
CBSE SAMPLE PAPER –02

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. Where is parapodia seen? What is its function?
2. What is an inhibitor?
3. Expand PPLO.
4. Define genus.
5. What is reflex action?

Section – B

6. Give two examples as to how ABA acts as a stress hormone in plants.
7. Differentiate fascicular cambium from cork cambium. Or

Justify that all underground parts of a plant are not always roots.

8. Mention the differences between Gram positive and Gram negative bacteria.
9. What are aqueous humor and vitreous humor? Mention their functions?

Section – C

10. Draw a labelled diagram of digestive system of a cockroach.
11. Describe competitive inhibition of enzyme activity with an example?
12. What is pulmonary circulation? Describe its importance. Why is the left ventricular wall more muscular than that of the right ventricle?
13. Give the structural formula of (i) glycerol and (ii) lecithin.
14. Explain three common symptoms of deficiency of mineral nutrients in plants, with the example of an element that causes each of them.
15. Differentiate between essential amino acids and non-essential amino acids.
16. What are (i) Viroids and (ii) phycobionts?
17. Differentiate between photophosphorylation and oxidative phosphorylation.
18. A) Why do sharks have to swim continuously?
B) Name two phycocolloids.

OR

Mention the ploidy of the following (i) PEP of a dicot plant (ii) Leaf cells of moss (iii) Gemmae of Marchantia and (iv) Zygote of a fern.

19. What is the significance of step-wise release of energy in respiration?
20. What is a parthenocarpic fruit? Why maize grain is not called as a seed? What is Vermicomposting?
21. **Roshan Lal lives in a small town. He was feeling tired and less energetic for some times. One day he visited a doctor who advised him to undergo a blood test. Initially he hesitated for it but later agreed for it. Doctor went through the report and advised him to not use potato, rice and other sweet things.**
 - a) **What values do you find in doctor?**
 - b) **What was the possible disease Roshan Lal was suffering?**
 - c) **Why did the doctor advise him to not use potato, rice etc.**

Section – D

22. Explain mass flow hypothesis with neat sketch.

Or

Explain Hatch –Slack pathway.

23. Explain the fore brain of human with neat sketch

Or

How the function of kidney regulated?

Section-E (OTBA) Questions

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