



**ABHIGYAN
ACADEMY**

PYQs on Cell Theory and Basic structure of cell



6. Which one of the following is the smallest unit showing the properties of life such as capacity for metabolism, response to the environment, growth and reproduction ?

- (a) Gene
- (b) Chromosome
- (c) Nucleus
- (d) Cell



Eukaryotic cells are much more complex as compared to prokaryotes. Which one of the following structures is exclusively present in a eukaryotic cell ?

- (a) Cell wall
- (b) Plasma membrane
- (c) Nucleic acid
- (d) Mitochondria



. Which one of the following cell organelles is absent in animal cell?

- (a) Cell membrane
- (b) Endoplasmic reticulum
- (c) Cell wall
- (d) Mitochondria



Which one of the following is ***not*** an example of eukaryotic organism?

- (a) Yeast
- (b) Bacteria
- (c) Plant
- (d) Human being



Which one of the following groups of cellular organelles contains DNA?

- (a) Mitochondria, nucleus, chloroplast
- (b) Mitochondria, Golgi bodies, nucleus
- (c) Mitochondria, plasma membrane, nucleus
- (d) Chloroplast, nucleus, ribosomes

One of the additional functions of Smooth Endoplasmic Reticulum (SER) is

- (a) protein synthesis
- (b) lipid synthesis
- (c) storage of biomolecules
- (d) detoxification of toxic substances



Which one of the following statements regarding viruses is *not* true ?

- (a) Viruses need living cells to reproduce.
- (b) All viruses are parasites.
- (c) Viruses can synthesize their food through photosynthesis.
- (d) Viruses are similar to chemical substances outside the host.

Which of the following statements regarding animal cell membrane is correct ?

- (a) They are composed of phospholipids only.
- (b) They are composed of proteins only.
- (c) They are composed of phospholipids and proteins only.
- (d) They are composed of phospholipids, proteins and cholesterol (lipid).

Movement of materials to different parts of cytoplasm and nucleus is generally carried out by

- (a) Ribosomes.
- (b) Mitochondria.
- (c) Lysosomes.
- (d) Endoplasmic reticulum.

In mitochondria, ATP synthesizing chemical reactions take place in the

- (a) Outer membrane.
- (b) Matrix.
- (c) Inner membrane.
- (d) DNA of mitochondria.



Which one of the following cell organelles does NOT possess nucleic acid ?

- (a) Nucleolus
- (b) Chloroplast
- (c) Ribosome
- (d) Plasma Membrane



Which one of the following cell organelles does NOT possess its own genetic material encoding proteins?

- (a) Ribosome
- (b) Nucleus
- (c) Mitochondria
- (d) Chloroplast



Which one of the following is an organelle that is NOT found in prokaryotic cells ?

- (a) Cell wall
- (b) Mitochondria
- (c) Plasma membrane
- (d) Ribosome



Who among the following first discovered the cell ?

- (a) Robert Brown
- (b) Robert Hooke
- (c) Leeuwenhoek
- (d) Rudolf Virchow