

ACADEMIC PLAN
SESSION - 2016-17
CLASS - VII
SUBJECT: SCIENCE

SUMMATIVE ASSESSMENT - I

1. Transportation in Plants & Animals
2. Nutrition in Living Organisms – Plants
3. Nutrition in Living Organisms – Animals & Man
4. Weather, climate and adaptation of animals to climate
5. Heat
6. Chemical Substances and processes
7. Acids, Bases and Salts
8. Motion and Time
9. Forests

SUMMATIVE ASSESSMENT - II

1. Electric Charges at rest
2. Electric Current and its Effects
3. Light
4. Fabric from Fiber
5. Reproduction in Plants
6. Respiration in Organisms
7. Water
8. Soil

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

Nutrition in Living Organisms - Plants

SYLLABUS FOR UNIT TEST –II

Heat

SYLLABUS FOR UNIT TEST -III

Electric Current and its Effects

SYLLABUS FOR UNIT TEST –IV

Reproduction in Plants

ACTIVITY FOR FORMATIVE ASSESSMENT -II

- ❖ Testing presence of acids & bases .

ACTIVITY FOR FORMATIVE ASSESSMENT -III

- ❖ Report file on ray diagrams .
- ❖ MCQ -
 1. Electric charges at rest.
 2. Fabric from fibres

MONTH	LESSON	CLASS ACTIVITIES	LEARNING OBJECTIVES/ VALUES	H.W/ ASSIGN- MENTS
F.A-I (APRIL - MAY) April (20 days)	1.Transportation in Plants and Animals (Class Test)	1) Collect information about different blood groups. 2)To study the process of osmosis in a potato	The students will be able – A)To understand how food and waste is transported in developed organisms. B)To appreciate the importance of healthy diet to keep oneself fit. C)To understand the function of blood ,blood vessels and heart. D)To understand pulse rate and heart rate. *Care and concern for all life forms.Self Awareness.	1+1
	2. Nutrition in Living organisms- Plants (Revision)	1) To observe permanent slide of stomata in leaf and nodules in a legume. 2) To observe models of insectivorous plants. 3) To show that light is necessary for photosynthesis.	A)To identify modes of nutrition. B)To understand importance of symbiosis and its relevance to life. C)To classify plants on the basis of their nutrition. * Life long learning. Respect for all life forms.	1+1

MONTH	LESSON	CLASS ACTIVITIES	LEARNING OBJECTIVES/ VALUES	H.W/ ASSIGN- MENTS
May (10 days)	3. Nutrition in Animals & Man (Class Test)	1)Class discussion on modes of nutrition in animals and birds in surroundings.	A)To appreciate synchronization between different organs to perform digestion . B)To compare and contrast the nutrition in humans, ruminants and amoeba. * Respect for nature.	1+1
F.A .II (July- August) July (21 days)	4. Weather, climate and adaptation of animals to climate (Oral Test)	1)Class discussion on need for adaptation in organisms and varied types of adaptations seen in nature.	A)Appreciate diversity in nature. B)Understand the concept of evolution and survival of the fittest. *Awareness of one's surroundings. Respect for nature.	1+1
	5.Heat (Revision)	1)To learn the use of clinical and lab. thermometer ,its range and least count etc. 2)To demonstrate heat transfer in solids and liquids. 3)To show that black bodies are good absorbers and shining bodies are bad absorbers of heat.	A)To use a thermometer correctly. B)Understand the modes of heat transfer and apply the knowledge to daily life situations. C)To identify conductors and insulators on basis of their properties. *Inter –personal skills. Scientific temper	1+1

MONTH	LESSON	CLASS ACTIVITIES	LEARNING OBJECTIVES/ VALUES	H.W/ ASSIGN- MENTS
	6. Chemical substances & processes (Class Test)	1) To familiarize the students with apparatus & chemicals used in laboratory. 2) To observe the nature of change, when iron nail is dipped in copper sulphate solution. 3) To perform a neutralization reaction and observe the changes.	A) To differentiate between elements, compounds and ions. B) To write formulae of compounds. C) Classify different types of reactions. *Scientific temper. Logical thinking	1+1
August (22 days)	7. Acids, Bases and Salts. (Class Test)	1) To observe the effect of natural and synthetic indicators on acids and bases. 2) To identify whether the given sample is acid or a base	A) To differentiate between acids, bases and salts. B) To classify materials used in daily life as acids, bases and salts. C) Write chemical equation for neutralization reaction. * Critical thinking	1+1
	8. Motion and Time (Class Test)	To explore different types of graphs from magazines. Paste any five in notebook	A) To understand the concept of speed and solve numerical based on the same. B) Draw d-t graphs and identify type of motion from them. C) To understand motion of pendulum and concept of frequency and time period. * Scientific attitude. Logical and critical thinking	1+1

