

BHARATIYA VIDYA BHAVAN – KOCHI KENDRA
YEAR PLAN 2022-2023
COMPUTER SCIENCE
STD –IV

MONTH	UNIT/CONTENT
JUNE/JULY	Revision of Level 3 Logical Thinking Programming Multiple Sprites in Scratch
AUGUST/SEPTEMBER	Programming Multiple Sprites in Scratch More Activities using Scratch Healthy Practices – Pranayama
OCTOBER	Revision & Assessment Term 1
NOVEMBER/DECEMBER	Programming Multiple Sprites in Scratch More activities using Scratch Healthy Practices
JANUARY/FEBRUARY	Naming and Organising Files, Useful Computer Tools
MARCH	Revision and Assessment - Term 2

SL.NO.	NAME OF THE SCHOOL	TEACHER(S)	SIGNATURE
1	BVM, ELAMAKKARA	SANGEETA SRINIVAS ANJANA.V.VINDU IN ANJU G. Ganga Varma.	Sangeeta Anju Anju
2	BVM, EROOR	LIBY MATHAN Anupama Usha	Liby Mathan Anupama Usha
3	BVV, THRIKKAKARA	Anjita - S. Rajas	Anjita
4	BVM, GIRINAGAR	MARY PHILOMINA PC	Mary Philomina
5	BAV, KAKKANAD	SEEMA C Neethesh N Shenoy VANDANA.P.	Seema Neethesh N Shenoy Vandana P. 3/6/2022
6	BMV, TRIPUNITHURA	SRILEKSHMI.M SUSMITHA.SHENAY RESHMA RAJU	Srilekshmi M Susmitha Shenay Reshma Raju 30/5/22
7	BNV, VELLOOR	SHYBEE THOMAS ANISH.M.N	Shybee Thomas Anish M.N 30/5/22

BHARATIYA VIDYA BHAVAN, KOCHI KENDRA

SCHEME OF WORK (2022-2023)

SUBJECT: Computer Science

STD : IV

MONTH	JUNE 2022
UNIT	Revision of Level 3
CONTENT	Programs in Scratch using commands to change the backdrop and basic commands under Motion, Pen. Looks and Sound blocks.
LEARNING OUTCOMES/ COMPETENCY	Students are able to correlate the commands in different blocks like Motion block, Looks blocks, Sound block etc. with the programming context.
ACTIVITY Experiential learning/ Art integration/ Subject appropriate doable activities/ Subject enrichment activities etc	<ul style="list-style-type: none"> a. Make a sprite walk to and fro. b. Design an appropriate background for the same.
ASSESSMENT:	Lab Assessment:
As Learning:	Draw basic shapes (Line, Square, Rectangle) with different color.
For Learning:	Oral questions: Scratch – Shapes, Costume, Blocks

Of Learning:	Discuss some healthy practices while using computer
VALUE	Working systematically and patiently.
RESOURCES (Digital Content)	PPT on Introduction to Scratch. https://drive.google.com/drive/folders/1h3FtbHNcgf1Ibl6R-sy5ofDzGgn_5Tro?usp=sharing
MONTH	JULY 2022
UNIT	Logical Thinking Programming Multiple Sprites in Scratch
CONTENT	Steps in Logical Thinking: – Identify the goal- Understand the given information, rules and conditions- Work out the solution in a stepwise manner. Programming with multiple Sprites - Determine the location of the Sprite - Coordinate the actions of the various Sprites – Use Control block, Sensing block and Events block appropriately.
LEARNING OUTCOMES/ COMPETENCY	<ul style="list-style-type: none"> • Students are able to integrate various blocks like Control block, Sensing, Event block etc. to design a program. • Determine the location of the sprite using proper co-ordinates so that they become confident in writing a program using Scratch.
ACTIVITY Experiential learning/ Art integration/	Create an animation for trampoline jumping. (Page No 71 Ques 2a ,2b ,2c, 3)


