# SOVABAZAR YOUTH COMPUTER TRAINING CENTRE



**GOVT. OF WEST BENGAL** 



REGIONAL INSTITUTE
OF TECHNOLOGISTS
& ANALYSTS



**Computer Academy** 

73A, Arabinda Sarani, Kolkata-700 005

[Between Metro Sovabazar and Hatibagan]

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### WBBSE / WBCHSE :: Duration: 1 year

### IV

History of computer, Word, PowerPoint

#### V

Computer Fundamental, Word, Internet, Logo

### VI/VII/VIII

Word, PowerPoint, Excel, Network

#### IX

Generation of Computer, Boolean Algebra, Number System, WWW

### X

Excel, Access, Network

### XI [Application]

Generation of Computer, Number System, Boolean Algebra, Word, PowerPoint, Software and Languages and Visual Basic

### XI [Science]

Generation of Computer, Number System, Boolean Algebra, Combinational Circuit, C Language, Software and Languages

### XII [Application]

Combinational Circuit, Network, HTML, Excel, Access, Database and SQL

### XII [Science]

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Sequential Circuit, Network, HTML, Database and SQL, Data Structure, File Handling, C++

### CBSE/ICSE :: Duration: 1 year

- CH-1: Demo of few interesting uses and applications.
- CH-2: Uses of a computer.
- CH-3: Names of only basic parts of a computer.
- CH-4: Worksheets related to parts of a computer. Such as: analogy with the human body.
- CH-5: General carefulness, including power switch on/off. Such as: no banging on keyboard, no touching any wires, no direct switch off.



### CBSE/ICSE :: Duration: 1 year

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CH-1: Parts of a Computer CH-2: How Does a Computer Work CH-3: Operating a computer CH-4: The Keyboard and its Functions

CH-5: Handling a Mouse CH-6: Fun with Paint

CH-7: Draw and Color Shapes CH-8: Tux Paint

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CH-1: Computer Basics CH-2: Fun with Paint Brush

CH-3: More About Paint Brush CH-4: About Desktop and Computer

Peripherals

CH-5: Microsoft word 2007 CH-6: Log on to LOGO

CH-7: Using Primitives

IV

CH-1: Introduction to Computer CH-2: Components of a Computer

CH-3: Hardware and Software CH-4: Introduction to Windows

CH-5: Paint Program
CH-6: Features of Paint
CH-7: Exploring MS Word
CH-8: MS PowerPoint

CH-9: Internet

CBSE :: Duration: 1 year

V-VI-VII

Word, Excel, PowerPoint, Access, HTML, QBASIC, Network

VIII

Access, HTML, Excel

IX

Open office writer, Open office impress, Open office Calc, ICT skill, Communication skill, green skill

X

Employability skills, Open office writer, Open office calc, DBMS, SQL, Web application

ΧI

Number system, Boolean algebra, Python

XII

CBSE 12 - Python, SQL, Network



### ICSE / ISC :: Duration: 1 year

V

Word, PowerPoint, Scratch, Internet

#### VI-VII-VIII

Word, Excel, PowerPoint, Access, HTML, QBASIC, Network

IX

OOP Concept, Java, Computer Ethics

X

Java with class IX

XI

Java Array 2D Array, Call by reference method, Output Recursion, File Handling, String Tokenizer, Number System, Boolean Algebra (up to Full Adder)

### XII

Combinational Circuit, K map, Java Recursion, DSA, Inheritance, including 11 Java Program



### PROFESSIONAL COURSES

Course: HTML :: Duration: 6 months

### 1. HTML-OVERVIEW

- 1.1 Basic HTML Document
- 1.2 HTML Tags
- 1.3 HTML Document Structure
- 1.4 The <!DOCTYPE> Declaration

### 2. HTML-BASIC TAGS

- 2.1 Heading Tag
- 2.2 Paragraph Tag
- 2.3 Line Break Tag
- 2.4 Centering Content
- 2.5 Horizontal Lines
- 2.6 Preserve Formatting
- 2.7 Nonbreaking Spaces

### 3. HTML-ELEMENTS

- 3.1 HTML Tag vs. Element
- 3.2 Nested HTML Elements

#### 4. HTML-ATTRIBUTES

- 4.1 Core Attributes
- 4.2 Internationalization Attributes
- 4.3 The xml: lang Attribute

### 5. HTML-FORMATTING

- 5.1 Bold Text
- 5.2 Italic Text
- 5.3 Underlined Text
- 5.4 Strike Text
- 5.5 Monospaced Font
- 5.6 Superscript Text
- 5.7 Subscript Text
- 5.8 Inserted Text
- 5.9 Deleted Text
- 5.10 Larger Text
- 5.11 Smaller Text
- 5.12 Grouping Content



### 6. HTML-PHRASE TAGS

- 6.1 Emphasized Text
- 6.2 Marked Text
- 6.3 Strong Text
- 6.4 Text Abbreviation
- 6.5 Acronym Element
- 6.6 Text Direction
- 6.7 Special Terms
- 6.8 Quoting Text
- 6.9 Short Quotations
- 6.10 Text Citations
- 6.11 Computer Code
- 6.12 Keyboard Text
- 6.13 Programming Variable
- 6.14 Program Output
- 6.15 Address Text

