

BUDHA DAL PUBLIC SCHOOL, PATIALA

LESSON PLAN OF CLASS VII (SUBJECT: COMPUTER) Term –I & Term-II Syllabus (Session 2024-25)

Term – 1

Ch – 1 Number System

Ch – 3 Photoshop Introduction

Ch – 4 Photoshop Working with Layers

Ch – 5 Internet – Ethics & Safeguards

Term - 2

Ch – 6 HTML5 – Creating WebPages using CSS

Ch – 7 HTML5 – Images, Links and Tables

Ch-8 Python-Conditional Control Structures and Turtle

Ch – 10 AI for Sustainable Development Goals

Month-Wise Distribution

APRIL –

Ch – 1 Number System

MAY –

Ch – 3 Photoshop Introduction

JULY –

Ch – 4 Photoshop Working with Layers

AUGUST –

Ch – 5 Internet – Ethics & Safeguards

SEPTEMBER

Revision + Half yearly exam

OCTOBER -

Ch – 6 HTML5 – Creating WebPages using CSS

NOVEMBER –

Ch – 7 HTML5 – Images, Links and Tables

DECEMBER –

Ch-8 Python-Conditional Control Structures and Turtle

JANUARY –

Ch – 10 AI for Sustainable Development Goals

FEBRUARY –

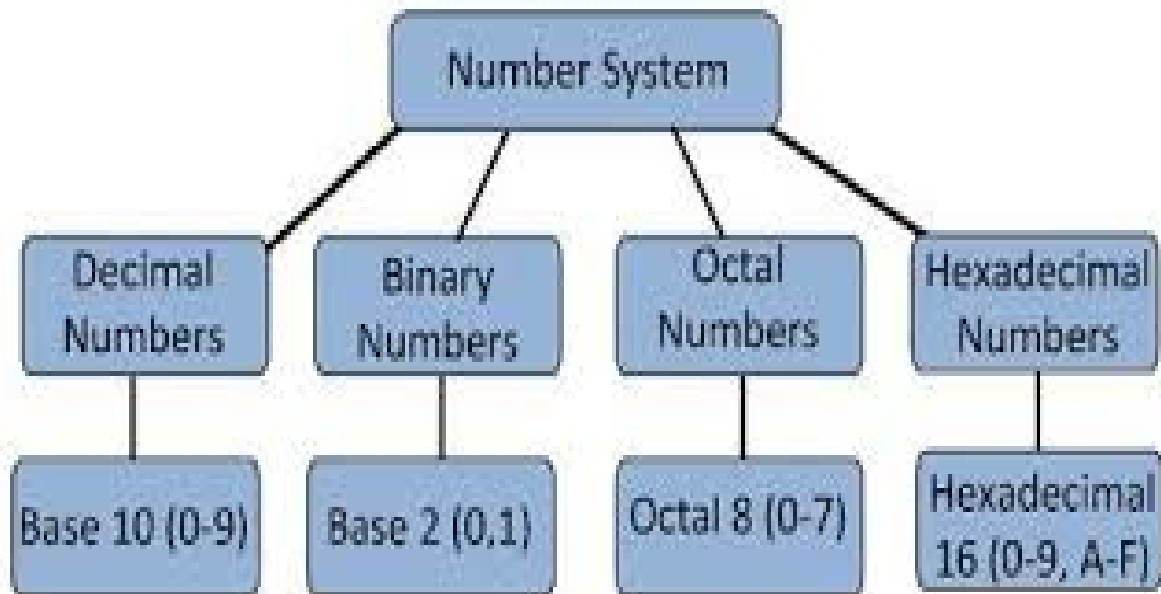
Revision for Final exam

MARCH –

Final Term Exams

Term-I

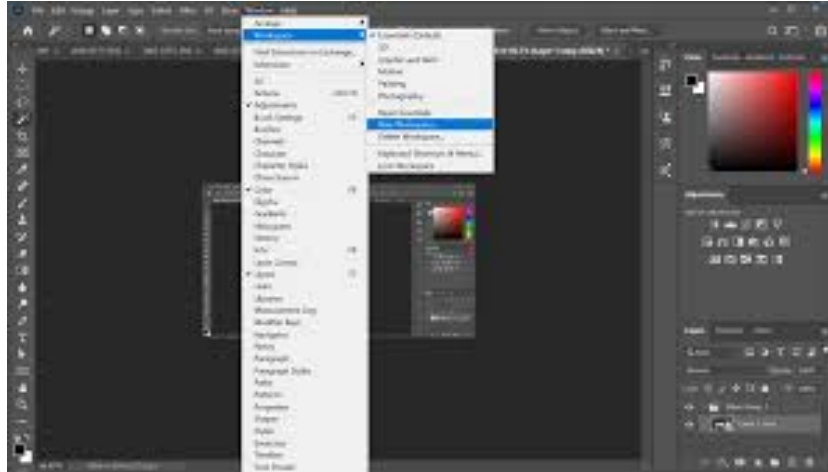
April – Chapter 1: Number System



Lesson Plan: Chapter 1 - Number System

- **Topics:**
 - Introduction to Number Systems
 - Types of Number Systems (Binary, Decimal, Octal, Hexadecimal)
 - Conversion between Number Systems
 - Binary Arithmetic
 - Applications of Number Systems in Computing
- **Learning Objectives:**
 - Understand different number systems and their significance.
 - Convert numbers between binary, decimal, octal, and hexadecimal systems.
 - Perform basic binary arithmetic operations.
 - Appreciate the role of number systems in computer science.
- **Art & Integrated Activity/Project/Practical:**
 - Practice number system conversions with exercises.
 - Create charts and diagrams to visualize number systems.
 - Develop simple programs to perform number system conversions.
 - Explore binary arithmetic through hands-on activities.
- **Expected Learning Outcomes:**
 - Students will be proficient in converting between number systems.
 - They will perform basic binary arithmetic operations accurately.
 - Students will understand the applications of number systems in computing.
- **Assignment and Assessments/Test:**
 - Assignments on number system conversions and binary arithmetic.
 - Quizzes on types of number systems and their applications.
 - Practical tests on conversion and arithmetic operations.
- **Remedial Measures:**
 - Extra practice sessions and step-by-step guides on number systems.
 - Video tutorials on conversion techniques and binary arithmetic.
 - Personalized feedback and one-on-one assistance for specific challenges.

