

PGDCA 101 : Computer Fundamentals

Time 3.00 Hours Max. Marks : 100 Min. Passing Marks : 40

UNIT 1 - Computer system concepts, Computer system characteristics, Capabilities and limitations, Types of computers-Analog, Digital, Hybrid, General, Special Purpose, Micro, Mini, Mainframe, Super, Basic components of a computer system - Control unit, ALU, Input/Output functions and characteristics, memory - RAM, ROM, EPROM, PROM and other types of memory. Data representation and codes, Decimal, Binary, Octal and Hexadecimal System and inter conversion, BCD numbers and ASCII codes.

UNIT 2-Computer hardware, Input devices- Keyboard, Mouse, Trackball, Joystick, Digitizing tablet, Scanners, Digital Camera, MICR, OCR, OMR, Bar-code Reader, Voice Recognition, Light pen, Touch Screen, Output devices- Monitors - characteristics and types of monitor -Digital, Analog, Size, Resolution, Refresh Rate, Interlaced / Non Interlaced, Dot Pitch, Video Standard - VGA, SVGA, XGA etc, Printers - Daisy wheel, Dot Matrix, Inkjet, Laser, Line Printer, Plotter, Sound Card and Speakers, Memory devices, RAM, ROM, Winchester drive, Mass storage devices, CD-ROM, Flash memory and their characteristics and uses.

UNIT 3-System software - Assemblers, Translators, Interpreters, Compilers, Operating Systems - Functions, Types- Batch, Single, Multiprogramming, Languages : High level languages, Procedural and Object Oriented languages. Application Software -- Word Processing, Spreadsheet, Presentation Graphics, Data Base Management Software.

UNIT 4-Computer applications, Office automation, Industrial applications, CAD/CAM, Library information system, Digital image processing, Multimedia applications, Space research,

UNIT 5-Computer networking: Goals and applications, LAN, MAN, WAN
Computer communication.: Communication modes : simplex, half duplex, full duplex.
Types of Network - LAN, WAN, MAN etc., Topologies of LAN - Ring, Bus, Star, Mesh and Tree topologies, Components of LAN -Media, Bridges, HUB, Routers, Repeater and Gateways, communication Channels - Twisted, Coaxial, Fiber Optic, Serial and Parallel Communication, Modem - Working and characteristics, Types of Connections - Dialup, Leased Lines, ISDN, Use of Communication in daily life.

Reference:

1. Introduction to Computers
2. Fundamentals of Computers
3. IT Today
4. Computers Today
5. Fundamentals of Information technology

C. Xavier 2nd Edition,
New Age International
V. Rajaraman 2nd Edition
Prentice Hall of India
S Jaiswal Galgotia Publication
S K. Basandra, Galgotia Publications.
Alexis Leon & Mathews Leon,
Vikas Publishing House, New Delhi.

 

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PGDCA102 : Application Software Packages

Time 3.00Hours

Max. Marks : 100

Min. Passing Marks : 40

UNIT - 1

MS Windows: Introduction to M.S. Windows; Features of Windows; Various versions of Windows & its use; Working with Windows; My Computer & Recycle bin ; Desktop, Icons and Windows Explorer; Screen description & working styles of Windows; Dialog Boxes & Toolbars; Working with Files & Folders; Shortcuts & Autostarts; Accessories and Windows Settings using Control Panel; Start button & Program lists; Installing new Hardware & Software.

UNIT - II

Basics Of word:

Creating word documents; The word window , Entering Text . Editing Document text; Selecting Text, Copying and Moving Text. Applying Text Enhancements; Applying Fonts and Font Styles in Word, Highlighting Text For Distinctive Look . Aligning and Formatting ; Aligning Text, Using Indentation Options, Setting Line Spacing Options, Using Tabs. Creating Lists, Numbers and Symbols ; Numbering and Bullets, Creating Special Characters. Replacing and checking Text ; Creating and Applying Frequently Used Text, Finding and Replacing Text , More about Spelling and Grammar, Using the Thesaurus Command. Getting Into Print ; Using Print Preview, Changing Page Orientation and Paper Size, Aligning Text Vertically, Setting Margins, Printing Options.

Advanced Formatting Techniques in Word :

Formatting Pages; Formatting Sections, Creating and Modifying Page Numbers, Creating Headers and Footers , Taking Care of Loose Ends .Working With Columns ; Working With Newspaper Columns, Revising Column Structure. Constructing High-Quality Tables ; Creating and Revising Tables , Modifying Table Structure , Formatting Tables , Using Tables Calculatingly. Working Smarter with Word ; Using Templates. Creating Outlines in Word ; Creating an Outline , Modifying an Outline

UNIT - III

Access Concepts & terms : database tables ,relational databases , records , fields , controls & objects , queries & dynasets, forms, reports ,properties , wizards , macros , Access requirements , starting & quitting access , the access workspace & tool, views . Creating database & tables with & without wizard , field name , data types & properties , adding & deleting fields in fields , renaming fields & their caption , resizing fields , freezing columns , primary key field & indexing fields.

Form: Form wizard , saving & modifying forms : Entering & Editing data , Finding , sorting & displaying data , queries & dynasets , creating & using select queries , using wild cards in queries , reformatting dynasets.

Reports : Creating reports, previewing reports, printing reports, modifying, saving.

Relational databases – definition, purpose, creation, viewing, deleting. Expressions , Macros.

UNIT - IV

FOR COLLEGE USE
FOR USE
35/04/2015
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Creating Excel Worksheets :

Entering and Editing Cell Entries ; The excel Application Window , Workbooks and Worksheets, Moving the Cell Pointer, Entering Text and Numbers , Revising Text and Numbers. Working with Numbers ; Creating Formulas, Formatting numbers. Changing Worksheet Layout ; Adjusting Column Width and Row Height, Inserting and Deleting Rows and Columns, Inserting and Deleting Cells , Moving and Copying Cell Contents , Naming a Worksheets , Selecting Worksheets , Copying and Moving Worksheets, Inserting and Deleting Worksheets, Other Formatting Options ; Aligning Text , Border and Color. Printing in Excel ; Print Preview, Changing Page Setup , Checking Worksheet Spelling.

Advanced Techniques in Excel :

Using Functions and References ; Using Functions , Entering Functions, Relative and Absolute Cell References. Naming Ranges ; Naming Ranges , Using Names . Creating Easy-to-Understand Charts ; Pie Charts , Series Charts , Creating Charts , Moving , Sizing , and Printing Chart Objects . Editing and Formatting Charts ; Adding a Data Series , Deleting a Data Series , Modifying and Formatting Charts.

UNIT - V

Creating PowerPoint Presentations:

Creating a Basic Presentation , Building Presentations, Modifying Visual Elements. Formatting and Checking Text , Adding Objects, Applying Transitions , Animation Effects and Linking , Preparing handouts , Taking the Show on the Road.

Reference :

- 1. Microsoft Office 97 : Will Train , Gini Courter, Annette Marquis
bpb Publication.

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