CELL: THE FUNDAMENTAL UNIT OF LIFE

CLASS: IX

1. Which of the following organelles is smallest in size?

a. Ribosome

b. Mitochondrial

c. Chloroplast

d. Lysosome

2. Which of the following organelles have double membrane?

a. Chloroplast

b. Ribosome

c. Lysosome

d. Vacuole

3. Which of the following organelle is not present in an animal cell?

a. Ribosome

b. Plastid

c. Mitochondrial

d. Nucleus

4. Plastid that is colourless is

a. Chromoplast

b. Leucoplast

c. Chloroplast

d. Lysosome

5. Plant cell wall is mainly composed of

a. Cellulose

b. Lipid

c. Protein

d. Sugar

6. The foldings of the inner membrane of mitochondria are known as

a. Stroma

b. Grana

c. Cristae

d. Oxysome

7. The site of aerobic respiration, in an animal cell, is

a. Ribosome

b. Mitochondrial

c. Chloroplast

d. Nucleus

8. Ribosomes are the site of

a. Protein synthesis

b. Lipid synthesis

c. Respiration

d. Photosynthesis

9. Which of the following statements is correct?

a. Prokaryotic cells are surrounded by a cell membrane

b. Prokaryotic cells have a nucleus

c. Eukaryotic cells have genetic information

d. Eukaryotic cells have membrane-bound organelles

10. The membrane that surrounds the vacuole is

a. Tonoplast

b. Plasma membrane

c. Cell wall

d. Nuclear membrane

11. The organelle involved in cell secretion is

a. Plastids

b. ER

c. Golgi bodies

d. Nucleolus

12. Plasmolysis occurs due to

a.Diffusion

b. Endosmosis

c. Exosmosis

d. Absorption

13. The solution that has higher water concentration than the cell is known as

a. Hypertonic

b. Hypotonic

c. Isotonic

d. None of these

14. Cell nucleus was discovered by

a. Robert Hooke

b. Robert Brown

c. Virchow

d. Leuwenhoek

15. Which process requires the energy provided by ATP?

a. Osmosis

b. Diffusion

c. Active transport

d. Plasmolysis

16. Cellular respiration is related to _____ as _____ is related to chloroplasts.

a. Mitochondria, Light

b. Mitochondria, Photosynthesis

c. Chloroplast, Light

d. Chloroplast, Photosynthesis

17. Lipid molecules in the cell are synthesised by

a. SER

b. RER

c. Golgi bodies

d. Ribosomes

18. A cell that contains a large central vacuole is

a. Plant cell

b. Animal cell

c. Bacterial cell

d. Yeast cell

19. Old organelles, viruses and bacteria that a cell can ingest are broken down in

a. Ribosomes

b. Lysosomes

c. SER

d. RER

20. A slide of human cheek cell is stained with methylene blue and mounted in glycerine. Which of the following cellular organelle would you be able to see under a microscope?

a. Plasma membrane

b. Cell wall

c. Mitochondrial

d. Lysosome

21. A cell “X” contains a cell wall, large central vacuole and a nucleus at the periphery. The cell “X” is _____.

a. Plant cell

b. Animal cell

c. Bacterial cell

d. Prokaryotic cell

22. In human cheek cells, the nucleus is located at the _____.

a. Center of the cell

b. The left side of the cell

c. The right side of the cell

d. None of these.

23. Which term is used to refer the process of absorption of water by wooden doors in rainy season?

a. Exosmosis

b. Endosmosis

c. Diffusion

d. Imbibition

24. Raisins soaked in high concentrated solution of sugar ____i_____. The process involved is known as ___ii____.

a. i- shrinks, ii- endosmosis

b. i- swells, ii- Exosmosis

c. i- shrinks, ii- exosmosis

d. i- swells, ii- endosmosis

25. When raisins are kept in water, the water moves ____i____ the raisins. This makes the raisins to __ii____.

a. i- inside, ii- swell

b. i- inside, ii- shrink

c. i- outside, ii- swell

d. i-outside, ii- shrink

26. What will happen, a when a human RBC is a placed in a hypotonic environment?

a. It undergoes plasmolysis

b. It undergoes turgidity

c. It is at equilibrium

d. None of these

27. Chromosomes are made up of

a. DNA

b. Protein

c. DNA and Protein

d. RNA

28. Lysosomes are formed by

a. RER

b. SER

c. Plasma Mambrane

d. Golgi apparatus

29. Organelle other than nucleus, containing DNA is

a. ER

b. Golgi apparatus

c. Chloroplast

d. Lysosome

30. Lipid molecules of cell are synthesized by

a. SER

b. RER

c. Nucleus

d. Mitochondria

31. A plasma membrane consists of:

a. Chitin b. Cellulose c. Protein and lipid. d. Fibre.

32. Cytoplasm = Protoplasm – ……

a. Plasma mebrane b. Cytoplasm c. Organelles d. Nucleus.

33. We say Rough Endoplasmic Reticulum as rough because ……. are attached to it.

a. smooth endoplasmic reticulum b. Mitochindria c. Ribosome d. Nucleus.

34. Colorful organelles in plant cells are called:

a. Chloroplast b. Plastid c. Chromoplast d. Leucoplast

35. The function of the vacuole in plants is…

a. Digestion b. Antibody production c. Provides rigidity and turgidity to plant d. None

36. Which is the largest cell organelle present in plant cell?

(a) Nucleus(b) Chloroplast(c) Endoplasmic reticulum (d) Mitochondria

37. During plasmolysis the space between cell wall and shrinked protoplasm is filled by

a. Water b. Hypertonic solution c. Hypotonic solution d. Gas

38. Cell wall of which one of these is not made up of cellulose?

(a) Bacteria

(b) Hydrilla

(c) Mango tree

(d) Cactus

39. Kitchen of the cell is

(a) mitochondria

(b) endoplasmic reticulum

(c) chloroplast

(d) golgi apparatus

40. Select the odd one out

(a) The movement of water across a semi-permeable membrane is affected by the amount of substances dissolved in it.

(b) Membranes are made of organic molecules like proteins and lipids

(c) Molecules soluble in organic solvents can easily pass through the membrane.

(d) Plasma membranes contain chitin sugar in plants