

# S.D. PUBLIC SCHOOL

## ACADEMIC PLANNER OF COMPUTER SCIENCE CLASS IX(2024-25)

Month/Days	LEARNING OUTCOMES	Theory	Practical
April	<b>Unit 3: Digital Documentation(Part-B)</b>		<ul style="list-style-type: none"> <li>• List the available word processing applications.</li> </ul>
No of working days -22	1. Create a document using a word processor.	<ul style="list-style-type: none"> <li>• Introduction to word processing,</li> <li>• Word processing applications, Introduction to Word Processing tool</li> <li>• Creating a document, Parts of a Word Processor Window,</li> </ul>	<ul style="list-style-type: none"> <li>• Introduce with the parts of the main window.</li> <li>• Change document views.</li> <li>• Start a new document.</li> <li>• Open an existing document.</li> <li>• Save a document.</li> <li>• Close a document.</li> </ul>
	2. Apply Editing features	<ul style="list-style-type: none"> <li>• Text editing – Undo and Redo,</li> <li>• Moving and copying text,</li> <li>• Copy and Paste,</li> <li>• Selecting text,</li> <li>• Selection criteria,</li> <li>• Selecting non-consecutive text items,</li> <li>• Selecting a vertical block of text,</li> <li>• Find and replace option,</li> <li>• Jumping to</li> </ul>	<ul style="list-style-type: none"> <li>• Editing of text in a document</li> <li>• Demonstrate to use undo and redo option,</li> <li>• Use the keyboard and mouse options to select, cut, copy, paste, and move text.</li> <li>• Demonstrate to select nonconsecutive text items, vertical block of text,</li> <li>• Search and replace text in a document.</li> <li>• Jump to the given page number in a document,</li> <li>• Insert non-printing characters in a</li> </ul>

		<p>the page number,</p> <ul style="list-style-type: none"> <li>• Non-printing characters,</li> <li>• Checking spelling and grammar,</li> <li>• Using Synonyms and Thesaurus.</li> </ul>	<p>document,</p> <ul style="list-style-type: none"> <li>• Apply Spelling and grammar option of document.</li> <li>• Demonstrate to use Synonyms and Thesaurus.</li> </ul>
	3. Apply formatting features	<ul style="list-style-type: none"> <li>• Page style dialog</li> <li>• Formatting text – Removing manual formatting, Common text formatting, Changing text case, Superscript and Subscript</li> <li>• Formatting paragraph – Indenting paragraphs, Aligning paragraphs, Font colour, highlighting, and background colour, Using bullets and numbering, Assigning colour, border and background to paragraph.</li> <li>• Page formatting – setting up basic page layout using style, Inserting</li> </ul>	<ul style="list-style-type: none"> <li>• Apply various text formatting options for the text,</li> <li>• Demonstrate to format paragraphs– indent/align paragraphs, assign font colour, highlighting, and background colour,</li> <li>• Assign number or bullets to the lists items</li> <li>• Demonstrate to assign colour, border and background to paragraph</li> <li>• Demonstrate the page formatting–set up basic page layout using styles,</li> <li>• Insert page break, Create header/footer and page numbers</li> <li>• Define borders and backgrounds</li> <li>• Insert images, shapes, special characters in a document</li> <li>• Divide page into columns,</li> <li>• Format the shape or image.</li> </ul>

		<p>page break, Creating header/footer and page numbers,</p> <ul style="list-style-type: none"> <li>Defining borders and backgrounds, Inserting images, shapes, special characters in a document, Dividing page into columns, Formatting the shape or image.</li> </ul>	
	<b>Unit 1: Communication Skills-I (Part-A)</b>		•
	1. Demonstrate knowledge of various methods of communication	<ul style="list-style-type: none"> <li>Methods of communication - Verbal - Non-verbal - Visual</li> </ul>	<ul style="list-style-type: none"> <li>Writing pros and cons of written, verbal and non-verbal communication</li> <li>Listing do's and don'ts for avoiding common body language mistakes</li> </ul>
	2. Identify elements of communication cycle	<ul style="list-style-type: none"> <li>Meaning of communication</li> <li>Importance of communication skills</li> <li>Elements of communication cycle– (i) sender, (ii) ideas, (iii) encoding, (iv) communication channel, (v) receiver, (vi) decoding, and (vii) feedback</li> </ul>	<ul style="list-style-type: none"> <li>Draw a diagram of communication cycle</li> <li>Role plays on communication process related to the sector/job role</li> </ul>

