

HOT QUESTIONS

CHAPTER- CELL

Class- 8

1. Indicate whether the following statements are True (T) or False (F)

- (a) Unicellular organisms have a one-celled body.
- (b) Muscle cells are branched.
- (c) The basic living unit of an organism is an organ.
- (d) Amoeba has an irregular shape.

2. Make a sketch of the human nerve cell. What function do nerve cells perform?

3. Write short notes on the following : -

- (a) Cytoplasm
- (b) Nucleus of a cell

4. Which part of the cell contains organelles?

- 5. Make sketches of animal and plant cells. State three differences between them.**
- 6. State the difference between eukaryotes and prokaryotes.**
- 7. Where are chromosomes found in a cell? State their function.**
- 8. 'Cells are the basic structural units of living organisms.' Explain.**
- 9. Explain why chloroplast are found only in plant cells?**

10. Complete the crossword with the help of clues given below.

Across

1. This is necessary for photosynthesis.
3. Term for component present in the cytoplasm.
6. The living substance in the cell.
8. Units of inheritance present on the chromosomes.

Down

1. Green plastids.
2. Formed by collection of tissues.
4. It separates the contents of the cell from the surrounding medium.
5. Empty structure in the cytoplasm.
7. A group of cells.

Short Questions: -

1. is the outermost layer of an animal cell.
2. What is the name given to the green plastids?
3. Name two organelles present in the plant cell but not in the animal cell.
4. Which part of the cell contains organelles?
5. Why cells could not be observed before 17th century?
6. Why Hooke had to take thin slices of cork ?
7. Where did Hooke demonstrate cork slice ?
8. Single celled organisms are also called unicellular organisms (True/False)
9. Name the cells having branched structure.
10. Which cell is observable with unaided eye ?
11. Name the outermost layer of animal cell.
12. Mention the layer outside the plasma membrane of a plant cell.
13. Which four basic elements constitute 90% of protoplasm ?

14. The term cell was coined by
15. Cell wall is present in only.
16. Which organism has smallest cell?

17. How do you differentiate protoplasm from cytoplasm ?
18. Draw a typical cell. Label important organelles.
19. What name is given to living things having more than one cell ?
20. Can unicellular organisms be seen with the naked eye ?
21. Give two examples of unicellular animals.
22. Name the parts of the cell.
23. What is the jelly-like fluid inside the nucleus called ?
24. What are chromosomes ?
25. What is the function of Golgi bodies ?
26. Which part of the animal cell is concerned with cell division ?
27. Give other name for cell membrane.
28. What are vacuoles ?
29. What is meant by division of labour ?
30. What is meant by cell division ?
31. Why are the nerve cells long and thread like ?
32. Which cells in our body grow and divide all through the life ?
33. Name a unicellular organism which is about 10 cm in length.
34. Human body has
 - one million cells

- one billion cells
- one trillion cells
- more than a trillion cells

35. Name the basic structural and functional unit of life.

Long Answer Questions

1. What is a cell? Name the longest cell in human body. Draw its diagram also.
2. Why are mitochondria known as the “power house of the cell”?
3. Are the cells of an elephant larger than cells of a rat?
4. What are the “building blocks of life”? Why are they so called ?
5. What is the difference between tissue and organ ?
6. Differentiate between an organ and a system.
7. Name an organ system in the human body and the major organs that make up that system.
8. What features are possessed by both plant cells and animal cells ?
9. Name the organelle known as “suicide bags”? Why is it called so ?
10. Give the functions of cell wall.

Extended Long answer Questions : -

1. Name any three elements which form major part of protoplasm.
2. Why are plant cells more rigid in shape than animal cells?
3. Name the largest and the smallest cells in the living world.
4. Tomatoes are red and leaves are green. Why?

5. Distinguish between prokaryotes and eukaryotes.
6. Make a sketch of the human nerve cell. What function do nerve cells perform ? axon.
7. If you boil a hen's egg, what changes do you observe ?
8. What are the functions of the cell membrane ?
9. Give the functions of the following :
 1. Endoplasmic reticulum
 2. Golgi complex
 3. Ribosomes
10. What is a cell? Who discovered the cell? Name one microscopic organism.
11. Differentiate between plant and animal cell.
12. Describe the variations in shape and size of cells.
13. Give the functions of the following parts of the cell:
 1. Vacuoles.
 2. Centrioles.
 3. Cellulose.
 4. Plasma membrane.
 5. Nucleus.
14. Explain the mode of cell division in Amoeba. [KVS 2006, 2007, 2008]
15. In multicellular organisms, how does growth take place?

MCQ Questions

1. The structure which Robert Hooke observed under his self-designed microscope was
 - (a) cell wall
 - (b) cell membrane
 - (c) both (a) and (b)
 - (d) living cell

2. Which of the following is covered by a single membrane ?

- (a) Mitochondria
- (b) Vacuole
- (c) Lysosome
- (d) Plastid

3. Kitchen of the cells is known as

- (a) mitochondria
- (b) endoplasmic reticulum
- (c) chloroplast
- (d) Golgi apparatus.

4. Cell theory was given by

- (a) Schleiden and Schwann
- (b) Virchow
- (c) Robert Hooke
- (d) Haeckel

5. The only cell organelle seen in prokaryotic cell is

- (a) mitochondria
- (b) ribosomes
- (c) plastids
- (d) lysosomes

6. Organelle without a cell membrane is

- (a) ribosome
- (b) Golgi apparatus
- (c) chloroplast
- (d) nucleus

7. Which organelle is known as the store house of the cell ?

- (a) Mitochondria
- (b) Vacuole
- (c) Ribosomes
- (d) Golgi complex

8. Green plastids are also called

- (a) chromoplasts
- (b) chloroplasts
- (c) chromatin
- (d) none of these

9. Which of the following is not unicellular ?

- (a) Euglena
- (b) Paramecium
- (c) Chicken

(d) Amoeba

10. Thread-like body that lies in the nucleus of the cell is

- (a) cytoplasm
- (b) chromosome
- (c) nucleoplasm
- (d) mitochondrion

11. Which of these cells will have cell wall around them ?

- (a) Cheek cells
- (b) Nerve cells
- (c) Onion peel cells
- (d) Blood cells