

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester

(April, 2022 to June, 2022)

Name of the Teacher – Ms. Sakshi Aneja

Subject- Operating System-II

Paper- BCA-362

Class- BCA 6<sup>th</sup> Sem.

April, 2022 2 <sup>nd</sup> Week 4 April -9 April	Process Synchronization: The Critical Section Problem – Single Process/Two Process Solutions; Semaphores – Types, Implementation, Deadlocks and Starvation;
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-16 April	Classical Problems of Synchronization – The Bounded Buffer Problem, The Readers and Writers Problem, The Dining-Philosophers Problem, Critical Regions, Monitors Directory Structure: Single Level,
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April- 23 April	Two Level, Tree Structures, Acyclic Graph, General Graph; Directory Implementation, Recovery
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -30 April	Secondary Storage Structure: Disk Structure, Disk Scheduling: FCFS, SSTF, SCAN, C-SCAN
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2 May -7 May	LOOK; Selection of Disk Scheduling Algorithm; Disk Management; Swap Space Management
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -14 May	Network Operating Systems: Remote Login, Remote File Transfer; Distributed Operating System: Data Migration, Computation Migration, Process Migration
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-21 May	Linux: Introduction, Features, Architecture, Distributions, Accessing Linux System, Login/Logout/Shutting Down, Comparison of Linux with other Operating Systems, Commands in Linux: General-Purpose Commands
22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b> File Oriented Commands, Directory Oriented Commands, Communication Oriented Commands
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	Process Oriented Commands, Redirection of Input and Output, Pipes Linux File System: Types of Files in Linux, File Attributes, Structure of File System, I node, File Permission, File System Components,
June 2022 1 <sup>st</sup> week 1 June - 4 June	Standard File System, File System Types, Disk Related Commands Processes in Linux: Introduction, Job Control in Linux using at, batch, corn & time commands, The vi editor: Introduction, Modes of vi Editor, Command in vi Editor
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 6 June –11 June	Shell Programming: Introduction, Shell Variables, Shell Keywords, Operators, Assigning Values to the Variables, I/O in Shell, Control Structures, Creating & Executing Shell Programs in Linux.

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester

(April, 2022 to June, 2022)

Name of the Teacher –Ms. Sakshi Aneja

Subject- Linux & Shell Programming

Paper- MS-15-22

Class- M.Sc (Computer Science)

April, 2022 2 <sup>nd</sup> Week 4 April -9 April	Introduction to Unix/Linux: Evolution of Unix/Linux, Unix/Linux distributions, Linux/Unix operating system, Linux/Unix architecture, Features of Linux/Unix,
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-16 April	Interfacing with Unix/Linux system. Commands in Unix/Linux: General-Purpose commands, File oriented commands, directory oriented commands, Communication-oriented commands,
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April- 23 April	process oriented commands & other commonly used commands, Regular expressions & Filters in Linux: Regular expressions and their use, Simple filters viz. more, wc, diff,sort, uniq, grep, sed, etc.
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -30 April	Linux/Unix file system: Linux/Unix files ,I nodes and structure and file system, file system components, standard file system, file system types,
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2 May -7 May	file system mounting and unmounting. Processes in Linux : starting and stopping processes, initialization Processes,
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -14 May	mechanism of process creation, job control - at, batch, cron, time, Signal handling. System Calls: creat, open, close, read, write, lseek, link, unlink,
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-21 May	System Calls: fstat, umask, chmod, exec, fork, wait,system.
22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b> Basic system administration in Linux/Unix. Shell Programming: vi editor,
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	shell variables, I/O in shell, control structures, loops,
June 2022 1 <sup>st</sup> week 1 June - 4 June	subprograms, command line programming,
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 6 June –11 June	Creating shell scripts. Previous Years Question Papers discussed, Syllabus revised & Problem Taken

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Harbinder Kaur

Subject- ADVANCED PROGRAMMING USING C++

Paper- BCA – 242

Class- BCA 4<sup>th</sup> Sem

April, 2022 2 <sup>nd</sup> Week 4 April -9 April	Inheritance: Rules of Derivations – Private, Protected and Public Derivations. Different Forms of Inheritance
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-16 April	Single, Multiple, Multilevel, Hierarchical and Multipath Inheritance
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April- 23 April	Roles of Constructors and Destructors in Inheritance, Genericity in C++: Templates in C++, Function templates.
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -30 April	Dynamic Polymorphism: Function Overriding, Virtual Function and its Need,
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2 May -7 May	Pure Virtual Function, Abstract Class, Virtual Derivation, Virtual Destructor.
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -14 May	Type Conversion: Basic Type Conversion, Conversion between objects and basic types,
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-21 May	Conversion between objects of different classes Problems taken from students
22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b> Class templates in C++ Problems taken from students
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	Exception Handling in C++: try, throw and catch,
June 2022 1 <sup>st</sup> week 1 June - 4 June	Files I/O in C++: Class Hierarchy for Files I/O, Text versus Binary Files,
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 6 June –11 June	Opening and Closing Files, File Pointers, Operation on files. Previous Years Question Papers discussed, Syllabus revised & Problem Taken

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Harbinder Kaur

Subject- Java Programming

Paper- MS-15-21

Class- M.Sc (Computer Science) 2<sup>nd</sup> Sem

April, 2022 2 <sup>nd</sup> Week 4 April -9 April	Introduction to Java: Importance and features of Java, Java virtual machine, Byte code, JDK, Keywords, constants, variables and Data Types, Operators and Expressions, Decision Making,
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-16 April	Branching and Looping, jump statements: break, continue, return. Introducing classes, objects and methods: defining a class, adding variables and methods, creating objects, constructors, class inheritance.
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April- 23 April	Arrays and String: Creating an array, one and two dimensional arrays, string array and methods.
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -30 April	Packages and interfaces, Exception Handling: Fundamentals exception types, uncaught exceptions, throw exception, built in exception,
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2 May -7 May	Creating your own exceptions, Multithreaded Programming: Fundamentals, Java thread model: synchronization, messaging, thread classes, Runnable interface.
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -14 May	Inter -Thread Communication, suspending, resuming and stopping threads.
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-21 May	I/O Streams: String and String Buffer classes, Wrapper classes: Basics types, using super, Multilevel hierarchy, abstract and final classes. Input/ Output Programming: Basics, Streams, Byte and Character Stream, predefined streams, Reading and writing from console and files.
22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b>
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	Event Handling: Different Mechanism, the Delegation Event Model, Event Classes, Event Listener Interfaces.
June 2022 1 <sup>st</sup> week 1 June - 4 June	Adapter and Inner Classes, Working with windows, Graphics and Text, using AWT controls, Layout managers and menus, handling Image, animation, sound and video, Java Applet.
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 6 June –11 June	Beans: Introduction to Java Beans and Swings Previous Years Question Papers discussed, Syllabus revised & Problem Taken

# KVA DAV College for Women, Karnal

## Lesson plan for the odd semester

(November, 2021 to June, 2022)

Name of the Teacher – Ms. Harbinder Kaur

Subject- PROBLEM SOLVING THROUGH 'C'

Paper- CS-DE-12

Class- PGDCA

3 <sup>rd</sup> Week 15 Nov-20 Nov	Programming Fundamentals: Introduction to Compiler, Assembler and Interpreter,
19 Nov,2021	<b>Guru Nanak Jayanti</b>
21 Nov, 2021	<b>Sunday</b>
4 <sup>th</sup> Week 22 Nov-27 Nov	Concept of problem solving, Problem definition, Program design, Debugging,
28 Nov, 2021	<b>Sunday</b>
Dec, 2021 1 <sup>st</sup> Week 29 Nov-04 Dec	Types of errors in programming, Documentation. Flowcharting, decision tables, algorithms,
05 Dec, 2021	<b>Sunday</b>
2 <sup>nd</sup> Week 06 Dec -11 Dec	Structured programming concepts, Programming methodologies - top-down and bottom-up programming.
12 Dec,2021	<b>Sunday</b>
3 <sup>rd</sup> week 13 Dec -18 Dec	Overview of C: History of C, Importance of C, Structure of a C Program.
19 Dec,2021	<b>Sunday</b>
4 <sup>th</sup> Week 20 Dec-24 Dec	Elements of C: C character set, identifiers and keywords, Data types, Constants and Variables.
25 Dec,2021 26 Dec,2021	<b>Christmas</b> <b>Sunday</b>
5 <sup>th</sup> Week 27 Dec -01 Jan	Operators: Arithmetic, relational, logical, bitwise, unary, assignment and conditional operators and their hierarchy & associativity.
2 Jan ,2022	<b>Sunday</b>
Jan ,2022 1 <sup>st</sup> week 3 Jan – 8 Jan	Input/output: Unformatted & formatted I/O function in C.
9 Jan ,2022	<b>Sunday (Sh. Guru Gobind Singh's Birthday)</b>
2 <sup>nd</sup> week 10 Jan – 15 Jan	Control statements: Sequencing, Selection: if and switch statement;
16 Jan ,2022	<b>Sunday</b>
3 <sup>rd</sup> week 17 Jan – 22 Jan	Repetition: for, while, and do-while loop;
23 Jan ,2022	<b>Sunday</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the odd semester (November, 2021 to June, 2022)

Name of the Teacher – Ms. Harbinder Kaur

Subject- PROBLEM SOLVING THROUGH 'C'

Paper- CS-DE-12

Class- PGDCA

4 <sup>th</sup> Week 24 Jan – 29 Jan, 31 Jan	<b>Sessional Exams</b>
26 Jan, 2022 30 Jan ,2022	<b>Republic Day</b> <b>Sunday</b>
Feb, 2021 1 <sup>st</sup> week 1 Feb-4 Feb	break, continue, goto.Functions: Definition, prototype,
5 Feb, 2022 6 Feb ,2022	<b>Vasant Panchmi</b> <b>Sunday</b>
2 <sup>nd</sup> week 7 Feb- 12 Feb	Functions-Passing parameters, function calls, library functions, recursion.
13 Feb ,2022	<b>Sunday</b>
3 <sup>rd</sup> week 14 Feb- 19 Feb	Storage classes in C: auto, extern, register and static storage class, their scope, storage, & lifetime.
20 Feb ,2022	<b>Sunday</b>
4 <sup>th</sup> Week 21 Feb-26 Feb	Arrays: Definition, types, initialization, processing an array, passing arrays to functions, dynamic arrays.
March 1,2022	<b>Maha Shivratri</b>
1 <sup>st</sup> Week 1March-5 March	Programs discussed on functions, arrays,& recursions
6 March ,2022	<b>Sunday</b>
2 <sup>nd</sup> week 7- 12 March	Strings: String handling, reading and writing strings,
13 March ,2022	<b>Sunday</b>
3 <sup>rd</sup> week 14 -20 March	<b>HOLI Break</b>
20 March ,2022 23 March ,2022	<b>Sunday</b> <b>Shaheed Divas</b>
4 <sup>th</sup> Week 21-26 March 2022	string functions, dynamic strings.
27 March ,2022	<b>Sunday</b>
5 <sup>th</sup> Week March 28 -31, 2022	Problems Discussed from Unit-1 & 2
1 <sup>st</sup> Week April 1-2,2022	Pointers: Declaration, operations on pointers
3 April ,2022	<b>Sunday</b>
2 <sup>nd</sup> Week April 4-9,2022	pointers and arrays, dynamic memory allocation, pointers and functions,
10 April ,2022	<b>Sunday</b>
3 <sup>rd</sup> Week April 11-16,2022	Pointers and strings. Programs on Pointers

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Subject- PROBLEM SOLVING THROUGH 'C'

Paper- CS-DE-12

Class- PGDCA

<b>17 April ,2022</b>	<b>Sunday</b>
4 <sup>th</sup> Week <b>18-23 April 2022</b>	Problems taken & discussed about Pointers & functions from students
<b>24 April ,2022</b>	<b>Sunday</b>
5 <sup>th</sup> Week <b>25-30 April 2022</b>	Structure & Union: Definition, Declarations ,examples
<b>1 May ,2022</b>	<b>Sunday</b>
1 <sup>st</sup> Week <b>2-7 May, 2022</b>	processing, Structure and pointers,.
<b>3 May,2022</b>	<b>Eid Holiday</b>
<b>8 May ,2022</b>	<b>Sunday</b>
2 <sup>nd</sup> Week <b>9-14 May, 2022</b>	passing structures to functions,
<b>15 May ,2022</b>	<b>Sunday</b>
3 <sup>rd</sup> Week <b>16-21 May</b>	Union, difference between structure & union
<b>22 May ,2022</b>	<b>Sunday</b>
4 <sup>th</sup> Week <b>23-31 May 2022</b>	<b>Sessionals</b>
<b>29 May ,2022</b>	<b>Sunday</b>
1 <sup>st</sup> Week <b>1-4 June,2022</b>	Previous years question paper discussed
<b>5 June ,2022</b>	<b>Sunday</b>
2 <sup>nd</sup> Week <b>6-11 June,2022</b>	Syllabus revised and problems taken from students
<b>12 June ,2022</b>	<b>Sunday</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher –Ms. Neha Sharma

Subject- Advanced Data Structures

Paper- BCA – 241

Class-BCA-IV Sem

April, 2022 2 <sup>nd</sup> Week 4 April -9 April	Tree: Introduction, Definition, Representing Binary tree in memory, Traversing binary trees,
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-16 April	Traversal algorithms using stacks, Binary search trees: introduction
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April- 23 April	storage, Searching, Insertion and deletion in a Binary search tree(having no children, one children, two children)
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -30 April	Huffman's algorithm, General trees. Heap sort, Graph: Introduction, Graph theory terminology
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2 May -7 May	Sequential and linked representation of graphs, operations on graphs,
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -14 May	traversal algorithms and their implementation (Breadth First Search & Depth First search), Warshall's algorithm for shortest path,
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-21 May	Dijkstra algorithm for shortest path, Topological Sort
22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b> Sorting: Internal & external sorting, Radix sort, Quick sort, Merge sort,
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	Tournament sort, Comparison of various sorting and searching algorithms on the basis of their complexity.
June 2022 1 <sup>st</sup> week 1 June - 4 June	Files: Introduction Attributes of a file, Classification of files, File operations, Comparison of various types of files,
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 6 June –11 June	File organization: Sequential, Indexed-sequential, Random-access file. Hashing: Introduction, Collision resolution.



# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher –Ms. Neha Sharma

Subject- Structured System Analysis and Design

Paper- BCA-125

Class-BCA-II Sem

April, 2022 2 <sup>nd</sup> Week 4 April -9 April	System Concept: Definition, Characteristics, Elements of system, Physical and abstract system, open and closed system, man-made information systems.
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-16 April	System Development Life Cycle: Various phases of system development, Considerations for system planning and control for system success. Role of system analyst.
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April- 23 April	System Planning: Bases for planning in system analysis: Dimensions of Planning.Initial Investigation: Determining user's requirements and analysis,
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -30 April	fact finding process and Techniques, Tools of structured Analysis: Data Flow diagram, data dictionary, IPO and HIPO charts, Gantt charts, pseudo codes,
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2 May -7 May	Flow charts, decision tree, decision tables,Feasibility study: Technical, Operational & Economic Feasibilities.
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -14 May	Cost/Benefit Analysis: Data analysis cost and benefit analysis of a system. Input/ Output and Form Design, File Organization and database design:
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-21 May	Introduction to files and database, File structures and organization, objectives of database design, logical and physical view of data.
22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b> System testing: Introduction, objectives of testing, test planning, testing techniques.
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	Quality assurance: Goal of quality assurance, levels of quality assurance System implementation and software maintenance
June 2022 1 <sup>st</sup> week 1 June - 4 June	Primary activities in maintenance, reducing maintenance costs.
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 6 June –11 June	Previous Years Question Papers discussed, Syllabus revised & Problem Taken

# KVA DAV College for Women, Karnal

## Lesson plan for the odd semester

(November, 2021 to June, 2022)

Name of the Teacher – Ms. Neha Sharma

Subject- Computer Science

Paper- PGDCA [Data Structure]

Class- PGDCA

3 <sup>rd</sup> Week 15 Nov-20 Nov	Introduction to Data Structures: Elementary data organization, Data structure operations, Classification of data structures
19 Nov,2021	Guru Nanak Jayanti
21 Nov, 2021	<b>Sunday</b>
4 <sup>th</sup> Week 22 Nov-27 Nov	.Algorithm complexity and time-space tradeoff, String Processing: Storing strings, String operations (copy, length, concatenation, pattern, index)
28 Nov, 2021	<b>Sunday</b>
Dec, 2021 1 <sup>st</sup> Week 29 Nov-04 Dec	Pattern matching algorithms. First Pattern Matching algorithm, Second/state matching pattern algorithm
05 Dec, 2021	<b>Sunday</b>
2 <sup>nd</sup> Week 06 Dec -11 Dec	Arrays: Linear arrays, Operations on arrays, Insertion algorithm
12 Dec,2021	<b>Sunday</b>
3 <sup>rd</sup> week 13 Dec -18 Dec	Deletion algorithm, Traversing algorithm,
19 Dec,2021	<b>Sunday</b>
4 <sup>th</sup> Week 20 Dec-24 Dec	Multidimensional arrays, Storage of arrays, Matrices, Sparse Matrices.
25 Dec,2021 26 Dec,2021	<b>Christmas</b> <b>Sunday</b>
5 <sup>th</sup> Week 27 Dec -01 Jan	Stacks, Array representation of Stacks, Operations on stack-Insertion, traversing
2 Jan ,2022	<b>Sunday</b>
Jan ,2022 1 <sup>st</sup> week 3 Jan – 8 Jan	Deletion in Stack, Applications of stack- Evaluation of Postfix Expression and examples, Recursion,
9 Jan ,2022	<b>Sunday (Sh. Guru Gobind Singh's Birthday)</b>
2 <sup>nd</sup> week 10 Jan – 15 Jan	Infix to postfix Conversion and examples, Quick Sort
16 Jan ,2022	<b>Sunday</b>
3 <sup>rd</sup> week 17 Jan – 22 Jan	Queues, Array representation of Queues, Operations on queues,
23 Jan ,2022	<b>Sunday</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the odd semester

(November, 2021 to June, 2022)

Name of the Teacher – Ms. Neha Sharma

Subject- Computer Science

Paper- PGDCA [Data Structure]

Class- PGDCA

4 <sup>th</sup> Week 24 Jan – 29 Jan, 31 Jan	<b>Sessional Exams</b>
26 Jan, 2022 30 Jan ,2022	<b>Republic Day</b> <b>Sunday</b>
Feb, 2021 1 <sup>st</sup> week 1 Feb-4 Feb	Dequeues, Priority Queues, Linked Lists: Representation of linked list in memory,
5 Feb, 2022 6 Feb ,2022	<b>Vasant Panchmi</b> <b>Sunday</b>
2 <sup>nd</sup> week 7 Feb- 12 Feb	Traversal, Searching, Insertion(at beginning , at location, at the end of linked list) algorithms
13 Feb ,2022	<b>Sunday</b>
3 <sup>rd</sup> week 14 Feb- 19 Feb	Insertion at the end of linked list algorithm, Deletion (from beginning , at location, at the end of linked list)algorithms
20 Feb ,2022	<b>Sunday</b>
4 <sup>th</sup> Week 21 Feb-26 Feb	Sorted Linked List-Search algorithm, Header List Linked List ,
March 1,2022	<b>Maha Shivratri</b>
1 <sup>st</sup> Week 1March-5 March	Two – Way List; Applications of Linked List, Linked Implementation of Stacks & queues
6 March ,2022	<b>Sunday</b>
2 <sup>nd</sup> week 7 March- 12 March	Trees: Tree basic Terminologies, Binary Trees, Representation of binary trees in memory
13 March ,2022	<b>Sunday</b>
3 <sup>rd</sup> week 14 -20 March	<b>HOLI Break</b>
20 March ,2022 23 March ,2022	<b>Sunday</b> <b>Shaheed Divas</b>
4 <sup>th</sup> Week 21-26 March 2022	<b>On Leave</b>
27 March ,2022	<b>Sunday</b>
5 <sup>th</sup> Week March 28 -31, 2022	Different tree traversal algorithms( inorder. preorder, postorder) using recursion and examples discussed
1 <sup>st</sup> Week April 1-2,2022	Tree traversal algorithms using Stacks and examples discussed
3 April ,2022	<b>Sunday</b>
2 <sup>nd</sup> Week April 4-9,2022	Threaded Binary Trees, Balanced Tree
10 April ,2022	<b>Sunday</b>
3 <sup>rd</sup> Week April 11-16,2022	Binary Search Tree: Searching, Insertion, and deletion in a Binary search tree having no children,

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## Lesson plan for the odd semester

(November, 2021 to June, 2022)

Name of the Teacher – Ms. Neha Sharma

Subject- Computer Science

Paper- PGDCA [Data Structure]

Class- PGDCA

17 April ,2022	<b>Sunday</b>
4 <sup>th</sup> Week 18-23 April 2022	Deletion algorithm in a Binary search tree having one child & Deletion algorithm in a Binary search tree having two children, Heap Sort
24 April ,2022	<b>Sunday</b>
5 <sup>th</sup> Week 25-30 April 2022	Graph and its terminology, Representation of Graphs and Applications: Adjacency Matrix,
1 May ,2022	<b>Sunday</b>
1 <sup>st</sup> Week 2-7 May, 2022	Linked Representation of a Graph, Traversing a Graph; Traversing a Graph(Breadth first search, Depth first search )
3 May,2022	<b>Eid Holiday</b>
8 May ,2022	<b>Sunday</b>
2 <sup>nd</sup> Week 9-14 May, 2022	Sorting and Searching: Linear Search, Binary Search, Bubble Sort. Difference between internal & external searching/sorting
15 May ,2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16-21 May	Bubble Sort ,Insertion Sort, Selection Sort, Radix Sort
22 May ,2022	<b>Sunday</b>
4 <sup>th</sup> Week 23-28 May 2022	<b>Sessionals</b>
29 May ,2022	<b>Sunday</b>
1 <sup>st</sup> Week 30-31 May 1-4 June,2022	Previous years question paper discussed
5 June ,2022	<b>Sunday</b>
2 <sup>nd</sup> Week 6-11 June,2022	Syllabus revised and problems taken from students
12 June ,2022	<b>Sunday</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Divya Vij

Subject- Computers

Paper- MS-15-23 THEORY OF COMPUTATION

Class- M.Sc. I Computer Science (2<sup>nd</sup> Semester)

April, 2022 2 <sup>nd</sup> Week April 04-09, 2022	Computability and Non-computability and examples of non-computable problems, Russel's paradox, Finite State System, Extended Transition Function, Designing of DFA and NDFA, Finite Automata with E-Transitions, Equivalence of DFA and NFA with proof, Regular Expression, Laws of Regular Expressions,
April 10, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week April 11-16, 2022	Kleene's Theorem 1 and 2, Properties and Limitations of FSM, FSM with Output: Moore and Mealy Machines, Arden's Theorem with proof, Closure Properties of Regular Sets, Application of Pumping Lemma,
April 14, 2022 April 17, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week April 18-23, 2022	Grammar: Definition, Chomsky Classification of Grammars, Construction of Context Free Grammar, Derivation, Parse Trees, Ambiguity, Removal of Ambiguity, Simplification of Context Free Grammar
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week April 25-30, 2022	CNF and GNF, Closure properties of CFL, Pumping Lemma for CFL, Myhill-Nerode Theorem, Minimization of FA.
May 01, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week May 02-07, 2022	Pushdown Automaton: Introduction, Types of PDA, Designing of PDA's, Conversion from PDA to CFG and vice-versa, Applications, Parsing: Early's, Cook-Kasami-Young, Tomito's, top-down and bottom-up methods
May 03, 2022 May 08, 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week May 09-14, 2022	Linear Bounded Automata (LBA), Turing machines, variants of TMs, Restricted TMs, TMs and Computers. Recursive and recursively- enumerable languages and Properties.
May 15, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week May 16-21, 2022	Decidability: Post's correspondence problem, Rice's theorem, decidability of membership, emptiness and equivalence problems of languages. Random Access Machines,
May 22, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week May 23-28, 2022	<b>Sessionals</b>
May 29, 2022	<b>Sunday</b>
5 <sup>th</sup> Week May 30-31, 2022	Decidable languages, decidable problems, The halting problem.

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Divya Vij

Subject- Computers

Paper- MS-15-23 THEORY OF COMPUTATION

Class- M.Sc. I Computer Science (2<sup>nd</sup> Semester)

<b>June 2022</b> <b>1<sup>st</sup> Week</b> <b>June 01-04,</b> <b>2022</b>	Diagonalization method, Undecidable problems for Regular expressions, Turing machines and other undecidable problems. Reducibility: The Set NP and Polynomial Verifiability, Polynomial-Time Reductions and NP-Completeness, The Cook-Levin Theorem.
<b>June 02, 2022</b> <b>June 05, 2022</b>	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
<b>2<sup>nd</sup> Week</b> <b>June 06–11,</b> <b>2022</b>	Some Other NP-Complete Problems, Reduction, mapping reducibility. Computational Complexity: Primitive recursive functions, computable functions, examples, Recursion theorem. Tractable and Intractable problems, Theory of Optimization.

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Divya Vij

Subject- Computers

Paper- MS-15-24 COMPILER DESIGN

Class- M.Sc. I Computer Science (2<sup>nd</sup> Semester)

April, 2022 2 <sup>nd</sup> Week April 04-09, 2022	Compilers and Translators, Need of Translators, Tools used for compilation, Structure and Phases of Compiler, Single-Pass and Multi-Pass Compilers, Bootstrapping, Compiler Construction Tools. Bootstrap compilers, Phases of Compilation process.
April 10, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week April 11-16, 2022	Lexical Analysis: Design of Lexical Analyzer, Finite Automata and Regular Expressions, Lex package on UNIX systems. Process of Lexical Analysis, Recognition of Regular Expressions.
April 14, 2022 April 17, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week April 18-23, 2022	Parsing Techniques: Top down & Bottom-up parsing, Shift Reduce parsing, Operator Precedence parsing, Predictive Parsers. Left Recursion and its removal, Recursive Descent parser,
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week April 25-30, 2022	Automatic Construction of efficient Parsers: LR parsers, the Canonical Collection of LR(0) items, Constructing SLR parsing tables, Constructing Canonical LR parsing tables, Constructing LALR parsing tables, Using Ambiguous Grammars
May 01, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week May 02-07, 2022	An Automatic Parser Generator, Implementation of LR parsing tables, Constructing LALR sets of items. YACC package on UNIX systems. Symbol Table: Contents of Symbol Table, Data Structures used for symbol table, Representating scope information.
May 03, 2022 May 08, 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week May 09-14, 2022	Syntax-Directed Translation: Translation Schemes, Implementation of Syntax-Directed Translators, Intermediate code and its need, Postfix Notation, Parse Trees and Syntax Trees, Three-address code and its representations, Boolean Expressions, Flow of Control.
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week May 16-21, 2022	Run Time Storage Administration: Types of Storage Allocation Schemes, Implementation of Stack Allocation Scheme, Implementaion of Block Structured Languages, Storage Allocation in Block Structured Languages.
May 22, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week May 23-28, 2022	<b>Sessionals</b>
May 29, 2022	<b>Sunday</b>
5 <sup>th</sup> Week May 30-31, 2022	Error Detection and Recovery: Errors, Lexical-Phase Errors, Syntactic Phase Errors, Semantic Errors.

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Divya Vij

Subject- Computers

Paper- MS-15-24 COMPILER DESIGN

Class- M.Sc. I Computer Science (2<sup>nd</sup> Semester)

<b>June 2022</b> <b>1<sup>st</sup> Week</b> <b>June 01-04, 2022</b>	Intermediate Code Generation: Object programs, Issues in the design of a code generator, Intermediate languages, Quadruples, Generating intermediate code for declarative statement, Register Allocation and Assignment statement, Boolean expression, and case statement, peephole optimization.
<b>June 02, 2022</b> <b>June 05, 2022</b>	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
<b>2<sup>nd</sup> Week</b> <b>June 06-11, 2022</b>	Code Optimization: Principle sources of Optimization, optimization of basic blocks, Loop Optimizations, DAG Representation of Basic Blocks, Loop Invariant Computation, Reducible Flow Graphs, Global Data Flow Analysis, code improving transformation.



# KVA DAV College for Women, Karnal

## Lesson Plan Odd Semester

(November, 2021 to June, 2022)

Name of the Teacher – Ms. Divya Vij

Subject- Computers

Paper- CS-DE-15 OPERATING SYSTEMS

Class- PGDCA

3 <sup>rd</sup> Week November 15-20, 2021	Introductory Concepts: Operating system functions and characteristics.
November 19, 2021 November 21, 2021	<b>Guru Nanak Dev Ji's Birthday Sunday</b>
4 <sup>th</sup> Week November 22-27, 2021	Historical evolution of operating systems, Real time systems.
November 28, 2021	<b>Sunday</b>
December 2021 1 <sup>st</sup> Week November 29-December 04, 2021	Distributed systems, O/S services, system calls, system programs.
December 05, 2021	<b>Sunday</b>
2 <sup>nd</sup> Week December 06-11, 2021	CPU Scheduling: Process concept, Process scheduling.
December 12, 2021	<b>Sunday</b>
3 <sup>rd</sup> Week December 13-18, 2021	Scheduling criteria, Scheduling algorithms.
December 19, 2021	<b>Sunday</b>
4 <sup>th</sup> Week December 20-24, 2021	Revision of Unit-I
December 25, 2021 December 26, 2021	<b>Christmas Sunday</b>
1 <sup>st</sup> Week 27 December 27, 2021- January 01, 2022	Deadlocks: Deadlock characterization, Deadlock prevention and avoidance.
January 02, 2022	<b>Sunday</b>
January 2022 2 <sup>nd</sup> Week January 03-08, 2022	Deadlock detection and recovery.
January 09, 2022	<b>Sunday (Sh. Guru Gobind Singh's Birthday)</b>
3 <sup>rd</sup> Week January 10-15, 2022	Storage Management: Storage allocation methods: Single contiguous allocation, Multiple contiguous allocation.
January 16, 2022	<b>Sunday</b>
4 <sup>th</sup> Week January 17-22, 2022	Paging; Segmentation, Virtual memory concepts.