	3. Identify the factors affecting our perspectives in communication	<ul style="list-style-type: none"> <li>• Perspectives in communication</li> <li>• Factors affecting perspectives in communication - Visual perception - Language - Past experience - Prejudices - Feelings - Environment</li> </ul>	<ul style="list-style-type: none"> <li>• Group discussion on factors affecting perspectives in communication</li> <li>• Sharing of experiences on factors affecting perspectives</li> <li>• Sharing experiences on factors affecting communication at workplace</li> </ul>
	4. Demonstrate the knowledge of basic writing skills	<ul style="list-style-type: none"> <li>• Writing skills related to the following: - Phrases - Kinds of sentences - Parts of sentence - Parts of speech - Use of articles - Construction of a paragraph</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstration and practice of writing sentences and paragraphs on topics related to the subject</li> </ul>
<b>May</b>	<b>Unit 3: Digital Documentation(Part-B)</b>		<ul style="list-style-type: none"> <li>• Demonstrate and do the following in Word Processor:</li> </ul>
No of working days -18	4. Create and work with tables	<ul style="list-style-type: none"> <li>• Creating table in Word</li> <li>• Processor</li> <li>• Inserting row and column in a table</li> <li>• Deleting rows and columns</li> <li>• Splitting and merging tables</li> <li>• Deleting a table</li> <li>• Copying a table</li> </ul>	<ul style="list-style-type: none"> <li>• Create table,</li> <li>• Insert and delete rows and column in a table,</li> <li>• Split and merge tables,</li> <li>• Delete a table,</li> <li>• Copy or move from one location to another location of document.</li> </ul>

		<ul style="list-style-type: none"> <li>Moving a table.</li> </ul>	
	5. Use Print Options	<ul style="list-style-type: none"> <li>Printing options in Word Processor.</li> <li>Print preview,</li> <li>Controlling printing,</li> <li>Printing all pages, single and multiple pages.</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate to print the document, selected pages in the document</li> <li>Print the document with various options,</li> <li>Preview pages before printing.</li> </ul>
	6. Understand and apply mail merge	<ul style="list-style-type: none"> <li>Introduction to mail merge</li> <li>Concept of data source for mailmerge.</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate to print the letters using mail merge,</li> <li>Do the following to achieve</li> <li>Create a main document,</li> <li>Create the data source,</li> <li>Enter data in the fields,</li> <li>Merge the data source with main document,</li> <li>Edit individual document,</li> <li>Print the merged letter,</li> <li>Save the merged letter.</li> </ul>
<b>July</b>	<b>Unit 4: Electronic Spreadsheet (Part-B)</b>		<ul style="list-style-type: none"> <li>Start the spreadsheet,</li> <li>Identify the parts of Calc,</li> <li>Identify the rows number, column number, cell address,</li> <li>Define the range of cell,</li> <li>Identify row range, column range, row &amp;</li> </ul>
No of working days -25	1. Create a Spreadsheet	<ul style="list-style-type: none"> <li>Introduction to spreadsheet application</li> <li>Starting a spreadsheet</li> <li>Parts of a spreadsheet</li> </ul>	

