

**MCM DAV College for Women, Sector – 36A, Chandigarh**  
**Monthly Teaching Plans (Odd Semester)**  
**Session – (2023-24)**

**Name of the Teacher:** Ms. Aashita Jain

**Department:** Department of Computer Science & Applications

**Class:** BCA III (5<sup>th</sup> Semester) **Subject:** BCA-16-501 (Computer Networks) **Section(s):** A & B

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
1.	24 <sup>th</sup> July, 2023	31 <sup>st</sup> July, 2023	<p style="text-align: center;"><b>UNIT-I</b></p> <p><b>Computer Network:</b> Network Hardware and Software, Network Topologies, Uses of Computer Networks.</p>	Lecture method, PPT, Online sources
2.	1 <sup>st</sup> Aug, 2023	31 <sup>st</sup> Aug, 2023	<p>OSI Reference Model, TCP/IP reference model, Comparison of OSI with TCP/IP model.</p> <p><b>Physical Layer:</b> Transmission media: Twisted pair, Coaxial cable, Fiber optics, Wireless Transmission (Radio, Microwave, and Infrared), <b>Switching:</b> Circuit Switching, Message Switching, Packet Switching &amp; their comparisons. <b>ISDN</b> and its services,</p>	Lecture method, PPT, PDF, videos, class tests
2.	1 <sup>st</sup> Sep, 2023	30 <sup>th</sup> Sep, 2023	<p><b>Multiplexing:</b> Frequency Division, Time Division, Wave Length Division, <b>MODEMS.</b></p> <p style="text-align: center;"><b>UNIT-II</b></p> <p><b>Data Link Layer:</b> Design Issue, Framing</p> <p><b>Errors Detection and Correction Code:</b> Check sum, CRC, Hamming code, Data Link Protocols for noisy and noiseless channels,</p> <p><b>Sliding Window Protocol:</b> Stop and Wait ARQ, Go- back-N ARQ, Selective Repeat ARQ series and continuous series.</p>	Lecture method, PPT, videos, PDF, class tests, Assignments
3.	1 <sup>st</sup> Oct, 2023	31 <sup>st</sup> Oct, 2023	<p><b>Medium Access Sub-Layer:</b> Introduction to Static and Dynamic channel allocation, IEEE standards 802.3</p> <p style="text-align: center;"><b>UNIT-III</b></p> <p><b>Network Layer:</b> Design Issues, network layer addressing, network layer datagram, IP addressed Classes. Subnetting-Sub network, Subnet mask, Routing Algorithm: Shortest Path Routing, Flooding, Broadcast and Multicast routing,</p>	Lecture method, PPT, videos, class tests Doubt sessions, Assignments
4.	1 <sup>st</sup> Nov, 2023	Till the end of semester	<p>Congestion control: Principles of Congestion Control, Congestion prevention policies, Leaky bucket and token bucket algorithms.</p> <p style="text-align: center;"><b>UNIT-IV</b></p> <p><b>Application Layer:</b> Domain Name system (DNS), DNS name space, DNS Servers, World Wide Web, HTTP, e-mail: Architecture and Services, Message Component, Multipurpose Internet Mail Extensions (MIME), Simple Mail Transfer Protocol (SMTP), Post Office Protocol (POP), Remote Login and File transfer protocol, Introduction to Network Security.</p> <p><b>Revision of Syllabus</b></p>	Lecture method, PPT, videos, class tests Doubt clearing sessions, Assignments, Discussion of previous year question papers

**MCM DAV College for Women, Sector – 36A, Chandigarh**  
**Monthly Teaching Plans (BCA III: Odd Semester)**  
**2023-24**

