

## LESSON PLAN -Even Semester (2023-24)

Name of College : M.N.S. Govt College, Bhiwani.

Name of the Associate Professor: Jagbir Singh

Class : B.Sc. 2<sup>ND</sup> Sem. (Computer Science)

Paper : Problem Solving using Computer (20UCS201)

Sr. No.	Weeks	Topics to be Covered
1	16 Feb to 17 Feb	Introduction to computers, classification, types, generations, Block diagram
2	19 Feb to 24 Feb	Problem solving, Debugging. Errors, Documentation
3	26 Feb to 02 March	Flowcharting, Decision Table, Programming methodology
4	4 March to 9 March	Programming using C, Data types, Operators
5	11 March to 16 March	I/O statements, Control statements
6	18 March to 22 March	Functions types, Parameter passing
7	23 March to 31 March 24	Holi holidays
8	1 April to 6 April	Array and Strings
9	8 April to 13 April	Structure and Unions, Pointer and Structures
10	15 April to 20 April	Pointer and Arrays
11	22 April to 27 April	Pointer to function
12	29 April to 4 May	Revision

## Lesson Plan

Teacher ...Parisha.....

Class ...B.Sc Computer Science 4<sup>th</sup> Sem.....

Subject .....Skill Enhancement(HTML)

Session .....2023-24.....

Week(Feb.)	Topics
1(15-17)	The Basics, The Head, The Body, Colors, Attributes.
2(19-24)	Basic Formatting Tags
3(26-29)	Attributes-align ,color ,bgcolor ,font face ,border ,size.

Week(March)	Topics
1(1-2)	Lists-ordered, unordered and definition, Table Tag
2(4-9)	Navigation Links using anchor tag-Internal ,external ,mail and image link
3(11-16)	Relative and Absolute Link, Link Attributes
4(18-23)	Images and Tables
5(25-30)	Holiday of Holi

Week(April)	Topics
1(1-6)	Forms-Basic Input and Attributes, Other kind of Inputs
2(8-13)	Styling Forms with CSS
3(15-20)	Html Forms Controls and hidden controls.
4(22-27)	REVISION
5(29-30)	TEST

## LESSON PLAN – Even Semester (2023-24)

Name of College : M.N.S. Govt College, Bhiwani.

Name of the Assistant Professor: Parvesh Kumari

Class : B.Sc. Computer Science 6<sup>th</sup> Semester

Paper : 20UCS604, Object Oriented Programming using C++-

Sr.no	Weeks	Topics to be Covered
1	6 Feb to 10 Feb 2024	Introduction to object oriented programming: Procedural vs. Object oriented programming, Characteristics of OOP: Objects, classes, Encapsulation, Data Abstraction, Inheritance, Polymorphism, Dynamic Binding, and Message Passing
2	12 Feb to 17 Feb	Structure of C++ program: Data-types, Variables, Static Variables, Operators in C++.
3	19 Feb to 24 Feb	Arrays, Strings, Structure, Functions, Recursion, Control Statements.
4	26 Feb to 02 March	Introduction to Class: Class Definition, Classes and Objects, Access Specifiers: Private, Public and Protected, Member functions of the class,
5	4 March to 9 March	Constructor and Destructor, Parameterized Constructor, Copy Constructors.
6	11 March to 16 March	. Inheritance: Reusability, Types of Inheritance: Single inheritance, Multiple, Multilevel, Hybrid Inheritance, Public, Private, and Protected Derivations,
7	18 March to 22 March	Constructor and destructor in derived Class, Object initialization and conversions, Nested classes.
8	25 March to 30 Mar. 24	Holi holidays, revision 1 <sup>st</sup> and 2 <sup>nd</sup> unit
9	1 April to 6 April	Polymorphism: Function Overloading, Static Class Members, Static Member Functions, Friend Functions, Operator Overloading: Unary and Binary Operator Overloading
10	8 April to 13 April	Abstract class, Virtual function, Pure virtual function, Overloading vs. Overriding. Memory management: new, delete, object Creation at

		Run Time, This Pointer
11	15 April to 20 April	Exception handling: Throwing, Catching, Re-throwing an exception, specifying exceptions, processing unexpected exceptions, Exceptions when handling exceptions.
12	22 April to 27 April	Templates: Introduction, Class templates and Function templates, Overloading of template function, namespaces
13	29 April to 4 May	Introduction to STL: Standard Template Library: benefits of STL, containers, adapters, iterator, vector, list. Working with files: C++ streams, C++ stream classes, creating, opening, dosing and deleting files, file pointers and their manipulators, Error handling during file operations.
14	6 May to 11 May	Revision and test

LESSON PLAN – Even Semester (2023-24)

Name of College : M.N.S. Govt College, Bhiwani.

