

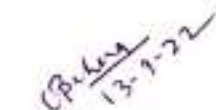
**Lesson plan of 2022-23  
(3<sup>RD</sup> SEMESTER CSE)**

<b>DISCIPLINE:CSE</b>	<b>SEMESTER:3RD</b>	<b>NAME OF THE TEACHING FACULTY:MRS YOGESWARI MAGAR</b>
<b>SUBJECT: Computer System Architecture</b>	<b>NO.OF DAYS/PERWEEK CLASS ALLOTTED: 4</b>	<b>SEMESTER FROM DATE: 15/09/2022 TO DATE: 22/12/2022</b>
		<b>NO.OF WEEKS:15</b>
<b>WEEK</b>	<b>CLASS DAY</b>	<b>THEORY/PRACTICAL TOPICS</b>
1 <sup>ST</sup>	1 <sup>ST</sup>	Basic structure of computer hardware
	2 <sup>ND</sup>	Basic Structure of computer hardware
	3 <sup>RD</sup>	Functional Units
	4 <sup>TH</sup>	Computer components
2 <sup>ND</sup>	1 <sup>ST</sup>	Performance measures
	2 <sup>ND</sup>	Memory addressing & Operations
	3 <sup>RD</sup>	Instructions & instruction Sequencing
	4 <sup>TH</sup>	Fundamentals to instructions
3 <sup>RD</sup>	1 <sup>ST</sup>	Fundamentals to instructions
	2 <sup>ND</sup>	Operands
	3 <sup>RD</sup>	Op Codes
	4 <sup>TH</sup>	Instruction formats
4 <sup>TH</sup>	1 <sup>ST</sup>	Addressing Modes
	2 <sup>ND</sup>	Processor System
	3 <sup>RD</sup>	Register Files
	4 <sup>TH</sup>	Complete instruction execution
5 <sup>TH</sup>	1 <sup>ST</sup>	Complete instruction execution
	2 <sup>ND</sup>	Fetch
	3 <sup>RD</sup>	Decode
	4 <sup>TH</sup>	Execution
6 <sup>TH</sup>	1 <sup>ST</sup>	Hardware control
	2 <sup>ND</sup>	Hardware control
	3 <sup>RD</sup>	Micro program control
	4 <sup>TH</sup>	Memory System
7 <sup>TH</sup>	1 <sup>ST</sup>	Memory characteristics
	2 <sup>ND</sup>	Memory characteristics
	3 <sup>RD</sup>	Memory hierarchy
	4 <sup>TH</sup>	Memory hierarchy
8 <sup>TH</sup>	1 <sup>ST</sup>	RAM and ROM organization
	2 <sup>ND</sup>	Interleaved Memory
	3 <sup>RD</sup>	Cache memory
	4 <sup>TH</sup>	Cache memory
9 <sup>TH</sup>	1 <sup>ST</sup>	Virtual memory
	2 <sup>ND</sup>	Input – Output System
	3 <sup>RD</sup>	Input - Output Interface
	4 <sup>TH</sup>	Modes of Data transfer
10 <sup>TH</sup>	1 <sup>ST</sup>	Modes of Data transfer

	2 <sup>ND</sup>	Programmed I/O Transfer
	3 <sup>RD</sup>	Programmed I/O Transfer
	4 <sup>TH</sup>	Interrupt driven I/O
11 <sup>TH</sup>	1 <sup>ST</sup>	Interrupt driven I/O
	2 <sup>ND</sup>	DMA
	3 <sup>RD</sup>	I/O Processor
	4 <sup>TH</sup>	I/O Interface & Bus architecture
12 <sup>TH</sup>	1 <sup>ST</sup>	Bus and System Bus
	2 <sup>ND</sup>	Types of System Bus
	3 <sup>RD</sup>	Data Bus
	4 <sup>TH</sup>	Address Bus Control
13 <sup>TH</sup>	1 <sup>ST</sup>	Bus Structure
	2 <sup>ND</sup>	Bus Structure
	3 <sup>RD</sup>	Basic Parameters of Bus design
	4 <sup>TH</sup>	SCSI
14 <sup>TH</sup>	1 <sup>ST</sup>	USB
	2 <sup>ND</sup>	Parallel Processing
	3 <sup>RD</sup>	Parallel Processing
	4 <sup>TH</sup>	Linear Pipeline
15 <sup>TH</sup>	1 <sup>ST</sup>	Multiprocessor
	2 <sup>ND</sup>	Multiprocessor
	3 <sup>RD</sup>	Flynn's Classification
	4 <sup>TH</sup>	Flynn's Classification



Signature of Faculty

  
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CSE Dept.

