
CBSE SAMPLE PAPER -01**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. Differentiate open and closed circulatory system with an example for each.
2. What is meant by nodes of Ranvier?
3. What are intercalary meristems? Where do they occur?
4. What are flagellated protozoans? Give an example.
5. Define ammonification.

Section - B

6. Write the significance of mitosis.
7. What is binomial nomenclature? Explain with an example

Or

How are archaebacteria able to tolerate extremes of climate?

8. Define plasticity. Give an example of this phenomenon.
9. Where is thymus located in human body? Name the hormone and mention its important function.

Section – C

10. Differentiate between aerobic respiration and fermentation
11. What are the events that take place in telophase of mitosis?
12. Draw the dorsal, ventral and lateral view of the body of the earthworm showing mouth opening.

OR

Describe the female reproductive system of a cockroach.

13. What is a photosystem? Differentiate between the two types of photosystems in a higher plant.
14. Define the following
 - a) Functional residual capacity.
 - b) Expiratory capacity
 - c) Total lung capacity
15. Name the following
 - (i) The smallest known living cells.
 - (ii) An acellular slime mould.
 - (iii) A flagellated protozoan.
 - (iv) A bilaterally symmetrical chrysophytes.
16. Differentiate parenchyma from collenchyma Enumerate the peculiar features that you find in phylum chordata.
17. Show diagrammatically the facilitated diffusion.

18. Draw the floral diagram of liliaceae.
19. What are respiratory substrates? Name the most common respiratory substrate.
20. Differentiate between red algae and green algae.
21. **Radhika and Amina are good friends and study in same class. Radhika belongs to a rich family but Amina to a poor family. Radhika was poor in study but Amina was very intelligent. Radhika used to help him financially with her pocket money and Amina help her in study. Radhika parents do not like Amina but Radhika convinced them.**
- a. What values do you find in Radhika and Amina?
- b. What are the possible cause of poverty in society?
- c. Why Radhika's parents not like the friendship of her with Amina?

Section - D

22. Explain chemiosmotic hypothesis.

Or

Explain both pathways of water and ion absorption and movement in roots with neat sketch.

23. Draw the labelled diagram of pectoral and pelvic girdle.

Or

Explain different types of plastids, their pigments and functions.

Section-E (OTBA) Questions

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