BUDHA DAL PUBLIC SCHOOL, PATIALA
LESSON PLAN OF CLASS VI (SUBJECT: COMPUTER)
Term –I & Term-II Syllabus (Session 2025-26)

Month-Wise Distribution

April

Lesson-1 Types and Languages of Computers

May

Lesson-3 Advanced Features of Word

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Lesson-4 Formatting in Excel

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Lesson-6 Using Electronic Mail (Email)

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Syllabus of Term – I

Lesson-1 Types and Languages of Computers
Lesson-3 Advanced Features of Word
Lesson-4 Formatting in Excel
Lesson-5 Functions in Excel

Syllabus of Term - II

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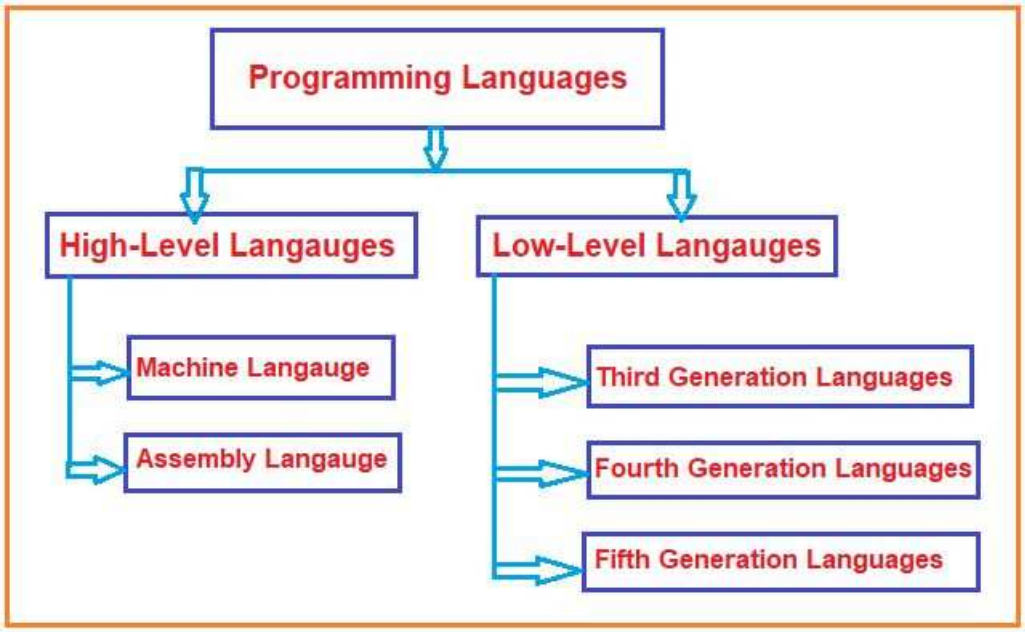
Lesson-7 Digital Citizenship
Lesson-8 Introduction to Python
Lesson-9 Artificial Intelligence

Term-1

Month :- April

Lesson 1: Types and Languages of Computers



Topics:

1. Types of Computers
2. Classification Based on Types of Data (Analog, Digital, Hybrid)
3. Classification Based on Size (Super Computer, Mainframe, Mini, Micro, Desktop)
4. Computer Languages (Assembly, High-Level, Fourth & Fifth Generation)

Learning Objectives:

By the end of the lesson, students will be able to:

- Identify and describe different types of computers.
- Understand how computers process different types of data (Analog, Digital, Hybrid).
- Differentiate computers based on their size and usage.
- Recognize various types of computer languages and their role in programming.
- Develop an interest in how computers work and their applications in daily life.
- Relate computer classifications to real-world examples they encounter.

