

6 th standard			
S.No	Topic	Subtopic	Detail/Content
1	Operating System	1.1) What is OS?	What does the OS do? Managing Resources (files, memory, processes, I/O, Providing User Interface, Running Applications, Support for built-in Utility Programs, Control Computer Hardware
		1.2) Types of OS	Windows, MacOS, Unix, Linux, Android, iOS (some history may be interesting – talk about mainframes, punched cards before Operating Systems)
2	Windows	2.1) Windows Versions and usage of OS.	How to identify it? Where is it installed? What will get wiped out when you upgrade? Etc.
		2.2) Multi finger gestures.	Usage of gestures – two, three and four finger moves on the track pad at the same time.
		2.3) Folders, Icons, Apps	Common Folders. Drives. Storage of files. Moving files within one drive or to different drives. Copying between folders. Different views in windows explorer. Using windows explorer Traversing a directory. Tree structure of directories. Deleting files. System trash folder. Copy, paste of files and directories.
		2.4) File	File extensions. What happens when you single click or double click on a file? Multiple ways to reach/open a file – through an app like OpenOffice or through Windows Explorer or through search. File properties – size, type, time created, time accessed, etc. Short cuts, Rename the file, folder.
		2.5) Task manager	Usage of Task Manager, Killing a process. Processes and visible apps. System resources used by processes. Ctrl+Alt+Del, Right click --> Task manager.
3	Open office	3.1) Encoding	ASCII, EBCDIC, Unicode, UTF-8, UTF-16, UTF-32
		3.2) Text document.	Object Wrapping [Right click on the shape and use some features], Shadows, Highlight text, etc.
		3.2.1) Table	How to create table, Insert row and column. Delete column cell and row.
		3.3) Basics Spreadsheet	Introduction and usage of spreadsheet.
		3.3.1) Cell	It is basic unit of worksheet where numbers, text, formulae, etc, can be placed.
		3.3.2) Row	Cells that are arranged horizontally are given numbers 1, 2, 3,.....is called rows.
		3.3.3) Column	Cells that are arranged vertically are given letters A, B, C,.....is called columns.
		3.3.4) Sheet	Group of cells/rows+columns.
		3.3.5) Insert New Sheet	Insert a new sheet. Use in Insert tool.
		3.3.6) Cell properties	
		Cell Address	Current cell name.
		Merge cell/Split cell	To combine two or more cells.
		Wrap text	If the cell has insufficient space for the text use it to wrap the text.
		Cell border	Out line cell border.
		Formulas	It is Values and name function or operators. Only Sum operator.
		3.3.7) Editing Operation	
		Cut	Select and cut the cell or row or column. Press right click button click - cut.

		Copy	Select and copy the cell or row or column then where you want to the place copy it.
		Paste	After cutting or copying in the document then paste in the other place.
		Insert Column	Insert a new column. Use in Insert tool or else right click and choose option.
		Insert Row	Insert a new Row. Use in Insert tool or else right click and choose option.
		Delete row	Choose the unwanted row click the right click button delete the row.
		Delete Column	Choose the unwanted Column click the right click button delete the Column.
		Resize Column/Row	Resize the Column and row.
		Delete sheet	Choose the unwanted sheet click the right click button delete the Sheet.
		3.3.8) Simple formulae usage	Freeze rows or columns, sort in ascending or descending order, Paste special, Enter inside a cell (Ctrl+Enter).
		3.4) Presentation	Create a presentation.
4	Internet	4.1) Wi-fi	Connect to Wifi.
		4.2) Hotspot	Turn the hotspot on or off.
		4.3) Browser History	Hypertext browsers, Lynx, Mosaic, Netscape, Communication Protocols – Gopher, HTTP, FTP, etc. Data sharing – Usenet.
		4.3.1) Browsers	Types of Browsers, Chrome, Firefox, Edge, Internet Explorer.
5	Introduction of activity for programming	5.1) Procedural operations in 3*3 grid with real people.	Usage. Real Activity.
		5.2) Directions and orientation.	Right, left, straight. Absolute vs relative.
		5.3) Pseudo code or Flow chart.	Hand written program.
6	Basic Programming	6.1) Procedural operations	Describes a “simple” action. Take one step forward, turn right. Turn left, emit a sound, write hello. etc.
		6.2) Sequence of operations.	Take a step forward – 5 times. Mix of operations in a defined order.
		6.3) Operators	Arithmetic, boolean, relational, etc.
		6.4) Loops	For, While, Until, Do While, Nested loops, Repeated condition.
		6.4.1) Activity	Activity for teach loop.
		6.5) Conditional statement	Simple If.
			If-then-else
			Else if ladder

