Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Dr Sakshi Aneja Class- BCA-6TH SEM Subject- Operating System-II Paper- BCA-362

January, 2025 1 st Week 1 Jan – 4 Jan	UNIT – I Process Synchronization: The Critical Section Problem – Single Process/Two Process Solutions;
5 Jan, 2025 6 Jan, 2025	Sunday Shri Guru Gobind Singh Ji Jayanti
2 nd Week 6 Jan – 11 Jan	Semaphores – Types, Implementation, Deadlocks and Starvation; Classical Problems of Synchronization – The Bounded Buffer Problem, The Readers and Writers Problem,
12 Jan,2025	Sunday
3 rd Week 13 Jan – 18 Jan	The Dining-Philosophers Problem, Critical Regions, Monitors
19 Jan,2025	Sunday
January, 2025 4 th Week 20 Jan-25 Jan	Directory Structure: Single Level, Two Level, Tree Structures, Acyclic Graph, General Graph;
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan – 31 Jan	Directory Implementation, Recovery

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Dr Sakshi Aneja Class- BCA-6TH SEM Subject- Operating System-II Paper- BCA-362

February, 2025 1 st Week 1 Feb, 2025	UNIT – II Secondary Storage Structure: Disk Structure
2 Feb, 2025 2 nd Week 3 Feb – 8 Aug	Sunday, Basant Panchmi Disk Scheduling: FCFS, SSTF, SCAN, C-SCAN,LOOK
9 Feb, 2025 3 rd Week 10 Feb - 15 Feb	Sunday Selection of Disk Scheduling Algorithm; Disk Management; Swap Space Management
12 Feb, 2025 16 Feb, 2025 4 th Week 17 Feb-22 Feb	Guru Ravidas Jayanti Sunday Network Operating Systems: Remote Login, Remote File Transfer; Distributed Operating System: Data Migration,
23 Feb, 2025 5 th Week 24 Feb- 28 Feb	Sunday Computation Migration, Process Migration UNIT – III Linux: Introduction, Features, Architecture, Distributions
26 Feb, 2025	Maha Shivratri

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Dr Sakshi Aneja Class- BCA-6TH SEM Subject- Operating System-II Paper- BCA-362

March, 2025 1 st Week	Accessing Linux System, Login/Logout/Shutting Down,
1 March, 2025	
2 March, 2025	Sunday
2 nd Week	Comparison of Linux with other Operating Systems, Commands in Linux:
3 March – 8 March	General-Purpose Commands, File Oriented Commands
	•
3 rd Week	Holi Vacations
9 March - 16 March	
	Directory Oriented Commands,
17 March – 22 March	Communication Oriented Commands, Process Oriented Commands,
	Redirection of Input and Output, Pipes
23 March, 2025	Sunday, Shaheedi Diwas/Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March – 29 March	Sessional Exams
30 March, 2025	Sunday
6 th Week	Id-ul- Fitr
31 March, 2025	

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Dr Sakshi Aneja Class- BCA-6TH SEM Subject- Operating System-II

Paper- BCA-362

April, 2025	UNIT – IV
1 st Week	Linux File System: Types of Files in Linux, File Attributes, Structure of File
1 April – 5 April	System, inode, File
6 April, 2024	Sunday
<u>-</u> ·	•
2 nd Week	Permission, File System Components, Standard File System, File System
7 April - 12 April	Types, Disk Related Commands
	Processes in Linux: Introduction, Job Control in Linux using at, batch, corn
	& time commands
10 April, 2025	Mahavir Jayanti
13 April, 2025	Sunday
14 April, 2025	Dr. B.R.Ambedkar Jayanti
3 rd Week	The vi editor: Introduction, Modes of vi Editor, Command in vi Editor
15 April - 19 April	Shell Programming: Introduction, Shell Variables, Shell Keywords,
	Operators,
20 April, 2025	Sunday
4 th Week	Assigning Values to the Variables, I/O in Shell, Control Structures, Creating
21 April - 26 April	& Executing Shell Programs in Linux.
27 April, 2025	Sunday
5 th Week	Problems taken from students
28 April, 2025	Previous Year Question Papers Discussed
29 April, 2025	Parshuram Jayanti
30 April, 2025	Akshya Tritya

Lesson Plan for the Even Semester (February to May, 2025)

Name of the Teacher – Dr Sakshi Aneja

Class- BCA-2nd Sem

Subject- Concepts of Operating System

Unit-I
Introductory Concepts: Operating System, Functions and Characteristics, Historical Evolution of Operating Systems
Guru Ravidas Jayanti
Sunday
Operating System Structure. Types of Operating System: Real-time,
Multiprogramming, Multiprocessing, Batch processing. Operating System Services, Operating System Interface,
Sunday
Service System Calls, and System Programs. Process Management:
Process Concepts, Operations on Processes, Process States, and Process
Control Block. Inter-Process Communication.
Maha Shivratri

Lesson Plan for the Even Semester (February to May, 2025)

Name of the Teacher – Dr Sakshi Aneja

Class- BCA-2nd Sem

Subject- Concepts of Operating System

March, 2025	Unit-II
1 st Week	CPU Scheduling: Scheduling Criteria
1 March, 2025	
2 March, 2025	Sunday
2 nd Week	Levels of Scheduling, Scheduling Algorithms, Multiple Processor Scheduling,
3 March – 8 March	Algorithm Evaluation. Synchronization: Critical Section Problem
3 rd Week	Holi Vacations
9 March - 16 March	
4 th Week	Semaphores, Classical Problem of Synchronization, Monitors. Deadlocks:
17 March – 22 March	Deadlock Characterization,
23 March, 2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru &
5 th Week	Sukhdev
	Methods for Handling Deadlocks, Deadlock Prevention, Deadlock
24 March – 29 March	Avoidance, Deadlock Detection and Recovery
30 March, 2025	Sunday
30 Waren, 2023	Sunday
6 th Week	Id-ul- Fitr
31 March, 2025	

Lesson Plan for the Even Semester (February to May, 2025)

Name of the Teacher – Dr Sakshi Aneja

Class- BCA-2nd Sem

Subject- Concepts of Operating System

April, 2025	Unit-III
1 st Week	Memory Management Strategies: Memory Management of Single-user and
1 April – 5 April	Multiuser Operating Systems
6 April, 2024	Sunday, Ram Navmi
2 nd Week	Partitioning, Swapping, Contiguous Memory Allocation, Paging and
	Segmentation
10 April, 2025	Mahavir Jayanti
13 April, 2025	Sunday, Vaisakhi
14 April, 2025	Dr. B.R. Ambedkar Jayanti
3rd Week	Virtual Memory Management: Demand Paging, Page Replacement Algorithms,
15 April - 19 April	Thrashing.
20 April, 2025	Sunday
4 th Week	
21 April - 28 April	Sessional Exams
27 April, 2025	Sunday
29 April, 2025	Parshuram Jayanti
30 April, 2025	Akshya Tritya

Lesson Plan for the Even Semester (February to May, 2025)

Name of the Teacher – Dr Sakshi Aneja

Class- BCA-2nd Sem

Subject- Concepts of Operating System

May , 2025 1 st Week 1 May - 3 May	Unit-IV Implementing File System: File System Structure, File System Implantation
4 May , 2025	Sunday
•	·
2 nd Week 5 May – 10 May	File Operations, Type of Files, Directory Implementation, Allocation Methods,
11 May, 2025	Sunday
3 rd Week	Free Space Management. Disk Scheduling algorithm - SSTF, Scan
12 May - 17 May	
18 May , 2025	Sunday
4 th Week	Disk Scheduling algorithmC- Scan, Look, C-Look. SSD Management
19 May - 24 May	
25 May, 2025	Sunday
5 th Week	Problems taken from students
26 May - 31 May	Previous years question papers discussed
29 May, 2025	Maharana Partap Jayanti
1 June, 2025 Onwards	University Examinations

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Harbinder Kaur

Class- BCA Final

Subject- ADVANCED PROGRAMMING WITH VISUAL BASICS

Paper- BCA-365

January, 2025 1 st Week 1 Jan – 4 Jan	Collections: Adding, Removing, Counting, Returning Items in a Collection; Processing a Collection;
5 Jan, 2025 6 Jan, 2025 2 nd Week 6 Jan – 11 Jan	Sunday Shri Guru Gobind Singh Ji Jayanti Working with Forms: Form Properties, Creating a form, Adding a form Various programs discussed Programs VB using Forms
12 Jan,2025 3 rd Week 13 Jan – 18 Jan	Sunday Working with Forms: Removing Forms in Project, Adding Multiple Forms, Managing Forms at Run Time, Hiding & Showing Forms
19 Jan,2025 January, 2025 4 th Week 20 Jan-25 Jan	Sunday Load & UnloadStatements, Drag and Drop Operation, Activate & Deactivate events, Form-load event, Example usingForms,
26 Jan, 2025 5 th Week 27 Jan – 31 Jan	UNIT – II Working with Menu: Menu Designing in VB; Adding a Menu to a Form, Modifying and Deleting Menu Items, Adding Access Characters

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Harbinder Kaur

Class- BCA Final

Subject- ADVANCED PROGRAMMING WITH VISUAL BASICS

Paper- BCA-365

February, 2025 1 st Week 1 Feb, 2025	Adding Shortcut Keys, Manipulating Menus using Common Dialog Box, Attaching Code to Events, Creating Submenus, Dynamic Menu Appearance
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Aug	Advanced Controls in VB: Scroll Bar, Slider Control, Tree View
9 Feb, 2025	Sunday
3 rd Week	List View, Rich Text Box Control, Toolbar, Status Bar, Progress Bar, Cool bar,
10 Feb - 15 Feb	Image List Program Development in VB using Menus and Advance Controls
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week	File Handling & File Controls: Sequential & Random files, Opening and
17 Feb-22 Feb	Closing Data Files, Viewing the Data in a File,
23 Feb, 2025	Sunday
5 th Week	Performing Operations on a File, Creating a Sequential Data File,
24 Feb- 28 Feb	Writing Data to a Sequential File,
26 Feb, 2025	Maha Shivratri

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher -

Class-Subject-

Paper-

March, 2025	Reading the Data in a Sequential File, Finding the End of a Data File,
1 st Week	Locating a File, Reading and Writing a Random File (get, put, LOF, seek)
1 March, 2025 2 March, 2025	Sunday
*	•
2 nd Week 3 March – 8 March	Working with Graphics: Using Paint, Line, Circle, Manipulating Graphics
3 March – 6 March	Program Development in VB using Files and Graphics
3 rd Week	Holi Vacations
9 March - 16 March 4 th Week	
17 March – 22 March	Practice of various tool box programs
17 March 22 March	
22.15 1 2025	
23 March, 2025	Sunday, Shaheedi Diwas/Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week	
24 March – 29 March	Sessional Exams
30 March, 2025	Sunday
50 March, 2025	Sunday
6 th Week	Id-ul- Fitr
31 March, 2025	

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher –

Class-Subject-

Paper-

April, 2025	Explain DBMS and its operation and techniques; Accessing Databases:
1 st Week 1 April – 5 April	using various methods.
	Creating the Database, Setting Properties, Applying Operations on
	Database, Viewing the Database, Updating the Database (adding, deleting
	records)
	records)
6 April, 2024	Sunday
2 nd Week	Database connectivity using Data Controls using bounded methods and
7 April - 12 April	unbounded methods
10 April, 2025	Mahavir Jayanti
13 April, 2025 14 April, 2025	Sunday Dr. B.R.Ambedkar Jayanti
3 rd Week	What is DAO (Data Access Object) and its database connectivity, RDO
15 April - 19 April	
20 April, 2025	Sunday
4 th Week	Explain ActiveX Data Object (ADO) as Control and Reference
21 April - 26 April	Program Development in VB using Database and Advance Controls
	Previous years question papers discussed.
27 April, 2025	Sunday
5 th Week	Program Development in VB using Database and Advance Controls Previous
28 April, 2025	years question papers discussed.
20 April 2025	Dorghunom Joyanti
29 April, 2025 30 April, 2025	Parshuram Jayanti
30 Aprii, 2025	Akshya Tritya
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Lesson Plan for the Even Semester (February to May, 2025)

Name of the Teacher – Harbinder Kaur

Class- BCA-2nd Sem

Subject-Object Oriented Programming using C++

3 rd Week	Unit-I Input Output in C++: Unformatted and Formatted I/O
10 Feb - 15 Feb	Operations. I/O using insertion and extraction operators
12 Feb, 2025	Guru Ravidas Jayanti
16 Feb, 2025	Sunday
4 th Week	Streams in C++. Functions: Declaration and Definition, return
17 Feb-22 Feb	values, arguments, passing parameters by value
23 Feb, 2025	Sunday
5 th Week	call by reference, call by pointer, Recursion, Inline Functions,
24 Feb- 28 Feb	
26 Feb, 2025	Maha Shivratri

Lesson Plan for the Even Semester (February to May, 2025)

Name of the Teacher – Harbinder Kaur Class- BCA-2nd Sem Subject-Object Oriented Programming using C++ Paper- B23-CAP-201

March, 2025	Function overloading. Pointers,
1 st Week	distribution overrousing. I officers,
1 March, 2025	
2 March, 2025	Sunday
2 nd Week	Structures, and union in C++.
3 March – 8 March	Unit-II
	Object-oriented features of C++: Class and Objects, Data hiding &
	encapsulation, abstraction,
3 rd Week	Holi Vacations
9 March - 16 March	
4 th Week	Data Members and Member Functions, accessing class members,
17 March – 22	empty class, local class, global class, Scope Resolution Operator and
March	its Uses, Static Data Members, Static Member Functions,
23 March, 2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week	
24 March – 29	Structure vs Class, Friend function and friend class. Constructors and
March	Destructors
30 March, 2025	Sunday
6 th Week	Id-ul- Fitr
31 March, 2025	
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Lesson Plan for the Even Semester (February to May, 2025)

Name of the Teacher – Harbinder Kaur Class- BCA-2nd Sem Subject-Object Oriented Programming using C++

April, 2025 1 st Week 1 April – 5 April	Constructors, Instantiation of objects, Default constructor, Parameterized constructor, Copy constructor and its use, Destructors, Dynamic initialization of objects.
6 April, 2024	Sunday, Ram Navmi
2 nd Week	Unit-III
7 April - 12 April	Operator Overloading: Overloading unary and binary operators: arithmetic operators, manipulation of strings using operators.
10 April, 2025 13 April, 2025 14 April, 2025	Mahavir Jayanti Sunday, Vaisakhi Dr. B.R. Ambedkar Jayanti
3 rd Week 15 April - 19 April	Inheritance: Derived class, base class, Accessing the base class member,
20 April, 2025	Sunday
4 th Week 21 April - 28 April	Sessional Exams
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti Akshya Tritya

Lesson Plan for the Even Semester (February to May, 2025)

Name of the Teacher – Harbinder Kaur Class- BCA-2nd Sem Subject-Object Oriented Programming using C++

May, 2025 1 st Week	Inheritance: multilevel, multiple, hierarchical, hybrid; Virtual base class, Abstract class.
1 May - 3 May	
4 May , 2025	Sunday
2 nd Week	Unit-IV
5 May – 10 May	Virtual Functions, pure virtual functions; Polymorphism & its types
11 May, 2025	Sunday
3 rd Week	
12 May - 17 May	Exception Handling in C++: exception handling model, Exception handling
	constructs - try, throw, catch,
18 May , 2025 Onwards	Sunday
4th Week	Order of catch blocks, Catching all exceptions, Nested try blocks,
19 May - 24 May	
25 May , 2025	Sunday
5 th Week	handling uncaught exceptions.
26 May - 31 May	Problems taken from students
	Previous years question papers discussed
1 June, 2025	University Examinations
Onwards	

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – NEHA SHARMA Class- BCA-6TH SEM Subject- Web Designing Using Advanced Tools Paper- BCA-361

January, 2025 1 st Week 1 Jan – 4 Jan	UNIT – I Interactivity Tool - JavaScript: Introduction, Features, Data types, Operators, Statements, Functions,
5 Jan, 2025 6 Jan, 2025	Sunday Shri Guru Gobind Singh Ji Jayanti
2 nd Week 6 Jan – 11 Jan	Event Handling, Use of Predefined Object and Methods, Frames, Windows, Tables, Images, Links
12 Jan,2025	Sunday
3 rd Week 13 Jan – 18 Jan	Interactivity Tool - VBScript: Introduction, Features, Variables, Data Types, Numeric and Literal Constants,
19 Jan,2025	Sunday
January, 2025 4 th Week 20 Jan-25 Jan	Arrays, Operators, Subroutine Procedures, Function Procedures, Control Statements,
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan – 31 Jan	Strings, Message and Input Boxes, Date and Time, Event Handlers, Embedding VBScript in HTML

KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – NEHA SHARMA Class- BCA-6TH SEM Subject- Web Designing Using Advanced Tools Paper- BCA-361

February, 2025 1 st Week 1 Feb, 2025	UNIT – II Interactivity Tool - Active Script Pages – Introduction
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Aug	Features of ASP, Client-Server Model, Data Types,
9 Feb, 2025	Sunday
3 rd Week	Decision Making Statements, Control statements, Use of Various Objects
10 Feb - 15 Feb	of ASP, Various Techniques of Connecting to Database
12 Feb, 2025	Guru Ravidas Jayanti
16 Feb, 2025	Sunday
4 th Week 17 Feb-22 Feb	Other Interactivity Tools - Macromedia Flash, Macromedia Dreamweaver, PHP: Basic Introduction and Features
23 Feb, 2025	Sunday
5 th Week	UNIT – III
24 Feb- 28 Feb	DHTML: Introduction, Features, Events, Dynamic Positioning, Layer Object, Properties of STYLE,
26 Feb, 2025	Maha Shivratri

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – NEHA SHARMA Class- BCA-6TH SEM Subject- Web Designing Using Advanced Tools Paper- BCA-361

