

**ACHIEVEMENT TEST PAPER
CLASS-IX**

Maximum marks-
25
Time-30 Minutes

Name of Student _____

School Name _____

Class _____

Section _____

Instructions:

- Answer the Questions.
- Each Question carry 1 marks.

Multiple Choice Questions:

1. Microscopic Units of living organism are :
(a) Tissue (b) Cell
(c) Organ (d) Body
2. The barrier between the protoplasm and other environment is an animal cell is :
(a) Cell wall (b) Nuclear Membrane
(c) Tonoplast (d) Plasma Membrane
3. A plant cell differs from an animal cell in the absence of :
(a) Endoplasmic reticulum (b) Mitochondria
(c) Ribosome (d) Centrioles
4. Fluid Mosaic Model was given by:
(a) Watson and Crick (b) Robert Hooke
(c) Robert Brown (d) Singer and Nikolson

5. Animal cell lacking nuclei would also lack in:
- (a) Chromosome (b) Ribosome
(c) Lysosome (d) Endoplasmic reticulum
6. Which is called the "Digestive Bag"
- (a) Centrosome (b) Lysosome
(c) Mesosome (d) Chromosome
7. The radiant energy of sunlight is converted to chemical energy and stored as :
- (a) AMP (b) ATP
(c) ADP (d) APP
8. Root hairs absorb water from soil through:
- (a) Osmosis (b) Active Transport
(c) Diffusion (d) Endocytosis
9. Plasma Membrane acts as a:
- (a) Permeable Membrane (b) Selectively Permeable Membrane
(c) diffusion (d) Endocytosis
10. The yellow red and orange pigments of green plant is:
- (a) Eiocinophyll (b) Xanthophyll
(c) tonoplast (d) Leucophyll
11. The largest cell in the human body is :
- (a) Muscle cell (b) Liver cell
(c) Nerve (d) Kidney Cell
12. Plasmolysis occurs due to:
- (a) Absorption (b) Endosmosis

- (c) Osmosis (d) Exosmosis
13. The Basic building block of protein are:
(a) DNA (b) RNA
(c) Nucleic Acid (d) Amino Acid
14. Which is not the part of Nucleus:
(a) Nuclear Membrane (b) Nucleoplasm
(c) Cytoplasm (d) Chromatin Material
15. Cell secretion is done by:
(a) Plastids (b) Endoplasmic Reticulum
(c) Golgi apparatus (d) Nucleolus
16. The Membrane surrounding the vacuole of a plant cell is called:
(a) Tonoplast (b) Plasma Membrane
(c) Nuclear Membrane (d) Cell wall
17. Double Membrane is absent in :
(a) Mitochondria (b) Chloroplast
(c) Nucleus (d) Lysosome
18. Spontaneous movement of water molecule through permeable membrane is known as:
(a) Osmosis (b) Diffusion
(c) Plasmolysis (d) Osmoregulation
19. With in a cell the site of respiration (Oxidation) is the:
(a) Ribosome (b) Golgi apparatus
(c) Mitochondria (d) Endoplasmic reticulum

20. Organisms lacking nucleus and membrane bound organelle are:

- (a) Diploid
- (b) prokaryotes
- (c) Eukaryotes
- (d) haploid

21. Ribosome's are centre for :

- (a) Respiration
- (b) Photosynthesis
- (c) Protein synthesis
- (d) fat synthesis

22. Cell organelle found only in plant is:

- (a) Golgi apparatus
- (b) Mitochondria
- (c) Plastids
- (d) Ribosome's

23. The network of endoplasmic reticulum is present in the :

- (a) Nucleus
- (b) Nucleolus
- (c) Cytoplasm
- (d) chromosomes

24. Centriole is associated with :

- (a) DNA Synthesis
- (b) Reproduction
- (c) Spindle formation
- (d) Respiration

25. Main difference between animal cell and plant cell is :

- (a) Nutrition
- (b) Growth
- (c) Movement
- (d) Respiration

PRACTICAL ORIENTED TEST

CLASS- IX

SUBJECT BIOLOGY

MAX-MARK-25

TIME-1½ HOURS

1. Draw the diagram of animal cell and label the part that carry on function of -

- a. Respiration
- b. Secretion
- c. Protein synthesis
- d. Transport of material

6 marks

2. Identify the given material-

4 marks

- a. Blue green algae
- b. Plant

Write down the main difference between them.