Subject appropriate doable activities/ Subject enrichment activities etc	
ASSESSMENT: As Learning: For Learning: Of Learning:	Assessment: Page 74 Ques: A and B (Monkey game) Activities based on logical thinking and reasoning in Page no. (42-48) Identify the main steps in Logical thinking.
VALUE	Exchange of ideas and sharing of resources.
RESOURCES (Digital Content)	SCRATCH DIGITAL CONTENT: https://drive.google.com/drive/folders/1h3FtbHNcgf1Ibl6R-sy5ofDzGgn-5Tro?usp=sharing
MONTH	AUGUST 2022
UNIT	Programming multiple sprites in Scratch (Continued) Healthy Practices
CONTENT	Broadcast in Scratch, use of sensing block

LEARNING OUTCOMES/COMPETENCY	Students are able to apply step wise thinking in solving problems Students are able to improve mind and body - Coordination by practicing asanas
ACTIVITY Experiential learning/ Art integration/ Subject appropriate doable activities/ Subject enrichment activities etc	Scratch project for Conversation between two sprites Costume design for Sprite
ASSESSMENT: As Learning: For Learning: Of Learning	Activity: Dress up game - Dress up the Sprite with the costumes of your choice (use sensing block to select the costume) Continuation of Monkey game Page no 75 Ques 4c Name the Scratch commands involved in broadcasting and receive message?
VALUE	Working Systematically
RESOURCES (Digital Content)	SCRATCH DIGITAL CONTENT: https://drive.google.com/drive/folders/1h3FtbHNcgf1Ibl6R-sy5ofDzGgn-5Tro?usp=sharing
MONTH	SEPTEMBER 2022
UNIT	More Activities Using Scratch
CONTENT	Use stepwise thinking in Scratch programming

LEARNING OUTCOMES/ COMPETENCY	Students can create games, interactive stories and animation using Scratch
ACTIVITY Experiential learning/ Art integration/ Subject appropriate doable activities/ Subject enrichment activities etc	Build your own Computer Game -Conquer the Maze (Page No 102).
ASSESSMENT: As Learning: For Learning: Of Learning:	Use multiple Sprites, Sensing Block, Control Block, Motion Block, Looks Block... to create an aquarium List some commands in Sensing Block along with their uses Which are the commands and keys involved in moving the sprite in mase game.
VALUE	Need for interaction and coordination
RESOURCES (Digital Content)	SCRATCH DIGITAL CONTENT: https://drive.google.com/drive/folders/1h3FtbHNcgf1l6R-sy5ofDzGgn-5Tro?usp=sharing
MONTH	OCTOBER (Revision and Assessment Term I)
MONTH	NOVEMBER
UNIT	More activities using Scratch (Continued...) Healthy Practices (Continued...)
CONTENT	Create games, interactive stories and animation using Scratch, Broadcast. Healthy Practices while using computer.




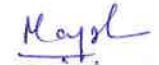
LEARNING OUTCOMES/COMPETENCY	Students are able to apply Stepwise thinking, Logical skills and Creative skills.
ACTIVITY Experiential learning/ Art integration/ Subject appropriate doable activities/ Subject enrichment activities etc	Demonstrate a food chain. Interactive story creation in Scratch
ASSESSMENT: As Learning: For Learning: Of Learning:	Lab Assessment: Scratch exercise given in Lesson 5(Page 84) Demonstrate two eye exercises while using the computer for long time (Blinking, palming, exercise using pencil...) Create at least two robot Sprites, using shapes. Paint various Costumes for each of the robots. Write a program in Scratch to make the robots demonstrate at least two of the asanas they have learned. Thus, students reinforce the yogic asanas they have learnt along with their coding skills.
VALUE	Working systematically
RESOURCES (Digital Content)	SCRATCH DIGITAL CONTENT: https://drive.google.com/drive/folders/1h3FtbHNcgf1Ibl6R-sy5ofDzGgn-5Tro?usp=sharing
MONTH	DECEMBER
UNIT	More activities using Scratch (Continued...) Healthy Practices (Continued...)

