

# WELLAND GOULDSMITH SCHOOL

## CLASS-VI

### BIOLOGY ANSWER KEY

#### CHAPTER 3-CELL

##### **Name them:-**

1. Cell sap
2. Ribosomes
3. Robert Brown
4. Knoll and Ruska
5. Bacterium

##### **Fill in the blanks:-**

1. Ribonucleic acid
2. Mitochondria
3. Nucleoplasm, nucleolus, chromatin material.
4. Bacteria/Yeast
5. Chromoplast

##### **Book questions:-**

##### **A. Name the following:-**

1. Cell wall
2. Leucoplast
3. Ciliated cell
4. Prokaryotic cell

##### **B. Short answer questions:-**

1. Pg 42

2.

Plant cell	Animal cell
1. They are larger than animal cells.	1. Usually smaller in size.
2. Cell wall is present and made-up of cellulose.	2. Cell wall is absent around cell membrane.
3. Plastids are present.	3. Plastids are absent.
4. Centrosome is absent.	4. Centrosome is present.

3. Cell membrane controls the entry and exit of materials in and out of the cell. It allows only selective substance to pass through it, so it is known as selectively permeable.

4. M.Schleiden, Thodor Schwann and Rudolf Virchow formulated the cell theory.

### C. Long answer :

1. The Cell theory states the following:-

- All living things are composed of cells.
- A cell is the structural and functional unit of life.
- All cells come from the division of pre-existing cells.

2. The cellular components are called the Cell Organelles. These cell organelles are membrane-bound, present within the cells and are distinct in their structures and functions.

CELL ORGANELLE	FUNCTION
Cell membrane	Provides shape, protects the inner organelle of the cell .It is a selectively permeable membrane.
Vacuoles	Provide shape and rigidity to the plant cell and helps in storage of food materials and waste products.
Nucleus	Controls the activity of the cell, helps in cell division and controls the hereditary characters.
Plastids	Helps in the process of photosynthesis, gives colour to leaves, flowers and fruits and stores food.
Mitochondria	Produces energy from oxidation of food.Also known as the power house of the cell.

3. Pg 39 Structure of the Nucleus

4. There are three types of Plastids-

Chromoplast-They are present in fruits and flowers and responsible for their bright colours.

Chloroplast- It contains chlorophyll pigment which is responsible for photosynthesis.

Leucoplast- They are colourless plastids used to store food prepared in the plant in the form of starch, proteins and fats.

**D. Choose the odd one from each of the following:-**

1. Chloroplast 2. Ribosomes 3. Cell wall 4. Hydra

**E. Fill in the blanks:-**

1. Microns 2. Vacuoles 3. Nucleus 4. Cell 5. Microscope

**F. Write true or false and correct the incorrect statements:-**

1. False ; Amoebas are able to change their shapes. They can extend parts of themselves and flow in the direction in which they wish to go.

2. True.

3. True

4. True.

5. False ; Cytoplasm is larger than nucleoplasm.

**G. Choose the correct answer:-**

1. Chromoplast

2. Nerve cell

3. Nucleus

4. Cellulose

5. Ribosomes

6. Robert Hooke

7. Tonoplast.