

ACADEMIC PLAN
Session : 2016 - 17
CLASS : VI
SUBJECT : SCIENCE

Summative Assessment - I

- 1) Our Environment
- 2) Food
- 3) Nature of Matter
- 4) Work and Energy
- 5) Separation of Substances
- 6) Structure and Function of the Living Organisms-plants
- 7) Magnets

Summative Assessment - II

- 1) Measurement and Motion
- 2) Changes around us
- 3) Structure and function of the living organisms – Animals
- 4) Fabric from fibre
- 5) The world of living
- 6) Electric current and circuits
- 7) Light and shadows

SCHEDULE OF FORMATIVE ASSESSMENT & UNIT TEST

FORMATIVE ASSESSMENT-I	FORMATIVE ASSESSMENT-II	FORMATIVE ASSESSMENT-III	FORMATIVE ASSESSMENT-IV
UNIT TEST (20)	UNIT TEST (20) HOLIDAY HOME WORK (10) • (INTERDISCIPLINARY PROJECT) Activity (10)	UNIT TEST (20) ACTIVITY (10) • MCQ (10)	UNIT TEST (20) HOME WORK/ ASSIGNMENT (SA-I(10) + SA-II(10))

SYLLABUS FOR UNIT TEST –I

- Our Environment

SYLLABUS FOR UNIT TEST –II

- Nature of Matter

SYLLABUS FOR UNIT TEST –III

- Structure & functions of living Organisms- Animals

SYLLABUS FOR UNIT TEST –IV

- Fabric from Fibre
- The World of Living

ACTIVITY FOR FORMATIVE ASSESSMENT – II

Activity 1 - Interdisciplnary project (Holiday Homework)

Activity 2 - Group Acivity – Separation Techniques

ACTIVITY FOR FORMATIVE ASSESSMENT –III

1. MCQ – Measurement & Motion
Changes around Us
2. To make a toy/any shape using different types of clothes

<p>July – August</p> <p>JULY (21 days)</p>	<p>3. Nature of Matter (U.T. - II) (Revision)</p>	<ol style="list-style-type: none"> 1. Classification of things around on the basis of parameters like – size, colour , texture,etc. 2. Students will be shown the process of diffusion using colours of HOLI , diffusion of ink in a chalk piece(liquid in solid). 3. Collection of samples of salt,wax,sand,chalk powder and sugar and to their solubility in water. 4. Miscibility of liquids like glycerine, milk, oil, honey in water is checked. 5. Diffusion of perfume, incense stick into air. 6. To prepare saturated salt solution. 7. To study the effect of temperature on the solubility of a substance. 	<ol style="list-style-type: none"> 1. The students will realize the importance of classification of materials. 2. The students understand how to classify materials on the basis of similarities and dissimilarities in some of their properties. 3. The students will learn about different properties of matters as follows :- <ul style="list-style-type: none"> a) Transparency b) Floating/ sinking c) Diffusion d) Dissolution e) Solubility 	<p>1+1</p>
	<p>4. Work and Energy (Class Test)</p>	<p>Students will perform several tasks like opening a bottle and lifting heavy objects easily by using simple machines and to show work is done on a body through a force acting on it</p>	<p>Students will learn about :-</p> <ol style="list-style-type: none"> 1. The concept of work and energy. 2. Measurement of work. 3. Forms of energy and their use in our day to day life. <p>*Critical Thinking</p>	<p>1+1</p>
	<p>5. Separation of substances</p> <p>FA-II Holiday Home Work (Class Test)</p> <p>FA-II Group activity on separation techniques</p>	<ol style="list-style-type: none"> 1. To obtain clear water from muddy water by – Sedimentation, Decantation and filtration. 2. Separation of mixtures : <ul style="list-style-type: none"> a) Chana dal , peanuts and flour b) Salt and Sand c) Sand and camphor. 	<ol style="list-style-type: none"> 1. Students will learn about the various methods of separation. <p>*Decision Making, Scientific Temper</p>	<p>1+1</p>

