



**STATE COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING
TELANGANA, HYDERABAD.**

READINESS PROGRAMME LEVEL - I

Class : X

Medium : English

Subject : Biological Science

Name of the chapter : CELL - STRUCTURE AND FUNCTIONS Worksheet No : 1

Name of the topic / concept : PLANT CELL AND ANIMAL CELL

CONCEPTS:

1. Cell organelles
2. Plant cell
3. Animal cell

LEARNING OUTCOMES:

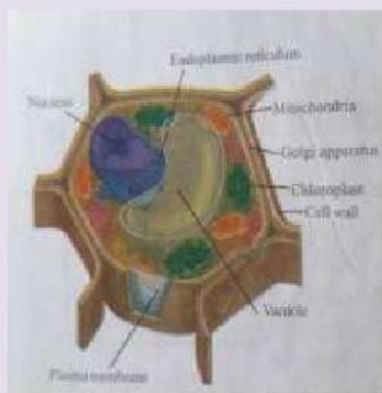
The learner ...

1. Identifies different cell organelles and their functions.
2. Differentiates the structure of plant cell and animal cell.
3. Makes the model of an animal cell with locally available resource material.
4. Explains the functions of different cell organelles.

BRIEF SUMMARY:

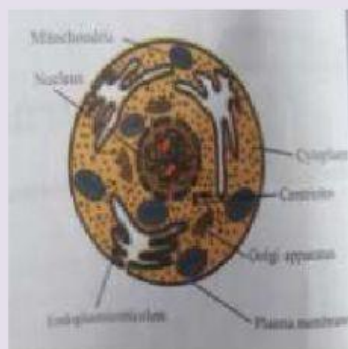
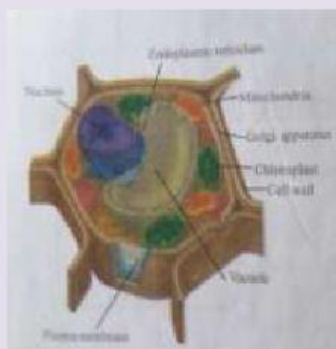
Cell is the basic structural and functional unit of an organism. Cells contain different cell organelles like Mitochondria, Plastids, Ribosomes, Endoplasmic reticulum, Golgi apparatus, Lysosomes and vacuoles.

Activity-1: Observe the given diagram and list out the organelles



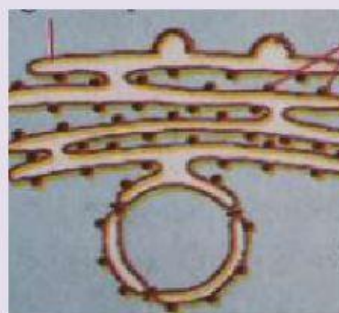
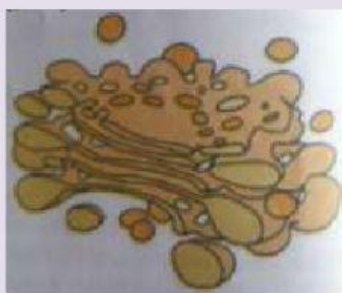
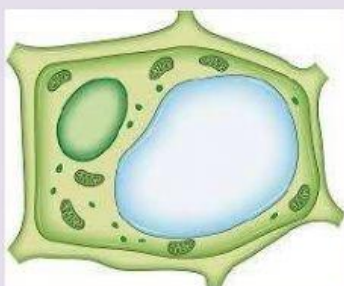
1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

Activity-2: Observe the given diagrams and differentiate the plant cell and animal cell.



Plant Cell	Animal Cell

Activity-3: Observe the given figures and write their names and functions in the given table.



Name of the cell organelle	Function

ASSESSMENT:

1. Plant cell can be identified by the presence of ()

- i. Chloroplast
- ii. Plasma membrane
- iii. Cell wall
- iv. Mitochondria

A) i and ii B) i and iii C) ii and iii D) iv only

2. Match the following ()

- | | |
|------------------------------|---------------------------|
| a. Control room of the cell | i) Lysosome |
| b. Powerhouse of the cell | ii) Nucleus |
| c. Network of membranes | iii) Mitochondria |
| d. Suicidal bags of the cell | iv) Endoplasmic reticulum |

A) a-i, b-ii, c-iii, d-iv B) a-ii, b-iii, c-iv, d-i
C) a-ii, b-iv, c-i, d-iii D) a-iii, b-ii, c-iv, d-i

3. Choose the incorrect statement. ()

- A) Endoplasmic reticulum transport substances from one part of the cell to other part.
- B) Golgi bodies pack various substances before they are transported to other parts of the cell.
- C) The materials that need to be destroyed are transported to the lysosomes.
- D) Nucleus is considered as the powerhouse of the cell.

4. Draw a neat labelled diagram of Nucleus.

5. Choose the correct statements. ()

- I. Rough endoplasmic reticulum is the site of protein synthesis.
- II. Smooth endoplasmic reticulum helps in the manufacture of fat molecules.
- III. Number of Golgi bodies varies from cell to cell.
- IV. Plant cell differ from animal cell in having cell wall.

A) I and II

B) I and III

C) I, II and III

D) I, II, III and IV

RESOURCES:

<https://www.youtube.com/watch?v=ApvxVtBJxd0> <https://www.youtube.com/watch?v=KOZDAyWZ8Wg>
<https://www.youtube.com/watch?v=V6s0xOTNmT4>