

LESSON PLAN**Computer Science (2025-26)****Class :- BCA-II****Teacher :- Mrs. Sonia****Subject :-Database Management System (24BCA403DS03)(3:1)****Semester:- 3rd**

1ST TEACHING TERM (15 JULY, 2025– 13 OCT, 2025)	
WEEK 1 15JULY-19JULY	Introduction Scheme , (Theory: 75 (50+25) , Practical: 25 (20+5))
WEEK 2 21 JULY-26 JULY	Bachelor Program in Computer Applications , NEP-2020 , advantages ,skills
WEEK 3 28 JULY – 31 JULY	Syllabus ,unit discussion,
WEEK 4 1AUG- 2 AUG	Course Objectives: The objective of this course is to teach the student concepts related to database, database design techniques, transaction management, crash recovery and backup.
WEEK 5 4 AUG- 9 AUG	Course Outcomes: Learn about basics of database and database management system,Understand about data models and file organization. , Indepth understanding of relational data models, databases and normalization process.,Learn about transaction processing and concurrency control techniques, Understanding about relevance of recovery and backups
WEEK 6 11 AUG- 16 AUG	Database Management System: Introduction, Database System Applications, History of Database Systems, Database System Vs. File Processing System, View of Data, Data Abstraction,
WEEK 7 18 AUG – 23 AUG	Instances and Schemas. DBMS Environment, Database languages, Database Models.
WEEK 8 25 AUG -30 AUG	Database design and ER Model: Physical, Conceptual and Logical Database design, Entity-Relationship Model: Entities, Relationships,
WEEK 9 1SEPT -6 SEPT	Representation of entities, attributes, Representation of relationship set, Generalization, Aggregation, Conceptual design with ER Model
WEEK 10 8 SEPT- 13 SEPT	Relational Model: Introduction to the Relational Model, Attributes, Domains, Tuples, Relations and their schemes, relation representation, Keys, relationship,
WEEK 11 15 SEPT – 20 SEPT	relational operations, , Integrity Constraint Over relations, Enforcing Integrity constraints, Querying relational data, View: Introduction to Views, Destroying / altering Views.
WEEK 12 22 SEPT – 27 SEPT	Relational Algebra and Calculus: Relational Algebra & its operations, Relational calculus & its types, Power of Algebra and calculus. Lab Problem(s): <i>Creation and Querying relational data with SQL</i>
WEEK 13 29 SEPT – 30 SEPT	Normalization: Schema Refinement, Problems caused by redundancy, Decomposition & its properties;
WEEK 14 1 OCT- 4 OCT	Normalization:First, Second, Third Normal forms, BCNF, Multivalued Dependencies, Join Dependencies.
WEEK 15 6 OCT- 13 OCT	Transaction Management & Concurrency Control: ACID properties, Transactions and Schedules, Concurrent execution of transaction, Serializability and Recoverability, Lock based Concurrency control, Lock Management, Lock Conversion, Dealing with deadlocks, Concurrency without Locking.
DIWALI VACATIONS (14 OCT, 2025 – 22 OCT, 2025)	
2ND TEACHING TERM (23 OCT, 2025 – 18 NOV, 2025)	
WEEK 16 23 OCT -25 OCT	Crash Recovery and Backup: Failure classifications, storage structure, Recovery & Atomicity, Log base recovery, Recovery with concurrent transactions,
WEEK 17 27 OCT – 31 OCT	Failure with loss of nonvolatile storage, Database backup & recovery from catastrophic failure, Remote Backup System.
WEEK 18 3 NOV – 8 NOV	Storage and File Organization : Overview of physical storage media, Storage access; File organization, Operations on Files, Serial Files, Sequential Files , Index-Sequential Files, Direct Files.
WEEK 19 10 NOV – 15 NOV	Queries, Tests and Assignments
WEEK 20 17 NOV- 18 NOV	Revision
EXAMINATIONS OF ODD SEM(19 NOV, 2025 onwards)	

LESSON PLAN
Computer Science (2025-26)

