

**Q1. The cell wall is secreted by**

- a) Middle lamella
- c) Cytoplasm
- b) Ergastic substances
- d) Plasmo desmata

**Q. 2. Who called protoplasm as physical basis of life**

- a) Purkinje
- c) Robert son
- b) Huxley
- d) Hanstein

**Q. 3. The cell organelles are embeded in**

- a) Cytoplasm
- c) Mitochondria
- b) Nucleolus
- d) Protoplasm

**Q. 4. Synthesis of A.T.P in mitochondria Takes place**

- a) In the matrix
- c) in the inner cristae space
- b) At the critae
- d) None of the above

**Q. 5. The main difference between plant cell and cell is**

- a) Plant cells lack chloroplast which are found in animals cells
- b) Animal cells have thicken cell wall, plant cells lack
- c) Vacuoles are small and many in animal cell and single large in plant cell
- d) None of the above

**Q. 6. Tonoplast, defferentially permiable membrane surrounds**

- a) Vacuole
- c) Cytoplasm
- b) Nucleus
- d) Lysosome

**Q. 7. The cell organelle not bound by a membrane is**

- a) Mitochondria
- c) Spherosome
- b) Chloroplast
- d) Ribosome

**Q. 8. Golgi bodies are known for**

- a) Excretion
- c) Secretion

**Q. 9. Quanta somes are found in**

- a) Cristae of mitochondria    c) Grana of Chloroplast  
b) Stroma of Chloroplast      d) Endoplasmic Reticulum

**Q. 10. Cell membrane is chiefly composed of**

- a) Phospholipids
  - b) Glycoproteins
  - c) Lipoproteins
  - d) Glycolipids

**Q. 11. Golgi bodies originate from**

- a) Lysosome
  - b) Mitochondria
  - c) Endoplasmic Reticulum
  - d) Cell membrane

**Q. 12. Centrioles have following kind of tubular arrangement**



**Q. 13. A polysome is formed by**

- a) Cluster of ribosomes attached to mRNA
  - b) Cluster of ribosomes
  - c) Cluster of m.R.N.A
  - d) Cluster of mRNA attached to a ribsome

**Q. 14. The electron microscope is invented by**

- a) Laderberg and tatum
  - b) Knoll and Ruska
  - c) Iwanowisky
  - d) Robert son

**Q. 15. Centrosome is found in**

- a) Cytoplasam
  - b) Nucleolus
  - c) Chromosomes
  - d) Nucleus

**Q. 16. The branch that deals with the study of cell structure is known as**

- a) Histology
- c) Morphology
- b) Ecology
- d) Cytology

**Q. 17. The number of daughter cells produced at the end of mitosis**

- a) Two
- c) Six
- b) Four
- d) Eight

**Q. 18. The chromosome compliment found in kline felter's syndrome is**

- a) XXY
- c) XYY
- b) XXX
- d) YYY

**Q. 19. A cell having only one set of chrosome is called**

- a) Diploid
- c) Tetraploid
- b)Haploid
- d)Polypliod

**Q. 20. Direct cell division without formation of spindle fibres is called**

- a) Pro-mitosis
- c) Amitosis
- b)Endomitosis
- d)Meiosis

**Q. 21. In general sex-chromosomes are called**

- a) Autosomes
- c) Sexosomes
- b)Polysomes
- d)Allosomes

**Q. 22. Vehicles of heredity are the**

- a) Nucleus
- c) Chromosomes
- b) Genes
- d)Nucleolus

**Q. 23. Nucleous takespart in the synthesis of**

- a) rRNA
- c) mRNA
- b)tRNA
- d)DNA

**Q. 24. Functional actvties of a cell is controlled by**

- a) Protoplasm
- c) Nucleus
- b)Nucleolus
- d)mitochondria

**Q. 25. The composition of nucleous**

- a) DNA and RNA
- c) RNA and protiens
- b)RNA
- d)DNA, RNA & protiens

**Q. 26. The term ribosome is coined by**

- a) Palade
- c) Benda
- b)Porter
- d)Hanstein

**Q. 27. The cell division includes**

- a) Cytokinesis      c) Cytokinesis and Karyokinesis
- b) Karyokinesis      d) None of the above

