



INDIAN SCHOOL AL WADI AL KABIR



MONTH	YEAR 2025-26	Syllabus for class: IV		Subject: Computer Science PEDAGOGICAL PLAN		
WEEKS	Syllabus/Topic	Learning Objectives	Teaching Strategies	Periods Alloted	Assignments	Teaching material prepared
APR-25 (4 Weeks)						
6TH-30TH APR (8 PERIODS)	BRIDGE COURSE: *THEORY & PRACTICAL TOPICS: Hardware and Software/Coding in Scratch *TH:CH-1: More on Windows 10 *PR:CH-2: Graphics in Word	Students will be able to	TH & PRACT: (NEP - Aditi) The teacher introduces the lesson: Brainstorming session.	4 + 4	Home Assignment: (NEP-Prasar & Prayog)	
		*Students will be able to identify and differentiate between ☞ Hardware ☞ Software *The children will be able to know: the components on desktop, change the background pictures, types of icons, sorting the icons and manage the files and folders under This PC icon, use of taskbar etc.	*Ask students to name different hardware and Softwares. *The teacher shows a video to help students understand how to manage icons on the taskbar, Left and right pane of start menu, use of quick launch bar, to update date and time, change the volume of the speaker & change the position of the taskbar. *The teacher explains the following in the class: How to change the colour schemes. Show to the students: • Changing the Colour Schemes • Types of Icons • Sorting Desktop Icons. • To use This PC icon, Icons on the Taskbar such as Start Button, Quick launch bar, clock etc. • Changing the volume of the speaker		* Ask the students to create smiley face with the text "I love my class teacher'. Change the thickness and outline colour of the smiley face. Also, fill it with blue colour. * Insert Arrow shape in Word and insert text in it, Insert Symbols and choose 'Wingdings' font. *Ask the students to research and collect information about some of the examples of hardware and software. *Lab activity pg 30	Smart Board / White Board / Computer Lab/ Textbook Exercises/ Textbook Animations https://drive.google.com/drive/folders/1swv48e--34LrbucBMnhJMeXiKs8bDrCb?usp=drive_link
MAY-25						
1ST-29TH MAY (8 PERIODS)	*THEORY TOPIC:CH-3: Tables in Word *PRACTICAL TOPIC: MS Word 2019		TH & PRACT: (NEP - Aditi)	4 + 4	Home Assignment: (NEP-Prasar & Prayog)	
		Students will learn about ☞ Inserting a Table + Entering Data in a Table ☞ Selecting Cells, Rows, Columns and Table + Inserting Rows or Columns ☞ Deleting Rows or Columns + Changing Column Width and ☞ Row Height + Merging Cells ☞ Splitting Cells + Moving and Resizing Tables ☞ Applying Border and Shading + Table Styles	*Demonstrate to the students the method of inserting a table and entering data in a table in a Word document. *Show to the students how to select a cell, a group of cells, a row, a column or the whole table. *Introduce merging of cells as combining two or more cells in the same row or the same column into a single cell.		*Create a table with 6 rows and 6 columns with headings Rollno, Name, English, Hindi, Maths and Total and by adding datas of their choice. *Insert one more column and insert the values, use merge cells and give a heading to the table. *Lab Activity pg 43	Smart Board / White Board / Computer Lab/ Textbook Exercises/ Textbook Animations https://drive.google.com/drive/folders/17BoJlLhHrf75oqizoJSklQyWmdHcZ07?usp=drive_link
SUMMER BREAK						
AUG-25 (4 Weeks)						
3RD-31ST AUG (8 PERIODS)			TH & PRACT: (NEP - Aditi)	4 + 4	Home Assignment: (NEP-Prasar & Prayog)	

