

Lesson plan		
Discipline- Information Technology	Semester-6th	
Subject-Th.1 Cryptography & Network	Name of teaching Faculty-Smt. Abhijita Routray, Lecturer in Computer Application	
No of weeks-15	No of classes per week allotted-4	
Week	Period	Topic
1st	1st	Possible attacks on Computers :The need for security
	2nd	Security approach
	3rd	Principles of security
	4th	Types of attacks
2nd	1st	Revision
	2nd	Cryptography Concepts : Plain text & Cipher Text
	3rd	Plain text & Cipher Text
	4th	Substitution techniques
3rd	1st	Substitution techniques
	2nd	Transposition techniques
	3rd	Transposition techniques
	4th	Encryption & Decryption
4th	1st	Encryption & Decryption
	2nd	Symmetric & Asymmetric key cryptography
	3rd	Symmetric & Asymmetric key cryptography & Revision
	4th	Symmetric & Asymmetric key algorithms : Symmetric key algorithm types
5th	1st	Symmetric key algorithm types
	2nd	Overview of Symmetric key cryptography
	3rd	Overview of Symmetric key cryptography
	4th	Data encryption standards
6th	1st	Data encryption standards
	2nd	Over view of Asymmetric key cryptography
	3rd	Over view of Asymmetric key cryptography
	4th	The RSA algorithm
7th	1st	The RSA algorithm
	2nd	The RSA algorithm
	3rd	Symmetric & Asymmetric key cryptography
	4th	Symmetric & Asymmetric key cryptography
8th	1st	Digital signature
	2nd	Revision
	3rd	Digital certificate & Public key infrastructure : Digital certificates
	4th	Private key management
9th	1st	Private key management
	2nd	Private key management
	3rd	PKIX Model
	4th	PKIX Model
	1st	PKIX Model
	2nd	Public key cryptography standards

10th	3rd	Public key cryptography standards
	4th	Revision
11th	1st	Internet security protocols : Basic concept
	2nd	Secure socket layer
	3rd	Secure socket layer
	4th	Transport layer security
12th	1st	Transport layer security
	2nd	Secure Hyper text transfer protocol(SHHTTP)
	3rd	Time stamping protocol (TSP)
	4th	Secure electronic transaction (SET)
13th	1st	Secure electronic transaction (SET)
	2nd	Revision
	3rd	User authentication :Authentication basics , Password
	4th	Authentication Tokens
14th	1st	Certificate based authentication
	2nd	Biometric authentication
	3rd	Network Security & VPN : Brief introduction of TCP/IP
	4th	Firewall
15th	1st	Firewall
	2nd	IP Security
	3rd	IP Security
	4th	Virtual Private Network (VPN)


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Lesson plan		
Discipline- Information Technology		Semester-4th
Subject-ITPC204/TH2- Database Management System		Name of teaching Faculty-Smt. Abhijita Routray, Lecturer in Computer Application
No of weeks-15		No of classes per week allotted-4
Week	Period	Topic
1st	1st	Database Basics: Definition, Need, and Applications of DBMS.
	2nd	Database vs File System
	3rd	DBMS Architecture: Components, Views of Data
2nd	1st	Data Models
	2nd	Introduction to RDBMS
	3rd	Advantages and Disadvantages of DBMS, Revision
3rd	1st	Entities, Attributes
	2nd	Relationships, and Constraints
	3rd	Keys: Primary
4th	1st	Foreign
	2nd	Candidate, and Super Keys
	3rd	ER Diagrams and their components,
5th	1st	Converting ER Diagrams to Relational Models
	2nd	Revision
	3rd	Relational Algebra: Selection, Projection, Union, Intersection, Difference, Cartesian Product
6th	1st	Joins, SQL Basics: Data Definition Language (DDL) and Data Manipulation Language (DML),
	2nd	SQL Queries: Create, Alter, Drop
	3rd	Insert, Update, Delete
7th	1st	Basic and Advanced Queries: Filtering, Sorting
	2nd	Aggregate Functions, and Group By
	3rd	Joins: Inner, Outer, Left, Right, and Cross Joins.
8th	1st	Joins: Inner, Outer, Left, Right, and Cross Joins.
	2nd	Joins: Inner, Outer, Left, Right, and Cross Joins and revision
	3rd	Database Design and Normalization: Data Redundancy and Anomalies
9th	1st	Functional Dependencies,
	2nd	Normal Forms: 1NF
	3rd	2NF
10th	1st	3NF
	2nd	BCNF
	3rd	Decomposition of Relations
11th	1st	Revision
	2nd	Database Transaction Management and Concurrency Control:
	3rd	Transactions: Properties (ACID)
12th	1st	States, and Schedules
	2nd	Serializability and Recoverability
	3rd	Concurrency Control: Locks
13th	1st	Concurrency Control: Locks
	2nd	Deadlocks
	3rd	Timestamp Ordering and Revision
14th	1st	Database Administration and Security Management: User
	2nd	Privileges and Roles
	3rd	Database Security: Authentication
15th	1st	Authentication
	2nd	Authorization, Data Encryption
	3rd	Revision