7th standard			
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		2.3) Folders, Icons, Apps	Common Folders. Drives. Storage of files. Moving files within one drive or to different drives. Copying between folders. Different views in windows explorer. Using windows explorer Traversing a directory. Tree structure of directories. Deleting files. System trash folder. Copy, paste of files and directories.
		2.4) File	File extensions. What happens when you single click or double click on a file? Multiple ways to reach/open a file – through an app like OpenOffice or through Windows Explorer or through search. File properties – size, type, time created, time accessed, etc. Short cuts, Rename the file, folder.
		2.5) Task manager	Usage of Task Manager, Killing a process. Processes and visible apps. System resources used by processes. Ctrl+Alt+Del, Right click --> Task manager.
3	Open office	3.1) Encoding	ASCII, EBCDIC, Unicode, UTF-8, UTF-16, UTF-32
		3.2) Text document.	Object Wrapping [Right click on the shape and use some features], Shadows, Highlight text, etc.
		3.2.1) Table	How to create table, Insert row and column. Delete column cell and row.
		3.3.9)Formulae, advance usage.	Freeze rows or columns, sort in ascending or descending order, Paste special, Enter inside a cell (Ctrl+Enter).
		3.4) Presentation	Create a presentation.
4	Internet	4.1) Wi-fi	Connect to Wifi.
		4.2) Hotspot	Turn the hotspot on or off.
		4.3) Browser History	Hypertext browsers, Lynx, Mosaic, Netscape, Communication Protocols – Gopher, HTTP, FTP, etc. Data sharing – Usenet.
		4.3.1) Browsers	Types of Browsers, Chrome, Firefox, Edge, Internet Explorer.
		4.4) Browsing and Navigating through websites.	URLs. Address bar. Hover behavior Left and Right Click behavior Scroll. Resizing of the screen. Some things re display and some do not. Forward and backward pages.
		4.5) Search	Search for pictures ,videos and specific websites.
		4.6) New tab	New tab creation – use of memory
		4.7) Downloading	Download and save the documents,Image, and videos.
		4.8) Uploading	
5	Introduction of Advanced Activity	5.1) Procedural operations in 5*5 grid with real people.	Usage. Real Activity.

		5.2) Directions and orientation.	Right, left, straight. Absolute vs relative.
		5.3) Pseudo code or Flow chart.	Hand written program.
6	Basic Programmin g	6.1) Procedural operations	Describes a “simple” action. Take one step forward, turn right. Turn left, emit a sound, write hello. etc.
		6.2) Sequence of operations.	Take a step forward – 5 times. Mix of operations in a defined order.
		6.3) Operators	Arithmetic, boolean, relational, etc.
		6.4) Loops	For, While, Until, Do While, Nested loops, Repeated condition.
		6.4.1) Activity (for loop)	Activity for FOR loop.
		6.5) Conditional statement	Simple If.
			If-then-else
			Else if ladder
		6.5.1) Activity (If-else)	Make a lesson plan for teach the if-else conditions.
7	Advanced programmin g	Using Scratch and Code.org	
		7.1) Backdrop (Stage)	How to Insert a backdrop, Upload a backdrop from the local drive, Create a new backdrop?.
		7.2) Sprite (Object)	How to Insert a sprite, upload a sprite from local drive, create a new sprite using paint?
		7.3) Costumes	How to create a new costumes using paint, Know about the default costumes.
		7.4) Motion	Move -->How to move the object. (forward, backward)
			Turn left --> Turn the specific angles in left.
			Turn right --> Turn the specific angles in right.
			Axis --> x,y positions.
		7.5) Looks	Text --> Give the information by using text
			Color --> Change the color effect to sprite.
			Show --> Show the sprite.
			Hide --> Hide the sprite.
		7.6) Sound	How to use default sound and select the various sounds from the library
			How to record sound?
		7.7) Pen	Size --> How to increase and decrease the size of pen.
			Color --> Change the color of pen.
		7.8) Events	Basic events --> Flag, key pressed, when sprite is clicked.
		7.9) Control	Wait
			Repeat
			Forever
			Conditional statement --> How to check the conditions by using AND operators.
		7.10) Conditional Statement	Conditional statement --> How to check the conditions by using variables and operators.
		7.11) Sensing	Touching mouse pointer.
			Touching the specific color.
		7.12) Variables	Storing state information.
		7.13) Functions	Usage of functions in programming.

8 th standard			
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		4.5) Search	Search for pictures ,videos and specific websites.
		4.6) New tab	New tab creation – use of memory
		4.7) Downloading	Download and save the documents and videos.
		4.8) Uploading	Upload your document, audio, etc to a site
		4.9) Mail	Using E- Mail.
		4.10) Sent, Inbox and other Folders	How to send and receive? (Usage of Mail)
		4.11) Book mark	Usage.

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		6.4) Loops	For, While, Until, Do While, Nested loops, Repeated condition.
		6.4.1) Activity (for loop)	Activity for FOR loop.
		6.4.2) for loop	Example program for practice the for loop.
		6.5) Conditional statement	Simple If.
			If-then-else
			Else if ladder
		6.5.1) Activity (If-else)	Make a lesson plan for teach the if- then-else conditions.
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			How to record sound?
		7.7) Pen	Size --> How to increase and decrease the size of pen.
			Color --> Change the color of pen.
		7.8) Events	Basic events --> Flag, key pressed, when sprite is clicked.
		7.8.1) Custom events	Broadcast the message and wait.
		7.9) Control	Wait
			Repeat
			Forever
		7.10) Conditional Statement	Conditional statement --> How to check the conditions by using variables and operators.
		7.11) Sensing	Touching mouse pointer.
			Touching the specific color.
		7.12) Variables	Storing state information.
		7.13) Functions	Usage of functions in programming.
		7.13.1) Pre-defined Functions	Usage of pre-defined functions in programming.
		7.13.2) User-defined Functions	Usage of user-defined functions in programming.