



**HOLIDAY ASSIGNMENT
BIOLOGY
CLASS-IX**

MCQ TYPE

1. The honour of seeing, the structure of the cell for the first time is given to –

- (A) Matthias Schleiden
- (B) Anton van Leeuwenhoek
- (C) Robert Brown
- (D) Robert Hooke

2 .The example of a prokaryotic cell is –

- (A) Blue green algae
- (B) fungi
- (C) Plants
- (D) Animals

3 .The scientists who saw the living cell for the first time was–

- (A) Leeuwenhoek
- (B) M.J. Schleiden
- (C) Kolliker
- (D) Palade

4 Who proposed the cell theory?

- (A) Schleiden and Schwann
- (B) Watson and Crick
- (C) Darwin and Wallace
- (D) Mendel and Morgan

5 Which is called the ‘digestive bag’?

- (A) Centrosomes
- (B) Lysosome
- (C) Mesosome
- (D) Chromosome

6. Cardiac muscle cells are cylindrical branched:

- (A) Uninucleate and voluntary
- (B) Uninucleate and involuntary
- (C) Multinucleate and voluntary
- (D) Multinucleate and involuntary

7. The cells of a tissue are similar in –

- (A) Structure
- (B) Function
- (C) Origin
- (D) Both (A) and (B)

8. Simple epithelium is –

- (A) One cell thick
- (B) Two cells thick
- (C) Two or three cells thick
- (D) All are correct

9 Which is not an example of tissue –

- (A) Epidermis
- (B) A colony of protozoa
- (C) Blood
- (D) Grey matter of spinal cord

10. Which part of body's weight is formed by connective tissue –

- (A) 40%
- (B) 30%
- (C) 20%
- (D) 60%

11. One key function of nuclear pores is to –

- (A) Allow cells to communicate with one another.
- (B) Aid in the production of new nuclei.
- (C) Allow molecules such as proteins to move into and out of the nucleus.
- (D) Form connections between different organelles.

12. Vesicles are essential for the normal functioning of the Golgi apparatus because –

- (A) They provide energy for chemical reactions.
- (B) They move proteins and lipids between different parts of the organelle.

- (C) They contribute to the structural integrity of the organelle.
- (D) They produce the sugars that are added to proteins.

13. Which of the following statements is not true –

- (A) Both mitochondria and chloroplasts provide energy to cells in the same way.
- (B) Both mitochondria and chloroplasts have more than one membrane.
- (C) Only chloroplasts contain the pigment chlorophyll.
- (D) Both animal and plant cells contain mitochondria.

14. When comparing sieve tube elements with companion cells, which of the following statements is true –

- (A) Xylem cells are alive at maturity.
- (B) Companion cells lack cytoplasmic material and a nucleus at maturity.
- (C) Companion cells contains a nucleus and cytoplasm at maturity.
- (D) Sieve tube elements are found in xylem.

15. The mesophyll of a leaf consists of –

- (A) Spongy parenchyma cells
- (B) Palisade parenchyma cells
- (C) Both spongy and palisade parenchyma cells
- (D) Pith cells

ASSERTION & REASON TYPE

Each question contains STATEMENT-1 (Assertion) and STATEMENT-2 (Reason). Each question has 5 choices (A), (B), (C), (D) and (E) out of which ONLY ONE is correct.

- (A) Statement-1 is True, Statement-2 is true; Statement-2 is a correct explanation for Statement-1.
- (B) Statement-1 is True, Statement-2 is true; Statement-2 is NOT a correct explanation for Statement-1.
- (C) Statement -1 is True, Statement-2 is False.
- (D) Statement -1 is False, Statement-2 is true.
- (E) Statement -1 is False, Statement-2 is False.

16. Statement 1: Smooth muscle fibres do not appear to be striated.
Statement 2: This is due to regular alternate arrangement of thick and a thin filament in smooth muscle fibre.

17. Statement 1: Presence of connective tissue inside the brain is essential for conduction of nerve impulse.

Statement 2: Connective tissue holds together the nerve cells of brain.

18. Statement 1: Epithelial tissues protect the underlying and overlying tissues.

Statement 2: Materials are exchanged at the surfaces across the epithelial tissues.

19. Statement 1: Cartilage (protein matrix) and bone (calcium matrix) are rigid connective tissue.

Statement 2: Blood is connective tissue in which plasma is the matrix.

20. Statement 1: Connective tissue contains a large amount of non-living intercellular or extracellular matrix.

Statement 2: Intercellular substance is usually made up of protein fibres.

21. Statement 1: Areolar tissue is a connective tissue.

Statement 2: Areolar tissue is found beneath epithelia of stomach.

22. Statement 1: Unit of nervous tissue is neuron.

Statement 2: The nerve tissue is developed from ectoderm.