March, 2025 1 st Week 1 March, 2025 2 March, 2025 2 nd Week 3 March – 8 March	Dynamic Styles, Inline Styles, Event Handlers; Cascading Style Sheets (CSS): Basic Concepts, Properties, Creating Style Sheets; Common Tasks with CSS: Text, Fonts, Margins, Links, Tables, Colors; Marquee; Sunday Mouseovers; Filters and Transitions; Adding Links; Adding Tables; Adding Forms;
3 rd Week	Holi Vacations
9 March - 16 March	Hon vacations
4 th Week	Adding Image and Sound; Use of CSS in HTML Documents Linking and
	Embedding of CSS in HTML Document
23 March, 2025	Sunday, Shaheedi Diwas/Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March – 29 March	Sessional Exams
30 March, 2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – NEHA SHARMA

Class- BCA-6TH SEM

Subject- Web Designing Using Advanced Tools

Paper- BCA-361

April, 2025 1 st Week 1 April – 5 April	UNIT – IV Microsoft FrontPage: Introduction, Features, Title Bar, Menu bar, FrontPage Tool Bar, Style,
6 April, 2024	Sunday
2 nd Week 7 April - 12 April	Font Face and Formatting Bar, Scroll Bars XML: Introduction, Features, XML Support and Usage, Structure of XML Documents, Structures in XML
10 April, 2025	Mahavir Jayanti
13 April, 2025	Sunday
14 April, 2025	Dr. B.R.Ambedkar Jayanti
3 rd Week 15 April - 19 April	Creating Document Type Declarations, Flow Objects, Working with Text and Font, Color and Background Properties;
20 April, 2025	Sunday
4 th Week 21 April - 26 April	Previous Year Question Papers Discussed
27 April, 2025	Sunday
5 th Week 28 April, 2025	Problems taken from students
29 April, 2025 30 April, 2025	Parshuram Jayanti Akshya Tritya

Lesson Plan for the Even Semester (February to May, 2025)

Name of the Teacher – Neha Sharma

Class- BCA-2nd Sem

Subject-Introduction to Web Technologies

3rd Week	Unit-II Creating a Website and Introduction to Markup Languages
10 Feb - 15 Feb	(HTML and DHTML), HTML Document Features & Fundamentals,
12 Feb, 2025	Guru Ravidas Jayanti
16 Feb, 2025	Sunday
4 th Week	HTML Elements, Creating Links; Headers; Text styles; Text Structuring;
17 Feb-22 Feb	Text color and Background; Formatting text; Page layouts,
23 Feb, 2025	Sunday
5 th Week	Images; Ordered and Unordered lists; Inserting Graphics;
24 Feb- 28 Feb	
26 Feb, 2025	Maha Shivratri

Lesson Plan for the Even Semester (February to May, 2025)

Name of the Teacher – NEHA SHARMA

Class- BCA-2ND SEM

Subject-Introduction to Web Technologies

March, 2025 1st	Table Creation and Layouts;
Week	
1 March, 2025	
2 March, 2025	Sunday
2 nd Week	Frame Creation and Layouts; Working with Forms and Menus; Working
3 March – 8 March	with Radio Buttons;
3 rd Week	Holi Vacations
9 March - 16 March	Hon vacations
4 th Week	Check Boxes; Text Boxes, HTML5
	Unit-III
	Introduction to CSS (Cascading Style Sheets): Features
	introduction to CSS (Cuseuding Style Shocks): 1 cutares
23 March, 2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru &
	Sukhdev
5 th Week	Core Syntax of CSS, Types, Style Sheets and HTML, Style Rule Cascading
24 March – 29 March	and Inheritance
20 Manual 2025	Constant
30 March, 2025	Sunday
6 th Week	Id-ul- Fitr
31 March, 2025	
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Lesson Plan for the Even Semester (February to May, 2025)

Name of the Teacher – NEHA SHARMA

Class- BCA-2ND SEM

Subject-Introduction to Web Technologies

1 April – 5 April	ositioning, and other useful Style Properties; Features of CSS3.
6 April, 2024	Sunday, Ram Navmi
2 nd Week U	nit-I Introduction to Internet and World Wide Web (WWW); Evolution
1 1	nd History of World Wide Web, Web Pages and Contents, Web Clients,
W	Veb Servers,
10 April, 2025	Mahavir Jayanti
	Sunday, Vaisakhi
	Dr. B.R. Ambedkar Jayanti
3 rd Week	Veb Browsers; Hypertext Transfer Protocol, URLs; Searching, Search Engines and
15 April - 19 April _{Se}	earch Tools. Web Publishing: Hosting website;
20 April, 2025	Sunday
4 th Week	•
21 April - 28 April §	Sessional Exams
	Sunday
	Parshuram Jayanti
30 April, 2025	Akshya Tritya

Lesson Plan for the Even Semester (February to May, 2025)

Name of the Teacher – NEHA SHARMA

Class- BCA-2ND SEM

Subject-Introduction to Web Technologies

May, 2025	Internet Service Provider; Planning and designing website; Web Graphics
1st Week	Design, Steps For Developing website
1 May - 3 May	
4 M 2025	Const.
4 May , 2025	Sunday
2 nd Week	Unit-IV The Nature of JavaScript: Evolution of Scripting Languages,
5 May – 10 May	JavaScript-Definition, Programming for Non-Programmers,
11 May, 2025	Sunday
3rd Week	Introduction to Client–Side Programming,
12 May - 17 May	
18 May, 2025	Sunday
4th XX7 I	
4 th Week	Enhancing HTML Documents with JavaScript. Static and Dynamic web
19 May - 24 May	pages
25 May, 2025	Sunday
#th xxx I	
5 th Week	Problems taken from students
26 May - 31 May	Previous years question papers discussed
29 May, 2025	Maharana Partap Jayanti
1 June, 2025	University Examinations
Onwards	Chronoly Examinations
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Lesson Plan for the Even Semester (January to May, 2025)

January, 2025 4 th Week 20 Jan-25 Jan	E-Commerce concept, history.
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan – 31 Jan	Organizing themes, e-commerce business models.

Lesson Plan for the Even Semester (January to May, 2025)

February, 2025 1 st Week 1 Feb, 2025	The internet, concept, INTRANET, WWW, TECHNOLOGIES. Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Feb	Building an e-commerce website,
9 Feb, 2025	Sunday
3 rd Week 10 Feb - 15 Feb	E-commerce website design, role of website B2C ecommerce.
12 Feb, 2025	Guru Ravidas Jayanti
16 Feb, 2025 4 th Week	Sunday A Systematic conversely a communication of the surface of
17 Feb-22 Feb	A Systematic approach, e commerce security environment, and security threads, technology solution.
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Management policies, business procedures, and public laws, website strategies.
26 Feb, 2025	Maha Shivratri

Lesson Plan for the Even Semester (January to May, 2025)

March, 2025 1 st Week	Web design principles, push and pull technologies, alternative methods of customer communication
1 March, 2025	customer communication
2 March, 2025	Sunday
2 nd Week	E-Marketing, scope and technique, traditional web promotion, web counters
3 March – 8 March	
3 rd Week	Holi Vacations
9 March - 16 March	
	web advertisements, issues and technologies,role of social media ,E-commerce
17 March – 22 March	customer, strategies for purchasing an support activities,
23 March, 2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru &
	Sukhdev
5 th Week	planning for e-commerce and its initiates, pros and cons of online shopping,
24 March – 29 March	
	technologies.
30 March, 2025	Sunday
50 March, 2025	Sunday
6 th Week	Id-ul- Fitr
31 March, 2025	

Lesson Plan for the Even Semester (January to May, 2025)

April, 2025 1 st Week 1 April – 5 April	EP and web based EP, Electronic Payment system, electronic billing and payment,.
6 April, 2024	Sunday, Ram Navmi
2 nd Week 7 April - 12 April	Special features required in payment system for ecommerce, e-payment system, Types e-cash, & currency servers, E-cheques,.
10 April, 2025	Mahavir Jayanti
13 April, 2025	Sunday, Vaisakhi
14 April, 2025	Dr. B.R. Ambedkar Jayanti
3 rd Week 15 April - 19 April	Credit cards, smart cards, electronic purses and debit cards.
20 April, 2025	Sunday
4 th Week 21 April - 28 April	Sessional Exams
27 April, 2025	Sunday
29 April, 2025	Parshuram Jayanti
30 April, 2025	Akshya Tritya

Lesson Plan for the Even Semester (January to May, 2025)

May , 2025 1 st Week 1 May - 3 May	UPI Payments, e-vallets, Master cards/visa, secure electronic transaction: introduction, business requirements, concepts, payment processing
4 May , 2025	Sunday
2 nd Week 5 May – 10 May	Issues in e-commerce, Ethical, social and political issues, Basic ethical concept, analyzing ethical dilemmas, ethical principles, privacy and information rights,
11 May, 2025	Sunday
3 rd Week 12 May - 17 May	information collected at e-commerce websites,concept of privacy, legal protections,intellectual property rights types and governance
18 May , 2025	Sunday
4 th Week 19 May - 24 May	Revision of all Syllabus.
25 May , 2025	Sunday
5 th Week 26 May - 31 May	Revision of all Syllabus.
29 May , 2025	Maharana Partap Jayanti
1 June, 2025 Onwards	University Examinations

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms Mamta Atreja Class- B.Sc.III CS+B.A.III CS (VI Semester) Subject- Relational Data Base Management System Paper- I

January, 2025 1 st Week 1 Jan – 4 Jan	Relational Model Concepts, Codd's Rules for Relational Model, Hierarchical Data Model–Introduction, Features.
5 Jan, 2025	Sunday
6 Jan, 2025	Shri Guru Gobind Singh Ji Jayanti
2 nd Week	Components, Example, Network Data Model– Introduction, Features,
6 Jan – 11 Jan	Components, Example,
12 Jan,2025	Sunday
3 rd Week 13 Jan – 18 Jan	Differences between Hierarchical Data Model and Network Data Model.
19 Jan,2025 January, 2025 4 th Week 20 Jan-25 Jan	Sunday Comparison of Relational Data Model with Hierarchical Data Model and Network Data Model.
26 Jan, 2025	Sunday, Republic Day
5 th Week	Relational Algebra:-Selection and Projection, Set Operation, Join and
27 Jan – 31 Ja	Division.

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher –Ms Mamta Atreja Class- B.Sc.III CS+B.A.III CS (VI Semester) Subject- Relational Data Base Management System Paper- I

February, 2025 1 st Week 1 Feb, 2025	Relational Calculus: Tuple Relational Calculus and Domain Relational Calculus.
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Aug	Functional Dependencies and Normalization Purpose, Data Redundancy.
9 Feb, 2025	Sunday
3 rd Week 10 Feb - 15 Feb	Update Anomalies, Partial/Fully Functional Dependencies.
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	Transitive Functional Dependencies, Characteristics of Functional Dependencies.
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Decomposition and Normal Forms (1NF, 2NF, 3NF & BCNF).
26 Feb, 2025	Maha Shivratri

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms Mamta Atreja Class- B.Sc.III CS+B.A.III CS (VI Semester) Subject- Relational Data Base Management System Paper- I

March, 2025 1st Week	SQL: Data Definition and data types, Create Table, Insert Data, Viewing Data, Filtering Table Data.
1 March, 2025 2 March, 2025	Sunday
	•
2 nd Week	Sorting data, Creating Table from a Table, Destroy table, Update, View, Delete,
3 March – 8 March	Join.
3 rd Week	Holi Vacations
9 March - 16 March	
4 th Week	Concatenating data from Table Specifying Constraints in SQL; Primary Key,
17 March – 22 March	Foreign Key, Unique Key, Check Constraint, Using Functions.
23 March, 2025	Sunday, Shaheedi Diwas/Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March – 29 March	Sessional Exams
30 March, 2025	Sunday
6 th Week	Id-ul- Fitr
31 March, 2025	

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms Mamta Atreja Class- B.Sc.III CS+B.A.III CS (VI Semester) Subject- Relational Data Base Management System Paper- I

April, 2025 1 st Week 1 April – 5 April	PL/SQL-Introduction, Advantages of PL/SQLThe Generic PL/SQL Block: PL/SQL Execution Environment; PL/SQL Character Set and Data Types.
6 April, 2024	Sunday
2 nd Week	Declaration and Assignment of Variables, Control Structure in PL/SQL:
	Conditional Control, Iterative Control.
10 April, 2025	Mahavir Jayanti
13 April, 2025	Sunday
14 April, 2025	Dr. B.R.Ambedkar Jayanti
3 rd Week 15 April - 19 April	Sequential Control
20 April, 2025	Sunday
4 th Week	Revision of all Syllabus
21 April - 26 April	
27 April, 2025	Sunday
5 th Week	Revision of all Syllabus
28 April, 2025	
29 April, 2025	Parshuram Jayanti
30 April, 2025	Akshya Tritya

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms Mamta Atreja Class- B.Sc.III CS+B.A.III CS (VI Semester) Subject- Computer Networks

Paper- II

January, 2025 1 st Week 1 Jan – 4 Jan	Introduction to Data Communication and Computer Networks; Uses of Computer Networks; Types of Computer Networks and their Topologies.
5 Jan, 2025	Sunday
6 Jan, 2025	Shri Guru Gobind Singh Ji Jayanti
2 nd Week 6 Jan – 11 Jan	Network Hardware Components: Connectors, Transceivers, Repeaters, Hubs, Network Interface Cards and PC Cards, Bridges.
12 Jan,2025	Sunday
3 rd Week 13 Jan – 18 Jan	Switches, Routers, Gateways; Network Software: Network Design issues and Protocols.
19 Jan,2025	Sunday
January, 2025 4 th Week 20 Jan-25 Jan	Connection-Oriented and Connectionless Services; OSI Reference Model;
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan – 31 Jan	TCP/IP Model

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms Mamta Atreja Class- B.Sc.III CS+B.A.III CS (VI Semester) Subject- Computer Networks Paper- II

February, 2025 1 st Week 1 Feb, 2025	Analog and Digital Communications Concepts: Analog and Digital data and signals.
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Aug	Bandwidth and Data Rate, Capacity, Baud Rate; Guided and Wireless.
9 Feb, 2025	Sunday
3 rd Week 10 Feb - 15 Feb	Transmission Media; Communication Satellites.
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	Switching and Multiplexing.
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Modems and modulation techniques.
26 Feb, 2025	Maha Shivratri

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms Mamta Atreja Class- B.Sc.III CS+B.A.III CS (VI Semester) Subject- Computer Networks Paper- II

March, 2025 1 st Week 1 March, 2025 2 March, 2025	Data Link Layer Design issues; Error Detection and Correction methods; Sliding Window Protocols: One-bit, Go Back N and Selective Repeat. Sunday
2 nd Week 3 March – 8 March	Media Access Control: ALOHA, Slotted ALOHA, CSMA, Collision free protocols; Introduction to LAN technologies: Ethernet.
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week	Switched Ethernet, Fast Ethernet, Gigabit Ethernet; Token Ring; Introduction to Wireless LANs and Bluetooth.
23 March, 2025	Sunday, Shaheedi Diwas/Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March – 29 March	Sessional Exams
30 March, 2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms Mamta Atreja Class- B.Sc.III CS+B.A.III CS (VI Semester) Subject- Computer Networks Paper- II

■	Routing Algorithms: Flooding, Shortest Path Routing, Distance Vector Routing; Link State Routing.
6 April, 2024	Sunday
2 nd Week 7 April - 12 April	Hierarchical Routing; Congestion Control; Traffic shaping; Choke packets; Load shedding; Application Layer: Introduction to DNS, E-Mail and WWW services; Network Security Issues: Security attacks; Encryption methods.
10 April, 2025	Mahavir Jayanti
13 April, 2025	Sunday
14 April, 2025	Dr. B.R.Ambedkar Jayanti
3 rd Week 15 April - 19 April	Firewalls; Digital Signatures;
20 April, 2025	Sunday
4th Week	Revision of all Syllabus
21 April - 26 April	
27 April, 2025	Sunday
5 th Week	Revision of all Syllabus
28 April, 2025	
29 April, 2025	Parshuram Jayanti
30 April, 2025	Akshya Tritya

Lesson Plan for the Even Semester (January to April, 2025)

January, 2025 1 st Week 1 Jan – 4 Jan	Introduction to E-commerce: Meaning of electronic commerce, business applications of e-commerce, comparison with traditional commerce.
5 Jan, 2025 6 Jan, 2025	Sunday Shri Guru Gobind Singh Ji Jayanti
2 nd Week	Business models in E-commerce –e-shops.
6 Jan – 11 Jan	Business models in B commerce of snops.
12 Jan,2025	Sunday
3 rd Week 13 Jan – 18 Jan	E-procurement, e-auctions.
19 Jan,2025	Sunday
January, 2025 4 th Week 20 Jan-25 Jan	Value chain integrators, information brokerage.
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan – 31 Jan	Telecommunication, collaboration platforms, etc.

