

CBSE Class 12 Biology Viva Questions with Answers

Q1. What are the contrasting features that Mendel observed in a pea plant.

Ans: The contrasting features are the colour of the cotyledons, the form of seed, the form of pod, the colour of the seed coat, the length of the stem, the position of the flower, and the colour of the pod.

Q2. Who coined the term mitosis?

Ans: Walther Flemming

Q3. Name two plants and two animals living under aquatic conditions

Ans: Lilly and water hyacinth are aquatic plants. Seals and octopuses are aquatic animals.

Q4. Explain Meiosis.

Ans: Meiosis is a process in which a single cell divides two times to form four haploid daughter cells. Meiosis has 2 stages in all.

Q5. How does the hibiscus flower pollinate?

Ans: The pollen grains in Hibiscus germinates on stamen. It is then transferred from the stamen to the stigma pads of the pistil.

Q6. What is an enzyme?

Ans: An enzyme is a substance which catalyses cell metabolism.

Q7. What is protein? How many kinds of proteins are there?

Ans: Protein is the fundamental component in the living cells. It is made up of hydrogen, carbon, nitrogen, oxygen, and chains of amino acids. Three types of proteins are there which include fibrous, membrane, and globular.

Q8. What is nucleic acid?

Ans: Nucleic acid is a biomolecule which is necessary for all the known forms of life.

Q9. What is a monosaccharide?

Ans: Glucose and fructose are monosaccharides.

Q10. Give a few examples of High Protein Foods?

Ans: Pumpkin seeds, Monkfish, Cod, Coconut, Eggs, Bananas.

Q11. What is the shape of a pollen grain?

Ans: The shape of the pollen grain is mostly round, ovule, triangular, disc or in a bean-shape with a smooth to spiky texture.

Q12. Name 4 types of diseases.

Ans: Deficiency diseases, Infectious diseases, physiological diseases, hereditary diseases.

Q13. What are pollen grains?

Ans: They are small collections of microspores that aid in fertilisation and sexual reproduction in plants. It is attached to the anther of the male reproductive organ of the plant.

Q14. What is somatic cell division?

Ans: Somatic cell division is the type of cell division where the daughter cells produced are exactly similar to the parent cell. They have the same chromosomal number as the parent cell.

Q15. What are enzymes?

Ans: They are substances produced by a living organism which acts as a catalyst to bring about a specific biochemical reaction.

Q16. Give the full form of DNA?

Ans: Deoxyribonucleic acid.

Q17. Why is meiosis known as reduction division?

Ans: Meiosis is also known as reduction division as following the first meiotic division the number of chromosomes in the cell becomes half.

Q18. What is the full form of RNA?

Ans: Ribonucleic acid.

Q19. Name 2 xerophytic plants.

Ans: Ephemeral Annuals and Succulent

Q20. What are Mendel's laws of inheritance?

Ans: Mendel's laws of inheritance include the law of segregation, law of dominance, and law of independent assortment.

Q21. Which type of soil is most favourable for the growth of plants?

Ans: Loamy soil is best for plant growth as it has high water retention capacity thus it retains water for long and also retains the nutrients which are required for plant growth.

Q22. What is meant by mitosis?

Ans: It is a type of cell division that results in two daughter cells each having the same number and kind of chromosomes as the parent nucleus, typical of ordinary tissue growth.

Q23. What is the pH of soil?

Ans: The optimal pH range of the soil is between 5.5 to 7.0.

Q24. What is meant by soil texture?

Ans: Soil texture refers to the proportion of sand, silt and clay sized particles that make up the mineral fraction of the soil.

Q25. Pollen is contained in which part of the flower?

Ans: Anther

Q26. What produces the female gamete?

Ans: Ovule

Q27. What is a flower's male part called?

Ans: Stamen

Q28. What are the various kinds of soil?

Ans: Clay, Loamy, Sandy and Silt.

Q29. Define pollination.

Ans: Pollination is the act of transferring pollen grains from the male anther of a flower to the female stigma.