DISCIPLINE:CSE	SEMESTER:3RD	NAME OF THE TEACHING FACULTY:MRS MOUSUMI SUBUDHI
SUBJECT: Data Structure	NO.OF DAYS/PERWEEK CLASS ALLOTTED: 4	SEMESTER FROM DATE: 15/09/2022 TO DATE: 22/12/2022 NO.OF WEEKS:15
WEEK	CLASS DAY	THEORY/PRACTICAL TOPICS
1 <sup>ST</sup>	1 <sup>ST</sup>	Explain Data, Information, data types
	2 <sup>ND</sup>	Define data structure & Explain different operations Explain Abstract data types
	3 <sup>RD</sup>	Discuss Algorithm & its complexity
	4 <sup>TH</sup>	Explain Time, space tradeoff
2 <sup>ND</sup>	1 <sup>ST</sup>	Explain Basic Terminology, Storing Strings
	2 <sup>ND</sup>	State Character Data Type, Discuss String Operations
	3 <sup>RD</sup>	Discuss String Operations
	4 <sup>TH</sup>	Give introduction about array, Discuss Linear arrays, representation of linear array In memory
3 <sup>RD</sup>	1 <sup>ST</sup>	Explain traversing linear arrays, inserting & deleting elements
	2 <sup>ND</sup>	Discuss multidimensional arrays, representation of two dimensional arrays in memory (row major order & column major order), and pointers
	3 <sup>RD</sup>	Discuss multidimensional arrays, representation of two dimensional arrays in memory (row major order & column major order), and pointers
	4 <sup>TH</sup>	Discuss multidimensional arrays, representation of two dimensional arrays in memory (row major order & column major order), and pointers
4 <sup>TH</sup>	1 <sup>ST</sup>	Explain sparse matrices.
	2 <sup>ND</sup>	Explain sparse matrices.
	3 <sup>RD</sup>	Give fundamental idea about Stacks and queues
	4 <sup>TH</sup>	Give fundamental idea about Stacks and queues
5 <sup>TH</sup>	1 <sup>ST</sup>	Explain array representation of Stack
	2 <sup>ND</sup>	Explain arithmetic expression ,polish notation & Conversion
	3 <sup>RD</sup>	Explain arithmetic expression ,polish notation & Conversion
	4 <sup>TH</sup>	Discuss application of stack, recursion
6 <sup>TH</sup>	1 <sup>ST</sup>	Discuss queues, circular queue, priority queues.
	2 <sup>ND</sup>	Discuss queues, circular queue, priority queues.