Class :- BCA -III

Teacher :- Mrs Sonia

Subject :- Practical

Semester :- 5th

1ST TEACHING TERM (15 JULY, 2025– 13 OCT, 2025)	
WEEK 1 15JULY-19JULY	Introduction Scheme ,
WEEK 2 21 JULY-26 JULY	Bachelor Program in Computer Applications , NEP-2020 , advantages ,skills
WEEK 3 28 JULY – 31 JULY	Syllabus ,unit discussion,
WEEK 4 1AUG- 2 AUG	Course Objectives eventdriven programming languages , Visual & non-visual programming, Procedural, Object-oriented Course Outcomes ,
WEEK 5 4 AUG- 9 AUG	Introduction to VB: Visual & non-visual programming, Procedural, Object-oriented andeventdriven programming languages,
WEEK 6 11 AUG- 16 AUG	The VB environment: Menu bar, Toolbar, Projectexplorer, Toolbox, Properties window,
WEEK 7 18 AUG – 23 AUG	Form designer, Form layout, Immediate window.Visual Development and Event Driven programming.
WEEK 8 25 AUG -30 AUG	Basics of Programming: Variables: Declaring variables, Types of variables,
WEEK 9 1SEPT -6 SEPT	Converting variables types, User-defined data types, Forcing variable declaration, Scope & lifetime of variables. Constants: Named & intrinsic.
WEEK 10 8 SEPT- 13 SEPT	Operators: Arithmetic, Relational & Logical
WEEK 11 15 SEPT – 20 SEPT	operators. I/O in VB: Various controls for I/O in VB, Message box, Input Box, Print statement.
WEEK 12 22 SEPT – 27 SEPT	Programming with VB: Decisions and conditions: If statement, If-then-else, Select-case.
WEEK 13 29 SEPT – 30 SEPT	Looping statements: Do-loops, For-next, While-wend, Exit statement. Nested control structures. Arrays: Declaring and using arrays, one-dimensional and multi-dimensional arrays, Static & dynamic arrays, Arrays of array
WEEK 14 1 OCT- 4 OCT	. Collections: Adding, Removing, Counting,
WEEK 15 6 OCT- 13 OCT	Returning items in a collection, Processing a collection.
DIWALI VACATIONS (14 OCT, 2025 – 22 OCT, 2025)	
2ND TEACHING TERM (23 OCT, 2025 – 18 NOV, 2025)	
WEEK 16 23 OCT -25 OCT	Programming with VB: Procedures: General & event procedures, Subroutines, Functions,Calling procedures, Arguments- passing mechanisms, Optional arguments, Named arguments, Functions returning custom data types, Functions returning arrays.
WEEK 17 27 OCT – 31 OCT	Working with forms and menus : Adding multiple forms in VB, Hiding & showing forms,Load & unload statements, creating menu, submenu, popup menus, Activate & deactivate
WEEK 18 3 NOV – 8 NOV	events, Form-load event, menu designing in VB Simple programs in VB.
WEEK 19 10 NOV – 15 NOV	Queries, Tests and Assignments
WEEK 20	Revision
EXAMINATIONS OF ODD SEM(19 NOV, 2025 onwards	

LESSON PLAN
Computer Science (2025-26)

Class :- BCA-III

Teacher :- Mrs. Sonia

Subject :- MIS (BCA-301)

Semester :- 5th

1ST TEACHING TERM (15 JULY, 2025– 13 OCT, 2025)	
WEEK 1	Introduction Scheme for 4-Year Bachelor Program in Computer Applications , NEP-2020 , advantages ,skills
WEEK 2	Syllabus ,unit discussion
WEEK 3	Introduction to system and Basic System Concepts, Types of Systems, The Systems Approach, Information System: Definition & Characteristics, Types of information,
WEEK 4	Role of Information in Decision-Making, Sub-Systems of an Information system: EDP and MIS
WEEK 5	management levels, EDP/MIS/DSS.
WEEK 6	An overview of Management Information System: Definition & Characteristics, Components of MIS,
WEEK 7	Levels of Management, Simon's Model of decision-Making, Structured Vs Un-structured
WEEK 8	decisions, Formal vs. Informal systems.
WEEK 9	Developing Information Systems: Analysis & Design of Information Systems:
WEEK 10	Implementation & Evaluation, Pitfalls in MIS Development.
WEEK 11	Functional MIS
WEEK 12	A Study of Personnel, Financial and production MIS
WEEK 13	applications, Decision support systems support systems for planning,
WEEK 14	Introduction to ebusiness, systems,
WEEK 15	control and decision-making
DIWALI VACATIONS (14 OCT, 2025 – 22 OCT, 2025)	
2ND TEACHING TERM (23 OCT, 2025 – 18 NOV, 2025)	
WEEK 16	ecommerce – technologies,
WEEK 17	Frame Work for Understanding MIS: Information requirements
WEEK 18	support systems for planning
WEEK 19	Revision
WEEK 20	Revision
EXAMINATIONS OF ODD SEM(19 NOV, 2025 onwards)	

LESSON PLAN

Computer Science (2025-26)

