

DIPLOMA IN COMPUTER APPLICATION [D01]

Course Name: Diploma in Computer Application	Course Code: D01
	Eligibility: Plus 2/VHSE/10+ITI
Duration: 500 Hrs. (6 Months)	Course Fee : Rs. 8,000/- +(GST) 02 Installments: 1.Rs. 4,000/- + GST, at the time of Registration 2.Rs. 4,000/- + GST, at the time of Admission

SYLLABUS**D1: IT TOOLS AND APPLICATIONS****Computer Appreciation**

Characteristics of Computers, Input, Output, storage units, CPU, computer system, Binary number system, Binary to Decimal Conversion, Decimal to Binary Conversion, Binary Coded Decimal (BCD) Code, ASCII Code

Computer Organization**Central Processing Unit**

Control Unit, Arithmetic Unit, Instruction Set, Register, Processor Speed.

Memory

Main memory: Storage Evaluation Criteria, Memory Organization, capacity, RAM, Read Only Memories. Secondary Storage devices:-Magnetic Disks, Floppy and hard disks, Optical Disks CD-ROM, Mass Storage Devices

Input Devices

Keyboard, Mouse, trackball, joystick, Scanner, OMR, Bar-code reader, MICR Digitizer, Card Reader, Voice Recognition, web cam, video cameras.

Output Devices

Monitors, Printers - Dot matrix, inkjet, laser, Plotters, Computer Output Micro-Film (COM), Multimedia Projector, speech synthesizer; dumb, smart and intelligent terminal.

Multimedia

What is Multimedia, Text, Graphics, Animation, Audio, images, Video; Multimedia Application in Education, Entertainment, Marketing.

Computer Software

Relationship between Hardware and Software; System Software, Application Software, compiler, names of some high level languages, free domain software.

Operating System**Disk Operating Systems**

Simple DOS Commands, Simple File Operations. Directory Related Commands

Microsoft Windows

An overview of different versions of Windows, Basic Windows elements, File management through Windows, Using essential accessories: Systems tools- Disk cleanup, Disk defragmenter, Entertainment, Games, Calculator. Imaging- Fax, Notepad, Paint, WordPad.

Linux

An overview of Linux, Basic Linux elements: System Features, Software Features. File Structure, File handling in Linux, Installation of Linux: H/W, S/W requirements, Preliminary steps before installation, specifics on Hard drive repartitioning and booting a Linux System

Word Processing

Word processing concepts: Saving, Closing, Opening an existing document, selecting text, editing text, Finding and replacing text, printing documents, Creating and Printing Merged Documents, Character and Paragraph Formatting, Page Design and Layout. Editing and Proofing Tools: Checking and correcting spellings. Handling Graphics. Creating Tables and Charts. Document Templates and Wizards.

Spreadsheet Package

Spreadsheet Concepts. Creating, Saving and Editing a Workbook, Inserting Deleting Work Sheets,

entering data in a cell / formula Copying and Moving data from selected cells, Handling operators in Formulae, Functions: Mathematical, Logical, Statistical, Text, financial, Date and Time functions, Using Function Wizard. Formatting a Worksheet: Formatting Cells - changing data alignment, changing date, number, character, or currency format, changing font, adding borders and colors, Printing worksheets, Charts and Graphs— Creating, previewing, Modifying Charts. Integrating word processor, spread sheets, web pages.

Information Technology and Society

Application of Information Technology in Railways, Airlines, Banking, Insurance, Inventory control, Financial systems, Hotel management, Education, Video games, Telephone exchanges, Mobile phones, Information kiosks, special effects in Movies

D2: WORD PROCESSING

WINDOWS / MS-DOS

Operating System basics, MS-DOS - Internal/External commands, The User Interface - Desktop/ Taskbar/ Start Menu / Find Windows Accessories - Calculator / Paint Brush / Notepad / WordPad My Computer / Explorer / Folder / Shortcuts

Word processing (MS-Word)

Word processing concepts: Saving, Closing, Opening an existing document, Selecting text, Editing text, Finding and replacing text, printing documents, Creating and Printing Merged Documents, Character and Paragraph Formatting, Page Design and Layout.

Editing and Proofing Tools: Checking and correcting spellings. Handling Graphics. Creating Tables and Charts. Document Templates and Wizards.