Lesson Plan for the Even Semester (January to April, 2025)

February, 2025 1 st Week 1 Feb, 2025	Electronic payment system; E-Banking –concept, operations. Online fund transfer – RTGC, ATM, etc
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Aug	Online share market operations, Online marketing, Web-based advertising – concept, advantages.
0 E-L 2025	Constant
9 Feb, 2025 3 rd Week 10 Feb - 15 Feb	Sunday Types of online advertisements.
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	Search engine – as an advertising media, search engine optimisation – concept and techniques.
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Email marketing; Social Networking and marketing – promotion, opinion formulation, etc.
26 Feb, 2025	Maha Shivratri

Lesson Plan for the Even Semester (January to April, 2025)

March, 2025 1 st Week 1 March, 2025	Viral Marketing, E-retailing-concept, advantages, limitations; CRM and Information Technology.
2 March, 2025	Sunday
2 nd Week 3 March – 8 March	Tools to conducting online research – secondary research, online focus groups, web based surveys.
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March – 22 March	Data mining from social networking sites.
23 March, 2025	Sunday, Shaheedi Diwas/Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March – 29 March	Sessional Exams
30 March, 2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

Lesson Plan for the Even Semester (January to April, 2025)

April, 2025 1 st Week	Cloud computing – Concept, uses in business.
1 April – 5 April	
6 April, 2024	Sunday
2 nd Week	Enterprise Resource Planning; Security issues in e-commerce - Online frauds.
7 April - 12 April	Enterprise Resource Flamming, Security Issues in e-commerce - Ominie Hauds.
/ April - 12 April	
10 April, 2025	Mahavir Jayanti
13 April, 2025	Sunday
14 April, 2025	Dr. B.R.Ambedkar Jayanti
3 rd Week	Privacy issues; Cyber laws including Information Technology Act.
15 April - 19 April	
20 April, 2025	Sunday
4 th Week	Revision of all syllabus
21 April - 26 April	·
27 April 2025	Sunday
27 April, 2025 5 th Week	·
	Revision of all syllabus
28 April, 2025	
20 April 2025	Parshuram Jayanti
29 April, 2025	
30 April, 2025	Akshya Tritya

Lesson Plan for the Even Semester (January to May, 2025)

January, 2025 4 th Week 20 Jan-25 Jan	Introduction to Internet and World Wide Web (WWW); Evolution.
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan – 31 Jan	History of World Wide Web, Web Pages and Contents, Web Clients,
February, 2025 1 st Week 1 Feb, 2025	Web Servers, Web Browsers; Hypertext Transfer Protocol, URLs; Searching, Search Engines.
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Feb	Search Tools. Web Publishing: Hosting website.
9 Feb, 2025	Sunday
3 rd Week 10 Feb - 15 Feb	Internet Service Provider; Planning and designing website; Web Graphics Design, Steps For Developing website.
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	Creating a Website and Introduction to Markup Languages (HTML and DHTML), HTML Document Features & Fundamentals,
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	HTML Elements, Creating Links; Headers; Text styles; Text Structuring; Text colour and Background; Formatting text;
26 Feb, 2025	Maha Shivratri

Lesson Plan for the Even Semester (January to May, 2025)

March, 2025 1 st Week 1 March, 2025	Page layouts, Images; Ordered and Unordered lists;
2 March, 2025	Sunday
2 nd Week 3 March – 8 March	Inserting Graphics; Table Creation and Layouts; Frame Creation and Layouts;
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March – 22 March	Working with Forms and Menus Working with Radio Buttons; Check Boxes; Text Boxes, HTML5.
23 March, 2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March – 29 March	Introduction to CSS (Cascading Style Sheets): Features, Core Syntax, Types Style Sheets and HTML, Style Rule Cascading and Inheritance, Text Properties, CSS Box Model, Normal Flow Box Layout, Positioning, and other useful Style Properties; Features of CSS3.
30 March, 2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

Lesson Plan for the Even Semester (January to May, 2025)

April, 2025 1 st Week 1 April – 5 April	The Nature of JavaScript:
6 April, 2024	Sunday, Ram Navmi
2 nd Week 7 April - 12 April	Evolution of Scripting Languages, JavaScript-Definition,
10 April, 2025 13 April, 2025 14 April, 2025	Mahavir Jayanti Sunday, Vaisakhi Dr. B.R. Ambedkar Jayanti
3 rd Week 15 April - 19 April	Programming for Non-Programmers,
20 April, 2025	Sunday
4 th Week 21 April - 28 April	Sessional Exams
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti Akshya Tritya

Lesson Plan for the Even Semester (January to May, 2025)

May , 2025 1 st Week 1 May - 3 May	Introduction to Client–Side Programming,
4 May , 2025	Sunday
2 nd Week 5 May – 10 May	Enhancing HTML Documents
11 May, 2025	Sunday
3 rd Week 12 May - 17 May	JavaScript.
18 May , 2025	Sunday
4 th Week 19 May - 24 May	Static and Dynamic web pages
25 May , 2025	Sunday
5 th Week 26 May - 31 May	Dynamic web pages.
29 May , 2025	Maharana Partap Jayanti
1 June, 2025 Onwards	University Examinations

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms Megha Class- B.Sc I (Minor)

Subject-Programming Methodologies

Paper- B23-CSE-203

January, 2025 4 th Week	Problem Solving: Understanding the problem,
20 Jan-25 Jan 26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan – 31 Jan	Analyzing the problem, and Identifying the solution.
February, 2025 1 st Week 1 Feb, 2025	Tools for Problem-Solving: Flowcharts and its Symbols.
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Feb	Algorithm designing.
9 Feb, 2025 3 rd Week 10 Feb - 15 Feb	Sunday Examples of Algorithms with flow chart. Decision Table.
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	Program: Concept of a program,
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Need for writing programs, Characteristics of a good program,
26 Feb, 2025	Maha Shivratri
March, 2025 1 st Week 1 March, 2025	Programming style, Documentation, and Program Maintenance.
2 March, 2025	Sunday
2 nd Week 3 March – 8 March	Debugging Programs : Syntax Errors, Run-Time Errors, And Logical Errors.
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March – 22 March	Process of conceptualizing a solution to a problem and moving from algorithm to programming
23 March, 2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher - Ms Megha

Class- B.Sc I (Minor)

Subject-Programming Methodologies

Paper- B23-CSE-203

5 th Week	General Concepts: Clarity and Simplicity of Expressions, Use of proper
24 March – 29 March	names for Identifiers, Comments, Indentation; and Documentation.
30 March, 2025	Sunday
6 th Week	Id-ul- Fitr
31 March, 2025	
April, 2025	Programming Constructs: Sequence, Selection, and Iteration;
1st Week	
1 April – 5 April	
6 April, 2024	Sunday, Ram Navmi
2 nd Week	Simulation (dry run) of the program for better understanding of
7 April - 12 April	algorithm;
10 April, 2025	Mahavir Jayanti
13 April, 2025	Sunday, Vaisakhi
14 April, 2025	Dr. B.R. Ambedkar Jayanti
3 rd Week	
15 April - 19 April	Comparison.
20 April, 2025	Sunday
4 th Week	
21 April - 28 April	Sessional Exams
27 April, 2025	Sunday
29 April, 2025	Parshuram Jayanti
30 April, 2025	Akshya Tritya
May, 2025 1st	Analysis of Algorithms through simulations
Week	
1 May - 3 May	
4 May, 2025	Sunday
2 nd Week	Methodologies: Structured programming,
5 May – 10 May	programming,
11 May, 2025	Sunday
3 rd Week	
12 May - 17 May	Top-down approach, Bottom-up approach,
18 May , 2025	Sunday

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms Megha Class- B.Sc I (Minor) Subject- Programming Methodologies

Paper- B23-CSE-203

4 th Week	Functional programming,
19 May - 24 May	
25 May , 2025	Sunday
5 th Week 26 May - 31 May	Modular programming, and Object-oriented programming.
29 May, 2025	Maharana Partap Jayanti
1 June, 2025 Onwards	University Examinations

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms Megha Class- BCA-II Subject- Fundamental of E-commerce

Paper- B23-VOC-231

January, 2025 4 th Week 20 Jan-25 Jan	E-Commerce concept, history.
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan – 31 Jan	Organizing themes, e-commerce business models.
February, 2025 1 st Week 1 Feb, 2025	The internet, concept, INTRANET, WWW, TECHNOLOGIES.
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Feb	Building an e-commerce website,
9 Feb, 2025	Sunday
3 rd Week 10 Feb - 15 Feb	E-commerce website design, role of website B2C ecommerce.
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	A Systematic approach, e commerce security environment, and security threads, technology solution.
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Management policies, business procedures, and public laws, website strategies.
26 Feb, 2025	Maha Shivratri
March, 2025 1 st Week 1 March, 2025	Web design principles, push and pull technologies, alternative methods of customer communication.
2 March, 2025	Sunday
2 nd Week 3 March – 8 March	E-Marketing, scope and technique, traditional web promotion, web counters
3 rd Week 9 March - 16 March 4 th Week	Holi Vacations web advertisements, issues and technologies, role of social media ,E-commerce
17 March – 22 March	
23 March, 2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms Megha Class- BCA-II Subject- Fundamental of E-commerce Paper- B23-VOC-231

5 th Week 24 March – 29 March	planning for e-commerce and its initiates, pros and cons of online shopping, marketing creating website, electronic publishing issues, approaches and technologies,.
30 March, 2025	Sunday
6 th Week	Id-ul- Fitr
31 March, 2025	
April, 2025	EP and web based EP, Electronic Payment system, electronic billing and
1st Week	payment,.
1 April – 5 April	
6 April, 2024	Sunday, Ram Navmi
2 nd Week	Special features required in payment system for ecommerce, e-payment
7 April - 12 April	system, Types e-cash, & currency servers, E-cheques,.
10 April, 2025	Mahavir Jayanti
13 April, 2025	Sunday, Vaisakhi
14 April, 2025	Dr. B.R. Ambedkar Jayanti
3 rd Week	Credit cards, smart cards, electronic purses and debit cards.
15 April - 19 April	
20 April, 2025	Sunday
4 th Week 21 April - 28 April	Sessional Exams
27 April, 2025	Sunday
29 April, 2025	Parshuram Jayanti
30 April, 2025	Akshya Tritya
May , 2025 1st	UPI Payments, e-vallets, Master cards/visa, secure electronic transaction:
Week	introduction, business requirements, concepts, payment processing.
1 May - 3 May	
4 May , 2025	Sunday
2 nd Week	Issues in e-commerce, Ethical, social and political issues,,.
5 May – 10 May	
11 May, 2025	Sunday
3 rd Week	
12 May - 17 May	Basic ethical concept, analyzing ethical dilemmas, ethical principles, privacy and information rights,
18 May , 2025	Sunday

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms Megha Class- BCA-II Subject- Fundamental of E-commerce Paper- B23-VOC-231

4 th Week	Information collected at e-commerce websites, concept of privacy.
19 May - 24 May	
25 May , 2025	Sunday
5 th Week 26 May - 31 May	legal protections, intellectual property rights types and governance.
29 May , 2025	Maharana Partap Jayanti
1 June, 2025 Onwards	University Examinations

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms Megha

Class- BCA-III

Subject-Internet Technologies

Paper- BCA-364

January, 2025 1st Week	Internet: Introduction; History; Internet Services; TCP/IP: Architecture.
1 Jan – 4 Jan	
5 Jan, 2025 6 Jan, 2025 2 nd Week 6 Jan – 11 Jan	Sunday Shri Guru Gobind Singh Ji Jayanti Layers, Protocols; TCP/IP model versus OSI Model; World Wide Web (WWW) - The Client Side, The Server Side, Creating and Searching Information on the
12 Jan,2025	Web. Sunday
3 rd Week 13 Jan – 18 Jan	Popular Search Engines, URL, HTTP, Web Browsers, Chat & Bulletin Board, USENET.
19 Jan,2025	Sunday
January, 2025 4 th Week 20 Jan-25 Jan	NNTP (Network News Transfer Protocol); Internet vs. Intranet.
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan – 31 Jan	TCP, UDP and IP Protocols, Port Numbers; Format of TCP, UDP and IP; IPv4 addressing.
February, 2025 1 st Week 1 Feb, 2025	The need for IPv6; IPv6 addressing and packet format; TCP Services.
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Aug	TCP Connection Management; Remote Procedure Call; IP Address Resolution-DNS; Domain Name Space.
9 Feb, 2025	Sunday
3 rd Week 10 Feb - 15 Feb	DNS Mapping; Recursive and Iterative Resolution; Mapping Internet Addresses to Physical Addresses: ARP, RARP, DHCP; ICMP; IGMP.
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	Application Layer: Electronic Mail: Architecture; Protocols - SMTP, MIME, POP.
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	IMAP; Web Based Mail; File Access and Transfer: FTP, Anonymous FTP, TFTP, NFS.
26 Feb, 2025	Maha Shivratri

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms Megha Class- BCA-III Subject- Internet Technologies Paper- BCA-364

March, 2025	Remote Login using TELNET.
1 st Week	Kemote Login using TELNET.
1 Week 1 March, 2025	
2 March, 2025	Sunday
2 nd Week	Voice and Video over IP: RTP, RTCP.
3 March – 8 March	Voice and video over if . K11, K1C1.
3 rd Week	Holi Vacations
9 March - 16 March	TO THE LOCK IN POLYT
	IP Telephony and Signaling, RSVP.
17 March – 22 March	
23 March, 2025	Sunday, Shaheedi Diwas/Martyrdom Day of Bhagat Singh, Rajguru &
	Sukhdev
5 th Week	
24 March – 29 March	Sessional Exams
30 March, 2025	Sunday
·	
6 th Week	Id-ul- Fitr
31 March, 2025	
April, 2025	Routing in Internet: RIP, OSPF, and BGP.
1 st Week	
1 April – 5 April	
6 April, 2024	Sunday
2 nd Week	Internet Multicasting; Mobile IP; Private Network Interconnection.
7 April - 12 April	<u> </u>
10 April, 2025	Mahavir Jayanti
13 April, 2025	Sunday
14 April, 2025	Dr. B.R.Ambedkar Jayanti
3 rd Week	Network Address Translation (NAT), Virtual Private Network (VPN).
15 April - 19 April	, , , , , <u> </u>
20 April, 2025	Sunday
• ′	
4 th Week	Internet Management and SNMP.
21 April - 26 April	
27 April, 2025	Sunday

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms Megha Class- BCA-III Subject- Internet Technologies Paper- BCA-364

5 th Week 28 April, 2025	Internet Security: E-Mail Security; Web Security; Firewall; Introduction to IPsec and SSL.
29 April, 2025	Parshuram Jayanti
30 April, 2025	Akshya Tritya

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms Megha Class- B.Sc I(Major) Subject- Cloud Computing Skills Paper- Sec

January, 2025 4 th Week 20 Jan-25 Jan	Basic Concepts of Cloud Computing
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan – 31 Jan	Computer Network Basics.
February, 2025 1 st Week 1 Feb, 2025	Concepts of Distributed Systems Concepts of Cloud Computing and its Necessity.
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Feb	Cloud Service Providers in use and their Significance.
9 Feb, 2025	Sunday
3 rd Week 10 Feb - 15 Feb	Cloud Infrastructure Cloud Pros and Cons.
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	Cloud Delivery Models. Cloud Deployment Models
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Cloud Storage Management Concept of Virtualization
26 Feb, 2025	Maha Shivratri

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms Megha Class- B.Sc I(Major) Subject- Cloud Computing Skills Paper- Sec

March, 2025	Load Balancing.
1 st Week	
1 March, 2025	
2 March, 2025	Sunday
2 nd Week	Overview on Virtualization used for Enterprise Solutions
3 March – 8 March	
3 rd Week	Holi Vacations
9 March - 16 March	
4 th Week	Key Challenges in managing Information.
17 March – 22 March	
23 March, 2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week	Identifying the problems of scale and management in big data.
24 March – 29 March	
30 March, 2025	Sunday
6 th Week	Id-ul- Fitr
31 March, 2025	

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms Megha Class- B.Sc I(Major) Subject- Cloud Computing Skills Paper- Sec

April, 2025 1 st Week	Building Cloud Networks Designing .
1 April – 5 April	
6 April, 2024	Sunday, Ram Navmi
2 nd Week	Implementing a Data Center-Based Cloud.
7 April - 12 April	
10 April, 2025	Mahavir Jayanti
13 April, 2025	Sunday, Vaisakhi
14 April, 2025	Dr. B.R. Ambedkar Jayanti
3 rd Week	Installing Open Source Cloud service.
15 April - 19 April	
20 April, 2025	Sunday
4 th Week	
21 April - 28 April	Sessional Exams
27 April, 2025	Sunday
29 April, 2025	Parshuram Jayanti
30 April, 2025	Akshya Tritya

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms Megha Class- B.Sc I(Major) Subject- Cloud Computing Skills

Paper- Sec

May , 2025 1 st Week 1 May - 3 May	Amazon Web Services (AWS).
1 1/2dy	
4 May, 2025	Sunday
2 nd Week 5 May – 10 May	Google Cloud Platform .
11 May, 2025	Sunday
3 rd Week 12 May - 17 May	Revision of all syllabus
18 May , 2025 4 th Week 19 May - 24 May	Sunday Revision of all syllabus
25 May , 2025	Sunday
5 th Week	Revision of all syllabus
29 May , 2025	Maharana Partap Jayanti
1 June, 2025 Onwards	University Examinations

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms Prashantika P Sanduja Class- BCA II Year (4th Semester) Subject- Data Structures and Applications Paper- B23-CAP-401

January, 2025	Definition, Data Type vs. Data Structure, Classification of Data Structures,
4 th Week	Data Structure Operations, Applications of Data Structures.
20 Jan-25 Jan	
26 Jan, 2025	Sunday, Republic Day
-th	
5 th Week	Performance Analysis and Measurement (Time and Space Analysis of
27 Jan – 31 Jan	Algorithms- Average, Best and Worst Case Analysis).