**Q. 28. Cancer is formed due to rapid**

- a) a mitotic cell division      c) Meotic cell division
- b) Mitotic cell division      d) None of the above

**Q. 29. The smallest known cell is**

- a) Virus      c) Mycoplasama
- b)Bacteria      d)Diatoms

**Q. 30.The Components of endoplasmic Reticulum**

- a) Cisternae, Vesicles, Tubules
- b)Cristae, Vesicles, Tubules
- c) Grana, Cristae, Tubules
- d) eisterna, Thylakoids, Tubules

**Q. 31. Chromatin exists in two forms namely**

- a) Euchromatin and prochromatin
- b) Euchromatin and Hetero chromatin
- c) Heterochromatin and prochromatin
- d) None of the above

**Q. 32. A nucleosome consists of**

- a) Hstones
- c) Hstones and linker DNA
- b) Only DNA
- d) Histones wth DNA wrapped arround

**Q. 33. The chromosome structure is clear during**

- a) Interphase
- c) Metaphase
- b) Prophase
- d) Telophase

**Q. 34. Plasma membrane is**

- a) Permeable membrane
- c) Semipermeable membrane
- b) Impermeable membrane
- d) none of the above

**Q. 35. The nucleus is absent in the mature**

- a) Seive tube cells
- c) Monocytes
- b) Mammalian Erythrocytes
- d) Both a & b

**Q. 36. The largest cell of human body is**

- a) Nerve cell
- c) Involuntary muscle cell
- b) Voluntary muscle cell
- d) Cardiac muscle cell

**Q. 37. Cellulose content is high in**

- a) Primary wall
- c) Tertiary wall
- b) Secondary wall
- d) Middle lamellae

**Q. 38. The term organoid is used for**

- a) Well defined organ
- c) Idioblast
- b) A distinct tissue
- d) Cell organelle

**Q. 39. The nuclear division is also called**

- a) Cytokinesis
- c) Nucleokinesis
- b) Karyokinesis
- d) None of the above

**Q. 40. A ribosome is composed of**

- a) Two sub-units
- c) Three sub-units
- b) A single-unit
- d) Four sub-units

**Q. 41. Pinocytosis was studied for the first time by**

- |                |           |
|----------------|-----------|
| a) Metchinkoff | c) Plowe  |
| b) Lewis       | d) Nageli |

**Q. 42. Lysosomes are surrounded by**

- |                    |                      |
|--------------------|----------------------|
| a) Single membrane | c) Three membranes   |
| b) Two membranes   | d) None of the above |

**Q. 43. The ribosome is composed of**

- |                          |                          |
|--------------------------|--------------------------|
| a) Only one sub-unit     | c) Three equal sub-units |
| b) Two unequal sub-units | d) Two equal sub-units   |

**Q. 44. Foldings of inner mitochondrial membrane is called**

- |              |               |
|--------------|---------------|
| a) Cristae   | c) Grana      |
| b) Cisternae | d) Thylakoids |

**Q. 45. Outer most layer of cell wall is**

- |                   |                   |
|-------------------|-------------------|
| a) Plasmalemma    | c) Secondary wall |
| b) Middle lamella | d) Primary wall   |

**Q. 46. Eukaryotic chromosomes are composed of**

- |                  |                  |
|------------------|------------------|
| a) DNA + Protein | c) RNA + Protein |
| b) DNA + RNA     | d) Only DNA      |

**Q. 47. 'Y' chromosome is**

- |                |                    |
|----------------|--------------------|
| a) Acrocentric | c) Sub-Metacentric |
| b) Metacentric | d) Acentric        |

**Q. 48. Down's syndrome is due to**

- |                        |                     |
|------------------------|---------------------|
| a) Missing chromosome  | c) A dominant gene  |
| b) An extra chromosome | d) A recessive gene |

**Q. 49. Centromere is a constituent of**

- |               |               |
|---------------|---------------|
| a) Chromosome | c) Centrosome |
|---------------|---------------|