Spreadsheet package (MS-Excel)

Spreadsheet Concepts. Creating, Saving and Editing a Workbook, Inserting, Deleting Work Sheets, entering data in a cell / formula Copying and moving data from selected cells, Handling operators in Formulae, Functions: Mathematical, Logical, Statistical, Text, financial, Date and Time functions, Using Function Wizard,

Formatting a Worksheet: Formatting Cells - changing data alignment, changing date, number, character, or currency format, changing font, adding borders and colors, Printing worksheets, Charts and Graphs— Creating, Previewing, Modifying Charts.

Data base (MS-ACCESS)

Definition - Database/Relational database, Creating a database / creating a table Add / edit / view records, Sort / search / filter / print records, Modify database structure

English and Malayalam data entry

Database Data entry, Working with **English & Malayalam Fonts**

D3: DESKTOP PUBLISHING & PRESENTATION GRAPHICS

PageMaker

Basic concept of Page making and Layout, Constructing a publication, Text formatting and Word processing, Graphics & Text objects, Colour Management, Print setup /Print.

Adobe table

Inserting tables / Manipulating tables, Formatting tables / Insert table into Page maker,

Adobe Photoshop

Introduction to Image processing, Colour management / Working with layers, Editing & Retouching, Page setup and printing

CorelDraw

Introduction to Computer Graphics, Drawing & page layout / Working with views, Drawing shapes / Working with objects, Handling text, Page setup and printing

Presentation package

Creating, Opening and Saving Presentations, Creating the Look of Your Presentation, Working in Different Views, Working with Slides, Adding and Formatting Text, Formatting Paragraphs, Checking Spelling and Correcting Typing mistakes, Making Notes Pages and Handouts, Drawing

and Working with Objects, Adding Clip Art and Other Pictures, Designing Slide Shows, Running and Controlling a Slide Show, Printing Presentations

D4: INTERNET AND WEB DESIGN

Introduction to Internet

Internet, Growth of Internet, Owners of the Internet, Anatomy of Internet. ARPANET and Internet, history of the World Wide Web, Basic Internet Terminology

Internet Applications- Commerce on the Internet, Governance on the Internet, Impact of Internet on Society -Crime on/through the Internet.

Internet technology and protocols

Internet Protocols, TCP/IP, IP Address and its Format, TCP/IP Based packages, SLIP, PPP. Network and Network Devices: - Network Architecture, Ethernet, FDDI, and ATM.

Characteristics of Local Area Network & Wide Area Network: Topology, Protocols and media, Implementation, Transmission, Access method and Technologies, special consideration for the Blinds. Addressing in Internet: DNS, Domain Name and their organization, understanding the Internet Protocol Address. Client-Server concepts, their architecture and applications. Getting connected, Items needed to connect, Levels of Connectivity.

World Wide Web

Evolution of WWW, Basic features, WWW Browsers, WWW Servers, HTTP, Universal Resource Locator (URL), Search Engines and their Categories, Searching Criterion, WWW and Hypertext.

Browsers

Basic features, Bookmarks, history, Progress indicators, Customization of browsers, Saving and Printing web pages, Netscape Communicator, Internet Explorer.

Electronic mail

Introduction to e-mail. E-mail Networks and Servers, Email protocols - SMTP, POP3, IMAP4, MIME6. Structure of an e-mail - Email Address, Email Header, Body and Attachments.

Email Clients: Netscape Mail Clients, Outlook Express, Web based E-mail. Email encryption - Address Book, Signature File

File Transfer Protocol

Introduction to FTP and Terminology, FTP Servers and Authentication, Line Mode FTP and Common Commands, GUI Based FTP Clients, Browser Based FTP Clients

Telnet

Introduction to Telnet, Establishing Telnet Connection, Using Telnet with Netscape, Telnet Protocol, Terminal Emulation, User Authentication

User and Internet relay chat

Usenet - its components, News Groups, Searching and subscribing New Groups, News Servers Concept of chatting and IRC, Client Software for Chat, Chat Servers, Smiley.

Web publishing

Overview, web hosting, Documents Interchange Standards, Components of Web Publishing, Document Management, Web Page Design Consideration and Principles, Search Engines, How to register a Web Site on search Engines, Publishing Tools.

HTML

Document Layout, Header Elements, Section Headings, Block-oriented elements, Lists, Inline elements, Visual markup, Hypertext links, Uniform Resource Locators (URLs), Images, Forms, Tables, and Special Characters.