		<ul style="list-style-type: none"> <li>• Worksheet – Rows and Columns, Cell and Cell Address,</li> <li>• Range of cells – column range, row range, row and column range.</li> </ul>	column range
	2. Apply formula and functions in spreadsheet	<ul style="list-style-type: none"> <li>• Different types of data,</li> <li>• Entering data – Label, Values, Formula</li> <li>• Formula, how to enter formula,</li> <li>• Mathematical operators used in formulae,</li> <li>• Simple calculations using values and operators,</li> <li>• Formulae with cell addresses and operators,</li> <li>• Commonly used basic functions in a spreadsheet – SUM, AVERAGE, MAX, MIN, Count</li> <li>• Use of functions to do calculations.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate to enter the text, numeric data in a cell,</li> <li>• Identify the label, values and formula in the cell,</li> <li>• Demonstrate to enter formula in a cell,</li> <li>• Construct the formula using mathematical operators,</li> <li>• Identify formulae with cell addresses and operators,</li> <li>• Identify the correct syntax of formula,</li> <li>• Use the basic functions to perform calculations on data.</li> </ul>
	3. Format data in the spreadsheet	<ul style="list-style-type: none"> <li>• Formatting tool,</li> <li>• Use of dialog boxes to</li> </ul>	<ul style="list-style-type: none"> <li>• Identify the formatting tool,</li> <li>• Demonstrate to use of dialog boxes to</li> </ul>

		<p>format values,</p> <ul style="list-style-type: none"> <li>• Formatting a range of cells with decimal places,</li> <li>• Formatting a range of cells to be seen as labels,</li> <li>• Formatting of a cell range as scientific,</li> <li>• Formatting a range of cells to display times,</li> <li>• Formatting alignment of a cell range,</li> <li>• Speeding up data entry using the fill handle,</li> <li>• Uses of fill handle to copy formulae.</li> </ul>	<p>format values,</p> <ul style="list-style-type: none"> <li>• Demonstrate to format range of cells with decimal places,</li> <li>• Demonstrate to format a range of cells to labels,</li> <li>• Demonstrate to format of a cell range as scientific,</li> <li>• Demonstrate to format a range of cells to display time,</li> <li>• Demonstrate to align cell data range,</li> <li>• Demonstrate to create number series using fill handle,</li> <li>• Copy formula by dragging the formula using fill handle.</li> </ul>
	4. Understand and apply Referencing	<ul style="list-style-type: none"> <li>• Concept of referencing,</li> <li>• Relative referencing,</li> <li>• Mixed referencing,</li> <li>• Absolute referencing.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate to use Relative referencing in spreadsheet,</li> <li>• Demonstrate to use Mixed referencing in spreadsheet,</li> <li>• Demonstrate to use Absolute referencing in spreadsheet.</li> </ul>
	5. Create and insert different types of charts in a spreadsheet	<ul style="list-style-type: none"> <li>• Importance of chart in spreadsheet</li> <li>• Types of chart</li> </ul>	<ul style="list-style-type: none"> <li>• Create different types of charts supported by a spreadsheet,</li> <li>• Illustrate the example of chart in a spreadsheet.</li> </ul>
	<b>Unit 2: Self Management Skills-I (Part-A)</b>		<ul style="list-style-type: none"> <li>• Identification of self management skills</li> </ul>

	1. Describe the meaning and importance of self management	<ul style="list-style-type: none"> <li>• Meaning of self-management</li> <li>• Positive results of self-management</li> <li>• Self-management skills</li> </ul>	<ul style="list-style-type: none"> <li>• Strength and weakness analysis</li> </ul>
	2. Identify the factors that help in building self confidence	<ul style="list-style-type: none"> <li>• Factors that help in building self confidence – social, cultural, and physical factors</li> <li>• Self-confidence building tips - getting rid of the negative thoughts, thinking positively, staying happy with small things, staying clean, hygienic and smart, chatting with positive people, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Role play exercises on building self-confidence</li> <li>• Use of positive metaphors/ words</li> <li>• Positive stroking on wakeup and before going bed</li> <li>• Helping others and working for community</li> </ul>
<b>August</b>	<b>Unit 1: Introduction to IT–ITeS industry (Part-B)</b>		<ul style="list-style-type: none"> <li>• Identify and list the various IT enabled services, Observe the application of IT in various areas.</li> </ul>
No of working days -23	1. Appreciate the applications of IT	<ul style="list-style-type: none"> <li>• Introduction to IT and ITeS, BPO services,</li> <li>• BPM industry in India,</li> <li>• Structure of the IT-BPM industry,</li> <li>• Applications of IT in home computing,</li> </ul>	



