

Chapter – 8 | Cell: The Unit of Life**QUIZ
PART-08**

1. Nucleus was first discovered by —

- A. Robert Brown
- B. Robert Hooke
- C. Singer
- D. George Palade (A)

Explanation : Robert Brown discovered the nucleus in 1831.

2. Flemming named the stainable nuclear substance as —

- A. Chromatin
- B. Tonoplast
- C. Plasmid
- D. Peptidoglycan (A)

Explanation : Flemming named the nuclear substance that stains with alkaline dye as chromatin.

3. Nuclear envelope is made up of —

- A. Two parallel membranes
- B. One thick cell wall
- C. Only cellulose
- D. Single tonoplast (A)

Explanation : Electron microscope study shows that nuclear envelope has two membranes.

4. The space between the two nuclear membranes is called —

- A. Perinuclear space
- B. Stroma
- C. Matrix
- D. Lumen (A)

Explanation : The 10–50 nm space between nuclear membranes is called perinuclear space.

5. Nuclear pores help in the movement of —

- A. RNA and protein molecules
- B. Cell wall and capsule
- C. Fat droplets only
- D. Cristae only (A)

Explanation : Nuclear pores allow movement of RNA and proteins between nucleus and cytoplasm.

6. Nucleolus is the site of —

- A. rRNA synthesis
- B. ATP production
- C. Lipid digestion
- D. Cell wall formation (A)

Explanation : Nucleolus actively synthesizes ribosomal RNA.

7. Human cells contain DNA spread over —

- A. 46 chromosomes
- B. 10 chromosomes
- C. 80 chromosomes
- D. 4 chromosomes (A)

Explanation : A human cell has 46 chromosomes or 23 pairs.

8. The primary constriction of chromosome is called —

- A. Centromere
- B. Nucleolus
- C. Ribosome
- D. Tonoplast (A)

Explanation : Each chromosome has a primary constriction called centromere.

9. A chromosome with centromere in the middle is —

- A. Metacentric
- B. Telocentric
- C. Acrocentric
- D. Submetacentric (A)

Explanation : In metacentric chromosome, centromere is located in the middle and arms are equal.

10. Microbodies are present in —

- A. Both plant and animal cells
- B. Only bacteria
- C. Only viruses
- D. Only prokaryotes (A)

Explanation : Microbodies are membrane-covered microscopic vesicles in plant and animal cells.