Introduction to interactivity tools

ASP, VB Script, JAVA Script, JAVA and Front Page

Multimedia and graphics

VRML and Authoring Tools for Graphic Web Editors

Internet management security concepts, information privacy and copyrightissues

Overview of Internet Security; Firewalls. Internet Security Management Concepts and Information

D5: FUNDAMENTALS HARDWARE AND NETWORKING

Personal Computer Hardware

Power supply

Types:- Linear, SMPS, Working principle, input out put voltage requirements, cables, power good signal. Testing of various voltage levels

Mother board

Configuration, Various types of mother boards

Microprocessors

Processor specification, Intel processors, Intel compatible processors, Co processors

Serial /Parallel ports

Memory

RAM, ROM, General concepts, Differences, Various types of RAM and ROM

Video display hardware

Display technologies, Monochrome versus color, monitor resolution

Keyboard/ mouse

Working principle, installation

Printers

Types of printers, Working principle, installation

Floppy disk, hard disk and CD drive

General concepts, Installation, Formatting and Partition of hard disk, Installation of peripherals mouse, printer, modem, Operating systems Software Installation, Making bootable and start up disks, Installation of application software, Multimedia installation

Network

Network card, hub, cables, Network installation and configuration, Virus Detection, Cleaning, Anti Virus Software installation

UPS

Study of UPS -UPS rating, Types, Connections.

D6: PROGRAMMING FUNDAMENTALS OF VISUAL BASIC AND C

Introduction to C Programming

The Basic Model of Computation, Algorithms, Flow-charts, Programming Languages, Compilation, Linking and Loading, Testing and Debugging, Documentation

Algorithms for Problem Solving

Exchanging values of two variables, summation of a set of numbers, Decimal Base to Binary Base conversion, Reversing digits of an integer, GCD (Greatest Common Divisor) of two numbers, Test whether a number is prime, Organize numbers in ascending order, Find square root of a number, factorial computation, Fibonacci sequence, Evaluate 'sin x' as sum of a series, Reverse order of elements of an array, Find largest number in an array, Print elements of upper triangular matrix, multiplication of two matrices, Evaluate a Polynomial

Introduction to C Language

Character set, Variables and Identifiers, Built-in Data Types, Variable Definition, Arithmetic operators and Expressions, Constants and Literals, Simple assignment statement, Basic input/output statement, Simple 'C programs

Conditional Statements and Loops

Decision making within a program Conditions, Relational Operators, Logical Connectives, if statement, if else statement Loops: while loop, do while and for loop, Nested loops, Infinite loops, Switch statement, structured Programming

Arrays

One dimensional arrays: Array manipulation; Searching, Insertion, Deletion of an element from an array; Finding the largest/smallest element in an array; Two dimensional arrays,

Addition/Multiplication of two matrices, Transpose of a square matrix Functions

Top-down approach of problem solving, Modular programming and functions, Standard Library of C functions, Prototype of a function: Formal parameter list, Return Type, Function call, Block structure, Passing arguments to a Function: call by reference, call by value, Recursive Functions, arrays as function arguments

Introduction to Visual Basic

Introduction to Visual Basic, Visual Basic Application Development Cycle, Loading Visual Basic, Visual Basic User Interface, Quitting Visual Basic, Visual Basic Controls, Drawing Objects on the form, Visual Basic Controls:- TextBox, Label, List, ComboBox, CheckBox, RadioButton, Image

Programming Fundamentals

Variables- Declaring Variables, Storing and Retrieving Data in Variables, Variable Data Types, Scope and Lifetime of Variables, Data types

Control Structures- If, Select Case, Do while...Loop, Do...Loop While, for...Next, for each...Next

Menus, MDI and Data Files

Menu Editor, Writing Code for Menu Controls, MDI Applications- To creates MDI Form, to create child forms, Animation

PARTICULARS OF STRENGTH

Name of School Certificate Course - D.C. A

Name of Teacher in charge..... STD.....DIV.....

