Diploma in Computer Application
(1-Years Program)
Syllabus

First Semester

6 Month = Days 180 Working Days=125 Days / Hrs 1 Hrs / Day

Project / Assignment / Seminar / Activities

First Semester

EXAMINATION	TOPIC	Hrs	Days	Marks
Unit Ist	Computer Fundamental / Windows	15	15	25
	Lab Work : Notepad, Wordpad, MS Paint, Dos Commands	20	20	--
Unit IInd	Number system / Boolean Algebra / Logic Gates / Internet.	20	20	25
	Lab Work : Internet	10	10	--
Unit IIIrd	Word Processing	20	20	25
	Lab Work : MS Word	20	20	--
Uint IVth	Spread Sheet	20	20	25
	Lab Work : MS Excel	20	20	--
	Assignment I	--	--	50
Total		145	145	150

First Semester Detailed Syllabus

Unit I: Computer Fundamental / Windows

Understanding a computer system, History of computer, characteristics of computer, Generation of computer, Types of computer, Hardware, Input Device, Memory & Storage Device, Output Devices, Basic Architecture of Computer, Software, System Software, system Software, Operating System, Computer Languages & Language Processor, Application Software, MS Dos, Microsoft Windows Operations,

Unit II: Number system / Boolean Algebra / Logic Gates / Internet

Introduction, Decimal Number system, Binary Number system, Octal Number system, Hexadecimal Number system, Conversion Techniques with Remainder Method & Expansion Method, Logical Operators, Gates, Logic Circuits, Introduction of Internet & www, Communication Protocol, Web Browser, Website, Internet Service Provider, E-mail.

Unit III: Word Processing

Understanding Microsoft Word, Creating New Document / Opening an Existing Document, Formatting Tool, Changing Case of Text, Creating Columns of Text, creating a Drop Cap, Changin page Background, Adding Page & Column Breaks, Adding Page Numbers, Hyperlink, Bookmark, Header & Footer Page Setup, Spelling & Grammer, Endnote & Footnote, Mail Merge, Micros, Page Layout, Track Changes.

Unit IV: Spread Sheet

Understanding Microsoft Excel, Format Cell, Conditional Formatting, Pivot Table Report, Adding Graphs / Charts, Cell Referencing, Page Setup, Formulas, Arranging Data – Sort, Filtering Data, Working with Subtotals, Data Analysis with Goal Seek, Scenario Manager & Data Table. Protect Worksheet & Workbook.

Second Semester

EXAMINATION	TOPIC	Hrs	Days	Marks
Unit Ist	Application of Presentations	5	5	25
	Lab Work: PowerPoint	5	5	--
Unit IInd	Programming Logic Techniques	10	10	25
Unit IIIrd	C++ Basic	30	30	25
	Lab Work: C++	30	30	--
Unit IVth	Object Oriented Programming	30	30	25
	Lab Work: C++	35	35	--
	Assignment II / Project	--	--	50
Total		145	145	150

Second Semester Detailed Syllabus

Unit I: Application of Presentations

Understanding MS PowerPoint, Manage Presentations, Change presentation Options and Views, Creating Presentation Using Templates, Configure, print settings, Manage Slides, Insert & Format Images, Master Slide, Apply Transitions & Animations.

Unit II: Programming Logic Techniques

Understanding Programming Logic Techniques, Algorithms, Flow Chart.

Unit III: C++ Basic

Applications of C++, Data Types, Declaring & Initializing Variables, Header Files, Operators, Comments in C++, Conditional Statement, Control Statement, Array and Its types, Strings, String related functions, Structures, Limitations of structures, Array of structure, Pointers, Functions, Call By Value & Call By References, Recursion.

Unit IV: Object Oriented Programming

Object Oriented Programming Paradigm, Basic Concepts of Object-Oriented Programming, Class and Objects, Accessing class members. Defining member functions, Arrays of Objects, Friend Function, Constructors, Types of Constructors, Destructor, Inheritance, Types of Inheritance, File Handling in C++.

GRADING SCHEME

Percentage > = 80	Grade – A	Excellent
Percentage > = 60	Grade – B	Good
Percentage > = 40	Grade – C	Average
Percentage < 40	Grade – D	Fail