Teaching Aids/Materials Required:

- Smart board /Projector for visuals
- Flashcards with different computer types
- Charts/Posters illustrating computer sizes
- Examples of simple codes in different languages
- Short videos explaining the evolution of computers

Teaching Methodology:

- Introduction: Ask students, "Can you name different types of computers you have seen?" (Encourage responses like laptops, desktops, supercomputers, etc.)
- Explanation: Use real-life examples and visuals to explain:
  - Types of Computers (where and how they are used)

    - Classification Based on Data Processing (Compare Analog to a thermometer, Digital to a smartphone, and Hybrid to a medical machine)
    - Classification Based on Size (Explain that supercomputers are the "giants," desktops are for personal use, etc.)
    - Computer Languages (Introduce the idea of programming as giving instructions to a computer)
- Activity:
    - Group students and ask them to match computer types to their real-world uses.
    - Let them create a small chart showing classifications.
- Discussion & Recap: Summarize key points and ask students quiz-like questions to check their understanding.

Art & Integrated Activity/Project/Practical:

- **Drawing Activity:** Students will draw and label different types of computers.
- **Worksheet:** Fill in the blanks and match-the-following exercises on computer types.
- **Practical Activity:** Show students a simple code in a high-level language (like Scratch) and discuss how it works.
- **Group Presentation:** Each group picks a type of computer or language and presents key facts.

Expected Learning Outcomes:
After the lesson, students will:

- Be able to name different types of computers and their uses.
- Understand how computers process different types of data.
- Know the difference between Super, Mainframe, Mini, Micro, and Desktop computers.
- Recognize computer languages and how they help create programs.
- Develop curiosity about how computers work and their role in technology.

Assignments & Assessments:

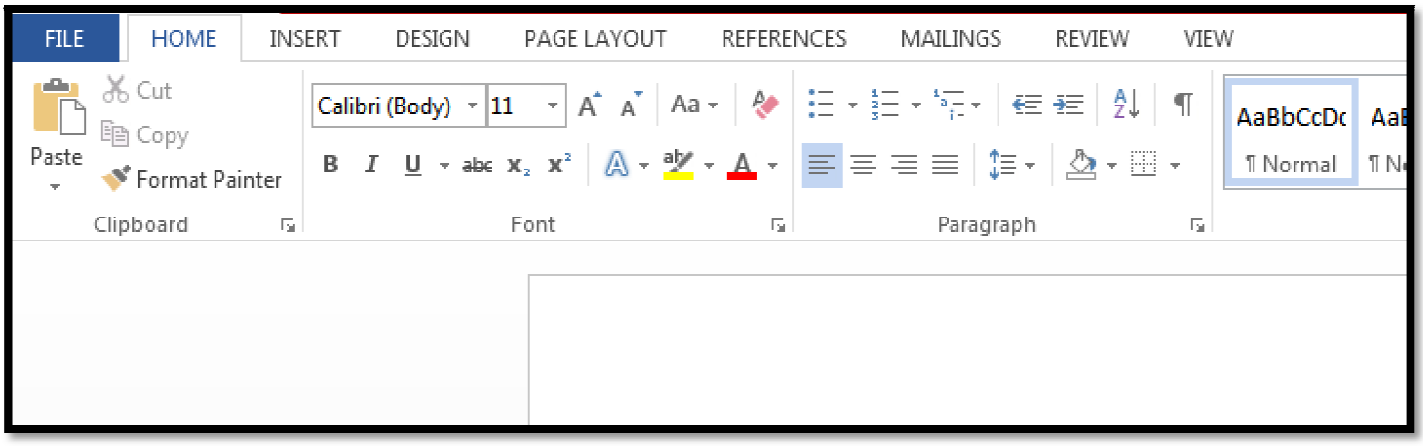
- **Homework:** Write five examples of where each type of computer is used.
- **Classwork:** A worksheet on matching computers to their types.
- **Quiz:** Short MCQ-based quiz on classification of computers and languages.
- **Project:** Research and present about one famous supercomputer.

Remedial Measures:

- Use real-life examples (e.g., smartphones = digital computers) for better understanding.
- Show animated videos on how computers are classified.
- Pair students together to explain topics in simpler terms.
- Provide extra practice sheets for students who need more support.
- Conduct quizzes for revision.

