MCM DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans (Odd Semester)
Session – (2025-26)

Name of the Teacher: Ms. Aashita Jain
Department: Department of Computer Science & Applications
Class: BCA III (5th Semester)   **Subject:** BCA-16-501 (Computer Networks)   **Section(s):** A & B

S.No.	Date (Monthly) From	Date (Monthly) To	Topics to be Covered	Academic Activity Undertaken*
1.	14 July 2025	31 Aug 2025	Computer Network: Network Hardware and Software, Network Topologies, Uses of Computer Networks. OSI Reference Model, TCP/IP reference model, Comparison of OSI with TCP/IP model. Physical Layer: Transmission media: Twisted pair, Coaxial cable, Fiber optics, Wireless Transmission (Radio, Microwave, and Infrared), Switching: Circuit Switching, Message Switching, Packet Switching & their comparisons. ISDN and its services	Lecture method, PPT, Online sources
2.	1 Sep 2025	30 Sep 2025	Multiplexing: Frequency Division, Time Division, Wave Length Division, MODEMS. Data Link Layer: Design Issue, Framing Errors Detection and Correction Code: Check sum, CRC, Hamming code, Data Link Protocols for noisy and noiseless channels, Sliding Window Protocol: Stop and Wait ARQ, Go- back-N ARQ, Selective Repeat ARQ series and continuous series. Medium Access Sub-Layer: Introduction to Static and Dynamic channel allocation, IEEE standards 802.3	Lecture method, PPT, PDF, videos, class tests
3.	1 Oct 2025	30 Oct 2025	Network Layer: Design Issues, network layer addressing, network layer datagram, IP addressed Classes. Sub netting- Sub network, Subnet mask, Routing Algorithm: Shortest Path Routing, Flooding, Broadcast and Multicast routing Congestion control: Principles of Congestion Control, Congestion prevention policies, Leaky bucket and token bucket algorithms.	Lecture method, PPT, videos, PDF, class tests, Assignments
4.	1 Nov 2025	13 Nov 2025	Application Layer: 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. Revision of Syllabus	Lecture method, PPT, videos, class tests Doubt sessions, Assignments

*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.

MCM DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans (BCA III: Odd Semester)
2025-26
Name of the Teacher: Ms. Deepti Sharda & Ms. Punam
Department: Department of Computer Science & Applications   **Class:** BCA 5th Sem
Subject: BCA-16-503 (Java Programming)   **Section(s):** A & B

S No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	**To**		
1	14 July 2025	31 Aug 2025	Java and the Internet: The Java programming language and its characteristics; Java development kit, Java run- time environment; Java compiler Fundamentals of Java, defining class, creating objects, accessing class members, constructors, Garbage Collection, method overloading. Inheritance: Different types of Inheritance, member access, method overriding, dynamic method dispatch, using abstract classes, using Final keyword. I/O Basics: streams, the predefined streams; Reading console Input, Writing console Output.	Lecture Method, PPT, Periodic Test, Assignments, Quiz, Online Sources
2	1 Sep 2025	30 Sep 2025	Interfaces: Defining an Interface, Implementing Interfaces, Variables in Interfaces, Achieving multiple inheritance using interfaces. Arrays and Strings: One-dimensional and two-dimensional Arrays, String Handling using String and StringBuffer class, String Functions. 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.	Lecture Method, PPT, Periodic Test, Assignments, Quiz, Online Sources
3	1 Oct 2025	30 Oct 2025	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. 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.	Lecture Method, PPT, Periodic Test, Assignments, Quiz, Online Sources
4	1 Nov 2025	13 Nov 2025	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. Multi-threaded Programming: The Java Thread model, the Thread class and Runnable interface, synchronization, deadlocks.	Lecture Method, PPT, Periodic Test, Assignments, Quiz, Online Sources

*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 – (2025-26)
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: 5th   **Subject:** Web Application Development using PHP (BCA-16-504)

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	**To**		
1	14 July 2025	31 Aug 2025	Introduction to web applications: Client Side Scripting Vs Server Side Scripting, Understanding, Web Servers, Installing WAMP and configuring PHP environment. PHP Basics, Control structures, file inclusion Statements	PPT, Assignments, Demonstrations
2	1 Sep 2025	30 Sep 2025	Functions, Recursion, Library functions String Handling and string functions, Formatting Strings, Comparing and searching Strings and substrings, Sample PHP programs, Basics of arrays, inspecting arrays	PPT, Practical Assignments, Discussions, Related Material, Live demonstrations
3	1 Oct 2025	31 Oct 2025	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 Revision of topics covered	PPT, Assignments,, Peer Learning, Related Material mid term exams
4	1 Nov 2025	13 Nov 2025	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 and Deleting a cookie, Creating sessions, Working with Files	Assignments, Live demonstration of PHP programs, Peer Learning