### 7. HTML-META TAGS

- 7.1 Adding Meta Tags to your Documents
- 7.2 Specifying Keywords
- 7.3 Document Description
- 7.4 Document Revision Date
- 7.5 Document Refreshing
- 7.6 Page Redirection
- 7.7 Setting Cookies
- 7.8 Setting Author Name
- 7.9 Specify Character Set

### 8. HTML-COMMENTS

- 8.1 Valid vs Invalid Comments
- 8.2 Multiline Comments
- 8.3 Conditional Comments
- 8.4 Using Comment Tag
- 8.5 Commenting Script Code
- 8.6 Commenting Style Sheets

### 9. HTML-IMAGES

- 9.1 Insert Image
- 9.2 Set Image Location
- 9.3 Set Image Width/Height
- 9.4 Set Image Border
- 9.5 Set Image Alignment
- 9.6 Free Web Graphics



### 10. HTML-TABLES

- 10.1 Table Heading
- 10.2 Cellpadding and Cellspacing Attributes
- 10.3 Colspan and Rowspan Atributes
- 10.4 Table Backgrounds
- 10.5 Table Height and Width
- 10.6 Table Caption
- 10.7 Table Header, Body, and Footer
- 10.8 Nested Tables

### 11. HTML-LISTS

- 11.1 HTML Unordered Lists
- 11.2 The type Attribute
- 11.3 HTML Ordered Lists
- 11.4 The type Attribute
- 11.5 HTML Definition Lists

### 12. HTML - TEXT LINKS

- 12.1 Linking Documents
- 12.2 The target Attribute
- 12.3 Use of Base Path
- 12.4 Linking to a page section
- 12.5 Setting Link Colors
- 12.6 Download Links
- 12.7 File Download Dialog Box

### 13. HTML - IMAGE LINKS

- 13.1 Mouse-Sensitive Images
- 13.2 Server-Side Image Maps
- 13.3 Client-Side Image Maps
- 13.4 Coordinate System

### 14. HTML-EMAIL LINKS

- 14.1 HTML Email Tag
- 14.2 Default Settings

### 15. HTML-FRAMES

- 15.1 Disadvantages of Frames
- 15.2 Creating Frames
- 15.3 The <frameset> Tag Attributes
- 15.4 The <frame> Tag Attributes
- 15.5 Browser Support for Frames
- 15.6 Frame's name and target attributes

### 16. HTML-IFRAMES

16.1 The <lframe>Tag Attributes



### 17. HTML-BLOCKS

- 17.1 Block Elements
- 17.2 Inline Elements
- 17.3 Grouping HTML Elements
- 17.4 The <div> tag
- 17.5 The <span> tag

### 18. HTML-BACKGROUNDS

- 18.1 Html Background with Colors
- 18.2 Html Background with Images
- 18.3 Patterned & Transparent Backgrounds

### 19. HTML-COLORS

- 19.1 HTML Color Coding Methods
- 19.2 HTML Colors- Color Names
- 19.3 W3C standard 16 colors
- 19.4 HTML Colors-Hex Codes
- 19.5 HTML Colors-RGB Values
- 19.6 Browser Safe Colors

### 20. HTML-FONTS

- 20.1 Set Font Size
- 20.2 Relevant Font Size
- 20.3 Setting Font Face
- 20.4 Specify alternate font faces
- 20.5 Setting Font Face
- 20.6 Specify alternate font faces
- 20.7 Setting Font Color
- 20.8 The<br/>basefont>Element
- 20.9 Example of the <basefront> Element

#### 21. HTML-FORMS

- 21.1 Form Attributes
- 21.2 HTML Form Controls
- 21.3 Text Input Controls
- 21.4 Single-line text input controls
- 21.5 Attributes
- 21.6 Password Input controls
- 21.7 Attributes
- 21.8 Multiple-Line Text Input Controls
- 21.9 Attributes
- 21.10 Checkbox Control
- 21.11 Attributes



- 21.12 Radio Button Control
- 21.13 Select Box Control
- 21.14 Attributes
- 21.15 File Upload Box
- 21.16 Button Controls
- 21.17 Hidden Form Controls

### 22. HTML-EMBED MULTIMEDIA

- 22.1 The <embed>Tag Attributes
- 22.2 Supported Video Types
- 22.3 Background Audio
- 22.4 HTML Object tag

### 23. HTML-MARQUEES

23.1 The <marquee> Tag Attributes

### 24. HTML-HEADER

- 24.1 The HTML<title> Tag
- 24.2 The HTML<meta>Tag
- 24.3 The HTML<base>Tag
- 24.4 The HTML<link>Tag
- 24.5 The HTML<style>Tag
- 24.6 The HTML<script>Tag

### 25. HTML-STYLESHEET

- 25.1 External Style Sheet
- 25.2 Internal Style Sheet
- 25.3 Inline Style Sheet

### 26. HTML JAVASCRIPT

- 26.1 External JavaScript
- 26.2 Internal Script
- 26.3 Event Handlers
- 26.4 Hide Scripts from Older Browsers
- 26.5 The <noscript> Element
- 26.6 Default Scripting Language

### 27. HTML-LAYOUTS

- 27.1 HTML Layout- Using Tables
- 27.2 Multiple Columns Layout-Using Tables
- 27.3 HTML Layouts-Using DIV, SPAN