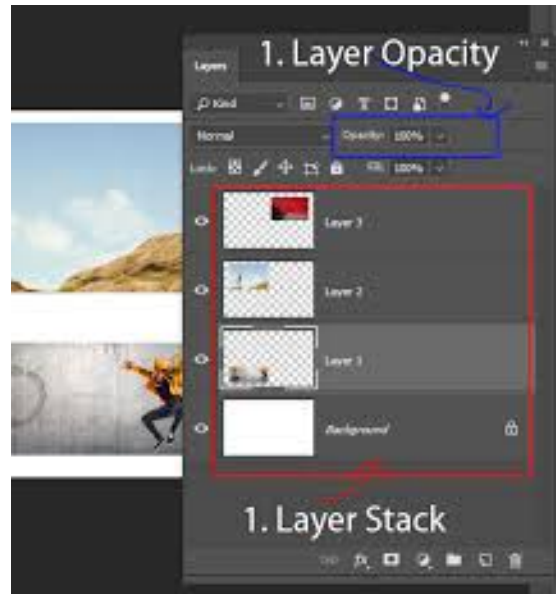
May – Chapter 3: Photoshop Introduction



Lesson Plan: Chapter 3 - Photoshop Introduction

- **Topics:**
 - Introduction to Photoshop Interface
 - Basic Tools and Their Functions
 - Working with Layers
 - Basic Image Editing Techniques
 - Saving and Exporting Images
- **Learning Objectives:**
 - Navigate the Photoshop interface and identify basic tools.
 - Use basic Photoshop tools for image editing.
 - Understand the concept of layers and their importance.
 - Save and export edited images in different formats.
- **Art & Integrated Activity/Project/Practical:**
 - Hands-on practice with basic Photoshop tools.
 - Simple image editing projects to apply learned techniques.
 - Create layered compositions to understand layer functionality.
 - Export images in various formats for different uses.
- **Expected Learning Outcomes:**
 - Students will navigate and use the Photoshop interface confidently.
 - They will perform basic image editing tasks using Photoshop tools.
 - Students will understand and work with layers effectively.
 - They will save and export images in suitable formats.
- **Assignment and Assessments/Test:**
 - Assignments on using basic Photoshop tools and editing images.
 - Quizzes on Photoshop interface and tool functions.
 - Practical tests on creating layered compositions and exporting images.
- **Remedial Measures:**
 - Extra practice sessions and step-by-step guides on Photoshop basics.
 - Video tutorials on using Photoshop tools and editing techniques.
 - Personalized feedback and one-on-one assistance for specific challenges.

July – Chapter 4: Photoshop Working with Layers



Lesson Plan: Chapter 4 - Photoshop: Working with Layers

- **Topics:**
 - Advanced Layer Techniques
 - Layer Styles and Effects
 - Using Adjustment Layers
 - Layer Masks and Clipping Masks
 - Organizing and Managing Layers
- **Learning Objectives:**
 - Apply advanced techniques for working with layers.
 - Use layer styles and effects to enhance images.
 - Utilize adjustment layers for non-destructive editing.
 - Understand and apply layer masks and clipping masks.
 - Organize and manage layers efficiently in complex projects.
- **Art & Integrated Activity/Project/Practical:**
 - Advanced projects utilizing layer styles and effects.
 - Practice using adjustment layers for various edits.
 - Create compositions using layer masks and clipping masks.
 - Manage and organize layers in multi-layered projects.
- **Expected Learning Outcomes:**
 - Students will apply advanced layer techniques in Photoshop.
 - They will use layer styles and effects to enhance their projects.
 - Students will edit images non-destructively with adjustment layers.
 - They will effectively use layer masks and clipping masks.
- **Assignment and Assessments/Test:**
 - Assignments on advanced layer techniques and effects.
 - Quizzes on layer functionalities and their applications.
 - Practical tests on managing and organizing layers in complex projects.
- **Remedial Measures:**
 - Extra practice sessions and step-by-step guides on advanced layer techniques.
 - Video tutorials on using layer styles, masks, and adjustment layers.
 - Personalized feedback and one-on-one assistance for specific challenges.

August – Chapter 5: Internet – Ethics & Safeguards



Lesson Plan: Chapter 5 - Internet: Ethics & Safeguards

- **Topics:**
 - Introduction to Internet Ethics
 - Understanding Online Privacy and Security
 - Recognizing and Preventing Cyber Threats
 - Ethical Behavior in Online Communication
 - Safe Internet Practices and Safeguards
- **Learning Objectives:**
 - Understand the importance of internet ethics and safe practices.
 - Learn about online privacy, security, and how to protect oneself.
 - Recognize common cyber threats and preventive measures.
 - Practice ethical behavior in online communication.
 - Implement safe internet practices and use safeguards effectively.
- **Art & Integrated Activity/Project/Practical:**
 - Research and presentations on internet ethics and cyber threats.
 - Simulate scenarios involving online privacy and security breaches.
 - Create guides for safe internet practices and ethical behavior.
 - Practice implementing safeguards in various online activities.
- **Expected Learning Outcomes:**
 - Students will understand internet ethics and the importance of safe practices.
 - They will protect their online privacy and security effectively.
 - Students will recognize and prevent common cyber threats.
 - They will practice ethical behavior in online communication.
- **Assignment and Assessments/Test:**
 - Assignments on internet ethics and safe practices.
 - Quizzes on online privacy, security, and cyber threats.
 - Practical tests on implementing safeguards and ethical online behavior.
- **Remedial Measures:**
 - Extra practice sessions and step-by-step guides on internet safety.

- Video tutorials on recognizing and preventing cyber threats.
- Personalized feedback and one-on-one assistance for specific challenges.

