

Sr 326
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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:

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|---|---|
| 1. Introduction to Computers | C. Xavier 2 nd Edition,
New Age International |
| 2. Fundamentals of Computers | V. Rajaraman 2 nd Edition
Prentice Hall of India |
| 3. IT Today | S Jaiswal Galgotia Publication |
| 4. Computers Today | S.K. Basandra, Galgotia Publications. |
| 5. Fundamentals of Information technology | Alexis Leon & Mathews Leon,
Vikas Publishing House, New Delhi. |

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

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2-16**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.

