## MCM DAV College for Women, Sector – 36A, Chandigarh Monthly Teaching Plans (Odd Semester) Session: 2020-21

Name of the Teacher: Dr. Gitika Singh

# **Department:** Computer Science and Application

**Class:** BSc-I (1<sup>st</sup> semester)

**Section:** Voc.( Computer Applications)

**Subject:** Fundamentals of IT (CA-01)

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity
	From	То		Undertaken*
1.	14 Sep, 2020	30 Sep , 2020	<b>Computer Appreciation:</b> Introduction to computers, characteristics of computer; History of computers; Classification of computers on basis of size: (Micro, Mini, Mainframe and super computers), Working Principles, Generations; Applications of computers; Commonly used terms–Hardware, Software, Firmware; Basic Computer Organization: Block diagram of computer system- Input unit, Processing Unit and Output Unit	Lecture method, PPT, Online sources, Doubt sessions, Assignments.
2.	1 Oct.,2020	31 Oct , 2020	<b>Description of Computer input devices:</b> Keyboard, Mouse, Trackball, Light Pen, Touch screens, Scanner, Digital Camera; <b>Output devices:</b> Monitors, Printers, Plotters <b>Computer Memory:</b> Representation of information: BIT, BYTE, Memory, Memory size; Units of measurement of storage; Main memory: Storage evaluation criteria, main memory organization, RAM and ROM and their types; Secondary storage devices: Sequential Access Memory, Direct Access Memory, Magnetic Tapes, Magnetic disks, Optical disks: CD, DVD; Memory storage devices: Flash Drive, Memory card	Lecture method, PPT, Online sources, Doubt sessions, Revisions, Assignments.
3.	1 Nov,2020	30 Nov ,2020	<b>Types of software:</b> System, Utility and Application software; Programming Languages: Generation of Languages; Translators - Interpreters, Compilers, Assemblers and their comparison. <b>Understanding Number System:</b> Computer arithmetic; Number systems: Decimal, Binary, Octal, Hexadecimal, Conversions between different number systems Character Codes: Introduction, need, ASCII, EBCDIC and Unicode character sets	Lecture method, PPT, Online sources, Doubt sessions, Revisions, Assignments.
4.	1 Dec,2020	31Dec, 2020	Understanding Operating System using DOS: Introduction to operating systems and its functions, DOS and versions of DOS, Booting sequence; Warm and Cold Boot; Concepts of files and directories, Wildcard characters, Types of DOS commands, Internal Commands: cls, copy con, type, ver, volume, prompt, path name, date, time, md, cd, rd, copy, Del; External Commands: doskey, format, unformat, xcopy, fdisk, Attrib, chkdsk; Introduction to Config.Sys and Autoexec.Bat	Lecture method, PPT, Online sources, Doubt sessions, Revisions, Assignments, Practical demonstrations, class Tests.
5.	1 Jan, 2021	31 Jan, 2021	Windows Operating System: Anatomy of windows, Taskbar Settings, Managing folders and files using Windows Explorer, Searching Files and folders, Customizing Windows, Paint, WordPad, Notepad, Control Panel.	Lecture method, PPT, Online sources, Doubt sessions, Revisions, Assignments, Practical demonstrations, class Tests.
6.	1 Feb, 2021	Till end of semester	<b>Introduction to Computer based Problem-solving:</b> Steps of development developing of a program, Algorithm development, Flowchart, Pseudo codes, basic programming constructs, Documentation, Testing and Debugging <b>Revision of syllabus</b>	Lecture method, PPT, Online sources, Doubt sessions, Revisions, Assignments, Class tests.