**Name of the Teacher:** Ms. Deepti Sharda & Ms. Punam

**Department:** Department of Computer Science & Applications

**Subject:** BCA-16-503 (Java Programming)

**Class:** BCA 5<sup>th</sup> Sem

**Section(s):** A & B

S No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
1	24 <sup>th</sup> Aug'23	31 <sup>st</sup> July'23	Java and the Internet: The Java programming language and its characteristics; Java development kit, Java run- time environment; Java compiler Fundamentals of Java: Java Vs. C++, Byte Code, Java Virtual Machine, constants, variables, data types, operators, expressions, control structures, defining class, creating objects, accessing class members, constructors, Garbage Collection, method overloading.	Lecture Method, PPT, Periodic Test, Assignments, Quiz, Online Sources
2	1 Aug'23	31 <sup>th</sup> Aug'23	Inheritance: Different types of Inheritance, member access, using super keyword to call super class constructors, creating a multilevel hierarchy, method overriding, dynamic method dispatch, using abstract classes, using Final keyword. Interfaces: Defining an Interface, Implementing Interfaces, Variables in Interfaces, Achieving multiple inheritance using interfaces, Interface and Abstractclasses.	Lecture Method, PPT, Periodic Test, Assignments, Quiz, Online Sources
3	1 <sup>st</sup> Sep'23	30 <sup>th</sup> Sep'23	Using AWT controls: Introduction to AWT, Creating GUI Applications using AWT, AWT controls: Label, TextBox, TextArea, Check Boxes, Radio Buttons, Choice lists, Understanding Layout Managers: FlowLayout, BorderLayout, GridLayout; Introduction to Event handling using Delegation Event Model. Introduction to Java Database Connectivity (JDBC): JDBC Architecture, JDBC Drivers, Java.SQL package, Connecting to the Database and performing basic database operation like Insert, Delete, Update and Select.  Arrays and Strings: One-dimensional and two-dimensional Arrays, String Handling using String and StringBuffer class, String Functions. I/O Basics: streams, the predefined streams; Reading console Input, Writing console Output.	Lecture Method, PPT, Periodic Test, Assignments, Quiz, Online Sources

4	1 <sup>st</sup> Oct'23	31 <sup>st</sup> Oct'23	<p>Applet Programming: Introduction, Types of applet, Life Cycle, Incorporating an applet into web page using Applet Tag, running applets, using Graphics class and its methods to draw lines, rectangles, circles, ellipses, arcs and polygons.</p> <p>Exception Handling: Java Exception handling model, Types of exception, using Try and catch, Multiple Try and Catch clauses, Nested Try statements, finally block, user defined exceptions.</p>	Lecture Method, PPT, Periodic Test, Assignments, Quiz, Online Sources
5	1 <sup>st</sup> Nov'22	18 <sup>th</sup> Nov'23	<p>Multi-threaded Programming: The Java Thread model, the Thread class and Runnable interface, Creating a Thread using Runnable Interface and extending Thread, Creating Multiple Threads, Thread Priorities, Synchronizations: Methods, Statements, Inter Thread Communication, Deadlock, Suspending, Resuming and Stopping Threads.</p>	Lecture Method, PPT, Periodic Test, Assignments, Quiz, Online Sources

<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans</b>			
	Aug-Sep 2023	Planned the strategy to start the syllabus and reviewed different books and decided the book to be recommended	
	Oct 2023	Reviewed the topic covered & designed next month lesson plan. Discussed the MST syllabus.	
	Nov 2023	Reviewed the topic covered & designed next month lesson plan method. Designed question paper.	

**\*Any of these** – (i) Lecture Method; (ii) PPT; (iii) Online Sources; (iv) Group Discussion; (v) Case Studies etc.  
Other Methods adopted by the teacher – Please write the specific teaching methods.

