# COMPUTER SYLLABUS

# Class - 6

# **6**<sup>th</sup> Class Computer Syllabus – An Overview

For Class 6, the NCERT Computer Science syllabus expands on earlier concepts and introduces more sophisticated topics. Here's a detailed breakdown of the topics and sub-topics typically covered:

# Here our chapters for ITSE Examination :-

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Chapter – 1 ( Introduction to Computers )
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**Chapter - 2 (Computer Hardware)** 

Chapter – 3 ( Software and Operating Systems )

Chapter – 4 (Using Word Processors)

**Chapter - 5 ( Presentation Software )** 

Chapter - 6 (Spreadsheets and Data Handling)

Chapter – 7 ( Internet and Web Technologies )

Chapter - 8 (Introduction to Multimedia)

**Chapter - 9 (** *Basics of Coding and Programming* )

Chapter - 10 (Ethical and Responsible use of Technology)

**Chapter - 11 (** *Practical Applications and Projects* )

# **Chapter – 1 (Introduction to Computers)**

## Topics and Sub - Topics :-

#### • Understanding Computers

- Definition and importance of computers in various fields.
- Evolution and history of computers.

## • Types of Computers

- Categories based on size and function: Supercomputers, Mainframes, Desktops, Laptops, Tablets.
- Introduction to modern devices like Smartphones and IoT devices.

# **Chapter - 2 (Computer Hardware)**

## Topics and Sub - Topics :-

#### • Detailed Study of Hardware Components

- Internal parts: CPU, Memory (RAM, ROM), Storage (HDD, SSD).
- External devices: Input devices (Keyboard, Mouse, Scanner), Output devices (Monitor, Printer, Speakers).

#### • Storage Devices

- Types of storage: Hard Disk, SSD, USB Flash Drives, CD/DVD, Cloud Storage.
- Understanding how data is stored and accessed.

# Chapter - 3 ( Software and Operating Systems )

## Topics and Sub - Topics :-

• Types of Software

- System Software: Operating Systems (Windows, macOS, Linux).
- Application Software: Word Processors, Spreadsheets, Graphics Software.

#### Functions of an Operating System

- o Managing hardware and software resources.
- o User interface and file management.

# Chapter – 4 (Using Word Processors)

# Topics and Sub - Topics :-

- Advanced Word Processing
  - Creating and formatting documents: Text alignment, styles, and themes.
  - Inserting and formatting images, tables, and charts.

#### • Document Collaboration

- Track changes and comments.
- Sharing documents for collaborative editing.

# **Chapter - 5 ( Presentation Software )**

# Topics and Sub – Topics :-

- Creating Effective Presentations
  - o Designing slides with text, images, and multimedia.
  - Using transitions and animations.

## • Delivering Presentations

o Tips for effective presentation delivery.

o Reviewing and printing slides.

# **Chapter - 6 (Spreadsheets and Data Handling)**

## Topics and Sub - Topics :-

## • Basics of Spreadsheets

- Introduction to cells, rows, columns, and worksheets.
- Entering and formatting data.

#### • Formulas and Functions

- Using basic mathematical and logical formulas.
- Applying functions for data analysis (SUM, AVERAGE, COUNT).

#### • Data Visualization

- Creating and customizing charts and graphs.
- Using conditional formatting to highlight data.

# Chapter - 7 (Internet and Web Technologies)

# Topics and Sub - Topics :-

#### • Understanding the Internet

- Basic concepts of how the internet works.
- Introduction to web browsers and search engines.

#### • Online Communication

- Using email and instant messaging.
- Basics of video conferencing and online meetings.

## • Internet Safety

- Recognizing and avoiding online threats (malware, phishing).
- Safe browsing and secure online practices.

# Chapter - 8 (Introduction to Multimedia)

Topics and Sub - Topics :-

#### • Elements of Multimedia

- o Understanding text, graphics, audio, video, and animation.
- Examples of multimedia applications in education and entertainment.

## • Creating Multimedia Projects

- o Using software to create simple multimedia presentations.
- o Combining different media elements effectively.

# **Chapter - 9 (Basics of Coding and Programming)**

Topics and Sub - Topics :-

## • Introduction to Programming

- Understanding programming concepts and algorithms.
- Introduction to programming languages (Scratch, Python basics).

## • Block-based Programming

• Creating simple programs using block-based tools like Scratch.

• Basic concepts: loops, conditionals, variables.

#### • Text-based Programming

- Introduction to basic syntax and commands in text-based languages.
- Writing simple scripts and programs.

# **Chapter - 10 (Ethical and Responsible use of Technology)**

## Topics and Sub - Topics :-

#### • Digital Citizenship

- Understanding digital rights and responsibilities.
- Respecting digital property and avoiding plagiarism.

## • Cyber Ethics

- Ethical behavior in online environments.
- Importance of strong passwords and protecting personal information.

# Chapter - 11 (*Practical Applications and Projects*)

# Topics and Sub – Topics :-

## • Integrated Projects

- Applying knowledge from different topics to create comprehensive projects.
- Examples: Creating a newsletter, designing a website, developing a simple game.

## • Hands-on Activities

- Practical exercises to reinforce learning.
- Group projects to enhance teamwork and collaboration skills.