MONTH	LESSON	CLASS ACTIVITIES	LEARNING OBJECTIVES/ VALUES	H.W/ ASSIGNMENTS
FA-II August (22 days)	6. Structure and function of the living organisms Plants. (Class Test)	<ol style="list-style-type: none"> To observe parts of plants and their importance. To study how roots bind the soil. Study leaf impression to find arrangements of veins. Conduction of water in plants using coloured ink. 	<p>Students will be able :-</p> <ol style="list-style-type: none"> To understand the structure of flowering plants. State the functions of root , stem and leaves and their modifications. Understand the structure of flower and its functions. <p>* Environment sensitization, Awareness about nature, Learning by doing</p>	2+1
	7. Magnets (Class Test)	<ol style="list-style-type: none"> Seperation of magnetic and non-magnetic substances. Activity to show most of magnetic strength of a magnet is at poles. Activity to show how magnets react on bringing same or opposite poles close together. To magnetise an iron needle. 	<p>Students will be able to:-</p> <ol style="list-style-type: none"> Understand the concept of magnets, magnetic force & their properties. Learn how magnets help in finding direction. Learn how two magnets behave when brought close to each other. <p>* Work ethics , logical thinking</p>	1+1
September (5 days)	REVISION – SA – I EXAMINATION			

MONTH	LESSON	CLASS ACTIVITIES	LEARNING OBJECTIVES/ VALUES	H.W./ ASSIGNMENTS
FA-III (Oct-Nov) October (17 days)	1. Measurement and Motion FA-III Activity- MCQ	1. Measuring a curved line with the help of a thread and a divider. 2. To Measure the length of a book or a table using scale.	1. Students will learn about the correct measurement of length. 2. The students will learn about measuring of length using a scale and length of a curved line. 3. The students will realize the importance of need to have standards units of measurement. 4. Students will learn about:- a) The concept of rest and motion. b) Different types of motion. c) Force and its effects. *Problem Solving, Critical Thinking	1+1
	2. Changes Around Us FA-III Activity- MCQ	1. To classify changes around us as physical or chemical change:- a) Change of shape of balloon on inflation and deflation. b) Burning of a candle. c) Preparing solutions of salt and sugar. d) Heating of sugar in a china dish. e) Melting of a candle wax. 2. To study endothermic and exothermic changes	1. Students will learn about different types of changes that occur around us. 2. Students will learn Characteristic of :- a) Reversible and Irreversible changes. b) Physical and Chemical changes. *Analytical Thinking	1+1

MONTH	LESSON	CLASS ACTIVITIES	LEARNING OBJECTIVES/ VALUES	H.W./ ASSIGNMENTS
November (21 days)	3. Structure and function of the living organisms- Animals U.T. - III (Revision)	1. Students will watch a smart board presentation to concretized their understanding about some organ systems and their structures.	1. Students will understand various system of human body and their functions. * Self Awareness,Care for others	2+1
	4. Fabric from Fibre U.T. - IV (Revision) FA-III Activity-2 To make a toy/ any shape using different types of clothes.	1. Students will perform an activity with sheets of different colour and weave them together to form a sheet. Through this they understand how fibre are interwoven to form a fabric.	1. Students will be able to:- a) Identify various types of fabrics. 2. Differentiate between various plant and animal fibres. 3. Differentiate between weaving and knitting. * Lifelong learning, Analytical approach	1+1
FA-IV (Dec-Jan) December (22 days)	5. The World of Living U.T - IV (Revision)		Students will:- 1. Learn the characteristics of living organisms. 2. Study the various life processes. * Awareness about nature, Life long learning	1+1

	6. Electric Current and Circuits (Class Test)	<ol style="list-style-type: none"> 1. To open a commercial cell and study its parts. 2. To study different arrangements of electric cell and a bulb. 3. To learn how to make an electric switch. 4. To test given material as conductors and insulators. 5. To make an electric circuit and understand its working. 	Students will learn:- <ol style="list-style-type: none"> 1. How an electric cell works and helps in lighting a bulb. 2. How to make an electric circuit and a switch. 3. That some materials allow electric current to pass through them but some do not. 4. The importance of conductors and insulators. * Critical Thinking	1+1
January (12 days)	7. Light and Shadows (Class Test)	<ol style="list-style-type: none"> 1. Study different types of materials as-transparent, translucent and opaque. 2. To make a pin hole camera in class. 	Students will learn:- <ol style="list-style-type: none"> 1. About light as a form of energy. 2. How shadows are formed. 3. That light always travels in a straight line. 4. That the direction of light changes when it falls on a mirror. *Scientific temper, Learning by doing, Work ethics.	1+1

Note:

- **One notebook will be maintained for C.W. and H.W./ Assignment and it will be assessed by the teacher as FA-IV.**
- **Measures to enhance performance of bright students-**
 - HOTS questions
 - Application and skill based questions
 - Problem solving questions / situational questions
- **Remedial measures for below average students-**
 - Objective type questions
 - Very short answer type questions
 - Frequent oral and written test
- **The following chapters will be supported by PPT -**
 - Work and Energy
 - Structure and Function of the Living Organisms - Plants
 - Fabric and Fibre
 - Light and Shadows