

Christu Jyothi Convent Sr. Sec. School

Class- 6th

subject -biology

chapter- 3 (The cell)

Answer the following question in short:

Ques1. Name the smallest unit of life?

ans. Cell is the smallest unit of life.

Ques2. What controls the flow of substance in and out of the cell?

Ans. Cell membrane controls the flow of substance in and out of the cell.

Ques3. Define multicellular Organism?

Ans. The Organism which are made up of many cells.

Ques4. Name a cell of any Organism that can be easily seen with the naked eye ?

Ans. Hen's egg is a cell of an Organism that can be easily seen with the naked eye.

Ques5. How does cell wall support plant cell?

Ans. Cell wall support a plant cell because it is made up of a tough material called cellulose.

Ques6. what is protoplasm?

Ans. Protoplasm is a colorless, Jelly like viscous substance.

Ques7. Which Organism has the smallest cell?

Ans. Bacteria Mycoplasma is the smallest cell.

Ques8. What is the function of chloroplast in plant cell?

Ans. Chloroplast help in making of food in plant cell.

Ques9. Name the biggest cell?

Ans. Ostrich egg is the biggest cell.

Ques10. What is plastid?

Ans. The organelles containing pigments present in the cytoplasm of plant cell.

Answer the following questions in detail:

Ques1. What is cytoplasm? what is its function?

Ans. It is made up of mostly water and salt. Cytoplasm is present within the cell membrane of all cells type and contains all organelles and cell parts. cytoplasm has various functions in the cell. cytoplasm is responsible for giving a cell its shape. it helps to fill out the cell and keep organelles in their space.

Ques2. What is Protoplasm? Name four elements which make up major part of Protoplasm?

Ans. The cytoplasm and nucleus together are known as protoplasm. it includes cytoplasm and nucleus and its other organelles. it is made up of four elements: carbon, hydrogen, nitrogen and oxygen.

Ques3. What are unicellular organism? Name two unicellular organisms.

Ans. The organisms which are made up of only one cell are known as unicellular organisms. for example: Amoeba, Paramecium.

Ques4. What are multicellular organism? Name two multicellular organisms?

Ans. The organisms which are made up of many cells are known as multicellular organisms. example: rat and human being.

Ques5. Draw a well labelled diagram of animal and plant cell.

Ans. Animal cell on page no 50 ,fig no. 3.14 and plant cell on page no 50 ,fig no. 3.15.

Ques6. State four difference between Plant and Animal cell?

Ans. animal cell

- Animals cells are generally small in size.
- Cell wall is absent.
- except the protozoan Euglena, no animal cell possess plastids.
- Animal cell have centrosome and centrioles.

Plant cell:

- Plant cells are large in size.
- The plasma membrane of plant cell is surrounded by a rigid cell wall of cellulose.
- plastids are present.
- Plant cells lack centrosome and centrioles.

Choose the correct option: (pg no. 52)

1. The basic similarity among all the living organism is that they are made up of: **cells**
2. The organelles which provide energy for all the activities of a cell are: **mitochondria**
3. In a living cell chromatin is present in: **nucleus**
4. Which of the following is not a unicellular organism: **Yak**
5. The part of a cell which play a role in inheritance is: **nucleus**
6. Which of the following cell does not have a nucleus: **red blood cell**
7. The parts which are not present in an animal cell are: **cell wall.**

Fill in the blanks: (pg no. 52- 53)

1. A **cell** is a Smallest unit of life which has a definite structure and performs a specific function.
2. The dissolved substances such as food and oxygen can enter into the cell whereas the waste products such as carbon dioxide can go out from the cell through the pores of the **cell membrane**.
3. **Nucleus** controls all the activities of cell.
4. The cytoplasm of a cell has many tiny structure in it called **organelles**.
5. Depending on the absence or presence of ribosomes **ribosomes** on the surface of Endoplasmic Reticulum, they can be smooth endoplasmic reticulum or rough endoplasmic reticulum.
6. **Mitochondria** provide energy for all the activities of cell.
7. Centrosomes consists of two minute granules called **centrioles**.
8. Plant cells have many simpler unit of Golgi apparatus called **dictyosomes**.

Write true and false: (pg no.53)

1. Bacteria is a multicellular organism. **False**
2. Nucleus is the largest organelle in a Eukaryotic cell. **True**
3. Nucleus is separated from the cytoplasm by cell wall. **False**
4. The cytoplasm and the nucleus taken together make up the protoplasm. **True**
5. Golgi bodies are present in plant cell. **True**
6. The function of vacuoles in a cell is to store various substance including waste product of the cell. **True**
7. Plants cell lack centrosome and centrioles. **True**

Name the following: (pg no.53)

1. A unicellular organism: **amoeba**
2. Suicide bag of cell: **lysosome**
3. Cells that receive and transmit messages between brain and other body parts: **nerve cell**.
4. Tough material from which plant cell is made up of: **cellulose**
5. Tiny round structure that present in nucleoplasm: **nucleolus**
6. Colourless plastids: **leucoplast**
7. Simpler unit of Golgi apparatus present in plant cells: **dictyosomes**
8. A cell organelle consisting of centriole: **centrosomes**
9. Space in the cytoplasm of a cell: **vacuoles**
10. Liquid present in vacuoles which contains dissolved sugar and salt: **cell sap**

State whether true or false : (pg no.45)

1. All cells cannot be seen with naked eye :**true**

2. All the living organisms are made up of cells: **true**
3. Paramecium is a multicellular organism : **false**
4. Some cells can be seen with the naked eye : **true**

Name the following : (pg no.49)

1. It separates the cells from one another and also from the surrounding medium : **cell membrane**
2. It gives shape and support to Plant cell and is absent in animal cell : **cell wall**
3. It is a transparent Jelly like material which fills the cell between nucleus and cell membrane :
cytoplasm
4. Tiny rod-shaped or spherical organelles which are found in a Cell also called as powerhouse of the cell : **mitochondria**
5. These are a kind of garbage disposal system of a cell : **lysosomes**

END