Slip Test

Class – X BIOLOGY

Maximum Marks: 40 Time Allowed: 2 hours

General Instructions:

- All questions are compulsory.
- The question paper consists of four sections: A, B, C and D.
- Internal choices are provided in some questions.
- Draw diagrams wherever necessary. Ensure they are neat and labeled.

Section A (1 mark each)
(5 questions × 1 = 5 marks)

1. What is the role of the stomata in plants?
2. Name the enzyme responsible for the digestion of proteins in the human stomach.
3. What are chromosomes made of?
4. State two reasons why Mendel chose pea plants for his experiments.
5. Why is the ozone layer important for life on Earth?

Section B (2 marks each)
(6 questions × 2 = 12 marks)

6. Write any two differences between aerobic and anaerobic respiration.
7. Explain the process of reflex action with an example.
   OR

   Explain the structure and function of a neuron.

8. State the role of the following hormones in plants:
   a) Auxin
   b) Cytokinin
9. Write the main functions of blood in humans.
10. What is the role of Trypsin and lipase in digersti
11. Explain how variations during reproduction contribute to evolution.

Section C (3 marks each)
(6 questions × 3 = 18 marks)

12. With the help of a diagram, describe the process of photosynthesis.
    OR

What are the end products of photosynthesis? Why is this process essential for life on Earth?

13. Explain the double circulation of blood in humans.

14. State the difference between renewable and non-renewable resources. Give one example of each.

15. Describe Mendel's monohybrid cross with the help of a diagram. What was his conclusion?

16. Name 3 hormones involved in human reproduction.

17. Case-Based Question:

A factory in a small-town releases untreated chemical waste into the local river. As a result, the water becomes polluted, impacting aquatic life and the community that relies on the river for drinking water and irrigation.

a) What type of pollution is described in the case study?

b) How does water pollution affect aquatic organisms?

c) Suggest two ways to reduce water pollution in this scenario.

Section D (5 Marks)

1. Describe the structure and function of human heart with the help of neat and labelled diagram.

OR

Explain Mendel's dihybrid cross with an example and state its phenotypic ratio.