

## Class Test - 08

## Yakeen NEET 2.0 2026 Cell - The Unit of Life

## BOTANY

- 1. Find the incorrect one with respect to the function of smooth ER
  - (1) Actively engaged in lipid and steroids synthesis
  - (2) Involved in detoxification of drugs
  - (3) Involved in the synthesis of secretory proteins
  - (4) Involved in muscle contraction by release and uptake of Ca<sup>++</sup>ions
- 2. The different types of plastids i.e., leucoplast, chromoplast and chloroplast are quite related as
  - (1) These are interconvertible depending upon the requirement of an organ/plant part
  - (2) These all perform same function
  - (3) These all store photosynthetic pigments
  - (4) These all are green coloured
- **3.** Find the incorrect statement with respect to mitochondria
  - (1) Inner membrane contains electron carriers and enzymes for the formation of ATP
  - (2) The circular ds DNA is  $G \equiv C$  rich
  - (3) The matrix contains enzymes for TCA cycle
  - (4) For protein formation it never depends on nuclear genome
- **4.** Find how many organelles function in a coordinated manner from the box given below

Vacuole, Ribosome, Golgi bodies, Centrosome, ER, Sphaerosome, Lysosome, Mitochondria, Plastids

- (1) 4
- (2) 3
- (3) 2
- (4) 1
- **5.** Read the following statement carefully
  - A. Lipid molecules in the membrane are exactly same on both sides with respect to chemical composition
  - B. Membrane proteins are 30 % in human RBC membrane
  - C. Proteins cannot readily undergo flip-flop movement.
  - D. Transmembrane proteins can be removed by using detergents.

Which one of these statements are correct?

- (1) A and B
- (2) B and C
- (3) C and D
- (4) All the above

**6.** Which structure is more active in acidic pH?

Duration: 20 Min.

- (1) SER
- (2) RER
- (3) Lysosome
- (4) Ribosome
- 7. Match the columns and identify the correct option

	Column-I		Column-II
a.	Thylakoids	(i)	Disc shaped sacs in Golgi
			bodies
b.	Cristae	(ii)	Condensed structure of
			DNA
c.	Cisternae	(iii)	Flat membranous sacs in
			stroma
d.	Chromatin	(iv)	Infoldings of
			mitochondrial membrane

- (1) a (iii), b (iv), c (ii), d (i)
- (2) a (iv), b (iii), c (i), d (ii)
- (3) a (iii), b (iv), c (i), d (ii)
- (4) a (iii), b (i), c (iv), d (ii)
- **8.** Which of the following characteristics are correct with respect to chlorophyll containing semiautonomous organelle?
  - (1) Self duplication ability
  - (2) Presence of ribosomes (80S type)
  - (3) Presence of oxysomes
  - (4) Presence of cristae
- 9. In human beings, the membrane of the erythrocyte (RBC) is made up of
  - (1) 40 percent protein and 52 percent lipid
  - (2) 52 percent protein and 40 percent lipid
  - (3) 62 percent protein and 40 percent lipid
  - (4) 52 percent protein and 48 percent lipid
- **10.** Which of the following is not true for cell wall of higher plants
  - (1) It may possess proteins
  - (2) Traversed regularly by plasmodesmata
  - (3) Primary cell wall is present inside the secondary cell wall
  - (4) Both (1) and (3)

	P	N)	
11.	A facilitates the transport of a number of ionsB concentration gradient into the vacuole  (1) A-Tonoplasm, B-along (2) A-Tonoplast, B-against (3) A-Leucoplast, B-along (4) A-Lysosomes, B-against	15. 16.	The cytoplasmic bridges between two adjacent plant cells is (1) Middle lamella (2) Primary cell wall (3) Plasmodesmata (4) Secondary cell wall Which is the main arena of cellular activities? (1) Cell membrane (2) Cytoplasm
12.	According to fluid-mosaic model of cell membrane,		(3) Cell wall (4) Mitochondria
	<ol> <li>Cell membrane is composed of phospholipids only</li> <li>Cell membrane is symmetrical</li> <li>Lipids are arranged in a single layer</li> <li>Proteins are represented as ice bergs in a sea of lipid</li> </ol>	17.	A special membranous structure, mainly associated with respiration and replication isA in bacterial cell and replaced byB in eukaryotes  (1) A - Plasmid, B - nucleolus  (2) A - Nucleoid, B - nucleus  (3) A - Mesosome, B - plastid
13.	Mitochondrial porins are located in (1) Outer membrane		(4) A - Mesosome, B - mitochondria
	<ul><li>(2) Inner membrane</li><li>(3) Inter-membrane space</li><li>(4) Both (1) and (2)</li></ul>	18.	All these types of transport across the plasma membrane do not need energy, except  (1) Facilitated diffusion  (2) Simple diffusion
14.	Flagella occurs in (1) Prokaryotic cells (2) Eukaryotic cells (3) Viruses (4) Both (1) and (2)		(3) Active transport (4) Osmosis



## ANSWER KEY

1	(2)
	(3)
1.	(2)

**2.** (1)

**3.** (4)

**4.** (1)

**5.** (3)

**6.** (3)

**7.** (3)

**8.** (1)

**9.** (2)

**10.** (3)

**11.** (2)

**12.** (4)

**13.** (1)

**14.** (4)

**15.** (3)

**16.** (2)

**17.** (4)

**18.** (3)

