

QUIZ: THE FIVE KINGDOM CLASSIFICATION

1. The five Kingdom classification proposed by Whittaker is based on
 - (a) Cell structure
 - (b) Mode and source of nutrition
 - (c) Body organization
 - (d) Cell structure, mode and source of nutrition and body organization

2. Among the following which one is not a member of *Protista*?
 - (a) Euglena
 - (b) Amoeba
 - (c) Anabaena
 - (d) Diatoms

3. Lichens are examples for symbiotic association between an alga (either green algae or blue green algae) and a fungus (either a member of ascomycetes or basidiomycetes). Which of the following statement is pertinent to lichen?
 - (a) Lichen is a composite organism and shows bio trophic mode of nutrition.
 - (b) Lichen is a composite organism.
 - (c) Lichens are seen only on the bark of trees as colored patches.
 - (d) Both (a) and (b)

4. Heterotrophic eukaryotic organisms; some are saprotrophs while others may be parasites or rarely show symbiotic association; Chitinous cell wall.

The above characteristics are exhibited by members of

- (a) Plantae
 - (b) Fungi
 - (c) Protista
 - (d) Monera
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5. *Euglena* which contains chloroplasts is a member of
 - (a) Protista
 - (b) Monera

- (c) Plantae
- (d) Animalia

6. Multicellular eukaryotic organisms, heterotrophic mode of nutrition, cell are without cell wall. These are features observed in which of the following group?
- (a) Fungi
 - (b) Monera
 - (c) Animalia
 - (d) Plantae
7. In the hierarchy of classification of organisms, the correct sequence is
- (a) Order → Class → Genus → Family
 - (b) Order → Family → Class → Genus
 - (c) Class → Order → Family → Genus
 - (d) Genus → Family → Class → Order

Answers:

1. (d)

Explanation: Living organisms are classified into 5 Kingdoms on the basis of cell structure (Prokaryotic/Eukaryotic); mode and source of nutrition (Autotrophs and Heterotrophs) and body organization (unicellular/ multicellular simple/ multi cellular complex)

2. (c)

Explanation: Anabaena is a member of *Monera* as it shows characters of prokaryotic cell viz., do not have a defined nucleus or organelles. Euglena, Amoeba and Diatoms are unicellular eukaryotic organisms.

3. (a)

Explanation: Yes, Lichens are composite organisms. The alga and fungus which form the lichen look different in their morphology. However when they form a lichen, the morphology of lichen is altogether different from that of the alga and fungus. The alga by photosynthesis prepares food and leaches it to outside. The food which is leached out is absorbed by the fungus (Bio trophic mode of nutrition). Also lichens are seen growing on rocks.

4. (b)

Explanation: Fungi are characterized by the above characters especially the chitinous cell wall. Plantae members are multicellular eukaryotes, generally autotrophs and cell wall is made up of cellulose. The members of Monera are unicellular prokaryotes. Protista includes many kinds of unicellular eukaryotic organisms which are either autotrophs or heterotrophs.

5. (a)

Explanation: *Euglena* is a unicellular, motile, autotrophic Protozoan.

6. (c)

Explanation: Animalia members show the above mentioned characters. The members of Fungi and plantae possess a cell wall whereas the members of Monera do not have a defined nucleus or organelles and do not show multicellular body designs.

7. (c)

Explanation: A Class is made up of one has many orders, and an order in turn has families. A family contains one or more than one Genus.