MCM DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans (BCA III: Odd Semester)
2022-23

Name of the Teacher: Ms. Ritu
Department: Computer Science and ApplicationsClass:
BCA-III (5th Sem)
Subject: Computer Networks (BCA-16-501)   Section(s): A & B

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	**To**		
1.	13 Aug, 2022	31 Aug, 2022	**UNIT-I** **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.	Lecture method, PDF, Online sources, Doubt sessions, Assignments.
2.	1 Sep, 2022	30 Sep, 2022	**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, **Multiplexing:** Frequency Division, Time Division, Wave Length Division, **MODEMS**. **UNIT-II** **Data Link Layer:** Design Issue, Framing **Errors Detection and Correction Code:** Check sum, CRC, Hamming code, Data Link Protocols for noisy and noiseless channels,	Lecture method, PDF, Online sources, Doubt sessions, Assignments.
3.	1 Oct, 2022	31 Oct, 2022	**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 **UNIT-III** **Network Layer:** 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, Congestion control: Principles of Congestion Control, Congestion prevention policies, Leaky bucket and token bucket algorithms.	Lecture method, PDF, Online sources, Doubt sessions, Assignments
4.	1 Nov, 2022	Till the end of semester	**UNIT-IV** **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.	Lecture method, PDF, Online sources, Doubt sessions, Assignments.

Name of the Teacher: Ms. Deepti Sharda & Ms. Punam Dawgotra
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	13th Aug'22	31st Aug'22	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 Sep'22	30th Sep'22	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 Abstract classes.	Lecture Method, PPT, Periodic Test, Assignments, Quiz, Online Sources
3	1st Oct'22	31st Oct'22	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. Exception Handling: Java Exception handling model, Types of exception, using Try and catch, MultipleTry and Catch clauses, Nested Try statements, finally block, user defined exceptions. 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:	Lecture Method, PPT, Periodic Test, Assignments, Quiz, Online Sources

			Methods, Statements, Inter Thread Communication, Deadlock, Suspending, Resuming and Stopping Threads.	
4	1st Nov'22	Till the end of semester	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. 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.	Lecture Method, PPT, Periodic Test, Assignments, Quiz, Online Sources

Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans			
	Aug-Sep 2022	Planned the strategy to start the syllabus and reviewed different books and decided the book to be recommended	
	Oct 2022	Reviewed the topic covered & designed next month lesson plan. Discussed the MST syllabus.	
	Nov 2022	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 metho

Mehr Chand Mahajan DAV College for Women, Sector – 36A,
ChandigarhMonthly Teaching Plans (Odd Semester)
Session – (2022-23)

Name of the Teacher/s- Mandeep K. Chawla & Ms. 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	13 Aug, 2022	31 Aug, 2022	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 2022	30 Sep 2022	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, 2022	31 Oct, 2022	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, 2022	Till the end of the semester	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
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
	Aug-Sep 2022		Planned the strategy to start the syllabus and reviewed differentbooks and decided the book to be recommended	
	Oct 2022		Reviewed the topic covered & designed next month lesson plan.Discussed the MST syllabus.	
	Nov 2022		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

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

S. No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken *
	From	**To**		
1.	16 Jan, 2023	31 Jan, 2023	**UNIT-I** **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, PDF, Online sources, Doubt sessions, Assignments.
2.	1 Feb, 2023	28 Feb, 2023	**UNIT - II** **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 awebsite, 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, PDF, Online sources,Doubt sessions, Assignments.
3.	1 Mar, 2023	31 March, 2023	**UNIT - III** **Electronic Payment Systems**: E-cash: Purchasing & usingof 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; Interbank clearing system. **UNIT- IV** **Mobile Commerce**: Definition, Benefits of Mobile Commerce, Issues in Mobile Commerce, Mobile Commerce Framework	Lecture method, PDF, Online sources, Doubt sessions, Assignments
4.	1 Apr, 2023	Till the end ofsemester	**Applications of E-Commerce & Case Studies**: Applicationsof e-commerce, Case studies in Retailing, Banking and e- governance; Cyber Crimes: Types, Cyber Forensics, Cyber-crimes and IT Act - 2000.	Lecture method, PDF, Online sources, Doubt sessions, Assignments

Mehr Chand Mahajan DAV College for Women, Sector – 36A,
ChandigarhMonthly Teaching Plans (Even Semester)
Session – (2022-23)

Name of the Teacher: Dr. Mandeep K. Chawla / Navdeep
Kaur**Department:** Department of Computer Science &
Applications

Class: BCA III　　　　　　**Section (s):** A &B　　　　　　**Semester: 6**[th]

Subject: Application Development using VB.Net (BCA-16-602)

S. No.	Date (Monthly)		Topics to be Covered	Academic Activity toUndertake*
	From	**To**		
1	16 Jan 2023	31 Jan 2023	Visual Studio .NET IDE, .NET Framework,CLR, Introducing Controls	Lecture Method, Demonstration on PC
2	1 Feb 2023	28 Feb 2023	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 2023	31 Mar 2023	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 2023	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 OnlineSources, project implementation, Project report making. Topics discussion, Preparing for viva voce
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lessonplans				
	Feb 2023		*Discuss and review, prepare the next lesson plan, , MSTsyllabus and paperplanning*	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lessonplans				
	Mar 2023		*Discuss and review, prepare the next lesson plan*	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lessonplans				
	Apr 2023		*Discuss and review the deviations (if any),prepare the next lesson plan. MST results review, Review the syllabus completion, Final practical paperplanning*	

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

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	**To**		
1	16th Jan, 2023	31st Jan, 2023	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, 2023	28th Feb, 2023	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 problems of using Multimedia?	Lecture Method, Reading &Discussion, Coding Discussion, Demonstration Online Resources
3	1st Mar, 2023	31st Mar, 2023	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, 2023	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

Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lessonplans			
	Feb 2023		*Discuss and review, prepare the next lesson plan, , MSTsyllabus and paper planning*
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lessonplans			
	Mar 2023		*Discuss and review, prepare the next lesson plan*
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lessonplans			
	Apr 2023		*Discuss and review the deviations (if any),prepare the next lesson plan. MST results review, Review the syllabus completion, Final practical paper planning*