SAMAGRA SHIKSHA KERALA

SECOND TERM EVALUATION 2022-23 BASIC SCIENCE



# Standard : VII

Time : 2 Hrs

- 15 minutes is given as cooloff time.
- Read the questions carefully during this time.
- Attend ANY 8 activities from 10 activities.

## Activity-1

Notice the two circuits.





3 volt LED available from fancy shops are used in these circuits. As soon as the second circuit is turned on, the LED burns out.

A. What could be the reason for this?

- B. What arrangement should be made in the circuit to prevent such damages while working?
- C. What safety precautions should be taken while using electric devices?

### Activity-2

- A. The pH value of a soil is 6. What is the chemical nature of this soil?
- B. What should be done to change the pH value of this soil to 7?
- C. What is the chemical reaction taking place here? Explain.

## Activity -3

Below are the observations noted when Hydrogen peroxide was added to two soil type samples.

Sand	Soil from field
Minimum effervescence is formed.	Maximum effervescence is formed.

- A. What is the reason for this difference?
- B. In what ways does soils differ?
- C. Write an experiment to prove that soil contains water.

## Activity 4

Autotrophs	Parasites
Mango tree Paddy Monotropa Loranthus	Loranthus Cuscuta Venus fly trap Sandal

- A. Find out the odd one from each group.
- B. What are the characteristics of the soil where insectivorous plants grow? Explain.
- C. What is the reason for including Loranthus in both the groups?

## Activity 5

Observe the picture.



A. Which of the following materials can be used to complete the circuit and light the bulb?

pencil graphite, iron naii, glass rod, steel spoon, plastic scale, golden bangle

B. Write the names of the devices marked 1, 2 and 3 in the figure and draw the symbols.

#### Activity 6

The important steps in the process of water purification in a water treatment plant are given below.

- 1. Filters out and removes impurities.\*
- 2. Sterilizes water.
- 3. Water mixes with air.
- 4. Sedimentation of solid matter present in water by adding Alum.
- A. Write these activities in the proper order.
- B. The school decided to place boards near the water body to spread the message of water conservation. Prepare three messages to be written on the boards.

Below are the organs passed through and the changes that have taken place during idli's journey through the digestive system.

A. Find and write the missing ones.

Changes that happened to idly	Organ
1	Small intestine
The teeth crushed me to pieces.	2
As the water and minerals were absorbed, I turned into waste	3
4	stomach
I moved down by a wavy movement.	5

B. List the organs in the journey of food in the correct order.

#### Activity 8

Check the situations mentioned below for taking medicine from a bottle to a syringe.

Situation - 1

Situation - 2

The piston of the syringe is pulled and placed in the medicine.

The syringe is placed in the medicine and the piston is pulled.

- A. In which situation does the medicine enter the syringe? What is the reason for this?
- B. Write another situation where air pressure is used.

## Activity 9



- A. What may be the reason for the increase in the electricity bill of Babu?
- B. Write three suggestions for reducing the use of electricity.

# Activity 10

Look at the pictures of the teeth of two animals.



Animal 1



Animal 2

- A. Compare these and write your findings about the food habits of both.
- B. The permanent teeth are more important than the milk teeth. Why?
- C. You brush your teeth very carefully everyday after dinner. It is very good for dental health. Why?