		<p>everyday life, library, workplace, education, entertainment , communication, business, science and engineering, banking, insurance, marketing, health care, IT in the government and public service</p>	
<b>September</b>	<b>Unit 2: Information And Communication Technology Skills– I (Part-A)</b>		<ul style="list-style-type: none"> <li>• Discussion on the role and importance of ICT in personal life and at workplace.</li> <li>• Preparing posters / collages for showing the role of ICT at workplace</li> </ul>
No of working days -23	1. Describe the role of Information and Communication Technology (ICT) in day to-day life and workplace	<ul style="list-style-type: none"> <li>• Introduction to ICT</li> <li>• Role and importance of ICT in personal life and at workplace</li> <li>• ICT in our daily life (examples)</li> <li>• ICT tools - Mobile, tab, radio, TV, email, etc.</li> </ul>	
	2. Identify components of basic computer system and their functions	<ul style="list-style-type: none"> <li>• Computer system - Central Processing Unit (CPU), memory, motherboard, storage devices</li> <li>• Hardware and software of a</li> </ul>	<ul style="list-style-type: none"> <li>• Connecting the cables and peripherals to the Central Processing Unit</li> <li>• Starting and shutting down a computer</li> <li>• Group discussion on the various aspects of hardware and software</li> </ul>

		<p>computer system</p> <ul style="list-style-type: none"> <li>• Role and functions of Random Access Memory (RAM) and Read Only Memory (ROM)</li> <li>• Role and functions of Central Processing Unit</li> <li>• Procedure for starting and shutting down a computer</li> </ul>	
	3. Demonstrate use of various components and peripherals of computer system	<ul style="list-style-type: none"> <li>• Peripherals devices and their uses – mouse, keyboard, scanner, webcam, etc. of a computer system</li> </ul>	<ul style="list-style-type: none"> <li>• Identification of various parts and peripherals of a computer</li> <li>• Demonstration and practice on the use of mouse</li> <li>• Demonstration and practice on the use of keyboard</li> <li>• Demonstration of the uses of printers, webcams, scanner and other peripheral devices</li> <li>• Drawing diagram of computer system and labelling it</li> </ul>
	4. Demonstrate basic computer skills	<ul style="list-style-type: none"> <li>• Primary operations on a computer system – input, process, storage, output, communication networking,</li> </ul>	<ul style="list-style-type: none"> <li>• Identification of the various input and output units and explanation of their purposes</li> </ul>

		etc.	
<b>October</b>	<b>UNIT 2: Data Entry And Keyboarding Skills(Part-B)</b>		<ul style="list-style-type: none"> <li>• Identify the keys and its use on the keyboard,</li> <li>• Demonstrate to use various keys on the keyboard,</li> <li>• Demonstrate to type the text, numbers, special character using appropriate keys on the keyboard,</li> <li>• Practice the correct typing ergonomics,</li> <li>• Practice to place fingers on correct key in four different row of keyboard,</li> <li>• Practice various mouse operations.</li> </ul>
No of working days -20	1. Use keyboard and mouse for data entry	<ul style="list-style-type: none"> <li>• Keyboarding Skills,</li> <li>• Types of keys on keyboard, Numeric keypad,</li> <li>• Home keys, Guide keys,</li> <li>• Typing and deleting text,</li> <li>• Typing ergonomics,</li> <li>• Positioning of fingers on the keyboard, Allocation of keys to fingers on four different rows,</li> <li>• Pointing device – Mouse, Mouse operations.</li> </ul>	
	2. Use typing software	<ul style="list-style-type: none"> <li>• Introduction to Rapid Typing Tutor,</li> <li>• Touch typing technique,</li> <li>• User interface of Typing Tutor,</li> <li>• Typing text and interpret results,</li> <li>• Working with lesson editor,</li> <li>• Calculating typing speed,</li> <li>• Typing rhythm.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify the user interface of typing tutor,</li> <li>• Practice to type text in typing tutor software and interpret the results,</li> <li>• Practice to work in lesson editor,</li> <li>• Calculate the typing speed</li> <li>• Practice to improve typing</li> <li>• Using typing tutor software.</li> </ul>
<b>November</b>	<b>UNIT 5: Digital</b>		

