

Yakeen NEET 2.0 - 2026

Botany By Rupesh Chaudhary Sir Cell - The Unit of Life

(NCERT Booster – 06)

1. Vacuole
 - (A) double membrane bound space in cytoplasm
 - (B) It contain water, sap, excretory product
 - (C) it's membrane is tonoplast which is semipermeable
 - (D) occupy 90% volume in animal cell
 - (E) all are incorrect
2. **Assertion (A):** material enter into vacuole from cytoplasm by active transport
Reason (R): material move against concentration gradient into vacuole
 - (A) Both A and R are true and R is the correct explanation of A.
 - (B) Both A and R are true but R is NOT the correct explanation of A.
 - (C) A is true but R is false.
 - (D) A is false but R is true.
3. Correct
 - (A) Contractile vacuole found only in amoeba
 - (B) contractile vacuole perform only excretion not osmoregulation
 - (C) In Protista food vacuole present formed by engulfing food
 - (D) none
4. Correct
 - A. Mitochondria not visible even after staining
 - B. number of mitochondria is not constant
 - C. it's number depend upon physiology
 - D. shape, size is constant in mitochondria
 - E. it is sausage shape
 - F. diameter 0.2 to 0.1 um length 1-4.1um
 - (A) 1. (B) 2.
 - (C) 3. (D) 4
5. Mitochondria
 - (A) single membrane organelle
 - (B) energy currency of cell
 - (C) ATP factory of cell
 - (D) both (B) & (C) are correct
6. Mitochondria (Incorrect)
 - A. membrane divide its lumen into two compartment
 - B. inner compartment filled with heterogenous substance matrix
 - C. outer membrane is delimiting layer and discontinuous
 - D. Inner membrane forms infolding called cisternae
 - (A) 1 (B) 2
 - (C) 3 (D) 4
7. Correct
 - (A) Cristae form away from matrix
 - (B) cristae decrease surface area
 - (C) inner membrane is discontinuous
 - (D) all are incorrect
8. Incorrect
 - (A) Two membrane do not have same enzyme
 - (B) outer membrane is more permeable compare to inner membrane
 - (C) outer membrane have porins lipid
 - (D) site of aerobic respiration
9. Correct
 - A. matrix posses single circular single strand DNA
 - B. power house of cell as synthesis lipid
 - C. also contain few RNA and 70 s Ribosomes
 - D. these component require for synthesis of ATP
 - E. mitochondria divide by fission
 - (A) 2 (B) 3
 - (C) 4 (D) 1



Answer Key

1. (B)
2. (A)
3. (C)
4. (D)
5. (C)

6. (A)
7. (C)
8. (C)
9. (B)



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