

## Class Test - 06

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

## Botany By Rupesh Chaudhary Sir

- 1. Find the incorrect statement
  - (1) Middle lamella is mainly made up of calcium pectate
  - (2) Cell wall is formed on the inner side of the cell therefore secondary wall formed first
  - (3) Middle lamella glues the neighbouring cells together
  - (4) Cell wall helps in cell to cell interaction and provides barrier to undesirable macromolecules
- **2.** Transitional vesicles enclosing biochemicals pinched off from ER fuse with
  - (1) Maturing face of golgi body
  - (2) Forming face of golgi body
  - (3) Primary lysosome for intracellular digestion
  - (4) Plasma membrane to remove them from cell
- **3.** Choose incorrect statement regarding cells
  - (1) Mycoplasma, the smallest cell, is only 0.3 μm in length while bacteria could be 3 to 5 μm
  - (2) Haemoglobin associated human cells are about 7 μm in diameter
  - (3) The shape of the cell may not vary with the function they perform
  - (4) Nerve cells are longest cells
- **4.** Correct statement in relation to vacuoles is
  - (1) It is a triple membrane bound space found in cytoplasm containing sap
  - (2) It can occupy 90 % of cell volume in plants
  - (3) Its membrane allows transport of materials along the concentration gradient only
  - (4) Concentration of ions is significantly lesser in vacuole than cytoplasm
- 5. Vesicles from ER fuse with
  - (1) Maturing face of golgi body
  - (2) Forming face of golgi body
  - (3) Primary lysosome for intercellular digestion
  - (4) Plasma membrane to remove them out from cell

**6.** The lipid-like steroidal hormones are synthesized in SER among

**Duration**: 20 Min.

- (1) Hopanoid containing bacterial cell
- (2) Plant cells
- (3) Animal cells
- (4) More than one option is correct
- **7. Assertion :** Endomembrane system is present in eukaryotic cells.

**Reason :** It comprises of peroxisomes, golgi complex, lysosomes and vacuoles.

Mark the correct choice as:

- (1) If both Assertion & Reason are true and the reason is the correct explanation of the assertion
- (2) If both Assertion & Reason are true but the reason is not the correct explanation of the assertion
- (3) If Assertion is true statement but Reason is false
- (4) If both Assertion and Reason are false statements
- **8. Assertion :** Several ribosomes attach to a single mRNA and form a chain called polyribosome.

**Reason :** Ribosomes are site of protein synthesis.

Mark the correct choice as:

- (1) If both Assertion & Reason are true and the reason is the correct explanation of the assertion
- (2) If both Assertion & Reason are true but the reason is not the correct explanation of the assertion
- (3) If Assertion is true statement but Reason is false
- (4) If both Assertion and Reason are false statements
- **9. Assertion :** Lysosomes are associated with digestion of biochemicals.

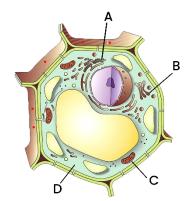
**Reason:** Lysosomes are rich in acid hydrolases.

Mark the correct choice as:

- (1) If both Assertion & Reason are true and the reason is the correct explanation of the assertion
- (2) If both Assertion & Reason are true but the reason is not the correct explanation of the assertion
- (3) If Assertion is true statement but Reason is false
- (4) If both Assertion and Reason are false statements

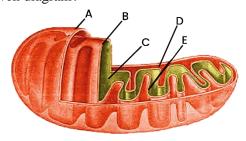


- **10.** The organelle considered as the site of aerobic respiration
  - (1) Produce cellular energy in the form of ATP hence called 'Kitchen of cell'
  - (2) Outer membrane forms number of infoldings known as cristae
  - (3) Divide by fission
  - (4) Matrix possesses single, circular and single stranded DNA molecule
- 11. Chromatin contains
  - (1) DNA, histone protein, basic non-histone protein, dsRNA
  - (2) DNA, basic histone protein, non-histone protein, RNA
  - (3) DNA, acidic histone protein, basic non-histone protein, RNA
  - (4) DNA, acidic histone protein, non-histone protein, dsRNA
- **12.** Choose odd one w.r.t. composition of cell wall of algae
  - (1) Cellulose, galactans
  - (2) Mannans, minerals
  - (3) Hemicellulose, pectin
  - (4) Cellulose, minerals
- 13. Identify the cell organelles labelled as A, B, C and D. Mark the correct option w.r.t. organelle and its function.