### Course: CORE JAVA :: Duration: 6 months

### 1. INTRODUCTION OF JAVA

- 1.1 Platform Independent
- 1.2 Open Source
- 1.3 Multi-threading
- 1.4 More Secure
- 1.5 Portable

### 2. CORE JAVA TOPICS

- 2.1 Oops Concept
- 2.2 Control Statement and Looping
- 2.3 Arrays
- 2.4 String
- 2.5 Collections
- 2.6 Exceptions
- 2.7 Constructor

### 3. INTRODUCTION OF OOPS

- 3.1 Class
- 3.2 Object
- 3.3 Method
- 3.4 Encapsulation
- 3.5 Inheritance
- 3.6 Polymorphism
- 3.7 Abstraction

### 4. ENCAPSULATION

### 5. INHERITANCE

- 5.1 Single Inheritance
- 5.2 Multilevel Inheritance
- 5.3 Multiple Inheritance
- 5.4 Hybrid Inheritance
- 5.5 Hierarchical Inheritance

### 6. ACCESS SPECIFIER

- 6.1 Public
- 6.2 Private
- 6.3 Protected
- 6.4 Default

### 7. DATA TYPES AND WRAPPER CLASS

- 7.1 Data types
- 7.2 Variable
- 7.3 Wrapper Class



### Course: CORE JAVA :: Duration: 6 months

### 8. CONTROL STATEMENT

- 8.1 If
- 8.2 If-else
- 8.3 If-else-if

### 9. LOOPING

- 9.1 For Loop
- 9.2 While Loop
- 9.3 Do-While Loop

### 10. POLYMORPHISM

- 10.1 Method Overloading
- 10.2 Method Overriding

### 11. ABSTRACTION

- 11.1 Abstract Class
- 11.2 Interface

### 12. ARRAYS

### 13. STRING

- 13.1 String Functions
- 13.2 Literal String
- 13.3 Non-Literal String
- 13.4 Mutable String
- 13.5 Immutable String

### 14. COLLECTIONS

- 14.1 List
- 14.2 Set
- 14.3 Map

### 15. EXCEPTION

- 15.1 Unchecked Exception
- 15.2 Checked Exception
- 15.3 Exception Handling

### 16. PACKAGES



### Course: ADVANCE JAVA :: Duration: 6 months

#### 1. BASICS OF A WEB APPLICATION

- 1.1 What is a web application?
- 1.2 What is a web client and web server?
- 1.3 How do client and server communicate?
- 1.4 HTTP protocol basics
- 1.5 HTTP Language basics
- 1.6 What is a TCP/IP port, URL?
- 1.7 Need for a web container

### 2. WEB CONTANER AND WEB APPLICATION PROJECT SET UP

- 2.1 To set up Tomcat Container on a machine
- 2.2 To set up a Servlets JSP project in eclipse
- 2.3 To configure dependency of servlet JSP APIs
- 2.4 Web application project structure

### 3. SERVLETS

- 3.1 What are Servlets?
- 3.2 What can they do? Why are they needed?
- 3.3 How do servlets look in code?
- 3.4 HTTP Methods; GET, POST, PUT, DELETE, TRACE, OPTIONS
- 3.5 GET/POST request; difference between the two Servlet Lifecycle
- 3.6 Servlet Context and Servlet Config
- 3.7 Forwarding and Rediretion of requests

### 4. SESSION MANAGEMENT

- 4.1 What is a session?
- 4.2 Why is it required?
- 4.3 How to get a session?
- 4.4 Session Information passing between client and server
- 4.5 Session information passing mechanisms-Cookies, Rewriting
- 4.6 How to destroy a session

### 5. JSPs

- 5.1 Introduction to JSP and need for JSPs
- 5.2 Basic HTML tags
- 5.3 JSP Lifecycle

### 6. JSP ELEMENTS

- 6.1 Scriptlets
- 6.2 Expressions
- 6.3 Declarations
- 6.4 Significance of above elements and fitment into the JSP Lifecycle



### Course: ADVANCE JAVA :: Duration: 6 months

- 6.5 What are Directives in JSP?
- 6.6 Page Directive
- 6.7 Include Directive
- 6.8 Taglib Directive

### 7. JSP TAG LIBRARY

- 7.1 JSP Standard Actions
- 7.2 Expression Language
- 7.3 JSTL basics and it's usage
- 7.4 Need for custom Tag Library
- 7.5 Custom Tag Library implementation

### 8. STRUTS FRAMEWORK

- 8.1 What is MVC?
- 8.2 MVC Type1 and Type2 architecture
- 8.3 Why Struts framework?