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms Prashantika P Sanduja Class- BCA II Year (4th Semester) Subject- Data Structures and Applications Paper- B23-CAP-401

February, 2025 1 st Week 1 Feb, 2025	Introduction, Linear Arrays, Representation of Linear Array in Memory
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Feb	Two Dimensional and Multidimensional Arrays, Sparse Matrix and its Representation, Operations on Array: Algorithm for Traversal, Selection, Insertion, Deletion and its implementation.
9 Feb, 2025	Sunday
3 rd Week 10 Feb - 15 Feb	Revision of Unit I
12 Feb, 2025	Guru Ravidas Jayanti
16 Feb, 2025	Sunday
4 th Week 17 Feb-22 Feb	Storage of Strings, Operations on Strings viz., Length, Concatenation, Substring, Insertion, Deletion, Replacement, Pattern Matching
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Introduction, Array vs. linked list, Representation of linked lists in Memory, Traversing a Linked List, Insertion, Deletion
26 Feb, 2025	Maha Shivratri

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms Prashantika P Sanduja Class- BCA II Year (4th Semester) Subject- Data Structures and Applications Paper- B23-CAP-401

March, 2025 1 st Week	Searching into a Linked list, Type of Linked List.			
1 March, 2025				
2 March, 2025	Sunday			
2 nd Week	Array Representation of Stack, Linked List Representation of Stack,			
3 March – 8 March	Algorithms for Push and Pop, Application of Stack: Polish Notation, Postfix Evaluation Algorithms, Infix to Postfix Conversion, Infix to Prefix Conversion, Recursion.			
3 rd Week 9 March - 16 March	Holi Vacations			
4 th Week	Simple Queue, Double Ended Queue, Circular Queue, Priority Queue,			
	Representation of Queues as Linked List and Array, Applications of Queue.			
17 March 22 March	Algorithm on Insertion and Deletion in Simple Queue and Circular Queue.			
	Priority Queues.			
	Thomy Quodes.			
23 March, 2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev			
5 th Week				
24 March – 29 March	Revision of Unit II & Unit III			
30 March, 2025	Sunday			
6 th Week	Id-ul- Fitr			
31 March, 2025				

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms Prashantika P Sanduja Class- BCA II Year (4th Semester) Subject- Data Structures and Applications Paper- B23-CAP-401

April, 2025 1 st Week 1 April – 5 April	Definitions and Concepts, Representation of Binary Tree, Binary Tree Traversal (Inorder, postorder, preorder), Binary Search Trees – Definition, Operations viz., searching, insertions and deletion;			
6 April, 2024	Sunday, Ram Navmi			
2 nd Week 7 April - 12 April	Searching and Sorting Techniques, Sorting Techniques: Bubble sort, Merge sort, Selection sort, Quick sort, Insertion Sort. Searching Techniques: Sequential Searching, Binary Searching.			
10 April, 2025	Mahavir Jayanti			
13 April, 2025	Sunday, Vaisakhi			
14 April, 2025	Dr. B.R. Ambedkar Jayanti			
3 rd Week 15 April - 19 April	Revision of Unit IV			
20 April, 2025	Sunday			
4 th Week 21 April - 28 April	Sessional Exams			
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti Akshya Tritya			

Lesson Plan for the Even Semester (January to May, 2025)

January, 2025 4 th Week 20 Jan-25 Jan	Basic Concepts of Cloud Computing Computer Network Basics. Concepts of Distributed Systems.
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan – 31 Jan	Concepts of Cloud Computing and its Necessity. Cloud Service Providers in use and their Significance.

Lesson Plan for the Even Semester (January to May, 2025)

February, 2025 1 st Week 1 Feb, 2025	Cloud Infrastructure Cloud Pros and Cons.			
2 Feb, 2025	Sunday, Basant Panchmi			
2 nd Week 3 Feb – 8 Feb	Cloud Delivery Models.			
9 Feb, 2025	Sunday			
3 rd Week 10 Feb - 15 Feb	Cloud Deployment Models.			
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday			
4 th Week 17 Feb-22 Feb	Cloud Storage Management Concept of Virtualization. Overview on Virtualization used for Enterprise Solutions.			
23 Feb, 2025	Sunday			
5 th Week 24 Feb- 28 Feb	Key Challenges in managing Information.			
26 Feb, 2025	Maha Shivratri			

Lesson Plan for the Even Semester (January to May, 2025)

7. 7. 2025			
	Identifying the problems of scale and management in big data.		
1 st Week			
1 March, 2025			
2 March, 2025	Sunday		
2 nd Week	Load Balancing, Building Cloud Networks Designing		
3 March – 8 March			
3 rd Week	Holi Vacations		
9 March - 16 March			
4 th Week	Implementing a Data Center-Based Cloud		
17 March – 22 March			
23 March, 2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru &		
20 1/141 cm, 2020	Sukhdev		
5 th Week	Installing Open Source Cloud service. Amazon Web Services (AWS). Google		
24 March – 29 March	Cloud Distance Cloud service. Amazon web services (Aws). Google		
	Cloud Flatioiii.		
30 March, 2025	Sunday		
50 Maich, 2025	Sunday		
6 th Week	Id-ul- Fitr		
31 March, 2025			
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Lesson Plan for the Even Semester (January to May, 2025)

April, 2025 1 st Week 1 April – 5 April	Revision of Unit I
6 April, 2024	Sunday, Ram Navmi
2 nd Week 7 April - 12 April	Revision of Unit II & III
10 April, 2025 13 April, 2025 14 April, 2025	Mahavir Jayanti Sunday, Vaisakhi Dr. B.R. Ambedkar Jayanti
3 rd Week 15 April - 19 April	Revision of Unit IV
20 April, 2025	Sunday
4 th Week 21 April - 28 April	Sessional Exams
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti Akshya Tritya

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher - Ms Prashantika P Sanduja

Class- M.SC. (CS) I Year (2nd Semester) Subject- Distributed Operating System

Paper- M24-CSE-204

January, 2025 4 th Week 20 Jan-25 Jan	Definition and Characteristics. Design Goals - Resource Sharing, Transparency, Openness, Scalability. Types of Distributed Systems - High performance distributed computing systems (Cluster Computing, Grid Computing, Cloud Computing)		
26 Jan, 2025	Sunday, Republic Day		
5 th Week 27 Jan – 31 Jan	Distributed information systems (Distributed transaction processing, Enterprise application integration), Distributed systems for pervasive computing (ubiquitous computing systems, mobile systems, and sensor networks).		

Lesson Plan for the Even Semester (January to May, 2025)

 $Name\ of\ the\ Teacher-Ms\ Prashantika\ P\ Sanduja$

Class- M.SC. (CS) I Year (2nd Semester) Subject- Distributed Operating System

Paper- M24-CSE-204

February, 2025 1 st Week 1 Feb, 2025	Layered architecture, Object Based & Service-oriented architecture, Resource-based architecture, Publish subscribe architecture.		
2 Feb, 2025	Sunday, Basant Panchmi		
2 nd Week 3 Feb – 8 Feb	System Architectures: Client-Server architecture, Multi- Tiered architecture, Peer-to-Peer systems. Middleware and System Models. Layered protocols, Types of Communication, Remote Procedure Call (RPC) – Basic RPC operation, Parameter passing. Remote Method Invocation (RMI), Message-oriented communication.		
9 Feb, 2025	Sunday		
3 rd Week 10 Feb - 15 Feb	Clock Synchronization – Need for synchronization, Cristian's algorithm, Berkeley algorithm, Network time protocol. Logical Clocks - Lamport's timestamps and vector clocks. Mutual Exclusion – Centralized algorithm, Ricart-Agrawala algorithm, Token-based algorithm.		
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday		
4 th Week 17 Feb-22 Feb	Revision of Unit I		
23 Feb, 2025	Sunday		
5 th Week 24 Feb- 28 Feb	Revision of Unit II		
26 Feb, 2025	Maha Shivratri		

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms Prashantika P Sanduja

Class- M.SC. (CS) I Year (2nd Semester) Subject- Distributed Operating System

Paper- M24-CSE-204

March, 2025	Election Algorithms: Bully algorithm, Ring algorithm, applications in leader			
1 st Week	selection.			
1 March, 2025				
2 March, 2025	Sunday			
2 nd Week	Deadlock Handling: Characteristics of deadlocks in distributed systems,			
3 March – 8 March	prevention, avoidance, detection and recovery. ACID properties, concurrency			
	control techniques (locking, timestamp ordering).			
3 rd Week	Holi Vacations			
9 March - 16 March				
4 th Week	Commit Protocols: Two-phase commit (2PC), three-phase commit (3PC),			
17 March – 22 March	r · · · · · · · · · · · · · · · · · · ·			
	considerations.			
23 March, 2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru &			
	Sukhdev			
5 th Week	Scheduling Strategies - Static vs dynamic scheduling, Issues in load distributing,			
24 March – 29 March				
	Sender-Initiated algorithms, Receiver- Initiated algorithms, Symmetrically			
	Initiated algorithms, Adaptive algorithms. Task migration, Issues in Task			
	migration.			
30 March, 2025	Sunday			
6 th Week	Id-ul- Fitr			
31 March, 2025	Tu-u- Fiu			
or march, avas				

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms Prashantika P Sanduja Class- M.SC. (CS) I Year (2nd Semester) Subject- Distributed Operating System Paper- M24-CSE-204

April, 2025 1 st Week 1 April – 5 April	Classification of failures, Backward and Forward Error Recovery, Approaches of Backward-Error Recovery — Operation-Based approach, State-based approach. Recovery in Concurrent systems, Synchronous and Asynchronous check-pointing and Recovery. Fault Tolerance: Issues, Commit protocols, Nonblocking Commit protocols, Voting protocols.
6 April, 2024	Sunday, Ram Navmi
2 nd Week 7 April - 12 April	Revision of Unit III
10 April, 2025 13 April, 2025 14 April, 2025	Mahavir Jayanti Sunday, Vaisakhi Dr. B.R. Ambedkar Jayanti
3 rd Week 15 April - 19 April	Revision of Unit IV
20 April, 2025	Sunday
4 th Week 21 April - 28 April	Sessional Exams
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti Akshya Tritya

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher–Ms. Gurcharan Kaur Class- PGDCA IInd Semester Subject- Computer Science Paper- Artificial Intelligence (M24-CAP-204)

2 Feb, 2025	Sunday, BasantPanchmi			
2 nd Week 8 Feb	Definition, history, and evolution of AI			
9 Feb, 2025	Sunday			
3 rd Week 10Feb -15 Feb	Strong AI vs. Weak AI, Applications of AI			
12 Feb, 2025	Guru RavidasJayanti			
16 Feb, 2025	Sunday			
4 th Week 17 Feb-22 Feb	Knowledge Representation using logic: Propositional logic: syntax, semantics, truth tables, logical connectives, inference rules, Predicate logic: first-order logic, quantifiers			
23 Feb, 2025	Sunday			
5 th Week 24 Feb- 28 Feb	predicates, clausal form and unification; Fuzzy logic: fuzzy sets, membership functions, fuzzy reasoning.			
26 Feb, 2025	MahaShivratri			

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher–Ms. Gurcharan Kaur Class- PGDCA IInd Semester Subject- Computer Science

Paper- Artificial Intelligence (M24-CAP-204)

Search Techniques: Problem formulation: state space representation, Uninformed Search
Sunday
Strategies: Breadth-First Search, Depth-First Search (DFS), Iterative Deepening DFS
Assignment I
Holi Vacations
Informed Search Strategies: Hill climbing, Best-first search, A* algorithm, admissibility, monotonicity, informedness.
Sunday, ShaheediDiwas/ Martyrdom Day of Bhagat Singh, Rajguru&Sukhdev
Search in Two-Player Games: Minimax algorithm, Alpha-Beta pruning. Class Test
Sunday
Id-ul- Fitr

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher–Ms. Gurcharan Kaur Class- PGDCA IInd Semester Subject- Computer Science Paper- Artificial Intelligence (M24-CAP-204)

April,2025 1 st Week 1April –5April	Production Systems: rules, working memory, and control strategies, forward chaining, backward chaining, commutative and non-commutative production systems
6April,2024	Sunday, Ram Navmi
2 nd Week 7April-12April	Expert Systems: Definition and characteristics, Architecture Applications; Genetic Algorithms, Components of GAs Assignment - II
10 April, 2025 13April,2025 14April,2025	MahavirJayanti Sunday, Vaisakhi Dr. B.R.AmbedkarJayanti
3 rd Week 15April -19April	: chromosomes, crossover, mutation selection, replacement, Fitness functions and evolution processes, GA vs. traditional problem solving techniques
20April,2025	Sunday
4 th Week 21April -28April	Sessional Exams
27 April, 2025 29 April, 2025 30 April, 2025	Sunday ParshuramJayanti AkshyaTritya

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher–Ms. Gurcharan Kaur Class- PGDCA IInd Semester Subject- Computer Science Paper- Artificial Intelligence (M24-CAP-204)

May,2025	Machine Learning (ML): Definition and importance, Types: supervised,
1 st Week	unsupervised,reinforcement learning
1 May -3 May	
·	
4May ,2025	Sunday
2 nd Week	Supervised Learning: Linear regression, Decision Trees, k- Nearest Neighbors (k-NN),
5May-10 May	
11May,2025	Sunday
3 rd Week	Neural networks: introduction, perceptron, multilayer networks, back-propagation,
12May-17May	
18May ,2025	Sunday
4 th Week	Unsupervised Learning: Algorithms: k-Means clustering, Hierarchical
19 May - 24 May	clustering, Principal Component Analysis.
19 May - 24 May	crustering, I interput Component i marysis.
25May ,2025	Sunday
5 th Week	
26 May - 31 May	Revision of all Syllabus
29May ,2025	MaharanaPartapJayanti
1 June,2025	UniversityExaminations
Onwards	

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Ms. Gurcharan Kaur Class- BCA IVth Sem 2nd Year Subject- VAC (B23-VAC-417)

Paper- E-Commerce

2 nd Week 8 Feb	Introduction – Meaning of E –Commerce, Nature, Concepts of E- Commerce
0 Feb. 2025	Sunday
9 Feb, 2025 3 rd Week	Sunday Adventages and reasons for transacting online
10Feb -15 Feb	Advantages and reasons for transacting online
12 Ech 2025	Comp Decided Learner
12 Feb, 2025 16 Feb, 2025	Guru RavidasJayanti Sunday
4 th Week 17 Feb-22 Feb	Categories of e-commerce
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Planning Online Business: nature and dynamics of the internet
26 Feb, 2025	MahaShivratri

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Ms. Gurcharan Kaur Class- BCA IVth Sem 2nd Year Subject- VAC (B23-VAC-417) Paper- E-Commerce

March,2025 1st	pure online vs. brick and click business.
Week	
1March, 2025	
2 March,2025	Sunday
2 nd Week	
3 March-8 March	Revision of Unit I
	Class Test
	Technology for Online Business – internet
3 rd Week	Holi Vacations
9 March - 16 March	
4 th Week	IT infrastructure; middleware contents, text and integrating e-business
17 March-22 March	applications
23 March,2025	Sunday, ShaheediDiwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week	mechanism of making payment through internet: online payment
24 March–29 March	mechanism, electronic payment systems, payment gateways
	mechanism, electronic payment systems, payment gateways
	Assignment I
30 March,2025	Sunday
6 th Week	Id-ul- Fitr
31 March, 2025	

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Ms. Gurcharan Kaur Class- BCA IVth Sem 2nd Year Subject- VAC (B23-VAC-417) Paper- E-Commerce

April,2025 1 st Week 1April –5April	Applications in e-commerce – e-commerce applications in manufacturing, wholesale
6April,2024	Sunday, Ram Navmi
2 nd Week 7April-12April	Applications in e-commerce – retail and service sector.
10 April, 2025	MahavirJayanti
13April,2025 14April,2025	Sunday, Vaisakhi Dr. B.R.AmbedkarJayanti
3 rd Week 15April -19April	Virtual Existence – Concepts, working, advantages and pitfalls of virtual Organizations
	Assignment II
20April,2025	Sunday
4 th Week 21April -28April	Sessional Exams
27 April, 2025 29 April, 2025 30 April, 2025	Sunday ParshuramJayanti AkshyaTritya

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher– Ms. Gurcharan Kaur Class- BCA IVth Sem 2nd Year Subject- VAC (B23-VAC-417) Paper- E-Commerce

May,2025 1 st Week 1 May -3 May	Security in e-commerce: digital signatures, network security, data Encryption secret keys, data encryption.
4May ,2025	Sunday
2 nd Week 5May-10 May	Revision of all Syllabus
1 June,2025 Onwards	UniversityExaminations

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher–Ms. Gurcharan Kaur Class- B.Sc + B.A. (Computer Science) IVth Semester 2nd Year Subject- Computer Science Paper- Data Management with DBMS (B23-CSE-401)

2 nd Week 8 Feb	Basic Concepts: Data, information, records, files schema and instance etc. Limitations of file- based approach,
9 Feb, 2025	Sunday
3 rd Week 10Feb -15 Feb	Characteristics of datadbase approach, data base management system (DBMS), DBMS Functions and Componets, Database Interfaces, Advantages and Disadvantages of DBMS.
12 Feb, 2025	Guru RavidasJayanti
16 Feb, 2025	Sunday
4 th Week 17 Feb-22 Feb	Database USERs: Data and Database Administrator, Role and Responsibilities of Database Administrator, Database Designers, Application Developers etc
23 Feb, 2025	Sunday
5 th Week	Database System Architecture: 1- Tier, 2- Tier & Three Levels of
24 Feb- 28 Feb	Architecture, External, Conceptual and Internal Levels Assignment-I
26 Feb, 2025	MahaShivratri

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher-Ms. Gurcharan Kaur Class- B.Sc + B.A. (Computer Science) IVth Semester 2nd Year **Subject- Computer Science**

Paper- Data Management with DBMS (B23-CSE-401)

March,2025 1st Week 1March, 2025 2 March,2025 2ndWeek 3 March—8 March	Schemas, Mappings and Instances, Data Independence-Logical and Physical Data Independence Sunday Data Models: Hierarchical, Network and Relational Data Models Entity – Relationship Model: Entity, Entity Sets, Entity Type, Attributes: Type of Attributes
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March–22 March	Keys, Integrity Constraints, Designing of ER Diagram, Symbolic Notations for Designing, ER Diagram
23 March,2025	Sunday, ShaheediDiwas/ Martyrdom Day of Bhagat Singh, Rajguru&Sukhdev
5 th Week 24 March–29 March	SQL Meaning, Purpose, and need of SQL, Data types, SQL Components DDL, DML, DCL, Basic Queries Class Test
30 March,2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher–Ms. Gurcharan Kaur Class- B.Sc +B.A. (Computer Science) IVth Semester 2nd Year Subject- Computer Science Paper- Data Management with DBMS (B23-CSE-401)