Month :- May

Lesson-3 Advanced Features of Word



Topics to be covered:

- Headers and Footers
- Finding and Replacing Text in a Document
- Using Mail Merge
- Checking Spelling and Using Thesaurus

Learning Objectives:

By the end of this lesson, students will be able to:

- Insert and customize headers and footers in a Word document.
- Utilize the 'Find and Replace' feature to efficiently edit text.
- Understand the basics of Mail Merge for creating personalized documents.
- Use the spell check and thesaurus tools to enhance document quality.
- Appreciate the importance of these advanced features in creating professional documents.
- Apply these tools to improve their own writing and editing processes.

Teaching Aids/Materials Required:

- Computers with Microsoft Word installed
- Projector or interactive whiteboard
- Sample documents for practice
- Handouts detailing step-by-step instructions for each feature
- Visual aids illustrating the location of each tool in the Word interface

Teaching Methodology:

Introduction: Begin by discussing the importance of creating polished and professional documents. Ask students if they've ever noticed uniform headers or corrected spelling in books or articles.

Explanation:

- **Headers and Footers:** Demonstrate how to insert headers and footers, explaining their purpose in adding consistent information like page numbers or titles across all pages.
- **Find and Replace:** Show how to quickly locate specific words or phrases and replace them, emphasizing its usefulness in editing lengthy documents.

    - **Mail Merge:** Introduce the concept of Mail Merge for generating personalized letters or labels, highlighting its efficiency in handling bulk correspondence.
    - **Spell Check and Thesaurus:** Explain how to use these tools to correct spelling errors and enhance vocabulary, improving the overall quality of their writing.
- **Activity:**
    - **Headers and Footers:** Have students add a header with their name and a footer with the date to a sample document.
    - **Find and Replace:** Provide a document where they need to replace a repeated word with a synonym.
    - **Mail Merge:** Guide students through a simple Mail Merge exercise, such as creating a form letter with placeholders for names.
    - **Spell Check and Thesaurus:** Assign a paragraph with intentional spelling errors and overused words for students to correct and improve using these tools.
- **Discussion & Recap:** Summarize the day's topics, encouraging students to share their experiences with the new features and discuss how these tools can aid in their future assignments.

Art & Integrated Activity/Project/Practical:

- **Creative Document Design:** Students will create a one-page newsletter incorporating headers, footers, and at least one instance of each feature learned.
- **Peer Review:** In pairs, students will exchange documents to check for spelling errors and suggest synonyms using the thesaurus.
- **Mail Merge Project:** Collaboratively, the class will create invitation letters for a school event using Mail Merge, personalizing each with recipient names.

Expected Learning Outcomes:

After the lesson, students will:

- Confidently use headers and footers to enhance document structure.
- Efficiently edit documents using the 'Find and Replace' feature.
- Understand the purpose and basic process of Mail Merge.
- Improve their writing by utilizing spell check and thesaurus tools.
- Recognize the value of these advanced features in producing professional and error-free documents.

Assignments & Assessments:

- **Homework:** Create a two-page document on a topic of choice, incorporating headers, footers, and correcting any spelling errors.
- **Classwork:** Complete a worksheet with scenarios requiring the use of 'Find and Replace' and thesaurus tools.
- **Quiz:** Short multiple-choice and practical questions assessing their understanding of each feature.
- **Project:** Develop a personalized certificate for each classmate using Mail Merge, applying appropriate design elements and ensuring accuracy.

Remedial Measures:

- Provide additional one-on-one guidance for students struggling with specific features.
- Offer simplified handouts with visual step-by-step instructions.
- Utilize peer tutoring to reinforce learning, pairing students who grasp the concepts with those needing more assistance.
- Conduct a follow-up session focusing on practical application and addressing any lingering questions.

Month July –

Lesson-4 Formatting in Excel

Topics:

- Formatting the Column Width and Row Height
- Formatting Using Font Group
- Formatting Text Using Alignment Group
- Formatting Data Using Number Group

Learning Objectives:

By the end of this lesson, students will be able to:

- Changing thecolumn's and row's width and height.
- Applying border and colour to a cell.
- Alignment the given text(left, right, center, wrapping, diagonal).
- Apply Currency formatting, adjusting commas and the number of decimal places to display.
- Applying bold, italics and underline to the text.
- Applying fill color to cells.

