Class Test - 11

Yakeen NEET 2.0 2026
Cell - The Unit of Life

Duration : 30 Min.

Botany By Rupesh Chaudhary Sir

1. The detailed description of form and appearance of living beings brought out their_____.
(1) Dissimilarities (2) Similarities
(3) Both (1) and (2) (4) None of these

2. What emphasized the unity underlying the diversity of forms of living organisms?
(1) Scientific methodology
(2) Cell theory
(3) Organismic biology
(4) Reductionist biology

3. Cell theory created a sense of mystery around
(1) Physiological processes
(2) Behavioural processes
(3) Living phenomena
(4) More than one are correct

4. In studying and understanding the living phenomena, one can
(1) Take a physicochemical approach
(2) Use cell-free systems to investigate
(3) Both (1) and (2)
(4) None of these

5. Reductionist biology can tell us about
(1) Molecular basis of all physiology
(2) Abnormal processes occurring during diseases
(3) Type of organic compounds which are present in living organisms
(4) All of these

6. Non-living and living beings are differentiated on the basis of
(1) Nucleus
(2) Cell
(3) Plasma membrane
(4) DNA

7. Anything _____ than a complete structure of a cell _____ ensure independent living.
(1) More, does (2) More, does not
(3) Less, does (4) Less, does not

8. Living cell was first observed and described by
(1) Robert Brown
(2) Robert Hooke
(3) A.V. Leeuwenhoek
(4) Schleiden

9. All the structural details of the cell are revealed by
(1) Microscope
(2) Light microscope
(3) Electron microscope
(4) Cell-biology

10. Who studied both plant and animal cells?
(1) Schleiden (2) Virchow
(3) Schwann (4) R. Brown

11. Schleiden and Schwann could not explain
(1) Origin of new cells
(2) Formation of tissue
(3) Fundamental unit of life
(4) Organisms are composed of cells

12. Which is correct sequence?
(1) Cell → Nucleus → DNA → Chromosome
(2) Nucleus → DNA → Chromosome → Cell
(3) DNA → Chromosome → Cell → Nucleus
(4) Cell → Nucleus → Chromosome → DNA

13. Cytoplasm occupies the volume of cell in
(1) Prokaryotic cell
(2) Eukaryotic cell
(3) Both (1) and (2)
(4) Organelles

14. Cytoplasm is the main arena of cellular activities in
(1) Plant cells only
(2) Animal cells only
(3) Both (1) and (2)
(4) Prokaryotic cells only

15. Which non-membrane bound organelle is found in both prokaryotic and eukaryotic cells?
(1) Microbody (2) Vacuole
(3) Ribosome (4) Lysosome

16. Centriole which helps in cell division is found in
(1) All plant cells
(2) Animal cells only
(3) Both (1) and (2)
(4) Mostly in animal cells

17. The smallest cells are
(1) Bacteria (2) BGA
(3) Viruses (4) Mycoplasma

18. The shape of the cells may vary due to
(1) Pressure from surrounding cells
(2) Function performed by them
(3) Both (1) and (2)
(4) Cell wall

19. Eukaryotes do not include
(1) Protists (2) Fungi
(3) Monera (4) Plants

20. Differentiation of cytoplasm and nucleoplasm is found in
(1) Prokaryotes (2) Eukaryotes
(3) Both (1) and (2) (4) None of these

21. In eukaryotes, genetic material is organised into chromosomes due to
(1) DNA (2) RNA
(3) Basic histones (4) Acidic histones

22. EMS does not involve
(1) ER, Golgi complex, Lysosomes
(2) Vacuoles, ER, Golgi complex
(3) Peroxisomes, Chloroplast, Mitochondria
(4) Golgi complex, Lysosome, Vacuoles

23. Endo-membrane system (EMS) is formed due to
(1) Control (2) Regulation
(3) Coordination (4) Integration

24. Functions of which group of organelles are coordinated?
(1) ER, Golgi complex, Lysosome and Vacuoles
(2) Mitochondria, Chloroplast and Peroxisomes
(3) ER, Chloroplast and Peroxisomes
(4) Lysosomes, Vacuoles, Mitochondria and Peroxisomes

25. Luminal compartment of ER
(1) Possesses ribosomes
(2) Receives Poly Peptide Chain
(3) Connects to Golgi complex
(4) Forms vesicles

26. Which structure is frequently observed in the cells actively involved in protein synthesis and secretion?
(1) ER (2) RER
(3) SER (4) GA

27. Major site for lipid synthesis is
(1) GA (2) ER
(3) RER (4) SER

28. ER is
(1) Sometimes continuous with nuclear membrane
(2) Mostly continuous with nuclear membrane
(3) Sometimes continuous with plasma membrane
(4) More than one are correct