April,2025 1 st Week 1April –5April	join operations and Sub-queries views, Specifying indexes, Constraints an its implementation in SQL
6April,2024	Sunday, Ram Navmi
2 nd Week 7April-12April	Relational Algebra: Basic Operations : Select , Project, Join , Union, Intersection, Difference and Cartesian Product Assignment- II
10 April, 2025 13April,2025	MahavirJayanti Sunday, Vaisakhi
14April,2025	Dr. B.R.AmbedkarJayanti
3 rd Week 15April -19April	Relational Calcu; us: Tuple Relational and Domain Relational Calculus, Relational Algebra Vs. Relational Calculus. Relational Model: Functional Dependency, Characteristics, Inference Rules for Functional Dependency, Types of Functional Dependency,
20April,2025	Sunday
4 th Week 21April -28April	Sessional Exams
27 April, 2025 29 April, 2025 30 April, 2025	Sunday ParshuramJayanti AkshyaTritya

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher–Ms. Gurcharan Kaur Class- B.Sc +B.A.(Computer Science) IVth Semester 2nd Year Subject- Computer Science Paper- Data Management with DBMS (B23-CSE-401)

May,2025 1 st Week	Normalization: Benefits and Need of Normalization, Normal Forms based on Primary Keys- (1 NF,2NF
1 May -3 May	
4May ,2025	Sunday
2 nd Week 5May–10 May	3NF,BCNF),Multi-valued Dependencies,4NF,join dependencies, 5NF, Domain Key Normal Form
11May,2025	Sunday
3 rd Week 12May-17May	Revision of all Syllabus

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher - Ms. Gurcharan Kaur

Class- BCA I (II Semester) Subject- Computers Science

Sunday Concepts of Cloud Computing and its Necessity. Cloud Service Providers in use and their Significance.
Concepts of Cloud Computing and its Necessity. Cloud Service Providers
Guru RavidasJayanti Sunday
Cloud Infrastructure Cloud Pros and Cons.
Sunday
Cloud Delivery Models. Cloud Deployment Models Assignment – I
MahaShivratri

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher - Ms. Gurcharan Kaur

Class- BCA I (II Semester) Subject- Computers Science

March,2025 1 st Week	Cloud Storage Management Concept of Virtualization and Load Balancing.
1March, 2025	
2 March,2025	Sunday
2 nd Week	Overview on Virtualization used for Enterprise Solutions.
3 March-8 March	1
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week	
17 March-22 March	Key Challenges in managing Information.
23 March,2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week	Identifying the problems of scale and management in big data
24 March-29 March	
	Class Test
30 March,2025	Sunday
6 th Week	Id-ul- Fitr
31 March, 2025	

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher - Ms. Gurcharan Kaur

Class- BCA I (II Semester) Subject- Computers Science

April,2025 1 st Week 1April –5April	Building Cloud Networks Designing and Implementing a Data Center-Based
6April,2024	Sunday, Ram Navmi
2 nd Week 7April-12April	Cloud Installing Open Source Cloud service
10 April, 2025	MahavirJayanti
13April,2025	Sunday, Vaisakhi
14April,2025	Dr. B.R.AmbedkarJayanti
3 rd Week	Amazon Web Services (AWS). Google Cloud Platform.
15April -19April	Assignment – II
20April,2025	Sunday
4 th Week	The state of the s
21April -28April	Sessional Exams
27 April, 2025	Sunday
29 April, 2025	ParshuramJayanti
30 April, 2025	AkshyaTritya

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher - Ms. Gurcharan Kaur

Class- BCA I (II Semester) Subject- Computers Science

May,2025 1 st Week 1 May -3 May	Revision of all syllabus
4May ,2025	Sunday
2 nd Week 5May–10 May	Revision of all syllabus
1 June,2025 Onwards	UniversityExaminations

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. Gurcharan Kaur Class- B.Com I (II Semester) Subject- Computers Science Paper- SEC(Cloud Computing Skills)

2 nd Week	Dosio Concerts of Cloud Computing Computer Network Design
	Basic Concepts of Cloud Computing Computer Network Basics.
8 Feb	Concepts of Distributed Systems
9 Feb, 2025	Sunday
3 rd Week	Concepts of Cloud Computing and its Necessity. Cloud Service Providers
10Feb -15 Feb	in use and their Significance.
12 Feb, 2025	Guru RavidasJayanti
16 Feb, 2025	Sunday
4 th Week	Cloud Infrastructure Cloud Pros and Cons.
17 Feb-22 Feb	
23 Feb, 2025	Sunday
5 th Week	Cloud Delivery Models. Cloud Deployment Models
24 Feb- 28 Feb	
	Assignment – I
26 Feb, 2025	MahaShivratri
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Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. Gurcharan Kaur Class- B.Com I (II Semester) Subject- Computers Science Paper- SEC(Cloud Computing Skills)

March,2025 1 st Week	Cloud Storage Management Concept of Virtualization and Load Balancing.
1March, 2025	
2 March,2025	Sunday
2 nd Week	Overview on Virtualization used for Enterprise Solutions.
3 March-8 March	·
3 rd Week	Holi Vacations
9 March - 16 March	
4 th Week	Key Challenges in managing Information.
17 March–22 March	Rey Chanenges in managing information.
23 March,2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week	Identifying the problems of scale and management in big data
24 March–29 March	
	Class Test
30 March,2025	Sunday
6 th Week	Id-ul- Fitr
31 March, 2025	

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. Gurcharan Kaur Class- B.Com I (II Semester) Subject- Computers Science Paper- SEC(Cloud Computing Skills)

April,2025 1 st Week 1April –5April	Building Cloud Networks Designing and Implementing a Data Center-Based
6April,2024	Sunday, Ram Navmi
2 nd Week 7April-12April	Cloud Installing Open Source Cloud service
10 April, 2025	MahavirJayanti
13April,2025	Sunday, Vaisakhi
14April,2025	Dr. B.R.AmbedkarJayanti
3 rd Week	Amazon Web Services (AWS). Google Cloud Platform.
15April -19April	Assignment – II
20April,2025	Sunday
4 th Week	
21April -28April	Sessional Exams
27 April, 2025	Sunday
29 April, 2025	ParshuramJayanti
30 April, 2025	AkshyaTritya

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. Gurcharan Kaur Class- B.Com I(II Semester) Subject- Computers Science Paper- SEC(Cloud Computing Skills)

May,2025 1 st Week 1 May -3 May	Revision of all syllabus
4May ,2025	Sunday
2 nd Week 5May–10 May	Revision of all syllabus
1 June,2025 Onwards	UniversityExaminations

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. LEENA

Class- M. Sc. I

Subject- Advanced Web Technologies

January, 2025 4 th Week 20 Jan-25 Jan	Basics of Front End Development: Overview of web development (Front End vs. Back End).
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan – 31 Jan	Understanding the MERN stack and its components, Tools and environments (text editors, browsers, version control with Git).

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. LEENA

Class- M. Sc. I

Subject- Advanced Web Technologies

February, 2025 1 st Week 1 Feb, 2025	Basics of JavaScript: Introduction to JavaScript, Variables, data types, and operators, Control structures (if, else, switch, loops); Functions and Scope.
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Feb	Defining and invoking functions, Function expressions and arrow functions, Scope and closures; Objects and Arrays.
9 Feb, 2025	Sunday
3 rd Week 10 Feb - 15 Feb	Creating and manipulating objects, Array methods and iteration; Event handling Introduction to React: Overview and advantages of React, Setting up a React development environment (using Create React App).
12 Feb, 2025	Guru Ravidas Jayanti
16 Feb, 2025	Sunday
4 th Week 17 Feb-22 Feb	JSX (JavaScript XML): Understanding JSX syntax, Embedding expressions in JS, JSX best practices; Components and Props: Functional and class components.
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Props and component communication, Prop types and default props.; State and Lifecycle: Understanding state in React, State management in class components.
26 Feb, 2025	Maha Shivratri

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. LEENA

Class- M. Sc. I

Subject- Advanced Web Technologies

March, 2025 1 st Week 1 March, 2025	Lifecycle methods (component Did Mount, component Did Update, component Will Unmount); Event Handling and Forms.
2 March, 2025	Sunday
2 nd Week 3 March – 8 March	Introduction to Node JS: Node JS process model, Advantages, Traditional web server model.
3 rd Week	Holi Vacations
9 March - 16 March	
4 th Week 17 March – 22 March	Setup Install Node.js on windows, REPL, Node JS console, Node JS
23 March, 2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March – 29 March	Events: Event Emitter class, inheriting events, Node Package Manager, Building Web Servers.
30 March, 2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. LEENA

Class- M. Sc. I

Subject- Advanced Web Technologies

April, 2025	Creating a basic HTTP server, Handling HTTP requests and responses,
1st Week	Understanding request methods (GET, POST, PUT, DELETE).
1 April – 5 April	
6 April, 2024	Sunday, Ram Navmi
2 nd Week	Express.js Basics: Introduction to Express.js, Setting up Express projects,
7 April - 12 April	Understanding routing and middleware.
10 April, 2025	Mahavir Jayanti
13 April, 2025	Sunday, Vaisakhi
14 April, 2025	Dr. B.R. Ambedkar Jayanti
3 rd Week	Using template engines (e.g., EJS) for server-side rendering, Designing
15 April - 19 April	RESTful APIs.
20 April, 2025	Sunday
4 th Week	
21 April - 28 April	Sessional Exams
27 April, 2025	Sunday
29 April, 2025	Parshuram Jayanti
30 April, 2025	Akshya Tritya
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Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. LEENA

Class- M. Sc. I

Subject- Advanced Web Technologies

May , 2025 1 st Week 1 May - 3 May	CRUD operations, Structuring API routes. Built-in middleware (e.g., bodyparser), Creating custom middleware, Error handling middleware.User authentication using JWT (JSON Web Tokens) and sessions.
4 May, 2025	Sunday
2 nd Week	Built-in middleware (e.g., body-parser), Creating custom middleware, Error
5 May – 10 May	handling middleware.User authentication using JWT (JSON Web Tokens) and sessions.
11 May, 2025	Sunday
3 rd Week 12 May - 17 May	Revision
18 May , 2025	Sunday
4 th Week	University Examinations
19 May ,2025	
Onwards	

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. LEENA

Class- M. Sc. I

Subject- Advanced Database Systems

January, 2025 4 th Week 20 Jan-25 Jan	Database Systems Concepts and Architecture: DBMS architecture and Data Independence, Entity Relationship Model.
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan – 31 Jan	Entity Types, Entity Sets, Attributes & keys, Relationships Types & Instances, E-R Diagrams.

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. LEENA

Class- M. Sc. I

Subject- Advanced Database Systems

February, 2025 1 st Week 1 Feb, 2025	Design of an E-R Database Schema. The Enhanced Entity-Relationship (EER) Model.
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Feb	Defining and Subclasses, Super classes, Inheritance, Specialization and Generalization.
9 Feb, 2025	Sunday
3 rd Week 10 Feb - 15 Feb	SQL: Data Definition and Data Types, DDL, DML, and DCL, Views & Queries in SQL.
12 Feb, 2025 16 Feb, 2025	Guru Ravidas Jayanti Sunday
4 th Week 17 Feb-22 Feb	Specifying Constraints & Indexes in SQL. PL/SQL: Architecture of PL/SQL, Basic Elements of PL/SQL, PL/SQL Transactions.
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Cursors and Triggers. Relational Database Design: Functional Dependencies, Normal Forms Based on Primary Keys- (1NF, 2NF, 3NF, BCNF).
26 Feb, 2025	Maha Shivratri

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. LEENA

Class- M. Sc. I

Subject- Advanced Database Systems

March, 2025	Multi-valued Dependencies, 4 NF, Join dependencies, 5 NF, Domain Key
1 st Week	Normal Form.
1 March, 2025	TOTHER FORM.
2 March, 2025	Sunday
2 nd Week	Query Processing and Optimization, Transaction Processing: Introduction to
3 March – 8 March	Transaction Processing. Transaction and System Concepts.
3 rd Week	Holi Vacations
9 March - 16 March	
4 th Week	, Desirable Properties of Transactions,
17 March – 22 March	Concurrency Control Techniques: Two-Phase
	Locking Techniques,
23 March, 2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week	Timestamp Ordering, Serializability. Database
24 March – 29 March	Backup and Recovery: Recovery facilities,
	Recovery Techniques.
	recovery reciniques.
30 March, 2025	Sunday
6 th Week	Id-ul- Fitr
31 March, 2025	

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. LEENA

Class- M. Sc. I

Subject- Advanced Database Systems

1 st Week	Databases for Advance Applications: Architecture for Parallel Database and Distributed Database.
1 April – 5 April	
6 April, 2024	Sunday, Ram Navmi
2 nd Week	Active Database Concept and Triggers.
7 April - 12 April	
10 April, 2025	Mahavir Jayanti
13 April, 2025	Sunday, Vaisakhi
14 April, 2025	Dr. B.R. Ambedkar Jayanti
3 rd Week	
15 April - 19 April	Temporal Databases
	Concepts, Spatial and
	Multimedia Databases,
20 April, 2025	Sunday
4 th Week	
21 April - 28 April	Sessional Exams
27 April, 2025	Sunday
29 April, 2025	Parshuram Jayanti
30 April, 2025	Akshya Tritya

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. LEENA

Class- M. Sc. I

Subject- Advanced Database Systems

May, 2025	Deductive Databases, Geographical Information System, Mobile
1 st Week	Databases.
1 May - 3 May	
4 May , 2025	Sunday
2 nd Week	Web Databases, XML Schema, Object- Based Databases, OLTP Vs OLAP.
5 May – 10 May	
11 3 / 2025	
11 May, 2025	Sunday
3 rd Week	
12 May - 17 May	Revision
18 May , 2025	Sunday
4 th Week	University Examinations
19 May ,2025	
Onwards	

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. LEENA

Class- M. Sc. II

Subject- SECURITY IN COMPUTING

Paper- MS-15-44(IV)

January, 2025 4 th Week 20 Jan-25 Jan	Computer Security Concepts, Threats, Attacks and Assets, Security Functional Requirements.
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan – 31 Jan	Security Architecture and Scope of Computer Security, Computer Security Trends.

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. LEENA

Class- M. Sc. II

Subject- SECURITY IN COMPUTING

Paper- MS-15-44(IV)

February, 2025 1 st Week 1 Feb, 2025	Computer Security Strategies. Program Security: Secure Program, Non-malicious Program Error.
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Feb	Viruses and other Malicious Code, Targeted Malicious Code, Control against Program Threats.
9 Feb, 2025	Sunday
3 rd Week 10 Feb - 15 Feb	Database Security: Database Management System, Relational Databases, Database Access Control.
12 Feb, 2025	Guru Ravidas Jayanti
16 Feb, 2025	Sunday
4 th Week 17 Feb-22 Feb	Inference, Security Requirements, Reliability and Integrity, Sensitive Data, Database Encryption. Network Security: Threats in Network.
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Network Security Controls, Firewall- Need for firewall, Characteristics, Types of firewall, Firewall Basing, Intrusion Detection System- Types, Goals of IDS, IDS strengths and Limitations.
26 Feb, 2025	Maha Shivratri

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. LEENA

Class- M. Sc. II

Subject- SECURITY IN COMPUTING

Paper- MS-15-44(IV)

March, 2025	Internet Security Protocols and Standards: Secure Socket Layer (SSL) and
1 st Week	Transport Layer Security (TLS).
1 March, 2025	
2 March, 2025	Sunday
2 nd Week	IPv4 and IPv6 Security, Kerberos 672, X.509 678, Public Key Infrastructure. Linux
3 March – 8 March	Security Model, File System Security, Linux Vulnerability.
3 rd Week	Holi Vacations
9 March - 16 March	
4 th Week	Linux System Hardening, Application Security.
17 March – 22 Marc	ch Window Security Architecture.
23 March, 2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru &
	Sukhdev
5 th Week	Windows Vulnerability, Windows Security
24 March – 29 Marc	ch Defense, Browser Defenses.
30 March, 2025	Sunday
6 th Week	Id-ul- Fitr
31 March, 2025	
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KUMARI VIDYAVATI ANAND D.A.V College for Women, Karnal

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. LEENA

Class- M. Sc. II

Subject- SECURITY IN COMPUTING

Paper- MS-15-44(IV)

April, 2025 1 st Week 1 April – 5 April	Physical Security Threats, Physical Security Prevention and Mitigation Measures, Recovery form Physical Security Breaches.
6 April, 2024	Sunday, Ram Navmi
2 nd Week 7 April - 12 April	Security Auditing Architecture, Security Audit Trail, Security Risk assessment, Security.
10 April, 2025	Mahavir Jayanti
13 April, 2025 14 April, 2025	Sunday, Vaisakhi Dr. B.R. Ambedkar Jayanti
3 rd Week 15 April - 19 April	Controls or Safeguard, IT
	Security Plan,
20 April, 2025	Sunday
4 th Week 21 April - 28 April	Sessional Exams
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti Akshya Tritya

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms. LEENA Class- M. Sc. II Subject- SECURITY IN COMPUTING Paper- MS-15-44(IV)

1 st Week	Cybercrime and Computer Crime.
1 May - 3 May	
4 May , 2025	Sunday
2 nd Week 5 May – 10 May	Intellectual Property, Privacy, Ethical Issues.
11 May, 2025	Sunday
3 rd Week 12 May - 17 May	Revision
18 May , 2025	Sunday
4 th Week 19 May ,2025 Onwards	University Examinations

