

## **Course Module of Diploma in Computer Application**

### **Pandu College, Guwahati**

**Course Name: Diploma in Computer Application**

**Degree/Diploma: Diploma Course**

**Duration: 6 months**

**Eligibility: HSLC passed or above**

**Total Course Credit: 40 Credits**

#### **Introduction:**

This course is basically designed to develop relevant skills in candidates. In case of this course, candidates will develop skills related to computer application, office management practices and automation techniques. After successful completion of this course, candidates will be able to deal with day – to – day office work/tasks and ways to automate and simplify the computerised office work.

#### **Unit 1: Basics of Computer: (1 week: 3days/week; 1hour/day; 1Theory: 2Practical – 2 Credits)**

Overview of a Computer, Functional Components of a computer (Working of each unit), Evolution Of Computers, Generations Of Computers, Classification Of Computers, Applications Of Computers, Input & Output devices, Memory & storage devices, Hardware and Software. Different types of printers used in Office.

#### **Unit 2: Windows Operating System: (1week: 3days/week; 1hour/day; 1 Theory: 2 Practical - 2Credits)**

Windows concepts, Features, Desktop, Task bar, Start Menu, My Computer, Recycle Bin, Windows Accessories, calculator, Notepad, Paint, Windows Explorer, Installation of various Software used in daily official work, use of scanner, system tools.

#### **Unit 3: Office Application I: MS Word: (3 weeks: 3days/week; 1hour/day; 3 Theory: 6 Practical - 6Credits)**

**MS Word:** Working with Documents – Opening & Saving files, Editing text documents, Inserting, Deleting, Cut, Copy, Paste, Undo, Redo, Find, Search, Replace, Formatting page & setting Margins, Converting files to different formats, Importing & Exporting documents, Sending files to others, Using Tool bars, Ruler, Using Icons, using help, Formatting Documents - Setting Font styles, Font selection style, size, colour etc., Type face - Bold, Italic, Underline, Case settings, Highlighting, Special symbols, Setting Paragraph style, Alignments, Indents, Line Space, Margins, Bullets & Numbering. Setting Page style - Formatting Page, Page tab, Margins, Layout settings, Paper tray, Border & Shading,

Columns, Header & footer, Setting Footnotes & end notes - Shortcut Keys; Inserting manual page break, Column break and line break, creating sections & frames, Anchoring & Wrapping, Setting Document styles, Table of Contents, Index, Page Numbering, date & Time, Author etc., Creating Master Documents, Web page. Creating Tables Table settings, Borders, Alignments, Insertion, deletion, Merging, Splitting, Sorting, and Formula, Drawing - Inserting ClipArt's, Pictures/Files etc., Tools - Word Completion, Spell Checks, Mail merge, Templates, creating contents for books, Creating Letter/Faxes, Creating Web pages, Using Wizards, Tracking Changes, Security, Digital Signature. Printing documents - Shortcut keys.

#### **Unit 4: Office Application II: MS Excel: (4 weeks: 3days/week; 1hour/day; 4 Theory: 8 Practical – 8 Credits)**

**MS Excel:** Spread Sheet & its Applications, Opening Spreadsheet, Menus - main menu, Formula Editing, Formatting Toolbars. Using Icons, Using help. Shortcuts, Spreadsheet types. Working with Spreadsheets- opening, saving files, setting Margins, converting files to different formats (importing, exporting, sending files to others), Spread sheet addressing - Rows, Columns & Cells, Referring Cells & Selecting Cells - Shortcut keys. Entering & Deleting Data- Entering data, Cut, Copy, Paste, Undo, Redo, Filling Continuous rows, columns, Highlighting values, Find, Search & replace, Inserting Data, Insert Cells, Column, rows & sheets, Symbols, Data from external files, Frames, Clipart, Pictures, Files etc., Inserting Functions, Manual breaks, Setting Formula - finding total in a column or row, Mathematical operations (Addition, Subtraction, Multiplication, Division, Exponentiation), Using other Formulae. Formatting Spreadsheets- Labelling columns & rows, Formatting. Cell, row, column & Sheet, Category - Alignment, Font, Border & Shading, Hiding/ Locking Cells, anchoring objects, Formatting layout for Graphics, Clipart etc., Worksheet Row & Column Headers, Sheet Name, Row height & Column width, Visibility - Row, Column Sheet Security, Sheet Formatting & style, Sheet background, Colour etc., Borders & Shading → Shortcut keys. Working with sheets - Sorting, Filtering, Validation, Consolidation, and Subtotal. Creating Charts - Drawing. Printing. Using Tools - Error checking, Spell Checks, Formula Auditing, Creating & Using Templates, Pivot Tables, Tracking Changes, Security, Customization.

#### **Unit 5: Office Application III: MS Power point: (2weeks: 3days/week; 1hour/day; 2 Theory: 4 Practical – 4 Credits)**

**MS Power point:** Introduction to Presentation - Opening new presentation, Different presentation templates, setting backgrounds, Selecting presentation layouts. Creating a presentation - Setting Presentation style, Adding text to the Presentation. Formatting a Presentation - Adding style, Colour, gradient fills, arranging objects, Adding Header & Footer, Slide Background, Slide layout. Adding Graphics to the Presentation - Inserting pictures, movies, tables etc. into presentation, Drawing Pictures using Draw. Adding Effects to the Presentation - Setting Animation & transition effect. Printing Handouts.

**Unit 6: Office Application IV: MS Access: (2week: 3days/week; 1hour/day; 2 Theory: 4 Practical – 4 Credits)**

**MS Access:** Introduction, planning a Database, Starting Access, Access Screen, creating a New Database, Creating Tables, working with Forms, creating queries, Finding Information in Databases, Creating Reports, Types of Reports, Printing & Print Preview - Importing data from other databases viz. MS Excel etc.

**Unit 7: Photoshop (2 week: 3 days/week; 1 hour/day; 2 Theory and 4 Practical- 4 Credits)**

Photoshop tools, Lasso tool, feather, Layers, colour ad-judgements, filters,

Making image clearer, Passport size photo, change background, change image dress, Merge two photos

**Unit 8: Hardware (1 week: 3 days/week; 1 hour/day; 1 Theory and 2 Practical- 2 Credits)**

Components of Motherboard: RAM, ROM, BIOS, Hard Disk, Processor, DVD Drive, SMPS, Different types of ports, Peripheral devices, Printer set-up.

**Unit 9: Basics of Internet, Networking (2 week: 3 days/week; 1 hour/day; 2 Theory and 4 Practical- 4 Credits)**

Concept of Computer Networks, Local Area Network (LANs), Wide Area Network (WAN), Intranet, Internet, Transmission media, Different types of Network cables, NIC, RJ45, I/O Box, Network devices: switch, hub, router etc. IP address, MAC address, to set-up a small LAN, Email account creation, Google meet.

**UNIT 10: Web Technology (2 week: 3 days/week; 1 hour/day; 2 Theory and 4 Practical- 4 Credits)**

http, https protocol, URL, Simple web page in html, JavaScript, CSS, website, Server side language PHP Basic overview, connecting with MySQL Database, Insert, Update, and Delete operation into database.