Class :- BCA-III

Teacher :- Mr. Suresh Kumar

Subject :- Computer Graphics

Semester :-5th

1 ST TEACHING TERM (15 JULY, 2025– 13 OCT, 2025)	
WEEK 1 15JULY-19JULY	Introduction Scheme for 4-Year Bachelor Program in Computer Applications
WEEK 2 21 JULY-26 JULY	NEP-2020 , advantages ,skills
WEEK 3 28 JULY – 31 JULY	Syllabus ,unit discussion
WEEK 4 1AUG- 2 AUG	Graphics Primitives: Introduction to computer graphics, Basics of Graphics systems, Application areas of Computer Graphics, overview of graphics systems,
WEEK 5 4 AUG- 9 AUG	video-display devices, and raster-scan systems, random scan systems,
WEEK 6 11 AUG- 16 AUG	graphics monitors and workstations and input devices.
WEEK 7 18 AUG – 23 AUG	Output Primitives: Points and lines, line drawing algorithms, mid-point circle and ellipse
WEEK 8 25 AUG -30 AUG	algorithms. Filled area primitives: Scan line polygon fill algorithm, boundary fill and floodfill algorithms .
WEEK 9 1SEPT -6 SEPT	2-D Geometrical Transforms: Translation, scaling, rotation, reflection and shear transformations,
WEEK 10 8 SEPT- 13 SEPT	matrix representations and homogeneous coordinates, composite transforms, transformations between coordinate systems.
WEEK 11 15 SEPT – 20 SEPT	2-D Viewing: The viewing pipeline, viewing coordinate reference frame, window to viewport coordinate transformation, viewing functions
WEEK 12 22 SEPT – 27 SEPT	Cohen-Sutherland and Cyrus-beck line clipping algorithms, Sutherland –Hodgeman polygon clipping algorithm.
WEEK 13 29 SEPT – 30 SEPT	3-D Object Representation: Polygon surfaces, quadric surfaces, spline representation, Hermite curve, Bezier curve and B-Spline curves,
WEEK 14 1 OCT- 4 OCT	Bezier and B-Spline surfaces. Basic illumination models, polygon-rendering methods.
WEEK 15 6 OCT- 13 OCT	3-D Geometric Transformations: Translation, rotation, scaling, reflection and shear transformations, composite transformations.
DIWALI VACATIONS (14 OCT, 2025 – 22 OCT, 2025)	
2 ND TEACHING TERM (23 OCT, 2025 – 18 NOV, 2025)	
WEEK 16 23 OCT -25 OCT	3-D Viewing: Viewing pipeline, viewing coordinates, view volume and general projection
WEEK 17 27 OCT – 31 OCT	transforms
WEEK 18 3 NOV – 8 NOV	and clipping.
WEEK 19 10 NOV – 15 NOV	Queries, Tests and Assignments
WEEK 20 17 NOV- 18 NOV	Revision
EXAMINATIONS OF ODD SEM (19 NOV, 2025 onwards)	

LESSON PLAN
Computer Science (2025-26)

Class :- BCA-III

Teacher :- Mr. Suresh Kumar

Subject :- C++

Semester :- 3rd

1ST TEACHING TERM (15 JULY, 2025– 13 OCT, 2025)	
WEEK 1 15JULY-19JULY	Introduction Scheme for 4-Year Bachelor Program in Computer Applications
WEEK 2 21 JULY-26 JULY	Course Objectives: The objective of this course is to introduce students to the principles and concepts of object-
WEEK 3 28 JULY – 31 JULY	C++ Programming Basics
WEEK 4 1AUG- 2 AUG	oriented programming (OOP) using the C++ programming language. The course aims to develop students' skills in designing and implementing object-oriented solutions to real-world problems.
WEEK 5 4 AUG- 9 AUG	Introduction to OOP concepts: Procedural Vs. Object- Oriented Programming, Principles of OOP and their benefits. Object, classes, Inheritance, Abstraction,
WEEK 6 11 AUG- 16 AUG	Encapsulation Polymorphism, Dynamic Binding, Message passing. C++ Programming Basics: Syntax and structure of C++ programs, Data types
WEEK 7 18 AUG – 23 AUG	, variables, and constants in C++, Control structures: decision making and looping constructs
WEEK 8 25 AUG -30 AUG	Classes and objects: Defining and using classes and objects, Member functions and data members, Access specifiers: public, private, protected, Functions
WEEK 9 1SEPT -6 SEPT	and parameter passing in C++, Arrays and strings in C++, Pointer, Constructors and destructors.
WEEK 10 8 SEPT- 13 SEPT	Inheritance: Derived class and Base class, Types of inheritance: single, multiple, multilevel, hierarchical, Access control in inheritance.
WEEK 11 15 SEPT – 20 SEPT	Polymorphism: function overloading, Operator overloading, Virtual functions and dynamic polymorphism,
WEEK 12 22 SEPT – 27 SEPT	Polymorphism: Abstract classes and pure virtual functions, Encapsulation and data hiding, Friend functions, static function.
WEEK 13 29 SEPT – 30 SEPT	Memory Management: Dynamic Memory Allocation: new, delete, Object Creation at run time.
WEEK 14 1 OCT- 4 OCT	Exception handling: Throwing, Catching, Re-throwing an exception, specifying exception: processing unexpected exceptions;
WEEK 15 6 OCT- 13 OCT	try-catch blocks, Exception propagation, Templates: class and function templates, Standard Template Library: benefits of STL and generic programming
DIWALI VACATIONS (14 OCT, 2025 – 22 OCT, 2025)	
2ND TEACHING TERM (23 OCT, 2025 – 18 NOV, 2025)	
WEEK 16 23 OCT -25 OCT	Working with Files: Stream Classes
WEEK 17 27 OCT – 31 OCT	, File input and output Operations in C++,
WEEK 18 3 NOV – 8 NOV	Error handling during file operations.
WEEK 19 10 NOV – 15 NOV	Queries, Tests and Assignment
WEEK 20 17 NOV- 18 NOV	Revision
EXAMINATIONS OF ODD SEM (19 NOV, 2025 onwards)	

