Biology (New Book) - 9th Class Biology Urdu Medium Chapter 1 Preparation

Q1. Define Marine Biology

Ans 1: It is the branch of Biology that deals with the study of life in occeans and salt water

Ans 2: Application : It helps to understand ocean biodiversity, discover new species, and address marine conservation issues.

Ans 3: Example: Corla reefs support a wide variety of marine life.

Q2. Define the term fossil

Ans 1: Fossils are remains of the living things preserved by natural process. Fossils help the study of lif ein the past and process of evolution

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Q3. Differentiate between Zoology and Botany

Ans 1: Botany: The division of biology which deals with the study of plants is called botany

Ans 2: Role of Observation : Observation are very important step in solving a biological problem Obserations are made by five senses of visionn, hearing , smaell, taste and touch.

Ans 3: Role of Experimentaion : It is themost important sep of biological medhod,Experiments are performed to prove if hypothesis is true or not. The deductions drawn from the hypothesis are subjected to rigorous testing Through experimentation, biological learns which hypothesis is correct

Ans 4: e.g. mustard, rose. Teh division of biology which deals with the study of animals is called Zoology e.g. Frog.

Q4. Difference betwwen Theory and Pricniple

Ans 1: Theory:- If th ehypothesis is found to be correct then it becomes a theory. It is supported by a number of evidences. A theory can be changed if better evidence is available
Example: The theory of evolution

Ans 2: Principle:
A theory that has been verified and apears to have wide application may become biological pricniple or law
Example: Mendel's laws of inheritance

Q5. Define Anatomy

Ans 1: It is the branch of Biology that explores the internal physcal structure of organisms particulary humans.

Ans 2: Application :It helps in disease diagnosis medical device development, and improving quality of life
Example: The study of the organs of the digestive system.

Q6. Define Genetics

Ans 1: It is the branch of Biology that deals with the study of transfer of characteristics from parentsto offspring.
Application : In Geneteics , scienttists also study the causes of genetic diseases, and develop better varieties of plants.

Q7. Difference between Morphology and Physiology

Ans 1: Morphology:
Defination : The study of the size, shape and structure of animals, plantss and micororganismsm is called morphology. This briach is also called external morphology

Ans 2: Example: Morphology of a flowerign plant includes the structure of roots, ste, leaves, flowers and fruit

Ans 3: Physiology:
Defination : It is the branch of biology that deals with the functioning of body parts.

Ans 4: Example Circulatory system transports vital substances throughout the body

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Q8. Define the followig terms: i) Cell Biology ii) Embryology

Ans 1: Cell Biology: The study of the structure and functions of the cell is called cell biology

Ans 2: Embryology: The study of the developmental stages of an organism from egg to the formation of a new organisms is called embryology

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Q9. What is difference betwene control group and experimetnal group

Ans 1: Control Group:
1. The group in an experiment that does nto receive the variable being tested
ii. It is used as a baseline to compare results
Example: We wil provide CO_2 to the platns as normal

Ans 2: Experimental Group:
i. The group in an experiment that reeives the variable being tested.
ii. It is used to test the effect of the vriable
Example:
We will not provide CO_2 to platn to check its effect

Q10. What is computational biology?

Ans 1: Definition : In Computational Biology, scientists use mathematical models, algorithms, and computer simulations to understand biologicla system and relationships.

Ans 2: Role of Computational Biology:

It involves analysisng biological data, such as sequence fo amino acids in a proteins.