4 marks

4 marks

3. Prepare a slide of onion peel with the help of given material.

4. Spotting –

- a. Bacteria
- b. Human blood slide
- c. Osmosis activity.

6 marks

5. Viva voce.

5 marks

PROCESS SKILLS ASSESSMENT SCHEDULE

ACTIVITY I: TEMPORARY SLIDE OF ONION PEEL

1. OBSERVING –

- a. Thick outer layer is present,
- b. In periphery region a dot like structure appears.
- c. Fluid is present in the cell.
- d. Able to count the number of cell

2 INFERRING

- a. Cell wall is the outer most covering of cell.
- b. Near periphery dot like structure is Nucleus.
- c. Fluid is cytoplasm present in the cell.
- d. Shape of cell determine onion peel is a type of plant cell

ACTIVITY II : TEMPORARY SLIDE OF CHEEK EPITHELIAL

1. OBSERVING

- a. Thin outer layer is present
- b. In mid region a dense part is present
- c. Fluid is present around the middle region

2. CLASSIFYING

- a. Able to differentiate between plant cell and animal cell.
- b. Able to identify the position of nucleus in plant cell and animal cell.

3. INFERRING

- a. Thin layer is present as outer most covering termed as plasma membrane.
- b. Dense structure in the centre of cell is nucleus.
- c. It confirms cheek epithelial is a type of animal cell.

ACTIVITY III: STUDY OF HUMAN BLOOD SMEAR

1. OBSERVING

- a. Are able to see the different structures of cells.

2. CLASSIFICATION

- a. Some cell are present in large numbers with out nucleus.
- b. Some cells are small star shaped.
- c. Except these two type of cells other type of cell are also present.

3. INFERRING

- a. Cells with out nuclei are termed R.B.C.
- b. Star shaped small cells are termed platelets.
- c. Remaining cells are known as W.B.C.

ACTIVITY-IV: SLIDE OF PROKARYOTIC CELL (BACTERIA)

1. OBSERVING

- a. Thick outer wall is present at outer most covering.
- b. Thread like structure appear on the surface of the cell.
- c. Many dot like structure are present inside the cell.

2. INFERRING

- a. Nucleus is absent.
- b. Plasma membrane is present.
- c. Cytoplasm is present in cell.
- d. Cells are microscopic.
- e. It confirms the bacteria cell is a type of prokaryotic cell.

ACTIVITY-V: SLIDE OF AMOEBA

1. OBSERVING

- a. Irregular shape of the cell appear
- b. Large circular structure appears.
- c. Small dot like structures are seen

2. INFERRING

- a. Large circular structure is known as food vacuole
- b. Small dot like structure are granules.
- c. It confirms amoeba is unicellular organism.

ACTIVITY-VI: DIFFUSION IN DIFFERENT STATE OF MATTER

1. OBSERVING

- a. Able to identifier different states of matter.
- b. By sensing able to identify spreading of molecules.
- c. Conscious about time taken in spreading of molecules.

2. CLASSIFYING

- a. Spreading of molecule is faster in gaseous state.
- b. Spreading of molecule is moderate in liquid state.
- c. Spreading of molecule is slowest in solid state.
- d. This phenomena of spreading of molecule from higher density to low density is known as diffusion.

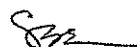
ACTIVITY VII: OSMOSIS IN POTATO.

1. OBSERVING

- a. Able to see cavity inside the potato.
- b. Able to see the level of sugar solution in potato cavity.

2. HYPOTHESIS

- a. The level of sugar solution decreases.
- b. The level of sugar solution increases .
- c. There is no change in the level of sugar solution.



3. INFERRING

- a. Potato tuber act as a semi permeable membrane.
- b. Level of sugar solution increases due to movement of water., molecules move from its higher concentration to its lower concentration inside the tuber (endosmosis)
- c. It confirms the process of osmosis.