	3 <sup>RD</sup>	Give Introduction about linked list Explain representation of linked list in memory
	4 <sup>TH</sup>	Discuss traversing a linked list, searching
7 <sup>TH</sup>	1 <sup>ST</sup>	Discuss traversing a linked list, searching,
	2 <sup>ND</sup>	Discuss garbage collection.
	3 <sup>RD</sup>	Explain Insertion into a linked list, Deletion from a linked list, header linked list
	4 <sup>TH</sup>	Explain Insertion into a linked list, Deletion from a linked list, header linked list
8 <sup>TH</sup>	1 <sup>ST</sup>	Explain Insertion into a linked list, Deletion from a linked list, header linked list
	2 <sup>ND</sup>	Explain Insertion into a linked list, Deletion from a linked list, header linked list
	3 <sup>RD</sup>	Explain Basic terminology of Tree
	4 <sup>TH</sup>	Explain Basic terminology of Tree
9 <sup>TH</sup>	1 <sup>ST</sup>	Discuss Binary tree, its representation and traversal, binary search tree, searching,
	2 <sup>ND</sup>	Discuss Binary tree, its representation and traversal, binary search tree, searching,
	3 <sup>RD</sup>	Discuss Binary tree, its representation and traversal, binary search tree, searching,
	4 <sup>TH</sup>	Explain insertion & deletion in a binary search trees
10 <sup>TH</sup>	1 <sup>ST</sup>	Explain insertion & deletion in a binary search trees
	2 <sup>ND</sup>	Explain insertion & deletion in a binary search trees
	3 <sup>RD</sup>	Explain graph terminology & itsrepresentation,
	4 <sup>TH</sup>	Explain graph terminology & its representation,
11 <sup>TH</sup>	1 <sup>ST</sup>	Explain graph terminology & its representation,
	2 <sup>ND</sup>	Explain Adjacency Matrix, Path Matrix
	3 <sup>RD</sup>	Explain Adjacency Matrix, Path Matrix
	4 <sup>TH</sup>	Explain Adjacency Matrix, Path Matrix
12 <sup>TH</sup>	1 <sup>ST</sup>	Discuss Algorithms for Bubble sort, Quick sort,
	2 <sup>ND</sup>	Discuss Algorithms for Bubble sort, Quick sort,
	3 <sup>RD</sup>	Discuss Algorithms for Bubble sort, Quick sort,
	4 <sup>TH</sup>	Merging
13 <sup>TH</sup>	1 <sup>ST</sup>	Merging
	2 <sup>ND</sup>	Linear searching, Binary searching

	3 <sup>RD</sup>	Linear searching, Binary searching
	4 <sup>TH</sup>	Linear searching, Binary searching
14 <sup>TH</sup>	1 <sup>ST</sup>	Discuss Different types of files organization and their access method,
	2 <sup>ND</sup>	Discuss Different types of files organization and their access method,
	3 <sup>RD</sup>	Discuss Different types of files organization and their access method,
	4 <sup>TH</sup>	Discuss Different types of files organization and their access method,
15 <sup>TH</sup>	1 <sup>ST</sup>	Introduction to Hashing, Hash function, collision resolution, open addressing.
	2 <sup>ND</sup>	Introduction to Hashing, Hash function, collision resolution, open addressing.
	3 <sup>RD</sup>	Introduction to Hashing, Hash function, collision resolution, open addressing.
	4 <sup>TH</sup>	Introduction to Hashing, Hash function, collision resolution, open addressing.

*M. Subudhi*  
Signature of Faculty  
13/9/2022

*C. P. S. S. S.*  
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DISCIPLINE:CSE	SEMESTER:3RD	NAME OF THE TEACHING FACULTY: SRI ABHIRAM BEHERA
SUBJECT: Digital Electronics	NO.OF DAYS/PERWEEK CLASS ALLOTTED: 4	SEMESTER FROM DATE: 15/09/2022 TO DATE: 22/12/2022  NO.OF WEEKS:15
WEEK	CLASS DAY	THEORY/PRACTICAL TOPICS
1 <sup>ST</sup>	1 <sup>ST</sup>	Basics of Digital Electronics
	2 <sup>ND</sup>	Number System-Binary, Octal, Decimal, Hexadecimal - Conversion from one system to another number system.
	3 <sup>RD</sup>	Arithmetic Operation-Addition, Subtraction, Multiplication, Division, 1"s & 2"s complement of Binary numbers& Subtraction using complements method
	4 <sup>TH</sup>	Arithmetic Operation-Addition, Subtraction, Multiplication, Division, 1"s & 2"s complement of Binary numbers& Subtraction using complements method
2 <sup>ND</sup>	1 <sup>ST</sup>	Digital Code & its application & distinguish between weighted & non-weight Code, Binary codes, excess-3 and Gray codes.
	2 <sup>ND</sup>	Digital Code & its application & distinguish between weighted & non-weight Code, Binary codes, excess-3 and Gray codes.
	3 <sup>RD</sup>	Logic gates: AND,OR,NOT,NAND,NOR, Exclusive-OR, Exclusive-NOR--Symbol, Function, expression, truth table & timingdiagram
	4 <sup>TH</sup>	Logic gates: AND,OR,NOT,NAND,NOR, Exclusive-OR, Exclusive-NOR--Symbol, Function, expression, truth table & timingdiagram
3 <sup>RD</sup>	1 <sup>ST</sup>	Universal Gates& its Realisation
	2 <sup>ND</sup>	Boolean algebra, Boolean expressions, Demorgan"s Theorems.
	3 <sup>RD</sup>	Represent Logic Expression: SOP & POS forms
	4 <sup>TH</sup>	Karnaugh map (3 & 4 Variables)&Minimization of logical expressions ,don"t care conditions
4 <sup>TH</sup>	1 <sup>ST</sup>	Combinational Logic Circuits
	2 <sup>ND</sup>	Half adder, Full adder, Half Subtractor, Full Subtractor, Serial and Parallel Binary 4 bit adder.
	3 <sup>RD</sup>	Half adder, Full adder, Half Subtractor, Full Subtractor, Serial and Parallel Binary 4 bit adder.
	4 <sup>TH</sup>	Half adder, Full adder, Half Subtractor, Full Subtractor, Serial and Parallel Binary 4 bitadder.



