

CODING

CLASS -VII

2022-23

| Date | Chapter | Ex./ Demo./Practicals |
|------------------------|---|--|
| Important links | Student HandBook- https://cbseacademic.nic.in/web_material/codeingDS/classVII_Coding_Student_Handbook.pdf | Project Booklet for Student - https://www.microsoft.com/en-us/makecode https://cbseacademic.nic.in/web_material/codeingDS/classVII_Coding_Project_Booklet.pdf |
| April | INTRODUCTION TO CODING | Practicals Based on Demo |
| No.of working days-23 | How do traffic lights work? | |
| | Where else do we see applications of coding? | |
| | What exactly is coding? | |
| | What is a programming language | Activity - How do traffic lights work? |
| May | ALGORITHMS WITH BLOCK CODING | Activity – Profit and Loss using Flowcharts |
| No.of working days- 10 | 1. Searching for a word in a dictionary 2. Flowchart a. What is a Flowchart? b. Symbols used created a Flowchart c. Benefits of using a flowchart 3. Activity – Profit and Loss using Flowcharts | Quiz Time Practicals Based on Demo |
| July | VARIABLES IN REAL LIFE | Activity: Addition operation using block coding |
| No.of working days-25 | 1. What are Variables? 2. Naming Variables "3. Data Types in Variables 4. Performing operations on Variables | |
| | What is Variable Initialization? | |
| | Data Types in programming | |
| | Relational operators | Practicals Based on Demo |
| | Greater than | |
| | Equal to | |
| | Less than | |
| | Greater than or equal to | |
| | Less than or equal to | |
| | Not equal to | |
| | Logical Operators | Activity: Are you a teen? |
| | a. And operator | |
| | b. OR operator | |
| | c. Not operator | |
| | Combining logical operators | |
| | | |

| | | |
|---|---|--|
| August | VARIABLES IN REAL LIFE | https://education.minecraft.net/get-started . |
| No.of working days-22 | What is Variable Initialization? | Quiz |
| | Data Types in programming 1. Integer 2. Floating-Point Number 3. String 4. Boolean How do we validate user input in programming? | |
| September | Math Operations in Programming | Practicals Based on Demo Quiz time |
| No.of working days-25 | Addition Subtraction Multiplication Division Modulus | |
| October | Applied Project | Practicals Based on Demo |
| No.of working days- | Create a program in Arcade to display square of | |
| November | Loops using block coding | Quiz time |
| No.of working days-24 | Introduction to Loops | |
| | Increment Loops | |
| | Different types of loops | |
| | While loop | |
| | For loop | |
| December | SEQUENCING WITH BLOCK CODING | Practicals Based on Demo Activity Drawing Rectangle https://minecraft.makecode.com/ |
| No.of working days-26 | What is Sequencing? | |
| | Examples of Sequence, Selection and Iteration | |
| | What is a Bug? | |
| | Activity Drawing Rectangle Fun Activity: Chase the Apple | |
| January | sequencing | Quiz Time Applied Project (https://scratch.mit.edu/) Code.org |
| No.of working days-13 | Is there a better way to apply sequencing? | |
| | Activity: Better way to create a square | |
| | Activity: Distributing Birthday Sweets | |
| | Applied Project Create a rectangle of length 5 and height 3 using a loop (repeat block) in Minecraft. | |
| February | Submission and assessment of the projects | |
| No.of working days-22 | | |
| Note: The students will be assessed on the basis of the classroom performance, task assigned as Home Assignments / Holiday Homework / Project. | | |