

# TISSUES

SUBJECT- BIOLOGY

CHAPTER NO- 6

**Introduction: Definition, Importance of tissues**

PERIOD-1

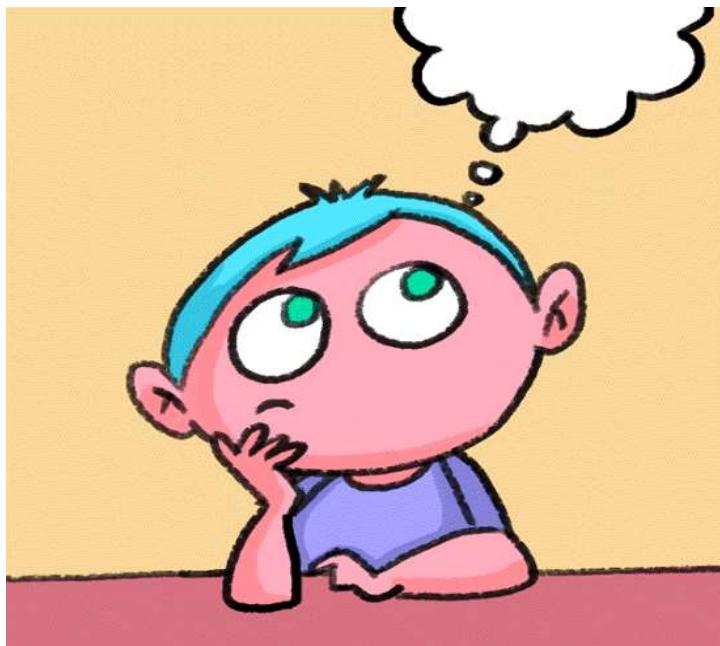
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**CHANGING YOUR TOMORROW**

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## LEARNING OBJECTIVE

- Student will be able to define tissues and state its function.
- Student will be familiarized with the importance of tissues in a complex organism
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## WARM UP QUESTIONS

- Teacher should initiate the discussion on following topics by
- Asking them to share their previous knowledge about cellular organization of living organisms.
- Show them the picture of cellular organization of living organisms and discuss that the complexity and size increases as we move from atoms to organisms

# WHAT DO YOU MEAN BY TISSUES?

A group of cells that are similar in structure and/or work together to achieve a particular function forms a tissue.

- What is the utility of tissues in multi-cellular organisms?
- This cluster of cells, called a tissue, is arranged and designed so as to give the highest possible efficiency of function. Blood, phloem and muscle are all examples of tissues. The Human body works with the principle of division of labor.

Level of Organization	Explanation	Example
 Atomic Level	Atoms are defined as the smallest unit of an element that still maintains the property of that element.	Carbon, Hydrogen, Oxygen
 Molecular Level	Atoms combine to form molecules which can have entirely different properties than the atoms they contain.	Water, DNA, Carbohydrates
 Cellular Level	Cells are the smallest unit of life. Cells are enclosed by a membrane or cell wall and in multicellular organisms often perform specific functions.	Muscle cell, Skin cell, Neuron
 Tissue Level	Tissues are groups of cells with similar functions	Muscle, Epithelial, Connective
 Organ Level	Organs are two or more types of tissues that work together to complete a specific task.	Heart, Liver, Stomach
 Organ System Level	An organ system is group of organs that carries out more generalized set of functions.	Digestive System, Circulatory System
 Organismal Level	An organism has several organ systems that function together.	Human

## IMPORTANCE OF TISSUES

1. It protects the organs from injury or shocks.
2. It also connects many body parts such as ligament connects **bones** to another **bones**.
3. It also provides nutrition to our body such as blood also transport **nutrients** to many parts of the body.
4. It fights against many infectious pathogens.

# HOME ASSIGNMENT

Following questions to be worked out

- Q. write the importance of tissues in a living organism
- Q. explain the cellular organization in a multicellular organism

**THANKING YOU**  
**ODM EDUCATIONAL GROUP**