LESSON PLAN

Computer Science (2025-26)

Class :- BCA-1st Sem

Subject :-Computer Architecture (25BCA401DS02)

Teacher :- Sophia

Semester :- 1st

1 ST TEACHING TERM (15 JULY, 2025– 13 OCT, 2025)	
WEEK 4 1AUG- 2 AUG	Introduction Scheme for 4-Year Bachelor Program in Computer Applications , NEP-2020 , advantages ,skills , Syllabus ,unit discussion
WEEK 5 4 AUG- 9 AUG	Digital Principles: Definition for Digital signals, Digital logic, Digital computers, Von Neumann Architecture, Boolean Laws and Theorems, K-Map: Truth Tables to K-Map,
WEEK 6 11 AUG- 16 AUG	2, 3 and 4 variable K Map, K-Map Simplifications, Don't Care Conditions, SOP and POS.
WEEK 7 18 AUG – 23 AUG	Number Systems: Decimal, Binary, Octal, Hexadecimal, Number System Conversions, Binary Arithmetic, Addition and subtraction of BCD, Octal Arithmetic
WEEK 8 25 AUG -30 AUG	, Hexadecimal Arithmetic, Binary Codes, Decimal Codes, Error detecting and correcting codes, ASCII, EBCDIC, Excess3 Code, The Gray Code.
WEEK 9 1SEPT -6 SEPT	Combinational Circuits: Half Adder and Full Adder, Subtractor, Decoders, Encoder, Multiplexer, Demultiplexer
WEEK 10 8 SEPT- 13 SEPT	Sequential Circuits: Flip-Flops- SR Flip- Flop, D Flip-Flop, J-K Flip-Flop, T Flip-Flop.
WEEK 11 15 SEPT – 20 SEPT	Register: 4 bit register with parallel load, Shift Registers- Bidirectional shift register with parallel load Binary Counters-4 bit synchronous and Asynchronous binary counter.
WEEK 12 22 SEPT – 27 SEPT	Basic Computer Organization and Design: Instruction Codes, Computer Registers, Computer Instructions, Timing and Control,
WEEK 13 29 SEPT – 30 SEPT	Instruction Cycle, Memory-Reference Instructions, InputOutput Interrupt, Complete Computer Description, Design of Basic Computer, Design of 37
WEEK 14 1 OCT- 4 OCT	Accumulator logic. Central Processing Unit: Introduction, General Register Organization, Stack Organization, Instruction Formats
WEEK 15 6 OCT- 13 OCT	, Addressing Modes, Data Transfer and Manipulation, Program Control, Reduced Instruction Set Computer(RISC), RISC Vs CISC.
DIWALI VACATIONS (14 OCT, 2025 – 22 OCT, 2025)	
2 ND TEACHING TERM (23 OCT, 2025 – 18 NOV, 2025)	
WEEK 16 23 OCT -25 OCT	Pipeline and Vector Processing: Parallel Processing, Pipelining, Arithmetic Pipeline, Instruction Pipeline
WEEK 17 27 OCT – 31 OCT	, RISC Pipeline. Input-Output Organization: Peripheral Devices, Input-Output Interface, Asynchronous data transfer, Modes of Transfer,
WEEK 18 3 NOV – 8 NOV	Priority Interrupt, Direct memory Access, Input-Output Processor(IOP).
WEEK 19 10 NOV – 15 NOV	Memory Organization: Memory Hierarchy, Main Memory, Auxiliary memory, Associate Memory, Cache Memory, Virtual Memory, Memory Management Hardware.
WEEK 20 17 NOV- 18 NOV	Revision
EXAMINATIONS OF ODD SEM (19 NOV, 2025 onwards)	

LESSON PLAN

Computer Science (2025-26)