### 9. HIBERNATE FRAMEWORK

- 9.1 Introduction
- 9.2 Hibernate Architecture
- 9.3 Hibernate CRUD
- 10. VARIOUS WEB TECHNOLOGY KNOWLEDGE



- 1. Getting Started
  - 1.1. History
  - 1.2. The first program and explanation
  - 1.3. Character Sets
  - 1.4. Tokens Keywords, Literals, Identifiers, Variables
  - 1.5. Data types
  - 1.6. Format Specifier
  - 1.7. Operators
  - 1.8. Type Conversion
  - 1.9. Comments
  - 1.10. Escape Sequence
  - 1.11. Input function
  - 1.12. Storage Classes
- 2. Branching and Looping
  - 2.1. Conditional Statements if-else, switch
  - 2.2. Loops for, while, do-while, break, continue
- 3. Functions, Pointer
- 4. Arrays
- 5. Strings
- 6. Structure
- 7. File Handling

### Course: C ++ :: Duration: 6 months

- 1. Getting Started
  - 1.1. History
  - 1.2. The first program and explanation
  - 1.3. Character Sets
  - 1.4. Tokens Keywords, Literals, Identifiers, Variables
  - 1.5. Data types
  - 1.6. Operators
  - 1.7. Type Conversion
  - 1.8. Comments
  - 1.9. Escape Sequence
- 2. Branching and Looping
  - 2.1. Conditional Statements if-else, switch
  - 2.2. Loops for, while, do-while, break, continue



### Course: C ++

- 3. Functions, Pointer
- 4. Arrays
- 5. Strings
- 6. Structure
- 7. File Handling
- 8. OOP concept

### Course: Python :: Duration: 6 months

- 1. Getting Started with Python
  - 1.1. Features and Advantages of Python
  - 1.2. Structure of Python Program
- 2. Python Fundamental
  - 2.1. Tokens: Keyword, Identifier, Literals & Operators
  - 2.2. Variables and Data Type
  - 2.3. Input Output Function
- 3. Program Control Flow
  - 3.1. Condition Statement
  - 3.2. Looping and Iteration
- 4. List
  - 4.1. List Methods
  - 4.2. Searching and Sorting
- 5. Tuple
- 6. String
- 7. Dictionary
- 8. Set
- 9. Functions
  - 9.1. Recursive functions
- 10. Modules
  - 10.1. Random
  - 10.2. Math
- 11. Lambda Functions
- 12. File Handling
- 13. Database Connectivity



### Course: Data Structure & Algorithm :: Duration: 4 Months

### Unit I

### Introduction to data structures:

Algorithms and Flowcharts, Basics Analysis on algorithm, Complexity of algorithm, Introduction and definition of data structure, classification of data, Arrays, Various types of data structure, Static and dynamic memory allocation, Function, Recursion.

### Arrays, Pointers, Strings:

Introduction to arrays, Definition, One Dimensional Array and Multi-Dimensional Arrays, Pointer, Pointer to structure, various programs for array and pointer. Strings. Introduction to Strings, Definition, Library functions of Strings.

#### Unit II

### Stacks and Queue:

Introduction to stack, Definition, Stack Implementation, Operations of stack, Application of stack and multiple stacks. Implementation of Multiple Stack Queues, Introduction to queue, Definition, Queue Implementation, Operations of queue, Circular queue, De-queue and Priority queue.

#### Unit III

### **Linked Lists and Trees:**

Introduction, Representation and operations of Linked Lists, Singly Linked List, Doubly Linked List, Circular Linked List, And Circular Doubly Linked List.

### Trees:

Introduction to Tree, Tree Terminology Binary Tree, Binary Search Tree, Strictly Binary Tree, Complete Binary Tree, Tree Traversal, Threaded Binary Tree, AVL Tree, B Tree, B+ Tree

#### **Unit IV**

### Graphs, Searching, Sorting and Hashing Graphs:

Introduction, Representation of graphs, Graph Traversals Shortest path algorithms.

### Searching and Sorting:

Searching, Types of searching, Sorting, Types of Sorting like quick sort, bubble sort, merge sort, selection sort.

### Hashing:

Hash Function, Types of Hash Functions, Collision, Collison Resolution Technique(CRT), Perfect Hasing



### Course: PHP :: Duration: 6 Months

- 1. Getting Started with PHP
  - 1.1. Features and Advantages of PHP
  - 1.2. Structure of PHP Program
- 2. PHP Fundamental
  - 2.1. Tokens: Keyword, Identifier, Literals & Operators
  - 2.2. Input Output Function
- 3. Branching and Looping
  - 3.1. Conditional Statements if-else, switch
  - 3.2. Loops for, while, do-while, break, continue
- 4. Array
- 5. String
- 6. OOP Concept
- 7. Method
  - 7.1. Overloading
  - 7.2. Passing Arguments
- 8. Constructor and Destructor
- 9. Inheritance
  - 9.1. Access Modifiers
  - 9.2. Overriding
- 10. Abstract Class and Interface
- 11. File Handling, Exception and Error Handling
- 12. Session and Cookies
- 13. File Upload and Form Validation
- 14. Database Concept and Database Connectivity



### Course: MySQL :: Duration: 6 Months

- 2.18 SQL Joins
- 2.19 SQL Inner Join
- 2.20 SQL Left Join
- 2.21 SQL Right Join
- 2.22 SQL Full Join
- 2.23 SQL Union
- 2.24 SQL Select Into
- 2.25 SQL Insert Into Select
- 2.26 SQL Create DB
- 2.27 SQL Create Table
- 2.28 SQL Constraints
- 2.29 SQL Not Null
- 2.30 SQL Unique
- 2.31 SQL Primary Key
- 2.32 SQL Foreign Key
- 2.33 SQL Check
- 2.34 SQL Default
- 2.35 SQL Create index
- 2.36 SQL Drop
- 2.37 SQL Alter
- 2.38 SQL Auto Increment
- 2.39 SQL Views
- 2.40 SQL Dates
- 2.41 SQL Null Values
- 2.42 SQL Null Functions
- 2.43 SQL Data Types
- 2.44 SQL DB Data Types

