000, CMM PPT	PPT
40.	L35.	Stress Testing, Ad hoc testing: PPT	PPT
41.	L36.	Buddy testing, Exploratory testing, PPT	PPT
42.	L37.	Agile and extreme testing PPT	PPT
43.	L38.	Query Session Unit-4	Offline
44.		Assignments -2	Offline

LessonPlan

Name of the Faculty:	Ms. Priyanka Kamboj
Discipline:	CSE
Semester:	7th
Subject:	Object Oriented Software Engineering:(PE-CS-D413A)
WorkLoad(Lecture/Practical) Perweek(in hours):	Lectures-03

SrNo.	Lecture No.	Theory	Pedagogy (PPT&Chalk-Board and Board/Video Recording /Activity/Case Study)
		Topic(Including Assignment/Test/Quiz)	
1	L1	Design Objects	Chalk-Board
2	L2	Class Hierarchy, Inheritance	Chalk-Board
3	L3	Aggregations and Object Containment	PPT
4	L4	Object Persistence	PPT
5	L5	Meta classes	PPT&Chalk-Board
6	L6	Object oriented systems development life cycle	PPT&Chalk-Board
7	L7	Software development process	PPT
8	L8	Object oriented systems development: a use case driven approach	PPT
9		Class Test–Unit-1	Offline
10	L9	Object modeling techniques as software as software engineering methodology	PPT
11	L10	Rumbaugh methodology	PPT
12	L11	Jacobson methodology	PPT
13	L12	Booch methodology	PPT
14	L13	Patterns	PPT
15	L14	Frameworks	PPT
16	L15	Unified Modeling language	PPT&Chalk-Board
17	L16	Analysis Process	PPT&Chalk-Board
18	L17	Use-Case Driven Object Oriented Analysis	PPT&Chalk-Board
19	L18	Use-Case Model	PPT&Chalk-Board
20		Query Session Unit-2	Offline
21		Assignment-1	Offline
22	L19	Object ClassificationTheory	PPT&Chalk-Board
23	L20	Different Approaches for identifying classes	PPT&Chalk-Board

24	L21	Classes, responsibilities	PPT&Chalk-Board
25	L22	Identifying Object Relationships	PPT
26	L23	Attributes and Methods	PPT&Chalk-Board
27	L24	Super-subclass relationship	PPT&Chalk-Board
28	L25	Apart of Relationship-Aggregation	PPT&Chalk-Board
29	L26	Class Responsibilities	Case Study
30	L27	Object Responsibilities	PPT
31	L28	Object Oriented design process,	PPT&Chalk-Board/Example
32	L29	Corollaries	PPT
33	L30	Design axioms	PPT/Case Study
34	L31	Object oriented design philosophies	PPT
35		Query Session Unit-3	Offline
36		Class Test Unit 3	Offline
37	L32	UML Object Constraint Language	PPT/Case Study
38	L33	Designing Classes: The Process, Class Visibility, Refining Attributes	PPT
39	L34	Designing Classes: The Process, Class Visibility, Refining Attributes	PPT&Chalk-Board
40	L35	Design patterns	PPT&Chalk-Board
41	L36	Designing Methods and Protocols	PPT
42	L37	Designing Methods and Protocols	PPT
43	L38	Collaborators	PPT
44	L39	Managing classes	PPT&Chalk-Board
45	L40	Packages	PPT&Chalk-Board
46	L41	Designing interface objects	PPT&Chalk-Board
48	L42	View layer interface design	PPT&Chalk-Board
49	L43	Macro level interface design process.	PPT&Chalk-Board
50	L44	Micro level interface design process	PPT&Chalk-Board
51		Query Session Unit-4	Offline
52		Assignments-2	Offline

Lesson Plan

Name of the Faculty:	Ms. Pratibha
Discipline:	B.Tech (CSE)
Semester:	7thSem
Subject:	Cyber Law and Ethics (OE-CS-401A)
Work Load(Lecture/Practical) per week (In hours):	Lecture-3

S. No	Lecture No.	Theory	
		Topic(Including Assignment/Test/Quiz)	Pedagogy (PPT/Chalk and Board/Case Study)
1.	L1.	Unit-1: Cyber Law: Emergence of cyber space	Chalk-Board
2.	L2.	Cyber Jurisprudence, Jurisprudence and law	Chalk-Board
3.	L3.	Doctrinal approach, Consensual approach,	Chalk-Board
4.	L4.	Real Approach,	PPT & Chalk-Board
5.	L5.	Cyber Ethics, Cyber Jurisdiction,	Chalk-Board
6.	L6.	Hierarchy of courts,	PPT & Chalk-Board
7.	L7.	Civil and criminal jurisdictions,	PPT & Chalk-Board
8.	L8.	CyberspaceWeb space,	PPT & Chalk-Board
9.	L9.	Web hosting and web Development agreement,	PPT & Chalk-Board
10.	L10.	Legal and Technological Significance of domain Names, Internet as a tool for global access.	Chalk-Board
11.		Query Session Unit-1	Offline/Case Study
12.		Sessionals-1	Offline
13.	L11.	Unit-2: Information Technology Act: Overview of IT Act 2000	Chalk-Board
14.	L12.	Amendments and Limitations of IT Act	Chalk-Board
15.	L13.	Digital Signatures,	PPT
16.	L14.	Cryptographic Algorithm, Public and Private Cryptography,	Chalk-Board
17.	L15.	Electronic Governance,	Chalk-Board
18.	L16.	Legal Recognition of Electronic Records,	Chalk-Board
19.	L17.	Legal Recognition of Digital Signature,	PPT

20.	L18.	Certifying Authorities, Cyber Crime and Offences	Chalk-Board
21.	L19.	Network Service Providers Liability,	Chalk-Board
22.	L20.	Cyber Regulations Appellate Tribunal,	Chalk-Board
23.	L21.	Penalties and Adjudication.	Chalk-Board
24.		Query Session Unit-2	Offline/Case Study
25.		Assignment-1	Offline
26.	L22.	Unit-3: Cyber law and Related Legislation: Patent Law,	Chalk-Board
27.	L23.	Patent Law, Trademark Law,	PPT & Chalk-Board
28.	L24.	Copyright, Software – Copyright or Patented,	PPT & Chalk-Board
29.	L25.	Domain Names and Copyright disputes,	Chalk-Board
30.	L26.	Electronic Data Base and its Protection,	Chalk-Board
31.	L27.	IT Act and Civil Procedure Code,	Chalk-Board
32.	L28.	IT Act and Criminal Procedural Code,	Chalk-Board
33.	L29.	Relevant Sections of Indian Evidence Act,	Chalk-Board
34.	L30.	Relevant Sections of Bankers Book Evidence Act,	Chalk-Board
35.	L31.	Relevant Sections of Indian Penal Code.	Chalk-Board
36.		Query Session Unit-3	Offline/Case Study
37.		Sessionals-2	Offline
38.	L32.	Unit-4: Cyber Ethics: The Importance of Cyber Law,	Chalk-Board
39.	L33.	Significance of cyber Ethics,	Chalk-Board
40.	L34.	Need for Cyber regulations and Ethics.	Chalk-Board
41.	L35.	Ethics in Information society,	PPT & Chalk-Board
42.	L36.	Introduction to Artificial Intelligence Ethics	Chalk-Board
43.	L37.	Ethical Issues in AI and core Principles,	Chalk-Board
44.	L38.	Introduction to Block-Chain Ethics.	Chalk-Board
45.		Query Session Unit-4	Offline/Case Study
46.		Assignment-2	Offline