Mehr Chand Mahajan DAV College for Women, Sector – 36A, Chandigarh

Monthly Teaching Plans (Odd Semester)

Session – (2023-24)

Name of the Teacher/s- Dr. Mandeep K. Chawla & Dr. Navdeep Kaur

Department: Department of Computer Science & Applications

Class: BCA III

Section (s): A & B

Semester: 5<sup>th</sup>

Subject: Web Application Development using PHP(BCA-16-504)

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
1	24 July,2023	31 Aug, 2023	Introduction to web applications: Client Side Scripting Vs Server Side Scripting, Understanding, Web Servers, Installing WAMP and configuring PHPenvironment. PHP Basics	PPT, Assignments, Demonstrations
2	1 Sep, 2023	30 Sep, 2023	Control structures, Functions, Recursion, Library functions String Handling and string functions, Formatting Strings, Comparing and searching Strings and substrings, Sample PHP programs	PPT, Practical Assignments, Discussions, RelatedMaterial, Live demonstrations
3	1 Oct, 2023	31 Oct, 2023	PHP Arrays and Iterative functions, Forms: Working with HTML Form controls and PHP, Super global variables, super global array PHP and Databases: Connecting to database, Making SQL queries, Executing queries	PPT, Assignments, Live demonstration of PHP, Peer Learning, Related Material
4	1 Nov, 2023	Till theend of the semesterer	Databases Contd: Integrating Forms and Databases, Editing data with an HTML form Maintaining User State: Introduction to Cookies, Setting time in a cookie with PHP, Creating andDeleting a cookie, Creating sessions, Working withFiles	Assignments, Live demonstration of PHP programs, Peer Learning, Related Material, mid-termexam
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans</b>				
	July-Aug 2023	Planned the strategy to start the syllabus and reviewed differentbooks and decided the book to be recommended		
	Sep-Oct 2023	Reviewed the topic covered & designed next month lesson plan.Discussed the MST syllabus.		
	Nov 2023	Reviewed the topic covered & designed next month lesson planmethod. Designed question paper.		

\*Any of these – (i) Lecture Method; (ii) PPT; (iii) Online Sources; (iv) Group Discussion; (v) CaseStudies etc.

Other Methods adopted by the teacher – Please write the specific teaching method

**MCM DAV College for Women, Sector – 36A, Chandigarh**  
**Monthly Teaching Plans (Even Semester)**  
**Session – (2023-24)**

**Name of the Teacher:** Ms. Aashita Jain

**Department:** Department of Computer Science & Applications

**Class:** BCA III, 6<sup>th</sup> Semester **Subject:** BCA-16-601(E-Commerce)

**Section(s):** A & B

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
1.	Jan, 2024	31 <sup>st</sup> Jan, 2024	<p style="text-align: center;"><b>UNIT-I</b></p> <p><b>An Overview of E-Commerce:</b> Definitions: E-commerce, E-business, difference between E-commerce and E-business, Problems with Traditional business systems, Aims of E-commerce, Types of E-commerce: B2B, B2C, C2C, B2G, G2H, G2C, Operational &amp; Strategic benefits of E-commerce, Issues &amp; Challenges in E-commerce.</p> <p><b>Electronic Data Interchange (EDI):</b> Definition; Traditional versus EDI enabled system for document exchange; Components of EDI: EDI Standards, EDI Software, Communication Networks; EDI Message Structure; EDI Notification Structure; EDI in India; EDI enabled procurement process; Benefits of EDI: Direct Benefits, Strategic Benefits; EDI Implementation issues; Legal Aspects</p>	Lecture method, PPT, Online sources, class discussion, class tests
2.	1 <sup>st</sup> Feb, 2024	29 <sup>th</sup> Feb, 2024	<p style="text-align: center;"><b>UNIT-II</b></p> <p><b>Web based E-Commerce:</b> Definition; Need for web based business, Steps in setting up business on Internet: Selection &amp; registration of domain name, Website development : Planning a website, Steps for creating a website, Elements of a webpage, web authoring tools, Hosting a website: Website hosting considerations.</p> <p><b>Online Promotion tools &amp; techniques:</b> Getting links to your site, banner advertisements &amp; measuring advertisement effectiveness; Web Traffic Analysis: Hits, View pages, Visits and Other web-reporting tools, various measures, What is Search Engine optimization</p>	Lecture method, PPT, assignments, videos, class tests
3.	1 <sup>st</sup> Mar, 2024	31 <sup>st</sup> Mar, 2024	<p style="text-align: center;"><b>UNIT-III</b></p> <p>Electronic Payment Systems: E-cash: Purchasing &amp; using of e-cash; Electronic Purses their loading with cash and use; E-cheque payment system; Online Third Party Verified Payment System through Credit &amp; Debit Cards; ATM based cash disbursement system; Electronic Bill Payment System; Inter bank clearing system.</p>	Lecture method, PPT, Online sources, class discussion, class tests
4.	1 <sup>st</sup> Apr, 2024	Till the end of semester	<p style="text-align: center;"><b>UNIT-IV</b></p> <p><b>Mobile Commerce:</b> Definition, Benefits of Mobile Commerce, Issues in Mobile Commerce, Mobile Commerce Framework</p> <p><b>Applications of E-Commerce &amp; Case Studies:</b> Applications of e-commerce, Case studies in Retailing, Banking and e-governance; Cyber Crimes: Types, Cyber Forensics, Cyber crimes and IT Act - 2000.,</p> <p><b>Revision of Syllabus</b></p>	Lecture method, PPT, videos, class tests Doubt clearing sessions, Assignments, Discussion of previous year question papers

