

# Basic Computer Syllabus

## Syllabus Outline

		Theory (hours)	Practical (hours)	Total (hours)
1	Fundamentals of computer			
2	Operating computer using GUI based operating system			
3	Microsoft Word			
4	Microsoft Excel			
5	Microsoft PowerPoint			
6	Basic Computer Repairing (Hardware)			
7	Communicating using the internet			
8	WWW and web browsers			
9	Online Security and Privacy			
10	Programming basics			
11	Website Creation basics			
12	Smart phone uses			
13	Linux and Dos commands			

## Detailed Syllabus

### **1. Fundamentals of computer**

- 1.0 Introduction
- 1.1 Basic Applications of Computer
- 1.2 Components of Computer System
  - 1.2.1 Block Diagram
  - 1.2.2 Central Processing Unit
  - 1.2.3 Input Output devices
    - 1.2.3.1 Keyboard shortcuts
  - 1.2.4 Computer Memory
- 1.3 Concept of Hardware and Software
  - 1.3.1 Hardware
  - 1.3.2 Software
    - 1.3.2.1 Application Software
    - 1.3.2.2 Systems software
- 1.4 Computer languages

### **2. Operating Computer Using GUI Based Operating System**

- 2.0 Operating System Introduction
- 2.1 Basics of popular operating system (LINUX, WINDOWS)
- 2.2 The User Interface
  - 2.2.1 Task Bar
  - 2.2.2 Icons
  - 2.2.3 Menu

- 2.2.4 Running an Application
- 2.3 Operating System Simple Setting
  - 2.3.1 Changing System Date and Time
  - 2.3.2 Changing Display Properties
  - 2.3.3 To Add or Remove a Windows Component
  - 2.3.4 Changing Mouse Properties
  - 2.3.5 Adding and removing Printers
- 2.4 File and Directory Management
  - 2.4.1 Creating and renaming of files and directories
- 2.5 Common utilities

### **3. Microsoft Word**

- 3.0 Introduction
  - 3.0.1 Common Buttons, Tabs and Ribbons
    - 3.1.2 The Flashing Line
- 3.1 Document Navigation Tips
  - 3.1.1 Using the Slider
  - 3.1.2 Keyboard Navigation Tips
  - 3.1.3 Using Browse Objects Tools
  - 3.1.4 Selecting Text Options
- 3.2 Manipulating Text
  - 3.2.1 Page Layout
  - 3.2.2 Cut, Copy, Paste, Move
  - 3.2.3 Find and Replace
- 3.3 Formatting Characters
  - 3.3.1 Changing Fonts
  - 3.3.2 Typical Text Format Options
  - 3.3.3 Bullet and Numbered Lists
  - 3.3.4 Other formatting tools
- 3.4 Formatting Paragraphs
  - 3.4.1 Line Spacing
  - 3.4.2 Quick Styles
  - 3.4.3 Paragraph Marks
- 3.5 Themes and Templates
  - 3.5.1 Applying Themes
  - 3.5.2 Opening Existing Templates
  - 3.5.3 Creating Templates
  - 3.5.3 Working with Existing Content
- 3.6 Quick Parts
  - 3.6.1 Quick Parts
  - 3.6.2 Creating Quick Parts
  - 3.6.3 Quick Parts - Inserting Fields
  - 3.6.4 Quick Parts - Inserting Images
- 3.7 Preparing Documents for Printing
  - 3.7.1 Spelling and Grammar Check
  - 3.7.2 Saving a Document
  - 3.7.3 Printing and Preview Options

- 3.8 Organizing Content
  - 3.8.1 Creating Lists
  - 3.8.2 Creating and Formatting Tables
  - 3.8.3 Converting Text to Tables
  - 3.8.4 Table Borders and Shading
- 3.9 Tabs, Columns, and Charts
  - 3.9.1 Creating Columns
  - 3.9.2 Creating Tabular Lists
  - 3.9.3 Creating Charts
- 3.10 Links, Headers, and Footers
  - 3.10.1 Creating Web Links
  - 3.10.2 Creating Document Location Links
  - 3.10.3 Email Links
  - 3.10.4 Headers and Footers
- 3.11 References
  - 3.11.1 Bookmarks
  - 3.11.2 Captions
  - 3.11.3 Footnotes
  - 3.11.4 Citations
  - 3.11.5 Reference Styles for Research
  - 3.11.6 Research Options
  - 3.11.7 Creating Indexes
  - 3.11.8 Bibliographies
  - 3.11.9 Cross Reference Bookmarks
  - 3.11.1 Cross Reference Page Numbers
- 3.12 Mail Merge
  - 3.12.1 Mail Merge for Letters
  - 3.12.2 Mail Merge for Envelopes
  - 3.12.3 Mail Merge for Labels
- 3.13 Visual Content
  - 3.13.1 Character Spacing
  - 3.13.2 Inserting Shapes
  - 3.13.3 Inserting Images
  - 3.13.4 Using Word Art
  - 3.13.5 Using Pull Quotes
  - 3.13.6 Using Text Boxes
  - 3.13.7 Sorting Text
  - 3.13.8 Using Smart Art
- 3.14 Reviewing Documents
  - 3.14.1 Document Views
  - 3.14.2 Split Screen View
  - 3.14.3 Tracking Changes
  - 3.14.4 Collaboration Options
  - 3.14.5 Combining and Approving Changes
  - 3.14.6 Using Comments
- 3.15 Protecting and Sharing Documents
  - 3.15.1 Compatibility Checker
  - 3.15.2 Previous Word Versions Compatibility
  - 3.15.3 Digital Signatures