**KVA DAV College for Women, Karnal**  
**Lesson Plan Odd Semester**  
**(November, 2021 to June, 2022)**

Name of the Teacher – Ms. Divya Vij  
 Subject- Computers  
 Paper- CS-DE-15 OPERATING SYSTEMS  
 Class- PGDCA

January 23, 2022	<b>Sunday</b>
5 <sup>th</sup> Week	<b>Sessional Exam</b>
January 24-29, 2022	
January 26, 2022	<b>Republic Day</b>
January 30, 2022	<b>Sunday</b>
February 2022	Demand Paging, Thrashing.
1 <sup>st</sup> Week	
January 31-February 04, 2022	
February 05, 2022	<b>Vasant Panchmi</b>
February 06, 2022	<b>Sunday</b>
2 <sup>nd</sup> Week	Page replacement Algorithms.
February 07-12, 2022	
February 13, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week	Revision of Unit-II
February 14-19, 2022	
February 20, 2022	<b>Sunday</b>
4 <sup>th</sup> Week	File Systems: File concept, File access and allocation methods.
February 21-26, 2022	
February 27, 2022	<b>Sunday</b>
March, 2022	Directory Systems: Structured Organizations.
1 <sup>st</sup> Week	
February 28, March 01-05, 2022	
March 06, 2022	<b>Sunday</b>
2 <sup>nd</sup> Week	Hardware Management: Disk scheduling policies.
March 07-12, 2022	
March 13, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week	Protection: Goals of protection, principles of protection, domain of protection.
March 14-19, 2022	
March 20, 2022	<b>Sunday</b>
4 <sup>th</sup> Week	Access matrix & its implementation, revocation of access rights.
March 21-26, 2022	
March 27, 2022	<b>Sunday</b>
5 <sup>th</sup> Week	Revision of Unit-III
March 28-31, April 01-02, 2022	
April, 2022	Windows: Features of Windows; Various versions of Windows & its use.
1 <sup>st</sup> Week	
April 04-09, 2022	
April 10, 2022	<b>Sunday</b>
2 <sup>nd</sup> Week	My Computer & Recycle bin.
April 11-16, 2022	
April 14, 2022	<b>Vaisakhi</b>
April 17, 2022	<b>Sunday</b>

# KVA DAV College for Women, Karnal

## Lesson Plan Odd Semester

(November, 2021 to June, 2022)

Name of the Teacher – Ms. Divya Vij

Subject- Computers

Paper- CS-DE-15 OPERATING SYSTEMS

Class- PGDCA

3 <sup>rd</sup> Week April 18-23, 2022	Desktop, Icons and Windows Explorer, Working with Files & Folders.
April 24, 2022	<b>Sunday</b>
4 <sup>th</sup> Week April 25-30, 2022	Simple operations like copy, delete, moving of files and folders from one drive to another.
May 01, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week May 02-07, 2022	Accessories and Windows. Dialog Boxes & Toolbars;
May 03, 2022 May 08, 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week May 09-14, 2022	Settings using Control Panel.
May 15, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week May 16-21, 2022	Linux: Linux architecture, Features of Linux.
May 22, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week May 23-28, 2022	<b>Sessionals</b>
May 29, 2022	<b>Sunday</b>
June 2022 1 <sup>st</sup> Week May 30-31, June 01-04, 2022	Simple Commands in Linux.
June 02, 2022 June 05, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week June 06-11, 2022	Revision of all syllabus.

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Mamta Atreja

Subject- Computers

Paper- Office Automation Tools(BCA-124)

Class- BCA-I (2<sup>nd</sup> Semester)

April, 2022 2 <sup>nd</sup> Week 4April -9 April	Desktop Publishing: Concept, Need and Applications; Hardware and Software requirements for DTP, An Overview and comparison between DTP packages, Common features of DTP.
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-16 April	Introduction to Page Maker: Features, System Requirements, Components of Page Maker Window, Introduction to Menu and Toolbars, PageMaker Preferences.
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April-23 April	Creating of Publications: Starting PageMaker, Setting Page size, Placing the text Formatting the text: Character Specification Paragraph setting: Paragraph Specification, Paragraph Rules, Spacing, Indents/Tabs, Define Styles, Hyphenation, Header & Footer, Page Numbering,
24April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April - 30April	Saving and Closing publication. Editing Publication: Open a publication ,Story editor, Find and change the text, Change character and Paragraph attributes ,spell checking ,Selecting text, Cut, Copy, Paste, Paste multiple, Working with columns
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2May -7 May	Word Processing: Introduction to Office Automation, Creating & Editing Document,
3 May , 2022 8May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -14 May	Formatting Document, Auto-text, Autocorrect, Spelling and Grammar Tool, Document Dictionary, Page Formatting, Bookmark
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-21 May	Advance Features of Word-Mail Merge, Macros, Tables, File Management, Printing, Styles, linking and embedding object.

## KVA DAV College for Women, Karnal

### Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher –Ms. Mamta Atreja

Subject- Computers

Paper- Office Automation Tools(BCA-124)

Class- BCA-I(2<sup>nd</sup> Semester)

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b>
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	Presentation using PowerPoint: Presentations, Creating, Manipulating & Enhancing Slides, Organizational Charts, Excel Charts, Word Art,
June 2022 1 <sup>st</sup> week 1 June - 4 June	Layering art Objects, Animations and Sounds, Inserting Animated Pictures or Accessing through Object,
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 6 June –11 June	Inserting Recorded Sound Effect or In-Built Sound Effect. <b>Revision of all Syllabus</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Mamta Atreja

Subject- Computers

Paper- Management Information System(BCA-246)

Class- BCA-II(4<sup>th</sup> Semester)

April, 2022 2 <sup>nd</sup> Week 4 April -9 April	Introduction to system and Basic System Concepts, Types of Systems
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-16 April	The Systems Approach, Information System: Definition & Characteristics, Types of information,
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April- 23 April	Role of Information in Decision-Making, Sub-Systems of an Information system:
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -30 April	EDP and MIS management levels, EDP/MIS/DSS.
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2 May -7 May	An overview of Management Information System: Definition & Characteristics, Components of MIS, Frame Work for Understanding MIS: Information requirements & Levels of Management
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -14 May	Simon's Model of decision-Making, Structured Vs Un-structured decisions, Formal vs. Informal systems.
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-21 May	Developing Information Systems: Analysis & Design of Information Systems: Implementation & Evaluation, Pitfalls in MIS Development

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher –Ms. Mamta Atreja

Subject- Computers

Paper- Management Information System(BCA-246)

Class- BCA-II(4<sup>th</sup> Semester)

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b>
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	Functional MIS: A Study of Personnel, Financial and production MIS
June 2022 1 <sup>st</sup> week 1 June - 4 June	Introduction to e-business systems, ecommerce – technologies, applications
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 6 June –11 June	Decision support systems – support systems for planning, control and decision-making <b>Revision of all Syllabus</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher –Ms. Mamta Atreja

Subject-Computers

Paper- Multimedia Tools(Paper-I)

Class- B.Sc III (Computer Applications) 6<sup>th</sup> Semester

April, 2022 2 <sup>nd</sup> Week 4 April -6 April	Multimedia Introduction: Definition, Characteristics, Multimedia Classification, Multimedia elements, Multimedia devices: Multimedia Input devices, Output devices, Communication devices, memory devices
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-13 April	Application of multimedia: General Applications, Edutainment, application in interactive television, Multimedia applications in entertainment & performing arts, Multimedia use in museum and galleries
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April- 20 April	Concept generation of multimedia project; Process and stages of multimedia production; Multimedia production team members
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -27 April	Text – Concepts of plain & formatted text, RTF & HTML texts, using common text preparation tools, Conversion to and from of various text formats, using standard software, Object Linking and Embedding concept, Basics of font design, overview of some fonts editing and designing tools, Understanding & using various text effects.
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2 May -4 May	Images – importance of graphics in multimedia, Vector and Raster graphics, image capturing methods –scanner, digital camera etc., Image file formats – BMP, DIB, EPS, CIF, PEX, PIC, JPG, TGA, PNG and TIF format – their features and limitations, graphic file formats conversions, processing images with common software tools such as Photoshop
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -11 May	Sound: Sound and its Attributes, Mono V/s Stereo sound, Sound channels, Sound and its effect in multimedia, Analog V/s Digital sound, Basics of digital sounds-Sampling, Frequency, Sound Depth, Channels, Sound on PC, Sound standards on PC, Capturing and Editing sound on PC, Overview and using some sound recording, editing software. Overview of various sound file formats on PC – WAV,MP3, MP4 etc.
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-18 May	Animation: Basics of animation, Principle and use of animation in multimedia, Effect of resolutions, pixel depth, Images size on quality and storage.Overview of 2-D and 3-D animation techniques: Cell Animation, Kinematics, Morphing, RotoScoping,Antialiasing Features of Computer Animation software- animation pro, 3D studio & Paint Shop pro animator.Animation on the Web – features and limitations, creating simple animations for the Web using GIF Animator and Flash.



# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms.Mamta Atreja

Subject-Computers

Paper- Multimedia Tools(Paper-I)

Class- B.Sc III (Computer Applications) 6<sup>th</sup> Semester

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b>
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	Video: Basics of Video – Analog and Digital Video, Introduction to graphics accelerator cards, DirectX Introduction to AV/DV and IEEE1394 cards, Digitization of analog video to digital video, Interlacing and non-interlacing, Various video standards – NTSC, PAL, SECAM, HDTV, Introduction to video capturing Media & instrument – Videodisk, DVCAM, Camcorder, Introduction to digital video compression techniques and file formats – AVI, MPEG, MOV, Real Video.
June 2022 1 <sup>st</sup> week 1 June	Multimedia on the Web: Bandwidth relationship, broadband technologies, Text in the web – Dynamic and embedded font technology, Audio on the Web – Real Audio and MP3/MP4, Audio support in HTML, Graphics – HTML safe color palette, Interlaced V/s Non interlaced model, Graphics support in HTML, Image Map,
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 6 June –8 June	Video on the Web – Streaming video, Real Video, MPEG and SMIL, Virtual Reality on the Web. <b>Revision of all Syllabus</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms .Mamta Atreja

Subject-Computers

Paper- Advanced Programming Using C++ (Paper-II)

Class- B.Sc III (Computer Applications) 6<sup>th</sup> Semester

April, 2022 2 <sup>nd</sup> Week 7 April -9 April	Dynamic Polymorphism: Function Overriding, Virtual Function and its
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 15 April-16 April	Need, Pure Virtual Function, Abstract Class, Virtual Derivation, Virtual Destructor
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 21 April- 23 April	Type Conversion: Basic Type Conversion, Conversion between objects and basic types, Conversion between objects of different classes,
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 28 April -30 April	Inheritance: Rules of Derivations – Private, Protected and Public Derivations.
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 5 May -7 May	Different Forms of Inheritance – Single, Multiple, Multilevel, Hierarchical and Multipath Inheritance
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 12 May -14 May	Roles of Constructors and Destructors in Inheritance, Genericity in C++:
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 19 May-21 May	Templates in C++, Function templates

## KVA DAV College for Women, Karnal

### Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms.Mamta Atreja

Subject-Computers

Paper- Advanced Programming Using C++ (Paper-II)

Class- B.Sc III (Computer Applications)

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b>
29 May, 2022	<b>Sunday</b>
June 2022 1 <sup>st</sup> week 3 June - 4 June	Class templates in C++, Exception Handling in C++: try, throw and catch, Files I/O in C++
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 June –11 June	Class Hierarchy for Files I/O, Text versus Binary Files, Opening and Closing Files, File Pointers, Operation on files. <b>Revision of all Syllabus</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms.Mamta Atreja

Subject-Computers

Paper- Relational Data Base Management System(Paper-I)

Class- B.A. III(Computer Science) 6<sup>th</sup> Semester

April, 2022 2 <sup>nd</sup> Week 4 April -6 April	Relational Model Concepts, Codd's Rules for Relational Model, Hierarchical Data Model–Introduction, Features, Components, Example, Network Data Model– Introduction, Features,Components, Example
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-13 April	Differences between Hierarchical Data Model and Network Data Model Comparison of Relational Data Model with Hierarchical Data Model and Network Data Model
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April- 20 April	Relational Algebra:-Selection and Projection, Set Operation, Join and Division
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -30 April	Relational Calculus: Tuple Relational Calculus and Domain Relational Calculus.
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2 May -4 May	Functional Dependencies and Normalization -- Purpose, Data Redundancy, Update Anomalies, Partial/Fully Functional Dependencies, Transitive Functional Dependencies
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -11 May	Characteristics of Functional Dependencies, Decomposition and Normal Forms (1NF, 2NF, 3NF & BCNF).
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-18 May	SQL: Data Definition and data types, Create Table, Insert Data, Viewing Data, Filtering Table

## KVA DAV College for Women, Karnal

### Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms.Mamta Atreja

Subject-Computers

Paper- Relational Data Base Management System(Paper-I)

Class- B.A. III (Computer Science) 6<sup>th</sup> Semester

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b>
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	Data, Sorting data, Creating Table from a Table, Destroy table, Update, View, Delete, Join, Concatenating data from Table Specifying Constraints in SQL; Primary Key, Foreign Key, Unique Key, Check Constraint, Using Functions
June 2022 1 <sup>st</sup> week 1 June	PL/SQL-Introduction, Advantages of PL/SQL The Generic PL/SQL Block: PL/SQL Execution Environment; PL/SQL Character Set and Data Types, Declaration and Assignment of Variables
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 6 June –8 June	Control Structure in PL/SQL: Conditional Control, Iterative Control, Sequential Control  <b>Revision of all Syllabus</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Prashantika P Sanduja