Teaching Aids/Materials Required:

- Computers with Microsoft Word installed
- Projector or interactive whiteboard
- Sample documents for practice
- Handouts detailing step-by-step instructions for each feature
- Visual aids illustrating the location of each tool in the Word interface

Teaching Methodology:

- **Introduction:** Begin by discussing the importance of formatting the document using various features.
    - **Changing Column Width and row height:** Demonstrate how to change the width of the column and height of row by selecting a particular cell.
    - **Applying Fill Color to Cells:** Select a range of cells and then click on the Home tab to fill the colors.
    - **Aligning the Text:** Explain the different alignment to the students i.e. align text middle, align text bottom, align text diagonal, wrap text in cell etc.
    - **Formatting data using number group:** Type the data in the cells and format the cells to display currency data where applicable.

Art & Integrated Activity/Project/Practical:

- **Students will implement all the steps in their practical class:**
    - **Changing Column Width and row height:** Students will increase the width of the column and height of a row.
    - **Applying Fill Color to Cells:** Students will select a range of cells and then click on the Home tab to fill the colors.
    - **Aligning the Text:** Students will write the text and apply the different types of alignments like middle, align text bottom, align text diagonal, wrap text in cell etc.
    - **Formatting data using number group:** Students will type the data in the cells and format the cells to display currency data where applicable.

Expected Learning Outcomes:

After the lesson, students will:

- .**Understanding Cell Formatting:**
  - **Text Formatting**: Learn how to format text by changing font styles, sizes, colors, and applying bold, italics, or underlining to make data more readable and visually appealing.
  - **Number Formatting**: Gain the ability to format numbers, including currency, percentage, scientific notation, and custom formats to display data in a more meaningful way.
  - **Date and Time Formatting**: Understand how to format dates and times, ensuring they are displayed correctly and consistently for data analysis or reporting purposes.

- . Cell Alignment and Merging
  - **Text Alignment**: Learn how to adjust text alignment (left, center, right) and vertical alignment within cells to improve data organization.
  - **Merging Cells**: Learn to merge multiple cells to create headers or labels that span across columns and rows, helping to organize large datasets more clearly.

- Working with Borders and Shading
  - **Borders**: Understand how to apply borders to cells, rows, or columns to enhance readability and create clean, structured tables.
  - **Shading and Background Colors**: Learn to use shading and background colors to highlight specific data ranges, which can improve clarity and make reports more visually appealing.

Assignment and Assessments / Test:

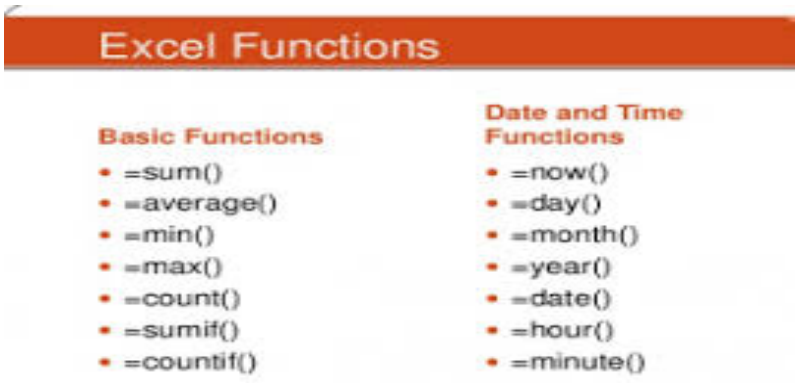
- Assessments will consist of quizzes and practical tests to evaluate students' understanding and application of the topics covered:
  - Format the **Salary** column to display currency (e.g., $50,000.00).
  - Aligning the written text in different alignment.
  - Giving the background and border to the cells.

Remedial Measures:

For students needing additional support, remedial measures will include providing extra practice sessions, step-by-step guides, video tutorials, and one-on-one assistance. Additional resources such as templates, examples, and interactive tutorials will be available to help students master the skills and concepts. Personalized feedback will be given to address specific areas of difficulty.

