Biology - 12th Class Biology Chapter 24 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. Define theory of special creation.

Ans 1: According to this theory all living things came into existence in their present from especially and specifically created by nature.

Q3. Explain the term homology with a suitable example.

Ans 1: Similarity in structure due to common ancestral origin is called homology. Homologous organs are best example of homology like flipper of whale,front leg of horse,arm of man,wing of bird.

Q4. What are vestigial organs?Give one example.

Ans 1: Organs which are rudimentary or non functional in present organisms but were full developed in the ancient organisms are called vestigial organs.
For Example: Appendix in man,ear muscles in man.

Q5. Differentiate between endangered and threatened species.

Ans 1: **Endangered Species:** Species which are near to extinct are called endangered species.

Ans 2: **Threatened Species:** The species which become endangered in near future are called threatened species.

Q6. How artificial selection is different from natural selection?

Ans 1: **Natural selection:** Natural selection occurs through an interaction between the environment and the variability in any population.

Ans 2: **Artificial selection:** It occurs by breeding of domesticated plants and animals.Human have modified other species over many generations selecting individuals with the desirable traits as breeding stock

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Q7. Differentiate natural and artificial selection.

Ans 1: **Natural Selection:** In natural selection,nature selects the individuals with favourable variations for better survival in an environment.
Selection pressure is exerted by environmental factors.

Ans 2: **Artificial Selection:** It is the selective breeding of domesticated plants and animals to produce off spring's with characters desirable to humans.
Selection pressure is exerted by humans.

Q8. What is endosymbiont hypothesis?Give example.

Ans 1: The enkaryotic cell might have evolved when a large anaerobic amoeboid prokaryote ingested small aerobic bacteria and stabilized them instead of digesting them.This idea is known as the endosymbiont hypothesis,which are the sites of aerobic respiration & most energy conversion in eukaryotic cells.

Q9. How does genetic drift affect the gene frequency?

Ans 1: It is a change in frequency of alleles at a locus that occurs by chance.In small populations,such as fluctuations may lead to loss of particular alleles.This may occur in a small population when a few individual fail to reproduce and then genes are lost from population.

Q10. Define species.

Ans 1: Group of organisms which have same morphological characters and can reproduce with each other and can produce fertile offspring similar to the themselves is called species.