Subject- Advanced Computer Architecture

Paper- MS-15-43

Class- M.Sc. CS 4<sup>th</sup> Semester

April, 2022 2 <sup>nd</sup> Week 4April -9 April	Computational Model: Basic computational models, evolution and interpretation of computer architecture, concept of computer architecture as a multilevel hierarchical framework. Classification of parallel architectures, Relationships between programming languages and parallel architectures
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-16 April	Parallel Processing:: Types and levels of parallelism, Instruction Level Parallel (ILP) processors, dependencies between instructions, principle and general structure of pipelines, performance measures of pipeline, pipelined processing of integer, Boolean, load and store instructions
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April-23 April	VLIW architecture, Code Scheduling for ILP Processors - Basic block scheduling, loop scheduling, global scheduling, MIMD Architectures: Concepts of distributed and shared memory MIMD architectures
24April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April - 30April	UMA, NUMA, CCNUMA & COMA models, problems of scalable computers. Direct Interconnection Networks: Linear array, ring, chordal rings, star, tree, 2D mesh, barrel shifter, hypercubes
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2May -7 May	Dynamic interconnection networks: single shared buses, comparison of bandwidths of locked, pended & split transaction buses, Arbiter Logics, crossbar, multistage networks – omega, butterfly
3 May , 2022 8May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -14 May	Cache coherence problem, hardware based protocols – snoopy cache protocol, directory schemes, hierarchical cache coherence protocols, software based protocols
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-21 May	Superscalar Processors: Emergence of superscalar processors, Tasks of superscalar processing – parallel decoding, superscalar instruction issue, shelving, register renaming

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Prashantika P Sanduja

Subject- Advanced Computer Architecture

Paper- MS-15-43

Class- M.Sc. CS 4<sup>th</sup> Semester

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b>
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	Parallel execution, preserving sequential consistency of instruction execution and exception processing
June 2022 1 <sup>st</sup> week 1 June - 4 June	Comparison of VLIW & superscalar processors, Branch Handling: Branch problem, Approaches to branch handling – delayed branching, branch detection and prediction schemes, branch penalties and schemes to reduce them, multiway branches, guarded execution
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 6 June –11 June	<b>Revision of the whole syllabus</b>

## KVA DAV College for Women, Karnal

### Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Prashantika P Sanduja

Subject- Security in Computing

Paper- MS-15-44 (iv)

Class- M.Sc. CS 4<sup>th</sup> Semester

April, 2022 2 <sup>nd</sup> Week 4April -9 April	Computer Security Concepts, Threats, Attacks and Assets, Security Functional Requirements, Security Architecture and Scope of Computer Security, Computer Security Trends, Computer Security Strategies
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-16 April	Program Security: Secure Program, Non-malicious Program Error, Viruses and other Malicious Code, Targeted Malicious Code, Control against Program Threats
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April-23 April	Database Security: Database Management System, Relational Databases, Database Access Control, Inference, Security Requirements, Reliability and Integrity, Sensitive Data, Database Encryption, Firewall- Need for firewall, Characteristics, Types of firewall, Firewall Basing
24April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April - 30April	Intrusion Detection System- Types, Goals of IDS, IDS strengths and Limitations, Internet Security Protocols and Standards: Secure Socket Layer (SSL) and Transport Layer Security (TLS), IPv4 and IPv6 Security, Kerberos 672, X.509 678, Public Key Infrastructure
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2May -7 May	Linux Security Model, File System Security, Linux Vulnerability, Linux System Hardening, Application Security. Window Security Architecture, Windows Vulnerability, Windows Security Defense, Browser Defenses.
3 May , 2022 8May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -14 May	Security Auditing Architecture, Security Audit Trail, Security Risk assessment, Security Controls or Safeguard, IT Security Plan, Cybercrime and Computer Crime
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-21 May	Intellectual Property, Privacy, Ethical Issues



# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Prashantika P Sanduja

Subject- Security in Computing

Paper- MS-15-44 (iv)

Class- M.Sc. CS 4<sup>th</sup> Semester

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b>
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	Network Security: Threats in Network, Network Security Controls
June 2022 1 <sup>st</sup> week 1 June - 4 June	Physical Security Threats, Physical Security Prevention and Mitigation Measures, Recovery form Physical Security Breaches
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 6 June –11 June	<b>Revision of the whole syllabus</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Prashantika P Sanduja

Subject- Programming in C

Paper- Paper - I

Class- B.Sc. CS 2<sup>nd</sup> Semester

April, 2022 2 <sup>nd</sup> Week 4 April -6 April	Overview of C: History & Importance of C, Structure of a C Program. Elements of C: C character set, identifiers and keywords, Data types, Constants and Variables, Assignment statement, Symbolic constant
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-13 April	Input/output: Unformatted & formatted I/O function, Input functions (scanf(), getch(), getche(), getchar(), gets()), output functions (printf(), putch(), putchar(), puts()).
17 April, 2022	<b>Sunday</b>
4 <sup>th</sup> Week 18 April-20 April	Operators & Expression: Arithmetic, relational, logical, bitwise, unary, assignment, conditional operators and special operators
24April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April - 27April	Arithmetic expressions, evaluation of arithmetic expression, type casting and conversion, operator hierarchy & associativity, Decision making & branching: Decision making with IF statement, IF-ELSE statement, Nested IF statement
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2May, 4 May	ELSE-IF ladder, switch statement, goto statement, Decision making & looping: For, while, and do-while loop
3 May, 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -11 May	Jumps in loops, break, continue statement, Functions: Definition, prototype, passing parameters, recursion
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-18 May	Arrays: Definition, types, initialization, processing an array. Structure and Union

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Prashantika P Sanduja

Subject- Programming in C

Paper- Paper - I

Class- B.Sc. CS 2<sup>nd</sup> Semester

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b>
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	Storage classes in C: auto, extern, register and static storage class, their scope, storage, & lifetime.
June 2022 1 <sup>st</sup> week 1 June	Storage classes in C: register and static storage class, their scope, storage, & lifetime.
5 June, 2022	<b>Sunday</b>
2 <sup>nd</sup> Week 6 June –8 June	<b>Revision of the whole syllabus</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Prashantika P Sanduja

Subject- Logical Organization of Computers

Paper- Paper - II

Class- B.Sc. CS 2<sup>nd</sup> Semester

April, 2022 2 <sup>nd</sup> Week 7 April -9 April	Information Representation: Number Systems – Decimal Number System, Octal Number System, Hexa Decimal Number System, Conversion from Decimal to Binary, Octal, Hexa decimal Number System and vice versa
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 15 April-16 April	Binary Arithmetic:- Binary Addition, Binary Subtraction, Binary Multiplication, Binary Division
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 21 April-23 April	Fixed-point and Floating point representation of numbers, BCD Codes, Error detecting and correcting codes, Character Representation – ASCII, EBCDIC
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 28 April - 30 April	Binary Logic: Boolean Algebra, Boolean Theorems, Boolean Functions and Truth Tables
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 5 May -7 May	Canonical and Standard forms of Boolean functions, Simplification of Boolean Functions – Venn Diagram, Karnaugh Maps
8 May , 2022	<b>Sunday</b>
2 <sup>nd</sup> Week 12 May -14 May	Digital Logic: Basic Gates – AND, OR, NOT, Universal Gates – NAND, NOR, Other Gates – XOR, XNOR, Combinational Circuits: Half-Adder, Full-Adder, Half- Subtractor, Full-Subtractor, Encoders, Decoders, Multiplexers, Demultiplexers, Comparators, Code Converters
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 19 May-21 May	Sequential Logic: Characteristics, Flip-Flops, Clocked RS, D type, JK, T type and Master- Slave flip-flops. State table, state diagram. Flip-flop excitation tables

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Prashantika P Sanduja

Subject- Logical Organization of Computers

Paper- Paper - II

Class- B.Sc. CS 2<sup>nd</sup> Semester

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b>
29 May, 2022	<b>Sunday</b>
June 2022 1 <sup>st</sup> week 3 June - 4 June	Shift registers : serial in parallel out and parallel in parallel out, serial in serial out and parallel in serial out, Designing counters – Asynchronous and Synchronous Binary Counters, Modulo-N Counters and Up-Down Counters
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 June –11 June	<b>Revision of the whole syllabus</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Tarjeet Kaur

Subject- Computers

Paper- BCA-361(Web Designing Using Advanced Tools)

Class- BCA VI Sem

April, 2022 2 <sup>nd</sup> Week 4April -9 April	Interactivity Tool - JavaScript: Introduction, Features, Data types, Operators, Statements, Functions, Event Handling, Use of Predefined Object and Methods, Frames, Windows
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-16 April	Tables, Images, Links Interactivity Tool, VBScript: Introduction, Features, Variables, Data Types, Numeric and Literal Constants, Arrays, Operators, Subroutine Procedures, Function Procedures
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April-23 April	Control Statements, Strings, Message and Input Boxes, Date and Time, Event Handlers, Embedding VBScript in HTML
24April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April - 30April	Interactivity Tool - Active Script Pages – Introduction, Features, Client-Server Model, Data Types, Decision Making Statements, Control statements,
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2May -7 May	Use of Various Objects of ASP, Various Techniques of Connecting to Database Other Interactivity Tools - Macromedia Flash, Macromedia Dreamweaver, PHP: Basic Introduction and Features
3 May , 2022 8May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -14 May	DHTML: Introduction, Features, Events, Dynamic Positioning, Layer Object, Properties of STYLE, Dynamic Styles, Inline Styles, Event Handlers; Cascading Style Sheets (CSS): Basic Concepts, Properties.
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-21 May	Creating Style Sheets; Common Tasks with CSS: Text, Fonts, Margins, Links, Tables, Colors, Marquee; Mouseovers, Filters and Transitions; Adding Links; Adding Tables; Adding Forms

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Tarjeet Kaur

Subject- Computers

Paper- BCA-361(Web Designing Using Advanced Tools)

Class- BCA VI Sem

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b>
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	Adding Image and Sound; Use of CSS in HTML Documents Linking and Embedding of CSS in HTML Document Microsoft FrontPage: Introduction, Features, Title Bar, Menu bar, FrontPage Tool Bar, Style,
June 2022 1 <sup>st</sup> week 1 June – 4 June	Font Face and Formatting Bar, Scroll Bars, XML: Introduction, Features, XML Support and Usage, Structure of XML Documents, Structures in XML,
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 6 June –11 June	Creating Document Type Declarations, Flow Objects, Working with Text and Font, Color and Background Properties;

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher- Ms. Tarjeet Kaur

Subject- Computers

PaperMS-15-42 COMPUTER GRAPHICS

Class- M.Sc. II Computer Science (4th Semester)

<b>April, 2022</b> <b>2<sup>nd</sup> Week</b> <b>4 April -9 April</b>	Introduction to Computer Graphics and its applications, Components and working of Interactive Graphics; Display Devices: CRT; Random Scan, Raster Scan, Refresh Rate and Interlacing, Bit Planes, Color Depth, Color Palette, Color CRT Monitor, DVST.
<b>10 April, 2022</b>	<b>Sunday</b>
<b>3<sup>rd</sup> Week</b> <b>11 April-16 April</b>	Display Processors; Resolution, Aspect Ratio, Refresh CRT, interlacing; Color CRT monitors, LookUp tables, Flat-Panel Displays: Plasma Panel, LED, LCD; Lookup Table, Interactive Input Devices, Display Processor, General Purpose Graphics Software, Coordinate Representations.
<b>14 April, 2022</b> <b>17 April, 2022</b>	<b>Vaisakhi</b> <b>Sunday</b>
<b>4<sup>th</sup> Week</b> <b>18 April- 23 April</b>	Interactive Input and Output Devices: keyboard, mouse, trackball, joystick, light pen, digitizers; image scanners, Touch Panels; Voice systems; printers, plotters; Graphics Software, Coordinate Representations
<b>24 April, 2022</b>	<b>Sunday</b>
<b>5<sup>th</sup> Week</b> <b>25 April -30 April</b>	Point-Plotting Techniques: Scan Conversion, Scan-Converting a Straight Line: The Symmetrical DDA, The Simple DDA, Bresenham's Line Algorithm; Scan-Converting a Circle: Circle drawing using Polar Coordinates.
<b>1 May, 2022</b>	<b>Sunday</b>
<b>May 2022</b> <b>1<sup>st</sup> Week</b> <b>2 May -7 May</b>	Bresenham's Circle Algorithm, Scan-Converting an Ellipse: Polynomial Method, Trigonometric Method; Polygon Area Filling: Scan line Fill and Flood Fill Algorithms.
<b>3 May , 2022</b> <b>8 May , 2022</b>	<b>Eid-ul-Fitr</b> <b>Sunday</b>
<b>2<sup>nd</sup> Week</b> <b>9 May -14 May</b>	Two-Dimensional Graphics Transformation: Basic Transformations: Translation, Rotation, Scaling; Matrix Representations and Homogeneous Coordinates; Other Transformations: Reflection, Shearing.
<b>15 May, 2022</b>	<b>Sunday</b>
<b>3<sup>rd</sup> Week</b> <b>16 May-21 May</b>	Coordinate Transformations; Composite Transformations; Inverse Transformation; Affine Transformations. Raster Transformation, Graphical Input: Pointing and Positioning Devices and Techniques



# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher- Ms. Tarjeet Kaur

Subject- Computers

PaperMS-15-42 COMPUTER GRAPHICS

Class- M.Sc. II Computer Science (4th Semester)

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b>
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	Two-Dimensional Viewing: Window and Viewport, 2-D Viewing Transformation Clipping: Point Clipping; Line Clipping: Cohen-Sutherland Line Clipping Algorithm. Shading: Modelling light intensities, Gouraud shading, Phong shading; Introduction to Animation, Tweening, Morphing, Fractals;
June 2022 1 <sup>st</sup> week 1 June - 4 June	Mid-Point Subdivision Line Clipping Algorithm; Polygon Clipping: Sutherland-Hodgman Polygon Clipping Algorithm, Liang-Barsky line clipping, Sutherland-Hodgman polygon clipping; Weiler-Atherton polygon Clipping, Pointing and positioning techniques; rubber band technique; dragging.
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 6 June –11 June	Three-Dimensional Graphics: Three-Dimensional Display Methods; 3-D Transformations: Translation, Rotation, Scaling; Composite Transformations Orthographic and oblique projection; perspective projection; Hidden surface removal: Z-buffer, depth-sorting, area subdivision, BSP-Tree method; Ray casting;

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Tarjeet Kaur

Subject- Computer Science

Paper- I (Relational Database Management Systems)

