

CBSE SAMPLE PAPER – 1 (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. What would happen if a rotten fruit gets mixed with unripe fruits?
2. Define plasmolysis.
3. Give one difference between acrocentric and telocentric.
4. Define isotonic.
5. Define synapsis.

Section - B

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

8. Draw a neat diagram of V.S of human eye and label the following parts.
- a) Fovea
 - b) Retina
 - c) Vitreous chamber
 - d) Blind spot

Or

Draw a neat diagram of alimentary canal of cockroach.

9. Explain the role of potassium ions in opening of stomata.

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. Name the following along with their sources a) pregnancy hormone and b) anti-diuretic hormone.

18. Why xylem transport is unidirectional?
19. What types of joints are found in hip joint, elbow joint, knee joint and wrist joint?
20. Write down the steps of conversion of atmospheric nitrogen to ammonia by nitrogenase enzyme.
21. **Brijmohan angrily says to his daughter not to marry Rajiv since their family is known to inherit Haemophilia. The daughter objected to her father's order. Brijmohan was adamant and threatened Rajiv also. Brijmohan's daughter explained the biological interpretation of his fear and convinced her father.**
- a) Rajiv was not haemophilic. Why was Brijmohan so worried?
- b) What values do you identify from the role played by Brijmohan's daughter?
- c) What explanation must have convinced Brijmohan?

Section - D

22. Describe in detail the cohesion theory of water transport.
- Or
- Schematically represent the interrelationship among the metabolites that undergo respiration mediated break down.
23. Draw any five different shapes of prokaryotic cells. Name them.
- Or
- Explain TCA cycle in detail.

Section-E (OTBA) Questions

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