29. Steroidal hormones are synthesized in
(1) SER in plant cells
(2) RER in plant cells
(3) RER in animal cells
(4) SER in animal cells

30. Find the odd one
(1) Convex face (2) Cis-face
(3) M-face (4) F-face

31. The cis and the trans faces of the organelle are _____, but interconnected
(1) Entirely similar
(2) Entirely different
(3) Partially similar
(4) Partially different

32. Materials packaged at Golgi apparatus are
(1) Delivered to the intra-cellular targets
(2) Secreted outside the cell
(3) Both (1) and (2)
(4) None of these

33. Glycoproteins and glycolipids are formed at
(1) ER (2) Golgi apparatus
(3) Lysosomes (4) Vacuoles

34. Vacuoles can occupy the 90 percent of
(1) Animal cell
(2) Fungal cell
(3) Bacterial cell
(4) Plant cell

35. Tonoplast facilitates the transport of ions and other materials
(1) Against concentration gradients into the vacuole
(2) Along concentration gradients into the vacuole
(3) Against concentration gradients into the cytoplasm
(4) Along concentration gradients into the cytoplasm

36. Which is correctly matched ?
(1) Schleiden – Zoologist, 1938
(2) Schwann – Botanist, 1939
(3) Singer and Nicolson – Sandwich model, 1972
(4) R. Virchow – Cell Lineage Theory, 1855

37. In Amoeba, the contractile vacuole helps in
(1) Storage (2) Digestion
(3) Excretion (4) Ingestion

38. Typical shape of mitochondria is
(1) Sausage-shaped (2) Cylindrical
(3) Both (1) and (2) (4) Lens-shaped

39. One mitochondrion gives rise to another by
(1) Budding (2) Fission
(3) Fusion (4) Fragmentation

40. Plastids are classified as chloroplast, chromoplast and leucoplast on the basis of
(1) Function
(2) Pigments
(3) Shape
(4) Colour

41. Majority of the chloroplasts are found in the
(1) Mesophyll cells (2) Xylem cells
(3) Root cells (4) Phloem cells

42. Chlorophyll pigments are present in the
(1) Plants (2) Chloroplast
(3) Stroma (4) Thylakoid membrane

43. Find the correct statement.
(1) Ribosomes of chloroplast are smaller than the cytoplasmic ribosomes
(2) Ribosomes of chloroplast are larger than the cytoplasmic ribosomes
(3) Ribosomes of chloroplast are equal to the cytoplasmic ribosomes
(4) More than one are correct

44. RNP particles were first observed under
(1) Simple microscope
(2) Light microscope
(3) Electron microscope
(4) Both (2) and (3)

45. Types of chromosomes are classified on the basis of position of
(1) Primary constriction
(2) Secondary constriction
(3) Centromere
(4) Both (1) and (3)

46. Location is constant of
(1) Primary constriction
(2) Secondary constriction
(3) Both (1) and (2)
(4) Centromere

47. Match the column and identify the correct option

	Column-I		**Column-II**
a.	Power house of cell	i.	Nucleolus
b.	Ribosome factory	ii.	Golgi apparatus
c.	Protein factory	iii.	Mitochondria
d.	Packaging unit	iv.	Ribosome

(1) a-ii, b-iii, c-iv, d-i
(2) a-i, b-iii, c-ii, d-iv
(3) a-i, b-iii, c-iv, d-ii
(4) a-iii, b-i, c-iv, d-ii

48. **Assertion :** Chromatin contains RNA.
Reason : RNA is genetic material in some viruses.
(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

49. **Assertion :** Study of nucleus is done in interphase.
Reason : Cells show structured chromosomes in place of nucleus during different stages of cell division.

(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

50. **Assertion :** The content of the nucleolus is continuous with the nucleoplasm.
Reason : Nucleolus is not membrane bound.

(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

ANSWER KEY

1.	(1)	**18.**	(3)	**35.**	(1)
2.	(2)	**19.**	(3)	**36.**	(4)
3.	(4)	**20.**	(2)	**37.**	(3)
4.	(3)	**21.**	(3)	**38.**	(3)
5.	(4)	**22.**	(3)	**39.**	(2)
6.	(2)	**23.**	(3)	**40.**	(2)
7.	(4)	**24.**	(1)	**41.**	(1)
8.	(3)	**25.**	(2)	**42.**	(4)
9.	(3)	**26.**	(2)	**43.**	(1)
10.	(3)	**27.**	(4)	**44.**	(3)
11.	(1)	**28.**	(4)	**45.**	(4)
12.	(4)	**29.**	(4)	**46.**	(2)
13.	(3)	**30.**	(3)	**47.**	(4)
14.	(3)	**31.**	(2)	**48.**	(2)
15.	(3)	**32.**	(3)	**49.**	(1)
16.	(4)	**33.**	(2)	**50.**	(1)
17.	(4)	**34.**	(4)		

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