Month-August

–Lesson5: Functions in Excel



Topics:

- Calculations in Excel
- Using Cell References
- Using AutoSum References
- Using Functions from the Function Library
- Errors Results in Excel

Learning Objectives:
By the end of this lesson, students will be able to:

- Understand and use basic mathematical functions like SUM, AVERAGE, MIN, MAX, and COUNT to perform arithmetic operations and aggregate data.
- Use date and time functions like TODAY, NOW, DATE, DATEDIF, and NETWORKDAYS to perform calculations related to dates and times.
- Students will be able to perform various cell referencing like relative, absolute and mixed.
- Using Functions from the Function Library.
- Learn to use error-handling functions like IFERROR, ISERROR, and ISNA to deal with potential errors in formulas and improve spreadsheet reliability.

Teaching Aids/Materials Required:

- Computers with Microsoft Word installed
- Projector or interactive whiteboard
- Sample documents for practice
- Handouts detailing step-by-step instructions for each feature
- Visual aids illustrating the location of each tool in the Word interface

Teaching Methodology:

- **Introduction:** Begin by discussing the importance of formatting the document using various features.
- **Objective**: Familiarize students with Excel functions, their structure, and how they differ from simple calculations.
- **Approach**:
    - Start by explaining the **basic structure of a function**: Function name, arguments, and parentheses.
    - Explain why functions are important in Excel—automating repetitive tasks, solving complex problems, and improving productivity.
    - Give an overview of the most commonly used functions: SUM, AVERAGE, COUNT, IF, etc.
    - Explanation of cell references and their significance in Excel formulas. • Step-by-step demonstration on how to use cell references in formulas for dynamic calculations. • Hands-on activity for stud
    - Explanation of common errors in Excel formulas (e.g., #DIV/0!, #VALUE!, #REF!). • Strategies for identifying and correcting errors in formulas

Art & Integrated Activity/Project/Practical:

- By the end of this practical session, students will be able to apply Excel functions to perform calculations, analyze data, and manage different types of data efficiently.
- Open a new Excel workbook.
- In cells A1 to A5, enter the following numbers:
    - 10
    - 25
    - 30

- 40
- 50

- In cell B1, use the SUM function to calculate the total of numbers in cells A1 to A5.
- Formula: =SUM(A1:A5)
- In cell B2, use the AVERAGE function to calculate the average of numbers in cells A1 to A5.
- Formula: =AVERAGE(A1:A5)
- In cell B3, use the MIN function to find the minimum number in cells A1 to A5.
- Formula: =MIN(A1:A5)
- In cell B4, use the MAX function to find the maximum number in cells A1 to A5.
- Formula: =MAX(A1:A5)
- In cell B5, use the COUNT function to count the number of numbers in cells A1 to A5.
- Formula: =COUNT(A1:A5)
    - cells to display currency data where applicable.

Expected Learning Outcomes:
After the lesson, students will:

- **By the end of this lesson, students will be able to:**
    - Understand and use basic mathematical functions like SUM, AVERAGE, MIN, MAX, and COUNT to perform arithmetic operations and aggregate data.
    - Use date and time functions like TODAY, NOW, DATE, DATEDIF, and NETWORKDAYS to perform calculations related to dates and times.
    - Students will be able to perform various cell referencing like relative, absolute and mixed.
    - Using Functions from the Function Library.
    - Learn to use error-handling functions like IFERROR, ISERROR, and ISNA to deal with potential errors in formulas and improve spreadsheet reliability.

Assignment and Assessments / Test:

- Assessments will consist of quizzes and practical tests to evaluate students' understanding and application of the topics covered:
- Assignment:
- Basic Arithmetic Functions (SUM, AVERAGE, MIN, MAX)

In **column A**, enter the following numbers:

- 10, 20, 30, 40, 50, 60, 70, 80, 90, 100

In **column B**, calculate the following:

- **B1:** Use the SUM function to calculate the total of numbers in column A.
- **B2:** Use the AVERAGE function to calculate the average of numbers in column A.
- **B3:** Use the MIN function to find the smallest number in column A.
- **B4:** Use the MAX function to find the largest number in column A.