**Q. 50. The shape of metacentric chromosome in anaphase is**

- a) L-shaped
  - b) J-shaped
  - c) V-shaped
  - d) I-shaped

**Q. 51. Polyploidy was first discovered by**

- a) Lutz
  - b) De Bary
  - b) Haberlandt
  - c) Sanio

**Q. 52. Oncology is the study of**

- a) Bones
  - b) Aids
  - c) Blood cells
  - d) Cancer

**Q. 53. The figures of cork cells as seen by Robert Hooke were published in his book**

- a) Micrographia
  - b) Origin of species
  - c) Plant kingdom
  - d) Genera Plantarum

**Q. 54. About 80% of the cell has**

- a) Minerals
  - b) Proteins
  - c) Water
  - d) Carbohydrates

**Q. 55. Plasmodesmata connections help in**

- a) Cytoplasmic streaming
  - b) Locomotion of unicellular
  - c) Mitotic divisions
  - d) Movement of substances between cells

**Q. 56. Average thickness of unit-membrane is**



**Q. 57. The term heterochromatin was coined by**

**Q. 58. Reorganization of genetic material occurs**

- a) Meiosis
  - b) Mitosis
  - c) Organogenesis
  - d) Metamorphosis

**Q. 59. Oxsomes are unique to**

- a) Golgi complex
  - b) Mitochondria
  - c) Chloroplast
  - d) Endoplasmic Reticulum

**Q. 60. Cancer of surface epithelium is known as**

- a) Carcinoma
  - b) Sarcoma
  - c) Lymphoma
  - d) Mycloma

**Q. 61. Golgi bodies givenise to**

- a) Centrosome
  - b) Lysosome
  - c) Vesicles
  - d) Both b & c

**Q. 62. Ribosomes of chloroplast, mitochondria and bacteria of the type**

- a) 80s
  - b) 50s
  - c) 70s
  - d) 30s

**Q. 63 The number of mitochondria per cell**

- a) Remain constant
  - b) Decreases with increasing cellular activity
  - c) Increases with cellular activity
  - d) May or may not change with cellular activity

**Q. 64. Which of the following results in the formation two indentical daughter cells**

- a) Mitosis
  - b) Amitosis
  - c) Meiosis
  - d) Karyokinesis

**Q. 65. Chromosomal doubling happens in**

**Q. 66. The process of unequal nuclear division is called**

- a) Mitosis
  - b) Meiosis
  - c) Amitosis
  - d) Karyokinesis

### **Q. 67. The structural elements of the cell wall**

- a) Microfibrils
  - b) Macrotubules
  - c) Microtubules
  - d) Recten

**Q. 68. Aneuploidy is the term applied for the**

- a) Gene mutation
  - b) Chromosomal mutation
  - c) Chromosomal mutation involving the addition or deletion of one or more chromosomes
  - d) Chromosomal mutation involving the addition or deletion of one or more complete set of chromosome

**Q. 69. A gradual decrease in the size of the tail during metamorphosis in the life cycle of the frog is a good example for?**

- a) Cell necrosis
  - b) Programmed cell death
  - c) Pinocytic activity
  - d) Cell Senescence

**Q. 70. A single large central vacuole occurs in**

- a) Mature animal cell
  - b) Developing animal cell
  - c) Developing plant cell
  - d) Mature plant cell

**Q. 71. Which one does not possess histone associated DNA?**

- a) Chromosome
  - b) Euchromatin
  - c) Mitochondria
  - d) Heterochromatin

**Q. 72. Active transport occurs**

- a) Along the concentration gradient requires ATP
- b) Along the concentration gradient but does not require ATP
- c) Against the concentration gradient but does not require ATP
- d) Against the concentration gradient requires ATP

**Q. 73. Nucleolus takes part in synthesis of**

- a) 45%
- b) 95%
- c) 70%
- d) 15%

**Q. 74. If haploid chromosome number is 10, the monosomic chromosome number**

- a) 09
- b) 10
- c) 18
- d) 19

**Q. 75. Two animal cells are interconnected by**

- a) Cell wall
- b) Plasma membrane
- c) Plasmodesmata
- d) Desmosomes

**Q. 76. Cell wall shows**

- a) Impermeability
- b) Permeability
- c) Semipermeability
- d) Differential permeability