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher–Ms. Mandeep Kaur Class-BCA II Year (4th sem) Subject-Computer Science Paper- Front-end Development (B23-CAP-402)

February, 2025 1 st Week 1 Feb, 2025	Objects in JavaScript: Introduction to objects, Type of objects in JavaScript
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Feb	Creating objects, Object methods, Constructor function
9 Feb, 2025	Sunday
3 rd Week 10Feb -15 Feb	Prototype in JavaScript, Inheritance using prototype chain
12 Feb, 2025	Guru Ravidas Jayanti
16 Feb, 2025	Sunday
4 th Week 17 Feb-22 Feb	Regular Expressions: Introduction to RegExp, Regular expression usage, Modifiers
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Reg Exp patterns, Reg Exp methods, String methods for Reg Exp, Type conversion in JavaScript
26 Feb, 2025	Maha Shivratri

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher–Ms. Mandeep Kaur Class-BCA II Year (4th sem) Subject-Computer Science Paper- Front-end Development (B23-CAP-402)

Week	
1March, 2025	
*	Sunday
	Event bubbling and capturing, Event listeners, Event types.
3 March – 8 March	
ard	
	Holi Vacations
9 March - 16 March	
4 th Week 17 March–22	Document Object Model (DOM): Introduction to DOM, Types of DOM,
March	Document Object Model (DOM). Indoduction to DoM, Types of DoM,
	DOM standards and methods, Manipulating documents using DOM,
	Handling images,
23 March,2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru &
	Sukhdev
5 th Week	
	Table manipulation, Animation, Node and Node-list handling
March	
30 March,2025	Sunday
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	Id-ul- Fitr
31 March, 2025	

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher–Ms. Mandeep Kaur Class-BCA II Year (4th sem) Subject-Computer Science Paper- Front-end Development (B23-CAP-402)

April,2025 1 st Week 1April –5April	Browser Object Model (BOM): Introduction to BOM, DOM vs BOM differences,
6April,2024	Sunday, Ram Navmi
2 nd Week 7April-12April	Window object and methods, BOM navigator, BOM history, BOM location, BOM timer,
10 April, 2025 13April,2025 14April,2025	Mahavir Jayanti Sunday, Vaisakhi Dr. B.R. Ambedkar Jayanti
3 rd Week 15April -19April	Introduction to Cookies, Session and persistent cookies Form Handling: Introduction to forms, Form processing, Forms object,
20April,2025	Sunday
4 th Week 21April -28April	Sessional Exams
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti AkshyaTritya

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher–Ms. Mandeep Kaur Class-BCA II Year (4th sem) Subject-Computer Science Paper- Front-end Development (B23-CAP-402)

May,2025 1 st Week 1 May -3 May	Accessing data from forms, Form validation, Additional features in forms, Validation APIs
4May ,2025	Sunday
2 nd Week 5May–10 May	Introduction to jQuery: jQuery Syntax,
11May,2025	Sunday
3 rd Week 12May-17May	JQuery Selectors, jQuery Events, jQuery Effects, jQuery HTML,
18May ,2025	Sunday
4 th Week 19 May - 24 May	jQuery Traversing, jQuery AJAX, jQuery Misc.
25May ,2025	Sunday
5 th Week 26 May - 31 May	REVISION OF SYLLABUS
29May ,2025	Maharana Partap Jayanti
1 June,2025 Onwards	University Examinations

Lesson Plan for the Even Semester (January to May, 2025)

February, 2025 1 st Week 1 Feb, 2025	Introduction: History of Computer Graphics (CG), Applications of Computer Graphics, Components of interactive graphics systems Sunday, Basant Panchmi
2 nd Week	Display devices: Refresh CRT, Color CRT, Plasma Panel displays LCD
3 Feb – 8 Feb	Panels
9 Feb, 2025	Sunday
3 rd Week 10Feb -15 Feb	Raster-scan System, Random scan System, Graphic software, Input/Output Devices, Tablets
12 Feb, 2025	Guru Ravidas Jayanti
16 Feb, 2025	Sunday
4 th Week	Output Primitives: Points and Lines, Line Drawing Algorithms:
17 Feb-22 Feb	DDA algorithm, Bresenham's algorithm.
	Circle drawing Algorithms: Polynomial Method, Bresenham's algorithm
23 Feb, 2025	Sunday
5 th Week	Parametric representation of Cubic Curves, Bezier Curves
24 Feb- 28 Feb	
26 Feb, 2025	Maha Shivratri

Lesson Plan for the Even Semester (January to May, 2025)

March,2025 1st	2D Transformation: Use of Homogeneous Coordinates Systems
Week	
1March, 2025	
2 March,2025	Sunday
2 nd Week	Composite Transformation: Translation, Scaling, Rotation, Mirror
3 March – 8 March	Reflection
3 rd Week	Holi Vacations
9 March - 16 March	
4 th Week	David Allia Dia
17 March-22	Rotation about an Arbitrary Point.
March	Clipping and Windowing, Clipping
	Chipping and Windowing, Chipping
	Operations
23 March,2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru &
	Sukhdev
5 th Week	Line Climina Algorithms, The Mid Doint
24 March–29 March	Line Clipping Algorithms: The Mid-Point
March	subdivision method
30 March,2025	Sunday
6 th Week	Id-ul- Fitr
31 March, 2025	
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Lesson Plan for the Even Semester (January to May, 2025)

April,2025 1 st Week 1April –5April	Cohen-Sutherland Line Clipping Algorithms, Polygon Clipping, Sutherland Hodgeman Algorithms
6April,2024	Sunday, Ram Navmi
2 nd Week 7April-12April	Text Clipping
10 April, 2025 13April,2025 14April,2025	Mahavir Jayanti Sunday, Vaisakhi Dr. B.R. Ambedkar Jayanti
3 rd Week 15April -19April	3-D Graphics: 3-D object representations
20April,2025	Sunday
4 th Week 21April -28April	Sessional Exams
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti AkshyaTritya

Lesson Plan for the Even Semester (January to May, 2025)

May,2025 1 st Week 1 May -3 May	3-D Transformations: Translation, Rotation, Scaling, Projections
4May ,2025	Sunday
2 nd Week 5May–10 May	Hidden surface elimination: Back face removal,
11May,2025	Sunday
3 rd Week 12May-17May	Depth Buffer algorithm, Scan-line algorithm, Depth sort algorithm,
18May ,2025	Sunday
4 th Week 19 May - 24 May	Shading.
25May ,2025	Sunday
5 th Week 26 May - 31 May	REVISION OF SYLLABUS
29May ,2025	Maharana Partap Jayanti
1 June,2025 Onwards	University Examinations

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Saumya Kumar **Class**- PGDCA 2nd sem

Class- PGDCA 2nd sem Subject- Computer Network Paper- M24-CAP-202

4th Week 20 Jan-25 Jan 26 Jan, 2025 Sunday, Republic Day Sth Week 27 Jan - 31 Jan Reference Models: OSI and TCP/IP February, 2025 1st Week 1 Feb, 2025 Sunday, Basant Panchmi 2nd Week 3 Feb - 8 Feb 205 Sunday Sunday Sunday Networking Models & Applications: Centralized, Decentralized, and Distributed; Client-Server and Peer-to-Peer; File sharing & Web-based Connection to Example Networks: The Internet and its Conceptual View Internet Services; Accessing The Internet 12 Feb, 2025 Guru Ravidas Jayanti Sunday Sth Week 17 Feb-22 Feb 23 Feb, 2025 Sunday Sunday Sunday Connection-Oriented Networks: X.25, Frame Relay and ATM; Sth Week 24 Feb- 28 Feb Data Communication Concepts & Components: Digital and Analog Data and Signals, Asynchronous and Synchronous transmission; bit rate & baud, bandwidth & Channel Capacity; Nyquist Bit Rate, Shannon Capacity; Network Performance Parameters; Transmission Impairment; March, 2025 1st Week 1 March, 2025 1st Week 2 March, 2025 Sunday Sunday	January, 2025	Network Characterization: Goals and Applications; Categorization according to
Sunday, Republic Day		Size, Purpose, Design issues & Transmission Technologies
Sth Week 27 Jan – 31 Jan Reference Models: OSI and TCP/IP February, 2025 1st Week 1 Feb, 2025 2 Feb, 2025 2 Feb, 2025 3 Network Architecture and Service Models; Design issues for the Layers; Reference Models: OSI and TCP/IP; Comparison of OSI & TCP/IP; Data Transmission using TCP/IP; Data Transmission using TCP/IP; Sunday, Basant Panchmi 2nd Week 3 Feb – 8 Feb Distributed; Client-Server and Peer-to-Peer; File sharing & Web- based Content Distribution Networks 9 Feb, 2025 3rd Week 10 Feb - 15 Feb Introduction to Example Networks: The Internet and its Conceptual View Internet Services; Accessing The Internet 12 Feb, 2025 16 Feb, 2025 16 Feb, 2025 17 Feb-22 Feb 23 Feb, 2025 23 Feb, 2025 5th Week 24 Feb - 28 Feb Data Communication Concepts & Components: Digital and Analog Data and Signals, Asynchronous and Synchronous transmission; bit rate & baud, bandwidth & Channel Capacity; Nyquist Bit Rate, Shannon Capacity; Network Performance Parameters; Transmission Impairment; March, 2025 1st Week 1 March, 2025 1st Week 1 March, 2025 1st Week 1 March, 2025 Sunday S		
Reference Models: OSI and TCP/IP February, 2025 1st Week 1 Feb, 2025 2 Feb, 2025 2 Feb, 2025 Sunday, Basant Panchmi 2nd Week 3 Feb - 8 Feb Distributed; Client-Server and Peer-to-Peer; File sharing & Web- based , Content Distribution Networks Sunday 3rd Week 10 Feb - 15 Feb 12 Feb, 2025 3rd Week 10 Feb - 2025 4rh Week 11 Feb- 2025 3rd Week 12 Feb, 2025 4rh Week 13 Feb - 28 Feb 23 Feb, 2025 3 Feb, 2025 Sunday The Week 24 Feb - 28 Feb March, 2025 Maha Shivratri March, 2025 March, 2025 March, 2025 Manday Reference Models: OSI and TCP/IP Functions of layers and protocols of TCP/IP; Comparison of OSI & TCP/IP; Data Transmission using TCP/IP; Data Transmission using TCP/IP; Comparison of OSI & TCP/IP; Comparison of OSI & TCP/IP; Data Transmission using TCP/IP; Comparison of OSI & TCP/IP; Comparison of OSI & TCP/IP; Data Transmission using TCP/IP; Comparison of OSI & TCP/IP; Data Transmission using TCP/IP; Comparison of OSI & TCP/IP; Data Transmission using TCP/IP; Comparison of OSI & TCP/IP; Comparison of OSI & TCP/IP; Data Transmission webs. TcP/IP; Comparison of OSI & TCP/	26 Jan, 2025	Sunday, Republic Day
February, 2025 1st Week 1 Feb, 2025 2 Feb, 2025 2 Feb, 2025 2 Feb, 2025 Sunday, Basant Panchmi 2nd Week 3 Feb — 8 Feb Distributed; Client-Server and Peer-to-Peer; File sharing & Web- based Content Distribution Networks 9 Feb, 2025 3rd Week 10 Feb - 15 Feb User Introduction to Example Networks: The Internet and its Conceptual View Internet Services; Accessing The Internet 12 Feb, 2025 Guru Ravidas Jayanti Sunday 4th Week 17 Feb-22 Feb 23 Feb, 2025 Sunday 5th Week 24 Feb- 28 Feb March, 2025 Maha Shivratri March, 2025 March, 2025 March, 2025 March, 2025 March, 2025 Sunday Functions of layers and protocols of TCP/IP; Comparison of OSI & TCP/IP; Data Transmission using TCP/IP; Data Transmission using TCP/IP; Data Transmission is Centralized, Decentralized, and Decentralized, and Distributions: Centralized, Decentralized, Decentralized, and Decentralized, and Decentralized, and Decentralized,		
1st Week 1 Feb, 2025 2 Feb, 2025 2 Sunday, Basant Panchmi 2nd Week 3 Feb - 8 Feb Distributed; Client-Server and Peer-to-Peer; File sharing & Web-based Content Distribution Networks 9 Feb, 2025 3rd Week 10 Feb - 15 Feb Introduction to Example Networks: The Internet and its Conceptual View Internet Services; Accessing The Internet 12 Feb, 2025 16 Feb, 2025 16 Feb, 2025 3 Feb, 2025 3 Feb, 2025 5 Sunday 4th Week 17 Feb-22 Feb 23 Feb, 2025 5 Sunday 5th Week 24 Feb- 28 Feb Data Communication Concepts & Components: Digital and Analog Data and Signals, Asynchronous and Synchronous transmission; bit rate & baud, bandwidth & Channel Capacity; Nyquist Bit Rate, Shannon Capacity; Network Performance Parameters; Transmission Impairment; March, 2025 1st Week 1 March, 2025 1st Week 1 March, 2025 1st Week 1 March, 2025 1st Week 2 March, 2025 Sunday Data Transmission using TCP/IP; Sunday, Basant Panchmi Networking Models & Applications: Centralized, Decentralized, and Distributed, and Distributed, Bridge, Routers, Gateways, Virtual LANs; Guided Transmission Media; Wireless transmission; Satellite communication.	27 Jan – 31 Jan	Reference Models: OSI and TCP/IP
2 Feb, 2025 2 Feb, 2025 Sunday, Basant Panchmi Networking Models & Applications: Centralized, Decentralized, and Distributed; Client-Server and Peer-to-Peer; File sharing & Web- based , Content Distribution Networks 9 Feb, 2025 Sunday 3rd Week 10 Feb - 15 Feb Introduction to Example Networks: The Internet and its Conceptual View Internet Services; Accessing The Internet 12 Feb, 2025 Guru Ravidas Jayanti Sunday 4th Week 17 Feb-22 Feb 23 Feb, 2025 Sunday Sunday Sunday Data Communication Concepts & Components: Digital and Analog Data and Signals, Asynchronous and Synchronous transmission; bit rate & baud, bandwidth & Channel Capacity; Nyquist Bit Rate, Shannon Capacity; Network Performance Parameters; Transmission Impairment; March, 2025 1st Week 1 March, 2025 1st Week 1 March, 2025 Sunday		* * *
2 Feb, 2025 Sunday, Basant Panchmi Networking Models & Applications: Centralized, Decentralized, and Distributed; Client-Server and Peer-to-Peer; File sharing & Web-based , Content Distribution Networks 9 Feb, 2025 Sunday 3rd Week 10 Feb - 15 Feb Introduction to Example Networks: The Internet and its Conceptual View Internet Services; Accessing The Internet 12 Feb, 2025 Guru Ravidas Jayanti Sunday Connection-Oriented Networks: X.25, Frame Relay and ATM; 17 Feb-22 Feb 23 Feb, 2025 Sunday Data Communication Concepts & Components: Digital and Analog Data and Signals, Asynchronous and Synchronous transmission; bit rate & baud, bandwidth & Channel Capacity; Nyquist Bit Rate, Shannon Capacity; Network Performance Parameters; Transmission Impairment; March, 2025 1st Week 1 March, 2025 1st Week 1 March, 2025 1st Week 1 March, 2025 Sunday Sunday		Data Transmission using TCP/IP;
2nd Week 3 Feb - 8 Feb Distributed; Client-Server and Peer-to-Peer; File sharing & Web- based Content Distribution Networks 9 Feb, 2025 Sunday 3rd Week 10 Feb - 15 Feb Introduction to Example Networks: The Internet and its Conceptual View Internet Services; Accessing The Internet 12 Feb, 2025 Guru Ravidas Jayanti Sunday 4th Week Tonnection-Oriented Networks: X.25, Frame Relay and ATM; 17 Feb-22 Feb 23 Feb, 2025 Sunday 5th Week 24 Feb - 28 Feb Data Communication Concepts & Components: Digital and Analog Data and Signals, Asynchronous and Synchronous transmission; bit rate & baud, bandwidth & Channel Capacity; Nyquist Bit Rate, Shannon Capacity; Network Performance Parameters; Transmission Impairment; March, 2025 1st Week 1 March, 2025 Sunday Connectors, Hubs, Transceivers & Media Connectors; Link-Layer Switches, Bridge, Routers, Gateways, Virtual LANs; Guided Transmission Media; Wireless transmission; Satellite communication. Sunday	1 Feb, 2025	
Jistributed; Client-Server and Peer-to-Peer; File sharing & Web- based Content Distribution Networks Feb, 2025 Sunday Jrd Week Introduction to Example Networks: The Internet and its Conceptual View Internet Services; Accessing The Internet Guru Ravidas Jayanti Sunday Connection-Oriented Networks: X.25, Frame Relay and ATM; Feb-22 Feb Ja Feb, 2025 Sunday Sunday Connection-Oriented Networks: X.25, Frame Relay and ATM; Sunday Sunday Sunday Data Communication Concepts & Components: Digital and Analog Data and Signals, Asynchronous and Synchronous transmission; bit rate & baud, bandwidth & Channel Capacity; Nyquist Bit Rate, Shannon Capacity; Network Performance Parameters; Transmission Impairment; March, 2025 Maha Shivratri March, 2025 Maha Shivratri Connectors, Hubs, Transceivers & Media Connectors; Link-Layer Switches, Bridge, Routers, Gateways, Virtual LANs; Guided Transmission Media; Wireless transmission; Satellite communication. Sunday	2 Feb, 2025	Sunday, Basant Panchmi
Jistributed; Client-Server and Peer-to-Peer; File sharing & Web- based Content Distribution Networks Feb, 2025 Sunday Jrd Week Introduction to Example Networks: The Internet and its Conceptual View Internet Services; Accessing The Internet Guru Ravidas Jayanti Sunday Connection-Oriented Networks: X.25, Frame Relay and ATM; Feb-22 Feb Ja Feb, 2025 Sunday Sunday Connection-Oriented Networks: X.25, Frame Relay and ATM; Sunday Sunday Sunday Data Communication Concepts & Components: Digital and Analog Data and Signals, Asynchronous and Synchronous transmission; bit rate & baud, bandwidth & Channel Capacity; Nyquist Bit Rate, Shannon Capacity; Network Performance Parameters; Transmission Impairment; March, 2025 Maha Shivratri March, 2025 Maha Shivratri Connectors, Hubs, Transceivers & Media Connectors; Link-Layer Switches, Bridge, Routers, Gateways, Virtual LANs; Guided Transmission Media; Wireless transmission; Satellite communication. Sunday	2 nd Week	Networking Models & Applications: Centralized, Decentralized, and
3rd Week		
3rd Week 10 Feb - 15 Feb View Internet Services; Accessing The Internet 12 Feb, 2025 16 Feb, 2025 16 Feb, 2025 4th Week 17 Feb-22 Feb 23 Feb, 2025 Sunday Connection-Oriented Networks: X.25, Frame Relay and ATM; 15 Week 24 Feb- 28 Feb Data Communication Concepts & Components: Digital and Analog Data and Signals, Asynchronous and Synchronous transmission; bit rate & baud, bandwidth & Channel Capacity; Nyquist Bit Rate, Shannon Capacity; Network Performance Parameters; Transmission Impairment; March, 2025 Maha Shivratri March, 2025 Sunday Connecting Devices & Transmission Media: Network Interface Cards, Connectors, Hubs, Transceivers & Media Connectors; Link-Layer Switches, Bridge, Routers, Gateways, Virtual LANs; Guided Transmission Media; Wireless transmission; Satellite communication. Sunday		,Content Distribution Networks
10 Feb - 15 Feb View Internet Services; Accessing The Internet 12 Feb, 2025 Guru Ravidas Jayanti Sunday 4th Week Connection-Oriented Networks: X.25, Frame Relay and ATM; 17 Feb-22 Feb 23 Feb, 2025 Sunday 5th Week 24 Feb- 28 Feb Data Communication Concepts & Components: Digital and Analog Data and Signals, Asynchronous and Synchronous transmission; bit rate & baud, bandwidth & Channel Capacity; Nyquist Bit Rate, Shannon Capacity; Network Performance Parameters; Transmission Impairment; March, 2025 Maha Shivratri March, 2025 Connecting Devices & Transmission Media: Network Interface Cards, Connectors, Hubs, Transceivers & Media Connectors; Link-Layer Switches, Bridge, Routers, Gateways, Virtual LANs; Guided Transmission Media; Wireless transmission; Satellite communication. 2 March, 2025 Sunday	9 Feb, 2025	Sunday
12 Feb, 2025 16 Feb, 2025 Guru Ravidas Jayanti Sunday Connection-Oriented Networks: X.25, Frame Relay and ATM; 17 Feb-22 Feb 23 Feb, 2025 Sunday Sunday Data Communication Concepts & Components: Digital and Analog Data and Signals, Asynchronous and Synchronous transmission; bit rate & baud, bandwidth & Channel Capacity; Nyquist Bit Rate, Shannon Capacity; Network Performance Parameters; Transmission Impairment; March, 2025 Maha Shivratri Connecting Devices & Transmission Media: Network Interface Cards, Connectors, Hubs, Transceivers & Media Connectors; Link-Layer Switches, Bridge, Routers, Gateways, Virtual LANs; Guided Transmission Media; Wireless transmission; Satellite communication. 2 March, 2025 Sunday	3 rd Week	Introduction to Example Networks: The Internet and its Conceptual
4th Week 17 Feb-22 Feb 23 Feb, 2025 Sunday	10 Feb - 15 Feb	View Internet Services; Accessing The Internet
4th Week 17 Feb-22 Feb 23 Feb, 2025 Sunday 5th Week 24 Feb- 28 Feb Data Communication Concepts & Components: Digital and Analog Data and Signals, Asynchronous and Synchronous transmission; bit rate & baud, bandwidth & Channel Capacity; Nyquist Bit Rate, Shannon Capacity; Network Performance Parameters; Transmission Impairment; March, 2025 Maha Shivratri Connecting Devices & Transmission Media: Network Interface Cards, Connectors, Hubs, Transceivers & Media Connectors; Link-Layer Switches, Bridge, Routers, Gateways, Virtual LANs; Guided Transmission Media; Wireless transmission; Satellite communication. 2 March, 2025 Sunday	12 Feb, 2025	Guru Ravidas Jayanti
23 Feb, 2025 Sunday 5th Week 24 Feb- 28 Feb Data Communication Concepts & Components: Digital and Analog Data and Signals, Asynchronous and Synchronous transmission; bit rate & baud, bandwidth & Channel Capacity; Nyquist Bit Rate, Shannon Capacity; Network Performance Parameters; Transmission Impairment; March, 2025 Maha Shivratri Connecting Devices & Transmission Media: Network Interface Cards, Connectors, Hubs, Transceivers & Media Connectors; Link-Layer Switches, Bridge, Routers, Gateways, Virtual LANs; Guided Transmission Media; Wireless transmission; Satellite communication. 2 March, 2025 Sunday	16 Feb, 2025	Sunday
23 Feb, 2025 Sunday Data Communication Concepts & Components: Digital and Analog Data and Signals, Asynchronous and Synchronous transmission; bit rate & baud, bandwidth & Channel Capacity; Nyquist Bit Rate, Shannon Capacity; Network Performance Parameters; Transmission Impairment; March, 2025 Maha Shivratri Connecting Devices & Transmission Media: Network Interface Cards, Connectors, Hubs, Transceivers & Media Connectors; Link-Layer Switches, Bridge, Routers, Gateways, Virtual LANs; Guided Transmission Media; Wireless transmission; Satellite communication. March, 2025 Sunday	4 th Week	Connection-Oriented Networks: X.25, Frame Relay and ATM;
5th Week 24 Feb- 28 Feb Data Communication Concepts & Components: Digital and Analog Data and Signals, Asynchronous and Synchronous transmission; bit rate & baud, bandwidth & Channel Capacity; Nyquist Bit Rate, Shannon Capacity; Network Performance Parameters; Transmission Impairment; March, 2025 Maha Shivratri Connecting Devices & Transmission Media: Network Interface Cards, Connectors, Hubs, Transceivers & Media Connectors; Link-Layer Switches, Bridge, Routers, Gateways, Virtual LANs; Guided Transmission Media; Wireless transmission; Satellite communication. March, 2025 Sunday	17 Feb-22 Feb	
24 Feb- 28 Feb and Signals, Asynchronous and Synchronous transmission; bit rate & baud, bandwidth & Channel Capacity; Nyquist Bit Rate, Shannon Capacity; Network Performance Parameters; Transmission Impairment; March, 2025 Maha Shivratri Connecting Devices & Transmission Media: Network Interface Cards, Connectors, Hubs, Transceivers & Media Connectors; Link-Layer Switches, Bridge, Routers, Gateways, Virtual LANs; Guided Transmission Media; Wireless transmission; Satellite communication. March, 2025 Sunday	23 Feb, 2025	Sunday
baud, bandwidth & Channel Capacity; Nyquist Bit Rate, Shannon Capacity; Network Performance Parameters; Transmission Impairment; March, 2025 Maha Shivratri Connecting Devices & Transmission Media: Network Interface Cards, Connectors, Hubs, Transceivers & Media Connectors; Link-Layer Switches, Bridge, Routers, Gateways, Virtual LANs; Guided Transmission Media; Wireless transmission; Satellite communication. March, 2025 Sunday	5 th Week	Data Communication Concepts & Components: Digital and Analog Data
Capacity; Network Performance Parameters; Transmission Impairment; March, 2025 Maha Shivratri Connecting Devices & Transmission Media: Network Interface Cards, Connectors, Hubs, Transceivers & Media Connectors; Link-Layer Switches, Bridge, Routers, Gateways, Virtual LANs; Guided Transmission Media; Wireless transmission; Satellite communication. March, 2025 Sunday	24 Feb- 28 Feb	and Signals, Asynchronous and Synchronous transmission; bit rate &
26 Feb, 2025 Maha Shivratri Connecting Devices & Transmission Media: Network Interface Cards, 1st Week 1 March, 2025 Bridge, Routers, Gateways, Virtual LANs; Guided Transmission Media; Wireless transmission; Satellite communication. 2 March, 2025 Sunday		* * * *
March, 2025 1st Week 1 March, 2025		Capacity; Network Performance Parameters; Transmission Impairment;
1st Week 1 March, 2025 Connectors, Hubs, Transceivers & Media Connectors; Link-Layer Switches, Bridge, Routers, Gateways, Virtual LANs; Guided Transmission Media; Wireless transmission; Satellite communication. 2 March, 2025 Sunday	26 Feb, 2025	Maha Shivratri
1 March, 2025 Connectors, Hubs, Transceivers & Media Connectors; Link-Layer Switches, Bridge, Routers, Gateways, Virtual LANs; Guided Transmission Media; Wireless transmission; Satellite communication. 2 March, 2025 Sunday	March, 2025	Connecting Devices & Transmission Media: Network Interface Cards,
1 March, 2025 Bridge, Routers, Gateways, Virtual LANs; Guided Transmission Media; Wireless transmission; Satellite communication. 2 March, 2025 Sunday	1st Week	Connectors, Hubs, Transceivers & Media Connectors; Link-Layer Switches,
	1 March, 2025	
2nd Week	2 March, 2025	Sunday
week Data Encoding & Modulation Techniques: NKZ, NKZ-1, Manchester and	2 nd Week	Data Encoding & Modulation Techniques: NRZ, NRZ-I, Manchester and
3 March – 8 March Differential Manchester encoding; 4B/5B; Pulse Code Modulation & Delta		
Modulation; Digital to Analog encoding		

