

# SAMAGRA SHIKSHA KERALA SUMMATIVE ASSESSMENT 1 2025-2026 BASIC SCIENCE

Class:7

Time: 2 Hrs 15 minutes

### Instructions

- 15 minutes cool-off time is allotted for reading and understanding the activities.
- Answer any six questions.

1.

Figure shows the method of production of plantlets which have the same quality as the mother plant. Which method is this?

Write two characteristics of plants produced through this method.



b) Classify the plants given below by giving suitable titles based on different methods of rooting.

Guava, Jasmine, Almond, Pepper, Cashew, Bougainvillea, Sapota

a	b		
Guava	d		
C	Jasmine		
Cashew	Pepper		

- c) Things to be taken care of while selecting seeds are given below. Find out the correct groups from them ..
  - A. High yielding plant, fruits formed at the middle of plant's lifespan, seeds which have normal weight.
  - B. Healthy plant, ripened fruit, seeds which have normal size.
  - C. High yielding plant, fruits formed at the initial stage of plant's lifespan, seeds which have light weight.
  - D. Healthy plant, fruit formed at the end of the plant's lifespan, seeds which have normal shape.
    - 1. A and B are correct
- 2. A and D are correct
- 3. C and D are correct
- 4. All are correct
- 2. Question 2 has two parts 2(A) and 2(B). Write any one 2(A) or 2(B) completely.

2.(A)

- a) When phenolphthalein is sprayed onto a white paper, a pink image appeared. Which may be the substances used for drawing the picture?
  - A. Lime Juice, Salt solution
- B. Vinegar, Turmeric water
- C. Baking soda solution, Rice water D. Soap solution, Lime water

- b) Acid burns are more dangerous than hot water burns. What is the reason? What is the first aid given for acid burns?
- c) Vinegar is used to keep pickles without decay. Write two other uses of vinegar.

#### OR

#### 2 (B)

a) Examine the table given below and rewrite the mistakes if any.

Floriculture	Rearing of poultry		
Apiculture	Growing of mushroom		
Mushroom culture	Rearing honeybees		
Poultry farming	Cultivation of flowering plants		

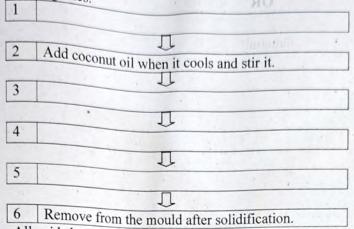
- b) Destruction of frogs may affect agricultural production. What is your response to this statement?
- c) Which among the following is correct in the groups of hybrid seeds?
  - A. Paddy Pavithra, Annapoorna, Jyothika
  - B. Chilli Ujjwala, Jwalamukhi, Bhagyalakshmi
  - C. Lady's finger Salkeerthi, Kiran, Susthira
  - D. Brinjal Haritha, Swetha, Surya
    - 1. A and B are correct
- 2. C and B are correct
- 3. C and D are correct
- 4. All are correct
- 3. a) You may have noticed that fans and tubelights are working in the classrooms when there are no students. Prepare a poster including instructions to prevent wastage of electricity.
- b) Observe the figure and explain how electricity is generated in hydroelectric power stations.
- c) Which one of the following systems convert energy from the sun to electric energy?
  - A. Solar cells
- B. Wind farm
- C. Generator
- D. Electric cell
- 4. a) Examine the given statement and reason and write down the correct one.

#### Statement: Curd has sour taste.

## Reason: Contains lactic acid.

- A. Statement is correct. Reason is not suitable for the statement.
- B. Statement is correct. Reason is suitable for the statement.
- C. Statement is wrong. Reason is not suitable for the statement.
- D. Statement and the reason are wrong.

b) Soap is made by using caustic soda, coconut oil, water, sodium silicate, stone powder, colour and perfume. The stages of preparation of soap are given below. Complete the missing ones.



- c) All acids have sour taste. Write two other properties of acids.
- **5.** a) Examine the table and find out the correct group.

1	Urea	A	Biological control
2	Tobacco decoction	В	Chemical fertiliser
3	Vermi compost	C	Organic pesticide
4	Trichogramma	D	Organic fertiliser

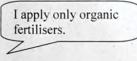
A. 1-B, 2-C, 3-D, 4-A

B. 1-A, 2-D, 3-C, 4-D

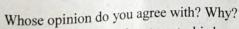
C. 1-D, 2A, 3-B, 4-C

D. 4-A, 2-B, 3-C, 4-D

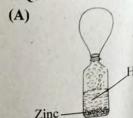




I apply both chemical and organic fertilisers.



- c) Which method of pest control is by using traps or by hand picking? Name an equipment available in the market for this.
- 6. Question 6 has two parts 6 (A) and 6 (B). Write any one 6 (A) or 6(B) 6 completely.



Hydrochloric acid b) W

- a) Did you observe the figure? Which gas is filled in the balloon?
  - What are the properties of the gas filled in the balloon?

c) Plan an experiment to produce the same gas using vinegar and magnesium ribbon.

#### OR

6. (B)

a) Observe the figure. Which metal is commonly used for electricity to pass through?

A. Copper

B. Silver

C. Aluminium

D. Zinc



- b) Draw an open circuit using the symbols of a minimotor, conducting wire, battery and a switch.
- c) The different types of bulbs used in our homes are LED, CFL and filament bulb. The following table indicates their properties. Examine the table and write your findings. (4 numbers). Which bulb is better to use in your home? Write your inference.

Name of bulb	Energy efficiency	Span	Energy consumption 6-20 watts
LED	85 – 90 %	25000 hours	
CFL	75 %	8000 hours	8-30 watts
Filament bulb 10 %		1000 hours	40-100 watts

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