**Q. 77. Cell sap is**

- a) The living content of the cell
- b) Nonliving content of the vacuole
- c) Nonliving content of the protoplasm
- d) Living content of the Cytoplasm

**Q. 78. In a multicellular organism, the cells are usually**

- a) Totally independent of each other
- b) Incapable of multiplication
- c) Partly dependent on one another
- d) Totally dependent upon each

**Q. 79. Both double & single RNAs are present in equal amounts.  
The smallest RNA IS**

- a) m-RNA
- C) r-RNA
- B) t-RNA
- d) genetic-RNA

**Q. 80. Which of the following organelle is present in animal cell but absent plant cell ?**

- a) Chromosomes
- c) Nucleolus
- b) Ribosomes
- d) Centrioles

**Q. 81. A cell lacking a nucleous would also lack**

- a) Plasma membrane
- c) Vacuole
- b) Mitochondria
- d) Chromosomes

**Q. 82. The part of the protoplast that exhibits cytoplasmic streaming movement**

- a) Cytoplasam
- c) Ectoplasm
- b) Endoplasm
- d) Nucleous

**Q. 83. A feature common to nucleous, chloroplast, & mitochondria s the presence of**

- a) Lamellae
- c) Nuclic acid
- b) Cristae
- d) None of the above

**Q. 84. Who initiated cell concept**

- a) Robert Hooke
- c) Leeuwenhoek
- b) Grew
- d) Schleiden & Sohwan

**Q. 85. Who discovered the cell**

- a) Leeuwenhoek
- c) Robert Brown
- b) Robert Hooke
- d) Robert Boyle

**Q. 86. A 3-D structure of cell organell can be observed through**

- a) Electron microscope
- b) Scanning electron microscope
- c) Simple microscope

d) Sterio microscope

**Q. 87. Which of the following is impermeable to water and gases in plants?**

- a) Cellulose
- c) Chitin
- b) Cutin
- d) Lignin

**Q. 88. Microtubules are present in**

- a) Cilia
- c) Spindle fibres
- b) Sperm tail
- d) All the above

**Q. 90. In Eukaryotic cells normally mitochondria occurs in**

- a) Vegetative cells
- b) Degenerative cells
- c) Reproductive cells
- d) Both a & c

**Q. 91. Terminalization of chiasma is seen in**

- a) Zygote
- c) Diakinesis
- b) Diplotene
- d) Both b & c

**Q. 92. Programmed cell death is known as**

- a) Senescence
- c) Apoptosis
- b) Pychosis
- d) Lipofuscin

**Q. 93. Too much increase in the population of WBCs in the body is due to**

- a) Carcionoma
- c) Sareoma
- b) Leukaemia
- d) Neoplasia

**Q. 94. Protien synthesis occurs**

- a) On the surface of nucleous and E.R
- b) In The nucleous and mitochondria
- c) In the cytosal and nucleous
- d) In the cytosol and mitochondria

**Q. 95. Meiosis is also known as**

- a) Equational division
- b) Reducation division
- c) Unequal Nuclear Division
- d) Direct Nuclear division

**Q. 96. Asters are formed around**

- a) Chromosomes
- c) Centrosomes
- b) Centrioles
- d) Spindle fibres

**Q. 97. The part of the protoplast that exhibits cytoplasmic streaming is**

- a) Cytoplasm
- c) Endoplasm
- b) Ectoplasm
- d) Nucleoplasm

**Q. 98. The cell organelle that is necessary for aerobic respiration is**

- a) Endoplasmic reticulum
- b) Golgi complex
- c) Mitochondria
- d) Chloroplast

**Q. 99. Irregular shaped nucleous is characteristic of**

- a) Human RBCs
- c) RBCs of camel
- b) Lymphocytes
- d) Basophils

**Q. 100. Phargmoplast formation is seen in the cytokinesis**

- a) Animal cells
- c) Plant cells
- b) Bacterial cell
- d) Mycoplasma cells