	<b>Presentation (Part-B)</b>		
No of working days -23	1. Understand features of an effective presentation	<ul style="list-style-type: none"> <li>• Concept of presentation,</li> <li>• Elements of presentation,</li> <li>• Characteristics of an effective presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Hands on activity on Page No.-73</li> </ul>
	2. Create a presentation	<ul style="list-style-type: none"> <li>• Introduction to presentation software,</li> <li>• Opening a presentation software</li> <li>• Parts of presentation window,</li> <li>• Closing a presentation</li> <li>• Creating a presentation using template,</li> <li>• Selecting slide layout,</li> <li>• Saving a presentation,</li> <li>• Running a slide show,</li> <li>• Save a presentation in PDF,</li> <li>• Closing a presentation,</li> <li>• Using Help.</li> </ul>	<ul style="list-style-type: none"> <li>• Start the presentation application</li> <li>• Various components of main Impress window</li> <li>• Observe the different workspace views.</li> <li>• Create a new presentation using wizard.</li> <li>• Run the presentation,</li> <li>• Save the presentation,</li> <li>• Close the presentation,</li> <li>• Demonstrate to use Help in presentation.</li> </ul>
	3. Work with slides	<ul style="list-style-type: none"> <li>• Inserting a duplicate slide,</li> <li>• Inserting new slides,</li> <li>• Slide layout,</li> <li>• Copying and moving slides,</li> <li>• Deleting and renaming</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate to insert a new slide and duplicate slide in a presentation,</li> <li>• Change the slide layout,</li> <li>• Demonstrate to copy and move slides in the presentation,</li> <li>• Demonstrate to copy,</li> </ul>

		<p>slides</p> <ul style="list-style-type: none"> <li>• Copying, moving and deleting contents of slide,</li> <li>• View a presentation,</li> <li>• Controlling the size of the view,</li> <li>• Workspace views – Normal, Outline, Notes, Slide sorter view.</li> </ul>	<p>move and delete contents of the slide,</p> <ul style="list-style-type: none"> <li>• Demonstrate to view a presentation in different views.</li> </ul>
	4. Format text and apply animations	<ul style="list-style-type: none"> <li>• Formatting toolbar,</li> <li>• Various formatting features,</li> <li>• Text alignment,</li> <li>• Bullets and numbering.</li> <li>• Custom Animation</li> </ul>	<ul style="list-style-type: none"> <li>• Identify and list the various options in formatting toolbar,</li> <li>• Apply the appropriate formatting option</li> <li>• Align the text in presentation,</li> <li>• Apply bullets and numbering to the list items in presentation. Apply Animation</li> </ul>
	5. Create and use tables	<ul style="list-style-type: none"> <li>• Inserting tables in presentation,</li> <li>• Entering and editing data in a table,</li> <li>• Selecting a cell, row, column, table,</li> <li>• Adjusting column width and row height,</li> <li>• Table borders and background</li> </ul>	<p>Demonstrate the following:</p> <ul style="list-style-type: none"> <li>• Insert table in presentation,</li> <li>• Enter and edit data in a table,</li> <li>• Select a cell, row, column, table,</li> <li>• Adjust column width and row height,</li> <li>• Assign table borders and background.</li> </ul>
	6. Insert and format image in presentation	<ul style="list-style-type: none"> <li>• Inserting an image from a</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate to insert an image from file,</li> </ul>