## 4. Microsoft Excel

- 4.1 Introduction
- 4.2 Entering, Editing and Formatting Data
- 4.3 Formatting Numbers
- 4.4 Managing Worksheets
- 4.5 Modifying Rows and Columns
- 4.6 Changing Views
- 4.7 AutoFill and Custom Lists
- 4.8 Conditional Formatting
- 4.9 Tables
- 4.10 Data Tools
- 4.11 Referencing Formulas
- 4.12 Ranges and Dates
- 4.13 Lookups
- 4.14 Conditional Logic
- 4.15 Text Formulas
- 4.16 Introduction to Charts
- 4.17 Formatting Charts
- 4.18 Adding Graphics to Spreadsheets
- 4.19 Outline, Sort, Filter, and Subtotal
- 4.20 PivotTables
- 4.21 Protecting Data
- 4.22 Collaboration
- 4.23 Printing
- 4.24 Outline, Sort, Filter, and Subtotal
- 4.24 Saving a Workbook
- 4.24 Macros

## 5. Microsoft PowerPoint

- 5.1 Introduction
- 5.2 Applying Themes and Layouts to Slides
- 5.3 Working with Objects
- 5.4 Entering, Editing, and Formatting Text
- 5.5 Outline View and Proofing Presentations
- 5.6 Adding and Reading Notes
- 5.7 Inserting Pictures, Graphics, Shapes, and Other Things
- 5.8 Charts
- 5.9 Adding Sound and Video
- 5.10 Adding Transitions and Animation
- 5.11 Working with Master Slides
- 5.12 Working with Smart Art
- 5.13 Printing, Sharing, and Exporting Slides

## **6. Basic Computer Repairing (Hardware)**

- 6.1 Computer Hardware Overview
- 6.2 Motherboard: Types, Block Diagram, Identification of Ports, Chip, Slots, Connector, Section etc.
- 6.3 CPU: CPU Socket details, Types of CPU, Identification, and Basic Terminology of CPU
- 6.4 RAM: Types of RAM, Identification of RAM, RAM Operating Voltage
- 6.5 SMPS: Concept of Current, SMPS pin details, SMPS Voltage, Testing of SMPS, How to use multimeter, Testing of Power Cable.
- 6.6 Hard disk: Hard disk Types, Identification of Hard disk, Jumper Setting, Warranty, Measuring concept etc.
- 6.7 CD/DVD Drive: Assembling/Disassembling of CD/DVD Drive, Types of CD/DVD Drive, Repairing of CD/DVD Drive, Jumper Settings Etc.
- 6.8 UPS: Types, How UPS work, Measurement, Testing of UPS, Battery Concept.
- 6.9 Keyboard and Mouse: Types, Identification, Repairing of Keyboard and Mouse.
- 6.10 Monitor
- 6.11 Printer

## **7. Communication using the internet**

- 7.1 Basic of Computer Networks
  - 7.1.1 Local Area Network (LAN)
  - 7.1.2 Wide Area Network (WAN)
- 7.2 Internet
  - 7.2.1 Concept of Internet
  - 7.2.2 Applications of Internet
  - 7.2.3 Connecting to the Internet
  - 7.2.4 Troubleshooting

## **8. WWW and web browsers**

- 8.1 World Wide Web (WWW)
- 8.2 Web Browsing Software
- 8.3 Search Engines
- 8.4 Understanding URL
- 8.5 Surfing the web

## **9. Online Security and Privacy**

- 9.1 Threats to computer
- 9.2 Virus and its types
- 9.3 Anti-Virus software and Examples
- 9.4 Firewall and its use
- 9.5 Hackers and Crackers
- 9.6 Cyber-crime and Computer ethics
- 9.7 Cyber law and Importance
- 9.8 Backup and Restore

## **10. Programming basics**

10.1 Algorithm

10.2 Flowchart

## **11. Website Creation basics**

11.1 HTML

## **12. Smart phone uses**

12.1 Introduction

12.2 Popular Uses

12.3 Important Features

12.4 Designs and Trends

12.5 iPhone Vs Android

## **13. Linux and Dos commands**