

Anatomy

theory

By

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Introduction to Anatomy

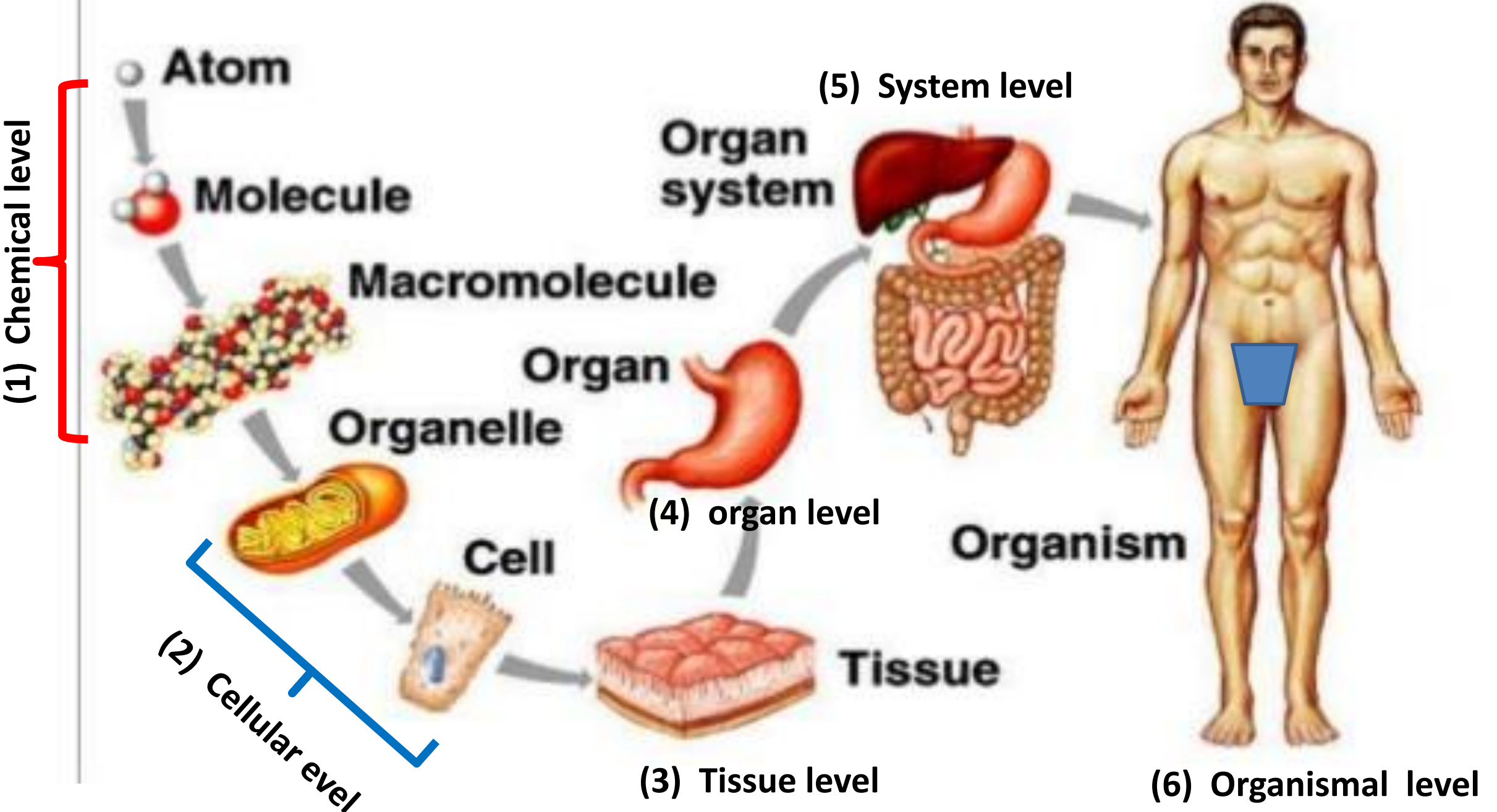
Definitions

Definition

- For understanding the body's parts and functions; two branches of science—**anatomy** and **physiology**— will provide the basis for such objectives.
- **Anatomy** is the study of body structures and the relationships among them.