Remedial Measures:

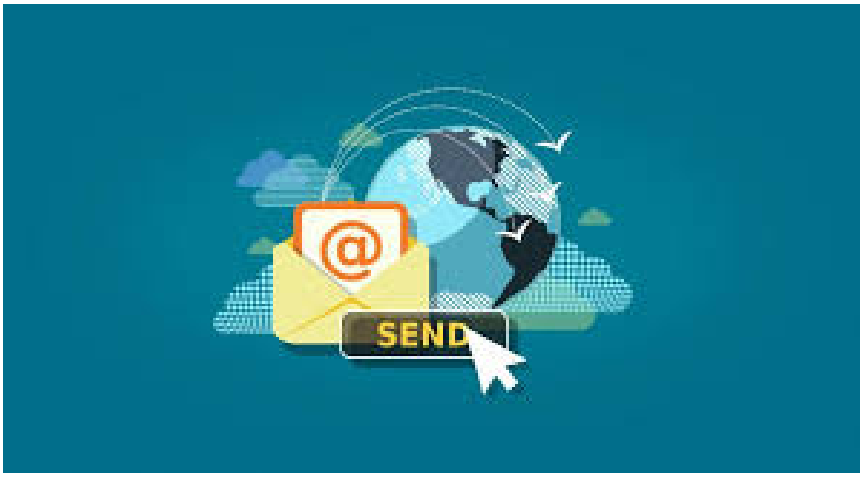
For students needing additional support, remedial measures will include providing extra practice sessions, step-by-step guides, video tutorials, and one-on-one assistance. Additional resources such as templates, examples, and interactive tutorials will be available to help students master the skills and concepts. Personalized feedback will be given to address specific areas of difficulty

September – Revision + Half Yearly Exam

Term-II

Month –October

Lesson 6: Using Electronic Mail(email)



Topics:

- What is an Electronic Mail
- Creating an Email Account
- Writing an Email
- Opening, Replying, Forwarding and Deleting an Email
- Some Miscellaneous Aspects of Using Emails
- Use of Emotions

Learning Objectives:

By the end of this lesson, students will be able to:

- To Create the Email Account.
- Writing an Email.
- Opening, Replying, Forwarding and Deleting an Email
- Understand some miscellaneous aspects of using Email.
- Use of Emoticons

Art & Integrated Activity/Project/Practical:

- Assignments will include tasks such as creating
- Assessments will consist of quizzes and practical tests to evaluate students' understanding and application of the topics covered:

TASK 1: Composing an Email

1. Open your email account.
2. Compose a new email:
    - **Recipient:** Enter an email address (use your own if you don't have another recipient).
    - **Subject:** Enter a relevant subject (e.g., "Meeting Reminder" or "Assignment Submission").
    - **Body of the email:** Write a brief email. Include a greeting, body content, and closing. For example:

- Greeting: “Dear [Name],”
- Body: “I hope you’re doing well. I wanted to remind you about our meeting tomorrow at 10 AM.”
- Closing: “Best regards, [Your Name]”

3. **Send the email** to yourself or a fellow student.

Task 2: Adding an Attachment

1. Compose another email (this time with a different subject, like “Assignment Submission”).
2. **Attach a file** to the email:
    - Attach a document (Word, PDF, or any other file) to the email. This could be a file related to your coursework, such as an assignment or report.
    - Most email services have a paperclip icon for attachments. Click on it, browse for your file, and upload it.
3. **Send** the email with the attachment to yourself or a recipient.

Task 3: Replying to an Email

1. **Open** an email that you have received.
2. Click on the **Reply** button.
3. Respond to the email by typing your reply in the message body. Ensure you:
    - Acknowledge the content of the original message.
    - Answer any questions or requests in the email.
    - End your reply with a polite closing (e.g., “Kind regards, [Your Name]”).
4. **Send** your reply.

Task 4: Forwarding an Email

1. **Open** any email that you have received.
2. Click on the **Forward** button.
3. In the “To” field, enter another email address (can be your own or a classmate’s).
4. Add a short message at the top, if necessary (e.g., "Here is the email I wanted to share with you").
5. **Send** the forwarded email.

