BRAIN INTERNATIONAL SCHOOL

SESSION 2024-25

CLASS: VIII **TERM 1 REVISION SHEET** **SUBJECT: SCIENCE**

Chapter 1: Crop Production and Management

1. Multiple Choice Question:

Which of these is not a kharif crop?

(a) wheat (b) rice (c) maize (d) groundnut

2. Assertion –Reason questions:

Select the correct answer to these questions from the codes (i), (ii), (iii) and (iv) as given below

(i) Both A and R are true and R is correct explanation of the assertion.

(ii) Both A and R are true but R is not the correct explanation of the assertion.

(iii) A is true but R is false.

(iv) A is false but R is true.

Assertion: Use of fertilizers greatly enhances crop productivity.

Reason: Irrigation is very important in increasing crop productivity.

3. Read the passage and answer the questions that follow:

When plants of the same kind are cultivated at one place on a large scale, it is called a crop. For example, crop of wheat means that all the plants grown in a field are that of wheat. We already know that crops are of different types like cereals, vegetables and fruits. These can be classified on the basis of the season in which they grow. India is a vast country. The climatic conditions like temperature, humidity and rainfall vary from one region to another. Accordingly, there is a rich variety of crops grown in different parts of the country. Despite this diversity, two broad cropping patterns can be identified.

i. Name the organic substance obtained from the decomposition of plant and animal waste that helps in the healthy growth of plants .
ii. What are Rabi Crops? Enlist some of the examples of Rabi Crops.
iii. Explain a method to determine the damaged seeds before sowing.

4. Answer the following questions:

1. An appropriate distance between the seeds is important during sowing. Explain.
2. Why is organic manure considered better than fertilizers?
3. What are the modern methods of irrigation? Explain.
4. If you are given a dry piece of land for cultivation what will you do before sowing the seeds? Explain.

Chapter 2: Microorganisms: Friend and Foe

1. Multiple Choice Question:

The bread or idli dough rises because of _____.

(a) heat (b) grinding (c) growth of yeast cells (d) kneading

2. Assertion –Reason questions:

Select the correct answer to these questions from the codes (i), (ii), (iii) and (iv) as given below

(i) Both A and R are true and R is correct explanation of the assertion.

(ii) Both A and R are true but R is not the correct explanation of the assertion.

(iii) A is true but R is false.

(iv) A is false but R is true.

Assertion: Bacteria and fungi are used to make medicines.

Reason: These medicines kill or stop the growth of disease-causing microorganisms.

3. Read the passage and answer the questions that follow:

Megha, a class VIII student was asked to submit a project report on mosquito-transmitted diseases. She visited a nearby hospital where her aunt was a nurse. Her aunt took her to a patient suffering from malaria. Megha consulted with the doctor and got the information that a protozoan called Plasmodium is responsible for malaria. It lives in the liver and blood of the person who has been infected by this disease. A female Anopheles mosquito when sucks blood from the infected person, Plasmodium along with blood, is taken into its stomach.

i. What are pathogens?
ii. Explain how malaria is transmitted to humans.
iii. List the measures which help to avoid the spread of malaria.

4. Answer the following questions:

1. What is the role of microorganisms in cleaning the environment and in sewage treatment?
2. Define food preservation. What role does sugar play in the preservation of food?
3. (a) Name two diseases that are caused by virus.
   (b) Write one important characteristic of virus.
4. Give reasons for the following.
   (a) Fresh milk is boiled before consumption while processed milk stored in packets can be consumed without boiling.
   (b) Raw vegetables and fruits are kept in refrigerators whereas jams and pickles can be kept outside.
   (c) Farmers prefer to grow beans and peas in nitrogen deficient soils.

Chapter 3: Coal and Petroleum

1. Multiple Choice Question:

Which of the following is a pair of exhaustible natural resources?

(a) coal and soil
(b) air and sun-light
(c) water and petroleum
(d) wild life and minerals

2. Assertion –Reason questions:

Select the correct answer to these questions from the codes (i), (ii), (iii) and (iv) as given below

(i) Both A and R are true and R is correct explanation of the assertion.