September – Revision + Half Yearly Exam

Lesson Plan: Revision and Exam Preparation

Term-II

October – Chapter 6: HTML5 – Creating Webpages using CSS

Lesson Plan: Chapter 6 - HTML5: Creating Webpages using CSS

```
<!DOCTYPE html>
<html>

<head>
<title>My First Webpage</title>
<meta name="viewport" content="width=device
<link rel="stylesheet" type="text/css" href
</head>

<body>

<div class="container">

<h1>Heading 1</h1>
```

- **Topics:**
 - Introduction to HTML5 and CSS
 - HTML5 Structure and Basic Tags
 - Applying CSS for Styling Webpages
 - Creating Layouts with CSS
 - Responsive Design Principles
- **Learning Objectives:**
 - Understand the basics of HTML5 and CSS.
 - Use HTML5 tags to structure web pages.
 - Apply CSS for styling and enhancing web pages.
 - Create web page layouts using CSS.
 - Implement responsive design principles for mobile compatibility.
- **Art & Integrated Activity/Project/Practical:**
 - Hands-on projects creating and styling web pages.
 - Design web page layouts using CSS.
 - Practice responsive design techniques for mobile-friendly pages.
 - Develop a small website project integrating HTML5 and CSS skills.
- **Expected Learning Outcomes:**
 - Students will structure and style web pages using HTML5 and CSS.
 - They will create effective layouts for web pages.
 - Students will implement responsive design for mobile compatibility.
 - They will develop a functional small website.
- **Assignment and Assessments/Test:**
 - Assignments on creating and styling web pages using HTML5 and CSS.
 - Quizzes on HTML5 tags, CSS properties, and responsive design.
 - Practical tests on developing web page layouts and designs.

- **Remedial Measures:**
 - Extra practice sessions and step-by-step guides on HTML5 and CSS.
 - Video tutorials on creating web pages and applying CSS.
 - Personalized feedback and one-on-one assistance for specific challenges.

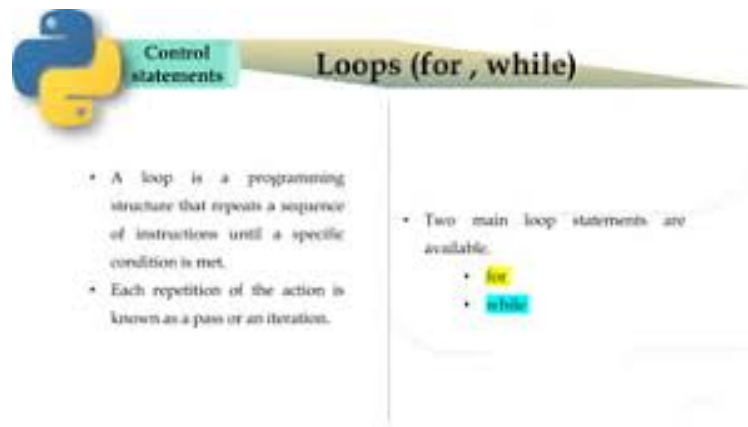
November – Chapter 7: HTML5 – Images, Links, and Tables



Lesson Plan: Chapter 7 - HTML5: Images, Links, and Tables

- **Topics:**
 - Adding and Styling Images in HTML5
 - Creating and Managing Hyperlinks
 - Structuring Data with HTML5 Tables
 - Advanced Table Styling with CSS
 - Accessibility Considerations
- **Learning Objectives:**
 - Insert and style images in HTML5 web pages.
 - Create and manage hyperlinks effectively.
 - Structure data using HTML5 tables.
 - Apply advanced CSS styling to enhance tables.
 - Ensure web pages are accessible.
- **Art & Integrated Activity/Project/Practical:**
 - Projects incorporating images, links, and tables in web pages.
 - Practice styling images and tables with CSS.
 - Develop web pages with well-structured data using tables.
 - Implement accessibility features in web designs.
- **Expected Learning Outcomes:**
 - Students will effectively use images, links, and tables in web pages.
 - They will apply advanced CSS styling to enhance web elements.
 - Students will structure data using HTML5 tables.
 - They will ensure web pages are accessible and user-friendly.
- **Assignment and Assessments/Test:**
 - Assignments on adding and styling images, links, and tables.
 - Quizzes on HTML5 elements and CSS styling techniques.
 - Practical tests on developing web pages with structured data.
- **Remedial Measures:**
 - Extra practice sessions and step-by-step guides on HTML5 elements.
 - Video tutorials on styling images, links, and tables with CSS.
 - Personalized feedback and one-on-one assistance for specific challenges.

