

Govt. College Barwala, Hisar
Lesson Plan, BSc-III CSc.
w.e.f.14-07-2025, to 21-11-2025
(21 Weeks (Diwali break 19-10-2025 to 26-10-2025))
Subject:-Data Analytics
Teacher Name:-Minakshi Sharma
online studymaterial:-cslectminakshi.blogspot.com

Weeks	Topics
Week1	Data Analytics: Introduction to Data Analytics, Business Intelligence (BI) for better decisions.
Week2	Decision types, BI tools, BI skills, BI applications.
Week3	Data warehousing: Introduction to Data warehousing (OW), Design considerations for DW.
Week4	DW development approaches, OW architecture. Data Mining: Introduction to Data mining, Data cleaning and preparation.
Week5	outputs of Data mining. evaluation of data mining results, Data Mining Techniques
Week6	Decision Trees: Introduction to Decision tree, Decision tree problem. Decision tree construction. Lessons from constructing trees, Decision tree algorithms
Week7	Regression: Introduction, Correlations and Relationships, Visual Look at Relationships,
Week8	Logistic regression. Advantages and disadvantages of regression models.
Week9	Artificial Neural Networks: Introduction , business applications of ANN, Design principles of an ANN,
Week10	Representation of a neural network, Architecting a neural network. Developing an ANN, Advantages and disadvantages of using ANN.
Week11	Cluster analysis: Introduction, Applications of cluster analysis, Definition of a cluster, Representing clusters.
Week12	Clustering techniques, K-means algorithm for clustering. Selecting the number of clusters.
Week13	Association rule Mining: Introduction, Business applications of association rules,
Week14	Representing association rules, Algorithms for association rule
Week15	Apriori algorithm. Creating association rules. Web Mining:
Week16	Introduction, Web content mining, Web structure mining, Web usage mining. Web mining algorithms.
Week 17	Naive-base analysis: Introduction, Probability, Na'ive base model,
Week 18	Text classification example, Support vector machines: Introduction, SVM model, The kernel method,
Week 19	Big Introduction, Defining Big Data, Big Data Landscape, Big data implications of big data. Technology
Week 20	implications of big data, Big data technologies, Management of big data.
Week 21	Revision

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Lesson Plan, BSc-III CSc.
w.e.f.14-07-2025, to 21-11-2025
(21 Weeks (Diwali break 19-10-2025 to 26-10-2025))Subject:-C++
Teacher Name:-Minakshi Sharma
online studymaterial:-cslectminakshi.blogspot.com

Weeks	Topic
Week1	ProcedureOrientedProgramming, Object-OrientedprogrammingParadigm, differencebetweenProcedure Oriented Programming and Object-Oriented programming,
Week2	Basic concepts of Object-Oriented programming, Benefitsof OOP,
Week3	Object Oriented Languages, and application of OOP
Week4	Structure of a C++, Program Insertion operator,Extraction operator,
Week5	Hierarchy of Console Stream Classes, functions
Week6	Unformatted and Formatted I/O Operations,
Week7	Manipulators, Inline function
Week8	C structure revisited, specifying a Class. Creating Objects,
Week9	Defining member function, Memoryallocation forobjects,
Week10	Scope resolution operator and its significance,
Week11	Static Data Members, Static member functions,
Week12	Friend function, Friend Class
Week13	Dynamic Memory Management using new and delete Operator
Week14	Constructor, type of constructors, Dynamic initialization of objects,
Week15	Constructoroverloading, Constructorwithdefaultarguments, Destructors,
Week16	function overloading, Operator Overloading,
Week 17	Overloading unary and binary operators
Week 18	Inheritance, Single Inheritance. Making a private member inheritable, Multilevel Inheritance,
Week 19	Multiple Inheritance, Hierarchical Inheritance,Hybrid Inheritance,
Week 20	Virtual BaseClass.AbstractClasses,Constructors in derived classes.
Week 21	Revision

<p align="center"> Govt. College Barwala,Hisar Lesson Plan, BSc-I NM. w.e.f.14-07-2025, to 21-11-2025 (21 Weeks (Diwali break 19-10-2025 to 26-10-2025)) Subject:-MIC, C24MIC102T: Computer Programming Fundamentals Teacher Name:-Minakshi Sharma online studymaterial:-cslectminakshi.blogspot.com </p>	
Weeks	Topic
Week1	Introduction to Programming
Week2	Overview of programming concepts,
Week3	Computer Languages: Machine Language, Assembly Language,
Week4	High Level Language; Source code, Object Code
Week5	Compiler, Interpreter,
Week6	Algorithm
Week7	Flow Chart and pseudocode,
Week8	Basics of problem-solving in programming,Debugging,
Week9	Error: Types of Error
Week10	Programming fundamentals: Data types: Integers, floating-point numbers,
Week11	strings, and Booleans, Variables and constants,
Week12	Input/output operations,
Week13	Operators and expressions,
Week14	Conditional statements: if
Week15	Conditional statements: else if, else,
Week16	Loops: while loops,
Week 17	for loops;
Week 18	Loops Revised
Week 19	Control structures: break,
Week 20	Control structures: continue;
Week 21	Revision