(ii) Both A and R are true but R is not the correct explanation of the assertion.

(iii) A is true but R is false.

(iv) A is false but R is true.

Assertion: Petroleum is referred to as 'black gold.
Reason: Petroleum resembles molten gold in appearance.

3. Read the passage and answer the questions that follow:

Formation of fossil fuels takes millions of years. They are formed by the dead remains of plants and animals. These remains go deep into the soil and get converted to fossil fuels under high temperature and pressure. Fossil fuels are used for different purposes like, production of electricity, fuel for cars, making candles etc. Some products obtained from fossil fuels are harmful for the environment, burning of fossil fuel is major cause of global warming.

i What is carbonisation?
ii Write any four constituents of petroleum.
iii The burning of fuels is harmful for health and environment. Explain why?

4. Answer the following questions:

1. Explain the complete process of formation of coal.
2. Write the characteristics and some important uses of coal.
3. How can we avoid excess use of petrol or diesel while driving?
4. Explain refining of petroleum. Why do we find oil layer above water layer?

Chapter 4: Combustion and flame

1. Multiple Choice Question:

Shyam was cooking potato curry on a chulha. To his surprise he observed that the copper vessel was getting blackened from outside. It may be due to:

(a) proper combustion of fuel.
(b) improper cooking of potato curry.
(c) improper combustion of the fuel.
(d) burning of copper vessel.

2. Assertion –Reason questions:

Select the correct answer to these questions from the codes (i), (ii), (iii) and (iv) as given below

(i) Both A and R are true and R is correct explanation of the assertion.

(ii) Both A and R are true but R is not the correct explanation of the assertion.

(iii) A is true but R is false.

(iv) A is false but R is true.

Assertion: Inflammable substances catch fire easily.
Reason: They have high ignition temperature.

3. Read the passage and answer the questions that follow:

People generally use wood, cow dung cakes, crop residues, kerosene oil, coke or LPG gas to cook food. For running vehicles, we use petrol or diesel oil. In factories, we use coal or fuel oil or natural gas. The materials, such as wood, coke, LPG (liquid petroleum gas), petrol, diesel, natural gas have one property in common, i.e., they produce heat on burning which is then put into different uses. Furthermore, some materials on burning produce flame and some do not. For example, a candle or coal gas on burning. Air or oxygen which helps in burning is called supporter of combustion and the chemical reaction which takes place with the release of heat and light energy is called combustion.

produces a flame, but not the coal or charcoal.

i. Why is the person caught in fire, is covered with a blanket?
ii. Why do you have to use paper or kerosene oil to ignite fire in wood or coal?
iii. Why CO_2 is considered as the best fire extinguisher?

4. Answer the following questions:

1. You are provided with three watch glasses containing milk, petrol and mustard oil, respectively. Suppose you bring a burning candle near these materials one by one, which material(s) will catch fire instantly and why?
2. Differentiate between rapid combustion and spontaneous combustion.
3. What are the harmful effects of burning of fuels? Explain any three.
4. Sketch the different zones of candle flame. Label all parts.

Chapter 6: Reproduction in Animals

1. Multiple Choice Question:

In humans, the development of fertilized egg takes place in the

(a) ovary (b) testis (c) oviduct (d) uterus

2. Assertion –Reason questions:

Select the correct answer to these questions from the codes (i), (ii), (iii) and (iv) as given below

(i) Both A and R are true and R is correct explanation of the assertion.

(ii) Both A and R are true but R is not the correct explanation of the assertion.

(iii) A is true but R is false.

(iv) A is false but R is true.

Assertion: Hydra produces young ones by the process of budding.

Reason: An amoeba reproduces by the process of binary fission.

