

DELHI PUBLIC SCHOOL JAMMU
SESSION-2023-24
YEARLY SYLLABUS

CLASS-IX
SUBJECT SCIENCE

OBJECTIVES:-

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

SUBJECT : PHYSICS

| S.NO. | | NAME OF THE LESSON/TOPIC |
|--------------|-----------|---|
| 1 | APRIL | Motion Activity: To study how position and time is related with each other using graphical method. |
| 2 | MAY | Motion and its numericals (Contd.) Revision Test |
| 3 | JUNE+JULY | Force and laws of Motion Activity: To verify Newton's three laws of motion. |
| 4 | AUGUST | Work and Energy Revision Test |
| 5 | SEPTEMBER | Work and Energy Activity: To verify Archimedes' principle. |
| 6 | OCTOBER | Gravitation Revision Test |

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| 7 | NOVEMBER | Floatation and its numericals Revision Test : Numericals |
| 8 | DECEMBER | Sound Activity: To verify laws of Reflection of sound. |
| 9 | JAN | Revision |
| 10. | FEBRUARY | Revision |

SYLLABUS FA-1

1. Motion

SYLLABUS FOR HALF YEARLY EXAMINATION

1. Motion,
2. Force Laws of Motion

SYLLABUS OF FA-2

1. Gravitation + Floatation

SYLLABUS FOR FINAL EXAMINATION

1. Gravitation and
Floatation
2. Work and Energy.
3. Motion
4. Force & Laws of
motion

SUBJECT ENRICHMENT :(HALF YEARLY)

1. Determine the density of solid by using spring balance and a measuring cylinder.
2. Establishing the relation between the loss in weight of a solid when immersed in a tap water and strongly salt water, with the weight of water displaced by it by taking at least two different solids.

(FINAL EXAMINATION)

1. Determine the speed of a pulse propagated through a stretched string/slinky.
2. Verification of Laws of Reflection by sound.

SUBJECT : CHEMISTRY

| S.NO. | MONTH | NAME OF THE LESSON/TOPIC |
|-------|-----------|--|
| 1 | APRIL | Matter in our surroundings Activity: To study the characteristics of particles of matter. |
| 2 | MAY | Matter in our surroundings (Contd.) Practical: To determine the melting point of ice & boiling point of water. |
| 3 | JULY | Is matter around us pure? Activity: To differentiate between solution, colloidal and suspension on the basis of properties. |
| 4 | AUGUST | Is matter around us Pure (Contd) Activity: Revision and class test |
| 5 | SEPTEMBER | Is matter around us Pure (Contd) |
| 6 | OCTOBER | Atoms and Molecules Activity: To determine the law of conservation of mass. |
| 7 | NOVEMBER | Atoms and molecules Revision Test |
| 8 | DECEMBER | Structure of Atom Assignment on Rutherford's x-ray scattering experiment. |
| 9 | JANUARY | Structure of Atom Revision Test |
| 10 | FEBRUARY | Revision |

SYLLABUS FOR FA-1

1. Matter in our surroundings

SYLLABUS FOR HALF YEARLY EXAMINATION

1. Matter in our surroundings
2. Is Matter around us Pure + Practicals

SYLLABUS FOR FA-2

1. Atoms and molecules

SYLLABUS FOR FINAL EXAMINATION

1. Atoms and Molecules + Practicals

2. Structure of Atom

ENRICHMENT ACTIVITIES

HALF YEARLY

1. To determine the melting point of ice and boiling point of water.

FINAL EXAMINATION

1. To carry out the following reactions and classify them as physical or chemical changes.
 - a) Iron with copper sulphate solution in water.
 - b) Burning of magnesium ribbon in air.
 - c) Zinc with dilute sulphuric acid.
 - d) Heating of copper sulphate crystals.
 - e) Sodium sulphate with barium chloride in the form of their solutions in water.

SUBJECT : BIOLOGY

| S. No. | MONTH | NAME OF THE LESSON/TOPIC |
|---------------|--------------|--|
| 1 | APRIL | The Fundamental unit of life Activity: To study the process of osmosis in raisins. |
| 2 | MAY | Fundamental unit of life cell (contd.) Practical: Preparation of stained mounts of onion peel and draw labelled diagrams. |
| 3 | JULY | Tissues Practical: To study plant tissues from prepared slides/ diagrams. |
| 4 | AUGUST | Tissues(contd.) Practical: To study animal tissues from prepared slides/ diagrams. |
| 5 | SEPTEMBER | Tissues Revision Test |
| 6 | OCTOBER | Food Production Activity : Project report on nutrient Management |

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| 7 | NOVEMBER | Food Production (Contd.) |
| 8 | DECEMBER | Food Production(Contd.) |
| 9 | JANUARY | Natural Resources(Internal Assessment) Activity: Project report on biogeochemical cycles. |
| 10 | FEBRUARY | Revision |

SYLLABUS FOR FA-1

- 1.Fundamental unit of life

SYLLABUS FOR HALF YEARLY EXAMINATION

1. Fundamental unit of life
2. Tissues

SYLLABUS FOR FA-2

1. Improvement in food resources

SYLLABUS FOR FINAL EXAMINATION

1. Improvement in food resources

PRACTICALS:

- 1Preparation of stained mounts of onion peel and draw labelled diagrams.
- 2.Identification of Parenchyma, Collenchyma and sclerenchyma tissues in plants,striped,smooth and cardiac muscles fibres and nerve cells in animals, from prepared slides. Draw their labeled diagrams.