Class :- BCA-Final YEAR

Subject :- Data Communication and Networking

Teacher :- SOPHIA

Semester :- 1st

1ST TEACHING TERM (15 JULY, 2025– 13 OCT, 2025)	
WEEK 1 15JULY-19JULY	Syllabus ,unit discussion
WEEK 2 21 JULY-26 JULY	Introduction to Computer Communications and Networking Technologies; Uses of Computer Networks; Network Devices, Nodes, and Hosts; Types of Computer Networks
WEEK 3 28 JULY – 31 JULY	Topologies; Network Software: Network Design issues and Protocols;
WEEK 4 1AUG- 2 AUG	Connection-Oriented and Connectionless Services; Network Applications and Application Protocols;
WEEK 5 4 AUG- 9 AUG	Computer Communications and Networking Models: Decentralized and Centralized Systems, Distributed Systems, Client/Server Model, Peer-to-Peer Model,
WEEK 6 11 AUG- 16 AUG	Web-Based Model, Network Architecture and the OSI Reference Model, TCP/IP reference model, Example Networks: The Internet, X.25, Frame Relay, ATM.
WEEK 7 18 AUG – 23 AUG	Analog and Digital Communications Concepts: Concept of data, signal, channel, bid-rate ,
WEEK 8 25 AUG -30 AUG	maximum data-rate of channel, Representing Data as Analog Signals, Representing Data as Digital Signals, Data Rate and Bandwidth, Capacity, Baud Rate
WEEK 9 1SEPT -6 SEPT	; Asynchronous and synchronous transmission, data encoding techniques, Modulation techniques, Digital Carrier Systems;
WEEK 10 8 SEPT- 13 SEPT	Guided and Wireless Transmission Media; Communication Satellites; Switching and Multiplexing; Dialup Networking; Analog Modem Concepts; DSL Service.
WEEK 11 15 SEPT – 20 SEPT	Data Link Layer: Framing, Flow Control, Error Control; Error Detection and Correction;
WEEK 12 22 SEPT – 27 SEPT	Sliding Window Protocols; Media Access Control: Random Access Protocols, Token Passing Protocols; Token Ring; Introduction to LAN technologies
WEEK 13 29 SEPT – 30 SEPT	: Ethernet, switched Ethernet, VLAN, fast Ethernet, gigabit Ethernet, token ring, FDDI, Wireless LANs; Bluetooth;
WEEK 14 1 OCT- 4 OCT	Network Hardware Components: Connectors, Transceivers, Repeaters, Hubs, Network Interface Cards and PC Cards, Bridges, Switches, Routers, Gateways.
WEEK 15 6 OCT- 13 OCT	Network Layer and Routing Concepts: Virtual Circuits and Datagrams; Routing Algorithms:
DIWALI VACATIONS(14 OCT, 2025 – 22 OCT, 2025)	
2ND TEACHING TERM (23 OCT, 2025 – 18 NOV, 2025)	
WEEK 16 23 OCT -25 OCT	Flooding, Shortest Path Routing, Distance Vector Routing; Link State Routing, Hierarchical
WEEK 17 27 OCT – 31 OCT	Routing; Congestion Control Algorithms; Internetworking; Network Security Issues:
WEEK 18 3 NOV – 8 NOV	Security threats; Encryption Methods; Authentication;
WEEK 19 10 NOV – 15 NOV	Symmetric – Key Algorithms; Public-Key Algorithms.
WEEK 20 17 NOV- 18 NOV	Revision
EXAMINATIONS OF ODD SEM (19 NOV, 2025 onwards)	

LESSON PLAN

Computer Science (2025-26)

