

## SCOPE OF ANATOMY AND PHYSIOLOGY

### Anatomy

Anatomy is the study of the **structure of different parts of the body**, including their **shape, position, and relationship** with one another.

### Physiology

Physiology is the study of the **functions of body parts**, whether of the **whole body or individual organs and systems**.

### Body Systems

The human body consists of the following major systems:

1. Central nervous system
2. Autonomic nervous system
3. Respiratory system
4. Cardiovascular system
5. Digestive system
6. Urinary system
7. Lymphatic system
8. Skeletal system
9. Reproductive system
10. Muscular system
11. Endocrine system
12. Excretory system
13. Integumentary system

### Various Terms Used in Anatomy

1. **Cell:**  
The smallest, basic, living, structural, and functional unit of the body.
2. **Tissue:**  
A group of similar cells performing a specific function.
3. **Anatomical position:**  
The body standing upright, head facing forward, arms by the side, and palms facing forward.
4. **Proximal end:**  
The part of a structure **nearest to the point of origin**.
5. **Distal end:**  
The part of a structure **farthest from the point of origin**.
6. **Superior:**  
The upper part of the body.

7. **Inferior:**

The lower part of the body.

8. **Symmetrical:**

Right and left parts are similar

Examples: eyes, ears, lungs, kidneys.

9. **Asymmetrical:**

Right and left parts are not similar

Example: wrist.

10. **Median line:**

The imaginary central line that divides the body into **right and left halves**.

### Other Terms Used in Anatomy and Physiology

1. **Cytology:** Study of cells

2. **Histology:** Study of tissues

3. **Myology:** Study of muscles

4. **Neurology:** Study of the nervous system

5. **Cardiology:** Study of the heart

6. **Osteology:** Study of bones

7. **Haematology:** Study of blood

8. **Odontology:** Study of teeth

9. **Arthrology:** Study of joints

10. **Pathology:** Study of the nature and causes of diseases