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Saumya Kumar **Class**- PGDCA 2nd sem

Class- PGDCA 2nd sem Subject- Computer Network Paper- M24-CAP-202

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3 rd Week	Holi Vacations
9 March - 16 March	
4 th Week	Switching and Bandwidth Utilization: Methods of Switching; Virtual Circuit &
17 March – 22 March	
	Local Loop: Telephone Networks; Modems; Broadband and ADSL; ADSL
	Versus Cable; Hybrid Fiber-Coaxial Network; Fiber-to-the-Home Broadband;
23 March, 2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru &
25 Watch, 2025	Sukhdev
-41	
5 th Week	Data Link Layer: Communication at the Data Link Layer; Nodes and Links;
24 March – 29 March	
	Framing techniques; Error Detection and Correction; Sliding Window Flow
	Control Protocols;
30 March, 2025	Sunday
6 th Week	Id-ul- Fitr
31 March, 2025	IU-UI- FIU
	M 1' A C A 1 D 1 A A 11 1 COMA COMA CO C 11' '
April, 2025	Media Access Control: Random Access: Aloha, CSMA, CSMA/CD; Collision
1 st Week	free protocols with Controlled Access; Wavelength Division Multiple access for
1 April – 5 April	Fiber-Optic Data Communication;
6 April 2024	Cunday Dam Narmi
6 April, 2024	Sunday, Ram Navmi
2 nd Week	IEEE LAN standards: Ethernet (Physical specifications, Encoding, Frame
7 April - 12 April	Format & MAC protocol); Binary Exponential Backoff algorithm; Introduction
	to Wireless Networks: IEEE 802.11 Wireless LAN; Wi-Max; Wireless LAN
	Protocol: MACA; Bluetooth and other wireless PAN technologies; Cellular
	Networks: Generations; GSM, CDMA, LTE.
10 April, 2025	Mahavir Jayanti
13 April, 2025	Sunday, Vaisakhi
14 April, 2025	Dr. B.R. Ambedkar Jayanti
3rd Week	•
15 April - 19 April	Transport layer: Addressing, Services and Protocols; TCP and UDP services & header formats; Network Layer: Services, Routing Algorithms: Shortest
To takin 19 takin	
	Path Routing, Flooding, Distance Vector Routing, Link State Routing,
	Hierarchical Routing, Multi Cast Routing, Routing for Mobile hosts.

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Saumya Kumar

Class- PGDCA 2nd sem Subject- Computer Network Paper- M24-CAP-202

20 4 11 2025	
20 April, 2025	Sunday
4 th Week	
21 April - 28 April	Sessional Exams
27 April, 2025	Sunday
29 April, 2025	Parshuram Jayanti
30 April, 2025	Akshya Tritya
30 April, 2023	Aksiiya Titiya
May, 2025	Network Layer in TCP/IP: Basic characteristics of IP protocol; addressing and
1st Week	header format of IPv4; IPv6;
	incauci ioiiiiat oi ir v4, ir v0,
1 May - 3 May	
4 May , 2025	Sunday
2 nd Week	Congestion Control & Quality of Service: General Principals; Congestion
5 May – 10 May	control in Virtual – Circuit Subnets; Congestion Control in Datagram Subnets
11 May, 2025	Sunday
3rd Week	
12 May - 17 May	Choke packets, Load Shedding; Random Early Detection, Jitter Control; Over
	provisioning, Buffering, Traffic Shaping,
18 May , 2025	Sunday
4th Week	Leaky Bucket, Token Bucket, Resource Reservation, Admission Control,
19 May - 24 May	Packet Scheduling;
25 May , 2025	Sunday
5 th Week	Revision of entire syllabus
26 May - 31 May	
29 May , 2025	Maharana Partap Jayanti
1 June, 2025	University Examinations
Onwards	

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Saumya Kumar

Class- PGDCA 2nd Sem

Subject- Server Side Web Technology

January, 2025 4 th Week 20 Jan-25 Jan	Introduction to web servers, Client-Server Architecture, Request-Response Cycle, ServerSide vs. Client-Side. Introduction to Node.js: Overview of Node.js
26 Jan, 2025	Sunday, Republic Day
5 th Week 27 Jan – 31 Jan	Non-blocking I/O, Event-driven architecture, Benefits of using Node.js in the MERN stack
February, 2025 1 st Week 1 Feb, 2025	Installing Node.js, Using Node Package Manager (npm), Creating and managing packages
2 Feb, 2025	Sunday, Basant Panchmi
2 nd Week 3 Feb – 8 Feb	Modules: Working with core modules, Creating and importing custom modules, require and exports.
9 Feb, 2025	Sunday
3 rd Week	File handling: Reading from and writing to files, Handling directories
10 Feb - 15 Feb	
12 Feb, 2025	Guru Ravidas Jayanti
16 Feb, 2025	Sunday
4 th Week 17 Feb-22 Feb	Managing asynchronous tasks efficiently in File handling.
23 Feb, 2025	Sunday
5 th Week 24 Feb- 28 Feb	Building Web Servers: Creating a basic HTTP server, Handling HTTP requests and responses
26 Feb, 2025	Maha Shivratri
March, 2025 1 st Week 1 March, 2025	Understanding request methods (GET, POST, PUT, DELETE). Event-Driven Programming Using EventEmitter, Creating custom events, Handling realtime data
2 March, 2025	Sunday
2 nd Week 3 March – 8 March	Error Handling and Debugging: Try-catch blocks, Handling asynchronous errors, Using debugging tools (e.g., nodeinspect, Chrome DevTools).
3 rd Week 9 March - 16 March	Holi Vacations
4 th Week 17 March – 22 March	Express.js Basics: Introduction to Express.js, Setting up Express projects, Understanding routing and middleware

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Saumya Kumar

Class- PGDCA 2nd Sem

Subject- Server Side Web Technology

23 March, 2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev
5 th Week 24 March – 29 March	Using template engines (e.g., EJS) for server-side rendering, Designing RESTful APIs, CRUD operations, Structuring API routes.
30 March, 2025	Sunday
6 th Week 31 March, 2025	Id-ul- Fitr
April, 2025 1 st Week 1 April – 5 April	Built-in middleware (e.g., body-parser), Creating custom middleware, Error handling middleware. User authentication using JWT (JSON Web Tokens) and sessions.
6 April, 2024	Sunday, Ram Navmi
2 nd Week 7 April - 12 April	Introduction to MongoDB: NoSQL vs. SQL databases, Setting up MongoDB locally and on cloud (e.g., MongoDB Atlas)
10 April, 2025 13 April, 2025 14 April, 2025	Mahavir Jayanti Sunday, Vaisakhi Dr. B.R. Ambedkar Jayanti
3 rd Week 15 April - 19 April	Document-based NoSQL database, JSON-like documents
20 April, 2025	Sunday
4 th Week 21 April - 28 April	Sessional Exams
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti Akshya Tritya

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Saumya Kumar

Class- PGDCA 2nd Sem

Subject- Server Side Web Technology

May, 2025	Setting Up MongoDB: Installation, creating databases, collections, and documents
1st Week	
1 May - 3 May	
4 May , 2025	Sunday
2 nd Week	CRUD Operations in MongoDB: Inserting, querying, updating
5 May – 10 May	
11 May, 2025	Sunday
3 rd Week	
12 May - 17 May	CRUD Operations in MongoDB: Inserting, querying, updating, deleting documents
10.7.7	
18 May, 2025	Sunday
4 th Week	Indexes in MongoDB: Creating and using indexes
19 May - 24 May	
25 May , 2025	Sunday
5 th Week	Revision of entire Syllabus
26 May - 31 May	
29 May , 2025	Maharana Partap Jayanti
1 June, 2025	University Examinations
Onwards	

