

LESSON PLAN -Odd Semester (2023-24)

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

Name of the Associate Professor: Jagbir Singh

Class : B.Sc. 1st Sem. (Computer Science)

Paper : Digital Electronics (20UCS101)

Sr. No.	Weeks	Topics to be Covered
1	31 July to 05 Aug	Number systems: Binary, Decimal, Hexadecimal, Conversion between each
2	7 Aug to 12 Aug	Binary arithmetic: Addition, subtraction, 1's and 2's complement
3	14 Aug to 19 Aug	Codes: BCD, ASCII, Floating point representation
4	21 Aug to 26 Aug	Boolean Algebra, Boolean functions, Gates
5	28 Aug to 02 Sep	Venn diagrams, Realization of other gates using NAND and NOR
6	4 Sep to 09 Sep	DeMorgan's theorems, Min terms, SOP expression, POS expression
7	11 Sep to 16 Sep	K-Maps
8	18 Sep to 23 Sep	Flip Flops: SR, JK, D and T flip flops. Master Slave flip flop
9	25 Sep to 30 Sep	Full Adder and Half Adders, Full and Half Subtractors
10	3 Oct to 7 Oct	Decoders, Encoders, Multiplexer, De-multiplexer
11	9 Oct to 14 Oct	Counters
12	16 Oct to 21 Oct	Comparators-1bit and 2 bit
13	23 Oct to 28 Oct	Shift registers, keyboard encoder
14	30 Oct to 4 Nov	Revision

LESSON PLAN – odd Semester (2023-24)

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

Name of the Assistant Professor: Parvesh Kumari

Class : B.Sc. Computer Science 5th Semester

Paper : 20UCS501, Database Management Systems,
Computer Network

Sr.no	Weeks	Topics to be Covered
1	25 July to 28 July 2023	Database system architecture: Data Abstraction, Data Independence, Data Definition Language (DDL), Data Manipulation Language (DML).
2	31 July to 05 Aug	Data models: Entity-relationship model, network model, relational and object oriented data models, integrity constraints, data manipulation operations.
3	7 Aug to 12 Aug	Relational query languages: Relational algebra, Tuple and domain relational calculus, SQL3, DDL and DML constructs, Open source and Commercial DBMS - MYSQL, ORACLE, DB2, SQL server.
4	14 Aug to 19 Aug	Relational database design: Domain and data dependency, Armstrong's axioms, Normal forms, Dependency preservation, Lossless design.
5	21 Aug to 26 Aug	Transaction processing: Concurrency control, ACID property, Serializability of scheduling, Locking and timestamp based schedulers, Multi-version and optimistic Concurrency Control schemes, Database recovery.
6	28 Aug to 02 Sep	Database Security: Authentication, Authorization and access control, DAC, MAC and RBAC models, Intrusion detection, SQL injection.
7	4 Sep to 09 Sep	Advanced topics: Object oriented and object relational databases, Logical databases, Web databases, Distributed databases, Data warehousing and data mining.
8	11 Sep to 16 Sep	Basic concepts: Components of data communication, standards and organizations,

		Network Classification, Network Topologies; network protocol; layered network architecture; overview of OSI reference model; overview of TCP/IP protocol suite.
9	18 Sep to 23 Sep	Physical Layer: Cabling, Network Interface Card, Transmission Media Devices- Repeater, flub, Bridge, Switch, Router, Gateway; Data Link Layer: Framing techniques; Error Control; Flow Control Protocols; Shared media protocols - CSMA/CD and CSMA/CA.
10	25 Sep to 30 Sep	Basic concepts: Components of data communication, standards and organizations, Network Classification, Network Topologies; network protocol.
11	3 Oct to 7 Oct	layered network architecture; overview of OSI reference model; overview of TCP/IP protocol suite.
12	9 Oct to 14 Oct	Application Layer: Application layer protocols and services — Domain name system, HTTP, W WW, telnet, FTP, SMTP
13	16 Oct to 21 Oct	Network Security: Cryptography Common Terms, Firewalls, Virtual Private Networks
14	23 Oct to 28 Oct	Revision and test
15	30 Oct to 4 Nov	Revision and test

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

Name of the Assistant Professor: Parvesh Kumari

Class : B.Sc. Computer Science 5th Semester

Paper : 20USECCS502 , Programming in Visual Basic(Skill Enhancement)