3. Read the passage and answer the questions that follow:

All plants and animals go through life cycles. Just think about all the growing and changing human children do as they grow up. Children grow in height and get heavier until they reach adulthood. Children also change as their body matures. Although we grow lots from the time we are born to adulthood, humans never transform. Unlike us, butterflies go through a metamorphosis, or transformation. A butterfly looks very different as it changes through all four stages of its life cycle. A butterfly transforms through the first stage egg to the last stage adult butterfly. Similarly, frogs go through the same transformation from egg to an adult.

i. What is metamorphosis?
ii. Why do animals like fish and frog produce eggs and sperm in large numbers?
iii. Explain the life cycle of a frog with diagram.

4. Answer the following questions:

1. Why are not all animals oviparous? Does viviparous offer any advantage to organisms?
2. Hens and frogs are both oviparous exhibiting different types of fertilization. Explain.
3. Mother gives birth to a baby but the baby has characters of both parents. How is this possible?
4. What kind of asexual reproduction is shown in hydra? Draw a diagram to show reproduction in hydra.

Chapter 8: Force and Pressure

1. Multiple Choice Question:

Which of the following is an example of a non-contact force?

(a) The force exerted by us to lift a bucket (b) push a stationary car

(c) The force exerted by magnets (d) force due to friction

2. Assertion –Reason questions:

Select the correct answer to these questions from the codes (i), (ii), (iii) and (iv) as given below

(i) Both A and R are true and R is correct explanation of the assertion.

(ii) Both A and R are true but R is not the correct explanation of the assertion.

(iii) A is true but R is false.

(iv) A is false but R is true.

Assertion: In tug a war, when both the teams pull the rope, with equal and opposite force the rope will remain stationery.

Reason: The unequal force may not bring about change in state of rest.

3. Read the passage and answer the questions that follow:

In a game of volleyball, players often push the moving ball to their team mates to make a winning move. Sometimes the ball is returned to the other side of the court by pushing or smashing it. In cricket, a batsman plays his or her shot by applying a force on the ball with the bat.

i What kind of force is applied by a batsman on a ball while hitting it?

ii In the given example of volleyball game, what changes force brought about on the volleyball?

iii Give two examples showing that force has brought about change in shape of an object.

4. Answer the following questions:

1. What is muscular force? Why is it called contact force?
2. Two women are of the same weight. One wears sandals with pointed heels while the other wears sandals with flat soles. Which one would feel more comfortable while walking on a sandy beach? Give reasons for your answer.
3. Give reasons:
   (a) The tyres of truck and other heavy vehicles are made broad and thick.
   (b) You peddle a cycle to make it move but when you stop at length the cycle stops after moving a distance.
4. Describe an activity to show that ear exerts pressure in all directions.

Chapter 9: Friction

1. Multiple Choice Question:

A toy car released with the same initial speed will travel farthest on

(a) muddy surface
(b) polished marble surface
(c) cemented surface
(d) brick surface

2. Assertion –Reason questions:

Select the correct answer to these questions from the codes (i), (ii), (iii) and (iv) as given below

(i) Both A and R are true and R is correct explanation of the assertion.

(ii) Both A and R are true but R is not the correct explanation of the assertion.

(iii) A is true but R is false.

(iv) A is false but R is true.

Assertion: We can easily see the sparks when two pieces of stones are rubbed together. These sparks can be even used to make bon fire.

Reason: Due to friction the rough surfaces of stone pieces create heat that can be easily converted into fire.

3. Read the passage and answer the questions that follow:

On Sunday Razak invited everybody to play carrom in his house. While playing was not moving properly from one place to another. Everybody thought it is their bad luck. But Razia, one of the players, quickly got up and sprinkled some talcum powder on the board.

i Why Razia sprinkled some talcum powder?
ii How does the friction depend on the nature of the surface?
iii Explain increasing and decreasing friction with suitable examples.

4. Answer the following questions:

1. What do you mean by fluid friction? How can fluid friction be reduced?
2. Does friction cause any disadvantage? Explain with the help of an example.
3. Give reasons:
   (a) A pencil will write on paper but not on glass.
   (b) The handles of motor cycle are covered with a rubber sheet with spikes.
4. How is friction responsible for the damage of some parts of the machines? What are the methods used to reduce that damage?