

Syllabus - Computer Science

Session 2024-25

Class 8th

❖ **Typing Tutor (Punjabi)**

- Touch Typing
- **Different Techniques for Typing in Punjabi:** Phonetic fonts, Unicode font, Gurmukhi Keyboard Mapper:
- **Keymaps Of Commonly Used Punjabi Fonts:** Unicode Font – Raavi, Phonetic Fonts – AnmolLipi
- Numeric key pad, Important Keys on Key-board (Spacebar, Enter key, Backspace key, Shift key, Caps Lock key, Num Lock Key)
- Tips to improve typing speed, Proper Posture, Suggestions for Repetitive Stress Injuries during continuous typing

❖ **Internet Fundamentals**

- What is Internet?, History of Internet
- **Requirement for Internet:** Hardware Requirements, Software Requirements:
- **Facilities provided by internet:** News and Information, Art and Entertainment, On-Line Shopping, Mailing Letters, Health and Fitness, Tourism and Travel, Chatting, Banking Operations, Video Conferencing
- **Internet Connections:** Types of Internet Connections
- **Modem and Its Types:** External Modem and Internal Modem
- Internet Service Providers (ISP)
- **Services provided by Internet:** World Wide Web, Electronic Mail, E-Commerce, Social Networking Sites, Video Conferencing, Chatting, Web Searching
- Tools and Skills required for using Internet
- Web Browsing

❖ **Introduction to Information Technology**

- **Information Technology:** Need of Information Technology (For Business and Industry, At home, For Training)
- Web Sites, Searching, Web Surfing, Difference Between On-Line and Off-Line, Downloading, Net Banking, On-Line Shopping, How to View On-Line Result, Mobile Technology

❖ **MS PowerPoint**

- Introduction to PowerPoint, What is Presentation? What is Slide? How to Start/Open PowerPoint?
- **Components of PowerPoint Window:** Title Bar, Quick Access Toolbar, Ribbon and Tabs, Outline/Slides Tabs, Slide Pane, Notes Pane, Status Bar, View Options
- How to Create Photo-Album Presentation?
- **How to Play Presentation for audience:** How to Play Presentation from the Very First Slide, How to Play Presentation from the Current Slide
- Saving and Exiting Presentation
- **How to Create a New Blank Presentation:** Adding Text to Slides, Formatting Text of a Slide,
- Inserting New Slide, How to Change the Slide Layout?
- **How to Change the Appearance of Slides:** Working with Themes, Changing Background Styles, Format Background (Solid Fill, Gradient Fill, Picture or Texture Fill, Pattern Fill)
- Adding Contents to a Slide (WordArt, ClipArt, Tables, SmartArt, Pictures, Movie/Video etc.)
- **Slide View Options in PowerPoint:** Normal view, Slide Sorter view, Reading view, Slide Show view, Zoom Slider
- Working with Transition (Effect Options, Sounds, Duration)
- **Working with Animation:** Animation and its types (Entrance, Emphasis, Exit, Motion Paths), How to Apply Animation, Working with Animation Options (Effect Options, Add Animation, Animation Pane, Animation Painter, Timing Effects, Previewing Animations)
- **Record Slide Show/Narration and Timings:** How to Remove Narration or Timings from a Recorded Slide Show

- **Save Presentation:** as PDF format, as a Video, as a PowerPoint Show, in the form of Picture Files

❖ **Generations of Computer**

- Introduction to Generations
- **First Generation Computers:** Main features and characteristics of First Generation, Examples of First-Generation Computer Systems
- **Second Generation Computers:** Main features and characteristics of Second Generation with examples
- **Third Generation Computers:** Main features and characteristics of third Generation with examples
- **Fourth Generation Computers:** Main features and characteristics of fourth Generation with examples
- **Fifth Generation Computers:** Main features and characteristics of fifth Generation with examples

Unit-VI: Computer Memories

- What is Memory, Memory units, Types of Memory
- **Internal Memory** - CPU Registers, Cache Memory - Advantages and Disadvantages of cache memory, Primary/Main memory, RAM and its types– SRAM, DRAM, ROM and its types-ROM, PROM, EPROM, EEPROM) Characteristics of the Static and Dynamic RAM, Advantages of ROM
- **External Memory:** Characteristic of Secondary Memory, Sequential Access Devices, Direct Access Devices
- **Physical Structure of Magnetic disks:** Tracks and Sectors

Some Important Practical Topics
8th Class (Computer Science)

1. Practical for Searching any topic using Google Search Engine in any Web Browser (For Example: Open www.google.com in any web browser and then search information about different types of Computers)
2. Practical to view the result of Punjab School Education Board classes using internet.
3. Practical for downloading Images from internet, copying text content from web pages and get them in the word document.
4. Practical to open PowerPoint using different ways.
5. Practical for displaying/showing information about the different components of PowerPoint Window.
6. Prepare a Photo Album Presentation (using at least 10 photographs)
7. Practical to Save and Close the Presentation in PowerPoint
8. Create a New Blank Presentation showing different Types of Computers using at least 5 slides (Use Text Formatting and Clip-Art/Images etc. in the Presentation)
9. Play Presentation from first slide and current slide using slide show option in PowerPoint.
10. Create Presentation by changing the appearance of slides with the help of Themes/Background Styles/Format Background options in the New/Existing Presentation.
11. Apply Transition Effects in your Presentation (Use Effect Options and Sound Duration in your Presentation)
12. Use Different Types of Animations on Text/Images etc. added in the New/Existing Presentation.
13. Practical for using various Animation options through Animation Pane.
14. Save Presentation in different formats (PDF, Video, Images, PowerPoint Show)
15. Prepare a Presentation in PowerPoint showing the Different Generations of Computers. Prepare a presentation with at least 10 slides and use Text Formatting, Images, Transition Effects, Animation Effects in it.

16. Prepare a Presentation in PowerPoint that shows Different Types Of Computer Memories.
17. Type any essay/topic in MS Word using any punjabi font.

Charts/Models

- Prepare a chart/model showing the various services provided by the Internet.
- Prepare a chart/model related to different Generations of Computers.
- Prepare a chart/model showing different Types of Computer Memories.
- Prepare a chart/model showing the Physical Structure of a Magnetic Disk.