Class :- BCA-II
Subject :- Operating Systems

Teacher :- SOPHIA
Semester :- 3rd sem

1ST TEACHING TERM (15 JULY, 2025– 13 OCT, 2025)	
WEEK 1 15JULY-19JULY	Introduction Scheme for 4-Year Bachelor Program in Computer Applications , NEP-2020 , advantages ,skills
WEEK 2 21 JULY-26 JULY	Introduction to Operating Systems: Objectives and Characteristics. Classification: Batch, Multi-programming, Multi-processing, Multi-tasking,
WEEK 3 28 JULY – 31 JULY	Time-sharing, Distributed, Network and Real time Operating systems. System Calls and Services. Functions and Structures: Operating System Functions- Process management, Exokernel and Virtual Machines.
WEEK 4 1AUG- 2 AUG	Memory management, Secondary storage management, I/O management,
WEEK 5 4 AUG- 9 AUG	File management, Protection and Security. Structures- Simple Structure, Monolithic structure, Layered approach, Microkernel,
WEEK 6 11 AUG- 16 AUG	Process Management and Scheduling: Process concept- Process State Model, Process Control Block and Threads.
WEEK 7 18 AUG – 23 AUG	Process Scheduling- Scheduling Queues, Schedulers and Context Switch. Operations on Processes, Cooperating processes and Inter-Process Communication.
WEEK 8 25 AUG -30 AUG	Process Scheduling: Scheduling Criteria, Scheduling Algorithms: Single Processor Scheduling: FCFS, SJF, Round Robin, Multi Feedback Queue
WEEK 9 1SEPT -6 SEPT	Multiple Processor Scheduling and Real Time scheduling. Scheduling Algorithm Evaluation.
WEEK 10 8 SEPT- 13 SEPT	Memory Management: Concepts of Memory Management, Logical and Physical address space,
WEEK 11 15 SEPT – 20 SEPT	Swapping, Memory allocation: Contiguous and Non-Contiguous. Paging: Hardware Support. Page Map Table and Protection. Segmentation:
WEEK 12 22 SEPT – 27 SEPT	Hardware Support and Protection and Sharing. Virtual Memory: Need of Virtual Memory, Demand paging
WEEK 13 29 SEPT – 30 SEPT	, Pure Demand Paging. Handling page faults,
WEEK 14 1 OCT- 4 OCT	Performance of Demand Paging. Page replacement Algorithms and Allocation of Frames:
WEEK 15 6 OCT- 13 OCT	Allocation algorithms and Global vs Local Allocation. Thrashing.
DIWALI VACATIONS (14 OCT, 2025 – 22 OCT, 2025)	
2ND TEACHING TERM (23 OCT, 2025 – 18 NOV, 2025)	
WEEK 16 23 OCT -25 OCT	I/O Management: Basic I/O Devices, Types of I/O Devices: Block and Character Devices. I/O Software: Device Independent I/O,
WEEK 17 27 OCT – 31 OCT	User Space I/O and Kernel I/O Software. Device Controllers, Device Drivers and Interrupt Handlers. Communication Approaches to I/O Devices: Special Instruction I/O
WEEK 18 3 NOV – 8 NOV	Memory Mapped I/O and Direct Memory Access (DMA). Secondary Storage Structure: Disk Structure and Disk Scheduling Algorithms.
WEEK 19 10 NOV – 15 NOV	File System Interface: File Concept: Attributes, Operations and Types. File Access Methods: Sequential Access, Direct Access and Indexed Sequential. Free Space Management. Directory Structures: Single Level, Two level and Tree Structured. File Protection and Sharing.
WEEK 20 17 NOV- 18 NOV	Revision
EXAMINATIONS OF ODD SEM (19 NOV, 2025 onwards)	

LESSON PLAN

Computer Science (2025-26)

Class :- BCA- 1st Year

Teacher :- SUMAN

Subject :- Indian Knowledge Systems and Traditions

Semester :- 1st

1 ST TEACHING TERM (15 JULY, 2025– 13 OCT, 2025)	
WEEK 4 1AUG- 2 AUG	Introduction Scheme for 4-Year Bachelor Program in Computer Applications , NEP-2020 , advantages ,skills , Syllabus ,unit discussion
WEEK 5 4 AUG- 9 AUG	1 Indian Knowledge System ,2. Indian Culture & Civilization ,3. Ancient Indian Chemistry ,4. Ancient Indian Metallurgy
WEEK 6 11 AUG- 16 AUG	5. Ancient Indian Mathematics , 6. Ancient Indian Astronomy ,7. Indian Astronomical Instruments, 8. Indian Knowledge System (Upveda: Ayurveda) ,9. Indian Knowledge System (Upveda: Gandharveda)
WEEK 7 18 AUG – 23 AUG	10. Indian Knowledge System (Vedangas: Shiksha, Kalpa, Vyakrana) ,11. Indian Knowledge System (Vedangas: Jyotisha,
WEEK 8 25 AUG -30 AUG	Nirukta, Chandas) ,12. Indian Architecture I: Sthapatya-Veda ,13. Indian Architecture II: Temples
WEEK 9 1SEPT -6 SEPT	14. Indian Architecture III: Town & Planning ,
WEEK 10 8 SEPT- 13 SEPT	15. Indian Philosophical System ,Dhatuvada: art of metallurgy Akara jnana: art of mineralogy
WEEK 11 15 SEPT – 20 SEPT	Vastuvidya: art of engineering ,Yantramatrika: art of mechanics
WEEK 12 22 EPT – 27SEPT	Takshana: art of carpentry , Chalitakayoga: art of practicing as a builder of shrines ,Raupyaratnapariksha: art of testing silver and jewel
WEEK 13 29 EPT – 30SEPT	Maniraga jnana: art of tinging jewels ,Sucivayakarma: art of needleworks and weaving
WEEK 14 1OCT- 4 OCT	Vadya vidya: art of playing on musical instruments , Geet vidya : art of singing ,Nritya vidya: art of dancing
WEEK 15 6 OCT- 13 OCT	Natya vidya: art of theatricals , Alekhya vidya: art of painting ,Viseshakacchedya vidya: art of painting the face and body with color
DIWALI VACATIONS(14 OCT, 2025 – 22 OCT, 2025)	
2 ND TEACHING TERM (23 OCT, 2025 – 18 NOV, 2025)	
WEEK 16 23 CT -25 OCT	Udakavadya: art of playing on music in water , Manasi kavyakriya: art of composing verse ,Bhushanayojana: art of applying or setting ornaments
WEEK 17 27 OCT – 31 OCT	Citrasakapupabhakshyavikarakriya: art of preparing varieties of delicious food ,Dasanavasanangaraga
WEEK 18 3 NOV – 8 NOV	: art of applying preparations for cleansing the teeth, cloths and painting the body , Utsadana: art of healing or cleaning a person with perfumes
WEEK 19 10 NOV – 15 NOV	Vastragopana: art of concealment of cloths ,Balakakridanaka: art of using children's toys ,Tandulakusumabalivikara: art of preparing offerings from rice and flowers ,Pushpastarana: art of making a covering of flowers for a bed
WEEK 20 17 NOV- 18 NOV	Revision
EXAMINATIONS OF ODD SEM (19 NOV, 2025 onwards)	

