

SOLVED ASSIGNMENT FA-2

SUBJECT: BIOLOGY

CLASS: 7TH

CHAPTER 02: CLASSIFICATION OF LIVING WORLD

Fill in the blanks

Species

Kingdom

Sapiens

Monera

Pseudopodia

Chitin

Plantae

Sponges

Coelenterate

Chordata

Choose correct option

C

A

C

D

A

D

B

C

A

C

Match the following

H

E

G

B

A

C

F

D

Write true or false. If false, write the correct sentence

False. Correct statement: All plants are not autotrophs.

True

True

True

True

False. A genus is made of species.

False. Molluscs have open vascular system.

False. Most reptiles lay eggs and some give birth to young ones.

True

True

Answer the following.

1. Most bacteria have cell wall made of peptidoglycan outside their plasma membrane. They do not have a nucleus. They do not have most of the intracellular organelles. (draw a diagram given on page no. 14 , fig 2.4)
Round bacteria are called cocci, rod shaped ones are called bacilli. Spiral bacteria are called spirilla and comma-shaped bacteria are called as vibrios.
2. Cell of amoeba is surrounded by plasma membrane. Cytoplasm is divided into ectoplasm and granular endoplasm. Nucleus and other organelles are suspended in the endoplasm. (draw a diagram of amoeba)
3. Unlike plants, the cell wall of fungi is made of chitin. Fungi cannot make their food. Moulds are seen as a mass of thread like structures. These filaments are called as hyphae. Mass of hyphae is called as mycelium. (draw a diagram given on page no. 19 , fig 2.13 b)
4. Kingdom Plantae includes mosses, ferns, cone-bearing plants, monocot and dicot plants.
5. Seaweeds and scum are the forms of algae.
6. The seeds produced in the cones are naked and thus are called naked-seeded plants. In advanced plants, the seed is covered by fruit and thus these plants are called close seeded plants.
7. Parasites cause diseases. Tapeworm and liver fluke are parasites which belong to phylum Platyhelminthes. Phylum Nematoda consists of parasites like roundworm and hookworm.
8. The body cavity of Cnidarians is called as coelenteron.
9. The body fluid of Arthropods is called as haemolymph. Haemolymph circulates in the body cavity of arthropods called haemocoel.
10. Mammals are warm-blooded animals. They have hair on their body. They are give birth to babies. Examples of egg laying mammals are platypus and echidna.

F. Explain in brief

1. a. Classification helps scientists identify a new organism they come across as belonging to particular group.
- b. It helps them know the basic characters of the members of particular group

c. It helps them share information in a systematic way.

2. In binomial system, organism's name consists of two parts. First part refers to the generic name and second part refers to the species and called specific name.

3. Bacteria living in our intestine help in digestion and prevent infection.

Dairy industry uses bacteria to make cheese and yoghurt. Bacteria are used for the production of alcohol, antibiotics, vitamins and enzymes.

Bacteria help in nitrogen fixation and in breakdown of biodegradable waste. They are used in the production of biogas and in composting.

4. Amoebas extend their pseudopodia to encircle the food particle and engulf it forming food vacuole. Pseudopodia also help in locomotion. It is formed by the flow of cytoplasm in the direction of movement and withdrawal of cytoplasm from the opposite direction. (Draw a diagram given on page no. 17 , fig 2.9)

5. Amoebas respire through the membrane. They excrete the waste through the cell membrane or through contractile vacuoles. Water is expelled by exocytosis. Amoebas reproduce by binary fission and multiple fission. (draw a diagram given on page no. 18 , fig 2.10 and 2.11)

6. Symbiotic fungi live in association with other plants and animals. Fungi lives with algae to form lichens. The algae produces food while the fungi provides protection and anchorage, and absorbs moisture and nutrients from the surroundings.

7. Useful effect of fungi: fungi produce antibiotics such as penicillin, helps in increasing the soil fertility and is used to make cheese and other types of fermented foods.

Harmful effects of fungi: fungi cause skin infections like Athlete's foot, causes many diseases in plants and infects stored grains and fruits.

8. Invertebrates are divided into

Phylum Porifera: they lack well developed organ system and have hollow body. Ex *Spongilla, Hippospongia*

Phylum Cnidarians: they have body cavity called coelenterons and their mouth is surrounded by tentacles. Ex *Hydra, Jellyfish*

Phylum Platyhelminthes: they have soft, unsegmented body without a body cavity. Ex *Tapeworm, Liver fluke*

Phylum Nematoda: the body is elongated, cylindrical and threadlike, tapering at both the ends. The body has an outer covering called cuticle. Ex *roundworm, hookworm*.

Phylum Annelida: Annelids have tough but flexible outer covering called cuticle. Their body is divided into multiple segments called septa. Ex *earthworm and lugworm*.

Phylum Arthropoda: they have segmented body and a tough exoskeleton. Ex *insects, spiders*.

Phylum Echinodermata: their body is divided into five equal parts. They can regenerate parts of their body such as arms and spines. Ex *starfish, sea urchins*.

9. Cnidarians use their mouth surrounded by tentacles containing cnidocytes which help capture the prey. Cnidocytes are also called as stinging cells inject poison and capture prey.

10. Many echinoderms have water-filled canals within their body. In many of them, the canals have extensions called as tube feet projecting outside through skeleton. The tube feet

help them in feeding, respiration and attaching themselves to surfaces.

11. The temperature of the cold blooded animals change with the temperature of the surroundings. Fishes are cold blooded animals. Fishes have bony skeleton and a streamlined body. Reptiles are cold blooded. They are covered with scales and lay eggs.
12. Birds are warm blooded animals. Body is covered with feathers. They have wings instead of forelimbs Birds have air cavities in their bones Birds lay eggs and care for their young ones.

