

## WORKSHEET

CLASS - VIII

SUBJECT- Science

### CHAPTER- 1. The Cell- Its structure and Functions

#### A. Fill in the blanks.

1. \_\_\_\_\_ are the smallest cells known and are 0.1 \_\_\_\_\_ in diameter.
2. Lifespan of a red blood cell is about \_\_\_\_\_ days.
3. Many living structures present in the cell are called cell\_\_\_\_\_.
4. \_\_\_\_\_ in the plant cell provide space to store excess water and waste products.
5. Group of cells performing a specific function are called \_\_\_\_\_.

#### B. State whether these statements are true or false.

1. Cell membrane surrounds the protoplasm of each cell. \_\_\_\_\_.
2. Amoeba digests its food inside its stomach. \_\_\_\_\_.
3. Euglena has many cilia for locomotion. \_\_\_\_\_.
4. Chromosomes are thin threads having genes on them. \_\_\_\_\_.
5. Egg of a bird represents an organ. \_\_\_\_\_.

#### C. Match the following.

- |                     |                   |
|---------------------|-------------------|
| 1. Mitochondria.    | Sac-like          |
| 2. Fruits, flowers. | Nucleus           |
| 3. Golgi            | Membrane network  |
| 4. ER               | Chromoplasts      |
| 5. Nucleoplasm      | Rod- shaped       |
| 6. Cytoplasm        | Longest cell      |
| 7. Nerve cell.      | Jelly- like fluid |

#### D. Answer the following.

1. Rohan has a small lawn in his house, having a number of flowers. He is amazed at the beautiful colours and asks his teacher ' what makes the flowers so colourful?'
2. While observing onion peel cells, what is the dark structure in the centre of the cells found to be? Mention two of its functions.
3. Why are nerve cells long and fibre-like? Discuss.
4. Explain the role of ribosomes present on the Rough ER.
5. Why multicellular organisms like humans and elephants cannot grow as a single large cell and perform all functions through it?

#### E. Give reasons for the following.

1. Tomatoes are red in colour.
2. Plant cells contain large vacuoles.
3. Cells remained undiscovered for a long, long time.

4. More mitochondria are found in cells which are physiologically more active.
5. Multicellular organisms are made up of cells having varied shapes and sizes.

**F. Multiple choice questions.**

1. Cheek cells do not have
  - a. Nucleus
  - b. Plastids
  - c. Cell membrane
  - d. Golgi apparatus
2. Cytoplasm and nucleus make
  - a. Plant cell
  - b. Protoplasm
  - c. Chromatin
  - d. None
3. Which pair is responsible for inheritance of characters?
  - a. Cell membrane and cell wall
  - b. Chromosomes and genes
  - c. Chloroplasts and cell membrane
  - d. Chromosomes and mitochondria
4. Plastids that help in the storage of starch and proteins are———.
  - a. Chloroplasts
  - b. Chromoplasts
  - c. Leucoplasts
  - d. All of these
5. The unit used for measurement of the cell size is———.
  - a. Millimetre
  - b. Centimetre
  - c. Micrometre
  - d. Decimetre
6. No. of chromosomes in a human cell are———.
  - a. 80
  - b. 24
  - c. 46
  - d. 32
7. Smallest cells in the human body are ———.
  - a. Liver cell
  - b. Red blood cells
  - c. Nerve cell
  - d. Skin cell
8. The word cell is not applicable for
  - a. Algae
  - b. Bacteria
  - c. Fungi
  - d. Virus
9. Which one of these is not a part of the nucleus?

- a. Chromosomes
  - b. Genes
  - c. Ribosomes
  - d. Chromatin
10. Identify the statement that holds true for cells
- a. Eggs of Insects are not cells.
  - b. Single cell can perform all functions in a unicellular organism.
  - c. Cells are of the same shape in a multicellular organism.
  - d. Different types of cells make a tissue.
11. Plant cell wall is made up of
- a. Proteins
  - b. Cellulose
  - c. Starch
  - d. Lipid
12. Ritika accidentally touched a hot pan and immediately pulled her hand away. She felt the sensation of heat and reacted due to the action of
- a. Skin surface
  - b. Nerve cells
  - c. Blood cells
  - d. Nuclei of skin

**G. Look at the diagrams in the lesson carefully and find out where the following words show up and note down your observations-**

- **Cytoplasm**
- **Chloroplast**
- **Yolk**
- **Euglena**
- **Albumen**
- **Honey-comb**
- **Nerve cell**

**The first one is done for you –**

