
CBSE SAMPLE PAPER –04 (unsolved)

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. Define plasmolysis.
2. Give one difference between acrocentric and telocentric.
3. Define isotonic.
4. Define synapsis.
5. What is coronary system in circulation?

Section – B

6. Differentiate fibrous joints and cartilaginous joints.
 7. Why bile juice contains no digestive enzymes yet it is important for digestion?
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or

The content of nucleolus is continuous with that of nucleoplasm. Comments.

8. What are the functions of Golgi complex?
9. Differentiate hyperglycemia and hypoglycemia.

Section – C

10. Describe the process of inspiration under normal conditions.
11. Describe the three types of spores formed by asexual reproduction in fungi.
12. Describe the structure of cell wall of a plant

Or

Describe the female reproductive system of cockroach.

13. Draw a labelled diagram of a plant cell in Anaphase I.
 14. Give the structural formula of glycerol and lecithin.
 15.
 - a) What is parthenocarpic fruit?
 - b) Why the maize grain is not called as a seed?
 - c) What is vermicomposting?
 16. What was Van Niel's experiment? Give the equation of photosynthesis given by him.
 17. Give reason Enumerate the peculiar features that you find in phylum chordata.
 18. Describe the disorders of Myasthenia gravis.
 19. Name the following along with their sources a) pregnancy hormone and b) anti-diuretic hormone.
 20. Describe in detail the cohesion theory of water transport.
 21. **Raman and Deepak are good friends. Raman is tall but Deepak is dwarf. Deepak feels depressed due to less height. One day Deepak meets a local doctor, who advised him to take some medicine to increase his height. Next day Deepak talk the same to his friend. Who forbade him to take such medicine as it is not possible to increase the height by using medicine?**
 - a) What values do you find in Raman?
 - b) Name the hormone that controls the height.
 - c) What is the basis of Raman's conclusion?
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Section – D

22. Draw any five different shapes of prokaryotic cells. Name them.

Or

Explain TCA cycle in detail.

23. Schematically represent the interrelationship among the metabolites that undergo respiration mediated break down.

Or

Explain the steps in urine formation in a human kidney.

Section-E (OTBA) Questions

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