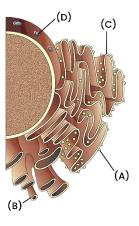


- (1) A Major site for synthesis of lipid.
- (2) B Performs the function of packaging materials, to be delivered to only intracellular targets.
- (3) C Sites of anaerobic respiration.
- (4) D Main arena of cellular activities

- **14.** Glycosylation, general secretion and recycling of broken plasma membrane are functions specifically performed by
  - (1) Glyoxysome
  - (2) SER
  - (3) RER
  - (4) Golgi complex
- **15.** Which of the following statement is correct for the given diagram?



- (1) 'C' possesses DNA molecule, RNA molecule and 80 S ribosomes
- (2) 'A' and 'B' have their own specific enzymes
- (3) 'E' made by inner membrane towards the inter membrane space
- (4) 'B' forms the continuous limiting boundary of the organelle
- 16. A number of proteins synthesized by ribosomes on the endoplasmic reticulum are modified in the \_\_\_\_\_ of the Golgi apparatus before they are released from its trans face
  - (1) Tubules
  - (2) Vesicles
  - (3) Cisternae
  - (4) More than one option is correct
- **17.** Examine the figure given below and select the part correctly matched with its function/structure





- (1) Part (A): Ribosome-made up of 30 S and 50 S subunits
- (2) Part (C): RER principally performs the function of packaging materials
- (3) Part (D): Nuclear pore passage through which movement of RNA takes place in one direction
- (4) Part (B): SER synthesis of steroidal hormones
- 18. Match the following

	Column-I		Column-II
a.	ER	(i)	Packaging of material
b.	Cytoskeleton	(ii)	Dense granules
c.	Golgi complex	(iii)	Synthesis of steroidal
	complex		hormones
d.	Ribosome	(iv)	Proteinaceous structure

- (1) a(iii), b(iv), c(i), d(ii)
- (2) a(iv), b(ii), c(iii), d(i)
- (3) a(ii), b(iii), c(iv), d(i)
- (4) a(ii), b(iii), c(i), d(iv)
- 19. Which of the following cell organelle is closely associated with ER & helps in formation of plasma membrane during cytokinesis?
  - (1) Centrosome
  - (2) Sphaerosomes
  - (3) Golgi bodies
  - (4) Ribosomes
- 20. Select the incorrect statement w.r.t. Golgi apparatus
  - (1) The cis and trans faces of the organelle are similar but interconnected
  - (2) The Golgi cisternae are concentrically arranged near the nucleus
  - (3) It remains in close association with the endoplasmic reticulum
  - (4) The ER vesicles fuse with the cis face

- Which of the following synthesizes proteins for export?
  - (1) Free ribosomes (2) SER
  - (3) Lysosome (4) RER
- 22. Select the incorrect statement(s) w.r.t. functions of various cellular components
  - Middle lamella works as glue to hold the adjacent cells together.
  - Mitochondria, chloroplast and vacuoles are part of endomembrane system as their functions are coordinated.
  - Lipoidal steroid hormones are synthesized by ER component which is not associated to 80 S ribosomes.
  - (1) Only b
  - (2) Only a
  - (3) Both a and c
  - (4) Both b and c
- 23. Thin, amorphous and cementing layer between two adjacent cells, is
  - (1) Primary wall
- (2) Middle lamella
- (3) Secondary wall (4) Plasma membrane
- 24. Dictyosome is
  - (1) Rough endoplasmic reticulum
  - (2) Smooth endoplasmic reticulum
  - (3) Non-connected cisternae in plants
  - (4) Interconnected cisternae in animals
- 25. Cell organelle with property of detoxification of drugs is
  - (1) RER
  - (2) Lysosome
  - (3) Sphaerosome
  - (4) SER



## ANSWER KEY

1	(2)
I.	(2)

**2.** (2)

**3.** (3)

**4.** (2)

**5.** (2)

**6.** (3)

(5)

**7.** (3)

**8.** (1)

**9.** (1)

**10.** (3)

**11.** (2)

**12.** (3)

**13.** (4)

**14.** (4)

**15.** (2)

**16.** (3)

**17.** (4)

**18.** (1)

**19.** (3)

**20.** (1)

**21.** (4)

**22.** (1)

**23.** (2)

**24.** (3)

**25.** (4)