

## NAVY CHILDREN SCHOOL, DELHI

### COMPUTER SPLIT UP SYLLABUS 2024 - 25 ( Class VII )

Month	Chapter	Contents	Objectives	Activities
APRIL/MAY	1. <b>Computer — Hardware Components</b> No. of Periods 4	<ul style="list-style-type: none"> <li>- Computer system</li> <li>- Hardware components</li> <li>- External and internal hardware</li> <li>- Storage and other devices</li> </ul>	<b>Students will be able to:</b> <ul style="list-style-type: none"> <li>- recognize different components of a computer like SMPS, ports, MODEM and disk drives</li> <li>- explain the usage of different</li> </ul>	<b>Lab Activity:</b> <ul style="list-style-type: none"> <li>- Take an old CPU and open it. Observe the different parts inside it and list all the parts on your notebook. Note the placement of the different components on motherboard.</li> <li>- Make a Powerpoint presentation for internal hardware like</li> </ul>
	2. <b>An Introduction to Number Systems</b> No. of Periods 4	<ul style="list-style-type: none"> <li>- Decimal number system</li> <li>- Binary number system</li> <li>- Octal number system</li> <li>- Hexadecimal number system</li> <li>- Binary arithmetic</li> </ul>	<b>Students will be able to:</b> <ul style="list-style-type: none"> <li>- explain the need for Number Systems</li> <li>- list the uses of various Number Systems in computer learning</li> <li>- convert a value from decimal number system to binary and vice versa</li> <li>- citing examples of binary, decimal conversion and demonstrating them</li> </ul>	<b>Lab Activity:</b> <ul style="list-style-type: none"> <li>- Make a Powerpoint presentation on different types of number systems. You can also include slides on conversion of numbers in different number systems.</li> </ul>
JUNE/JULY	3. <b>Computer VIRUS</b> No. of Periods 3	<ul style="list-style-type: none"> <li>- Computer VIRUS</li> <li>- Types of computer VIRUS</li> <li>- Measures to prevent VIRUS attack</li> <li>- Symptoms of VIRUS attack</li> <li>- Forms of VIRUS attack</li> <li>- AntiVIRUS softwares</li> <li>- Firewall</li> </ul>	<b>Students will be able to:</b> <ul style="list-style-type: none"> <li>- define a virus</li> <li>- list different types of viruses</li> <li>- follow standard measures to prevent virus attack</li> <li>- identify symptoms of virus attack on a computer</li> <li>- use a suitable antivirus software</li> </ul>	<b>Lab Activity:</b> <ul style="list-style-type: none"> <li>- In your computer lab, run an antivirus software in a computer and check VIRUS. Find out the process to clean or delete the VIRUS if present. In your class, discuss about the harmful effects of different computer VIRUSES.</li> </ul>
AUGUST	4. <b>Ethics and Safety Measures in Computing</b> No. of Periods 4	<ul style="list-style-type: none"> <li>- Advantages of using internet</li> <li>- Disadvantages of using internet</li> <li>- Ethics in computing</li> <li>- Unethical practices</li> <li>- Safety measures while using computers and internet</li> <li>- Digital footprints</li> </ul>	<b>Students will be able to:</b> <ul style="list-style-type: none"> <li>- follow ethics in computing</li> <li>- identify online threats</li> <li>- identify positive and negative uses of social media</li> <li>- show responsible behaviour when using computer and internet</li> <li>- become responsible digital citizens</li> </ul>	<b>Lab Activity:</b> <ul style="list-style-type: none"> <li>- Make a chart showing computer lab rules and display it in the class. This can help us in safe computing.</li> <li>- In your class, discuss on ethical and unethical practices related to internet use.</li> </ul>
SEPTEMBER / OCTOBER	5. <b>Spreadsheets - An Introduction</b> No. of Periods 6	<ul style="list-style-type: none"> <li>- Spreadsheet</li> <li>- Microsoft Excel (MS Excel)</li> <li>- Features of Microsoft Excel</li> <li>- Entering data in MS Excel</li> <li>- Performing calculations in MS Excel</li> <li>- Selecting cells, changing cell contents</li> <li>- Undo and Redo features</li> <li>- Copy and move data</li> </ul>	<b>Students will be able to:</b> <ul style="list-style-type: none"> <li>- define a spreadsheet</li> <li>- list the features and components of a spreadsheet</li> <li>- create a worksheet</li> <li>- identify the components of spreadsheet window</li> <li>- differentiate between a workbook and a worksheet</li> </ul>	<b>Lab Activity:</b> <ul style="list-style-type: none"> <li>- In your computer Lab, make an excel sheet showing total marks scored by 10 students. You can use formula for total marks.</li> <li>- Discuss on advantages of spreadsheet and workbook in your class.</li> </ul>

NOVEMBER	<b>6. MS Access</b> <b>-Database Management System</b> <b>No. of Periods 4</b>	<ul style="list-style-type: none"> <li>- Database</li> <li>- Uses of database</li> <li>- Create and save a database</li> <li>- Primary key</li> <li>- Querying a database</li> </ul>	<b>Students will be able to:</b> <ul style="list-style-type: none"> <li>- define database and DBMS</li> <li>- list real-life examples of databases</li> <li>- design a database</li> <li>- describe different data types</li> <li>- define a primary Key</li> <li>- create a table, insert data, save and edit a table</li> </ul>	<b>Lab Activity:</b> <ul style="list-style-type: none"> <li>- Make a telephone directory in MS access.</li> <li>- Make a student registration record using any DBMS application.</li> </ul>
DECEMBER/ JANUARY	<b>7. HTML – Advanced Features</b> <b>No. of Periods 6</b>	<ul style="list-style-type: none"> <li>- Making a website</li> <li>- HTML – An introduction</li> <li>- HTML Tags</li> <li>- Titles and Footers</li> <li>- Setting Background</li> <li>- Tables in HTML</li> </ul>	<b>Students will be able to:</b> <ul style="list-style-type: none"> <li>- add advanced features to a web page, like lists, images, links, tables and forms</li> </ul>	<b>Lab Activity:</b> <ul style="list-style-type: none"> <li>- Write an HTML program for your personal introduction using bold letters, tables and bullets.</li> </ul>
FEBRUARY	<b>8. Programming Languages - An Introduction to Python</b> <b>No. of Periods 4</b>	<ul style="list-style-type: none"> <li>- Computer Programming</li> <li>- Introduction to Python</li> <li>- Uses of Python</li> <li>- Python Programming</li> </ul>	<b>Students will be able to:</b> <ul style="list-style-type: none"> <li>- understand the importance of programming languages, basic concepts of Python and programming on Python</li> </ul>	<b>Lab Activity:</b> <p>Write programs in Python to do the following:</p> <ul style="list-style-type: none"> <li>- To input 5 numbers and check their average</li> <li>- To find the sum of two numbers</li> <li>- To find the sum of digits in a 5 digit number</li> </ul>