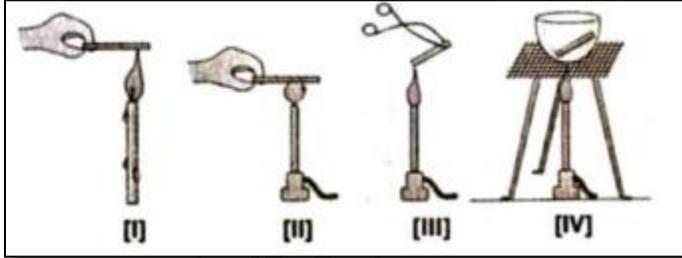
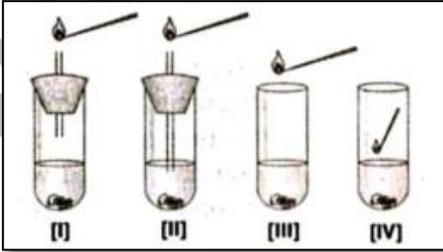


Revision Question Bank

- What are the main functions of each of the following cell components?
(a) Plasma membrane (b) Chromosomes (c) Lysosomes
(d) Ribosome (e) Nucleus (f) Mitochondria
- Name the cell organelle, which is able to destroy a damaged cell.
- Give the term for the incipient nucleus of prokaryotes.
- Give a scientific reason for the following:
(a) Inner membrane of mitochondria is deeply folded.
(b) Mitochondria are able to make some of their proteins.
- A plant cell is placed in a hypotonic solution. What will happen? Will the cell burst? Why or why not?
- Name the cell organelles, which are called 'suicide bags' and 'power-house' of the cell. Why are they so called? Give reason.
- Name the three major functional regions of cells. Briefly mention the component of each. Draw a labeled diagram of a plant cell.
- What are lysosomes, peroxisomes and centrosomes? Write their functions.
- What will happen if Golgi apparatus in a cell is removed?
- Why is cell said to be structural and functional unit of cell?

MCQ's [Practical Based Questions]

- When magnesium combines with oxygen it produces magnesium oxide that appears to be like :
(a) wood ash (b) chalk powder (c) table salt (d) powdered sugar.
- 'When dilute sulphuric acid is added to zinc granules, you will observe that:
(a) a precipitate is formed. (b) the reaction mixture turns yellow.
(c) the container becomes hot. (d) bubbles start coming out from the surface of zinc granules.
- When an iron nail rubbed with sandpaper, is dipped in copper sulphate solution, we observe that copper gets deposited :
(a) first on the lower part of the nail and proceeds to the upper part.
(b) first on the upper part of the nail and proceeds to the lower part.
(c) on the entire surface of the nail.
(d) on the nail in small patches.
- When solid copper sulphate is heated in a test tube, what is not observed during the reaction is :
(a) a colourless residue is produced (b) water vapours are produced
(c) water vapours condense on cooler parts of test tube (d) a brown gas is produced.

5. We want to carry out a reaction of zinc granules with sulphuric acid. One bottle contains concentrated sulphuric acid and another bottle contains dilute sulphuric acid. The correct way of carrying out the reaction is to :
- (a) use concentrated sulphuric acid. (b) add water to concentrated sulphuric acid before using it.
(c) use dilute sulphuric acid. (d) mix concentrated and dilute sulphuric acid and add water to it.
6. Four students used different ways of burning magnesium ribbon during an experiment as shown below. The correct way has been followed by student:
- (a) I (b) II
(c) III (d) IV
- 
7. The safest method to detect hydrogen gas produced in a reaction would be the method shown in :
- (a) I (b) II
(c) III (d) IV.
- 
8. Salt of sodium sulphate and barium chloride are mixed in equal proportions. What will be observed ?
- (a) white precipitates are formed. (b) clear solution is formed.
(c) yellow precipitates are formed. (d) nothing will be observed.
9. What is the nature of vapours formed during the heating of crystals of copper sulphate ?
- (a) irritating and suffocating (b) sweet and pleasant
(c) colourless and odourless (d) irritating and pungent smelling.
10. A student added zinc granules to dilute sulphuric acid taken in a test tube. Out of the following. The correct observation (s) made by the student will be :
- I. zinc granules have no regular shape II. zinc granules have silvery grey colour
III. the colour of zinc granules changed to brownish black.
- (a) I only (b) II only (c) III only (d) I, II and III.

