

NAVY CHILDREN SCHOOL, GOA
COMPUTER SPLIT UP SYLLABUS 2024 - 25 (Class VII)

| Month | Chapter | Contents | Objectives | Activities |
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| APRIL/MAY | 1. Computer — Hardware Components No. of Periods 4 | <ul style="list-style-type: none"> - Computer system - Hardware components - External and internal hardware - Storage and other devices | Students will be able to: <ul style="list-style-type: none"> - recognize different components of a computer like SMPS, ports, MODEM and disk drives - explain the usage of different components - differentiate between external and internal hardware - cite examples of external and internal hardware | Lab Activity: <ul style="list-style-type: none"> - 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. - Make a Powerpoint presentation for internal hardware like SMPS, motherboard, ports, graphics card, etc. |

JUNE/JULY

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| <p>2. An Introduction to Number Systems No. of Periods 4</p> <p>3. Computer VIRUS No. of Periods 3</p> | <ul style="list-style-type: none">- Decimal number system- Binary number system- Octal number system- Hexadecimal number system- Binary arithmetic - Computer VIRUS- Types of computer VIRUS- Measures to prevent VIRUS attack- Symptoms of VIRUS attack- Forms of VIRUS attack- AntiVIRUS softwares- Firewall | <p>Students will be able to:</p> <ul style="list-style-type: none">- explain the need for Number Systems- list the uses of various Number Systems in computer learning- convert a value from decimal number system to binary and vice versa- citing examples of binary, decimal conversion and demonstrating them <p>Students will be able to:</p> <ul style="list-style-type: none">- define a virus- list different types of viruses- follow standard measures to prevent virus attack- identify symptoms of virus attack on a computer- use a suitable antivirus software | <p>Lab Activity:</p> <ul style="list-style-type: none">- Make a Powerpoint presentation on different types of number systems. You can also include slides on conversion of numbers in different number systems. <p>Lab Activity:</p> <ul style="list-style-type: none">- 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. |
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AUGUST

**4. Ethics and Safety Measures in Computing
No. of Periods 4**

- Advantages of using internet
- Disadvantages of using internet
- Ethics in computing
- Unethical practices
- Safety measures while using computers and internet
- Digital footprints

Students will be able to:

- follow ethics in computing
- identify online threats
- identify positive and negative uses of social media
- show responsible behaviour when using computer and internet
- become responsible digital citizens
- take care about the digital footprint being created by their online behaviour
- use information ethically when developing presentations/ projects/ etc.

Lab Activity:

- Make a chart showing computer lab rules and display it in the class. This can help us in safe computing.
- In your class, discuss on ethical and unethical practices related to internet use.

**SEPTEMBER/
OCTOBER**

**5. Spreadsheets - An Introduction
No. of Periods 6**

- Spreadsheet
- Microsoft Excel (MS Excel)
- Features of Microsoft Excel
- Entering data in MS Excel
- Performing calculations in MS Excel
- Selecting cells, changing cell contents
- Undo and Redo features
- Copy and move data
- Autofill feature

Students will be able to:

- define a spreadsheet
- list the features and components of a spreadsheet
- create a worksheet
- identify the components of spreadsheet window
- differentiate between a workbook and a worksheet
- edit/format a worksheet

Lab Activity:

- In your computer Lab, make an excel sheet showing total marks scored by 10 students. You can use formula for total marks.
- Discuss on advantages of spreadsheet and workbook in your class.

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