Expected Learning Outcomes:

- **By the end of this lesson, students will be able to:**
    - To Create the Email Account.
    - Writing an Email.
    - Opening, Replying, Forwarding and Deleting an Email
    - Understand some miscellaneous aspects of using Email.
    - Use of Emoticons
    -

Assignment and Assessments/Test:

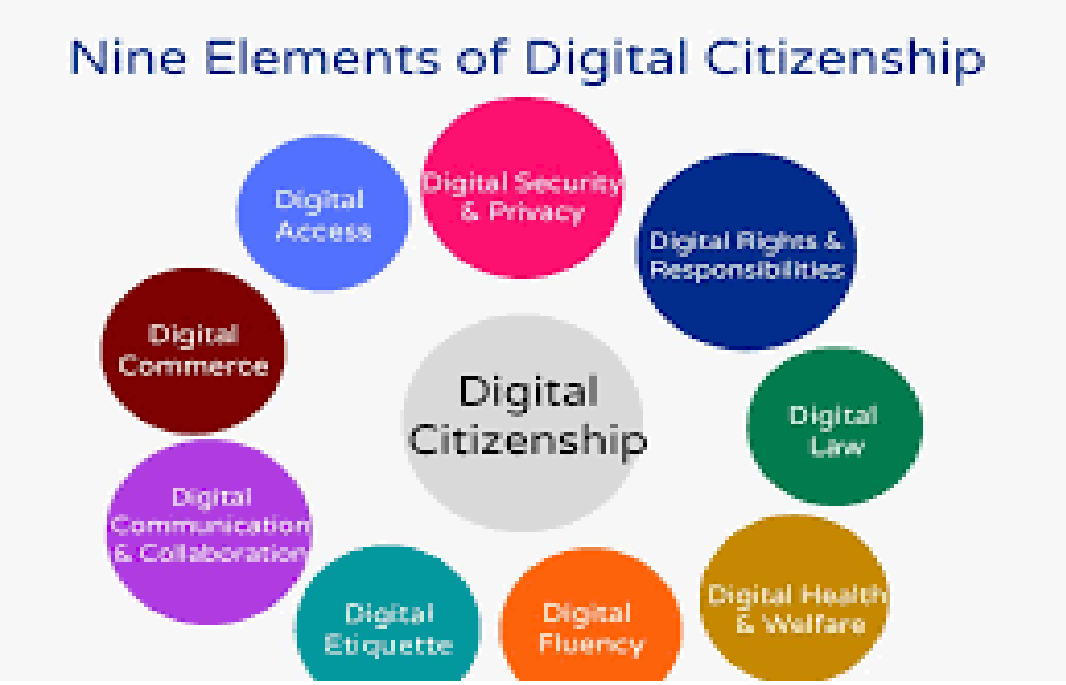
- Assignmentson using different Email specific tasks.
- Quizzes related to Emails.
- Practical tests on creation, writing, opening, replying, forwarding and deleting an Email.

Remedial Measures:

- Additional practice sessions and step-by-step guides on Emails.
- Video tutorials on functionalities of Email.
- Personalized feedback and one-on-one assistance for specific challenges.

Month-November

Lesson 7: Digital Citizenship



Topics:

- Digital Citizen
- Digital Citizenship
- Essential Elements of Digital Citizenship
- Digital Law
- Digital Rights
- Digital Health and Wellness
- Digital Security and Digital Footprints
-

Learning Objectives:

- Define what it means to be a Digital Citizen
  Explore the attributes and characteristics of a Digital Citizen.
- Introduce the essential elements of Digital Citizenship, including digital literacy, digital etiquette, digital safety, and digital responsibility.

Art Integrated Activity/Project/Practical:

- PowerPoint presentation on essentials elements of Digital Citizenship.
- Assessment on Digital Health and Wellness.
- Document on safely accessing websites.

