

Class X — SA1 Model Question Paper
General Science Paper II — Biological Science (English Version)

SA1 syllabus covered

- Ch 5 Life Processes (nutrition, respiration, transportation, excretion)
- Ch 6 Control and Coordination
- Ch 7 How do Organisms Reproduce?
- Ch 8 Heredity
- Not included for SA1: Ch 13 Our Environment

Question paper pattern

Section	Type of question	No. of questions	Marks
I	Objective / very short answer	6 (Q 1–6)	$6 \times 1 = 6$
II	Short answer	4 (Q 7–10)	$4 \times 2 = 8$
III	Short answer — Q 12 (diagram) has internal choice	5 (Q 11–15)	$5 \times 4 = 20$
IV	Long answer — internal choice in both questions	2 (Q 16–17)	$2 \times 8 = 16$
	Total	17	50

Where each chapter is tested

Chapter	Paper 1 — question numbers	Paper 2 — question numbers
Life Processes	1, 2, 7, 8, 10, 11, 16(A), 16(B)	1, 2, 7, 9, 11, 12(A), 12(B)
Control and Coordination	3, 4, 12(A), 13, 17(A)	3, 5, 8, 13, 16(B)
How do Organisms Reproduce?	5, 9, 12(B), 14	4, 10, 14, 16(A), 17(A)
Heredity	6, 15, 17(B)	6, 15, 17(B)

Notes for teachers

- Pattern follows the BSEAP SSC 2025-26 model paper for General Science Paper II (2 hours including 15 minutes reading time, 50 marks, 17 questions).
- Section IV in both papers keeps one lab-activity question, as the board model paper does.
- Our Environment is left out because it falls outside the SA1 portion.

Time: 2 Hours

Max. Marks: 50

Instructions:

1. Question paper consists of 4 sections and 17 questions.
2. Internal choice is available only for Q.No. 12 in Section III and for all the questions in Section IV.
3. In the duration of 2 hours, 15 minutes of time is allotted to read the question paper.
4. All answers should be written in the answer booklet only.
5. Answers should be written neatly and legibly.

SECTION – I**6 × 1 = 6 M***Note: 1) Answer all the questions. 2) Each question carries 1 mark.*

1. Name the green pigment that traps light energy in leaves.
2. The enzyme present in saliva that breaks down starch is _____.
3. The small gap between the nerve ending of one neuron and the dendrite of the next neuron is called _____.
4. Which plant hormone promotes cell division?
A) Auxin B) Gibberellin C) Cytokinin D) Absciscic acid
5. Write a slogan to create awareness about the dangers of early marriage for girls' health.
6. In Mendel's monohybrid cross between tall and dwarf pea plants, the phenotypic ratio in the F₂ generation is _____.

SECTION – II**4 × 2 = 8 M***Note: 1) Answer all the questions. 2) Each question carries 2 marks.*

7. Write any two differences between aerobic and anaerobic respiration.
8. Read the table and answer the questions.

Part / tissue	Function
Stomata	Exchange of gases and loss of water vapour
Xylem	Transport of water and minerals from roots
Phloem	Transport of food from leaves to other parts

- A) Which tissue carries prepared food in plants?
 - B) What is the transport of soluble products of photosynthesis called?
9. Why is DNA copying an essential part of the process of reproduction?
 10. Why is the pancreas called both an exocrine and an endocrine gland?

SECTION – III**5 × 4 = 20 M***Note: 1) Answer all the questions. 2) Each question carries 4 marks. 3) There is an internal choice only in Q.No. 12.*

11. Explain how urine is formed in the nephron.

12. Draw a neat labelled diagram of the following:

A) Structure of a neuron

(OR)

B) Longitudinal section of a flower

13. Plants do not have a nervous system, yet they respond to stimuli. Explain phototropism, geotropism, hydrotropism and chemotropism with one example each.

14. Many couples in your village do not know about methods of preventing pregnancy and sexually transmitted diseases. As a student, what information would you share with them in an awareness programme?

15. "The sex of a child is determined by the father, not the mother." Explain this statement with the help of a flow chart.

SECTION – IV

2 × 8 = 16 M

Note: 1) Answer all the questions. 2) Each question carries 8 marks. 3) Each question has an internal choice.

16. A) Explain the lab activity to show that light is necessary for photosynthesis. Mention the materials, procedure and observation.

(OR)

B) Explain the lab activity to show that carbon dioxide is released during respiration. Write the precautions you followed.

17. A) Describe the structure and functions of the human brain (forebrain, midbrain and hindbrain).

(OR)

B) Explain Mendel's dihybrid cross using round-yellow and wrinkled-green pea seeds. What does it show about the inheritance of two traits?

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