NEET Chapter 2: Biological Classification previous year questions from **2021 to 2025**, with **detailed answer explanations**.

Q1.In five-kingdom classification, which single kingdom contains blue-green algae, nitrogen-fixing bacteria and methanogenic archaebacteria?
A) Monera
B) Protista
C) Plantae
D) Fungi
NEET 2025

 Explanation:
Blue-green algae (cyanobacteria), nitrogen-fixing bacteria like *Rhizobium*, and methanogens like *Methanobacterium* are all **prokaryotes**. The five-kingdom classification (by Whittaker) includes **all prokaryotic organisms under Kingdom Monera**. Protista has eukaryotes (unicellular), Plantae includes multicellular photosynthetic organisms, and Fungi are eukaryotic decomposers.
 Correct Answer: A) Monera

Q2. Match the following organisms with their respective modes of nutrition:
A. Euglenoid –
B. Dinoflagellate –
C. Slime mold –
D. Plasmodium –

I) Parasitic
II) Photosynthetic
III) Saprophytic
IV) Parasitic

Options:
A) A–II, B–III, C–IV, D–I
B) A–II, B–II, C–III, D–IV
C) A–II, B–I, C–III, D–IV
D) A–IV, B–II, C–III, D–I
NEET 2024

 Explanation:

- **Euglenoids** like *Euglena* are both autotrophic (photosynthetic) and heterotrophic, but primarily considered photosynthetic.
- **Dinoflagellates** (like *Gonyaulax*) are mostly photosynthetic.
- **Slime molds** are saprophytic – they feed on decaying matter.
- **Plasmodium**, a protozoan parasite, causes malaria.

 Correct Match: A–II, B–II, C–III, D–IV
 Correct Answer: B) A–II, B–II, C–III, D–IV

Q3. Fungi usually store their reserve food as:
A) Starch
B) Glycogen and oil
C) Lipid
D) Protein
NEET 2023

 Explanation:
Unlike plants that store **starch**, **fungi** store **glycogen** (like animals) and oil as reserve food. This is one reason fungi are placed closer to animals than to plants in molecular taxonomy.
 Correct Answer: B) Glycogen and oil

Q4. In five-kingdom classification, unicellular green algae are included in the kingdom:
A) Metaphyta
B) Protista
C) Monera
D) Metazoa
NEET 2022

 Explanation:
Unicellular green algae like *Chlamydomonas* are eukaryotic and photosynthetic. They belong to **Kingdom Protista**, which includes all unicellular eukaryotes. Metaphyta and Metazoa are outdated terms referring to multicellular plants and animals, respectively. Monera includes prokaryotes.
 Correct Answer: B) Protista

Q5. Which of the following is correct for slime moulds?
A) They lack cell wall
B) They show animal-like and plant-like features
C) They are always multicellular
D) They are photosynthetic
NEET 2022

 Explanation:
Slime molds behave like **animals in their movement and feeding** (pseudopodia, phagocytosis), and **plants in spore formation**. They are **saprophytic** and form a multinucleated mass called plasmodium. They are not photosynthetic and do have cell walls during the spore-forming stage.
 Correct Answer: B) They show animal-like and plant-like features

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Q6. In five-kingdom classification, which kingdom includes blue-green algae, nitrogen-fixing bacteria, and methanogens?
A) Monera
B) Protista
C) Plantae
D) Fungi
NEET 2021

 Explanation:
Blue-green algae (cyanobacteria), **nitrogen-fixing bacteria**, and **methanogenic archaea** are all **unicellular prokaryotes**. In the five-kingdom system, all such organisms fall under **Kingdom Monera**.
 Correct Answer: A) Monera

Q7. Diatoms are considered as the chief 'producers' in oceans because:
A) They are photosynthetic
B) They produce silica
C) They have oil deposits
D) They form blooms
NEET 2021

 Explanation:
Diatoms are microscopic algae with **siliceous cell walls** and are **photosynthetic**. They form a major component of **phytoplankton**, which performs photosynthesis and supports the oceanic food chain. Hence, they are called the **chief producers** in oceans.
 Correct Answer: A) They are photosynthetic