CONTENT	Create games, interactive stories and animation using Scratch. Broadcast Healthy Practices while using computer
LEARNING OUTCOMES/COMPETENCY	<ul style="list-style-type: none"> • Students are able to improve programming skills of students are developed. • Students are able to apply Stepwise thinking, Logical skills and Creative skills.
ACTIVITY Experiential learning/ Art integration/ Subject appropriate doable activities/ Subject enrichment activities etc	Interactive story creation in Scratch
ASSESSMENT : As Learning : For Learning : Of Learning :	Create an interactive New Year greeting card using Scratch. Worksheet at the end of the chapter Healthy Practices. (Page No 88-89) Create an interactive Scratch project on musical instruments.
VALUE	Patient listening
RESOURCES (Digital Content)	SCRATCH DIGITAL CONTENT: https://drive.google.com/drive/folders/12JfalXCuodFiZCsytXsOOkb87q-ati5V?usp=sharing
MONTH	JANUARY
UNIT	Naming and Organising Files

CONTENT	Concept of files, folders and sub folders (definition and uses) – Selecting appropriate names for files and folders – Identifying the type of content in a file using file extensions – Organise data using files, folders and subfolders (directory structure).
LEARNING OUTCOMES/COMPETENCY	Students learn the concept of files, folders and sub folders
ACTIVITY Experiential learning/ Art integration/ Subject appropriate doable activities/ Subject enrichment activities etc	<p>Categorising the files, Organizing the files. (Separate different types of files based on file extensions.)</p> <p>Making clock using unused CDs</p> <p>Create a folder on student's name. In text editor, type five sentences about yourself, save the file as "Myself" and save it in the folder created.</p> <p>Amrutha  Myself.txt</p>
ASSESSMENT: As Learning: For Learning: Of Learning :	<p>Create a sub folder. Then create a file and write 3 common input devices and output devices.</p> <p>Worksheet at the end of the chapter Page-127-130</p> <p>Identify different types of files on your computer.</p>
VALUE	Arranging things at home and school in an orderly way.
RESOURCES (Digital Content)	<p>SCRATCH DIGITAL CONTENT:</p> <p>https://drive.google.com/drive/folders/1h3FtbHNcgf1Ibl6R-sy5ofDzGgn-5Tro?usp=sharing</p>
MONTH	FEBRUARY

UNIT	Useful Computer Tools
CONTENT	Use the On-Screen Keyboard tool - Use the Calculator application on a computer - Change the Date and Time on the computer - Close a program using the System Monitor / Task Manager.
LEARNING OUTCOMES/COMPETENCY	Students learn the usage of a tool in a situation where the conventional devices stop working (usage of on-screen keyboard and shortcut keys instead of mouse)
ACTIVITY Experiential learning/ Art integration/ Subject appropriate doable activities/ Subject enrichment activities etc	Appropriate selection of tools while using computer in real life.
ASSESSMENT:	
As Learning:	a. Using On screen keyboard type on topic in text editor
For Learning:	'My Pet'.

Of Learning:	b. Using Calculator find $4+5=$, $5*6=$, $23+145=$ c. Question no.2 – page 144
VALUE	Finding alternative way of doing a task
RESOURCES (Digital Content)	SCRATCH DIGITAL CONTENT: https://drive.google.com/drive/folders/1h_FtbHNcgf1Ibl6R-sy5oflJzGgn-5Tro?usp=sharing
MONTH	MARCH (Revision & Assessment Term II)

SL.NO.	NAME OF THE SCHOOL	TEACHER(S)	SIGNATURE
1	BVM, ELAMAKKARA	SANGEETA SRINIVAS ANJANA V. VINOVIN	
2	BVM, EROOR	Ampama Usha	
3	BVV, THRIKKAKARA	Anjila. S. Rajan	
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5	BAV, KAKKANAD	SEEMAC Neethesh. N. Shenoy VANDANA.P.	Seen 30/5/22 not in 3/6/2022
6	BMV, TRIPUNITHURA	SRILEKSHMI. M SUSMITHA SHENOY RESHMA RAJU	Srilekshmi 30/5/22 do
7	BNV, VELLOOR	SHYBEE THOMAS ANISH M.N	Shybee Joseph 30/5/22 do 30/5/22