CBSE SAMPLE PAPER –05

Class-XI

BIOLOGY (THEORY)

Time: 3 Hrs **MM: 70**

General Instructions

1. The question paper comprises of five Sections A, B, C, D and E.
2. All questions are compulsory.
3. There is no overall choice however; internal choice has been provided in one question of 2 marks, one question of 3 marks and all the two questions of five marks category. Only one option in such question is to be attempted.
4. Questions1 to 5 in section A are very short questions of one mark each. These are to be answered in one word or one sentence each.
5. Questions 6 to 9 in section B are short questions of two marks each. These are to be answered in approximately 20-30 words each.
6. Questions 10 to 20 in section C are questions of three marks each. These are to be answered in approximately 30-50 words each. Question 21 is of 4 marks.
7. Questions 22 to 23 in section D are questions of five marks each. These are to be answered in approximately 80-120 words each.
8. Questions 24 to26 in section E is based on OTBA of 10 marks.

Section – A

1. How can the age of a tree be determined?
2. What is meant by glycosidic bond?
3. Which hormone regulates calcium balance in body?
4. What is pseudocoelom?
5. What is stomatal apparatus?

Section – B

6. What are cell junctions? Name the different types of them.
7. Draw a labelled diagram of a bacteriophage.

   Or

   Draw a labelled diagram of a Funaria plant.
8. What is diatomaceous earth? Mention two uses of it.
9. What is meant by taxon and herbarium?

Section – C

10. Describe the structure of actin.
11. Describe competitive inhibition of enzyme activity with an example.
12. Draw a labelled diagram of the mouth parts of cockroach.

Or

Draw a labelled diagram of structure of monocot seed.

13. Describe the quaternary structure of proteins.
14. Differentiate between rods and cones.
15. Differentiate C3 and C4 pathways of photosynthesis.
16. Mention two important functions and one deficiency symptom of potassium in plants.
17. Schematically represent haplo-diplontic life cycle.
18. How ATP is synthesized in the electron transport particles of the mitochondria?
19. What is meiosis? Bring out its significance.
20. Draw a labelled diagram of human respiratory system.
21. **Sunita is the class moniter of class-11. On day after few periods of teaching she observed that class room is littered with many small pieces of papers. Next day she delivered a speech in morning assembly " if a paper is torn a branch of tree is being destroyed."**

    a) What values do you find in Sunita?

    b) Do you agree with the statement of Sunita?

    c) What should be done to prevent plants?

Section – D

22. Describe the process of cyclic photophosphorylation.

Or

a) What is mineral nutrition in plants?

b) How are essential elements classified on the basis of their functions in plants?

23. Draw a standard ECG and explain the different segments in it

Or

Explain structure of human heart with labelled diagram.

Section-E (OTBA) Questions

24. OTBA Question — 2 mark
25. OTBA Question — 3 mark
26. OTBA Question — 5 mark