Sr.no	Weeks	Topics to be Covered
1	25 July to 28 July 2023	GUI Environment: Introduction to graphical user interface (GUI), programming language (procedural, object oriented, event driven)
2	31 July to 05 Aug	the GUI environment, compiling, debugging, and running the programs.
3	7 Aug to 12 Aug	Data types, constants, named & intrinsic, declaring variables, scope of variables, val function, arithmetic operations, formatting data
4	14 Aug to 19 Aug	Controls: Introduction to controls textboxes, frames, check boxes, option buttons, images, setting borders and styles, the shape control, the line control
5	21 Aug to 26 Aug	working with multiple controls and their properties, designing the user interface, keyboard access, tab controls, default & cancel property, coding for controls.
6	28 Aug to 02 Sep	Decision Making: If statement, comparing strings, compound conditions (and, or, not), nested if statements.
7	4 Sep to 09 Sep	case structure, using if statements with option buttons & check boxes, displaying message in message box, testing whether input is valid or not.
8	11 Sep to 16 Sep	Forms Handling: Multiple forms creating, adding, removing forms in project, hide, show method, load, unload statement

9	18 Sep to 23 Sep	me keyword, referring to objects on a different form. Database connectivity with the form.
10	25 Sep to 30 Sep	Iteration handling: Do/loops, for/next loops, using msgbox function. Using string function.
11	3 Oct to 7 Oct	Revision and test
12	9 Oct to 14 Oct	Revision and test
13	16 Oct to 21 Oct	Revision and test
14	23 Oct to 28 Oct	Revision and test
15	30 Oct to 4 Nov	Revision and test

LESSON PLAN –19 August to December(2023-24)

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

Name of the Assistant Professor: Parisha

Class : B.Sc. 2 rd. Year (Computer Science)3rd sem

Paper : Data Structure and Algorithm (20UCS301)

Sr.no	Weeks	Topics to be Covered
1	19Aug to 26 Aug	Introduction to Data Structure, Arrays Linear and Binary Search
2	28 Aug to 2sept	Elementary Sorting Techniques- Bubble Sort, Insertion Sort, Merge Sort
3	4 Sept to 9 Sept	Advanced Sorting Techniques- Heap Sort, Quick Sort
4	11Sept to 16 Sept	Sorting in Linear time- Bracket Sort, Radix Sort and Count Sort, Recursion
5	18 Sept to 23 Sept	Implementing Stack using array and linked list, Prefix, Infix and Postfix expressions
6	25 Sept to 30 Sept	Utility and Conversion of these expressions from one to another; Queues: Array and Linked representation of Queue
7	02 Oct to 07 Oct	De-queue, Priority Queues, Linked Lists: Singly, doubly an Circular Lists
8	9 Oct to 14 Oct	Representation of Stack and Queue as Linked Lists. Revision
9	16Oct to 21 Oct	Assignment and Complexity Analysis.
10	23Oct to 28 Oct	Trees: Introduction to Trees as a data structure; Binary Trees, , Greedy Algorithms., Assignment
11	30 Oct to 4Nov	Basic Design and Analysis Techniques of Algorithms, Correctness of Algorithm and Test
12	6Nov to 11 Nov	Iterative Techniques, Divide and Conquer, Dynamic Programming
13	21 Nov to 25 Nov	Binary Trees, (Creation, and Traversals of Binary Search Trees).
14	27 Nov to 2 Dec	Revision of unit 1 and unit 2
15	4 Dec to 9 Dec	Revision &Assignment

LESSON PLAN –19 August to December(2023-24)

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

Name of the Assistant Professor: Parisha

Class : M.A English 1st Sem

Paper : IT Skills (23-ITSC-N-101)

Sr.no	Weeks	Topics to be Covered
1	29 Aug to 2 Sept	Introduction to PC, objectives, CPU
2	4 Sept to 9 Sept	Memory and Storage devices, Memory Hierarchy
3	11Sept to 16 Sept	Input/Output Devices
4	18 Sept to 23 Sept	Software and types of software
5	25 Sept to 30 Sept	Operating System and types ,Computer Virus
6	02 Oct to 07 Oct	Data, Information ,knowledge and Internet
7	9 Oct to 14 Oct	Concepts of Web Browsers, Search Engine and Data Communication
8	16Oct to 21 Oct	Assignment and Test
9	23Oct to 28 Oct	Types of Network, LAN Topologies and HTML basics
10	30 Oct to 4Nov	HTML and Multimedia
11	6Nov to 11 Nov	MS Powerpoint -Creating A Presentation, Saving and Printing Presentations ,Views, Insert Notes ,Animation and Show
12	21 Nov to 25 Nov	Microsoft Excel-Introduction ,Components of MS Excel Window ,Entering Data in Worksheet ,Editing and Formatting , Print preview and Sorting and Filtering
13	27 Nov to 2 Dec	Microsoft Word- Basics ,Editing ,Saving, Table, Mail Merge, Headers and Footers Macro ,Graphs and Pictures.
14	4 Dec to 9 Dec	Revision &Assignment