**Characteristics Of Protists** (p. 460 – 471)

**I. Diversity**

**1. Define the term Kingdom Protista.**

Kingdom Protista –

**2. Circle the letter of the sentence that is false concerning protists.**

a. Protists exhibit a wide range of feeding styles.

b. The means of movement of protists varies significantly.

c. Protists normally exist in aquatic environments.

d. Protists cannot respond to environmental stimuli.

**3. What are two traits that evolved among protists?**

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**4. Differentiate between protozoans and algae.**

Protozoans : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Algae : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**II. Ameboid Movement** (*Phylum* *Sarcodinia*) – **“Protozoans”**

**1. Define the term pseudopod.**

Pseudopod -

**2. Describe the ameboid movement using pseudopodia.**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**3. List two examples of protists that use ameboid movement for locomotion.**

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**4. Circle the letter of each sentence that is true about amoebas.**

a. Amoebas are very flexible, with no cell walls or flagella.

b. They live in fresh water, but not salt water.

c. Amoebas reproduce sexually.

d. Many amoebas are free-living, but some are parasitic.

**5. Circle the letter of each sentence that is true about foraminiferans.**

a. They live in fresh water environments.

b. Forams possess tiny, porous shells called tests.

c. Cytoplasmic extensions that extend from the pores of tests assist with movement.

d. The calcium carbonate shells accumulate on ocean floors.

**III. Algae**

**1. Algae can be single-celled or multicellular, but must be photosynthetic.**

Circle One : True False

**2. What two characteristics distinguish algae groups?**

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**3. Circle the letter of the sentence that is false concerning green algae.**

a. Green algae belong to the Phylum Chlorophyta.

b. They are mainly unicellular, freshwater organisms, but large marine forms exist.

c. Green algae are a major part of microscopic marine plankton.

d. The pigments of green algae is different than that found in plants.

**4. Circle the letter of the sentence that is false concerning red algae.**

a. Red algae belong to the Phylum Rhodophyta.

b. They are mainly unicellular, freshwater organisms.

c. Their pigments help them absorb various wavelengths of light at deep depths.

d. Commercially they are used to make agar and carrageenan.

**5. Circle the letter of the sentence that is false concerning brown algae.**

a. Brown algae belong to the Phylum Phaeophyta.

b. They are multicellular, freshwater organisms.

c. Coastline kelp provides food and shelter for multiple organisms.

d. They are among the largest organisms on Earth.

**IV. Diatoms** (*Phylum Bacillariophyta*) – **“Algae”**

**1. Define the term diatoms.**

Diatoms –

**2.** **Circle the letter of each sentence that is true concerning diatoms.**

a. Diatoms are photosynthetic, unicellular protists.

b. They possess unique double shells that are shaped like a petri dish.

c. Diatoms exhibit bilateral (two-sided) or radial (wheel-like) symmetry.

d. They are incapable of movement.

**3. What is diatomaceous earth?**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**V. Flagellates**

**1. What enables flagellates and ciliates to move?**

Flagellates : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Ciliates : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2.** **Circle the letter of the sentence that is false concerning dinoflagellates** *(“Algae”)****.***

a. They are unicellular and possess two flagella.

b. Dinoflagellates are mainly marine organisms that make up part of plankton.

c. Some dinoflagellates produce bioluminescent, poisonous red tides.

d. They are strictly photosynthetic organisms.

**3. Circle the letter of the sentence that is false concerning euglenoids** *(“Algae”)***.**

a. They are unicellular, freshwater organisms with two flagella.

b. Many euglena are photosynthetic and possess chloroplasts.

c. Euglena possess a pellicle, which is a non-flexible and does not change shape.

d. They have an eyespot, which is sensitive to light sources.

**4. Circle the letter of the sentence that is false concerning kinetoplastids** *(“Zooflagellates”)***.**

a. They are unicellular, heterotrophs with at least one flagellum.

b. They are closely related to Euglenoids.

c. Most usually reproduce sexually.

d. They are known to cause human diseases.

**5.** **Circle the letter of the sentence that is false concerning ciliates** *(“Protozoans”)***.**

a. A large number of cilia are present, which beat in rhythm to propel the organism.

b. They are complex, unicellular heterotrophs.

c. Like euglenoids, they possess a tough, flexible outer pellicle.

d. They do not have a nucleus.

**VI. Protistan Molds** – **“Protozoans”**

**1. Match the type of protistan mold with the correct definition.**

1. \_\_\_\_\_\_\_\_ Cellular Slime Mold A. Water molds, rusts, & mildew

2. \_\_\_\_\_\_\_\_ Plasmodial Slime Mold B. Mass of cytoplasm that looks like oozing slime

3. \_\_\_\_\_\_\_\_ Oomycetes C. Look like amoebas, develop “slug” colonies

**VII. Sporozoans** – **“Protozoans”**

**1. Circle the letter of each sentence that is true concerning sporozoans.**

a. They form spores during their reproductive cycle.

b. They are non-motile, unicellular parasites.

c. Sporozoans have only one host.

d. Diseases can be passes in food or water contaminated with infected feces.