### 3 SQL Functions

- 3.1 SQL Avg()
- 3.2 SQL Count()
- 3.3 SQL First()
- 3.4 SQL Last()
- 3.5 SQL Max()
- 3.6 SQL Min()
- 3.7 SQL Sum()



### Course: MySQL :: Duration: 6 Months

- 3.8 SQL Group By
- 3.9 SQL Having
- 3.10 SQL Ucase()
- 3.11 SQL Lcase()
- 3.12 SQL Mid()
- 3.13 SQL Len()
- 3.14 SQL Round()
- 3.15 SQL Now()
- 3.16 SQL Format()

### **4 SQL STORED PROCEDURES**

- 4.1 MySQL Stored Procedure Introduction
- 4.2 MySQL Stored Procedures Getting Started
- 4.3 MySQL Stored Procedure Variables
- 4.4 MySQL Stored Procedure Parameters
- 4.5 MySQL Stored Procedures-Return Multiple Values
- 4.6 MySQL IF Statement
- 4.7 MySQL CASE Statement
- 4.8 IF vs. CASE
- 4.9 MySQL Loop Statements
- 4.10 MySQL Cursor
- 4.11 MySQL Stored Procedure -Raising Error Conditions
- 4.12 MySQL Stored Function

### 5 Introduction to SQL Trigger

- 5.1 MySQL Triggers Implementation
- 5.2 Create Trigger in MySQL
- 5.3 Managing Triggers in MySQL
- 5.4 Create Multiple Triggers For The Same Trigger Event And Action Time
- 5.5 Working with MySQL Scheduled Event
- 5.6 Modifying MySQL Events

### 6 MySQL VIEWS

- 6.1 Introduction to Database View
- 6.2 Views in MySQL
- 6.3 MySQL CREATE VIEW
- 6.4 MySQL Views & With Check Option
- 6.5 Creating MySQL Updatable Views
- 6.6 LOCAL & CASCADED in WITH CHECK Option
- 6.7 Managing Views in MySQL



### **Advanced Excel**

### **Basic to Advanced Excel Course Syllabus**



### **Introduction to Computers**

Font formatting

Number formatting

Table formatting

Conditional formatting

Hide / Unhide

Sort / filter

Paste special

Find and select

#### Insert

Illustrations

Charts

**Tables** 

#### **Basic Functions**

Sum / Average / Count / Max / Min /

Product / Quotient / Mod

Basic Text / date / time / lookup /

information functions

Name manage

Formula Auditing

#### Review

**Proofing** 

Comments

**Protection Views** 

Types of views

Zoom

#### **Lookup Functions**

Vlookup / HLookup

Index and Match

Nested VLookup

Vlookup with Helper Column

Vlookup using Match Function

(Two\_Way\_Lookup)

VLOOKUP with Multiple Criteria

Vlookup with AutoDrag Feature

Using VLookUP to consolidate Data

from Multiple Sheets

#### **PivotTables**

Creating, Formatting Simple PivotTables

Page Field in a PivotTable

Formatting a PivotTable

Creating / Modifying a PivotChart

#### Logical/Statistical/Information Functions

And

Or

Count/Counta/CountBlank

DSum/DMax/DMin/DAvarage/DCountA

**SumProduct** 

IsNumber/IsText/IsBlank/IsError

Trend/ForeCast

Time & Date

IF

IF/ IFs and Nested IF Functions

CountIF/CountIFs

IF+OR/IF+AND

SumIF/SumIF+SumIF/SumIFs

SumIF with Data Validation

DatedIF

IF+Isnumber/ IF+Istext / IF+Isblank

IF+Sum

IF+Average

### Other Functions

Cell ABS Large / Small Rank Fact

Round/Rounddown/Roundup

Odd/Even

Power

Proper/Upper/Lower

Left/Right/Mid/Len

### **Validations**

Input Messages / Error Alerts / Drop-Down Lists

Conditional Formatting and Advance Level

**Conditional Formatting** 

Define Name/ Name Constant/ Name Manager

### **Advanced Filters**

Extracting Records with Advanced Filter

Using Formulas in Criteria

### Hyper / Data Linking

Hyper linking data, within sheet / workbook

Linking & Updating links between workbooks &

application

#### Consolidation

Consolidating Data with Identical / Different Layout

#### **Sharing and Protecting Workbooks**

Sharing Workbooks & Tracking Changes Protecting sheets / workbooks / Files



### B.Com :: Year 3 / 4: Semester VI / VIII

### COMPUTERISED ACCOUNTING SYSTEM and E-FILING OF TAX RETURN

### Unit-1: Computerized Accounting Package: Using Generic Software

[40 Marks, Class: 40]

- (a) Company creation, ledger creation, order processing, accounting voucher, inventory voucher, memorandum voucher, invoicing, multiple godown handling, Transfer of materials across godowns, Bank Reconciliation,
- (b) Cost Centre, Cost Category, Bill of Material (BoM), Budget and Controls
- (c) Payroll Accounting
- (d) TDS, GST
- (e) Back up & Restore, Export and Import data

### **Unit 2: Designing Computerized Accounting System**

[15 Marks, Class:15]

