

Term-wise Syllabus
Session -2018-19
Class-VII (Pratibha)
Subject-Science

April 2018 to September 2018
[FIRST – Term Examinations]

| Theme | Content | Suggestive Activities | Learning Outcomes |
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| Food | <p><u>Food from where :</u></p> <p>Ch-1 Nutrition in Plants</p> <ul style="list-style-type: none"> ❖ Mode of Nutrition in plants. ❖ Photosynthesis-food making process in plants. ❖ Other modes of nutrition in plants ❖ Saprotrophs ❖ How nutrients are replenished in the soil | <ol style="list-style-type: none"> 1. To show light is essential for Photosynthesis. 2. Collect leaves of different Colours – check that photosynthesis also occur in these coloured leaves. 3. Growing fungi on a bread. Observe the patches on the bread under a microscope or with the help of magnifying glass and write the observation in your note book . [Activities from Pragati-5] | <ul style="list-style-type: none"> • Identify different organisms on the basis of mode of nutrition. • Write word equation for photosynthesis • Draw labelled diagrams or flow chart of the process of photosynthesis. • Explain the process of photosynthesis in plants • Conduct investigations to seek the answer that leaves other than green also carry photosynthesis |
| | <p><u>Utilisation of food :</u></p> <p>Ch-2 Nutrition in Animals</p> <ul style="list-style-type: none"> ❖ Different ways of Taking Food ❖ Digestion in Humans ❖ Digestion in Grass-Eating Animals ❖ Feeding and Digestion in Amoeba | <ol style="list-style-type: none"> 1. Effect of saliva on starch. 2. Study with suitable learning materials /Aids <ol style="list-style-type: none"> a. Human Digestive System, b. Different types of teeth and their arrangement in mouth c. movement of the food in the alimentary canal. d. Digestive system of Ruminant. e. Permanent slide of Amoeba 3. To find the position of taste buds with the help of : <ol style="list-style-type: none"> a. Sugar solution b. Common Salt solution | <ul style="list-style-type: none"> • Identify types of teeth • Differentiates organisms on the basis of the process of digestion , • Explain process of digestive system in animals and human • Draw labelled diagram or flow charts of human digestive system. |

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| | | <p>c. Lemon juice</p> <p>d. Juice of crushed neem leaf [Activities from Pragati-5]</p> | |
| Material | <p><u>Materials of daily use :</u></p> <p>Ch-3 Fibre to Fabric Animal fibre -Wool and Silk</p> <ul style="list-style-type: none"> ❖ Wool ❖ Silk | <ol style="list-style-type: none"> 1. Draw/paste pictures of animals whose hair is used as wool. 2. Draw/paste stages of the life history of silk moth. [Activities from Pragati-5] | <ul style="list-style-type: none"> • Identifies animal fibres • Classify fabrics based on the characteristics of its fibres. • Differentiate between animal and plant fibre by observing the steps of their processing. • Draw labelled diagram or flow chart of life cycle of silk-moth |
| | <p>Ch-4 Heat</p> <ul style="list-style-type: none"> ❖ Hot and Cold ❖ Measurement of temperature ❖ Laboratory thermometer ❖ Transfer of heat ❖ Kinds of clothes We wear in summer and winter | <ol style="list-style-type: none"> 1. Experiment to show that ‘hot’ and ‘cold’ are relative. 2. Reading a clinical and laboratory thermometer. 3. Experiment to show Conduction, Convection and Radiation. [Activities from Pragati-5] | <ul style="list-style-type: none"> • Understand the meaning of cool / cold and warm / hot . • Differentiate between hot and cold. • Construct model of thermometer using resources available in their surroundings and explain its working. • Measure temperature. • Differentiate among the processes of modes of transfer of heat. • Understand the flow of heat from our body to surroundings or flow of heat to our body from the surroundings . • Differentiate substances as conductors or insulators. • Apply the learning of scientific concept in their daily life like what kinds of clothes help us to keep warm during winters? |

