

SAMAGRA SHIKSHA, KERALA First Term Evaluation 2019-20 **Basic Science**

E 606

Time: 2 hours

21.12.24

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Instructions

- 15 minutes cool-off time for reading the questions.
- TEN activities are given.
- Answer any EIGHT activities.

Activity - 1 V

Observe the following table. Is there any organisms that cannot be included in the list? Which a) are they?

> Unicellular organisms amoeba, bacteria, ant, louse paramecium, euglena

Justify your answer. b)

- Draw the diagram of a unicellular organism and write its name. C)
- Activity 2 V
- Name the part of the cell which gives green colour to leaves of a plant. a)

The following pictures show different parts of plants drawn by observing through a microscope.



Cells of leaves



Cells of onion peel

- Examine whether all the plant cells are identical or not? Write your findings. b)
- Identify and write, the parts of a cell which are present only in plant cells, from the following. C)

large vacuoles, nucleus, cell wall, cytoplasm

Activity - 3 V

- A slide without label is found in the science lab. While observing the slide through a microscope, a) cells with large balloon like parts were seen. Which type of cell is it?
- Two types of cells are given in the picture below. Write the parts of the cell that are common in b) both of them.



Write the features of any two of them. C)

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Activity - 4

- a) "All the cells of human body are identical in shape". Do you agree with this statement? Cite examples to justify your answer.
- b) The following are some statements based on the findings related to the size of the cell and body of organisms.

Correct the wrong statements, if any.

- Cells of an elephant is much bigger than the cells of a rabbit.
- The number of body cells of a cat and a kitten are the same.
- When an organism grows the number of its body cells increases.

Activity - 5 V

a) A toy fan is made using an electric cell and a mini motor. Which form of energy is used for the working of the toy fan?



b) Name the different forms of energy produced while operating an electric motor.

Heat energy	1	2

c) All substances contain chemical energy. How is chemical energy related with the food preparation process in plant? Explain.

Activity - 6 V

 a) In a discussion conducted in the classroom on, "Sun, the Source of Energy," a student remarked, "In my home, only LPG is used for cooking. So Sun has no role in it".

Analyse this statement and write your opinion about the student's comment.

b) Different situations that we come across in our daily life are given in the table. Complete it.

Form of energy produced	Form of energy we make use of
heat i)	ii)
iii), heat, iv)	v)
vi), sound	vii)
	heat i) iii), heat, iv)



Activity - 7 V

Observe the illustration related to the change of state of water.



a) complete the illustration suitably.

- b) The state of water having least heat energy.
- c) Why food items can cook easily in steam than in boiled water?

Activity - 8

Some of the situations in our daily life are given below.

Curdling of milk Melting of wax Ripening of mangoes Tearing of paper Burning of firewood Boiling of water Mamar E. O di Nale reproductive

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a) Classify them according to the peculiarities of the changes.

b) Write any two features of each change.



Activity - 9

The important parts of a flower are given in the concept map. Complete it. a)



Write the functions of Corolla and Pedicel. b)

In which part of the Anther is the male gamete found? C)

Activity - 10



Pumpkin



snake gourd

- Name A, B, C and D in the picture. a)
- Male reproductive organs and female reproductive organs are seen in separate flowers. What are b) these flowers called?
- How can we distinguish between a male flower and a female flower? C)