5 <sup>th</sup>	1 <sup>st</sup>	Multiplexer (4:1), De-multiplexer (1:4), Decoder, Encoder, Digital comparator (3 Bit)
	2 <sup>nd</sup>	Multiplexer (4:1), De-multiplexer (1:4), Decoder, Encoder, Digital comparator (3Bit)
	3 <sup>rd</sup>	Multiplexer (4:1), De-multiplexer (1:4), Decoder, Encoder, Digital comparator (3 Bit)
	4 <sup>th</sup>	Multiplexer (4:1), De-multiplexer (1:4), Decoder, Encoder, Digital comparator (3 Bit)
6 <sup>th</sup>	1 <sup>st</sup>	Seven segment Decoder
	2 <sup>nd</sup>	Seven segment Decoder
	3 <sup>rd</sup>	Seven segment Decoder
	4 <sup>th</sup>	Seven segment Decoder
7 <sup>th</sup>	1 <sup>st</sup>	Sequential logic Circuits
	2 <sup>nd</sup>	Principle of flip-flops operation, its Types
	3 <sup>rd</sup>	Principle of flip-flops operation, its Types
	4 <sup>th</sup>	SR Flip Flop using NAND,NOR Latch (un clocked)
8 <sup>th</sup>	1 <sup>st</sup>	SR Flip Flop using NAND,NOR Latch (un clocked)
	2 <sup>nd</sup>	SR Flip Flop using NAND,NOR Latch (un clocked)
	3 <sup>rd</sup>	SR Flip Flop using NAND,NOR Latch (un clocked)
	4 <sup>th</sup>	C l o c k e d SR,D,JK,T,JK Master Slave flip-flops-Symbol, logic Circuit, truth table and applications
9 <sup>th</sup>	1 <sup>st</sup>	C l o c k e d SR,D,JK,T,JK Master Slave flip-flops-Symbol, logic Circuit, truth table and applications
	2 <sup>nd</sup>	C l o c k e d SR,D,JK,T,JK Master Slave flip-flops-Symbol, logic Circuit, truth table and applications
	3 <sup>rd</sup>	Concept of Racing and how it can be avoided.
	4 <sup>th</sup>	Concept of Racing and how it can be avoided.
10 <sup>th</sup>	1 <sup>st</sup>	Registers, Memories & PLD
	2 <sup>nd</sup>	Shift Registers-Serial in Serial -out, Serial-in Parallel-out, Parallel in serial out and Parallel in parallel out
	3 <sup>rd</sup>	Shift Registers-Serial in Serial -out, Serial-in Parallel-out, Parallel in serial out and Parallel in parallel out
	4 <sup>th</sup>	Universal shift registers-Applications
11 <sup>th</sup>	1 <sup>st</sup>	Types of Counter & applications

