

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

Q1. What were the shortcomings of three kingdom classification system.

- Ans 1:**
- i. Some taxonomists disagreed about the position of fungi in kingdom plantae
 - ii. Fungi resemble plants in many ways but are heterotrophs which get their food by absorption
 - iii. They do not have cellulose in their cell wall but possess chitin

Q2. Difference between Fungi and Plants

Ans 1: Fungi:

- i. Eukaryotic organisms
- ii. Mostly multicellular and some fungi are unicellular
- iii. Fungi may be saprotrophic 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. Multicellular
- iii. Plants are autotrophic with chloroplasts containing chlorophyll.
- iv. Plants cell wall is made of cellulose
- v. Plants have photosynthetic mode of nutrition.

Example: Moss, mustard

Q3. Difference between Plant and Animals

Ans 1: Plant:

- i. Eukaryotic multicellular
- ii. Autotrophic with chloroplast containing chlorophyll
- iii. They have cellulose in cell walls.
- iv. They cannot move
- v. Examples: Moss, Mustard

Ans 2: Animals:

- i. Eukaryotic multicellular
- ii. Heterotrophic and lack chlorophyll
- iii. Animals lack cell wall
- iv. They can move from place to place.
- v. Example : a. Invertebrates e.g. insects, star fish
b. Vertebrates e.g. fish, frogs.

Q4. What are the seven taxonomic ranks used in the Linnaean system.

- Ans 1:** Linnaeus developed a system that went from broadest to most specific the level of classification he used are

Ans 2: Kingdom, phylum class, Order, Family, Genus and species.

Q5. What is domain? Name three domains of life.

Ans 1: In biology, a domain means the largest of all groups in the classification of life. Domain is group of kingdoms, or taxonomic category above the kingdoms. The three domains of life are Archaea, Bacteria and Eukarya.

Q6. How does binomial nomenclature facilitate clear communication about organisms across different languages.

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

Q7. Compare two kingdom, Kingdom, and five kingdom classification system.

Ans 1: Two Kingdom :

- i. It includes two kingdoms Plantae and Animalia
- ii. Bacteria and cyanobacteria were placed in plant kingdom
- iii. Unicellular or simple multicellular eukaryotes wrongly placed in kingdom plantae and animalia.
- iv. Fungi are wrongly placed in kingdom plantae

Ans 2: Three Kingdom:

- i. It includes three kingdoms plantae, Animalia, Protista
- ii. Euglena was placed in kingdom protista.
- iii. Multicellular microscopic organisms were separated from unicellular microscopic organisms.
- iv. Fungi were placed in kingdom plantae

Ans 3: Five Kingdom:

- i. It includes five kingdoms Monera, protista, Fungi, plantae and Animals
 - ii. Bacteria and cyanobacteria are placed in kingdom Monera
 - iii. Unicellular or simple multicellular eukaryotes placed in kingdom Protista
 - vi. Fungi are placed in kingdom Fungi
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Q8. How is biodiversity crucial for humans and for the planet Earth.

Ans 1: Biodiversity provides many essential 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 from food and medicine to building materials and fuel

Ans 5: 4. Economic Benefits: Biodiversity supports numerous industries including agriculture, tourism and pharmaceuticals

Q9. Enlist the distinguishing 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.

Q10. Why cannot we classify viruses in any Kingdom.

Ans 1: Viruses are not included in any kingdom because they lack any of the characteristics of the three domains of life.