	<p>*THEORY TOPIC: *CH-5: More on Internet</p> <p>*PRACTICAL TOPIC: CH-4: Introduction to PowerPoint 2016</p>	<p>By the end of this chapter, students will be able to:</p> <p>*understand the basics of the internet, requirements to connect to Internet and common terms used in Internet.</p> <p>*Identify and describe the key components of the PowerPoint window (Ribbon, Slides Pane, Status Bar, etc.).</p> <p>*Slide layout, adding a slide, Editing a slide, Delete, Exit, Save a slide in</p>	<p>*Ask students how they use the internet in daily life (e.g., learning, entertainment, communication). List the common terms on Internet.</p> <p>*Explain the different uses of the internet (e.g., emails, online shopping, research) with relatable examples.</p>		<p>*Create a presentation on "Food Waste". Also give the relevant information about the facts of food waste, the importance of food waste reduction etc. Finally save the presentation with the name "Food Waste" and close Powerpoint.</p> <p>*Ask students to sketch a simple homepage layout on paper, labeling parts like navigation bar, search bar,</p>	<p>Smart Board / White Board / Computer Lab/ Textbook Exercises/ Textbook Animations https://drive.google.com/drive/fo lders/17BoJILhhHrf75oqizoJSkIQy WmdHcZ07?usp=drive_link</p>
SEPT-25 (2 Weeks)						
1ST-30TH (8 PERIODS)	MID-TERM ASSESSMENT REVISION					
OCT-25 (4 Weeks)						
1ST-30TH OCT (8 PERIODS)			TH & PRACT: (NEP - Aditi)	4 + 4	Home Assignment: (NEP-Prasar & Pravog)	
	<p>*THEORY TOPIC: CH-6: Visual Processing & PRACTICAL TOPIC: CH-7: Blocks in Scratch</p>	<p>*Students will learn about</p> <ul style="list-style-type: none"> ☞ Picture Puzzle ☞ Directions and Maps <p>*Students will learn about</p> <ul style="list-style-type: none"> ☞ Coding Blocks ☞ Motion Blocks ☞ Looks Blocks ☞ Sound Blocks ☞ Events Blocks ☞ Control Blocks 	<p>*Tell the students about a puzzle. Also, tell them how to solve the puzzle by giving some examples which will improve their understanding of the topic.</p> <p>Tell the types of picture puzzle to the students which are:</p> <ul style="list-style-type: none"> • Odd One Out • Mirror Images <p>Show the students what is direction and how to identify it with the help of analysis.</p> <p>Explain the meaning of maps to the students and tell them how to use them with the help of directions.</p> <p>*Students recall about Scratch and revise the components of Scratch window components.</p>		<p>*They will do the exercise using the blocks of Scratch and observe the output performed by the spire.</p> <p>*Lab Activity pg 82.</p>	<p>Smart Board / White Board / Computer Lab/ Textbook Exercises/ Textbook Animations https://drive.google.com/drive/fo lders/17BoJILhhHrf75oqizoJSkIQy WmdHcZ07?usp=drive_link</p>
NOV-25 (4 Weeks)						
2ND-30TH NOV (8 PERIODS)			TH & PRACT: (NEP - Aditi)	4 + 4	Home Assignment: (NEP-Prasar & Pravog)	