	2 <sup>nd</sup>	Binary counter, Asynchronous ripple counter (UP & DOWN), Decade counter. Synchronous counter, Ring Counter.
	3 <sup>rd</sup>	Concept of memories- RAM, ROM, static RAM, dynamic RAM, PS RAM
	4 <sup>th</sup>	Basic concept of PLD & applications
12 <sup>th</sup>	1 <sup>st</sup>	A/D and D/A Converters
	2 <sup>nd</sup>	Necessity of A/D and D/A converters.
	3 <sup>rd</sup>	D/A conversion using weighted resistors methods.
	4 <sup>th</sup>	D/A conversion using R-2R ladder (Weighted resistors) network.
13 <sup>th</sup>	1 <sup>st</sup>	D/A conversion using R-2R ladder (Weighted resistors) network.
	2 <sup>nd</sup>	A/D conversion using counter method.
	3 <sup>rd</sup>	A/D conversion using Successive approximate method
	4 <sup>th</sup>	LOGIC FAMILIES
14 <sup>th</sup>	1 <sup>st</sup>	Various logic families & categories according to the IC fabrication process
	2 <sup>nd</sup>	Various logic families & categories according to the IC fabrication process
	3 <sup>rd</sup>	Various logic families & categories according to the IC fabrication process
	4 <sup>th</sup>	Characteristics of Digital ICs- Propagation Delay, fan-out, fan-in, Power Dissipation, Noise Margin, Power Supply requirement & Speed with Reference to logic families.
15 <sup>th</sup>	1 <sup>st</sup>	Characteristics of Digital ICs- Propagation Delay, fan-out, fan-in, Power Dissipation, Noise Margin, Power Supply requirement & Speed with Reference to logic families.
	2 <sup>nd</sup>	Characteristics of Digital ICs- Propagation Delay, fan-out, fan-in, Power Dissipation, Noise Margin, Power Supply requirement & Speed with Reference to logic families.
	3 <sup>rd</sup>	Features, circuit operation & various applications of TTL(NAND), CMOS (NAND & NOR)
	4 <sup>th</sup>	Features, circuit operation & various applications of TTL(NAND), CMOS (NAND & NOR)

*Prakash*  
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<b>DISCIPLINE:CSE</b>	<b>SEMESTER:3RD</b>	<b>NAME OF THE TEACHING FACULTY:MR PRAMOD KUMAR SWAIN</b>
<b>SUBJECT: Object Oriented Methodology</b>	<b>NO.OF DAYS/PI.RWEEK CLASS ALLOTTED: 4</b>	<b>SEMESTER FROM DATE: 15/09/2022 TO DATE: 22/12/2022</b>
		<b>NO.OF WEEKS:15</b>
<b>WEEK</b>	<b>CLASS DAY</b>	<b>THEORY/PRACTICAL TOPICS</b>
1 <sup>st</sup>	1 <sup>st</sup>	Programming Languages
	2 <sup>nd</sup>	Object Oriented Programming
	3 <sup>rd</sup>	OOPS concepts and terminology
	4 <sup>th</sup>	Benefit of OOPS
2 <sup>nd</sup>	1 <sup>st</sup>	Application of OOPS
	2 <sup>nd</sup>	Introduction to Java ,What is Java
	3 <sup>rd</sup>	Execution Model of Java ,The Java Virtual Machine
	4 <sup>th</sup>	A First Java Program , Variables and Data types
3 <sup>rd</sup>	1 <sup>st</sup>	Primitive Data types & Declarations
	2 <sup>nd</sup>	Numeric , Character Literals and String Literals
	3 <sup>rd</sup>	Arrays, Non-Primitive Data types
	4 <sup>th</sup>	Casting and Type Casting
4 <sup>th</sup>	1 <sup>st</sup>	Widening and Narrowing Conversions
	2 <sup>nd</sup>	Operators and Expressions
	3 <sup>rd</sup>	Control Flow Statements
	4 <sup>th</sup>	The concept of Objects and Classes Concept and Syntax of class
5 <sup>th</sup>	1 <sup>st</sup>	Defining a Class , Concept and Syntax of Methods
	2 <sup>nd</sup>	Defining Methods , Creating an Object
	3 <sup>rd</sup>	Accessing Class Members , Instance Data and Class Data
	4 <sup>th</sup>	Constructors
6 <sup>th</sup>	1 <sup>st</sup>	Access Specifiers
	2 <sup>nd</sup>	Access Modifiers
	3 <sup>rd</sup>	Access Control
	4 <sup>th</sup>	Use of Java Objects String Builder and String Buffer
7 <sup>th</sup>	1 <sup>st</sup>	String Builder and String Buffer
	2 <sup>nd</sup>	Methods and Messages
	3 <sup>rd</sup>	Methods and Messages
	4 <sup>th</sup>	Parameter Passing
8 <sup>th</sup>	1 <sup>st</sup>	Comparing and Identifying Objects
	2 <sup>nd</sup>	The Concept of Inheritance
	3 <sup>rd</sup>	Inheritance in Java
	4 <sup>th</sup>	Use of Inheritance
9 <sup>th</sup>	1 <sup>st</sup>	Types of Inheritance
	2 <sup>nd</sup>	Single Inheritance
	3 <sup>rd</sup>	Multi-level Inheritance
	4 <sup>th</sup>	Hierarchical Inheritance
10 <sup>th</sup>	1 <sup>st</sup>	Hybrid Inheritance
	2 <sup>nd</sup>	The concept of Polymorphism
	3 <sup>rd</sup>	Types of Polymorphism