Name of the Assistant Professor: Parvesh Kumari

Class : B.Sc. Computer Science 6th Semester

Paper : 20UCS607, Management Information,

20USECCS601, Software Testing Concepts

Sr.no	Weeks	Topics to be Covered
1	6 Feb to 10 Feb 2024	Software Testing: Basics of software testing, Strategic Approach to Software Testing, Testing objectives, Test Strategies for Conventional Software,
2	12 Feb to 17 Feb	Principles of testing, Testing and debugging, Test metrics and measurements, STLC, Verification, Validation, Software Quality and Reliability, V Shaped Software Lifecycle Model.
3	19 Feb to 24 Feb	Functional and non-functional Testing; system testing, recovery testing, security testing, stress testing, performance testing, usability testing, White box testing, static testing, static analysis tools.
4	26 Feb to 02 March	Structural testing: Unit/Code functional testing, Code coverage testing, Code complexity testing, Black Box testing, Requirements based testing, Boundary value analysis,
5	4 March to 9 March	Equivalence partitioning, state/graph based testing, Scenario Testing, Alpha, Beta and Acceptance Testing: Acceptance criteria; test cases selection and execution, Decision Table Based Testing.
6	11 March to 16 March	Basis Path Testing: Program Graph, DD Path graph, Cyclomatic Complexity, Graph Matrices, Control Flow Testing: Statement Coverage, Branch Coverage, Condition Coverage, Path Coverage.
7	18 March to 22 March	Data and Information. MIS- need and concepts, factors influencing MIS and characteristics of MIS. Technology of MIS. Structure of MIS. Decision Making and role of MIS. Data communication
8	25 March to 30 Mar. 24	Holi holidays, revision
9	1 April to 6 April	Basic H/W required, Channel features and concept of Distributed Databases Decision Support System: Overview, components and classification, steps in constructing a DSS, role in business, group decision support system
10	8 April to 13 April	Information system for strategic advantage, strategic role for information system, breaking business barriers, business process reengineering, improving business qualities.
11	15 April to 20 April	Planning for MIS; System Development Methodologies; Conceptual and detailed designs of MIS.

12	22 April to 27 April	Information system analysis and design, information SDLC, hardware and software acquisition, system testing, documentation and its tools, conversion methods
13	29 April to 4 May	System implementation Strategies and process; System Evaluation and Maintenance. Applications cross—functional MI W S; ERP; CRM; SCM; Transaction Processing; Artificial Intelligence technologies in business: neural network, fuzzy logic, virtual reality; Executive information system.
14	6 May to 11 May	Revision and test

## Lesson Plan

Teacher .....Parisha.....

Class ...B.SC 4<sup>th</sup> Sem Computer Science.....

Subject ...Operating Systems(20UCS401)

Session .....2023-24.....

Week(Feb.)	Topics
First week (15-17)	System Software, Resource Abstraction
	OS Strategies
Second week(19-24)	Types of Operating System- Multiprogramming ,Batch ,Time sharing ,Single user and Multi user
Third week(26-29)	Process Control and Real time systems

Week(March)	Topics
First week (1-2)	Factors in operating system design, Basic OS functions, implementation considerations
Second week(4-9)	Process modes, System Services, process management
Third week(11-16)	Process Hierarchy, Thread Model Scheduling
Fourth week(18-23)	File System, Various allocation methods, disk scheduling and management and its associated algorithms.
24-31March24	Holiday of Holi(Assignments)

Week(April)	Topics
First Week(1-6)	Memory Management, paging, virtual memory
Second Week(8-13)	Shell Scripting, Shell variables, System calls, Pipes and Filters
Third Week(15-20)	Loops in Shell, Functions, Utility Programs
Fourth Week(22-27)	REVISION
Fifth Week(29-30)	TEST