23. Statement 1: Vascular supply to leaf is called as leaf trace in higher plants.

Statement 2: The leaf trace extends between the leaf base and point where it merges with stem.

24. Statement 1: A complex tissue or compound tissue is a collection of different types of cells that help in the performance of a common function.

Statement 2: The complex tissues are assemblage of living and dead cells and may be primary or secondary upon their mode of origin.

25. Statement 1: Larger cells are less efficient

Statement 2: Surface volume ratio is more in large cells.

26. Statement 1: Schleiden and Schwann were the first to observe the cells and to put forward cell theory.

Statement 2: The cells are always living unit.

27. Statement 1: Lysosome help in photorespiration.

Statement 2: Lysosome have basic enzyme.

28. Statement 1: Cell wall is not found in animal cell.

Statement 2: Animal cells are covered by cell membrane.

29. Statement 1: It is important that the organisms should have cell.

Statement 2: A cell keeps its chemical composition steady within its boundary.

30. Statement 1: Mitochondria and chloroplasts are semiautonomous organelles.

Statement 2: They are formed by division of pre-existing organelles as well as contain DNA but lack protein synthesizing machinery.

31. Statement 1: Chloroplast is a cell organelle.

Statement 2: An organelle is a distinct part of a cell which has a particular structure and function.

32. Statement 1: Cell wall is present in plant

Statement 2: Animal cells lack cell wall.

33. Statement 1: Fluid mosaic model was proposed by Singer and Nicolson.

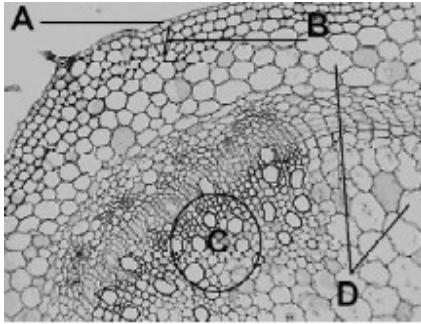
Statement 2: The 'mosaic' is the intricate composite of protein and lipids of the membrane.

34. Statement 1: Diffusion is a passive process of membrane transport.

Statement 2: Osmosis is an active process of membrane transport.

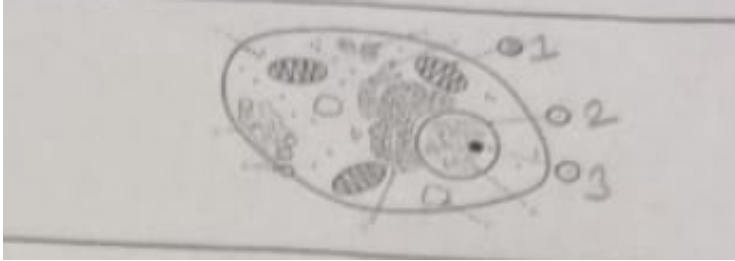
CASE-BASED QUESTIONS

Study the diagram and answer the following:



35. What is the tissue represented in A –
 (A) Collenchyma
 (B) Parenchyma
 (C) Sclerenchymas
 (D) Epidermis
36. What is the tissue represented in B –
 (A) Parenchyma
 (B) Collenchyma
 (C) Sclerenchyma
 (D) Hyper dermis
37. What is the tissue enclosed in the oval labeled C –
 (A) Phloem
 (B) Xylem
 (C) Fibers
 (D) Parenchyma
38. What is the function of the tissue represented in D –
 (A) Transport water
 (B) Transport food
 (C) Storage
 (D) Photosynthesis
39. What is the tissue represented in D –
 (A) Parenchyma
 (B) Chloroenchyma
 (C) Collenchyma
 (D) Hypodermis

Observe the given diagram of animal cell carefully and answer the following questions;



40. In the diagram, the labeling 1, 2 and 3 respectively are

- (A) Nucleus, cytoplasm, mitochondria
- (B) Mitochondria, nucleus, nucleolus
- © Nucleolus, nucleus, ribosomes
- (D) Mitochondria, vacuoles, ribosomes

41. Which two structures are found in animal cells but not in plant cells?

- (A) lysosome and centrioles
- (B) Lysosome and chloroplast
- ©) cell membrane and ribosomes
- (D) Ribosomes and centrioles

42. Name the cell organelle known as the suicidal bag of the cell

- (A) Ribosomes
- (B) Lysosome
- © Mitochondria
- (D) Peroxisome

43. Which organelle is the storage sac of solid and liquid materials?

- (A) Mitochondria
- (B) Lysosome
- © Nucleus
- (D) Vacuoles

44. The undefined nuclear region of prokaryotes are also known as

- (A) Nucleus
- (B) Nucleic acid
- © Nucleolus
- (D) Nucleoids

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

- (A) Bacteria
- (B) Mango tree
- © Hydrilla
- (D) Cactus