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| <p>Material</p> | <p><u>How things change / react with one another :</u></p> <p>Ch-6 Physical and Chemical changes</p> <ul style="list-style-type: none"> ❖ Physical changes ❖ Chemical changes ❖ Rusting of Iron ❖ Crystallisation | <ol style="list-style-type: none"> 1. Activities showing changes like what gets deposited on a Tawa or Kadai when left in a moist place. 2. Experiments involving chemical reactions like rusting of iron, Neutralisation (vinegar and baking soda), Displacement of copper from copper sulphate etc. 3. Make crystals of easily available substances. [Activities from Pragati-5] | <ul style="list-style-type: none"> • Classify physical and chemical changes. • Write word equation for chemical reactions like corrosion etc. • Take measures to prevent corrosion by relating cause with its effect. • Apply learning of scientific concepts in day to day life thus preventing corrosion. • Understand the cause like why is seawater salty? • Understand the reason of a cause like Is it possible to separate salt from seawater? |
| <p>Moving things , People and Ideas</p> | <p><u>Moving objects:</u></p> <p>Ch- 13 Motion and Time</p> <ul style="list-style-type: none"> ❖ speed ❖ Slow or fast speed ❖ Measurement of time ❖ Measuring speed ❖ Distance time Graph | <ol style="list-style-type: none"> 1. Observing the motion (slow or fast) of common objects. 2. Measure the distance covered by objects moving (with in school) in a given time period and calculating their speeds . 3. Plot distance vs. time graph for uniform motion. 4. Measure the time taken by a moving object (toy cars) to cover a given distance and calculate their speeds. 5. To see the constancy of time period of a simple pendulum. [Activities from Pragati-5] | <ul style="list-style-type: none"> • Observe and analyse motion as slow/fast. • Appreciate the idea of time and need to measure it (like measuring time with wrist watch / stop watch) • Analyse the constancy of time period of pendulum etc. • Measure and calculate speed of moving objects , • Measure the physical quantities and express their SI units. • Plot and interpret distance-time graph. |
| <p>Sept.2018</p> | <p style="text-align: center;">Revision and Mid -Term Examination</p> | | |

October 2018 to February 2019
(Second Term) Common Annual School Examination 2018-19

| Theme | Content | Activities | Learning Outcomes |
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| Material | <p><u>Material of daily use :</u></p> <p>Ch- 5 Acids, Bases and Salts</p> <ul style="list-style-type: none"> ❖ Acids and Bases ❖ Natural Indicators around us ❖ Neutralisation ❖ Use of Neutralisation in everyday life. | <ol style="list-style-type: none"> 1. Testing solutions of common substances like sugar, salt, vinegar, lime juice etc with indicators like Litmus, Turmeric, China rose or any other. 2. To study neutralisation reaction. 3. To prepare a card with Turmeric paste and soap solution. [Activities from Pragati-5] | <ul style="list-style-type: none"> • Classify substances as acidic, basic and neutral substances. • Conduct simple investigation like. Extract of coloured flowers be used as acid-base indicator. • Learn to handle experiments with care. • Write word equation for Acid-Base reactions. • Apply learning of scientific concept in day to day life – like dealing with Acidity, treating the stings of ants etc. |
| The world of the living | <p>Ch-10 Respiration in Organisms</p> <ul style="list-style-type: none"> ❖ Why do we respire - Breathing ❖ How do we breathe ❖ What do we breathe out? ❖ Breathing in other animals ❖ Breathing under water ❖ Do plants also respire? | <ol style="list-style-type: none"> 1. To study mechanism of breathing in human. 2. Prepare working Model of lung 3. Experiment to show plants and animals respire like what do we breathe out? What do plants breathe out? And breathing rate. 4. Effect of exhaled air on lime water. [Activities from Pragati-5] | <ul style="list-style-type: none"> • Identify organisms on the basis of respiratory organs. • Classify the types of respiration, • Explain the process of respiration in human. • Draw the labelled diagram of respiratory system of humans. • Write the word equation of chemical reactions of Aerobic and anaerobic respiration. |
| The world of living | <p>Movement of substances :</p> <p>Ch-11 Transportation in Animals</p> | <ol style="list-style-type: none"> 1. With the help of suitable aids study and draw labelled diagram of <ol style="list-style-type: none"> a. Circulation | <ul style="list-style-type: none"> • Explain the process of Circulation in humans. • Draw the labelled diagram of human heart |

