

KENDRIYA VIDYALAYA SANGATHAN BHOPAL REGION
CLASS IX – SCIENCE (EXPLORATION)
COMPETENCY-BASED TEST (CBT)

Topic: Cell – The Building Block of Life

Maximum Marks: 10

Times: 20 Minutes

Objective Type (MCQs) (10 × 1 = 10 Marks)

Q1. Which scientist first observed cork cells under a microscope?

- a) Anton van Leeuwenhoek
- b) Robert Hooke
- c) Robert Brown
- d) Matthias Schleiden

Q2. Which cell organelle is known as the "powerhouse of the cell"?

- a) Nucleus
- b) Mitochondria
- c) Ribosome
- d) Vacuole

Q3. A student observes a plant cell under a microscope and notices a thick outer covering. What is it?

- a) Cell membrane
- b) Cell wall
- c) Cytoplasm
- d) Nucleus

Q4. Which organelle controls all the activities of a cell?

- a) Nucleus
- b) Chloroplast
- c) Golgi apparatus
- d) Endoplasmic reticulum

Q5. Which of the following is present only in plant cells?

- a) Mitochondria
- b) Cell membrane
- c) Cell wall
- d) Cytoplasm

Q6. Why the cell is called the basic unit of life?

- a) It is the largest part of an organism.
- b) All living organisms are made of cells, and cells perform life functions.
- c) It contains only water.

d) It is found only in plants.

Q7. A red blood cell transports oxygen because it contains:

- a) Chlorophyll
- b) Hemoglobin
- c) Cell wall
- d) Starch

Q8. Which of the following is common to both plant and animal cells?

- a) Cell wall
- b) Chloroplast
- c) Nucleus
- d) Large central vacuole

Q9. If the cell membrane is damaged, which function will be affected first?

- a) Control of movement of substances into and out of the cell
- b) Photosynthesis
- c) Protein synthesis
- d) Cell division

Q10. Which statement correctly differentiates plant cells from animal cells?

- a) Plant cells lack a nucleus.
- b) Animal cells have a cell wall.
- c) Plant cells contain chloroplasts and a cell wall.
- d) Animal cells contain chloroplasts.

Answer Key

- 1. b) Robert Hooke
- 2. b) Mitochondria
- 3. b) Cell wall
- 4. a) Nucleus
- 5. c) Cell wall
- 6. b) All living organisms are made of cells, and cells perform life functions.
- 7. b) Hemoglobin
- 8. c) Nucleus
- 9. a) Control of movement of substances into and out of the cell
- 10. c) Plant cells contain chloroplasts and a cell wall.