Govt. College Barwala,Hisar
Lesson Plan, BSc-II NM.
w.e.f.14-07-2025, to 21-11-2025
(21 Weeks (Diwali break 19-10-2025 to 26-10-2025))
Subject:-MIC, IT & E-commerce
Teacher Name:-Minakshi Sharma
online studymaterial:-cslectminakshi.blogspot.com

Weeks	Topic
Week1	Introduction to internet, Networking, Network Topologies, Network Devices: Nodes, and Hosts;
Week2	Uses and Types of Computer Networks ,TCP/IP, IP Address,
Week3	Web Browser, Web Server, URL, Domain Names Search Engines
Week4	Switches, Repeater, Bridges, Routers, Gateways
Week5	Introduction to Ecommerce, Ecommerce Models B2B B2C,C2C,C2B,
Week6	Applications of Ecommerce, Service Industry ,Retail sector ,
Week7	Financial services, Travel & Tourism, Future of E-commerce, Online Shopping ,Web Portals,
Week8	Mobile Commerce ,Internet services through mobile,
Week9	Mobile Banking , WAP & WML Mobile information devices, POS
Week10	Online Payment Mechanism, Electronics Payment System and Legal Issues
Week11	Digital Currency E-Cash, E-cheque, EFT Advantages and Risk Digital Token
Week12	based E-payment system Smart cards,
Week13	payments gateways, risk management options for E-payment System
Week14	Cryptography AUTHENTICATYION,
Week15	Data encryption and decryption
Week16	public key ,private key ,digital signature
Week 17	E-cheque certification ,digital certification
Week 18	Threats in E-commerce, fraud prevention,
Week 19	E-commerce data protection PCI compliance and data privacy laws, security of client and service providers,
Week 20	Security issues over the web Cyber law IT Act 2000
Week 21	Revision

Govt. College Barwala,Hisar
Lesson Plan:- BA,Bcom-II.
w.e.f.14-07-2025, to 21-11-2025
(21 Weeks (Diwali break 19-10-2025 to 26-10-2025))
Subject:-MDC, C Programming
Teacher Name:-Minakshi Sharma
online studymaterial:-cslectminakshi.blogspot.com

Weeks	Topic
Week1	Introduction and Overview of C identifiers and keywords
Week2	Data types, Constants and its types, Assignment statement, formatted I/O function
Week3	Operators & Expression: Arithmetic, relational, logical, bitwise, unary, assignment
Week4	conditional operators, special operators. Arithmetic expressions, evaluation of arithmetic expression, operator hierarchy & associativity
Week5	Introduction to Statement and its types Decision making & branching:
Week6	Decision making with IF statementIF-else statement, Nested IF statement, Else IF,
Week7	switch and break statement
Week8	Introduction to Decision making & looping statement
Week9	For, while loop,
Week10	Do-while loop., jump statement
Week11	Arrays: Definition, types. Application of array,
Week12	Initialization in array, processing an array. Arrays with functions
Week13	Declaration of string variables, String handling functions
Week14	String length copy compare,substring,concatenate
Week15	Functions: Definition, benefits, prototype, passing parameters
Week16	Recursion
Week 17	Structure, definition, declaration
Week 18	Accessing member of structure
Week 19	Union.
Week 20	Difference between Structure & Union.
Week 21	Revision

Govt. College Barwala, Hisar
Lesson Plan, PGDCA.
w.e.f.14-07-2025, to 21-11-2025
(21 Weeks (Diwali break 19-10-2025 to 26-10-2025))
Subject:- IT
Teacher Name:-Minakshi Sharma
online studymaterial:-cslectminakshi.blogspot.com