	<p>*THEORY TOPIC: CH-8: AAI Timeline *PRACTICAL TOPIC: CH-7: Blocks in Scratch</p>	<p>Students will learn about</p> <ul style="list-style-type: none"> Developments in AI Pioneers in the Field of AI 	<p>*Real-life examples, interactive discussions, and hands-on activities to explain how AI works in popular apps, making the concept relatable and engaging.</p>		<p>*Students choose one app (e.g., chatGPT or Google Maps and research how AI is used in it.</p> <p>*Create a Maze Game: Design a maze and create a sprite that the player can control to navigate through the maze to reach a goal.</p> <p>*Pong Game: Create a simple version of the classic Pong game where two paddles hit a ball back and forth.</p> <p>*Lab Activity pg 126.</p>	<p>Smart Board / White Board / Computer Lab/ Textbook Exercises/ Textbook Animations https://drive.google.com/drive/folders/17BoJILhhHrf75oqizoJSklQyWmdHcZ07?usp=drive_link</p>
DEC-25 (3 Weeks)						
1ST-18TH DEC (6 PERIODS)			TH & PRACT: (NEP - Aditi)	3+3	Home Assignment: (NEP-Prasar & Prayog)	
	<p>*THEORY TOPIC: *CH-9: AI & Non-AI Robots *PRACTICAL TOPIC: SCRATCH:Sensing Blocks</p>	<p>*Students will learn about the two types of robots: AI-enabled robots and non-AI robots and understand their functionalities and application in various fields. *Students will apply their knowledge of Sensing Blocks to create interactive projects.</p>	<p>*Videos, interactive discussions on AI and Non-AI robots, explain them that robots are computer-programmed machines capable of complex tasks, explain the essential characteristics of robots (sense, movement, energy), differentiate between AI and Non-AI robots, introduce popular AI robots (e.g., Kuri, Sophia) and Non-AI robots (e.g., Cobots, Industrial Robots) *hands-on coding activities, step-by-step demonstrations, and fun projects to help students explore how sensing blocks work</p>		<p>*Create a 5-slide presentation about one robot of your choice (either AI or Non-AI). *Create a quiz game in Scratch where the program asks the user questions using the Ask () and wait block, checks their answers with the Answer block, and displays "Correct!" or "Try again!" using the If () then block.(Example: Ask questions like "What is 5 + 7?" and respond based on the user's input.)</p> <p>*Lab Activity pg 127</p>	<p>Smart Board / White Board / Computer Lab/ Textbook Exercises/ Textbook Animations https://drive.google.com/drive/folders/17BoJILhhHrf75oqizoJSklQyWmdHcZ07?usp=drive_link</p>
JAN-26 (4 Weeks)						
4TH-29TH JAN (8 PERIODS)		<p>Students will be able to</p> <p>*Learn basic coding concepts using blocks and Turtle graphics (e.g., drawing lines, shapes). *Differentiate between components of the code editor (e.g., block palette, console, script area).</p>	<p>TH & PRACT: (NEP - Aditi)</p> <p>*Live demo of logging into AI Connect, creating a project/activity, and using blocks to draw a line. *Show how to use the Turtle to create shapes (e.g., dotted line, square).</p>	4 + 4	Home Assignment: (NEP-Prasar & Prayog)	
	<p>*THEORY & PRACTICAL TOPIC: CH-10: Starting with AI Connect</p>				<p>*Draw a Flag: Use the Turtle in AI Connect to draw a national flag (e.g., India's tricolor) with horizontal lines. *Create a Shape: Design a geometric pattern (e.g., a star or spiral) using Turtle blocks.</p> <p>*Lab Activity pg 115</p>	<p>Smart Board / White Board / Computer Lab/ Textbook Exercises/ Textbook Animations https://drive.google.com/drive/folders/17BoJILhhHrf75oqizoJSklQyWmdHcZ07?usp=drive_link</p>
FEB-25 (4 Weeks)						
1ST-26TH FEB (8 PERIODS)			TH & PRACT: (NEP - Aditi)	4 + 4	Home Assignment: (NEP-Prasar & Prayog)	

	<p>*THEORY TOPIC & PRACTICAL TOPIC: CH- 11: AI in Real World</p>	<p>*Understand real-world applications of Artificial Intelligence (AI) in industries like healthcare, education, and entertainment. *Learn to perform object detection and emotion detection using AI Connect. *Explore basic AI concepts like machine learning, facial recognition, and natural language processing. *Develop skills to create AI-based coding activities in AI Connect (e.g., detecting objects/emotions in images).</p>	<p>*Show students how to use AI Connect's Load Image, Get object count, and Show Image with border blocks for object detection. *Demonstrate emotion detection using Facial Expression blocks (e.g., happy, sad, angry).</p>	<p>*Object Detection Challenge: Create an AI Connect program to detect vehicles or animals in an image. Steps: -Use the Load Image block to upload a picture. -Use Get object count to identify the object. -Display the result with Show Image with border. *Real-World AI Presentation: Prepare a 3-slide presentation on how AI is used in smart cars or healthcare. -Examples of AI applications (e.g., drowsiness detection in drivers). -Ethical considerations (e.g., privacy concerns).</p>	<p>Smart Board / White Board / Computer Lab/ Textbook Exercises/ Textbook Animations https://drive.google.com/drive/folders/17BoJILhhHrf75oqizoJSklQyWmdHcZ07?usp=drive_link</p>
Mar-25 FINAL ASSESSMENT					