MAL Medium ☐ ENG Medium ☐

[illegible][illegible]

NO. OF STUDENTS STUDYING FIRST LANGUAGE

Malayalam			Arabic			Urdu			Sanskrit		
B	G	T	B	G	T	B	G	T	B	G	T

Register of Attendance and Fees for the Month of _____

February - 2022

Standard

Admission No.	S.No.	NAME	Days																	
			Eng:	Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	1	SAHLA . N								X										
	2	SALEEHA . K								X										
	3	SUHADHA THASNI . M								X										
	4	ASIA SHAHONS - K								X										
	5	NAVYA . N . K								X										
	6	NANDANA . K . P								X										
	7	TYNTHILA . K . P								X										
	8	Rinzi . M								X										
	9	Rijula Dinesh .								X										
	10	Arya Ramachandran . k . p								X										
	11	Arora . k . c								X										
	12	Krishna Ramakrishnan . kp								X										
	13	Subana Shezin . v . P								X										
	14	Kusda k								X										
	15	Asna Shezin								X										
	16	Shameema Nasrin . k . P								X										
	17	Fehmila Roshni . T . T								X										
	18	Binu Riyazi . k .								X										
	19	Saneesha . AP								X										
	20	Risapa Maisan .								X										
	21	Nidheesh . Krishna . T								X										
	22	Pranav . M								X										
	23	Takumath Saharaja . p								X										
	24	Shibla Shirin . S . S								X										
	25	Pilsha . P . P								X										
	26	Shamliya . p								X										
	27	Fareeha Shirin . K								X										
	28	Fathima Anshada								X										
	29	Nusla Nuhan								X										
	30	Hutuda								X										
	31	Vamaya . k . p								X										
	32	Thaniya Rana . P								X										
	33	Hiba Sherin								X										
	34	ABHISHEK NAIR . R								X										
	35	Salima Palappura								X										
	36	Thahniya . T								X										
	37	Fathima Risha								X										
	38	Sreya .								X										
	39	Salva . K . V								X										
	40	Sivaprasadh .								X										
	41	Vidhya . K								X										
	42	Mohammed Shinas . M . V								X										
	43	Manya . k . c								X										
	44	Shobika . k . p								X										
	45	SREELAKSHMI . C								X										
	46	Nandana . C								X										
	47	Nasni . pv								X										
	48	Jasim Jalcel P . T								X										
	49	Anupama . K								X										
									</											

No. on roll at the beginning of the month	...
No. admitted during the month	...
No. left during the month	...
No. on roll at the end of the month	...

Average No. on roof during the month ...	
Average Attendance	
Total School Days	

Class Teacher: _____

Inspecting Officer:

[illegible]

Current fees collected	...
Arrear fees collected	...
Fine	...

Total

Balance of current fees due	...
Balance of arrear fees due	...
Balance of fine due	...

Total ...

Head Master

Register of Attendance and Fees for the Month of _____

No. on roll at the beginning of the month	...
No. admitted during the month	...
No. left during the month	...
No. on roll at the end of the month	...

Inspecting Officer

Standard

Current fees collected	...
Arrear fees collected	...
Fine	...

Balance of current fees due	...
Balance of arrear fees due	...
Balance of fine due	...

Head Master

Register of Attendance and Fees for the Month of

April

Standard

Admission No.	S.No.	NAME	Days Eng. Date																	
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	1	Dilsda . P . P .			X															
	2	SREELAKSHMI . C			X										X					
	3	Ardaya . K . C			X										X					
	4	Rijula Dinesh .			X										X					
	5	Shupama . K .			X										X					
	6	Talva . K . V			X										X					
	7	Kinci . M			X										X					
	8	Shameema Nasrin . K . P			X										X					
	9	Fahmida Roshni . T . T			X										X					
	10	Rusda . K			X										X					
	11	Asna Sherin .			X										X					
	12	Suhana Sherini . V . P			X										X					
	13	Binu Riyazi			X										X					
	14	Krishna Ramakrishnan . K . P			X										X					
	15	Arya Kamachandran . K . P			X										X					
	16	Shamliya . P			X										X					
	17	Jasim Jaleel . P . T			X										X					
	18	Vidhva . K			X										X					
	19	Pranav . M			X										X					
	20	Nitheesh Krishna . T			X										X					
	21	FATHIMATH SAHARIYA . P			X										X					
	22	SHIBLA SHIRIN . P . S			X										X					
	23	RISANA MAISAN .			X										X					
	24	SANEESHA . AP			X										X					
	25	FATHIMA ANSHIDA			X										X					
	26	THASNIYA BANU			X										X					
	27	HIBA SHEREM			X										X					
	28	VISMAYA KP			X										X					
	29	MUFCEDA			X										X					
	30	NUBLA NAHAN			X										X					
	31	NAFILA SHERIN			X										X					
	32	Navya . N . K			X										X					
	33	Jyoti . K . K . P			X										X					
	34	Nandana . K . P			X										X					
	35	Sahla . N			X										X					
	36	Saleha . K			X										X					
	37	Asta Shahomaz K			X										X					
	38	Nandana . C			X										X					
	39	Subadha Thasni M			X										X					
	40	SWARRAKASH .			X										X					
	41	ABHISHEK NAIR . R			X										X					
	42	Faseena Shwini . K .			X										X					