Answers

1.	a	2.	d	3.	c	4.	d	5.	c
6.	c	7.	a	8.	d	9.	c	10.	d

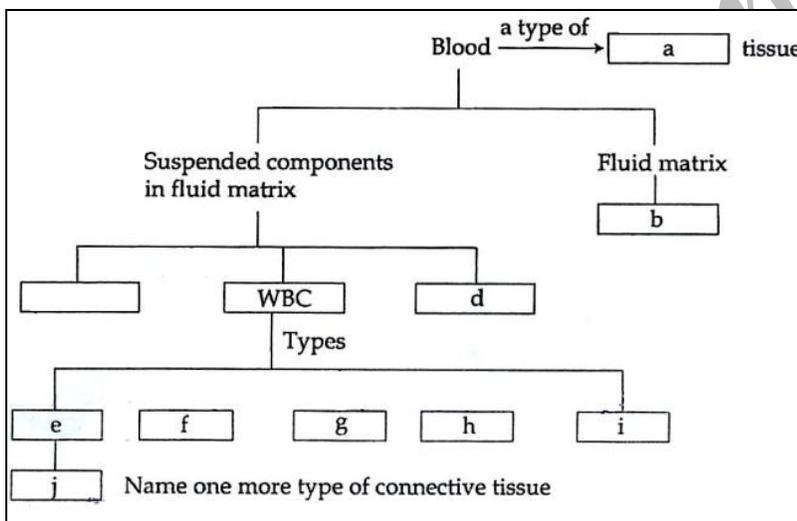
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Previous Years Question Bank

1. State what will happen when human red blood cells are placed in hypertonic salt/sugar solution?
[CBSE Schools 2016-17]
2. What is the fundamental unit of life? Who discovered it? How can they be observed?
[CBSE Schools 2016-17]
3. Do all cells of our body look alike in terms of shape, size and structure? What similarities do they have? Illustrate by drawing diagrams of various cells present in human body.
[CBSE Schools 2016-17]
4. Define plasmolysis.
[CBSE Schools 2016-17]
5. Can a single cell live independently on its own? Explain by giving example.
[CBSE Schools 2016-17]
6. Cell Membrane is made up of organic molecules. Name them.
[CBSE Schools 2016-17]
7. What would happen if there were no lysosomes in the cell? (Give any three effects)
[CBSE Schools 2016-17]
8. Which is the only cell organelle visible in a prokaryotic cell?
[CBSE Schools 2016-17]
9. What are living organisms made up of? Why are they called structural and functional unit of life?
[CBSE Schools 2016-17]
10. Identify the phenomenon by which the cell contents shrink away from the cell wall.
[CBSE Schools 2016-17]
11. How is the genetic material, Deoxyribo nucleic acid present in a non-dividing cell and in a cell which is about to divide? What are genes? How do they help in heredity?
[CBSE Schools 2016-17]
12. (a) What are the consequences of the following conditions?
[CBSE Schools 2016-17]
 - (i) A cell having higher water concentration than the surrounding medium.
 - (ii) A cell having lower water concentration than the surrounding medium.
 - (iii) A cell having equal water concentration to its surrounding medium.(b) Name the materials of, which the cell membrane and cell wall are composed of.
13. Name the cell organelle which is commonly called "sucidal bag" of the cell.
[CBSE Schools 2016-17]
14. Classify the organisms on the basis of the number of cells. Give two examples each.
[CBSE Schools 2016,17]
15. State the composition of plasma membrane.
[CBSE Schools 2016-17]
16. On the basis of number of cells living organisms are classified as unicellular and multicellular.
 - (a) Name two unicellular organisms.
 - (b) What is the full form of DNA?
 - (c) Name one prokaryotic and one eukaryotic unicellular organism
 - (d) Every multicellular organism has come from a single cell. Justify this statement.
 - (e) Which organelle is called the "power house of the cell" and why?
[CBSE Schools 2016-17]

