

TOPIC : Cell

- Which among the following is not correct?
 - No cell can have a volume whose metabolic requirements exceed the exchange capacity of its surface.
 - Generally, a cell which is metabolically very active can not have very large volume.
 - Small bodies have more surface per unit volume than large bodies.
 - Generalisation are not universally applicable to all living organisms.
- The Prokaryotic among the following is :
 - Protozoa
 - Yeast
 - Bacteria
 - Algae
- Which of the following is found in Prokaryotes?
 - Mitochondria
 - Histone
 - Actin and Myosin
 - Formylated methionine
- Which among the following is correct for dinoflagellates?
 - They are unicellular
 - has nuclear envelop but no histones
 - They are Prokaryotes
 - More than one of the above
- Eukaryotes, the histone probably remain bound to the DNA :
 - at all times
 - at some time during replication
 - at some times during RNA synthesis
 - only during protein synthesis
- The surface tension of cell is :
 - 1000 dyne/cm
 - 100 dyne/cm
 - 10-50 dyne/cm
 - almost nil
- Which among the following is correct for prokaryotes?
 - RNA and protein synthesized in same compartment
 - Histone remain bound to DNA at all times
 - Cell division by mitosis and meiosis
 - Nuclear membrane separate the nucleoplasm with cytoplasm.
- Was a German scientist, who observed that all plant tissues are made up of cells. At the same time....., British scientist studied different type of animal cells. Though he was able to observe the nuclei, but he could not locate the cell wall, he examined and realised that cell wall forms a unique character of plants.
 - Rudolf Virchow and Nageli respectively
 - Mathias Schleiden and Theodore Schwann respectively
 - Theodore Schwann and Mathias Schleiden respectively
 - Robert Hooke and Purkinje respectively
- Cell theory which was given by Schleiden and Schwann, did not explain as to how the new cells are formed ?modified the hypothesis of cell theory to give it a final shape ?
 - Nageli
 - R. Virchow
 - Both (A) and (B)
 - C.P. Swanson
- Who proposed "cell lineage theory" by stating that "*Omnis cellula e cellula*" ?
 - Karl Nageli
 - Rudolf Virchow
 - Schwann
 - Anton Von Leeuwenhoek

11. Largest isolated single cell is :-
 (A) Mycoplasma (B) Ostrich egg (C) Human red blood cell (D) Nerve cells
12. (a) granular structure
 (b) first observed under the electron microscope as dense particles by George Palade
 (c) composed of RNA and proteins
 (d) not surrounded by any membrane
 Above given statements are true for which cell organelle ?
 (A) Nucleolus (B) Ribosomes (C) Cristae (D) Chloroplast
13. Which one of the following is correct ?
 (a) Nuclear matrix or nucleoplasm contains nucleolus and chromatin.
 (b) Ectokaryotheca usually remains continuous with the ER and also bears ribosomes on it.
 (c) Small and less number of nucleoli are present in cells actively carrying out protein synthesis
 (A) a and b (B) only a (C) a, and c (D) b and c
14. (a) Minute vesicles
 (b) Membrane bound
 (c) Contained enzymes
 (d) Present in plant and animals
 Above statements are correct for :-
 (A) Plastids (B) Microbodies (C) Nucleoli (D) Satellite bodies
15. Central dogma of molecular genetics apply to :
 (A) All living cells (B) Plant cells only
 (C) Plants and animal cells (D) Bacterial cells only

ANSWER KEY

1. D	2. C	3. D	4. D	5. A	6. D	7. A	8. B
9. B	10. B	11. B	12. B	13. A	14. B	15. A	