Class- B.Sc. III

<b>April, 2022</b> <b>2<sup>nd</sup> Week</b> <b>4 April -6 April</b>	Relational Model Concepts, Codd's Rules for Relational Model, Hierarchical Data Model–Introduction, Features, Components, Example, Network Data Model– Introduction, Features, Components, Example, Differences between Hierarchical Data Model and Network Data Model
<b>10 April, 2022</b>	<b>Sunday</b>
<b>3<sup>rd</sup> Week</b> <b>11 April-13 April</b>	Comparison of Relational Data Model with Hierarchical Data Model and Network Data Model, Relational Algebra:-Selection and Projection, Set Operation, Join and Division, Relational Calculus: Tuple Relational Calculus and Domain Relational Calculus
<b>14 April, 2022</b> <b>17 April, 2022</b>	<b>Vaisakhi</b> <b>Sunday</b>
<b>4<sup>th</sup> Week</b> <b>18 April- 20 April</b>	Functional Dependencies and Normalization -- Purpose, Data Redundancy, Update Anomalies, Partial/Fully Functional Dependencies, Transitive Functional Dependencies, Characteristics of Functional Dependencies, Decomposition and Normal Forms (1NF, 2NF, 3NF & BCNF)
<b>24 April, 2022</b>	<b>Sunday</b>
<b>5<sup>th</sup> Week</b> <b>25 April -27 April</b>	SQL: Data Definition and data types, Create Table, Insert Data, Viewing Data, Filtering Table Data
<b>1 May, 2022</b>	<b>Sunday</b>
<b>May 2022</b> <b>1<sup>st</sup> Week</b> <b>2 May -4 May</b>	Sorting data, Creating Table from a Table, Destroy table, Update, View, Delete, Join
<b>3 May , 2022</b> <b>8 May , 2022</b>	<b>Eid-ul-Fitr</b> <b>Sunday</b>
<b>2<sup>nd</sup> Week</b> <b>9 May -11 May</b>	Concatenating data from Table Specifying Constraints in SQL; Primary Key, Foreign Key, Unique Key
<b>15 May, 2022</b>	<b>Sunday</b>
<b>3<sup>rd</sup> Week</b> <b>16 May-18 May</b>	Check Constraint, Using Functions, PL/SQL-Introduction, Advantages of PL/SQL, The Generic PL/SQL Block: PL/SQL Execution Environment

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Tarjeet Kaur

Subject- Computer Science

Paper- I (Relational Database Management Systems)

Class- B.Sc. III

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b>
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	Types, Declaration and Assignment of Variables Control Structure in
June 2022 1 <sup>st</sup> week 1 June	PL/SQL: Conditional Control, Iterative Control, Sequential Control
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 6 June –8 June	Test of Whole Syllabus

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Tarjeet Kaur

Subject- Computer Science

Paper- II (Computer Network)

Class- B.Sc. III

April, 2022 2 <sup>nd</sup> Week 7 April -9 April	Introduction to Data Communication and Computer Networks; Uses of Computer Networks, Types of Computer Networks and their Topologies; Network Hardware Components, Connectors
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 15 April-16 April	Transceivers, Repeaters, Hubs, Network Interface Cards and PC Cards, Bridges, Switches, Routers, Gateways; Network Software: Network Design issues and Protocols, Connection-Oriented and Connectionless Services; OSI Reference Model; TCP/IP Model
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 21 April- 23 April	Analog and Digital Communications Concepts: Analog and Digital data and signals; Bandwidth and Data Rate, Capacity, Baud Rate, Guided and Wireless Transmission Media, Communication Satellites
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 28 April -30 April	Switching and Multiplexing, Modems and Modulation Techniques, Data Link Layer Design issues; Error Detection and Correction methods; Sliding Window Protocols: One-bit, Go Back N and Selective Repeat; Media Access Control: ALOHA, Slotted ALOHA
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 5 May -7 May	CSMA, Collision free protocols; Introduction to LAN technologies: Ethernet, Switched Ethernet, Fast Ethernet, Gigabit Ethernet; Token Ring; Introduction to Wireless LANs and Bluetooth
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 12 May -14 May	Congestion Control; Traffic Shaping Choke packets; Load Shedding, Application Layer: Introduction to DNS
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 19 May-21 May	E-Mail and WWW services, Network Security Issues: Security attacks

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Tarjeet Kaur

Subject- Computer Science

Paper- II (Computer Network)

Class- B.Sc. III

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b>
29 May, 2022	<b>Sunday</b>
June 2022 1 <sup>st</sup> week 3 June - 4 June	Encryption methods; Firewalls; Digital Signatures
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 June –11 June	Test of the whole syllabus

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Mrs. Megha

Subject- Relational Data Base Management System

Paper- BCA-244

Class- BCA II

April, 2022 2 <sup>nd</sup> Week 4 April -9 April	Relational Model Concepts, Codd's Rules for Relational Model.
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-16 April	Relational Algebra:-Selection and Projection, Set Operation, Renaming, Join and Division.
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April- 23 April	Relational Calculus: Tuple Relational Calculus and Domain Relational Calculus.
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -30 April	Functional Dependencies and Normalization:-Purpose, Data Redundancy and Update Anomalies.
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2 May -7 May	Functional Dependencies:-Full Functional Dependencies, Transitive Functional Dependencies, and Characteristics of Functional Dependencies.
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -14 May	Decomposition and Normal Forms (1NF, 2NF, 3NF & BCNF).
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-21 May	SQL: Data Definition and data types, SQL Operators. Specifying Constraints in SQL.

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Mrs. Megha

Subject- Relational Data Base Management System

Paper- BCA-244

Class- BCA II

<b>22 May, 2022</b>	<b>Sunday</b>
<b>May, 2022</b> <b>4<sup>th</sup> Week</b> 23 May--28 May	<b>Sessionals</b>
<b>29 May, 2022</b>	<b>Sunday</b>
<b>5<sup>th</sup> Week</b> <b>30 May -31</b> <b>May</b>	Basic DDL, and DML and DCL commands in SQL. Simple Queries, Nested Queries. Tables, Views, Indexes, Aggregate Functions, Clauses.
<b>June 2022</b> <b>1<sup>st</sup> week</b> <b>1 June - 4 June</b>	PL/SQL architecture, PL/SQL and SQL*Plus, PL/SQL Basics, Advantages of PL/SQL, The Generic PL/SQL Block: PL/SQL Execution Environment. PL/SQL Character set and Data Types, Control Structure in PL/SQL.
<b>2 June, 2022</b> <b>5 June, 2022</b>	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
<b>2<sup>nd</sup> Week</b> <b>6 June –11</b> <b>June</b>	Cursors in PL/SQL, Triggers in PL/SQL, Programming using PL/SQL & Revision of all syllabus.

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester

(April, 2022 to June, 2022)

Name of the Teacher – Megha

Subject- Computer Graphics

Paper- BCA-363

Class- BCA III

April, 2022 2 <sup>nd</sup> Week 4 April -9 April	Introduction to Computer Graphics; Interactive and Passive Graphics; Applications of Computer Graphics; Display Devices: CRT; Random Scan, Raster Scan, Refresh Rate and Interlacing, Bit Planes.
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-16 April	Color Depth, Color Palette, Color CRT Monitor, DVST, Flat-Panel Displays: Plasma Panel, LED, LCD; Lookup Table, Interactive Input Devices, Display Processor, General Purpose Graphics Software, Coordinate Representations.
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April- 23 April	Point-Plotting Techniques: Scan Conversion, Scan-Converting a Straight Line: The Symmetrical DDA, The Simple DDA, Bresenham's Line Algorithm; Scan-Converting a Circle:
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -30 April	Circle drawing using Polar Coordinates, Bresenham's Circle Algorithm, Scan-Converting an Ellipse: Polynomial Method, Trigonometric Method; Polygon Area Filling: Scan-line Fill and Flood Fill Algorithms.
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2 May -7 May	Two-Dimensional Graphics Transformation: Basic Transformations: Translation, Rotation, Scaling; Matrix Representations and Homogeneous Coordinates.
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -14 May	Other Transformations: Reflection, Shearing; Coordinate Transformations; Composite Transformations; Inverse Transformation; Affine Transformations; Raster Transformation.
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-21 May	Graphical Input: Pointing and Positioning Devices and Techniques.



# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Megha

Subject- Computer Graphics

Paper- BCA-363

Class- BCA III

<b>22 May, 2022</b>	<b>Sunday</b>
<b>May, 2022</b> <b>4<sup>th</sup> Week</b> 23 May--28 May	<b>Sessionals</b>
<b>29 May, 2022</b>	<b>Sunday</b>
<b>5<sup>th</sup> Week</b> <b>30 May -31</b> <b>May</b>	Two-Dimensional Viewing: Window and Viewport, 2-D Viewing Transformation. Clipping: Point Clipping; Line Clipping: Cohen-Sutherland Line Clipping Algorithm,
<b>June 2022</b> <b>1<sup>st</sup> week</b> <b>1 June - 4 June</b>	Mid-Point Subdivision Line Clipping Algorithm; Polygon Clipping: Sutherland-Hodgeman Polygon Clipping Algorithm. Three-Dimensional Graphics: Three-Dimensional Display Methods;
<b>2 June, 2022</b> <b>5 June, 2022</b>	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
<b>2<sup>nd</sup> Week</b> <b>6 June –11</b> <b>June</b>	3-D Transformations: Translation, Rotation, Scaling; Composite Transformations & Revision of all syllabus.

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Megha

Subject- E-Commerce

Paper- BC-204

Class- B.COM (Gen.) (I)

April, 2022 2 <sup>nd</sup> Week 4 April -9 April	Introduction to internet: concept, application.
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-16 April	Uses of Internet, Internet services.
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April- 23 April	Information Technology and Business: concepts of data, information and information system.
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -30 April	Effects of IT on business; Types of information system: Transaction Processing System (TPS).
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2 May -7 May	Management Information System (MIS).
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -14 May	Introduction to E-commerce; e-commerce and world wide web; e commerce application services.
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-21 May	Ecommerce models: B2B, B2C, C2C; electronic data interchange: benefits.

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Megha

Subject- E-Commerce

Paper- BC-204

Class- B.COM (Gen.) (I)

<b>22 May, 2022</b>	<b>Sunday</b>
<b>May, 2022</b> <b>4<sup>th</sup> Week</b> 23 May--28 May	<b>Sessionals</b>
<b>29 May, 2022</b>	<b>Sunday</b>
<b>5<sup>th</sup> Week</b> <b>30 May -31</b> <b>May</b>	Components of EDI, EDI implementation..
<b>June 2022</b> <b>1<sup>st</sup> week</b> <b>1 June - 4 June</b>	Security issues in e-commerce
<b>2 June, 2022</b> <b>5 June, 2022</b>	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
<b>2<sup>nd</sup> Week</b> <b>6 June –11</b> <b>June</b>	M-commerce and e-governance: an overview & Revision of all syllabus.

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Megha

Subject- COMPUTER AWARENESS (LEVEL – I)

Paper- L1 – (I) BASIC COMPUTER EDUCATION

Class- B.A. I

April, 2022 2 <sup>nd</sup> Week 4 April -9 April	<b>Operating System</b> - Definition & Functions of Operating System, Basics of Popular Operating Systems; The User Interface, Exploring Computer, Icons, taskbar, desktop.
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-16 April	Using Menu and Menu-selection, managing files and folders, Control panel – display properties, add/remove software and hardware, Running an Application, Using help; Creating Short cuts, Basics of O.S Setup; Common utilities.
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April- 23 April	Introduction to Word Processing, Menus, Creating, Editing & Formatting Document, Spell Checking, Printing, Views, Tables, Word Art, Mail Merge, Macros.
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -30 April	<b>Spread Sheet:</b> Elements of Electronics Spread Sheet, Applications, Creating and Opening of Spread Sheet, Menus, Manipulation of cells: Enter texts numbers and dates.
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2 May -7 May	Cell Height and Widths, Copying of cells, Mathematical, Statistical and Financial function, drawing different types of charts.
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -14 May	Creating, modifying and enhancing a presentation.
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-21 May	Delivering a presentation, Using sound, animation and design templates in presentation.

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Megha

Subject- COMPUTER AWARENESS (LEVEL – I)

Paper- L1 – (I) BASIC COMPUTER EDUCATION

Class- B.A. I

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b>
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	<b>Computer Communication:</b> Internet and its applications, Connecting to internet, Surfing the Internet using web browsers, Web Browsing software.
June 2022 1 <sup>st</sup> week 1 June - 4 June	Search Engines, Understanding URL, Domain name, IP Address, Creating Email Id, Viewing an E-Mail.
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 6 June –11 June	Sending an E-Mail to a single and multiple users, Sending a file as an Attachment & Revision of all syllabus.

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ravneet Kaur

Subject- Computer

Paper- MS-15-41 (Advance Web Technology)

Class- M. Sc. IV Sem. (Computer Sc.)

April, 2022 2 <sup>nd</sup> Week 4 April -9 April	<b>Introduction:</b> Web Browsers, Caching -Downloading and Rendering, Persistent Connections - DNS caching and prefetching - Buffering, Weblog
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-16 April	<b>Optimization</b> - Parallel Downloading, Controlling caches -Content compression, Control size with minification -Optimizing images, Load balancers
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April- 23 April	- Marketing of Website: traffic generation, Newsletters; -Tuning MYSQL, Using query caching, Optimizing query execution and optimization <b>Security:</b> SQL: query log, SQL injections. - Searching techniques used by search engines, keywords, advertisements.
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -30 April	<b>Search engine optimization</b> for individual web pages - optimization for entire website - Pitfalls in Optimization
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2 May -7 May	<b>Assignment-1</b> -Tools for Optimization - CSS Expressions and performance <b>Doubt Clearing And Test</b>
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -14 May	- <b>Introduction to JavaScript</b> , Obtaining user inputs, memory concepts - Operators, Control Structures, Looping constructs, Objects
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-21 May	- Programmer defined functions, - Handling Events Using JavaScript.

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ravneet Kaur

Subject- Computer

Paper- MS-15-41 (Advance Web Technology)

Class- M. Sc. IV Sem. (Computer Sc.)

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May, 2022 24-28 ay	-Cookies in Java script <b>Introduction to PHP</b> - Variables, Data Types, Operators and Expressions, Constants - Code Blocks and Browser Output
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May 31 May, 1 June - 4 June	<b>Sessional</b> Strings Processing, Objects,
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
1 <sup>st</sup> week 6 June –11 June	<b>Assignment-II</b> Form processing Connecting to database
12 June, 2022	<b>Sunday</b>
2 <sup>nd</sup> Week 13 June- 18 June	<b>Cookies, dynamic contents</b> <b>Revision of Important Topic</b>
19 June, 2022	<b>Sunday</b>
3 <sup>rd</sup> week 20 June -24 June	<b>Revision of Important Topic</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ravneet Kaur

Subject- Computer

Paper- MC- 401 IT and E- Commerce

Class- M.Com IV Sem.

April, 2022 2 <sup>nd</sup> Week 4 April -9 April	<b>Introduction to E-commerce:</b> Meaning of electronic commerce, business applications of e-commerce, comparison with traditional commerce;
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-16 April	<b>Business models in E-commerce –</b> e-shops, e-procurement, e-auctions, value chain integrators, information brokerage, telecommunication, collaboration platforms, etc.;
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April- 23 April	<b>Electronic payment system;</b> E-Banking –concept, operations. Online fund transfer – RTGC, ATM, etc., Online share market operations
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -30 April	<b>Online marketing,</b> Web-based advertising – concept, advantages; Types of online advertisements;
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2 May -7 May	<b>Assignment-1</b> <b>Email marketing;</b> Social Networking and marketing – promotion, opinion formulation, etc.; -
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -14 May	Viral Marketing, E-retailing-concept, advantages, limitations; CRM and Information Technology.
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-21 May	<b>Tools to conducting online research –</b> secondary research, online focus groups, web based surveys, data mining from social networking sites;



# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ravneet Kaur

Subject- Computer

Paper- - MC- 401 IT and E- Commerce

Class- M.Com IV Sem.