- (a) Introduction to DBMS Package Table, Query, Form and Report
- (b) Designing Computerized Accounting System using DBMS Package Creating a voucher entry Form, Preparing ledgers, trial balance, profit & loss a/c, and balance sheet with Form wizard and Report
- (c) Designing Payroll System for Accounting using Form, Query, and Report

### Unit-3: E-filing of Tax return

[25 Marks, Class: 25]

- (a) Preparation and submission of the Income Tax Return (ITR) offline/online for individual taxpayer [e-filing without using DSC and with using DSC, EVC]
- (b) View form 26AS, Upload return, View e-file returns, e-verification
- (c) Use of e-tax calculator (including interest calculation u/s 234A, 234B, 234C)
- (d) E-Pay tax (Challan No./ITNS 280, ITNS 281)
- (e) Preparation and submission online form 10E [Relief u/s 89(1)]

### **Project Work:**

Assignment based for each and every topic should be prepared

- Software: Singhania, V.K., E-Filing of Income Tax Returns and Computations of Tax, Taxmann
- Software: "Excel Utility", incometaxindiaefiling.gov.in



### Tally with GST



### Contents

### BASIC OF ACCOUNTING

Introduction - Types of Accounts - Accounting Principles or concepts - Mode of Accounting - Rules of Accounting - Double-entry system of bookkeeping

#### **FUNDAMENTALS OF TALLY**

Company Features - Configuration - Getting functions with Tally - Creation / setting up of Company in Tally

#### ACCOUNTING MASTERS IN TALLY

Chart of Groups - Groups - Multiple Groups - Ledgers - Multiple Ledgers

#### **INVENTORY MASTERS IN TALLY**

Stock Groups - Multiple Stock Groups - Stock Categories - Multiple Stock Categories - Units of Measure - Stock Items

#### **VOUCHER ENTRIES IN TALLY**

Introduction - Types of Vouchers - Chart of Vouchers - Accounting Vouchers - Inventory Vouchers - Invoicing

#### ADVANCE ACCOUNTING IN TALLY

Bill-wise details - Cost centers and Cost Categories - Multiple currencies - Interest calculations - Budget and controls - Scenario management - Bank Reconciliation

#### ADVANCE INVENTORY IN TALLY

Order Processing - Recorder Levels - Batch-wise details - Bill of Materials - Batch-Wise Details - Different Actual and Billed Quantities - Price Lists - Zero-Valued Entries - Additional cost details - POS

#### **GST IN TALLY**

GST – GST Transactions for Registered Dealer - Composite Supply - Sales Return - Payment of GST - GST Transactions with Un-Registered Dealer with RCM - GST Transactions with Composition Dealer

#### TECHNOLOGICAL ADVANTAGES IN TALLY

Tally vault - Security controls - Tally Audit - Backup and restore - Split company data - Import and export of data - Printing Reports and Cheques - Company Logo

### PAYROLL ACCOUNTING IN TALLY

Employee Creation - Salary Define - Employee Attendance Register - Pay Heads Creation - Salary Report

#### GENERATING REPORTS IN TALLY

Financial Statements - Trading Account - Profit & Loss Account - Balance Sheet - Accounts Books and Reports - Inventory Books and Reports - Exception Reports - Statutory Reports - Payroll Reports - Trial balance - Day Book - List of Accounts - Stock Summary - Outstanding Statement



### **Graphic Designing:** Duration: 6 months

### **COREL DRAW:** Duration: 2 months

Introduction of COREL DRAW
BASIC TOOL, SHAPE and BEZIER TOOL, MOVE TOOL
CONTOUR, Introduction of GRAPHIC
Difference between RASTER GRAPHIC and VECTOR GRAPHIC
and VECTOR GRAPHIC
Definition of DPI nd PPI
Basic difference of DOTS and PIXELS

#### **PROJECTS:**

LOGO VISITING CARD LEAFLET DANGLER BROCHURE PACKAGING



### PHOTO SHOP :: Duration: 2 months

Introduction of PHOTO SHOP BASIC TOOL MASKING PHOTO EDITING COLOUR CORRECTION FILTER EFFECT BRUSH EFFECTS BRUSH MAKING TEXTURE MAKING PATTERN MAKING and Many More

#### PROJECTS:

LEAFLET DESIGNING
POSTER DESIGNING
MOVIE POSTER DESIGNING
BOOK COVER DESIGNING
ART MANIPULATION
DIGITAL PAINT





### **Graphic Designing**

### **ILLUSTRATOR** :: Duration: 2 months

Introduction of ILLUSTRATOR
BASIC TOOL
MASKING
PHOTO EDITING
COLOUR CORRECTION
FILTER EFFECT
BRUSH EFFECTS
BRUSH MAKING
TEXTURE MAKING
PATTERN MAKING
and Many More

### **PROJECTS:**

VECTOR ART POLY ART MESH ART WALL PAPER ART BRANDING



### 2D Animation :: Duration: 1 year

### **HAND SKETCH DRAWING :: Duration: 5 months**

Definition of ANIMATION
12 Principle of ANIMATION
Basic of Human ANATOMY
WALK CYCLE of Human, Animal, Creature
RUN CYCLE of Human, Animal, Creature
CYCLING, HORSE RIDING, DANCING



