

Biology - 12th Class Biology Full Book Short Questions Preparation

Q1. Define Lamarkism and theory of special creation.

Ans 1: Lamark gave two important points of his theory of evolution

Ans 2: 1) Use and disuse of organs 2) Inheritance of acquired characters

According to this theory all living things came into existence in their present form especially and specifically created by nature.

Q2. Write about the disease syphilis? Or Give causes and symptoms of syphilis?

Ans 1: It is caused by a spirochete, *Treponema pallidum*. It damages the reproductive organs, eyes, bones, joints, CNS, heart and skin. Sexual contact is major source of its spread.

Q3. Differentiate between determinate and indeterminate growth.

Ans 1: Determinate growth: in higher plants growth occur at certain points called meristem and whole body do not grow in different planes such a growth is called determinate growth.

Ans 2: Indeterminate growth: in lower plants whole body is capable of growth and which produced an irregular body of plant. Such a growth is called indeterminate growth.

Q4. How sex is determined in plants?

Ans 1: Plants show a variety of sexual situations. Some species like Ginkgo are dio-ecious having plants of separate sexes. Male plants produce flower with only stamens and female plants produce flower with only carpels. Some dioecious plants have a difference of sex chromosome between the sexes. These have an X-Y system. These plants typically exhibit an X-chromosome autosome balance system for sex determination.

Q5. Write role of DNA ligase.

Ans 1: The function of DNA ligase is to fill the nicks (small gaps) or to join the Okazaki fragments to make a continuous strand of DNA.

Q6. Differentiate between ectoparasites and endoparasites.

Ans 1: Ectoparasite: Parasite which lives on outer surface of the body is called ectoparasite like lice, ticks and mites.

Ans 2: Endoparasites: Parasites which live inside the body of its host is called endoparasite like liver fluke.

Q7. Define tactic movements. Give its one type.

Ans 1: The movement of entire organism or cell i.e., locomotive due to external stimulus is called tactic movement.

Q8. What are transgenic organisms?

Ans 1: Organisms having foreign DNA or gene in addition to its own DNA are called transgenic organisms.

Q9. Describe the process of cloning.

Ans 1: In animals especially vertebrate animals, a nucleus from the somatic cell is removed and introduced into an egg cell, whose nucleus has been destroyed by using UV light. The egg with transplanted to the parent who has contributed the nucleus.

Q10. What is nullo gametes?

Ans 1: A gamete without sex chromosomes is called nullo gamete. For Example Grasshopper male produce 50% nullo gametes and 50% with sex chromosomes.

Q11. Define pioneers and climax community.

Ans 1: Pioneers: The plants which first of all colonize on a bare land and start the process of succession are called pioneers. They are hardly invaders.

Ans 2: Climax community: it is the last stage which is most stable and remains essentially same if nothing changes in the environment to upset the balance.

Q12. What are metabolic defects and give two example?

Ans 1: Bones are malformed and one organ or its part is missing or it may be repeated.

Q13. What are heterotherms? Give example.

Ans 1: These are the animals that are capable of varying degrees of endothermic heat production but generally do not regulate their body temperature within a narrow range. For example bats and humming birds.

Q14. Name two layers of lateral plates of mesoderm.

Ans 1: The lateral plate of mesoderm splits into two layers named as somatic mesoderm and splanchnic mesoderm.

Q15. Write four similarities of nervous and chemical coordination.

Ans 1: Similarities are as follow

Ans 2: Both system help in co-ordination.

Ans 3: both are homoeostatic in function.

Ans 4: Both release chemical messenger in extracellular space of body.

Ans 5: Both systems synthesize chemical messengers

Q16. What do you Know about saltatory nerve?

Ans 1: In myelinated neuron the nerve impulse jump from on node to another node (node of Ranvier).It is called salutatory nerve impulse.

Q17. Write about the stage of telophase of mitosis.

Ans 1: During telophase of mitosis,nuclear membrane and nucleolus reappear,mitotic apparatus disappears and two nucleoli are formed in one cell.

Q18. Differentiate between autosome and sex chromosomes.

Ans 1: Autosome chromosomes: Chromosomes which do not contain genes for sex determination or chromosomes other than sex chromosomes are called autosomes.

Ans 2: Sex chromosomes: Chromosomes which play role in sex determination are called sex chromosomes.

Q19. What is hypertonic environment and what changes occur in a cell in such environment?

Ans 1: The more concentrated external environment is called hypertonic environment. The hypertonic environment makes the cell solution concentrated and cell shrinks due loss of water.

Q20. Enlist methods of asexual reproduction.

Ans 1: Types of asexual reproduction are:-

Ans 2: a) Budding b) Parthenogenesis c) Cloning d) Tissue culture e) Apomixes f) Sporulation g) Vegetative propagation h) Artificial propagation