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May, 2022 24-29 May	<b>Revision of Important Topics and Test</b>
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May 31 May, 1 June - 4 June	<b>Search engine</b> – as an advertising media, search engine optimization – concept and techniques, Cloud computing.
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
1 <sup>st</sup> week 6 June –11 June	<b>Assignment-II</b> Enterprise Resource Planning; Security issues in e-commerce - Online frauds, Privacy issues;
12 June, 2022	<b>Sunday</b>
2 <sup>nd</sup> Week 13 June- 18 June	Cyber laws including Information Technology Act. <b>Revision of Syllabus</b>
19 June, 2022	<b>Sunday</b>
3 <sup>rd</sup> week 20 June -24 June	<b>Revision of Syllabus and Test</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ravneet Kaur

Subject- Computer

Paper- E-Commerce

Class- B.Com II Sem. (General + Sales + Office Mgmt.)

<b>April, 2022</b> <b>2<sup>nd</sup> Week</b> <b>4 April -6 April</b>	<b>Introduction</b> -Applications , Uses, Services, <b>Information Technology</b> IT, Needs, Applications ,Impact on Business, Effects of IT on Business
<b>10 April, 2022</b>	<b>Sunday</b>
<b>3<sup>rd</sup> Week</b> <b>11 April-13 April</b>	<b>E-Commerce</b> -Introduction, Features -Traditional VS E-Commerce practices Applications
<b>14 April, 2022</b> <b>17 April, 2022</b>	<b>Vaisakhi, Ambedkar Jayanti</b> <b>Sunday</b>
<b>4<sup>th</sup> Week</b> <b>18 April- 20 April</b>	<b>Models , Framework of E- Commerce</b> <b>Information System</b> <ul style="list-style-type: none"> <li>- Introduction, Characteristics</li> <li>- Types</li> <li>- Needs</li> </ul> Role of Information System in Decision Making
<b>24 April, 2022</b>	<b>Sunday</b>
<b>5<sup>th</sup> Week</b> <b>25 April -27 April</b>	<b>Assignment-1</b> <b>Management Information System</b> <ul style="list-style-type: none"> <li>- Introduction, Characteristics, Objectives</li> <li>- Components of MIS, Limitations</li> </ul>
<b>1 May, 2022</b>	<b>Sunday</b>
<b>May 2022</b> <b>1<sup>st</sup> Week</b> <b>2 May -4 May</b>	<b>Security In E- Commerce</b> -Need,-Schemes,-Encryption, Legal Aspects
<b>3 May , 2022</b> <b>8 May , 2022</b>	<b>Eid-ul-Fitr</b> <b>Sunday</b>
<b>2<sup>nd</sup> Week</b> <b>9 May -11 May</b>	<b>- Electronic Data Interchange</b> -Introduction,-EDI VS Traditional Method, Benefits ,Components of EDI
<b>15 May, 2022</b>	<b>Sunday</b>
<b>3<sup>rd</sup> Week</b> <b>16 May-18 May</b>	<b>Electronic Data Interchange</b> <ul style="list-style-type: none"> <li>- Drawbacks, Financial EDI, Applications in Business</li> </ul>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ravneet Kaur

Subject- Computer

Paper- E-commerce

Class- B.Com II Sem. (General + Sales + Office Mgmt.)

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May-25 May	Revision and Doubt Clearing
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> week 30 May -1 June	<b>M- Commerce</b> <ul style="list-style-type: none"><li>- Introduction</li><li>- Advantages, Disadvantages</li></ul>
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
6 June –8 June	<ul style="list-style-type: none"><li>- M- Commerce Applications</li><li>- <b>E- Governance</b></li><li>- Difference</li></ul>
12 June,2022	<b>Sunday</b>
13 June – 15 June	<ul style="list-style-type: none"><li>- Challenges in E- Governance</li><li>-Applications and Recent Initiatives</li></ul>
19 June, 2022	<b>Sunday</b>
20 June – 22June	Revision And doubt Clearing

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ravneet Kaur

Subject- Computer

Paper- Enterprise Resource Planning

Class- B. Voc. VI Sem. (C.A.)

April, 2022 2 <sup>nd</sup> Week 4 April -6 April	<b>Enterprise:</b> concept and functions, process approach to business
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-13 April	Types of information in business; Systems approach to information management;
14 April, 2022 17 April, 2022	<b>Vaisakhi, Ambedkar Jayanti</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April- 20 April	Integrated data model; <b>ERP: concept</b> , origin and need, Reasons of growth of ERP.
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -27 April	<b>Assignment-1</b> - Introduction to ERP technologies - business process reengineering;
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2 May -4 May	- <b>Decision support system,</b>
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -11 May	- <b>Supply chain management system.</b>
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16May-18 May	- <b>Executive information system;</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ravneet Kaur

Subject- Computer

Paper- Enterprise Resource Planning E-commerce

Class- B. Voc. VI Sem. (C.A.)

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May-25 May	- <b>management information system</b> Revision and Doubt Clearing
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> week 30 May -1 June	<b>ERP Modules:</b> finance, sales and distribution, manufacturing, inventory management, CRM, etc
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
6June – 8 June	- Vendors for ERP, implementing ERP solutions - Revision And doubt Clearing
12 June,2022	<b>Sunday</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms.Gurcharan Kaur

Subject- Logical Organization of Computers-II

Paper- BCA-122

Class- BCA 1<sup>st</sup> Year (2<sup>nd</sup> Sem)

April, 2022 2 <sup>nd</sup> Week 4 April -9 April	Sequential Logic: Characteristics Flip-Flops, Clocked RS,
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-16 April	Clocked RS, D type, T type flip-flops,
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April- 23 April	JK flip-flops
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -30 April	Master-Slave flip-flops, State table,
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2 May -7 May	State diagram. Flip-flop excitation tables Memory & I/O Devices: Memory Parameters
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -14 May	Semiconductor RAM, ROM
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-21 May	Sequential Circuits: Designing registers – Serial Input Serial Output (SISO), Serial Input Parallel Output (SIPO)

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms.Gurcharan Kaur  
Subject- Logical Organization of Computers-II  
Paper- BCA-122  
Class- BCA 1<sup>st</sup> year (2<sup>nd</sup> Sem)

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	Parallel Input Serial Output (PISO), Parallel Input Parallel Output (PIPO) and shift registers. <b>Revision of above Topics</b>
24 May,2022	<b>Sessionals</b>
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	Designing counters, Instruction Design & I/O Organization: Machine instruction
June 2022 1 <sup>st</sup> week 1 June - 4 June	Instruction cycle, Instruction Format and Addressing Modes. I/O Interface, Interrupt
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 6 June –11 June	DMA transfer, I/O Channels, IOP. <b>Revision of all Syllabus</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms.Gurcharan Kaur

Subject- Computer Networks

Paper- Paper-II

Class- B.A(CS) 3<sup>rd</sup> Year (5<sup>th</sup> Sem)

April, 2022 2 <sup>nd</sup> Week 7 April -9 April	Introduction to Data Communication and Computer Networks; Uses of Computer Networks;
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 15 April-16 April	Types of Computer Networks and their Topologies; Network Hardware Components: Connectors, Transceivers, Repeaters, Hubs
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 21 April- 23 April	Network Interface Cards and PC Cards, Bridges, Switches, Routers, Gateways
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 28 April -30 April	Connection-Oriented and Connectionless Services; OSI Reference Model; TCP/IP Model;
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 5 May -7 May	Analog and Digital Communications Concepts: Analog and Digital data and signals; Bandwidth and Data Rate, Capacity, Baud Rate
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 12 May -14 May	Guided and Wireless Transmission Media; Communication
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 19 May-21 May	Satellites; Switching and Multiplexing; Modems and modulation techniques;



# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms.Gurcharan Kaur

Subject- Computer Networks

Paper- Paper-II

Class- B.A(CS) 3<sup>rd</sup> Year (5<sup>th</sup> Sem)

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 26 May--28 May	Data Link Layer Design issues; Error Detection and Correction methods; Sliding Window Protocols: One-bit, Go Back N and Selective Repeat <b>Revision of Above Topics</b>
27 May,2022	<b>Sessionals</b>
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	Media Access Control: ALOHA, Slotted ALOHA, CSMA, Collision free protocols; Introduction to LAN technologies:
June 2022 1 <sup>st</sup> week 2 June - 4 June	Introduction to Wireless LANs Routing Algorithms: Flooding, Shortest Path Routing
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 June –11 June	Security Issues: Security attacks; Encryption methods; Firewalls; Digital Signatures; <b>Revision of all Syllabus</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms.Gurcharan Kaur

Subject- Programming in C

Paper- Paper-I

Class- B.A (CS) 1<sup>st</sup> Year (2<sup>nd</sup> Sem)

April, 2022 2 <sup>nd</sup> Week 4 April -6 April	Overview of C: History & Importance of C, Structure of a C Program.
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-13 April	Elements of C: C character set, identifiers and keywords, Data types, Constants and Variables, Assignment statement, Symbolic constant.
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April- 20 April	Input/output: Unformatted & formatted I/O function, Input functions (scanf(), getch(),
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -27 April	getche(), getchar(), gets()), output functions (printf(), putchar(), puts()).
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2 May -4 May	Operators & Expression: Arithmetic, relational, logical, bitwise, unary, assignment, conditional operators type casting and conversion, operator hierarchy & associativity.
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -11 May	Decision making & branching: Decision making with IF statement, IF-ELSE statement, Nested IF statement, ELSE-IF ladder, switch statement, goto statement.
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-18 May	Decision making & looping: For, while, and do-while loop, jumps in loops, break, continue statement.

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms.Gurcharan Kaur

Subject- Programming in C

Paper- Paper-I

Class- B.A (CS) 1<sup>st</sup> Year (2<sup>nd</sup> Sem)

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--25 May	Functions: Definition, prototype, passing parameters, recursion.
25 May,2022	<b>Sessionals</b>
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -1 June	Storage classes in C: auto, extern, register and static storage class, their scope, storage, & lifetime.
June 2022 1 <sup>st</sup> week 6 June - 8 June	Arrays: Definition, types, initialization, processing an array. Structure and Union.
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 6 June –11 June	<b>Revision of all Syllabus</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms.Gurcharan Kaur

Subject- Logical Organization of Computers

Paper- Paper-II

Class- B.A 1<sup>st</sup> Year (2<sup>nd</sup> Sem)

April, 2022 2 <sup>nd</sup> Week 7 April -9 April	Information Representation: Number Systems, Binary Arithmetic, Fixed-point and Floating point representation of numbers
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 15 April-16 April	BCD Codes, Error detecting and correcting codes, Character Representation – ASCII, EBCDIC.
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 21 April- 23 April	Binary Logic: Boolean Algebra, Boolean Theorems, Boolean Functions and Truth Tables,
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 28 April -30 April	Canonical and Standard forms of Boolean functions, Simplification of Boolean Functions –Venn Diagram, Karnaugh Maps. Don't Care Conditions
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 5 May -7 May	Digital Logic: Basic Gates – AND, OR, NOT, Universal Gates – NAND, NOR
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 12 May -14 May	Gates – XOR, XNOR etc. Combinational Circuits: Half-Adder, Full-Adder
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 19 May-21 May	Half-Subtractor, Full-Subtractor, Encoders, Decoders, Multiplexers, Demultiplexers, Comparators, Code Converters.

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms.Gurcharan Kaur

Subject- Logical Organization of Computers

Paper- Paper-II

Class- B.A 1<sup>st</sup> Year (2<sup>nd</sup> Sem)

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 26 May--28 May	Sequential Logic: Characteristics, Flip-Flops, Clocked RS
26 May,2022	<b>Sessionals</b>
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	D type, JK, T type and Master- Slave flip-flops.
June 2022 1 <sup>st</sup> week 1 June - 4 June	State table, state diagram. Flip-flop excitation tables Shift registers, serial in parallel out and parallel in parallel out.. Designing counters –
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 6 June –11 June	Asynchronous and Synchronous Binary Counters, Modulo-N Counters and Up-Down Counters <b>Revision of all Syllabus</b>

# KVA DAV College for Women, Karnal

## Lesson Plan For Annual Year (October, 2021 to February, 2022)

Name of the Teacher – Ms.Gurcharan Kaur

Subject- Data Base Management Systems

Paper- CS-DE-14

Class- PGDCA

3 <sup>rd</sup> Week 15 Nov-20 Nov 2021	Data, Information and Knowledge
21 Nov, 2021	<b>Sunday</b>
4 <sup>th</sup> Week 22 Nov-27	Limitations of Manual Data Processing – Advantages of databases
28 Nov, 2021	<b>Sunday</b>
Dec, 2021 1 <sup>st</sup> Week 29 Nov-04 Dec	Basic DBMS Terminology – Role of DBA, Data Manager, File Manager, Disk Manager
05 Dec, 2021	<b>Sunday</b>
2 <sup>nd</sup> Week 06 Dec -11 Dec	Three Level Architecture of DBMS- Physical and Logical Data Independence
12 Dec,2021	<b>Sunday</b>
3 <sup>rd</sup> week 13 Dec -18 Dec	Data Base languages and Interfaces, DBMS functions and component modules.