17. How is each living cell capable to perform certain basic functions? [CBSE Schools 2016-17]
18. Differentiate between plant cell and animal cell on the following basis: [CBSE Schools 2016-17]
(i) location and size of nucleus and vacuole. (ii) the outermost covering.
19. Draw a plant cell and label on it the following :
(i) two cell organelles that contain their own genetic material. [CBSE Schools 2015-16]
(ii) the organelles where protein synthesis occurs. [CBSE Schools 2015-16]
20. Name the process of building of cell membrane. [CBSE Schools 2015-16]
21. Name the process by which unicellular freshwater organisms and most plant cells tend to gain water. [CBSE Schools 2015-16]
22. Cell size may range from a few micrometre to a metre. Support this statement with the help of examples. [CBSE Schools 2015-16]
23. Name the process by which CO_2 and O_2 gases get exchanged across the cell and its external environment. [CBSE Schools 2015-16]
24. Draw a neat and labeled diagram of the neuron cell. [CBSE Schools 2015-16]
25. Why the cell membrane is called a selectively permeable membrane? [CBSE Schools 2015-16]
26. Why the cell is called the structural and functional unit of life? Explain the concept of division of labour in multicellular organisms giving an example. [CBSE Schools 2015-16]
27. A group of students selected 10 raisins with stalks and weighed them using digital balance. Then, they soaked them for a few hours. The weight of the swollen raisins was 9.2g which was 4.6 g more than weight of dry raisins. Calculate the water imbibed by the raisins. [CBSE Schools 2015-16]
28. A student recorded the following observations in an experiment for finding the percentage of water absorbed by the raisins. [CBSE Schools 2015-16]
(i) Mass of water taken in beaker- 50 g (ii) Mass of dry raisins before soaking water = 20 g
(iii) Mass of raisins after soaking water=30 g (iv) Mass of remaining water in beaker after experiment = 40g
Calculate the percentage of water absorbed by the raisins.
29. Write four main steps of the method involved in an experiment "On determination of the percentage of water absorbed by raisins in the laboratory." [CBSE Schools 2015-16]
30. (a) What is the function of a vacuole in a typical plant cell? [CBSE Schools 2014-15]
(b) What will happen if an animal cell is placed in a very hypertonic solution? Give reason to justify.
(c) Name the cell organelle which is called as " the packaging and dispatch unit of the cell."
31. Draw a plant cell and label with following parts : [CBSE Schools 2014-15]
(a) Cell wall (b) Mitochondria (c) Vacuole (d) Rough endoplasmic reticulum

32. (a) Name and explain the phenomenon responsible for adsorption of water and minerals by roots.
 (b) Explain what will happen and why :
 (i) If grapes are kept in an isotonic solution (ii) If onion peel is kept in hypertonic solution
 (iii) If raisins are kept in hypotonic solution [CBSE Schools 2014-15]
33. What are genes? What is their significance? [CBSE Schools 2014-15]
34. Identity the type of cell and write one characteristic feature of each : [CBSE Schools 2014-15]
 (i) large vacuole, nucleus pushed to the periphery
 (ii) cell does not burst even in a very dilute medium
 (iii) nuclear region is not well defined and is known as the nucleoid
35. Which cell component can be called : [CBSE Schools 2014-15]
 (i) the direction of the cell (ii) the littler nucleus (iii) kitchen of the cell
36. State the site of manufacture of fat molecules in a cell. [CBSE Schools 2014-15]
37. What are the two dissimilarities between plant cell and animal cell? [CBSE Schools 2014-15]
38. Complete the following flow chart : [CBSE Schools 2014-15]



39. Name a cell organelle which lacks membrane. Where is it prepared? [CBSE Schools 2014-15]
40. List two similarities and two dissimilarities between a plant cell and an animal cell? [CBSE Schools 2014-15]
41. Which part of the cell in Eukaryotic organisms plays an important role in cellular reproduction? [CBSE Schools 2014-15]
42. Where are chromosomes present in the cell? What is their chemical composition?
 How many pairs of chromosomes are present in humans? [CBSE Schools 2014-15]

Chapter Test**Maximum Marks: 30****Maximum Time: 1 hour**

1. Name the two nucleic acid present in the cell. [1]
2. Where do the lipids and proteins constituting the cell membrane get synthesised? [1]
3. Name the plastid involved in conversion of a green tomato to red. [1]
4. What will happen to a plant cell if it is kept in a hypotonic solution? [2]
5. What will happen to a plant cell, if it is kept in sugar solution? [2]
6. Why plant cell contain large size vacoules, as compared to animal cell? [2]
7. Write two differences between prokaryotic cell and eukaryotic cell. [3]
8. Name the three major functional regions of the cells. Briefly mention the component of each and explain the function of each.
(a) What would you expect to see, if the ink contains three different coloured components? [3]
9. Write the main function of each of the following cell components. [3]
(a) Plasma membrane (b) Mitochondria
(c) Chromosomes (d) Ribosomes
(e) Lysosomes (f) Golgi apparatus
10. What is cell theory and who proposed this theory? What modification Virchow made in this theory? [3]
11. What is the difference between the plasma membrane and cell wall? Give the functions of each one. [3]
12. (a) What are chromosomes? Write their chemical composition, [3]
(b) What is the relationship between chromatin material and chromosomes.
13. Name a cell organelle found only in plant cell. Name its types and functions. [3]

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