

**CBSE Board
Class XII Biology
Sample Paper 8**

Time: 3 hrs

Total Marks: 70

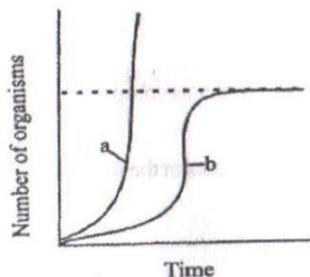
General Instructions:

- (i) All questions are compulsory.
- (ii) This question paper consists of four Sections A, B C and D. Section **A** contains **8** questions of **one** mark each, Section **B** is of **10** questions of **two** marks each, Section **C** is of **9** questions of **three** marks each, and Section **D** is of **3** questions of **five** marks each.
- (iii) There is no overall choice. However an internal choice has been provided in **one** question of **2** marks, **one** question of **3** marks and all the **three** questions of **5** marks weight age. A student has to attempt only one of the alternatives in such questions.
- (iv) Wherever necessary, the diagrams drawn should be neat and properly labeled.

Section A

- Q1. Why does thinning of bones usually start occurring in human females at about 50 years of age? [1]
- Q2. What is the cause of Klinefelter's syndrome? [1]
- Q3. Organ transplant is preferred between close relatives. Why? [1]
- Q4. Give one important use of GMO. [1]
- Q5. What is the main function of gel electrophoresis? [1]
- Q6. Why insulin was genetically engineered in bacteria? [1]
- Q7. Mass extinction of species has been witnessed even before humans appeared on the earth. Then why is the extinction in progress presently considered predominantly different and alarming? [1]

Q8. In the absence of the predators, which curve, (a) or (b) would appropriately depict the prey population? [1]



Section B

Q9. Why do you think the zygote is dominant for some time in a fertilized ovule? [2]

Q10. Why are some alleles dominant and some recessive? [2]

Q11. Describe briefly about 'origin of replication'. [2]

Q12. Distinguish between a leading strand and a lagging strand. [2]

Q13. What is the difference between function of primase and DNA polymerase? [2]

Q14. What are the functions of t-RNA in the protein synthesis? [2]

Q15. What is the ecological principle behind the biological control method of managing with pest insects? [2]

Q16. Where would you look for signs of secondary succession? When does secondary succession end? [2]

Q17. Name the major green house gases. What is their effect on the surface of earth? [2]

Q18. List two harmful effects of consuming alcohol. [2]

Or

What is the cause of swelling at the site of injury?

Section C

Q19. What are chasmogamous flowers? Why cross-pollination does not occur in cleistogamous flowers? Give reasons for your answer. [3]

- Q20. What changes occur in the uterus during (i) Menstruation (ii) Proliferative phase
(iii) Secretory phase? [3]
- Q21. Who are the universal recipient and universal donor people? Write down their genotypes. [3]
- Q22. Explain how a condition XXY chromosomes, can arise in humans? [3]
- Q23. Why is it generally difficult to transplant organs from one person to another?
How is this difficulty now overcome? [3]
- Q24. What is allergy? How are allergies related to the body's immune system? [3]
- Q25. What are the uses of genetically modified plants? [3]
- Q26. Give three important examples of commensalism. [3]
- Q27. Why we say energy flow in the biosphere is unidirectional? [3]

Or

Why very small animals are rarely found in Polar Regions?

Section D

- Q28. Describe briefly the structure of monocotyledonous aluminous (maize) seed. [5]
- Or
- What are the major functions of male accessory ducts and glands?
- Q29. Give the salient features of the double-helix structure of DNA. [5]

Or

Who proposed the chromosome theory of inheritance? Give the salient features of this theory.

- Q30. Municipal Corporation has deputed personnel to check for mosquito breeding in your school. [5]
- (a) Which are the places they should check for mosquitoes and there larvae?
(b) Name two diseases which are spread by mosquitoes.
(c) Name any two biological agents which can be used to control mosquitoes?
(d) What values are reflected in your answer?