
CBSE SAMPLE PAPER –03**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. Questions 1 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 to 26 in section E is based on OTBA of 10 marks.

Section – A

1. What are the functions of major proteins?
2. Give two similarities of kingdom monera and protista.
3. Define cell cycle.
4. What are micro and macro nutrients? Give examples.
5. Define the term 'vernalization'.

Section – B

6. How is the gut lining protected from its own secretion of proteases?
7. What are the different ways in which specimens are kept in a museum?

Or

Differentiate between ascus and basidia, apart from the names of the groups producing them.

8. Cell is the basic unit of the life. Discuss.
9. How does water scarcity affect the rate of photosynthesis?

Section – C

10. Write six distinguishing features of class Mammalia.
11. Describe the quaternary structure of proteins.
12. Describe the auto-regulation of GFR.
13. Draw the diagram of six different shapes of the cells.
14. Enumerate the chemical events that occur in the process of clotting of blood.
15. Write any four differences between collenchyma and sclerenchyma.
16. Draw a labelled diagram of Nostoc.
17. Define RQ. Show its value for fats and carbohydrates.
18. Describe the nervous system of an earthworm.

Or

Draw a labelled diagram of the female reproductive system of frog.

19. What was Van Niel's experiment? What was the finding from it? Give the equation of photosynthesis given by him.
20. What are kinetochores? What are their functions?
21. **RamPrakash is small farmer in a remote village. His daughter name is Santi. Ram Prakash fixed the marriage of his daughter at the age of 15 but Santi wants to study further. She discussed the matter with her teacher who lived in same village. Next day the teacher meets Santi's father and convinced him about the importance of study and disadvantage of early marriage. Finally Ram Prakash agreed to continue her study.**
 - a. **What values do you find in teacher?**
 - b. **Why girl education is more important than boys education?**
 - c. **What is the disadvantage of early marriage of girl?**

Section – D

22. Write a note on imbibitions? Explain the mechanism of it in brief.

Or

- a) Schematically represent the water movement in the leaf.
- b) Draw a labelled diagram showing apoplast and symplast pathway.

23. Write a note on dicotyledonous seed. With well labelled diagram

Or

Draw the structure of human brain and label it accurately?

Section-E (OTBA) Questions

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