																	No. of days present	No. of days present up-to date	Admission fee Rs.	Date of Payment	Tuition Fee				Special Fee				Total		Date of Payment	Initials of class Teacher	Remarks																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
Fees		Fine		Fees		Fine		Rs.		Ps.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.	Rs.	Ps.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
18	19	20	21	22	23	24	25	26	27	28	29	30	31																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																

Register of Attendance and Fees for the Month of

May

Standard

[illegible]

No. on roll at the beginning of the month	...
No. admitted during the month	...
No. left during the month	...
No. on roll at the end of the month	...

Average No. on rool during the month ...	
Average Attendance ...	
Total School Days ...	

Class Teacher

Inspecting Officer

[illegible]

Current fees collected	...
Arrear fees collected	...
Fine	...

Total

Balance of current fees due	...
Balance of arrear fees due	...
Balance of fine due	...

Total

Head Master

Register of Attendance and Fees for the Month of

Register of Attendance and Fees for the Month of

No. on roll at the beginning of the month
No. admitted during the month	...
No. left during the month	...
No. on roll at the end of the month	...

Average No. on rool during the month ...	
Average Attendance ...	
Total School Days ...	

Class Teacher

Inspecting Officer

June

Standard

Current fees collected	...
Arrear fees collected	...
Fine	...

Total

Balance of current fees due	...
Balance of arrear fees due	...
Balance of fine due	...

Total ...

Head Master

[illegible]

No. on roll at the beginning of the month	...
No. admitted during the month	...
No. left during the month	...
No. on roll at the end of the month	...

Average No. on rool during the month ...	
Average Attendance	
Total School Days	..

Class Teacher

Inspecting Officer

[illegible]

Current fees collected	...
Arrear fees collected	...
Fine	...

Balance of current fees due	...
Balance of arrear fees due	...
Balance of fine due	...

Total

Total

Head Master

Register of Attendance and Fees for the Month of

August

Standard

[illegible]

No. on roll at the beginning of the month	...
No. admitted during the month	...
No. left during the month	...
No. on roll at the end of the month	...

Average No. on rool during the month	...
Average Attendance	...
Total School Days	...

Class Teacher

Inspecting Officer

[illegible]

Current fees collected	...
Arrear fees collected	...
Fine	...

Balance of current fees due	...
Balance of arrear fees due	...
Balance of fine due	...

Total

Total ...

Head Master

Register of Attendance and Fees for the Month of

[illegible]

Inspecting Officer

Standard

Current fees collected	...	Balance of current fees due	...
Arrear fees collected	...	Balance of arrear fees due	...
Fine	...	Balance of fine due	...
Total	<u> </u>	Total	<u> </u>
	<u> </u>	Head Master	<u> </u>

Standard

Inspecting Officer

Head Master

Register of Attendance and Fees for the Month of
5/4/22

No. on roll at the beginning of the month ...	Average No. on roll during the month ...
No. admitted during the month ...	Average Attendance ...
No. left during the month ...	Total School Days ...
No. on roll at the end of the month ...	

Inspecting Officer

Standard

Current fees collected	...	Balance of current fees due	...
Arrear fees collected	...	Balance of arrear fees due	...
Fine	...	Balance of fine due	...
Total	_____	Total	_____
	_____	Head Master	_____

3112122

December

Standard

No. on roll at the beginning of the month	...
No. admitted during the month	...
No. left during the month	...
No. on roll at the end of the month	...

Average No. on roof during the month ...	
Average Attendance	...
Total School Days	...

Inspecting Officer

Current fees collected	...
Arrear fees collected	...
Fine	...

Total

Balance of current fees due	...
Balance of arrear fees due	...
Balance of fine due	...

Total ...

Head Master