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Saumya Kumar

Class- BCA VIth Sem

Subject- Programming in Core Java

Paper- BCA-366

January, 2025 1 st Week 1 Jan – 4 Jan	Basic Principles of Object Oriented Programming, Introduction to Java, History and Features of Java, Java Virtual Machine (JVM), Java's Magic Bytecode; The Java Runtime Environment				
5 Jan, 2025	Sunday				
6 Jan, 2025	Shri Guru Gobind Singh Ji Jayanti				
2 nd Week	Basic Language Elements: Lexical Tokens, Identifiers, Keywords, Literals,				
6 Jan – 11 Jan	Comments, Primitive Data types, Operators, Assignments				
12 Jan,2025	Sunday				
3 rd Week	Input/output in Java: Basics, I/O Classes, Reading Console Input, Control				
13 Jan – 18 Jan	Structures in Java: Decision and Loop Control Statements				
19 Jan,2025	Sunday				
January, 2025	Class and Object in Java: Defining Class in Java, Creating Objects of a Class,				
4th Week	Defining Methods, Argument Passing Mechanism, Using Class and Objects,				
20 Jan-25 Jan	Constructors				
26 Jan, 2025	Sunday, Republic Day				
-0					
5 th Week	Nested Class, Inner Class, Abstract Class, Dealing with Static Members				
27 Jan – 31 Jan					
February, 2025	Array & String in Java: Defining an Array, Initializing & Accessing Array,				
1 st Week	Multi –Dimensional Array				
1 Feb, 2025	Sunday Resent Denehmi				
2 Feb, 2025	Sunday, Basant Panchmi				
2 nd Week	Defining String, Operation on Array and String,				
3 Feb – 8 Aug					
9 Feb, 2025	Sunday				
3 rd Week	Creating Strings using StringBuffer Class Polymorphism in Java: Basic				
10 Feb - 15 Feb	Concept, Types, Overriding vs. Overloading				
12 Feb, 2025	Guru Ravidas Jayanti				
16 Feb, 2025	Sunday				
4 th Week	Implementation Extending Classes and Inheritance in Java: Benefits of				
17 Feb-22 Feb	Inheritance,				
23 Feb, 2025	Sunday				
5 th Week	Types of Inheritance in Java, Access Attributes, Inheriting Data				
24 Feb- 28 Feb	Members and Methods,				
26 Feb, 2025	Maha Shivratri				

Lesson Plan for the Even Semester (January to April, 2025)

 ${\bf Name\ of\ the\ Teacher}-Saumya\ Kumar$

Class- BCA VIth Sem

Subject- Programming in Core Java

Paper- BCA-366

March, 2025	Role of Constructors in Inheritance, Use of "super".				
	Packages & Interfaces: Basic Concepts of Package and Interface				
1 March, 2025					
2 March, 2025	Sunday				
2 nd Week	Organizing Classes and Interfaces in Packages, Defining Package, Adding Classes				
3 March – 8 March	from a Package to Your Program CLASSPATH Setting for Packages,				
3 rd Week	Holi Vacations				
9 March - 16 March					
4 th Week	Import Package, Naming Convention for Packages, Access Protection in				
17 March – 22 March					
23 March, 2025	Sunday, Shaheedi Diwas/Martyrdom Day of Bhagat Singh, Rajguru &				
	Sukhdev				
5 th Week					
24 March – 29 March	Sessional Exams				
30 March, 2025	Sunday				
6 th Week	Id-ul- Fitr				
31 March, 2025					
pril, 2025	Standard Packages Exception Handling in Java: The Idea behind Exception,				
1 st Week	Types of Exception, Use of try, catch, finally, throw, throws in Exception				
1 April – 5 April	Handling, In-built and User Defined Exceptions, Checked and Un-Checked				
	Exceptions, Catching more than one Exception				
6 April, 2024	Sunday				
2 nd Week	Applet in Java: Applet Basics, Applet Architecture, Applet Life Cycle, Applet Tag,				
7 April - 12 April	Parameters to Applet, Embedding Applets in Web page, Creating Simple Applets				
10 April, 2025	Mahavir Jayanti				
13 April, 2025	Sunday				
14 April, 2025	Dr. B.R.Ambedkar Jayanti				

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Saumya Kumar

Class- BCA VIth Sem

Subject- Programming in Core Java

Paper- BCA-366

3 rd Week 15 April - 19 April	GUI Programming: Designing Graphical User Interfaces in Java, Components and Containers,				
20 April, 2025	Sunday				
4th Week	Using Containers, Layout Managers, AWT Components,				
21 April - 26 April					
27 April, 2025	Sunday				
5 th Week	AWT Classes, AWT Controls				
28 April, 2025					
29 April, 2025	Parshuram Jayanti				
30 April, 2025	Akshya Tritya				

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms Komal

Class- PGDCA

Subject- Database Management System

January, 2025 4 th Week	Database System Concepts and Architecture: Three - Schema Architecture and Data Independence, Entity Relationship Model: Entity Types				
20 Jan-25 Jan	The state of the s				
26 Jan, 2025	Sunday, Republic Day				
5 th Week	Entity Sets, Attributes & keys, Relationships Types & instances ER Diagrams,				
27 Jan – 31 Jan	Naming conventions and Design Issues.				
February, 2025	Relational Model Constraints,				
1 st Week					
1 Feb, 2025 2 Feb, 2025	Sunday, Basant Panchmi				
2 nd Week	Concept of Keys, SQL: Data Definition and Data Types				
3 Feb – 8 Feb	Concept of Reys, SQL. Data Definition and Data Types				
9 Feb, 2025	Sunday				
3rd Week	DDL, DML, and DCL, Join Operations, Views & Queries in SQL,				
10 Feb - 15 Feb	Specifying Constraints				
12 Feb, 2025	Guru Ravidas Jayanti				
16 Feb, 2025	Sunday				
4 th Week	Indexes in SQL				
17 Feb-22 Feb	Aggregate functions - min, max, count, average, sum.				
23 Feb, 2025	Sunday				
5 th Week	Group by, Order by and Having clauses				
24 Feb- 28 Feb					
26 Feb, 2025	Maha Shivratri				

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms Komal

Class- PGDCA

Subject- Database Management System

	DV (GOV A 11 GOV				
March, 2025	PL/SQL: Architecture of PL/SQL				
1 st Week					
1 March, 2025					
2 March, 2025	Sunday				
2 nd Week	Basic Elements of PL/SQL, PL/SQL Transactions, Cursors and Triggers.				
3 March – 8 March					
3 rd Week	Holi Vacations				
9 March - 16 March					
4 th Week	Relational Algebra:				
17 March – 22 March	Unary and Binary Relational Operations,				
	Functional Dependencies				
23 March, 2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru &				
,	Sukhdev				
5 th Week	Normal Forms Based on Primary Keys- (1NF, 2NF, 3NF, BCNF)				
24 March – 29 March					
30 March, 2025	Sunday				
6th Week	Id-ul- Fitr				
31 March, 2025					
April, 2025	Multi-valued Dependencies, 4 NF, Join dependencies, 5 NF				
1 st Week	Titali values 2 opensonous, 1112, t om sepensonous, c 112				
1 April – 5 April					
6 April, 2024	Sunday, Ram Navmi				
• ,					
2 nd Week	Domain Key Normal Form, Query Processing and Optimization				
7 April - 12 April	Substitution of the substi				
10 April, 2025	Mahavir Jayanti				
13 April, 2025	Sunday, Vaisakhi				
14 April, 2025	Dr. B.R. Ambedkar Jayanti				
3rd Week	Query Processing and Optimization				
15 April - 19 April	Quely 1101000mg and opiningation				
20 April, 2025	Sunday				
4 th Week					
21 April - 28 April	Sessional Exams				
27 April, 2025	Sunday				
29 April, 2025	Parshuram Jayanti				
30 April, 2025	Akshya Tritya				
,					

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms Komal

Class- PGDCA

Subject- Database Management System

May, 2025	Transaction & System Concepts, Properties of Transaction
1st Week	
1 May - 3 May	
4 May, 2025	Sunday
2 nd Week	Schedules and Recoverability
5 May – 10 May	Recovery and security.
11 May, 2025	Sunday
3 rd Week	
12 May - 17 May	Serializability of Schedules, Concurrency Control
18 May, 2025	Sunday
4 th Week	Techniques: Locking Techniques
19 May - 24 May	
25 May , 2025	Sunday
5 th Week	Time stamp ordering, Multi-version Techniques, Database backup
26 May - 31 May	
29 May , 2025	Maharana Partap Jayanti
1 June, 2025	University Examinations
Onwards	

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms Komal

Class- M. Sc. Computer Science (Software)

Subject- Data Communication

Paper- M24-CSE-202

January, 2025	Introduction to Networks: Overview of computer networks, network					
4 th Week	architectures (layered model, OSI model, TCP/IP model)					
20 Jan-25 Jan						
26 Jan, 2025	Sunday, Republic Day					
5 th Week	Network protocols and services, Network Applications: File sharing (client-					
27 Jan – 31 Jan	server, peer-to-peer),					
February, 2025	Web services (HTTP, web servers, caching)					
1st Week						
1 Feb, 2025						
2 Feb, 2025	Sunday, Basant Panchmi					
2 nd Week	Content delivery networks (CDNs), distributed applications, wireless access					
3 Feb – 8 Feb	points.					
9 Feb, 2025	Sunday					
3rd Week	Network Devices: Network Interface Cards (NICs), hubs, switches, routers,					
10 Feb - 15 Feb	gateways, firewalls, modems					
12 Feb, 2025	Guru Ravidas Jayanti					
16 Feb, 2025	Sunday					
4th Week	Network Media: Guided media (coaxial cable, twisted-pair, fiber optic),					
17 Feb-22 Feb	wireless media (radio waves, Wi-Fi, cellular networks).					
23 Feb, 2025	Sunday					
5 th Week	Data Communication Concepts: digital and analog signals. asynchronous					
24 Feb- 28 Feb	and synchronous transmission in real-world scenarios					
26 Feb, 2025	Maha Shivratri					

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms Komal

Class- M. Sc. Computer Science (Software)

Subject- Data Communication

Paper- M24-CSE-202

March, 2025 1 st Week 1 March, 2025	Network Performance: Metrics (bandwidth, latency, throughput, packet loss)				
2 March, 2025	Sunday				
2 nd Week 3 March – 8 March	Factors affecting performance (bottlenecks, congestion, network impairments), quality of service (QoS).; Command-Line Tools to measure network performance				
3 rd Week 9 March - 16 March	Holi Vacations				
4 th Week 17 March – 22 March	Data Encoding & Modulation Techniques: NRZ, NRZ-I, Manchester and Differential Manchester encoding; 4B/5B; Pulse Code Modulation & Delta Modulation; Digital to Analog encoding;				
23 March, 2025	Sunday, Shaheedi Diwas/ Martyrdom Day of Bhagat Singh, Rajguru & Sukhdev				
5 th Week 24 March – 29 March	Switching and Bandwidth Utilization: circuit vs. packet switching and their application in real-world networks (voice calls vs. data transfer)				
30 March, 2025	Sunday				
6 th Week 31 March, 2025	Id-ul- Fitr				
April, 2025 1 st Week 1 April – 5 April	Wired Networks and the Local Loop: wired technologies (ADSL, Cable) used for internet access; Fiber-to-the-Home Broadband				
6 April, 2024	Sunday, Ram Navmi				
2 nd Week 7 April - 12 April	Data Link Layer: Concepts (framing, error detection and correction, flow control), Media Access Control (MAC) protocols (CSMA/CD, CSMA/CA), Ethernet (frame format, addressing), IEEE 802.11 Wi-Fi standards.				
10 April, 2025 13 April, 2025 14 April, 2025	Mahavir Jayanti Sunday, Vaisakhi Dr. B.R. Ambedkar Jayanti				
3 rd Week 15 April - 19 April	Network Layer: Logical addressing (IP addresses, subnetting, CIDR), routing protocols (distance vector, link state, hierarchical, Multicast Routing, Routing for mobile hosts), IPv4 and IPv6: Structure and addressing schemes of IPv4 and IPv6				
20 April, 2025	Sunday				
4 th Week 21 April - 28 April	Sessional Exams				
27 April, 2025 29 April, 2025 30 April, 2025	Sunday Parshuram Jayanti Akshya Tritya				

Lesson Plan for the Even Semester (January to May, 2025)

Name of the Teacher – Ms Komal

Class- M. Sc. Computer Science (Software)

Subject- Data Communication

Paper- M24-CSE-202

May, 2025	Transport Layer: Protocols (TCP, UDP), connection-oriented vs. connectionless				
1st Week	services, port numbers				
1 May - 3 May					
4 May, 2025	Sunday				
2 nd Week	Network Management: Simple Network Management Protocol (SNMP), network				
5 May – 10 May	monitoring tools, Virtual LANs (VLANs): Concept, configurations, benefits for				
	network management and security				
11 May, 2025	Sunday				
3rd Week					
12 May - 17 May	Reliable data transfer with TCP (three-way handshake, flow control, congestion control), Emerging Network Technologies: Software-Defined Networking (SDN)				
18 May, 2025	Sunday				
4 th Week	Internet of Things (IoT) networking, network function virtualization (NFV),				
19 May - 24 May	Introduction to Example Networks: The Internet - conceptual framework and common services				
25 May , 2025	Sunday				
5 th Week	Wide Area Networks (WAN) Technologies: X.25, Frame Relay, Asynchronous				
26 May - 31 May	Transfer Mode (ATM), MPLS.				
29 May , 2025	Maharana Partap Jayanti				
1 June, 2025 Onwards	University Examinations				

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms Komal

Class- M.Sc 2nd (4th sem)

Subject- ADVANCED WEB TECHNOLOGY

Paper- MS-15-41

January, 2025	Introduction: Web Browsers, Caching, Downloading and Rendering, Persistent					
1 st Week 1 Jan – 4 Jan	Connections, DNS caching and prefetching, CSS Expressions and performance, Buffering, Weblog.					
5 Jan, 2025	Sunday					
6 Jan, 2025	Shri Guru Gobind Singh Ji Jayanti					
2 nd Week	Optimization and Security: Parallel Downloading, Controlling caches, Content					
6 Jan – 11 Jan	compression, Control size with minification					
12 Jan,2025	Sunday					
3rd Week	Optimizing query execution and optimization, Marketing of Website: traffic					
13 Jan – 18 Jan	generation, Newsletters; Security: SQL: query log, SQL injections.					
19 Jan,2025	Sunday					
January, 2025	Search engines: Searching techniques used by search engines, keywords,					
4 th Week	advertisements, Search engine optimization for individual web pages: header					
20 Jan-25 Jan	entries					
26 Jan, 2025	Sunday, Republic Day					
5 th Week	Search engine optimization for entire website: Hyperlinks and link structure, page rank of Google, click rate, residence time of website.					
27 Jan – 31 Jan						
February, 2025 1 st Week	Frames, scripts, content management system.					
1 Feb, 2025						
2 Feb, 2025	Sunday, Basant Panchmi					
2 nd Week	Cookies, robots, Pitfalls in Optimization: optimization and testing, keyword density,					
3 Feb – 8 Aug	doorway pages, duplicate contents, quick change of topics,					
9 Feb, 2025	Sunday					
3 rd Week	tools for optimization: etracking, Google analytics, checklists.					
10 Feb - 15 Feb	Introduction to JavaScript: Introduction, Obtaining user inputs, memory concepts,					
12 Feb, 2025	Guru Ravidas Jayanti					
16 Feb, 2025	Sunday					
4 th Week	Operators, Control Structures, Looping constructs, break, continue statements,					
17 Feb-22 Feb	Programmer defined functions, Scoping rules, Recursion and Iteration.					
23 Feb, 2025	Sunday					
5 th Week	Array declaration and allocation, passing arrays to function, Objects: String, Date,					
24 Feb- 28 Feb	Boolean, Window, document; using cookies.					
26 Feb, 2025	Maha Shivratri					

Lesson Plan for the Even Semester (January to April, 2025)

Name of the Teacher – Ms Komal

Class- M.Sc 2nd (4th sem)

Subject- ADVANCED WEB TECHNOLOGY

Paper- MS-15-41

March, 2025 1st Week 1 March, 2025 2 March, 2025 2 March, 2025 Sunday 2nd Week 3 March - 8 March 3rd Week 9 March - 16 March 4th Week 17 March - 22 March 23 March, 2025 Sunday Constants, Flow Control Functions; Switching Flow, Loops, Constants, Flow Control Functions; Switching Flow Control Functio	ode Blocks and			
1 March, 2025 2 March, 2025 Sunday 2 nd Week 3 March – 8 March 3 rd Week 9 March - 16 March 4 th Week 17 March – 22 March 23 March, 2025 Sunday, Shaheedi Diwas/Martyrdom Day of Bhagat Single Sukhdey 5 th Week	ode Blocks and			
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17 March – 22 March Browser Output 23 March, 2025 Sunday, Shaheedi Diwas/Martyrdom Day of Bhagat Single Sukhdev 5th Week				
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Sukhdev 5th Week	h, Rajguru &			
5 th Week				
24 Watch 25 Watch				
30 March, 2025 Sunday				
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31 March, 2025				
April, 2025 Objects, Strings Processing, Form processing,				
1st Week Connecting to database using cookies	Connecting to database using cookies			
1 April – 5 April				
6 April, 2024 Sunday				
2 nd Week dynamic contents. Tags, selection of URL, alt tags,				
7 April - 12 April				
10 April, 2025 Mahavir Jayanti				
13 April, 2025 Sunday				
	Dr. B.R.Ambedkar Jayanti			
3 rd Week Broken links, poor readability, rigid layouts, navigation styles;	Broken links, poor readability, rigid layouts, navigation styles;			
15 April - 19 April				
20 April, 2025 Sunday				
	Optimizing images, Load balancers, Tuning MYSQL, Using query caching,			
21 April - 26 April				
27 April, 2025 Sunday				
5 th Week Handling Events Using JavaScript	v			
28 April, 2025				
29 April, 2025 Parshuram Jayanti				
30 April, 2025 Akshya Tritya	l			