Biology (New Book) - 9th Class Biology Urdu Medium Chapter 2 Preparation

Q1. How is he biodiversity crucial for humans and for the planet Earth.

Ans 1: Biodiversity provides many essentil services for humans and the planet. Here are some key benefits of biodiversity

Ans 2: 1. Ecosystem Stability: Biodiversity helps maintain the balance of ecosystems by contributing to the biogeochemical cycle.such as water cycle , carbon cycle, and nitrogen cycle.

Ans 3: 2. Climate Regulation : Plants and algae absorb carbon dioxide, helping to regulate the climate

Ans 4: Natural Resources: Biodiversity provides a vast array of resources form food and medicine to building materials and fuel

Ans 5: 4. Economic Benefits: Biodiversity supports numerious industire,s including agriculture tourism and pharmaceuticals

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Q2. Enlist the distingushing characteristics of fungi.

Ans 1: Kingdom Fungi:
Their cells are covered by cell wall made of chitin
ii. Example are mushrooms, rusts, smuts and molds.
iii. Fungi get nutrients in a unique way They do not ingest food like animals and some protists. They absorb food from surroundings.

Q3. Difference between Fungi and Plants

Ans 1: Fungi:
i. Eukaryotic organisms
ii. Mostly multicellular and some fungi are unicellular
iii. Fungi may be saprotrophci decomposers
iv.Fungi have chitin in their cell walls.
v. Fungi have absorptive mode of nutrition
Examples:
Black bread mold, yeast,mushroom etc.

Ans 2: Plants:
i. Eukaryotic organisms.
ii. Kulti cellular
iii. Plants are autotrophci with chloroplasts containing chlorophll.
iv. Plants cell wall is made of cellulose
v. Plants have photosynthesic mode of nutrition.
Exaple: Moss, mustard

Q4. Why mule is not regarded as a species.

Ans 1: Define : Specie is a group of similar individuals capable of interbreeding among themselves and producingfrertile offspring
Explanation : Cross between a male donkey and a female horse produces mule. It is infertile because of the odd number of

chromosomes. they can't reproduce. So, it is not species, species is the most basic unit of classfication, as well as a taxonomic rank

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Q5. How dows binomial nomenclature facilitate clear communication about organismsm across different langauges.

Ans 1: It facilitates by provideing a universal naming system for species.

Q6. Define Biodersity, Classification, Taxonomy , Systemsatic, Domain, Taxa, Species

Ans 1: Biodiversity:
Biodersity is defined as The variety of living organisms on Earh.

Ans 2: Classification :
The grouping of organisms is called classification

Ans 3: Taxonomy:
Taxonomy is the brach of biology concerned with identficiation, naming and classification of organisms.
Systematics:
The scientific study of diversity of organisms and their evolutionary relationship is called systematic

Ans 4: Domain :
In 1990 Carl Woese introduced a three domains system of classification. The three domains of life are Archaea, Bacterial and Eukarya.
Taxa:
The group into which organisms are classified are known as taxonomic categories or taxa .The taxa form a ladder,called taxonomic heirarchey. Therere are seven main taxonomic ranks. Kingdo, Phylum or division, class order family, genus and species.

Ans 5: Species: Species is a group of similar organismsm capable of interbreeding or exchanging genes among themselves and producing fertile offspring.

Q7. Why are the followign scientists famous for?Aristotle, Carolus Linnacus, Carl Woese

Ans 1: Aristotle: The greek philosopher Aristole was the first person who classified the living organisms.

Ans 2: Carolus Linnaeus:He grouped speices according to similar physical characteristics. According to earlier classified into two kingdoms, then three kingdom and then five-kingdom system. He also introduced binomial nomenclature

Ans 3: Carl Woese:In 1990 Carl Woese introduced a three domatin system of classificaton the three domains of life are.i. Arehaeaii. Bacteriaiii. Eukarya

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Q8. Describe aims of classification

Ans 1: The main aims and objectives of classification are:
1. To degermien similarities and difference betwene organisms.
2. To arrange organismsm on the basis of similarities and differences
3. Identify the organismsm to study them systematically
4. To find out evoultionary relationship among organisms.

Q9. What is the term used to describe the variety of life on Earth.

Ans 1: The term used for the variety of life on Earth is biodiversity, or biologicla diversity.

Ans 2: Definition :
Biodiversity means the variety of organismsm in a particular area including all living things and their interactions. It encompasses the variety of genes, species, ecosystems and functions.

Q10. What are basis of classification of life into domains?

Ans 1: Classification into three domains is based on difference in the sequence of nucleotides in the rRNA of the cell. the cell memberane lipid structur eand its sensitivity to antibiotics

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