**Mehr Chand Mahajan DAV College for Women, Sector – 36A, Chandigarh**

**Monthly Teaching Plans (Even Semester)**

**Session – (2023-24)**

**Name of the Teacher:** Dr. Mandeep K. Chawla / Dr. Navdeep Kaur

**Department:** Department of Computer Science & Applications

**Class:** BCA III

**Section (s):** A & B

**Semester:** 6<sup>th</sup> **Subject:** Application Development using VB.Net (BCA-16-602)

S. No.	Date (Monthly)		Topics to be Covered	Academic Activity to Undertake*
	From	To		
1	Jan 2024	31 Jan, 2024	Visual Studio .NET IDE, .NET Framework, CLR, Introducing Controls	Lecture Method, Demonstration on PC
2	1 Feb, 2024	29 Feb, 2024	Using common controls of Toolbox and their properties and methods, Additional controls of Toolbox, Operators, data types, Control structures, sub/function/ event procedures, strings, control arrays	Lecture Method, Class tests, practical demos, Sample programs discussion
3	1 Mar, 2024	31 Mar, 2024	Accessing Databases with ADO.NET: making connections, Data Adapter, Data Reader and Data sets, Data Navigation and Manipulation, Data Grid view control	Lecture Method, Class test, PPT, sample applications, real-life case studies, Online Sources, project study and plan, mid-term exam
4	1 Apr, 2024	Till the end of semester	Introduction to ASP.NET, Web Forms, Using 6 Validation Controls, State management in ASP.NET, Sessions/ Cookies/Query Strings, Introducing Web Services, Deploying Applications,	Lecture Method, PPT Online Sources, project implementation, Project report making. Topics discussion, Preparing for viva voce
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans</b>				
	Feb 2024		<i>Discuss and review, prepare the next lesson plan, , MST syllabus and paper planning</i>	
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans</b>				
	Mar 2024		<i>Discuss and review, prepare the next lesson plan</i>	
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans</b>				
	Apr 2024		<i>Discuss and review the deviations (if any), prepare the next lesson plan. MST results review, Review the syllabus completion, Final practical Paper planning</i>	

