

NTSE QUESTION BANK

TOPIC –CELL

1. In the plant cell, this layer is present nearest to the plasma membrane

- a. Tonoplast
- b. Middle lamella
- c. secondary wall
- d. primary wall

2. Plasma membrane is made up of

- a. A protein, a lipid and a cellulose layer
- b. Bimolecular lipid layer surrounded by protein layers
- c. A protein layer between two lipid layers
- d. A lipid layer between two protein layers

3. Cytoplasm without cell organelles is termed as _____

- a. Cytosol
- b. Cyclosis
- c. Lymph
- d. Blood

4. The association of more than one ribosome with a single molecule of mRNA complex is called as

- a. Polypeptide
- b. Polysome
- c. Polymer
- d. Polysaccharide

5. The cells involved in large amounts of lipid synthesis do not possess this organelle on the endoplasmic reticulum

- a. Mitochondrion
- b. Ribosomes
- c. Golgi apparatus
- d. lysosome

6. Microfilaments are made up of

- a. Fat
- b. Protein
- c. Carbohydrates
- d. Nucleic acid

7.It actively synthesized rRNA

- a. Nucleoplasm
- b. Nucleolus
- c. Nucleus
- d. all of the above

8.Who was the first person to observe the chromosomes?

- a. Fleming
- b. Waldeyer
- c. Strasburger
- d. Hofmeister

9.Cell Membrane is composed of_____

- a. Proteins and cellulose
- b. Proteins and Phospholipid
- c. Proteins and carbohydrates
- d. Proteins, Phospholipid and some carbohydrates

10.Which of the following organelle takes part in the secretion?

- a. Cytoplasm
- b. Ribosomes
- c. ER compartments
- d. Golgi apparatus

11.Cell Wall is present in_____.

- a. Plant cell
- b. Prokaryotic cell
- c. Algal cell
- d. All of the above

12.Name the complex polysaccharide which does not synthesize in the Golgi apparatus?

- a. Starch
- b. Hemicellulose
- c. Glycosaminoglycans
- d. Pectins

13.Which of the following are the functions of lysosomes?

- a. Autolysis
- b. Autophagy
- c. Digestion
- d. All of the above

14. Which of the following organelle is called the perinuclear dense bodies?

- a. Nucleolus
- b. Lysosomes
- c. Peroxisome
- d. All of the above

15. Cristae in mitochondria serves as sites for

- a. oxidation reduction reaction
- b. protein synthesis
- c. macromolecules breakdown
- d. flavoproteins are phosphorylated

16. Pick the incorrect statement

- a. mitochondrial DNA is known as mtDNA
- b. mitochondria are the powerhouse of the cell
- c. mitochondria are the site for Calvin cycle
- d. mitochondria are the site for Krebs cycle and oxidative phosphorylation

17. Mitochondrial DNA is

- a. simple single stranded circular DNA molecule
- b. simple double stranded circular DNA molecule
- c. simple double stranded linear DNA molecule
- d. simple single stranded linear DNA molecule

18. The term chromosome was coined by _____.

- a. Sutton
- b. Boveri
- c. Waldeyer
- d. Hoffmeister

19. Nucleolus is the site of formation of _____.

- a. Spindle fibers
- b. Ribosomes
- c. Peroxisomes
- d. Chromosomes

20. Factory for synthesis of sugars in autotrophic eukaryotes

- a. Mitochondria
- b. Chloroplast
- c. Ribosome
- d. Endoplasmic reticulum

21. When green tomato fruits turn to red, then
- new chromoplasts are formed
 - chloroplasts are disintegrated and get converted into chromoplasts
 - chromoplasts are changed to chloroplasts
 - none of these
22. This is a correctly matched pair
- Lysosomes – involved in synthesizing amino acids
 - Microsomes – take part in photosynthesis
 - Centrosomes – Provides enzymes essential for digestion
 - Endoplasmic reticulum – has a role in the formation of a new nuclear membrane while cell divides
23. The transfer vesicle from RER fuse with which region of Golgi complex
- Protein arms
 - Medial
 - Cis
 - Trans
24. How many autosomes are present in a human being?
- 20 pairs
 - 22 pairs
 - 23 pairs
 - 44 pairs
25. In the plasma membrane, lipid molecules are arranged in
- head parallel
 - alternate
 - scattered
 - series
26. Plasmolysis occurs due to-
- Absorption
 - Endosmosis
 - Osmosis
 - Exosmosis
27. Middle lamella is made up of _____.
- calcium sulphide
 - calcium pectate
 - calcium carbonate
 - calcium chloride

28. In germinating seeds, fatty acids are degraded exclusively in the

- a. Glyoxysomes
- b. Proplastids
- c. Peroxisomes
- d. Mitochondria

29. The chromosomes in which centromere is situated close to one end are

- a. Acrocentric
- b. Metacentric
- c. Telocentric
- d. Submetacentric

30. Which of the following structures between two adjacent cells is an effective transport pathway?

- a. Plasmalemma
- b. Endoplasmic reticulum
- c. Plastoquinones
- d. Plasmodesmata