### FLASH :: Duration: 5 months

CINEMATIC and NON CINEMATIC
All Types of TOOLs in FLASH like
LINE Tool
GRADIENT Tool
GRAPHICS and MOVIE CLIP
CHARACTER ANIMATION



### PHOTO SHOP:: Duration: 2 months

Introduction of PHOTO SHOP
BASIC TOOL
MASKING
PHOTO EDITING
COLOUR CORRECTION
FILTER EFFECT
BRUSH EFFECTS
BRUSH MAKING
TEXTURE MAKING
PATTERN MAKING
BACKGROUND ART
and Many More

#### **PROJECTS:**

MAN WALKING and RUNNING, CYCLING ANIMAL RUNNING and WALKING STORY BOARDING SYNAPSIS ANIMATIX CARTOON MOVIE MAKING





### Video Editing and Compositing with Motion Graphics

:: Duration: 10 months

### PREMIERE PRO :: Duration: 4 months

**BASIC SETTING** 

**BASIC TOOLS** 

**ROGER TOOL** 

HAND TOOL

**SLOW MOTION** 

ADDING SOUND

**AUDIO VIDEO MIXING** 

**ULTRA KEY** 

**CHROMA KEY** 

**GREEN SKIN REMOVE** 

TRANSITION EFFECTS

COLOUR CORRECTION AND BLUR TOOL

**MASKING** 

#### **PROJECTS:**

TRAILER MAKING TEASER MAKING TEXT ANIMATION

ADVERTISEMENT MAKING

STORY BOARDING



### **PHOTO SHOP:: Duration: 2 months**

Introduction of PHOTO SHOP

**BASIC TOOL** 

**MASKING** 

PHOTO EDITING

**COLOUR CORRECTION** 

**FILTER EFFECT** 

**BRUSH EFFECTS** 

**BRUSH MAKING** 

**TEXTURE MAKING** 

PATTERN MAKING

and Many More

#### **PROJECTS:**

CLOUD MAKING MATTE PAINTING ART MANIPULATION DIGITAL PAINTING





### Video Editing and Compostion with Motion Graphics

### **AFTER EFFECTS:: Duration: 4 months**

BASIC SETTINGS OF AFTER EFFECTS
BASIC TOOLS OF AFTER EFFECTS
Different TOOLS of TEXT EFFECTS
Different TYPES of MASKING
ALPHA KEY
CLONE STAMP TOOL
PIN PUPPET TOOL
3D ROTATION
COLOUR CORRECTION
PRACTICAL ANIMATION
WRITE ON
2D MOTION TRACKING
3D MOTION TRACKING
ROTOSCOPING
3D CAMERA PROJECTION

#### **PROJECTS:**

Different Type of EFFECTS MAKING in AFTER EFFECTS like FAIR MAKING WATER MAKING LOGO ANIMATION MOTION POSTER 3D SLIDE SHOW 10 TYPES OF MOTION GRAPHICS



### Learn COMMUNICATIVE ENGLISH to make your future ready

#### Why is English important for Students!

English language plays an essential role in our lives as it helps in Communication. It is the main language for studying any subject all over the world. English is important for students as it broadens their minds, develops emotional skills, improve the quality of life by providing job opportunities.

Moreover, the use of English as an international language is growing with time because it is the only medium for communication in many countries. English is also used widely in the literature and media section to publish books, most of the writers write in the English language due to the vast majority of readers know only the English language and they can describe their ideas best in the English language.

#### Core Skill of English Language:

As we are aware that English language skills depend upon four Core Skills. These skills are essential for learning the English language that is,

Listening Skills:- It improves the imagination and vocabulary of a learner. While listening we used to visualize the scene and memorize in our memory.

Speaking Skills:- When a learner speaks, he gets to know his mistakes and he can improve it further.

Reading Skills:- Reading a book or a passage helps in improving the vocabulary the spellings of all words. If a student masters those four skills then his/her English will automatically improve and gain confidence in presenting his skill.

Writing Skills:- When we write we get to know, what we are writing and we know the spelling of all words.

#### Why learning English language is important?

Perfect Communication – It is important to speak effectively. People get impressed by those who have good communication skills.

Gain Confidence - If you own good communication skills then your confidence will automatically be high.

Achieve you goal early - Effective English language skills help you meet your career goals quickly.

Effective Personality - When we speak effectively and with confidence, anyone can get attracted.

Part of the Global Communication – English language is a part of the global world. So if one knows good English then one can interact with others.

Multiple Career prospects – A person possessing effective communication skills have more career opportunities than others.

The importance of the English language is wider in education. A student studies other subjects in the English language only like Science, Economics, Geography, History etc. If he knows the general rules of grammar well then the student can easily write the notes and ace in exam.

With the growing competition, it has become essential to speak and write English perfectly. Our course of content is designed to mitigate this purpose. It has levels from beginner to advance. It depends upon the learner from which level he wants to learn. Students learn here in an easy way through audio and videos.

The content and textbooks are pretended to be use before oral practice in English. According to the age, groups of learners have been divided into three categories – (i) Primary plus (6-10 years), (ii) Secondary plus (11-17 years), (iii) Career plus (18-40 years).