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| | <p>and Plants</p> <ul style="list-style-type: none"> ❖ Circulatory system ❖ Excretion in animals ❖ Transport of substances in plants. | <p>b. Sections of Human Heart c. Human Excretory system d. Transport of food, water and minerals in a section of root of a plant. e. Transportation of water through cells</p> <p>2. Prepare working Model of stethoscope [Activities from Pragati-5]</p> | <p>and Excretory system.</p> <ul style="list-style-type: none"> • Draw the schematic diagram or flow chart of Circulation and excretion • Understand the cause of a process, like why heart beat is faster after exercise etc. • Measure and calculate pulse rate. • Construct the model of stethoscope from the available resources and know its use • Differentiate the transport of material in human and plants and its importance in plants. • Understand the cause and effect of transpiration in plants. |
| <p>The world of living</p> | <p>Multiplication in plants :</p> <p>Ch-12 Reproduction in Plants</p> <ul style="list-style-type: none"> ❖ Mode of reproduction ❖ Sexual Reproduction ❖ Fruits and seed formation seed dispersal | <p>1. To grow a plant by vegetative propagation. 2. To identify reproductive parts of a flower. 3. Make a collection of winged, hairy and spiny seeds. [Activities from Pragati-5]</p> | <ul style="list-style-type: none"> • Classify types of reproduction in plants. • Identify reproductive parts of the plant. • Differentiate unisexual and bisexual flowers. • Compare between wind pollinated and insect pollinated flowers. • Understand the cause of dispersal of seeds by different means. • Observe fruits and seeds development in plants • Apply learning of scientific concepts in cultivation by vegetative propagation. |
| <p>How things work</p> | <p>Ch-14 Electric current and Its effects</p> <ul style="list-style-type: none"> ❖ Symbols of electric components ❖ Heating effects of electric current ❖ Magnetic effect of electric current | <p>1. To make a simple electric circuit and draw its diagram. 2. To demonstrate: a. Heating effect of electric current.</p> | <ul style="list-style-type: none"> • Differentiate materials on the basis of conductivity like good and bad conductor of heat. • Understand and relate the process of heating and magnetic effects of current. |

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| | ❖ Electromagnet | b. Magnetic effect of current. 3. To make a model of electromagnet. [Activities from Pragati-5] | <ul style="list-style-type: none"> • Draw labelled diagram of electric circuits • Apply learning of scientific concepts indaily life likeconnecting two or more cells in proper order in devices • Make the model of electromagnet from the resources available in their surroundings. |
| Natural Phenomena | Ch-15 Light ❖ Light travels along a straight line ❖ Reflection of light. ❖ Right or left playing with spherical mirrors. ❖ Sunlight white or coloured ? | 1.Experiment to see the source of light through a straight and bent tube 2.Observation of reflection of light on wall or white paper screen. 3.Images made by different objects and recording the observations. 4.To identify and distinguish among plane, concave and convex mirrors and also between concave and convex lenses 5.To show sunlight is a mixture of different colours. 6.Making a disc with seven colours and observes it when it rotates. [Activities from Pragati-5] | <ul style="list-style-type: none"> • Identify mirrors and lenses on the basis of their function • Differentiate images formed by mirrors and lenses on the basis of its properties. • Conduct investigation like-Is white light composed of many colours? • Construct model of Seven colour disc from the resources available in their surroundings. |
| Moving things | Ch- 13 Motion and Time ❖ Slow or fast speed ❖ Measurement of time ❖ Measuring speed ❖ Distance time Graph | Same as done during Mid term Examination | Same as per Mid term Examination |
| Feb.2019 | Revision for common annual school examination 2018-19 | | |