<b>19 Dec,2021</b>	<b>Sunday</b>
4 <sup>th</sup> Week <b>20 Dec-24 Dec</b>	Entity Relationship Model- Concepts, Relationships
<b>25 Dec,2021</b> <b>26 Dec,2021</b>	<b>Christmas</b> <b>Sunday</b>
5 <sup>th</sup> Week <b>27 Dec -01 Jan</b>	Constraints, Keys- Primary, Secondary, Composite & Foreign Key
<b>2 Jan ,2022</b>	<b>Sunday</b>
<b>Jan ,2022</b> 1 <sup>st</sup> week <b>3 Jan – 8 Jan</b>	E-R Diagrams, Mapping ER- diagrams to Relational Tables
<b>9 Jan ,2022</b>	<b>Sunday (Sh. Guru Gobind Singh's Birthday)</b>
2 <sup>nd</sup> week <b>10 Jan – 15 Jan</b>	Case studies: Inventory System, Payroll System, Reservation System, Online Book Store etc.
<b>16 Jan ,2022</b>	<b>Sunday</b>
3 <sup>rd</sup> week <b>17 Jan – 22 Jan</b>	Introduction to Data Models, Comparison between Hierarchical, Network and Relational models.
<b>23 Jan ,2022</b>	<b>Sunday</b>
4 <sup>th</sup> Week <b>24 Jan – 29 Jan</b>	<b>Class Test</b> <b>Revision of all Topics</b>
<b>28 Jan,2022</b>	<b>Sessional</b>
<b>26 Jan, 2022</b> <b>30 Jan ,2022</b>	<b>Republic Day</b> <b>Sunday</b>
<b>Feb, 2021</b> 1 <sup>st</sup> week <b>1 Feb-4 Feb</b>	Relational Algebra- Query Language, Basic Set Operations, Special Relational Operations,

5 Feb, 2022 6 Feb, 2022	<b>Vasant Panchmi</b> <b>Sunday</b>
2 <sup>nd</sup> week 7 Feb- 12 Feb	Introduction to SQL: DDL, DML, and DCL Commands
13 Feb, 2022	<b>Sunday</b>
3 <sup>rd</sup> week 14 Feb- 19 Feb	Views & Queries in SQL,
April, 2022 2 <sup>nd</sup> Week 4 April -9 April	Constraints
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-16 April	Indexes in SQL. Functional Dependencies
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April- 23 April	Normalization- Normal forms based on primary keys 1 NF
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -30 April	2 NF
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2 May -7 May	3 NF, & BCNF
3 May, 2022 8 May, 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -14 May	MS Access: Parts of an Access Window, Tool Bars and
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-21 May	Their Icons, Creating a New Database, Creating a Database through Table Wizard
22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	Creating a New Table, Relationships, Creating Table through Design View,



<b>26 May,2022</b>	<b>Sessionals</b>
<b>29 May, 2022</b>	<b>Sunday</b>
<b>5<sup>th</sup> Week 30 May -31 May</b>	Relationship, Query, Forms, Reports, Import/export tables etc.
<b>June 2022 1<sup>st</sup> week 1 June - 4 June</b>	<b>Revision of all Syllabus</b>
<b>2 June, 2022 5 June, 2022</b>	<b>Maharana Pratap Jayanti Sunday</b>
<b>2<sup>nd</sup> Week 6 June –11 June</b>	<b>Revision of all Syllabus</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Leena

Subject- Computers

Paper- Advanced Programming with Visual Basic (BCA-365)

Class- BCA-III (6<sup>th</sup> Semester)

April, 2022 2 <sup>nd</sup> Week 4April -9 April	Collections: Adding, Removing, Counting, Returning Items in a Collection, Processing a Collection.
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-16 April	Working with Forms: Form Properties, Creating, Adding, Removing Forms in Project, Adding Multiple Forms, Managing Forms at Run Time, Hiding & Showing Forms.
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April-23 April	Statements, Drag and Drop Operation, Activate & Deactivate events, Form-load event, Example using Forms, Programs in VB using Forms.
24April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April - 30April	Working with Menu: Menu Designing in VB, Adding a Menu to a Form, Modifying and Deleting Menu Items, Adding Access Characters.
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2May -7 May	Adding Shortcut Keys, Manipulating Menus using Common Dialog Box, Attaching Code to Events, Creating Submenus, Dynamic Menu Appearance Advanced Controls in VB.
3 May , 2022 8May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -14 May	Scroll Bar, Slider Control, Tree View, List View, Rich Text Box Control, Toolbar, Status Bar, Progress Bar, Cool bar, Image List Program Development in VB using Menus and Advance Controls.
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-21 May	File Handling & File Controls: Sequential & Random files, Opening and Closing Data Files, Viewing the Data in a File. Performing Operations on a File, Creating a Sequential Data File, Writing Data to a Sequential File.

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Leena

Subject- Computers

Paper- Advanced Programming with Visual Basic (BCA-365)

Class- BCA-III (6<sup>th</sup> Semester)

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b>
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	Reading the Data in a Sequential File, Finding the End of a Data File, Locating a File, Reading and Writing a Random File (get, put, LOF, seek). Working with Graphics: Using Paint, Line, Circle, Manipulating Graphics.
June 2022 1 <sup>st</sup> week 1 June - 4 June	Accessing Databases: Data Controls, Data-Bound Controls, DAO, RDO, ADO, Creating the Database.
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 6 June –11 June	Setting Properties, Applying Operations on Database, Viewing theDatabase, Updating the Database. <b>.Revision of all Syllabus</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Leena

Subject- Computers

Paper- Programming in Core Java (BCA-366)

Class- BCA-III(6<sup>th</sup> Semester)

<b>April, 2022</b> <b>2<sup>nd</sup> Week</b> <b>4 April -9 April</b>	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; Basic Language Elements: Lexical Tokens, Identifiers, Keywords, Literals, Comments, Primitive Data types.
<b>10 April, 2022</b>	<b>Sunday</b>
<b>3<sup>rd</sup> Week</b> <b>11 April-16 April</b>	Operators, Assignments; Input/output in Java: Basics, I/O Classes, Reading Console Input, Control Structures in Java: Decision and Loop Control Statements.
<b>14 April, 2022</b> <b>17 April, 2022</b>	<b>Vaisakhi</b> <b>Sunday</b>
<b>4<sup>th</sup> Week</b> <b>18 April- 23 April</b>	Class and Object in Java: Defining Class in Java, Creating Objects of a Class, Defining Methods, Argument Passing Mechanism, Using Class and Objects, Constructors, Nested Class, Inner Class, Abstract Class, Dealing with Static Members; Array & String in Java: Defining an Array, Initializing & Accessing Array.
<b>24 April, 2022</b>	<b>Sunday</b>
<b>5<sup>th</sup> Week</b> <b>25 April -30 April</b>	Multi –Dimensional Array, Defining String, Operation on Array and String, Creating Strings using String Class, Creating String using StringBuffer Class,; Polymorphism in Java:Basic Concept, Types, Overriding vs. Overloading, Implementation.
<b>1 May, 2022</b>	<b>Sunday</b>
<b>May 2022</b> <b>1<sup>st</sup> Week</b> <b>2 May -7 May</b>	Extending Classes and Inheritance in Java: Benefits of Inheritance, Types of Inheritance in Java, Access Attributes, Inheriting Data Members and Methods, Role of Constructors in Inheritance, Use of “super”; Packages & Interfaces: Basic Concepts of Package and Interface, Organizing Classes and Interfaces in Packages, Defining Package.
<b>3 May , 2022</b> <b>8 May , 2022</b>	<b>Eid-ul-Fitr</b> <b>Sunday</b>
<b>2<sup>nd</sup> Week</b> <b>9 May -14 May</b>	Adding Classes from a Package to Your Program, CLASSPATH Setting for Packages, Import Package, Naming Convention For Packages , Access Protection in Packages, Standard Packages.
<b>15 May, 2022</b>	<b>Sunday</b>
<b>3<sup>rd</sup> Week</b> <b>16 May-21 May</b>	Exception Handling in Java: The Idea behind Exception, Types of Exception, Use of try, catch, finally.

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Leena

Subject- Computers

Paper- Programming in Core Java (BCA-366)

Class- BCA-III(6<sup>th</sup> Semester)

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b>
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	throw, throws in Exception Handling, In-built and User Defined Exceptions, Checked and Un-Checked Exceptions, Catching more than one Exception; Applet in Java: Applet Basics, Applet Architecture, Applet Life Cycle, Applet Tag, Parameters to Applet, Embedding Applets in Web page, Creating Simple Applets; GUI Programming.
June 2022 1 <sup>st</sup> week 1 June - 4 June	Designing Graphical User Interfaces in Java, Components and Containers, Using Containers, Layout Managers, AWT Components, AWT Classes, AWT Controls.
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 6 June –11 June	AWT Classes, AWT Controls. <b>Revision of all Syllabus</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher –Ms. Leena

Subject- Computers

PAPER I - Object Oriented Programming with C++

Class- B.Sc IV (Computer Applications)

April, 2022 2 <sup>nd</sup> Week 4 April -6 April	Object oriented Programming: Object-Oriented programming features and benefits, Object-Oriented features of C++.
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-13 April	Class and Objects, Data Hiding & Encapsulation, Structures, Data members and Member functions, Scope resolution operator and its significance, Static Data Members, Static member functions.
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April- 20 April	Nested and Local Class, Accessing Members of Class and Structure.
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -27 April	Constructor, Initialization using constructor, types of constructor– Default, Parameterized & Copy Constructors, Constructor overloading, Default Values to Parameters, Destructors
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2 May -4 May	Console I/O: Hierarchy of Console Stream Classes, Unformatted and Formatted I/O Operations.
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -11 May	Dynamic Memory Management: Pointers, new and delete Operator, Array of Pointers to Objects, this Pointer, Passing Parameters to Functions by Reference & pointers.
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-18 May	Static Polymorphism: Operators in C++, Precedence and Associativity Rules.
22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b>
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	Operator Overloading, Unary & Binary Operators Overloading

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher –Ms. Leena

Subject- Computers

PAPER I - Object Oriented Programming with C++

Class- B.Sc IV (Computer Applications)

June 2022 1 <sup>st</sup> week 1 June	Function Overloading, Inline Functions, Merits/Demerits of Static Polymorphism.
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti Sunday</b>
2 <sup>nd</sup> Week 6 June –8 June	Revision of all Syllabus

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher –Ms. Leena

Subject-Computers

PAPER II – Operating System

Class- B.Sc IV (Computer Applications)

April, 2022 2 <sup>nd</sup> Week 7 April -9 April	Introduction: operating system, architecture, functions, characteristics, historical evolution, types: Serial batch, multiprogramming, time sharing, real time, distributed and parallel. OS as resource Manager.
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 15 April-16 April	Computer system structures: I/O structure, storage structure, storage hierarchy, Operating system structure: system components, services, system calls, system programs, system structures.
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 21 April- 23 April	Process management: process concepts, process state, process control block, operations, process scheduling, inter process communication.
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 28 April -30 April	CPU Scheduling: scheduling criteria, levels of scheduling, scheduling algorithms, multiple processor scheduling. Deadlocks: Characterization, methods of handling, deadlock detection, prevention, avoidance, recovery. Derivations.
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 5 May -7 May	Storage Management: memory management of single-user and multiuser operating system, partitioning
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 12 May -14 May	swapping, paging and segmentation, virtual memory, Page replacement Algorithms, Thrashing.
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 19 May-21 May	Process synchronization: critical section problems, semaphores. Mutual exclusion



# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher –Ms. Leena  
Subject-Computers  
PAPER II – Operating System  
Class- B.Sc IV (Computer Applications)

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b>
29 May, 2022	<b>Sunday</b>
June 2022 1 <sup>st</sup> week 3 June - 4 June	Device and file management: Disk scheduling, Disk structure, Disk management, File.
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 June –11 June	Functions of the system, File access and allocation methods, Directory Systems: Structured Organizations, directory and file protection mechanisms. . <b>Revision of all Syllabus</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Leena

Subject-Computers

Paper- SOCIAL NETWORKING & DATA ANALYTICS

Class- B.A. III(Computer Science) 6<sup>th</sup> Semester

April, 2022 2 <sup>nd</sup> Week 4 April -6 April	Social networking: concept, evolution and applications, expansion of social networking, using popular.
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-13 April	social networking sites: Facebook, twitter, linked in, Instagram, blogging etc., trends in social media.
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April- 20 April	organize, access and share information using social networks. Messaging services as social networking.
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -30 April	business applications of social networking: product promotion, publicity, etc., social and ethical aspects of social networking.
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2 May -4 May	social networking and legislation: privacy issues, security, data protection, etc.
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -11 May	Big data and hadoop: concept and evolution. features of big data, managing big data, tools and languages.
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-18 May	used for data analysis - R, Excel, SQL, Python & Tableau; data visualization and statistical interpretation for analytics.
22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b>
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	for analytics, introduction to data warehousing and OLAP; data preparation, predictive analysis – linear

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Leena

Subject-Computers

Paper- SOCIAL NETWORKING & DATA ANALYTICS

Class- B.A. III(Computer Science) 6<sup>th</sup> Semester

June 2022 1 <sup>st</sup> week 1 June	regression, classification, clustering, time series, etc.
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 6 June –8 June	Revision of all Syllabus

## KVA DAV College for Women, Karnal

### Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Leena

Subject-Computers

Paper- COMPUTER AWARENESS(LEVEL-I)

April, 2022 2 <sup>nd</sup> Week 7 April -9 April	Definition & Functions of Operating System, Basics of Popular Operating Systems; The User Interface, Exploring Computer, Icons, taskbar, desktop, Using Menu and Menu-selection, managing files and folders.
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 15 April-16 April	Control panel – display properties, add/remove software and hardware, . Running an Application, Using help; Creating Short cuts, Basics of O.S Setup; Common utilities.
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 21 April- 23 April	Introduction to Word Processing, Menus, Creating, Editing & Formatting Document, Spell Checking, Printing, Views, Tables, Word Art, Mail Merge, Macros.
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 28 April -30 April	Elements of Electronics Spread Sheet, Applications, Creating and Opening of Spread Sheet, Menus, Manipulation of cells.
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 5 May -7 May	Enter texts numbers and dates, Cell Height and Widths, Copying of cells, Mathematical, Statistical and Financial function, Drawing different types of charts.
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>

<b>2<sup>nd</sup> Week</b> <b>12 May -14 May</b>	Creating, modifying and enhancing a presentation, Delivering a presentation .
<b>15 May, 2022</b>	<b>Sunday</b>
<b>3<sup>rd</sup> Week</b> <b>19 May-21 May</b>	Using sound, animation and design templates in presentation.