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Discipline- MODERN OFFICE MANAGEMENT		Lesson plan	
Subject-Th.4 Management Information System & E-Commerce		Semester-6th	
No of weeks-15		Name of teaching Faculty-Smt. Abhijita Routray, Lecturer in Computer Application	
Week	Period	No of classes per week allotted-4	
		Topic	
1st	1st	Meaning , Definition of management Information System.	
	2nd	Information System-rule, components , types , MIS Model	
	3rd	Information System-rule, components , types , MIS Model	
	4th	Information requirement at various levels of management, information processing unit.	
	5th	Information requirement at various levels of management, information processing unit.	
2nd	1st	Information requirement at various levels of management, information processing unit.	
	2nd	Information requirement at various levels of management, information processing unit.	
	3rd	MIS and data processing operating elements of information system.	
	4th	MIS and data processing operating elements of information system.	
	5th	MIS and data processing operating elements of information system.	
3rd	1st	Flow Chart , Fundamental concept of system	
	2nd	Flow Chart , Fundamental concept of system	
	3rd	Flow Chart , Fundamental concept of system	
	4th	Types of decisions and information, information system.	
	5th	Types of decisions and information, information system.	
4th	1st	Marketing	
	2nd	Marketing	
	3rd	Marketing	
	4th	Human Resources	
	5th	Human Resources	
5th	1st	Human Resources	
	2nd	Financial Management	
	3rd	Financial Management	
	4th	Financial Management	
	5th	Production Management	
6th	1st	Production Management	
	2nd	Production Management	
	3rd	Importance in decision making	
	4th	Importance in decision making	
	5th	Revision	
7th	1st	Introduction	
	2nd	What is E-Commerce	
	3rd	What is E-Commerce	
	4th	E- Business	
	5th	E- Business	
8th	1st	Categories of E- Commerce Application	
	2nd	Categories of E- Commerce Application	
	3rd	Global trading environment and adoption of E- Commerce	
	4th	Global trading environment and adoption of E- Commerce	
	5th	Comparison between traditional of E-Commerce	
9th	1st	Comparison between traditional of E-Commerce	
	2nd	Advantages and Disadvantages	
	3rd	Introduction of Business Models of E- Commerce	
	4th	B2C, B2B, C2C and Difference between B2C and B2B	
	5th	B2C, B2B, C2C and Difference between B2C and B2B and revision	
	1st	Introduction Need for B2B EDI EDI Standards	
	2nd	Data Standards used in EDI, Cost of EDI	
	3rd	Data Standards used in EDI, Cost of EDI	
	4th	Paperless transaction	

10th	5th	Paperless transaction
11th	1st	Reasons for slow acceptability
	2nd	Electronic fund Transfer
	3rd	Electronic fund Transfer
	4th	Reason for slow acceptability
	5th	Electronic fund Transfer
12th	1st	Electronic fund Transfer
	2nd	E-Commerce Application in manufacturing and wholesale, retail and service sector
	3rd	E-Commerce Application in manufacturing and wholesale, retail and service sector
	4th	E-Commerce Application in manufacturing and wholesale, retail and service sector
	5th	Revision
13th	1st	Introduction
	2nd	Cryptography
	3rd	Cryptography
	4th	Cryptography
	5th	Digital signature, Digital Envelop, Digital Certificate
14th	1st	Digital signature, Digital Envelop, Digital Certificate
	2nd	Electronic payment System; Introduction, Electronic Payment Mechanism
	3rd	Electronic payment System; Introduction, Electronic Payment Mechanism
	4th	Electronic payment System; Introduction, Electronic Payment Mechanism
	5th	Types of payment System. Risk associated with Electronic Payment
15th	1st	Types of payment System. Risk associated with Electronic Payment
	2nd	Types of payment System. Risk associated with Electronic Payment
	3rd	Risk Management Option, Payment Gateway
	4th	Risk Management Option, Payment Gateway
	5th	Revision

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