MONTH	LESSON	CLASS ACTIVITIES	LEARNING OBJECTIVES/ VALUES	H.W/ ASSIGN- MENTS
	Forest (OTBA)	1)Group discussion-Various topics related to the chapter.	A)To appreciate the gifts nature showers on us. B)To understand the role of human beings in conservation. *Respect for nature. Sense of responsibility.	1+1
September (5 days) <div>REVISION – SA - I</div>				

MONTH	LESSON	CLASS ACTIVITIES	LEARNING OBJECTIVES/ VALUES	H.W/ ASSIGN-MENTS
F.A-3 (October- November)	1.Electric charges at Rest (MCQ)	A) To demonstrate charging up of objects in pairs through rubbing . B) To differentiate between types of wires on the basis of their colour.	A)To understand the concept of charge . B)To charge an object using different techniques. C)To explore different ways to generate charge . * Scientific temper. Logical thinking	1+1
October (17 days)	2. Electric current and its effects (Revision)	1)To demonstrate that electric current has magnetic effect 2) To test given materials as conductors and insulators using simple electric circuit.	A)To appreciate the beauty of phenomenon of science. B)To connect devices and form a simple circuit. C)To apply learnt concepts to daily life situations. * Scientific temper. Logical thinking	1+1
November (21 days)	3.Light (Class Test)	1)To show use of different types of mirrors in daily life. 2)Explain laws of reflection using a plane mirror. 3)To observe nature of image formed by plane mirror. 4)To observe different types of images formed by spherical mirrors. 5)To show that light travels in a straight line.	A)To understand the concept of reflection of light by plane mirror and spherical mirrors. B)To draw ray diagrams for concave and convex mirrors. C)To match properties of mirrors with their applications. * Rational thinking. Scientific temper	1+1
	4.Fabric from fiber (MCQ)	1)To design a piece of cloth as a handkerchief using printing/dyeing/ embroidery. 2)To compare the properties of natural and synthetic fibres. 3)To study the stages in life cycle of a silk moth.	A)To understand the process of cloth production. B)To understand dependence of humans on nature. * Dignity of labour.	1+1

MONTH	LESSON	CLASS ACTIVITIES	LEARNING OBJECTIVES/ VALUES	H.W/ ASSIGN- MENTS
F.A- IV (December- January)	5.Reproduction in Plants (Revision)	1)To study asexual reproduction in unicellular organisms through permanent slides. 2) To dissect a flower and study its vegetative and reproductive parts.	A)To understand the need for reproduction. B)To understand different types of reproduction. *Care & compassion for all living creatures .	1+1
December (22 days)	6.Respiration in Organisms (Class Test)	1)To observe anaerobic respiration in yeast. 2) To demonstrate that exhaled air contains carbon dioxide . 3)To make a model of lungs.	A)To understand aerobic and anaerobic respiration. B)To understand process of respiration in humans. * Care & compassion for all living creatures .	1+1
	7.Water (Class Test)	Group discussion on waste water management and water conservation.	A)To know the various sources of water. B)To understand the importance of water for continuance of life C)To enlist ways to conserve water in home ,school and in society in general. D)To understand the cycle of waste and dirty water. * Sensitization towards current issues. Social responsibility.	1+1
January (12 days)	8. Soil (Class Test)	1)Class discussion related to soil as its type, formation, properties, etc. 2)To observe the rate of infiltration and percolation in soil.	A)To comprehend the nature of different layers of soil . B)To understand the importance of soil and its conservation. * Concern for environment.	1 + 1
February REVISION - SA - II				

**NOTE: One notebook will be maintained for C.W. and H.W/
Assignment and it will be assessed by the teacher as F.A-4**

- **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

- **The following chapters will be supported by PPT -**
 - Nutrition in Living Organisms – Plants
 - Acids, Bases and Salts
 - Reproduction in Plants
 - Respiration in Organisms