

SUMMATIVE ASSESSMENT 2
SCIENCE

CLASS- VIII

SA2

ASSIGNMENT NO. 12

CELL- STRUCTURE AND FUNCTIONS

Q1. Fill Ups:

- i. Cells were first observed in cork by _____.
- ii. _____ is the longest cell in our body.
- iii. _____ is the smallest cell known with a size of _____ micrometer.
- iv. _____ is present in plant cell but absent in animal cell while, _____ is present in animal cell and absent in plant cell.
- v. _____ in human blood is a single cell.
- vi. A _____ is a group of cells performing a specific function.
- vii. _____ are used to colour parts of the cell to study their details.
- viii. The plastids responsible for green color of leaves is _____.
- ix. _____ controls the transfer of a hereditary characteristic from parents to offspring.
- x. _____ cells having nuclear material without nuclear membrane.
- xi. The cells, like onion cells and cheek cells are example of _____ cells.
- xii. _____ is a structure that contains more than one type of tissues.
- xiii. The porous membrane that allows the movement of materials between the cytoplasm and the inside of the nucleus is _____.

- xiv. The porous membrane that allows the movement of materials both inward and outward from the cells is _____.
- xv. Basic structural units of living organisms are _____ .
- xvi. Protoplasm which is between nucleus and plasma membrane is_____.
- xvii. _____ and _____ are cell organelles in a human cell.

Q2. Name Parts of Nucleus.

Q3. Give the functions of the following:

- | | |
|-------------|------------------|
| 1. Nucleus | 4. Cell Membrane |
| 2. Plastids | 5. Pseudopodia |
| 3. Genes | |

Q4. Give the detailed structure of the nucleus of a cell?

Q5. Name any branched cell found in human body?

Q6. What are common similarities between all organisms?

Q7. Categorize the Organisms Based Upon their Cell.

Q8. Name the Largest and Smallest Single Cell in the World.

Q9. Define Protoplasm.

Q10. Few school students went for an educational trip to a nearby pond. There they divided themselves in groups of five and collected few samples of soil and pond water. Students brought the samples back to the school to study the microbes present in it.

(a) Name the instrument that is used to study microbes?

(b) Students found presence of *Amoeba* in the pond water sample. What kind of organism is *Amoeba*?

(c) What is the advantage of pseudopodia in an *Amoeba*?

(d) What values are expected from a student for a team work?

Q11. Choose the correct option:

1. Term used for the entire content of the living cell

- a) Cytoplasm b) Protoplasm c) Nucleoplasm d) Karyoplasm

2. Which of the following is absent in an animal cell:

- a) Cell Wall b) Plastids c) Large Vacuoles d) All of these

3. Cytoplasm is present in this region:

a) B/w Nuclear membrane and cell membrane

b) Inside the nucleus

c) Within the entire cell, including nucleus

d) None of these

4. Choose the correct sequence:

a) Tissue → Cells → Organ → Organism

b) Cells → Tissue → Organ → Organism

c) Organ → Tissue → Cell → Organism

d) Cell → Organ → Tissue → Organism

5. To enter or leave a cell, substances must pass through

- a) cytoplasm b) protoplasm c) nucleus d) plasma membrane

6. Bacterial cell are prokaryotic; in comparison to a typical eukaryotic cell they would

a) be smaller

b) have a smaller nucleus.

c) lacks a plasma membrane.

d) Have a greater variety of organelles

7. Which of the following clues would tell you whether a cell is prokaryotic or eukaryotic?

a) the presence or absence of a rigid cell wall

b) whether or not the cell has cytoplasm

c) the presence or absence of chloroplast

d) whether or not the cell contains organized nucleus