	4 <sup>TH</sup>	Types of Polymorphism
11 <sup>TH</sup>	1 <sup>ST</sup>	Method Overloading
	2 <sup>ND</sup>	Method Overloading
	3 <sup>RD</sup>	Run time Polymorphism
	4 <sup>TH</sup>	Run time Polymorphism
12 <sup>TH</sup>	1 <sup>ST</sup>	Method Overriding
	2 <sup>ND</sup>	Introduction to Packages
	3 <sup>RD</sup>	Java API Packages, Using System Packages
	4 <sup>TH</sup>	Naming Convention ,Creating Packages
13 <sup>TH</sup>	1 <sup>ST</sup>	Accessing a Package ,Using a Package
	2 <sup>ND</sup>	Adding a Class to Package
	3 <sup>RD</sup>	Hiding Classes ,Static Import
	4 <sup>TH</sup>	Concept of Java Files and I/O Defining a stream
14 <sup>TH</sup>	1 <sup>ST</sup>	Reading and writing to files(only txt files) Input and Output Stream
	2 <sup>ND</sup>	Manipulating Input data 8 Opening and Closing Streams
	3 <sup>RD</sup>	Predefined streams
	4 <sup>TH</sup>	File handling Classes and Methods
15 <sup>TH</sup>	1 <sup>ST</sup>	Exception Handling ,Exceptions Overview
	2 <sup>ND</sup>	Exception Keywords ,Catching Exceptions
	3 <sup>RD</sup>	Using Finally Statement , Exception Methods Declaring Exceptions
	4 <sup>TH</sup>	Defining and throwing exceptions , Errors and Runtime Exceptions

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Faculty

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DISCIPLINE:CSE	SEMESTER:3RD	NAME OF THE TEACHING FACULTY:MRS ITUSHREE RANI RATHA
SUBJECT: Environmental Studies	NO.OF DAYS/PERWEEK CLASS ALLOTTED: 4	SEMESTER FROM DATE: 15/09/2022 TO DATE: 22/12/2022 NO.OF WEEKS:15
WEEK	CLASS DAY	THEORY/PRACTICAL TOPICS
1 <sup>st</sup>	1 <sup>st</sup>	The Multidisciplinary nature of environmental studies:
	2 <sup>nd</sup>	Definition,
	3 <sup>rd</sup>	scope and importance,
	4 <sup>th</sup>	Need for public awareness,
2 <sup>nd</sup>	1 <sup>st</sup>	Natural Resources: Renewable and non- renewable resources: a) Natural resources and associated problems.
	2 <sup>nd</sup>	Forest resources: Use and over- exploitation, deforestation, case studies, Timber extraction mining,damsandtheireffectsonforestsandtri bal people.
	3 <sup>rd</sup>	Forest resources: Use and over- exploitation, deforestation, case studies, Timber extraction mining,damsandtheireffectsonforestsandtri bal people.
	4 <sup>th</sup>	Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems.
3 <sup>rd</sup>	1 <sup>st</sup>	Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems,
	2 <sup>nd</sup>	Mineral Resources: Use and exploitation, environmental effects of extracting and using mineralresources.
	3 <sup>rd</sup>	Mineral Resources: Use and exploitation, environmental effects of extracting and using mineralresources.
	4 <sup>th</sup>	Food Resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizers- pesticides problems, water logging, salinity,.
4 <sup>th</sup>	1 <sup>st</sup>	Energy Resources: Growing energy need, renewable and non-renewable energy sources, use of alternate energy sources, case studies.
	2 <sup>nd</sup>	Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion, anddesertification. b) Role of individual in conservation of natural resources. c) Equitable use of resources for sustainable life styles.



