

DELHI PUBLIC SCHOOL JAMMU
SESSION-2022-2023
YEARLY SYLLABUS

CLASS-X
SUBJECT : SCIENCE

➤ **OBJECTIVES:-**

- To provide the broader objectives of science that is process, skill, knowledge, curiosity etc.
- To encourage and enable students to develop inquiring minds and curiosity about science and nature.
- To communicate scientific ideas, arguments, and practical experiences accurately in a variety of ways.
- To think analytically, critically and creatively to solve problems.
- To acquire knowledge, conceptual understanding and skills to solve problems and make informed decisions in scientific contents.
- To understand the nature of science, and technology and society including the benefits and limitations of science and its applications in developments.
- To enable the learner to review, organize and edit their own work and work done by peers.
- To develop skills of scientific inquiry to design and evaluate scientific evidence to draw conclusions.

PHYSICS:

S.No	MONTH	CHAPTER/ TOPIC
1	April	Light(Reflection)
2	May	Light(Refraction
3	June/ July	Light (Full Chapter)
4	August/September	Human Eye+ Practicals
5	October	Electricity
6	November	Magnetic Effects of current
7	December	Revision : Light Human eye & colorful world

		Magnetic effects of current
8	January	Revision
9	February	Preboard-1
10	March	Preboard-II

SYLLABUS FOR FA-1

1.Light (up to reflection)

SYLLABUS FOR HALF YEARLY

1.Light

2. Human Eye and Colourful World

+Practicals

PRE-BOARD-I

1.Light

2.Human Eye and Colourful World + Practical's

3. Current Electricity

PRE-BOARD-II

1.Electricity

2. Magnetic effects of current

3. Human eye & colourful

4.Light

PRACTICAL'S COVERED APRIL + MAY

1. Determination of the focal length of (i) Concave Mirror (ii) Convex Lens by obtaining the image of distant object.
2. Finding the image distance for varying object distance in case of a convex lens and drawing corresponding ray diagrams to show the nature of image formed.

AUGUST AND SEPTEMBER

1 Tracing the path of the ray of light passing through a rectangular glass slab for different angles of incidence. Measure the angle of incidence, angle of refraction, angle of emergence and interpret the result.

2. Tracing the path of the rays of light through a glass prism.

NOVEMBER

1. Studying the potential difference (v) across a resistor on the current (I) passing through it and determine its resistance. Also plotting a graph between v and I .
2. Determination of the equivalent resistance of two resistors when connected in (a) series and (b) parallel.

ENRICHMENT ACTIVITY

1. Ohm's law and study various electrical devices connected in Ohm's Law
2. Faraday's law of electromagnetic induction and its experimental verification

CHEMISTRY :

S.No	MONTH	CHAPTER/TOPIC
1	April	Chemical Reactions and Equations
2	May+June	Chemical Reactions and Equations + Acids, Bases and Salts
3	July	Acids, Bases and Salts (Contd.)
4	August	Acids, bases and Salts (Contd.) + Practicals
5	September	Metals and Non Metals
6	October	Metals and Non Metals (Contd.) + Practicals
7	November	Carbon and its Compounds.
8	December	Carbon and it's compounds (Contd.) + Practicals
9	January	Revision

10	February	Preboard-I
11.	March	Preboard-II

SYLLABUS FOR FA-1

1. Chemical Reactions and Equations

SYLLABUS FOR HALF YEARLY

1. Chemical Reactions and Equations
2. Acids, Bases and Salts + Practicals
3. Metals and Non-Metals

PRE-BOARD-I

1. Chemical Reactions and Equations
2. Acids, Bases and Salts + Practicals
3. Metals and Non-Metals + Practicals

PREBOARD -II

1. Chemical Reactions and Equations
2. Acids, Bases and Salts + Practicals
3. Metals and Non-Metals + Practicals
4. Carbon and it's Compounds.

PRACTICALS (HALF YEARLY)

1. To study the properties of acids and bases (HCl and NaOH) by their reaction with
 - a) Litmus solution (Blue/Red)
 - b) Zinc metal
 - c) Solid sodium carbonate.

PRACTICALS (FINAL)

1. To study the following properties of acetic acid
 - i) Odour
 - ii) Solubility in water
 - iii) Effect on litmus
 - iv) Reaction with sodium bicarbonate
2. To study the comparative Cleansing action of a sample of soap in soft and hard water.

BIOLOGY:

S.No	MONTH	CHAPTER/TOPIC
1	April	Life Processes (Nutrition &Respiration)
2	May+June	Life Processes (Transportation&Excretion) +Practicals
3	July	Control and Co-ordination in Plants and Animals
4	August	Control and Co-ordination in Plants & Animals
5	September	How Do Organisms Reproduce?+ Practical
6	October	How Do Organisms Reproduce?(Contd.)
7	November	Heredity+ Practical
8	December	Our Environment
9	January	Revision
10	February	Preboard-I
11.	March	Preboard-II

SYLLABUS FOR FA-1

1.Life Processes

SYLLABUS FOR HALF YEARLY

1.Life Processes

2. Control and Co-ordination in Plants and Animals
+Practicals

PRE BOARD-I

1.Life Processes

2.Control and Co-ordination in Plants and Animal
+ Practical

3.How do Organisms Reproduce?

PRE-BOARD-II

- 1.Life Processes
- 2.Control and Co-ordination in Plants and Animal
- 3.How do Organisms Reproduce?
- 4.Heredity
- 5.Our Environment

PRACTICALS:

- 1.Experimentally show that carbon dioxide is given out during Respiration.
- 2.Prepare a temporary mount of a leaf peel to show stomata.
- 3.Studying (a) binary fission in *Amoeba*, and (b) Budding in yeast and Hydra with the help of prepared slides.
- 4.Identification of a different parts of an embryo of a dicot seed (Pea, gram or red kidney bean).