*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 method

MCM DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans (Even Semester)
Session – (2025-26)

Name of the Teacher: Ms. Aashita Jain
Department: Department of Computer Science & Applications
Class: BCA III, 6th Semester   **Subject:** BCA-16-601(E-Commerce)   .   **Section(s):** A & B

S.No.	Date (Monthly) From	Date (Monthly) To	Topics to be Covered	Academic Activity Undertaken*
1.	10 Jan, 2026	31st Jan, 2026	An Overview of E-Commerce: 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 & Strategic benefits of E-commerce, Issues & Challenges in E-commerce. Electronic Data Interchange (EDI): 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	Lecture method, PPT, Online sources, class discussion, class tests
2.	1st Feb, 2026	28th Feb, 2026	Web based E-Commerce: Definition; Need for web based business, Steps in setting up business on Internet: Selection & 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. Online Promotion tools & techniques: Getting links to your site, banner advertisements & measuring advertisement effectiveness; Web Traffic Analysis: Hits, View pages, Visits and Other web-reporting tools, various measures, What is Search Engine optimization	Lecture method, PPT, assignments, videos, class tests
3.	1st Mar, 2026	31st Mar, 2026	Electronic Payment Systems: E-cash: Purchasing & using of e-cash; Electronic Purses their loading with cash and use; E-cheque payment system; Online Third Party Verified Payment System through Credit & Debit Cards; ATM based cash disbursement system; Electronic Bill Payment System; Inter bank clearing system.	Lecture method, PPT, Online sources, class discussion, class tests
4.	1st Apr, 2026	25th Apr, 2026	Mobile Commerce: Definition, Benefits of Mobile Commerce, Issues in Mobile Commerce, Mobile Commerce Framework Applications of E-Commerce & Case Studies: Applications of e-commerce, Case studies in Retailing, Banking and e-governance; Cyber Crimes: Types, Cyber Forensics, Cyber crimes and IT Act - 2000. Revision of Syllabus	Lecture method, PPT, videos, class tests Doubt clearing sessions, Assignments, Discussion of previous year question papers

*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 method

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

Monthly Teaching Plans (Even Semester)
Session – (2025-26)
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: 6th   **Subject:** Application Development using VB.Net (BCA-16-602)

S. No.	Date (Monthly)		Topics to be Covered	Academic Activity to Undertake*
	From	**To**		
1	10 Jan, 2026	31st Jan, 2026	Visual Studio .NET IDE, .NET Framework, CLR, Introducing Controls	Lecture Method, Demonstration on PC
2	1st Feb, 2026	28th Feb, 2026	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	1st Mar, 2026	31st Mar, 2026	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	1st Apr, 2026	25th Apr, 2026	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

*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 method

Mehr Chand Mahajan DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans (Even Semester)
Session – (2025-26)

Name of the Teacher: Dr. Deepti Sharda & Ms. Punam Dawgotra

Department: Department of Computer Science & Applications

Class: BCA III   **Section (s):** A &B

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

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	**To**		
1	10th Jan, 2026	31st Jan, 2026	Computer Graphics: A Survey of Computer Graphics : Computer Aided Design, Presentation Graphics, Computer art, Entertainment, Education and Training, Visualization, Image Pressing, Graphical User Interfaces. 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) 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.	Lecture Method, Reading & Discussion, Coding Discussion, Demonstration Online Resources
2	1st Feb, 2026	29th Feb, 2026	Raster Scan Systems, Random Scan Systems. Graphics Monitors and Workstations, Input Devices, Hard-copy devices, Graphics Software. Studying the Features and Developing Computer Graphics Using Standard Graphics package 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. Multimedia Applications: What is multimedia, Components of Multimedia, Need of Multimedia, Features of a Multimedia System, Benefits and challenges	Lecture Method, Reading & Discussion, Coding Discussion, Demonstration Online Resources
3	1st Mar, 2026	31st Mar, 2026	System Components: Multimedia system and a conventional system, Basic System components, Subsystems and functions of a Multimedia computer, Multimedia Add-on Cards. Applications: Multimedia in the Real World, Training and Education, Image Processing, Multimedia in home and office 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. Studying features and use of Multimedia authoring tools like	Lecture Method, Reading & Discussion, Demonstration, Programs Discussion, Assignment Submission

			Photoshop and Macromedia Director. Photoshop- Features, Interface, Toolbox, Color models, Layers, Filters	
4	1st Apr, 2026	25th Apr, 2026	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, Control Panel, Sprite, Channels, Text Inspector, Tools for creating cast members	Method, Online Resources Reading & Discussion, Programs Discussion, Student Presentation, Assignment submission

*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 method