		<p>file,</p> <ul style="list-style-type: none"> <li>• Inserting an image from the gallery,</li> <li>• Formatting images,</li> <li>• Moving images,</li> <li>• Resizing images,</li> <li>• Rotating images,</li> <li>• Formatting using the Image toolbar,</li> <li>• Drawing graphic objects – line, shapes,</li> <li>• Grouping and n-grouping objects</li> </ul>	<p>gallery in presentation,</p> <ul style="list-style-type: none"> <li>• Apply formatting options to image in presentation,</li> <li>• Demonstrate to move, resize and rotate images,</li> <li>• Apply formatting options of Image toolbar,</li> <li>• Drawing line, shapes using graphic objects,</li> <li>• Demonstrate to group and ungroup objects.</li> </ul>
	7. Work with slide master	<ul style="list-style-type: none"> <li>• Slide masters,</li> <li>• Creating the slide masters,</li> <li>• Applying the slide masters to all slide,</li> <li>• Adding transitions.</li> </ul>	<ul style="list-style-type: none"> <li>• Create the slide masters,</li> <li>• Apply the slide masters to the presentation,</li> <li>• Add transitions to presentation.</li> </ul>
<b>December</b>	<b>Unit 4: Entrepreneurial Skills-I (Part-A)</b>		<ul style="list-style-type: none"> <li>• Practise of Project Work on Page No.-79</li> </ul>
No of working days -24	1. Identify various types of business activities	<ul style="list-style-type: none"> <li>• Types of businesses – service, manufacturing , hybrid</li> <li>• Types of businesses found in our community Business activities around us</li> </ul>	<ul style="list-style-type: none"> <li>• Prepare posters of business activities found in cities/villages, using pictures</li> <li>• Discuss the various types of activities, generally adopted by small businesses in a local community \</li> <li>• Best out of waste</li> <li>• Costing of the product made out of</li> </ul>

			<p>waste</p> <ul style="list-style-type: none"> <li>• Selling of items made from waste materials</li> <li>• Prepare list of businesses that provides goods and services in exchange for money</li> </ul>
	2. Demonstrate the knowledge of distinguishing characteristics of entrepreneurship	<ul style="list-style-type: none"> <li>• Meaning of entrepreneurship development</li> <li>• Distinguishing characteristics of entrepreneurship</li> <li>• Role and rewards of entrepreneurship</li> </ul>	<ul style="list-style-type: none"> <li>• Prepare charts showing advantages of entrepreneurship over wages</li> <li>• Group discussions on role and features of entrepreneurship</li> <li>• Lectures/presentations by entrepreneurs on their experiences and success stories</li> <li>• Identify core skills of successful entrepreneur</li> </ul>
<b>January</b>	<b>Unit 5: Green Skills – I (Part-A)</b>		
No of working days -13	1. Demonstrated the knowledge of the factors influencing natural resource conservation	<ul style="list-style-type: none"> <li>• Introduction to environment,</li> <li>• Relationship between society and environment, ecosystem and factors causing imbalance</li> <li>• Natural resource conservation</li> <li>• Environment protection and conservation</li> </ul>	<ul style="list-style-type: none"> <li>• Group discussion on hazards of deteriorating environment</li> <li>• Prepare posters showing environment conservation</li> <li>• Discussion on various factors that influence our environment</li> </ul>
	2. Describe the importance of green economy and green skills	<ul style="list-style-type: none"> <li>• Definition of green economy</li> <li>• Importance of green</li> </ul>	<ul style="list-style-type: none"> <li>• Definition of green economy</li> <li>• Importance of green economy</li> </ul>

		economy	
<b>February</b>	<ul style="list-style-type: none"><li>• Recapitulation</li></ul>		
No of working days -22	<ul style="list-style-type: none"><li>• Revision of all topics</li></ul>		