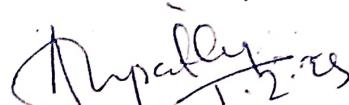


Department : Information Technology		Academic Lesson Plan of Summer 2025	
Subject: Database Management System	Semester : 4th	Name of the teaching faculty: Arohuna Tripathy	
	No. of days/per week class allotted : 4p/week.	Semester from : 14th Feb to 17th May 2025	
		No. of weeks: 15 weeks	
		Topics to be covered:	
		BASIC CONCEPTS OF DBMS , Purpose of database Systems	
1st week	1 st	Data definition language	
	2 nd	Data Dictionary	
	3 rd	Data independence	
2nd week	1 st	REVISION	
	2 nd	DATA MODELS	
	3 rd	Data independence	
3rd week	4th	Entity sets and Relationship sets,	
	1 st	Explain Attributes	
	2 nd	Types of Attributes	
4th week	3 rd	Mapping constraints	
	4th	E-R Diagram	
5th week	1 st	Relational model	
	2 nd	Hierarchical model	
	3 rd	Network model	
	4th	REVISION	
6th week	1 st	RELATIONAL DATABASE , Relational Algebra	
	2 nd	Relational Algebra	
	3 rd	Different operators select, project, simple Examples	
	4th	JOIN , simple Examples,	
7th week	1 st	Different operators select, project, join , simple Examples	
	2 nd	REVISION	
	3 rd	NORMALIZATION IN RELATIONAL SYSTEM, Functional Dependencies	
	4th	Functional Dependencies	
8th week	1 st	Lossless join	
	2 nd	Importance of normalization	
	3 rd	1NF	
	4th	2NF	
9th week	1 st	3NF	
	2 nd	Compare First second and third normal forms	
	3 rd	Explain BCNF	
10th week	1 st	REVISION	
	2 nd	STRUCTURED QUERY LANGUAGE, Elementary ideas of Query language	
	3 rd	Syntax and examples using different query languages	
11th week	1 st	Queries in SQL with examples	
	2 nd	Simple queries to create, update, insert in SQL	
	3 rd	Simple queries to create, update, insert in SQL	
12th week	1 st	REVISION	
	2 nd	TRANSACTION PROCESSING CONCEPTS, Idea about transaction processing	
	3 rd	Transaction & system concept	
	4th	Desirable properties of transaction	
13th week	1 st	Schedules and recoverability	
	2 nd	REVISION	
	3 rd	CONCURRENCY CONTROL CONCEPTS , Basic concepts	
	4th	Locks, Live Lock,	
14th week	1 st	Dead Lock and recoverability	
	2 nd	Continue	
	3 rd	Serializability (only fundamentals)	
	4th	SECURITY AND INTEGRITY, Authorization and views	
15th week	1 st	continue	
	2 nd	Authorization and views	
	3 rd	Security constraints	
	4th	continue	
	1 st	Integrity Constraints	
	2 nd	Discuss Encryption	
	3 rd	REVISION of all topics with Semester Question	
	4th	REVISION of all topics with Semester Question	


 Signature of the Faculty

Academic Lesson Plan of Summer 2025

Department : Information Technology	Semester : 6th	Name of the teaching faculty: Archana Tripathy
Subject: Cryptography & Network Security	No. of days/per week class allotted . 5p/week.	Semester from : 4th Feb 2025 to 17rd May 2025
		No. of weeks:15 weeks
		Topics to be covered:
1st week	1 st	The need for security
	2 nd	Security approach
	3 rd	Principles of security
2nd week	1 st	Continue
	2 nd	Types of attacks
	3 rd	Continue
3rd week	4th	Revision
	1 st	Cryptography concepts ,Plain text & Cipher Text
	2 nd	Substitution techniques
4th week	3 rd	Continue
	1 st	Transposition techniques
	2 nd	Continue
5th week	3rd	Encryption & Decryption
	1 st	Symmetric & Asymmetric key cryptography
	2 nd	Continue
6th week	3rd	Revision
	4th	Symmetric key algorithm types
	1 st	Overview of Symmetric key cryptography
7th week	2 nd	Data encryption standards
	3 rd	Continue
	4th	Continue
8th week	1 st	The RSA algorithm
	2 nd	Symmetric & Asymmetric key cryptography
	3 rd	Continue
9th week	4th	Digital signature
	1 st	continue
	2 nd	continue
10th week	3rd	Revision
	1 st	Digital certificates
	2 nd	Continue
11th week	3rd	PKIX Model, Private key management
	1 st	Public key cryptography standards
	2 nd	continue
12th week	3rd	continue
	1 st	Revision
	2 nd	Basic concept, Secure socket layer
13th week	3rd	continue
	1 st	Transport layer security, Secure Hyper text transfer protocol(SHHTTP)
	2 nd	Continue
14th week	3rd	Time stamping protocol (TSP), Secure electronic transaction (SET)
	1 st	Continue
	2 nd	Continue
15th week	3rd	Password , Authentication Tokens
	1 st	Continue
	2 nd	Certificate based authentication
	3rd	Continue
	1 st	Biometric authentication
	2 nd	Revision
	3rd	Brief introduction of TCP/IP
	4th	Continue
	1 st	Firewall
	2 nd	Continue
	3rd	continue, IP Security
	4th	IP Security
	1 st	Virtual Private Network (VPN)
	2 nd	Continue
	3rd	Revision & Semester Question Answer Discussion
	4th	Revision & Semester Question Answer Discussion

Signature of the faculty 1.2.25

Academic Lesson Plan of Summer 2025

Department : Information Technology	Semester : 6th	Name of the teaching faculty: Archana Tripathy
Subject:PROJECT PHAE-II	No.of days/per week class allotted 2p/week.	Semester from : 4th February 2025 to 17th May 2025
		No. of weeks:15 weeks
		Topics to be covered:
1 st week	1 st	Project Grouping Carry out a session or a seminar for directing the students to identify project areas in the field of their interest including interdisciplinary areas.
	2 nd	continue
	3 rd	continue
2 nd week	1 st	Power point presentation in seminar should include detail description of project areas related to program, Project report formats, developing personnel writing skills.
	2 nd	continue
	3 rd	continue
	4 th	continue
3 rd week	1 st	continue All students should start development of their Project
	3 rd	continue
4 th week	1 st	continue
	2 nd	The project development may include the following: Preparation of a feasibility report
5 th week	1 st	continue
	2 nd	continue
		continue
		Preparation of a feasibility report
6 th week	1 st	continue
	2 nd	continue
	3 rd	continue
7 th week	1 st	Design and development system
	2 nd	continue
	3 rd	continue
8 th week	1 st	continue
	2 nd	The improvement of existing system
	3 rd	continue
9 th week	1 st	continue
	2 nd	continue
	3 rd	Discussion regarding creation of New facilities
	4 th	continue
10 th week	1 st	continue
	2 nd	continue
	3 rd	The project should be challenging but manageable within the resources and time available.
	4 th	continue
11 th week	1 st	continue
	2 nd	reviews of project development
	3 rd	continue
12 th week	1 st	continue
	2 nd	Monitor the progress of Project work periodically
	3 rd	continue
	4 th	continue
13 th week	1 st	Project finally evaluated & cheked
	2 nd	continue
14 th week	1 st	continue
	2 nd	continue
	3 rd	Presentation
	4 th	Presentation
15 th week	1 st	Presentation
	2 nd	REVISION

Signature of the faculty