Expected Learning Outcomes:

- **By the end of this lesson, students will be able to:**
  - Define what it means to be a Digital Citizen
  - Explore the attributes and characteristics of a Digital Citizen.

- Introduce the essential elements of Digital Citizenship, including digital literacy, digital etiquette, digital safety, and digital responsibility

Assignment and Assessments/Test:

- Discussion of the back exercises of the lesson.
- Quizzes on Elements of Digital Citizenship like Digital Literacy, Digital Commerce, Digital Communication, Digital Access etc.

Remedial Measures:

- Additional practice sessions and step-by-step guides on Digital Citizenship.
- Video tutorials on essential elements of Digital Citizenship.
- Personalized feedback and one-on-one assistance for specific challenges.

Month-December –

Chapter 8: Introduction to Python

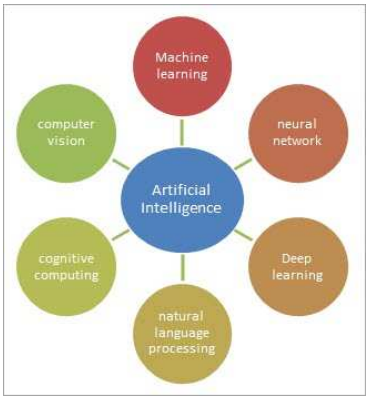
Lesson Plan: Chapter 9 - Python: Introduction

- **Topics:**
  - Introduction to Python Programming
  - Installing Python Basic Syntax and Data Types
  - Working in Python Shell
  - Data Types and Variables
  - Operators and Operands
  - Assigning values to variables
- **Learning Objectives:**
  - Understand the basics of Python programming.

- Set up and use the Python programming environment.
- Learn basic syntax and data types in Python.
- Write and execute simple Python programs.
- Get introduced to functions and loops in Python.

- **Art & Integrated Activity/Project/Practical:**
  - Hands-on programming exercises in Python.
  - Create simple programs to solve real-world problems.
  - Explore data types and control structures through coding.
  - Develop projects using functions and loops.
- **Expected Learning Outcomes:**
  - Students will understand the basics of Python programming.
  - They will set up and use the Python environment effectively.
  - Students will write and execute basic Python programs.
  - They will use functions and loops in Python coding.
- **Assignment and Assessments/Test:**
  - Assignments on writing simple Python programs.
  - Quizzes on Python syntax and data types.
  - Practical tests on using functions and loops in programs.
- **Remedial Measures:**
  - Additional practice sessions and step-by-step guides on Python basics.
  - Video tutorials on writing and executing Python programs.
  - Personalized feedback and one-on-one assistance for specific challenges.
  -

January – Chapter 9 Artificial Intelligence



Lesson Plan: Chapter 10 - Fields of Artificial Intelligence

- **Topics:**
  - Introduction to Artificial Intelligence (AI)
  - Types of Artificial Intelligence (AI)
  - History of Artificial Intelligence (AI)
  - Applications of Artificial Intelligence (AI)
  -
- **Learning Objectives:**
  - Understand the basics of Artificial Intelligence.
  - Explore AI applications in different industries.
  - Learn about machine learning and deep learning concepts.
  - Get introduced to natural language processing.
  - Discuss robotics and ethical considerations in AI.
- **Art & Integrated Activity/Project/Practical:**
  - Research and presentations on AI applications.
  - Explore machine learning through practical examples.
  - Create simple NLP programs.
  - Discuss and debate ethical issues in AI.
- **Expected Learning Outcomes:**
  - Students will understand the basics of AI and its applications.
  - They will explore machine learning and NLP concepts.
  - Students will appreciate the role of robotics in AI.
  - They will discuss ethical considerations in AI development.
- **Assignment and Assessments/Test:**
  - Assignments on researching and presenting AI applications.
  - Quizzes on machine learning and NLP.
  - Practical tests on creating simple AI programs.
- **Remedial Measures:**
  - Additional practice sessions and step-by-step guides on AI basics.
  - Video tutorials on AI applications and concepts.
  - Personalized feedback and one-on-one assistance for specific challenges.

February – Revision for Final Exam

March – Final Term Exams