LESSON PLAN

Computer Science (2025-26)

Class :- BCA – 1st year

Teacher :- Suman

Subject :- MDC (Fundamentals of Computing)

Semester :- 1st

1ST TEACHING TERM (15 JULY, 2025– 13 OCT, 2025)	
WEEK 4 1AUG- 2 AUG	Introduction: Historical evolution of computing, Computers and their classification; Working of a computer;
WEEK 5 4 AUG- 9 AUG	Block Diagram and its components; Characteristics, Benefits and Limitations of Computers. Human being Vs. Computer
WEEK 6 11 AUG- 16 AUG	. Computer Codes and their types. Input and Output Devices: Introduction to I/O concepts, Hardcopy and Softcopy Devices; Keyboards, mouse,
WEEK 7 18 AUG – 23 AUG	joysticks, trackballs, digitizer, voice-recognition, optical-recognition, scanners, terminals, point-of-sale terminals, machine-vision systems, Printer & its types.
WEEK 8 25 AUG -30 AUG	Memory & Mass Storage Devices: Characteristics of memory systems, types of memory
WEEK 9 1SEPT -6 SEPT	, RAM, ROM, magnetic disks-floppy disk, hard-disk; optical disks; Magnetic tapes; Concepts of Virtual and Cache memory
WEEK 10 8 SEPT- 13 SEPT	Software and Operating System Concepts: Introduction, Software and its types, Language translators,
WEEK 11 15 SEPT – 20 SEPT	Operating System and its Functions, Measuring System Performance, Assemblers, Compilers and Interpreters.
WEEK 12 22 SEPT – 27 SEPT	Batch Processing, Multiprogramming, Multi-tasking, Multiprocessing, Time Sharing
WEEK 13 29 SEPT – 30 SEPT	, DOS, Windows, Unix/Linux. Problem Solving and Programming Languages: Concept of problem solving, Problem definition, Programming Languages and their classification, Problem solving with computer,
WEEK 14 1 OCT- 4 OCT	Concept of a programming and design techniques, computer program lifecycle and program development process. Data Communication: Introduction, forms of data transmission, modem and its types, communication channels,
WEEK 15 6 OCT- 13 OCT	data transmission modes. Computer Networks: Introduction to Computer Network, types of Computer Network, Network Topologies, Network Protocols, Applications of Computer Networks
DIWALI VACATIONS(14 OCT, 2025 – 22 OCT, 2025)	
2ND TEACHING TERM (23 OCT, 2025 – 18 NOV, 2025)	
WEEK 16 23 OCT -25 OCT	Internet: Introduction to Internet, WWW, Web Browsers, Evolution of Internet, Applications of Internet, Connecting to Internet
WEEK 17 27 OCT – 31 OCT	Internet tools. Electronic Mail: Introduction to E-mail, Setting Up an E-mail Account, Composing and Sending E-mails, E-mail Etiquette and Best Practices, Managing E-mails, Security and Privacy,
WEEK 18 3 NOV – 8 NOV	Advanced E-mail Features, E-mail in Professional Settings, Troubleshooting Common E-mail Issues. Computer Applications: Computer applications in Artificial Intelligence, Banking, Education, Marketing,
WEEK 19 10 NOV – 15 NOV	Desktop publishing, CAD/CAM, Project Management, Military, Sports, Research & Development
WEEK 20 17 NOV- 18 NOV	Revision
EXAMINATIONS OF ODD SEM (19 NOV, 2025 onwards)	

LESSON PLAN

COMPUTER SCIENCE (2025–26)

