**BCA II Semester**

**BCA 124 Office Automation Tools**

**Month of April**

UNIT – I Desktop Publishing: Concept, Need and Applications; Hardware and Software requirements for DTP, An Overview and comparison between DTP packages, Common features of DTP. Introduction to Page Maker: Features, System Requirements, Components of Page Maker Window, Introduction to Menu and Toolbars, PageMaker Preferences

**Month of May**

UNIT – II 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, 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

**Month of June**

UNIT – III Word Processing: Introduction to Office Automation, Creating & Editing Document, Formatting Document, Auto-text, Autocorrect, Spelling and Grammar Tool, Document Dictionary, Page Formatting, Bookmark, Advance Features of Word-Mail Merge, Macros, Tables, File Management, Printing, Styles, linking and embedding object.

**Month of July**

UNIT – IV Presentation using PowerPoint: Presentations, Creating, Manipulating & Enhancing Slides, Organizational Charts, Excel Charts, Word Art, Layering art Objects, Animations and Sounds, Inserting Animated Pictures or Accessing through Object, Inserting Recorded Sound Effect or In-Built Sound Effect.

**PGDCA**

**COMPUTER ORGANIZATION & NETWORKING FUNDAMENTALS**

**Month of April**

UNIT - II Boolean Functions: Boolean algebra, Truth tables, Logic gates, Canonical representation of Boolean functions, simplification of Boolean expressions – Karnaugh Maps, Quine McCluskey procedure. Combinational Circuits: Half adder, full adder, half subtractor, full subtractor, parallel binary adder, BCD adder, code converter, decoder, encoder, multiplexer, demultiplexer.

**Month of May**

UNIT - III Sequential Circuits: Flip-flops – synchronous & asynchronous basic flip flops, D-type & T-type flip flops, JK flip flop, master-slave flip flop, characteristics & excitation tables of flip-flops. Registers – shift registers. Counters – synchronous & asynchronous binary counters, modulo-N counter.

**Month of June & July**

UNIT - IV Introduction to the Internet, concepts of Internet and Intranet; IP addresses, DNS; Internet Services; E-mail; File transfer and FTP; Remote login using TELNET; World Wide Web and HTTP; Web Browsers; Search Engines; Uniform Resource Locator(URL); Web Servers; Internet Connections: Dialup; Leased line; Modems; DSL service; Internet Service Provider.

**PGDCA**

**DATA BASE MANAGEMENT SYSTEMS**

**Month of April**

Data, Information and Knowledge – Limitations of Manual Data Processing – Advantages of databasesBasic DBMS Terminology – Role of DBA, Data Manager, File Manager and Disk Manager- Three Level Architecture of DBMS- Physical and Logical Data Independence, Data Base languages and Interfaces, DBMS functions and component modules.

**Month of May**

Entity Relationship Model- Concepts, Relationships, Constraints, Keys- Primary, Secondary, Composite & Foreign Key etc. E-R Diagrams, Mapping ER- diagrams to Relational Tables, Case studies: Inventory System, Payroll System, Reservation System, Online Book Store etc. Introduction to Data Models, Comparison between Hierarchical, Network and Relational models.

**Month of June**

Relational Algebra- Query Language, Basic Set Operations, Special Relational Operations, Introduction to SQL: DDL, DML, and DCL Commands, Views& Queries in SQL, Specifying Constraints & Indexes in SQL. Functional Dependencies, Normalization- Normal forms based on primary keys (1 NF, 2 NF, 3 NF, & BCNF)

**Month of July**

MS Access: Parts of an Access Window, Tool Bars and Their Icons, Creating a New Database, Creating a Database through Table Wizard, Creating a New Table, Relationships, Creating Table through Design View, Relationship, Query, Forms, Reports, Import/export tables etc.

**BCA 5th Semester**

**BCA-364: Internet Technologies**

**Month of April**

UNIT – I Internet: Introduction; History; Internet Services; TCP/IP: Architecture, Layers, Protocols; TCP/IP model versus OSI Model; World Wide Web (WWW) - The Client Side, The Server Side, Creating and Searching Information on the Web, Popular Search Engines, URL, HTTP, Web Browsers, Chat &Bulletin Board, USENET & NNTP (Network News Transfer Protocol); Internet vs. Intranet;

**Month of May**

UNIT – II 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; Remote Procedure Call; IP Address Resolution- DNS; Domain Name Space; DNS Mapping; Recursive and Iterative Resolution; Mapping Internet Addresses to Physical Addresses: ARP, RARP, DHCP; ICMP; IGMP;

**Month of June**

UNIT – III Application Layer: Electronic Mail: Architecture; Protocols - SMTP, MIME, POP, IMAP; Web Based Mail; File Access and Transfer: FTP, Anonymous FTP, TFTP, NFS; Remote Login using TELNET; Voice and Video over IP: RTP, RTCP, IP Telephony and Signaling, RSVP;

**Month of July**

UNIT – IV Routing in Internet: RIP, OSPF, BGP; Internet Multicasting; Mobile IP; Private Network Interconnection: Network Address Translation (NAT), Virtual Private Network (VPN); Internet Management and SNMP; Internet Security: E-Mail Security; Web Security; Firewall; Introduction to IPSec and SSL

**BCA 5th Semester**

**BCA-243 E-Commerce**

**Month of April**

Unit-I 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. 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.

**Month of May**

Unit-II 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; Private sector interface in E-governance. Applications in B2C: Consumers shopping procedure on the Internet; Impact on disinter mediation and re-intermediation; Global market; Strategy of traditional department stores.

**Month of June**

Unit-III 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; 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.

**Month of July**

Unit-IV Applications in B2B: Key technologies for b2b; architectural models of b2b, characteristics of the supplier –oriented marketplace, buyer-oriented marketplace and intermediary-oriented marketplace; Just In Time delivery in b2b; Internet-based EDI from traditional EDI; Marketing Issues in b2b. Emerging Business models: Retail model; Media model; advisory model, made-to-order manufacturing model; Do-it- yourself model; Information service model; Emerging hybrid models; Emerging models in India, Internet & E-Commerce scenario in India; Internet security Issues; Legal aspects of E-commerce