## **KVA DAV College for Women, Karnal**

### **Lesson plan for the Even semester (April, 2022 to June, 2022)**

**Name of the Teacher – Ms. Leena**

**Subject-Computers**

**Paper- COMPUTER AWARENESS(LEVEL-I)**

<b>22 May, 2022</b>	<b>Sunday</b>
<b>May, 2022</b> <b>4<sup>th</sup> Week</b> <b>23 May--28</b> <b>May</b>	Internet and its applications, Connecting to internet, Surfing the Internet using web browsers, Web Browsing softwares, Search Engines
<b>29 May, 2022</b>	<b>Sunday</b>
<b>June 2022</b> <b>1<sup>st</sup> week</b> <b>3 June - 4 June</b>	Understanding URL, Domain name, IP Address, Creating Email Id, Viewing an E-Mail,
<b>2 June, 2022</b> <b>5 June, 2022</b>	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
<b>2<sup>nd</sup> Week</b> <b>9 June –11</b> <b>June</b>	Sending an E-Mail to a single and multiple users, Sending a file as an attachment..  <b>Revision of all Syllabus</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester

(April, 2022 to June, 2022)

Name of the Teacher – Ms. Komal

Subject- Advanced Programming in C

Paper- BCA-121

Class- BCA 2<sup>nd</sup> semester

April, 2022 2 <sup>nd</sup> Week 4 April -9 April	Strings in 'C': Introduction, Declaration and initialization of string, String I/O, Array of strings <b>Revision</b>
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-16 April	String manipulation functions: String length, copy, compare, concatenate, search for a substring. <b>Revision</b>
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April-23 April	Structure and Union: Introduction, Features of structures, Declaration and initialization of structures, Structure within structure <b>Test : string and its function</b> <b>Assignment:1<sup>st</sup></b>
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -30 April	Array of structures, Structure and functions. Union: Introduction, Union of structures. Typedef, Enumerations <b>Revision</b>
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2 May -7 May	Pointers: Introduction, Pointer variables, Pointer operators, Pointer assignment, Pointer conversions, Pointer arithmetic
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -14 May	Pointer comparison, Pointers and arrays, Pointers and functions, Pointers and strings, Pointer to pointer, <b>Revision: pointer and its operation</b>
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-21 May	Files: Introduction, File types, File operations, File I/O, Structure Read and write in a file <b>Test : pointer</b> <b>Assignment:2<sup>nd</sup></b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester

(April, 2022 to June, 2022)

Name of the Teacher – Ms. Komal

Subject- Advanced Programming in c

Paper- BCA-121

Class- BCA 2<sup>nd</sup> semester

<b>22 May, 2022</b>	<b>Sunday</b>
<b>May, 2022</b> <b>4<sup>th</sup> Week</b> 23 May--28 May	<b>Sessionals: 23-05-2022</b> dynamic allocation using pointers, Errors in file handling, Random-access I/O in files.
<b>29 May, 2022</b>	<b>Sunday</b>
<b>5<sup>th</sup> Week</b> <b>30 May -31 May</b>	Preprocessor: Introduction, #define, macros, macro versus functions, <b>Test: file</b>
<b>June 2022</b> <b>1<sup>st</sup> week</b> <b>1 June - 4 June</b>	#include, Conditional compilation directives, undefining a macro. <b>Revision</b>
<b>2 June, 2022</b> <b>5 June, 2022</b>	<b>MaharanaPratapJayanti</b> <b>Sunday</b>
<b>2<sup>nd</sup> Week</b> <b>6 June –11 June</b>	Command line arguments: defining and using command line arguments. <b>Revision of syllabus</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester

(April, 2022 to June, 2022)

Name of the Teacher – Ms. komal

Subject- E-commerce

Paper-BCA-243

Class- BCA-4<sup>th</sup> semester

April, 2022 2 <sup>nd</sup> Week 4April -9 April	Introduction to E-Commerce:-Business operations; E-commerce practices vs. traditional business practices; concepts of b2b, b2c,c2c,b2g,g2h,g2c; Features of E-Commerce, Types of Ecommerce Systems, Elements of E-Commerce, principles of E-Commerce, Benefits and Limitations of E-Commerce.
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-16 April	Management Issues relating to e-commerce.Operations of E-commerce: Credit card transaction; Secure Hypertext Transfer Protocol (SHTP); Electronic payment systems; Secure electronic transaction (SET); SET`s encryption; Process; Cybercash, Smart cards; Indian payment models.
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April-23 April	Applications in governance: EDI in governance; E-government; E-Governance applications of Internet; concept of government –to-business, business-to-government and citizen-to-government; E-governance models
24April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -30April	Private sector interface in E-governance Applications in B2C: Consumers shopping procedure on the Internet;Impact on disinter mediation and re-intermediation. Test :unit 1 <sup>st</sup> Assignment: 1 <sup>st</sup>
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2May -7 May	Global market; Strategy of traditional department stores Products in b2c model; success factors of e-brokers; Broker-based services on-line; Online travel tourism services; Benefits and impact of e-commerce on travel industry.
3 May , 2022 8May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -14 May	Deal estate market; online stock trading and its benefits; Online banking and its benefits; Online financial services and their future; E-auctions – benefits, implementation and impact.
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-21 May	Applications in B2B: Key technologies for b2b; architectural models of b2b, characteristics of the supplier –oriented marketplace, buyer-oriented marketplace and intermediary-oriented marketplace. <b>Revision :unit 2<sup>nd</sup></b>



**KVA DAV College for Women, Karnal**  
**Lesson plan for the Even semester**  
**(April, 2022 to June, 2022)**

Name of the Teacher – Ms. komal

Subject- E-commerce

Paper- BCA-243

Class- BCA-4<sup>th</sup> semester

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals :25-05-2022</b> Just In Time delivery in b2b; Internet-based EDI from traditional EDI; Marketing Issues in b2b.
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	Emerging Business models: Retail model; Media model; advisory model, made-to-order manufacturing model; Do-it- yourself model; Information service model;
June 2022 1 <sup>st</sup> week 1 June - 4 June	Emerging hybrid models; Emerging models in India, Internet & E-Commerce scenario in India; Internet security Issues; Legal aspects of E-commerce
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 6 June –11 June	Revision of syllabus Assignment :2 <sup>nd</sup>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester

(April, 2022 to June, 2022)

Name of the Teacher – Ms. Komal

Subject- Internet Technology

Paper- BCA-364

Class- BCA-6<sup>th</sup> Semester

April, 2022 2 <sup>nd</sup> Week 4 April -9 April	Internet: Introduction; History; Internet Services; TCP/IP: Architecture, Layers, Protocols; TCP/IP model versus OSI Model; Internet vs. Intranet.
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-16 April	World Wide Web (WWW) - The Client Side, The Server Side, Creating and Searching Information on the Web, Popular Search Engines, URL, HTTP, Web Browsers. <b>Reivision: 1<sup>st</sup> unit</b> <b>Assignment:Internet, History, Internet Services.</b>
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April-23 April	TCP, UDP and IP Protocols, Port Numbers; Format of TCP, UDP and IP; IPv4 addressing; The need for IPv6; IPv6 addressing and packet format; TCP Services; TCP Connection Management
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -30 April	Remote Procedure Call; IP Address Resolution- DNS; Domain Name Space; DNS Mapping; Recursive and Iterative Resolution;
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2 May -7 May	Application Layer: Electronic Mail: Architecture; Protocols - SMTP, MIME, POP, IMAP; Web Based Mail; File Access and Transfer: FTP, Anonymous FTP, TFTP, NFS; <b>Revision:2<sup>nd</sup> unit</b>
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -14 May	Mapping Internet Addresses to Physical Addresses: ARP, RARP, DHCP; ICMP; IGMP; <b>Test: Network And Transport Layer Protocol</b> <b>Assignment:Network And Transport Layer Protocol</b>
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-21 May	Chat & Bulletin Board, USENET & NNTP (Network News Transfer Protocol); Remote Login using TELNET; Voice and Video over IP: RTP, RTCP, IP Telephony and Signaling, RSVP.

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester

(April, 2022 to June, 2022)

Name of the Teacher – Ms. Komal

Subject- Internet Technology

Paper- BCA-364

Class- BCA-6<sup>th</sup> Semester

22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals:26-05-2022</b> Routing in Internet: RIP, OSPF, BGP; Internet Multicasting; Mobile IP.
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	Private Network Interconnection: Network Address Translation (NAT), Virtual Private Network (VPN).
June 2022 1 <sup>st</sup> week 1 June - 4 June	Internet Management and SNMP;Internet Security: E-Mail Security; Web Security; Firewall; Introduction to IPSec and SSL.
2 June, 2022	<b>MaharanaPratapJayanti</b>
5 June, 2022	<b>Sunday</b>
2 <sup>nd</sup> Week 6 June –11 June	<b>Revision:3<sup>rd</sup> unit</b> <b>Revision:4<sup>th</sup> unit</b> <b>Doubt discussion question and answers</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester

(April, 2022 to June, 2022)

Name of the Teacher – Ms. Komal

Subject- Basic Computer Education

Paper- L1 – (I)

Class- BSC-Non med/Med/BT

April, 2022 2 <sup>nd</sup> Week 4 April -9 April	<b>Operating System-</b> Definition & Functions of Operating System, Basics of Popular Operating Systems; The User Interface, Exploring Computer, Icons, taskbar, desktop,
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-16 April	Using Menu and Menu-selection, managing files and folders Control panel – display properties, add/remove software and hardware, Running an Application, Using help;
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April- 23 April	Creating Short cuts, Basics of O.S Setup; Common utilities. <b>Word Processing:</b> Introduction to Word Processing, Menus, Creating, Editing & Formatting Document,
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -30 April	Spell Checking, Printing, Views, Tables, Word Art, Mail Merge, Macros. <b>Revision: word processing, operating system</b>
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2 May -7 May	<b>Spread Sheet:</b> Elements of Electronics Spread Sheet, Applications, Creating and Opening of Spread Sheet, Menus
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -14 May	Manipulation of cells: Enter texts numbers and dates, Cell Height and Widths, Copying of cells, Mathematical, Statistical and Financial function, Drawing different types of charts
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-21 May	<b>Presentation Software:</b> Creating, modifying and enhancing a presentation, Delivering a presentation, Using sound, animation and design templates in presentation.
22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals</b>
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	<b>Computer Communication:</b> Internet and its applications, Connecting to internet, Surfing the Internet using web browsers, Web Browsing softwares.
June 2022 1 <sup>st</sup> week 1 June - 4 June	Search Engines, Understanding URL, Domain name, IP Address, Creating Email Id, Viewing an E-Mail, Sending an E-Mail to a single and multiple users, Sending a file as an attachment.
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 6 June –11 June	<b>Revision of syllabus</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the odd semester (October, 2021 to February, 2022)

Name of the Teacher – Ms. Komal

Subject- Computer Organization & Networking Fundamentals

Paper- CS-DE-11

Class- PGDCA

October, 2021 2 <sup>nd</sup> Week 11 Oct-16 Oct	Fundamentals of computers: Block diagram of a digital computer, classification.
15 Oct, 2021 17 Oct, 2021	(Dussehra) Sunday
3 <sup>th</sup> Week 18 Oct-23 Oct	hardware, software, I/O devices ,storage devices – hard disk, pen drive, optical devices.
20 Oct, 2021 24 Oct, 2021	Maharishi Valmiki Jayanti Sunday
4 <sup>th</sup> Week 25 Oct-30 Oct	storage devices –optical devices. Information representation - Number Systems.
31 Oct, 2021	Sunday
November, 2021 1 <sup>st</sup> Week 1 Nov-7 Nov	(Haryana Day) Diwali Holidays
2 <sup>nd</sup> Week 8 Nov-13 Nov	Information representation : conversion from one number system to another number system.
14 Nov, 2021	Sunday
3 <sup>rd</sup> Week 15 Nov-20 Nov	Integer Representation – sign magnitude, 1's complement, 2's complement, codes.
21 Nov, 2021	Sunday
4 <sup>th</sup> Week 22 Nov-27	Floating-point Representation, Binary arithmetic – addition, subtraction multiplication, division.
28 Nov, 2021	Sunday
Dec, 2021 1 <sup>st</sup> Week 29 Nov-04 Dec	Introduction to Computer Networks: Types of Computer Networks.
05 Dec, 2021	Sunday
2 <sup>nd</sup> Week 06 Dec -11 Dec	topologies. Transmission media - wired and wireless.
12 Dec,2021	Sunday
3 <sup>rd</sup> week 13 Dec -18 Dec	Network hardware components - connectors, transceivers & media converters .
19 Dec,2021	Sunday
4 <sup>th</sup> Week 20 Dec-24 Dec	repeaters, network interface cards and PC cards.
25 Dec,2021 26 Dec,2021	Christmas Sunday
5 <sup>th</sup> Week 27 Dec -01 Jan	bridges, switches, routers, gateways.

# KVA DAV College for Women, Karnal

## Lesson plan for the odd semester (October, 2021 to February, 2022)

Name of the Teacher – Ms. Komal

Subject- Computer Organization & Networking Fundamentals

Paper- CS-DE-11

Class- PGDCA

<b>2 Jan ,2022</b>	<b>Sunday</b>
<b>Jan ,2022</b> 1 <sup>st</sup> week <b>3 Jan – 8 Jan</b>	Introduction to the Internet, concepts of Internet and Intranet; IP addresses, DNS; Internet Services; E-mail.
<b>9 Jan ,2022</b>	<b>Sunday (Sh. Guru Gobind Singh's Birthday)</b>
2 <sup>nd</sup> week <b>10 Jan – 15 Jan</b>	File transfer and FTP; Remote login using TELNET .
<b>16 Jan ,2022</b>	<b>Sunday</b>
3 <sup>rd</sup> week <b>17 Jan – 22 Jan</b>	World Wide Web and HTTP; Web Browsers; Search Engines.
<b>23 Jan ,2022</b>	<b>Sunday</b>
4 <sup>th</sup> Week <b>24 Jan – 29 Jan</b>	<b>Sessional: 24-01-2022</b> Uniform Resource Locator(URL); Web Servers; Internet Connections: Dialup; Leased line.
<b>26 Jan, 2022</b> <b>30 Jan ,2022</b>	<b>Republic Day</b> <b>Sunday</b>
<b>Feb, 2021</b> 1 <sup>st</sup> week <b>1 Feb-4 Feb</b>	Modems; DSL service; Internet Service Provider.
<b>5 Feb, 2022</b> <b>6 Feb ,2022</b>	<b>Vasant Panchmi</b> <b>Sunday</b>
2 <sup>nd</sup> week <b>7 Feb- 12 Feb</b>	<b>Revision of sallybus</b>
<b>13 Feb ,2022</b>	<b>Sunday</b>
3 <sup>rd</sup> week <b>14 Feb- 19 Feb</b>	<b>Revision of sallybus</b>

# KVA DAV College for Women, Karnal

## Lesson plan for the Even semester (April, 2022 to June, 2022)

Name of the Teacher – Ms. Komal

Subject- Computer Organization & Networking Fundamentals

Paper- CS-DE-11

Class- PGDCA

April, 2022 2 <sup>nd</sup> Week 4 April -9 April	Boolean Functions: Boolean algebra, Truth tables, Logic gates, Canonical representation Boolean functions,
10 April, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 11 April-16 April	simplification of Boolean expressions – Karnaugh Maps, Quine McCluskey procedure.
14 April, 2022 17 April, 2022	<b>Vaisakhi</b> <b>Sunday</b>
4 <sup>th</sup> Week 18 April- 23 April	Combinational Circuits: Half adder, full adder, half subtractor, full subtractor,
24 April, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 25 April -30 April	parallel binary adder, BCD adder, code converter, decoder, encoder, multiplexer, demultiplexer
1 May, 2022	<b>Sunday</b>
May 2022 1 <sup>st</sup> Week 2 May -7 May	<b>Revision of sallybus</b>
3 May , 2022 8 May , 2022	<b>Eid-ul-Fitr</b> <b>Sunday</b>
2 <sup>nd</sup> Week 9 May -14 May	Sequential Circuits: Flip-flops – synchronous & asynchronous basic flip flops, D-type type flip flops
15 May, 2022	<b>Sunday</b>
3 <sup>rd</sup> Week 16 May-21 May	JK flip flop, master-slave flip flop, characteristics & excitation tables of flip-flops.
22 May, 2022	<b>Sunday</b>
May, 2022 4 <sup>th</sup> Week 23 May--28 May	<b>Sessionals:23-05-2022</b> Registers – shift registers
29 May, 2022	<b>Sunday</b>
5 <sup>th</sup> Week 30 May -31 May	Counters – synchronous & asynchronous binary counters, modulo-N counter
June 2022 1 <sup>st</sup> week 1 June - 4 June	<b>Revision of sallybus</b>
2 June, 2022 5 June, 2022	<b>Maharana Pratap Jayanti</b> <b>Sunday</b>
2 <sup>nd</sup> Week 6 June –11 June	<b>Revision of sallybus</b>