**Mehr Chand Mahajan DAV College for Women, Sector – 36A, Chandigarh**

**Monthly Teaching Plans (Even Semester)**

**Session – (2023-24)**

**Name of the Teacher:** Ms. Punam Dawgotra and Ms. Deepti Sharda

**Department:** Department of Computer Science & Applications

**Class:** BCA III

**Section (s):** A & B

**Semester:** 6<sup>th</sup> **Subject:** Computer Graphics & Multimedia Applications (BCA-16-603)

S.No.	Date (Monthly )		Topics to be Covered	Academic Activity Undertaken*
	From	To		
1	Jan, 2024	31 <sup>st</sup> Jan, 2024	<p>Computer Graphics: A Survey of Computer Graphics : Computer Aided Design, Presentation Graphics, Computer art, Entertainment, Education and Training, Visualization, Image Pressing, Graphical User Interfaces.</p> <p>Overview of Graphics Systems: Video Display Devices, Cathode Ray Tube, CRT monitors, Flat panel displays: Plasma Panel display, Thin-film electroluminescent displays, LED, Liquid Crystal Displays (LCD)</p> <p>Developing Computer Graphics Using ‘C’: Input-output primitives, setting character and text attributes, changing line styles, Using fill styles to fill images. Use these primitives to develop programs like drawing concentric circles, Ellipses, Sine curves, Histograms, Pie charts and human face.</p>	<p>Lecture Method, Reading &amp; Discussion, Coding Discussion,</p> <p>Demonstration Online Resources</p>
2	1 <sup>st</sup> Feb, 2024	29 <sup>th</sup> Feb, 2024	<p>Raster Scan Systems, Random Scan Systems. Graphics Monitors and Workstations, Input Devices, Hard-copy devices, Graphics Software.</p> <p>Studying the Features and Developing Computer Graphics Using Standard Graphics package</p> <p>Auto CAD: Features and applications of AutoCAD, Interface, System Requirements, The X, Y coordinate system, Dimensioning, Drawing commands, Cleaning Up the drawing, Positioning Commands, Editing Commands, Construction Commands, Display Commands.</p> <p>Multimedia Applications: What is multimedia, Components of Multimedia, Need of Multimedia, Features of a Multimedia System, Benefits and problems of using Multimedia?</p>	<p>Lecture Method, Reading</p> <p>&amp; Discussion, Coding Discussion, Demonstration Online Resources</p>
3	1 <sup>st</sup> Mar, 2024	31 <sup>st</sup> Mar, 2024	<p>System Components: Multimedia system and a conventional system, Basic System components, Subsystems and functions of a Multimedia computer, Multimedia Add-on Cards.</p> <p>Applications: Multimedia in the Real World, Training and Education, Image Processing, Multimedia in home and office</p> <p>Multimedia Platforms: Personal computer as a Multimedia System, Limitations of the early Personal Computer as a Multimedia System, The evolution of MPC, Hardware Platforms, Software Platforms. Development Tools: Types of development tools, Commercial tools, Stages of Multimedia Application Development.</p> <p>Studying features and use of Multimedia authoring tools like</p>	<p>Lecture Method, Reading</p> <p>&amp; Discussion, Demonstration, Programs Discussion, Assignment Submission</p>

			Photoshop and Macromedia Director. Photoshop- Features, Interface, Toolbox, Color models, Layers, Filters	
4	1 <sup>st</sup> Apr, 2024	Till the end of semester	Image: Sources of image, Types of images, Basic editing operations, Introduction to Image Compression: Lossy and Lossless compression, Image file formats. Audio: Hardware for Audio, Digital Audio, Audio editing operations, MIDI, Audio file formats Video: Hardware Components of a Video System, introduction to Video compression, MPEG, Video file formats. Storage for multimedia: magnetic media, Optical media, Compact disk specifications. Macromedia Director- Features, Stage, Cast, Score, ControlPanel, Sprite, Channels, Text Inspector, Tools for creating cast members	Method, Online Resources Reading & Discussion, Programs Discussion, Student Presentation, Assignment submission

<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lessonplans</b>				
	Feb 2024		<i>Discuss and review, prepare the next lesson plan, , MST syllabus and paper planning</i>	
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lessonplans</b>				
	Mar 2024		<i>Discuss and review, prepare the next lesson plan</i>	
<b>Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lessonplans</b>				
	Apr 2024		<i>Discuss and review the deviations (if any),prepare the next lesson plan. MST results review, Review the syllabus completion, Final practical paper planning</i>	