

Name of the School: _____

SUMMATIVE ASSESSMENT – I (2026–27)
Class X — BIOLOGICAL SCIENCE (Science – Part II)

English Medium

Model Question Paper — Set A

Time: 1 Hour 30 Minutes

Max. Marks: 40

Name of the Student: _____ Roll No.: _____

Syllabus covered: Ch. 1 Nutrition – Food Supplying System, Ch. 2 Respiration – The Energy Producing System, Ch. 3 Transportation – The Circulatory System, Ch. 4 Excretion – The Wastes Disposing System, Ch. 5 Coordination – The Linking System

Instructions:

1. Part A (30 marks) is to be answered in the answer booklet in the first 1 hour 10 minutes.
2. Section I: Q.1–6 — answer all, 1 mark each. Section II: Q.7–10 — answer all, 2 marks each.
3. Section III: Q.11–14 — each question has internal choice; answer (a) or (b). 4 marks each.
4. Part B (10 marks) is to be answered on the question paper itself in the last 20 minutes.
5. Draw neat, labelled diagrams wherever necessary.

PART – A

Time: 1 Hour 10 Minutes Marks: 30

SECTION – I

Note: Answer ALL the questions. Each question carries 1 mark. $(6 \times 1 = 6)$

1. What is the role of chlorophyll in photosynthesis?
2. What is emulsification of fats?
3. Name the substance that accumulates in our muscles during heavy exercise due to anaerobic respiration.
4. What is double circulation?
5. What is dialysis?
6. What is a synapse?

SECTION – II

Note: Answer ALL the questions. Each question carries 2 marks. $(4 \times 2 = 8)$

7. Write the balanced chemical equation for photosynthesis. Name its raw materials.
8. Write any two differences between aerobic and anaerobic respiration.
9. What is blood pressure? What is the normal blood pressure of a healthy adult?
10. What is a reflex arc? Give one example of a reflex action.

SECTION – III

Note: Answer ONE question (a or b) from each of Q.11 to 14. Each question carries 4 marks. $(4 \times 4 = 16)$

11. (a) Draw a neat, labelled diagram of the human digestive system.

OR

(b) Describe an experiment to prove that light is necessary for photosynthesis.

12. (a) Draw a neat, labelled diagram of the internal structure of the human heart.

OR

(b) How does water travel from the roots to the leaves of a plant? Explain root pressure and transpiration pull.

13. (a) Draw a labelled diagram of a nephron and explain how urine is formed.

OR

(b) Trace the pathway of air from the nostrils to the alveoli, with a labelled diagram of the respiratory system.

14. (a) What are plant hormones? Write the functions of auxins, gibberellins, cytokinins and abscisic acid.

OR

(b) Draw a labelled diagram of a neuron and explain its structure.

PART – B

Time: 20 Minutes

Marks: 10

I. Multiple Choice Questions

Choose the correct answer and write its letter in the bracket. ($5 \times 1 = 5$)

1. The enzyme present in saliva is []
(A) pepsin (B) salivary amylase (C) lipase (D) trypsin
2. Exchange of gases in the lungs takes place in the []
(A) bronchi (B) trachea (C) alveoli (D) larynx
3. The blood vessel that carries oxygenated blood from the lungs to the heart is []
(A) pulmonary artery (B) pulmonary vein (C) vena cava (D) aorta
4. The structural and functional unit of the kidney is []
(A) neuron (B) nephron (C) alveolus (D) villus
5. The hormone that controls the blood sugar level is []
(A) thyroxine (B) adrenaline (C) insulin (D) auxin

II. Fill in the Blanks

($5 \times 1 = 5$)

6. Deficiency of vitamin C causes _____.
7. The flap that closes the wind pipe while we swallow food is _____.
8. The instrument used to measure blood pressure is _____.
9. The excretory organs of the earthworm are _____.
10. The largest part of the human brain is _____.

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