Academic Lesson Plan of Winter 2024		
Department: CSE	**Semester:5th**	**Name of the Teaching Faculty:GIRIJA PRASAD SWAIN**
Subject: **Software Engineering**	No. of days/per week class allotted 4p/week	Semester from:01/07/2024
		No. of weeks:15
		Topics to be covered:
WEEK	**DAY**	**TOPIC**
1st week	1st	Program vs. s/w product.
	2nd	Emergence of s/w engg, computer system engg.
	3rd	Software life cycle models
	4th	Software life cycle models
2nd week	1st	Lifecycle models
	2nd	Responsibility of project manager
	3rd	Project planning
	4th	Matrix for project size estimating
3rd week	1st	Project size estimation techniques
	2nd	COCOMO models
	3rd	Scheduling , organization team structure
	4th	Staffing , risk management & configuration management
4th week	1st	Requirement gathering & analysis
	2nd	software requirement specification
	3rd	content of SRS & characteristics of good SRS
	4th	organization & techniques of SRS
5th week	1st	Design of good s/w , s/w design approaches
	2nd	Cohesion & Coupling
	3rd	Structured analysis , Data flow diagram
	4th	Symbols used in DFD & design of DFD
6th week	1st	Developing DFD model of a system
	2nd	Short coming of DFD, level of DFD
	3rd	Structured design
	4th	Principles of transformation of DFD to structures
7th week	1st	Transform & transaction analysis
	2nd	Design review
	3rd	characteristics of good interface
	4th	basic concepts of UID
8th week	1st	types of User Interface
	2nd	component based GUI development
	3rd	coding, code review
	4th	code walk through
9th week	1st	code inspection & s/w documents
	2nd	testing ,unit testing
	3rd	black box testing
	4th	class partitioning & boundary value analysis
10th week	1st	white box testing
	2nd	white box methodology
	3rd	condition and path coverage
	4th	cyclomatic complexity
11th week	1st	data flow based & mutuation testing
	2nd	debugging approaches
	3rd	debugging guidelines
	4th	integration testing

12th week	1st	phased integration testing
	2nd	Incremental integration testing
	3rd	system testing , alpha , beta & acceptance testing
	4th	performance testing & error seeding
13th week	1st	general issues associated with testing
	2nd	s/w reliability
	3rd	s/w reliability matrics
	4th	reliability growth models
14th week	1st	s/w quality
	2nd	s/w quality management system
	3rd	s/w quality management system
	4th	doubt clearing class(chpt-1,2)
15th week	1st	doubt clearing class (chpt-3,4)
	2nd	doubt clearing class (chpt-5,6,7)
	3rd	Previous year question discussion
	4th	Previous year question discussion

Signature of Faculty

HOD
Sr. Lecture, CSE