



INDIAN SCHOOL AL WADI AL KABIR



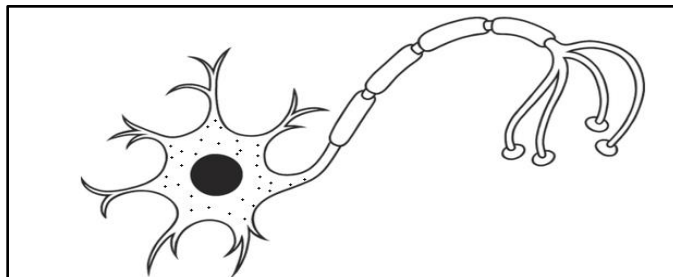
CLASS: VIII	DEPARTMENT: SCIENCE 2022 - 2023	DATE: 14.09.2022
TEXTBOOK Q & A	TOPIC: CELL STRUCTURE AND FUNCTION	NOTE: A4 FILE FORMAT
NAME OF THE STUDENT:	CLASS & SEC:	ROLL NO.

1. Indicate whether the following statements are True (T) or False (F).

- (a) Unicellular organisms have one-celled body. (T/F) – **[T]**
- (b) Muscle cells are branched. (T/F) – **[F]**
- (c) The basic living unit of an organism is an organ. (T/F) – **[F]**
- (d) *Amoeba* has irregular shape. (T/F) – **[T]**

2. Make a sketch of the human nerve cell. What function do nerve cells perform?

Ans: Nerve cell receives and transfer messages, thereby helping to control and coordinate the working of different parts of the body.



3. Write short notes on the following:

- (a) Cytoplasm
- (b) Nucleus of a cell

Ans: (a) Cytoplasm - The jelly like matrix present between the cell membrane and the nucleus is called cytoplasm. Various other components of cells are present in the cytoplasm. They are called as organelles E.g. Mitochondria, Golgi bodies etc.

(b) Nucleus of the cell-

- i] It is generally spherical and located in the centre of the cell.
- ii] The nucleus is separated from the cytoplasm by a membrane called the nuclear membrane.

iii] The nucleus contains thread-like structures called chromatin. The chromatin condenses during cell division to form chromosomes. They carry genes and help in inheritance or transfer of characters from the parents to the offspring (young ones).

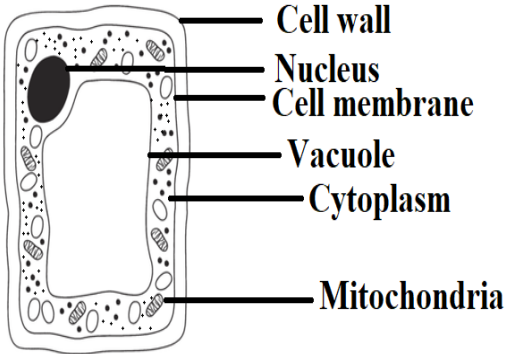
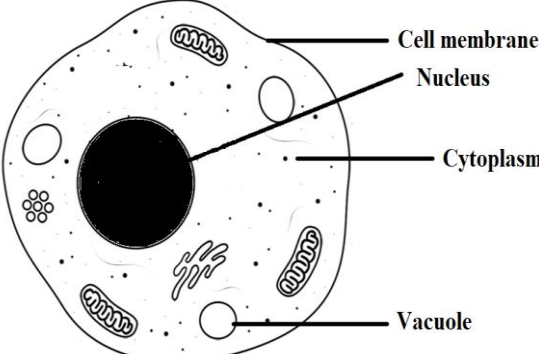
iv] The nucleus contains a small spherical body called nucleolus.

4. Which part of the cell contains organelles?

Ans: Cell organelles are located in the cytoplasm of the cell.

5. Make sketches of animal and plant cells. State three differences between them.

Ans:

PLANT CELL	ANIMAL CELL
 <p>Cell wall Nucleus Cell membrane Vacuole Cytoplasm Mitochondria</p>	 <p>Cell membrane Nucleus Cytoplasm Vacuole</p>
1. Cell wall is present	1. Cell wall is absent.
2. Chloroplast is present.	2. Chloroplast is absent.
3. A single large vacuole is found.	3. Many small vacuoles are found

6. State the difference between eukaryotes and prokaryotes.

Ans:

PROKARYOTES	EUKARYOTES
<p>The cells having nuclear material without nuclear membrane are termed prokaryotic cells.</p> <p>The organisms with cells having nuclear material without nuclear membrane are called prokaryotes</p>	<p>The cells having well organised nucleus with a nuclear membrane is designated as eukaryotic cells.</p> <p>The organisms with cells having well organised nucleus with a nuclear membrane are called Eukaryotes.</p>
E.g.: Bacteria and blue green algae	E.g. Plant cell and animal cell

Ans:

¹ C	H	L	² O	R	O	P	H	Y	L	L	
H			R								
L			G								
³ O	R	G	A	N	E	L	L	E			
R			N						⁴ M		
O							⁵ V		E		
⁶ P	R	O	⁷ T	O	P	L	A	S	M		
L			I				C		B		
A			S				U		R		
S			S				O		A		
T			U				L		N		
S			E				⁸ G	E	N	E	S

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