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NTSE (Biology Sheet-1)

Cell

1. 1 mμ (millimicron) is :-
(A) 10^{-5} mm (B) 10^{-6} mm (C) 10^{-7} mm (D) 10^{-8} mm

2. Size of Acetabularia is :
(A) 10 cm (B) 10 mm (C) 1.0 mm (D) 0.1 mm

3. A plant cell having a cellulose wall, a thin lining of cytoplasm with a large vacuole but lacks nucleus, mitochondria, plastid etc. and it still living. It is part of complex permanent tissue. The cell is :
(A) companion cell (B) sieve cell (C) tracheid (D) sclerenchyma fiber

4. The term protoplasm was coined by -
(A) Huxley (B) Purkinje (C) Dujardin (D) Schultze

5. Dictyosome are -
(A) respiratory particlest (B) golgi bodies
(C) liver cells (D) related to protein synthesis

6. Centriole is associated with
(A) DNA synthesis (B) reproduction (C) spindle formation (D) respiration

7. Chemical nature of ribosomes is
(A) beta galactosidase (B) proteins and lipids (C) glucose and sucrose (D) proteins and RNA

8. If all mitochondria are removed from the cell
(A) nothing happens (B) energy metabolism of cell gets reduced
(C) the cell cannot reproduce (D) leaves become white

9. Which of the following will comprise the most appropriate distinction of prokaryotic cells to distinguish them from eukaryotic cells ?
(A) Lack of DNA and nuclei
(B) Having dispersed DNA without a bounding nuclear membrane and by their lack of membrane bound organelles like plastids and mitochondria.
(C) Biochemistry being fundamentally different.
(D) Lack of ribosomes

10. Which of the following is not the correct pairing of structure with function ?
(A) Golgi complex : breakdown of complex molecules
(B) Mitochondria : Production of ATP
(C) Endoplasmic reticulum : synthesis of proteins
(D) Chloroplast : photosynthesis

11. When green tomatoes turn red then
(A) new chloroplasts are made
(B) chromoplasts are changed into chloroplasts

(C) chloroplasts are disintegrated and get converted into chromoplasts
(D) none of these

12. Which of the following pairs is mismatched?
(A) Nucleus : ribosomal RNA
(B) Nucleus : DNA replication
(C) Lysosome : protein synthesis
(D) Cytoskeleton : microtubules

13. Prokaryotic cells is one, which does not have
(A) proper nucleus
(B) mitochondria golgi bodies
(C) nucleolus in their nucleus
(D) A, B and C and are correct

14. If all ribosomes are removed from a prokaryotic cell, following function/s will be hindered
(A) Lipid and steroid synthesis
(B) Storage of food material
(C) Protein synthesis
(D) Removal of ribosomes do not affect the functioning of cell

15. Electron Microscope was discovered by
(A) Robert Hooke (B) Knoll and Ruska (C) Robert Brown (D) Janssen

16. Cells which loose their nucleus during differentiation are
(A) nerve cells (B) muscle cells (C) red blood cells (D) white blood cells

17. Double membrane is absent in
(A) mitochondria (B) chloroplast (C) nucleus (D) lysosomes

18. Golgi apparatus is absent in
(A) liver cells (B) higher plants (C) blue green alga (D) yeast

19. Cilia and flagella helps in
(A) movement (B) digestion (C) respiration (D) none of these

20. Proteins that are to be used outside the cell are synthesized
(A) in the mitochondria
(B) on the rough endoplasmic reticulum
(C) on the mitochondria
(D) on free ribosomes

21. Biomolecules are
(A) inorganic (B) organic (C) vital (D) both A and B

22. All organic substances possess
(A) carbon, hydrogen
(B) carbon, oxygen and nitrogen
(C) carbon, hydrogen and oxygen
(D) carbon, hydrogen, oxygen and nitrogen

23. Primary elements are
(A) P,S (B) N,C (C) N,P,K (D) C,H

24. In a cell, number of chromosomes is 44 after first meiosis. The number of chromosomes in its daughter cells after completion of meiosis is
(A) 44 (B) 22 (C) 11 (D) 66

25. Meiosis occurs in
(A) haploid cells
(B) mostly haploid cells but occasionally diploid cells
(C) diploid cells
(D) mostly diploid cells but occasionally haploid cells

26. Suffix 'S' in ribosome unit indicates
(A) sedimentation coefficient
(B) solubility
(C) surface area
(D) size

27. Cytoplasmic streaming is absent in
(A) plant cells (B) animal cells (C) protozoan protests (D) prokaryotes

28. Reorganization of genetic material occurs during
(A) metamorphosis (B) organogenesis (C) mitosis (D) meiosis

29. Spindle fibers are formed of
(A) tubulin (B) fibrin (C) flagellin (D) actin

30. Mitosis is
(A) karyokinesis (B) cytokinesis
(C) reduction in chromosome number (D) both A and B

31. Segregation of Mendelian factors (Tt) occurs during -
(A) mitosis (B) gametogenesis (C) meiosis II (D) cytokinesis

32. Which of is connected with cell division ?
(A) ER (B) peroxisomes (C) Ribosomes (D) Microtubles