#### Primary Plus: 6 Months Course

Unit-1	Know me!	Unit-2	Wishing some one	Unit-3	My House
Unit-4	My Class	Unit-5	On a Sunday	Unit-6	Lesson on Pants
Unit-7	Good Manners	Unit-8	Environment	Unit-9	Opposites
Unit-10	Going for a Picnic	Unit-11	The little Birdie	Unit-12	In the Market
Unit-13	Helping your Mother	Unit-14	What are they doing	Unit-15	Meet my family
Unit-16	My Best friend	Unit-17	About myself	Unit-18	Birthday Party
Unit-19	My Favorite	Unit-20	At the Breakfast Table	Unit-21	Airport
Unit-22	Story telling				



### Secondary Plus:- 8 Months Course

Unit-1	My Country	Unit-2	Buying things	Unit-3	Restaurant
Unit-4	Getting to know	Unit-5	Table Manners	Unit-6	Asking for Directions
Unit-7	Talk on Computer	Unit-8	About Cricket	Unit-9	Telephonic Conversation
Unit-10	Road safety	Unit-11	Shopping vegetables	Unit-12	Asking about School work
Unit-13	Visiting a Sick friend	Unit-14	At the Doctor's	Unit-15	At the Railway Station
Unit-16	At the Hotel	Unit-17	At a Wedding	Unit-18	At the Bank
Unit-19	Introducing People	Unit-20	Getting Information	Unit-21	Common Health Problem
Unit-22	Active VS Passive verbs conversation			Unit-23	Tag Questions
Unit-24	Short Answers	Unit-25	Interrogative Words	Unit-26	Simple Questions
Unit-27	General Conversation	Unit-28	Final preposition		and Negatives
Unit-29	Word Forms	Unit-30	Infinitive VS General Conversation		
Unit-31	Fluency Development	Unit-32	Illocution	Unit-33	Extempore Speech

### Career Plus:- 6 Months Course

Unit-1	Preparing for an Interview	Unit-2	The Interview
Unit-3	Group Discussion	Unit-4	First Day at Work
Unit-5	Effective Telephone Skills	Unit-6	Conversational Ability
Unit-7	E-Writing	Unit-8	Modes of Reporting
Unit-9	Video Conferencing	Unit-10	Public Speaking & Presentation Skill
Unit-11	Personality Development		



# Sovabazar Youth Computer Training Centre Govt. of West Bengal



### INFORMATION TECHNOLOGY

- **SEM I** Certificate in Information Technology Application (CITA)
  Fundamental, OS- Windows 11, Keyboard Shortcuts, Typing, MS Office,
  Visual FoxPro 6.0
- SEM II Diploma in Information Technology Application (DITA)

  MS ACCESS, Visual Basic, Internet & Email, Advanced Excel
- SEM III Advanced Diploma in Information Technology Application (ADITA)
  C++, VB.Net, JAVA SCRIPT, VB SCRIPT

### FINANCIAL ACCOUNTING SYSTEM

- **SEM I** Certificate in Financial Accounting System (CFAS)
  Fundamentals, OS- Windows 11, Keyboard Shortcuts, Typing, Ms Word 2021, Tally Erp9, Ex-Next Gen
- SEM II Diploma in Financial Accounting System (DFAS)

  Tally with GST, Basic to Advanced Excel, Ms-PowerPoint, Database

  Management System (Visual FoxPro), Two Financial Accounting Packages

  [Fact, Accord], Internet & E-Mail
- SEM III Advanced Diploma in Financial Accounting System (ADFAS)

  Tally Prime 2.0.1, Payroll System, Online GST (Video Classes),

  Taxation Software (IDT), TDS & E-return preparation Software, Two Financial Accounting Packages [Busy, Ace], MS Office 365 or latest (Advance) & Project Work

### **DESK TOP PUBLISHING**

- **SEM I** Certificate in Desk Top Publishing (CDTP)
  Fundamental, OS- Windows 11, MS Office, Page Maker, Corel Draw,
  Bengali Type
- **SEM II** Diploma in Desk Top Publishing (DDTP)
  Scanning & Editing Images of Publications, Adobe Photoshop, Freehand, Flash, Internet & E-Mail
- SEM III Advanced Diploma in Desk Top Publishing (ADDTP)

  Adobe Illustrator, Adobe InDesign, Basic of Web designing with Flash and Dreamweaver



## Sovabazar Youth Computer Training Centre Govt. of West Bengal



### **MULTIMEDIA**

### **SEM I** Certificate in Web Designing (CWD)

Concepts on Internet Protocols, Browsers Domain Names & Registering Domain Names

Scripting Languages (HTML, DHTML, XML, Java Script), GIF Animator / Cool 3D, Dreamweaver

Project on Web Page Designing, Web Hosting

### **SEM I** Certificate in Basic Multimedia (CBM)

Creating Illustrations: Adobe Illustrator CS3, Corel Draw X4, Imaging: Adobe

Photoshop, 2D Animation: Adobe Flash, Authoring: Adobe Director,

Sound Editing: Sound Forges

### SEM II Diploma in Multimedia, Animation & Video Editing (DMAVE)

Creating Illustrations: Adobe Illustrator CS3, Corel Draw X4,

Imaging: Adobe Photoshop

2D Animation: Adobe Flash, Authoring: Adobe Director,

Sound Editing: Sound Forges

Video Compositing & Editing: Adobe After effects, Deck Link Card with

Adobe Premiere Pro

3D Animation: Autodesk 3D Max









**SCHOOL** 