Class :- single major/multidisciplinary

Teacher :- Pinki Rani

Subject :- Web Designing

Semester :-III

1ST TEACHING TERM (1 August, 2025– 18 November, 2025)	
WEEK 1 1AUG- 2 AUG	Introduction & Syllabus Discussion
WEEK 2 4 AUG- 9 AUG	Introduction: Concept of Web Design; Web Servers; Hypertext Transfer Protocol, URLs; Searching and Web Casting Techniques;
WEEK 3 11 AUG- 16 AUG	Search Engines and Search Tools, Domain Name System, Home Page, Web page and Website.
WEEK 4 18 AUG – 23 AUG	Test & Test Discussion
WEEK 5 25 AUG -30 AUG	Web Publishing: Hosting your Site; Internet Service Provider; Phases of Planning and designing your Website; Steps for developing your Site; Choosing the contents;
WEEK 6 1SEPT -6 SEPT	Web Development: Introduction to HTML; Hypertext and HTML; HTML Document Features;
WEEK 7 8 SEPT- 13 SEPT	Document Features; HTML command Tags; Headers; Text styles;
WEEK 8 15 SEPT – 20 SEPT	Text Structuring; Text colors and Background; Formatting text.
WEEK 9 22 SEPT – 27 SEPT	Assignment
WEEK 10 29 SEPT – 30 SEPT	List: Definition and types of Lists - Ordered and Unordered, Table Creation and Layouts. Images; Inserting Graphics; Frame Creation and Layouts;
WEEK 11 1 OCT- 4 OCT	Creating Links; Working with Forms and Menus; Working with Radio Buttons and Check Boxes; Text Boxes; Page layouts.
WEEK 12 6 OCT- 13 OCT	Test & Test Discussion
DIWALI VACATIONS (14 OCT, 2025 – 22 OCT, 2025)	
2ND TEACHING TERM (23 OCT, 2025 – 18 NOV, 2025)	
WEEK 13 23 OCT -25 OCT	Cascading Style Sheets (CSS): Basic Concepts, Properties, Creation of Style Sheets. Common Tasks with CSS: Text, Fonts, Margins, Links, Tables,
WEEK 14	Colors. Marquee. Mouse Overs. Filters and Transitions. Adding Links. Adding Tables. Adding Forms. Adding Image and Sound. Use of CSS in HTML Documents, Linking and Embedding of CSS in HTML.
WEEK 15 3 NOV – 8 NOV	Assignment

WEEK 16 10 NOV – 15 NOV	Revision & Problem solving
WEEK 17 17 NOV- 18 NOV	Revision & Problem solving
EXAMINATIONS OF ODD SEM (19 NOV, 2025 onwards)	

LESSON PLAN

COMPUTER SCIENCE (2025-26)

Class :- single major/multidisciplinary

Teacher :- Pinki Rani

Subject :- Digital & Technology Solution

Semester :-1

1 ST TEACHING TERM (1 August, 2025– 18 Nov, 2025)		
WEEK 1 1AUG- 2 AUG	Introduction & Syllabus Discussion	
WEEK 2 4 AUG- 9 AUG	Introduction & Evolution of Digital Systems: Role & Significance of Digital Technology; Information and Communication Technology (ICT) & Tools;	
WEEK 3 11 AUG- 16 AUG	Computer System & its working, Software and its types. Operating Systems: Types and Functions. Problem Solving: Algorithms and Flowcharts	
WEEK 4 18 AUG – 23 AUG	Test & Test Discussion	
WEEK 5 25 AUG -30 AUG	Communication Systems: Principles, Model & Transmission Media. Computer Networks & Internet: Concepts & Applications, WWW, Web Browsers	
WEEK 6 1SEPT -6 SEPT	Search Engines, Messaging, Email, Social Networking. Computer Based Information System: Significance & Types.	
WEEK 7 8 SEPT- 13 SEPT	E-commerce & Digital Marketing: Basic Concepts, Benefits & Challenges	
WEEK 8 15 SEPT – 20 SEPT	Assignment/Quiz/Seminar	
WEEK 9 22 SEPT – 27 SEPT	Emerging Technologies and their applications: Overview of Artificial Intelligence, Machine Learning, Deep Learning;	
WEEK 11 29 SEPT – 30 SEPT	Big Data, Data Science and Big Data Analytics; Internet of Things (IoT) and Industrial Internet of Things (IIoT),	
WEEK 11 1 OCT- 4 OCT	Robotics and 3D Printing; Blockchain Technology; Quantum Computing; Cloud computing and its service models.	
WEEK 12 6 OCT- 13 OCT	Test & Test Discussion/Mini Project	
DIWALI VACATIONS (14 OCT, 2025 – 22 OCT, 2025)		
2 ND TEACHING TERM (23 OCT, 2025 – 18 NOV, 2025)		
WEEK 13 23 OCT -25 OCT	Digital India & e-Governance: Initiatives, Infrastructure, Services and Empowerment.	
WEEK 14 23 OCT -25 OCT	Digital Financial Tools: Unified Payment Interface, Aadhar Enabled Payment System, USSD, Credit / Debit Cards,	
WEEK 15 3 NOV – 8 NOV	e-Wallets, Internet Banking, NEFT/RTGS and IMPS, Online Bill Payment and POS. Cyber Security: Threats, Significance, Challenges, Precautions, Safety Measures and Tools.	
WEEK 16 10 NOV – 15 NOV	Assignment/Group Discussion/ Debate	

WEEK 17 17 NOV- 18 NOV	Revision & Problem solving
EXAMINATIONS OF ODD SEM (19 NOV, 2025 onwards)	