Lesson Plan

Name of Faculty : **Sandeep Mudgil**

Discipline : **Computer Engg.**

Semester : **6 th**

Subject : **Software Engg.**

Work Load (Lecturer per week) and (Practical per Week) = 3 Lectures 0 Practical)

Week	Theory	
	Lecture Day	Topic (including assignment/test)
1st	1	Introduction to software engineering, Programmes v/s Software Products
	2	Concept of systems, Types of systems: Open, closed, static and dynamic Systems
	3	Emergence of Software Engineering- Early Computer Programming, High-level Language Programming, Control flow based Design,
2nd	4	Data Structure Oriented Design, Object Oriented Design
	5	Revision and Assignment
	6	Software life cycle models, Requirement of Life Cycle Model
3rd	7	Classic Waterfall Model, Iterative Model with their advantage and disadvantage
	8	Prototyping Model with their advantage and disadvantage
	9	Evolutionary Model with their advantage and disadvantage
4th	10	Spiral Model with their advantage and disadvantage
	11	Introduction to Agile Model with their advantage and disadvantage
	12	Comparison of different Life Cycle Models
5th	13	Revision and Assignment
	14	Revision and Class test
	15	Sessional Test
6th	16	Software planning, Responsibilities of Software Project Manager
	17	Metrics for Project Size Estimation- LOC (Lines of Code),
	18	Function Point Metric
7th	19	Project estimation Techniques- Using COCOMO Model.
	20	Project estimation Techniques- Using COCOMO Model.
	21	Software Requirement Specifications (SRS),

8th	22	Characteristics of good SRS
	23	Revision and Assignment
	24	Software design and implementation, Characteristics and features of good Software Design
9th	25	Cohesion and Coupling
	26	Software design Approaches- Function Oriented Design (Data flow diagrams, Data dictionary, Decision Trees and tables),
	27	Function Oriented Design (Data flow diagrams, Data dictionary, Decision Trees and tables),
10th	28	Object Oriented Design,
	29	Structured Coding Techniques
	30	Coding Styles, documentation.
11th	31	Revision and Assignment
	32	Revision and Class test
	33	Sessional Test
12th	34	Software testing: Concept of Testing
	35	Verification v/s Validations
	36	Black Box Testing
13th	37	White Box Testing
	38	Unit Testing
	39	Integration testing
14th	40	System testing
	41	Introduction to Configuration Management.
	42	Introduction to Configuration Management.
15th	43	Revision and Assignment
	44	Revision and Class test
	45	Sessional Test
16th	46	Revision and Class test
	47	Revision and Class test
	45	Revision and Class test