	1 <sup>st</sup>	Systems: Concept of an eco-system.
	4 <sup>th</sup>	Structure and function of an eco-system.
	1 <sup>st</sup>	Producers, consumers, decomposers. 3.4. Energy flow in the eco systems.
	2 <sup>nd</sup>	Ecological succession.
	3 <sup>rd</sup>	Food chains, food webs and ecological pyramids.
	4 <sup>th</sup>	Introduction, types, characteristic features, structure and function of the following eco system:
6 <sup>th</sup>	1 <sup>st</sup>	Forest ecosystem:
	2 <sup>nd</sup>	Aquatic eco systems (ponds, streams, lakes, rivers, oceans, estuaries).
	3 <sup>rd</sup>	Biodiversity and it's Conservation: 4.1. Introduction-Definition: genetics, species and ecosystem diversity.
	4 <sup>th</sup>	Biogeographically classification of India.
7 <sup>th</sup>	1 <sup>st</sup>	Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and optin values.
	2 <sup>nd</sup>	Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and optin values.
	3 <sup>rd</sup>	Biodiversity at global, national and local level.
	4 <sup>th</sup>	Biodiversity at global, national and local level.
8 <sup>th</sup>	1 <sup>st</sup>	Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts.
	2 <sup>nd</sup>	Environmental Pollution: 5.1. Definition Causes, effects and control measures of:
	3 <sup>rd</sup>	a) Air pollution. b) Water pollution.
	4 <sup>th</sup>	c) Soil pollution d) Marine pollution
	1 <sup>st</sup>	e) Noise pollution.
	2 <sup>nd</sup>	f) Thermal pollution
	3 <sup>rd</sup>	g) Nuclear hazards.
	4 <sup>th</sup>	Solid waste Management: Causes, effectsand control measures of urban and industrial wastes.
10 <sup>th</sup>	1 <sup>st</sup>	Solid waste Management: Causes, effectsand control measures of urban and industrial wastes.
	2 <sup>nd</sup>	Role of an individual in prevention of pollution.
	3 <sup>rd</sup>	Role of an individual in prevention of pollution.
	4 <sup>th</sup>	Disaster management: Floods, earth quake, cyclone and landslides.
11 <sup>th</sup>	1 <sup>st</sup>	Disaster management: Floods, earth quake, cyclone and landslides.
	2 <sup>nd</sup>	Social issues and the Environment:

	3 <sup>RD</sup>	Form unsustainable to sustainable development.
	4 <sup>TH</sup>	Urban problems related to energy.
12 <sup>TH</sup>	1 <sup>ST</sup>	Water conservation, rain water harvesting, water shed management.
	2 <sup>ND</sup>	Resettlement and rehabilitation of people; its problems and concern.
	3 <sup>RD</sup>	Environmental ethics: issue and possible solutions.
	4 <sup>TH</sup>	Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies.
13 <sup>TH</sup>	1 <sup>ST</sup>	Air (prevention and control of pollution) Act.
	2 <sup>ND</sup>	Water (prevention and control of pollution) Act.
	3 <sup>RD</sup>	Public awareness.
	4 <sup>TH</sup>	Human population and the environment:
14 <sup>TH</sup>	1 <sup>ST</sup>	Population growth and variation among nations.
	2 <sup>ND</sup>	Population explosion- family welfare program.
	3 <sup>RD</sup>	Environment and human health.
	4 <sup>TH</sup>	Human rights.
15 <sup>TH</sup>	1 <sup>ST</sup>	Value education
	2 <sup>ND</sup>	Role of information technology in environment and human health.
	3 <sup>RD</sup>	Role of information technology in environment and human health.
	4 <sup>TH</sup>	Role of information technology in environment and human health.

Signature of Faculty

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