### MCM DAV College for Women, Sector – 36A, Chandigarh Monthly Teaching Plans (Odd Semester) Session: 2020-21

Name of the Teacher: Dr. Ritika Bansal

**Department:** Computer Science and Application

**Class:** BSc-I (1<sup>st</sup> semester)

**Section:** Voc.( Computer Applications)

**Subject:** Application Software (CA-02)

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity
	From	То		Undertaken*
1.	14 Sept, 2020	30 Sept, 2020	Opening, Creating, Saving, Printing and closing Documents, Menu Toolbars, Editing Text, Finding and Replacing Text, Spell Check,	Lecture method, PPT, Online sources and discussions.
2.	1 Oct, 2020	31 Oct, 2020	Adding Borders and shading, Adding Headers and Footers, Setting up Multiple columns, Adjusting Margins and Hyphenating Documents; Mail Merge, Inserting Pictures, Tables.	Lecture method, demonstrations through software and discussions.
3.	1 Nov, 2020	30 Nov, 2020	Autocorrect; Auto text, Character formatting, Page formatting. Macros: keyboard and button method	Lecture method, PPT, Online sources, demonstrations through software, class tests, and discussions.
4.	1 Dec, 2020	31 Dec, 2020	Creating, saving, and printing presentations; selecting design templates, Inserting tables and images, animations and transitions, Auto content Wizard, Changing Background	Lecture method, PPT, Online sources, demonstrations through software, class tests, and discussions.
5.	1 Jan, 2021	31 Jan, 2021	Worksheet overview, Row, Column, Cells, Menus, Creating, Opening, Saving and printing worksheet; Auto fill, working with Formulae, Data formatting, Working with Ranges, Absolute, relative and Mixed addressing, creating, sorting and filtering Data Base; Charts, Macros, Functions.	Lecture method, PPT, Online sources, sample questions, class tests, and revisions.
6.	1 Feb, 2021	Till end of semester	Introduction to database, Creating database using Wizard or from scratch, creating tables using wizard, entering data, using design view, saving, inserting, editing, Changing properties of fields, setting primary key. Revision of Syllabus	Lecture method, PPT, demonstrations, class tests and old paper discussions.

## MCM DAV College for Women, Sector – 36A, Chandigarh Monthly Teaching Plans (Even Semester) Session: 2020-21

Name of the Teacher:

**Department:** Computer Science and Application

**Class:** BSc-I (2<sup>nd</sup> semester)

**Section:** Voc.( Computer Applications)

Subject: C Programming Language (CA-03)

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	То		
1.	Month 1	Month 1	Character Set, Constants, Keywords, Variables, Data Types, Operators and its types, structure of C program, standard and formatted statements, decision control structures.	Lecture method, PPT, Online sources and discussions.
2.	Month 2	Month 2	Loop control structures and case control structures, Functions, recursion, Preprocessors, scope rules.	Lecture method, program demonstrations through software and discussions.
3.	Month 3	Month 3	Array declaration, Single and two dimensional arrays, Passing array elements to function, Insertion, deletion and searching operation in arrays, Pointers, Dynamic memory allocation, Reading and writing strings, string handling functions	Lecture method, PPT, Online sources, program demonstrations through software, class tests, and discussions.
4.	Month 4	Month 4	Structures, array of structures, union, opening and closing files, file accessing functions, file opening modes, argc and argv.	Lecture method, PPT, Online sources, sample programs, class tests, revisions and old paper discussions.
5.	Month 5	Till end of semester	Revision of syllabus	Discussions and class Tests

## MCM DAV College for Women, Sector – 36A, Chandigarh Monthly Teaching Plans (Even Semester) Session: 2020-21

Name of the Teacher:

**Department:** Computer Science and Application

**Class:** BSc-I (2<sup>nd</sup> semester)

**Section:** Voc.( Computer Applications)

Subject: Operating System concepts (CA-04)

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	То	-	Undertaken*
1.	Month 1	Month 1	OS and it's functions, Computer System Architecture, Storage Structure	Lecture Method, PPT
2.	Month 2	Month 2	Process life cycle, PCB, Scheduler, Types of Scheduling, Deadlocks, Resource Allocation Graph, Deadlock detection and Recovery	Class Test, dictated notes from online sources, PPT
3.	Month 3	Month 3	Memory Management, Paging & Segmentation, Page Replacement Algorithms	Assignment given, Lecture Method, PPT
4.	Month 4	Month 4	File Allocation Methods, Allocation Methods, Directory Structure, Disk Structure, Disk Scheduling Algorithms, Control devices	Discussion of previous year questions, Class Test of Unit- 3, Concluded with the syllabus
5.	Month 5	Till end of semester	Revision of syllabus	Discussions and class Tests