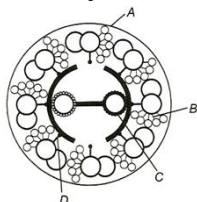


Class : XIth
Date :

Subject : BIOLOGY
DPP No. : 6

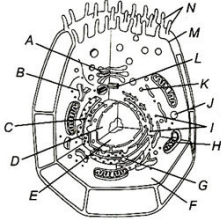
Topic :- Cell the Unit of Life

- If a length of DNA has 45,000 base pairs, how many complete turns will the DNA molecule take?
a) 4,500 b) 45,000 c) 45 d) 450
- The distance between two base pairs in DNA is
a) 34Å b) 3.4Å c) 0.34Å d) 20Å
- Analyse the following pairs and identify the correct option given.
I. Chromoplasts – Contain pigments other than chlorophyll
II. Leucoplasts – Devoid of any pigments
III. Amyloplasts – Store proteins
IV. Aleuroplasts – Store oils and fats
V. Elaioplasts – Store carbohydrates
a) II and III are correct b) III and IV are correct
c) IV and V are correct d) I and II are correct
- Which of the following is not relevant to the structure of double helical DNA?
a) The helix makes one complete spiral turn every 34Å
b) The diameter of the helix is 20Å
c) The distance between adjacent nucleotides is 3.4Å
d) Each strand of helix has a backbone made up of alternating ribose sugar and phosphate
- RNA has uracil instead of
a) Cytosine b) Guanine c) Thymine d) None of these
- Identify A to D in the diagrammatic representation of internal structure of centrioles



- A-Interdoublet bridge, B-Central microtubule, C-Plasma membrane, D-Radial spoke
- A-Plasma membrane, B-Central microtubule, C-Interdoublet bridge, D-Radial spoke
- A-Plasma membrane, B-Interdoublet bridge, C-Central microtubule, D-Radial spoke
- A-Plasma membrane, B-Interdoublet bridge, C-Radial spoke, D-Central microtubule

7. Which of the following cellular organelles is/are bound by a single membrane?
 Peroxisomes, lysosomes, mitochondria
 a) Only peroxisomes but not lysosomes and mitochondria
 b) Both peroxisomes and lysosomes but not mitochondria
 c) All of the three organelles
 d) None of the three organelles
8. Red colour of tomato is due to
 a) β -carotene b) Anthocyanin c) Lycopene d) Erythrocyanin
9. What is the difference between RNA and DNA?
 a) Base b) Sugar c) Both (a) and (b) d) Phosphate
10. Correlate the given features of animal cells (I to VII) with their respective parts (A to N)



- I. The structure replicates during mitosis and generates the spindle
 II. Major site for synthesis of lipid
 III. Power house of the cell
 IV. store house of digestive enzyme
 V. Increase the surface area for the absorption of materials
 VI. Site of glycolysis
 VII. Site for active ribosomal RNA synthesis

The correct option is

I II III IV V VI VII

- a) L G H J N F D b) M G H J N F D
 c) L B H J N F D d) M A H J N F D

11. Cell membrane was discovered by Schwann (1838) but it was named by
 a) Nageli and Cramer b) Schwann and Schleiden
 c) Robert Brown d) All the above
12. Which of the following is not present in cell vacuoles?
 a) Hydrolytic enzymes b) Latex of the rubber plant
 c) DNA d) Anthocyanins of the flowers

13. Plasmodesmata are
- Lignified cemented between cells
 - Locomotory structures
 - Membranes connecting the nucleus with plasmalemma
 - Connections between adjacent cells
14. If a cell has a twice as much DNA as in a normal functional cell it means that the cell
- Is preparing to divide
 - Has completed division
 - Has reached the end of its life span
 - Has ceased to function
15. Within the nucleus DNA is organised along with proteins into material called
- Nuclear lamina
 - Chromatin
 - Chromosome
 - Chromatid
16. The molecular action of UV light is mainly reflected through
- Photodynamic action
 - Formation of pyrimidine
 - Formation of sticky metaphases
 - Destruction of hydrogen bonds between DNA strands
17. Three of the following statements regarding cell organelles are correct, while one is wrong. Which one is wrong?
- Lysosomes are double membraned vesicles budded off from Golgi apparatus and contain digestive enzymes
 - Endoplasmic reticulum consists of a network of membranous tubule and helps in transport, synthesis and secretion
 - Leucoplasts are bound by two membranes, lack pigment but contain their own DNA and protein synthesising machinery
 - Sphaerosomes are single membrane bound and are associated with synthesis and storage of lipids
18. Plasmodesmata connections helps in
- Cytoplasmic streaming
 - Synchronous mitotic divisions
 - Locomotion of unicellular organisms
 - Movement of substances between cells
19. Which of the following pair is mismatched?
- Capsule – Thick and tough glycocalyx
 - Slime layer – Loose glycocalyx
 - Pilli – Motility organ
 - Bacterial cells – Motile or non-motile
20. The rough endoplasmic reticulum (RER) in the cells are because of the presence of
- Mitochondria associated with ER
 - Ribosomes on the surface of ER
 - Volutin granules on the surface of ER
 - Sulphur granules on the surface of ER