Weeks	Topic
Week1	Introduction to Computers: Characteristics and Limitations of Computers, Evolutions of Computers,
Week2	Classification of Computers, Computer Languages,
Week3	Types of software, Structured Programming
Week4	Concepts. Basic Computer Organization: Units of a computer, CPU, ALU, Memory Hierarchy, Registers,
Week5	I/O devices, Mother Board., Introduction to MS-Word, Creating & Editing Text:
Week6	Paragraph Formatting, Page Formatting, Template, Page, Views,
Week7	Table; Advanced Features: Bookmark, Mail Merge, Macros.
Week8	Spread Sheets: Introduction to MS-Excel, Creating & Editing Worksheet,
Week9	Formatting data, Formulas and Functions, Creating Charts, Pivot Tables.
Week10	Power Point Presentations: Creating, Manipulating & Enhancing Slides, Organizational Charts,
Week11	Animations & Sounds, Inserting Animated Pictures
Week12	Internet Basics: History of Internet, Web Browsers, Web Servers,
Week13	Hypertext Transfer Protocol, Internet Protocols Addressing, Internet Connection Types
Week14	How Internet Works, ISPs, Search Engines, Emails and Its Working
Week15	, Internet Security, Uses of Internet,
Week16	Computer Networks and their advantages,
Week 17	Types of Computer Network, Network Topologies
Week 18	Basics of Transmission Media;
Week 19	Cloud Computing Basics: Overview, Applications,
Week 20	Intranets and the Cloud; Benefits, Limitations and Security Concerns.
Week 21	Revision

<p style="text-align: center;"> Govt. College Barwala, Hisar Lesson Plan:- BBA-I. w.e.f.18-08-2025, to 21-11-2025 (21 Weeks (Diwali break 19-10-2025 to 26-10-2025)) Subject:-MDC, Computer Application in Management Teacher Name:-Minakshi Sharma online studymaterial:-cslectminakshi.blogspot.com </p>	
Weeks	Topic
Week1	Introduction to Computer, Characteristics of Computers;
Week2	Evolution of Computers; Basic Components of a Computer, Their Functions, and Inter- relation;
Week3	Computer Languages;
Week4	Types of Computer Systems: Personal-Micro, Mini, Mainframe, and Super Computer.
Week5	Data Storage: Primary Storage,
Week6	Secondary Storage;
Week7	Input Devices
Week8	Input Devices
Week9	Output Devices.
Week10	Output Devices.
Week11	operating System: Introduction to Operating System;
Week12	Types of Operating, Systems;
Week13	Word Processor: Meaning and Applications., Communication:
Week14	Concept of Data Communication and Network Topology,
Week15	Basics of MS Office: MS Word
Week16	MS Excel
Week 17	MS PowerPoint, Usage and Applications

Govt. College Barwala, Hisar
Lesson Plan:- BA,BBA,BCOM-I.
w.e.f.18-08-2025, to 21-11-2025
(21 Weeks (Diwali break 19-10-2025 to 26-10-2025))
Subject:-MDC, Information Technology
Teacher Name:-Minakshi Sharma
online studymaterial:-cslectminakshi.blogspot.com

Weeks	Topic
Week1	Introduction to Computer, Characteristics of Computers;
Week2	Classification of Computers, Block Diagram of Computer, Their Functions, and Inter-relation;
Week3	Hardware and Software, Types of software, Computer Languages.
Week4	
Week5	Data and information, Types of data & information, Data processing using Computer.
Week6	Units of a Computer, CPU, ALU, Mother Board.
Week7	Types of Memory and Memory Hierarchy, Registers,
Week8	Input Devices
Week9	Output Devices.
Week10	Processing numerical data using Spreadsheets,
Week11	Processing and displaying textual data using word processor.
Week12	Societal impact of IT, social use of WWW,
Week13	privacy security and integrity of Information,
Week14	Internet, Web Browsers,
Week15	Internet Connection Types, How Internet Works, ISPs, Search Engines,
Week16	Emails and Its Working, Internet Security, Uses of Internet,
Week 17	Introduction to Cloud and its Applications.

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Lesson Plan, BSc-III CSc.
w.e.f.14-07-2025, to 21-11-2025
(21 Weeks (Diwali break 19-10-2025 to 26-10-2025))Subject:-Cloud Computing
Teacher Name:-Minakshi Sharma
online studymaterial:-cslectminakshi.blogspot.com

Weeks	Topic
Week1	Introduction to client,Peer to Peer, distributed Computing
Week2	,collaborative & Cloud computing advantages and disadvantages
Week3	Functioning of cloud
Week4	Classification of cloud
Week5	SAAS,Pass,laas
Week6	characteristics
Week7	Cloud Architecture
Week8	Types of cloud
Week9	comaprison
Week10	Migrating to cloud
Week11	Seven step of migration
Week12	Business opportunities in cloud
Week13	Manage devices in cloud
Week14	Cloud as a type of distributed architecture
Week15	Application of cloud computing for email
Week16	Case study
Week 17	Case study