December – Chapter 8: Python – Conditional Control Structures and Turtle



Lesson Plan: Chapter 8 - Python: Conditional Control Structures and Turtle

- **Topics:**
 - Conditional Statements (if, elif, else)
 - Loops (for, while) and Their Applications
 - Introduction to Turtle Graphics
 - Drawing Shapes and Patterns with Turtle
 - Combining Control Structures and Turtle Graphics
- **Learning Objectives:**
 - Use conditional statements to control the flow of programs.
 - Implement loops for repetitive tasks in Python.
 - Create drawings and patterns using Turtle graphics.
 - Combine control structures and Turtle graphics for complex projects.
- **Art & Integrated Activity/Project/Practical:**
 - Hands-on programming exercises with conditional statements and loops.
 - Create drawings and patterns using Turtle graphics.
 - Develop projects combining control structures and Turtle graphics.
 - Explore creative coding projects with Turtle.
- **Expected Learning Outcomes:**
 - Students will use conditional statements and loops effectively in Python.
 - They will create drawings and patterns using Turtle graphics.
 - Students will combine control structures and Turtle graphics for complex projects.
 - They will develop creative coding projects using Python.
- **Assignment and Assessments/Test:**
 - Assignments on using conditional statements, loops, and Turtle graphics.
 - Quizzes on control structures and Turtle functions.
 - Practical tests on developing projects with conditional control structures and Turtle.
- **Remedial Measures:**
 - Extra practice sessions and step-by-step guides on Python control structures.
 - Video tutorials on using Turtle graphics in Python.
 - Personalized feedback and one-on-one assistance for specific challenges.

January – Chapter 10: AI for Sustainable Development Goals



Lesson Plan: Chapter 10 - AI for Sustainable Development Goals

- **Topics:**
 - Introduction to Sustainable Development Goals (SDGs)
 - Role of AI in Achieving SDGs
 - AI Applications in Healthcare, Education, and Environment
 - Ethical Considerations in AI for SDGs
 - Case Studies of AI Projects Supporting SDGs
- **Learning Objectives:**
 - Understand the Sustainable Development Goals (SDGs) and their importance.
 - Explore the role of AI in achieving SDGs.
 - Learn about AI applications in various sectors supporting SDGs.
 - Discuss ethical considerations in AI for SDGs.
 - Analyze case studies of AI projects supporting SDGs.
- **Art & Integrated Activity/Project/Practical:**
 - Research and presentations on AI applications for SDGs.
 - Explore case studies of AI projects supporting SDGs.
 - Develop project ideas integrating AI for specific SDGs.
 - Discuss and debate ethical issues in AI for SDGs.
- **Expected Learning Outcomes:**
 - Students will understand the importance of SDGs and AI's role in achieving them.
 - They will explore AI applications in various sectors supporting SDGs.
 - Students will develop project ideas integrating AI for SDGs.
 - They will discuss and address ethical considerations in AI for SDGs.
- **Assignment and Assessments/Test:**
 - Assignments on researching and presenting AI applications for SDGs.
 - Quizzes on SDGs and AI's role in achieving them.
 - Practical tests on developing project ideas integrating AI for SDGs.
- **Remedial Measures:**
 - Extra practice sessions and step-by-step guides on AI and SDGs.
 - Video tutorials on AI applications in various sectors.
 - Personalized feedback and one-on-one assistance for specific challenges.

February – Revision for Final Exam

March – Final Term Exams