Levels of Structural Organization

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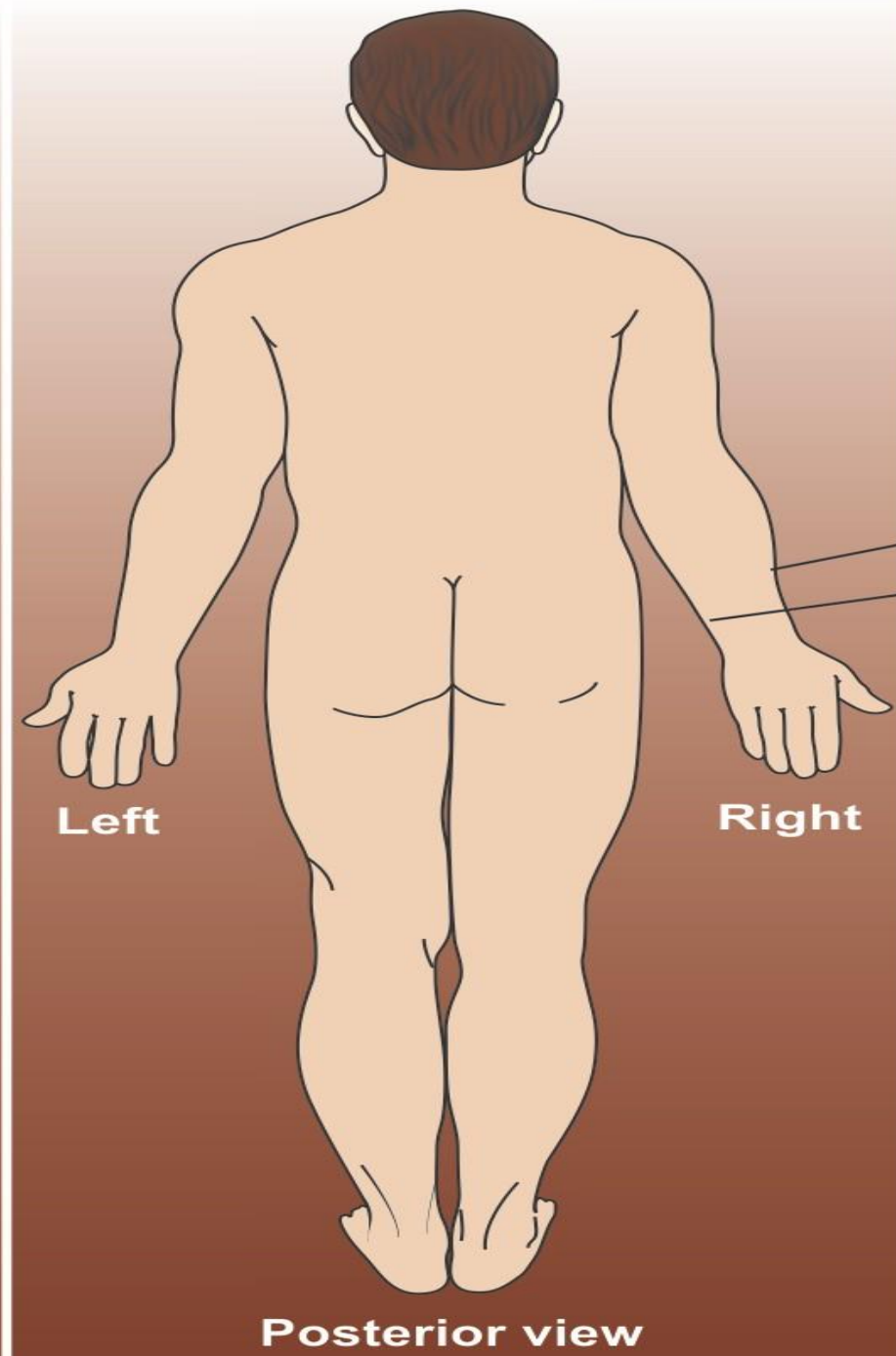
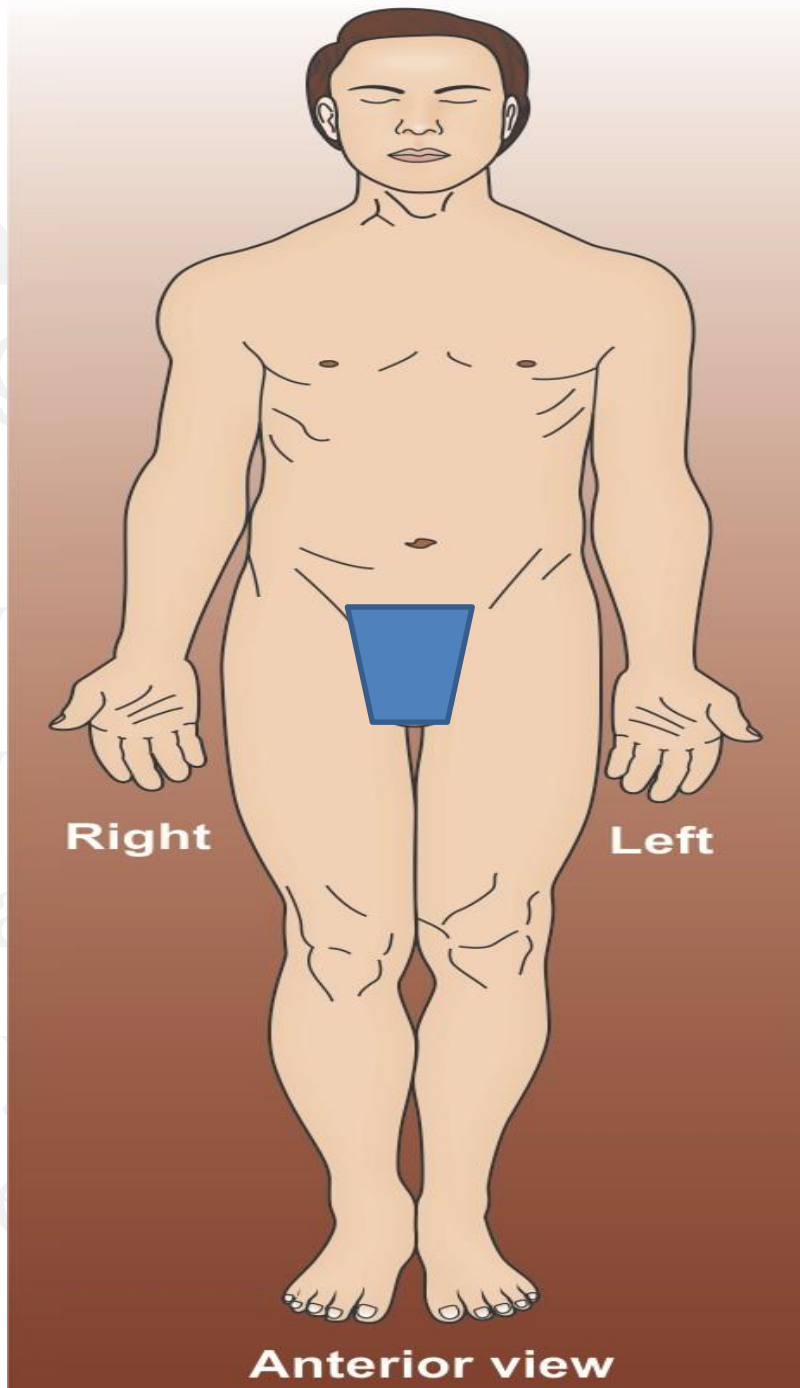


ANATOMICAL POSITION

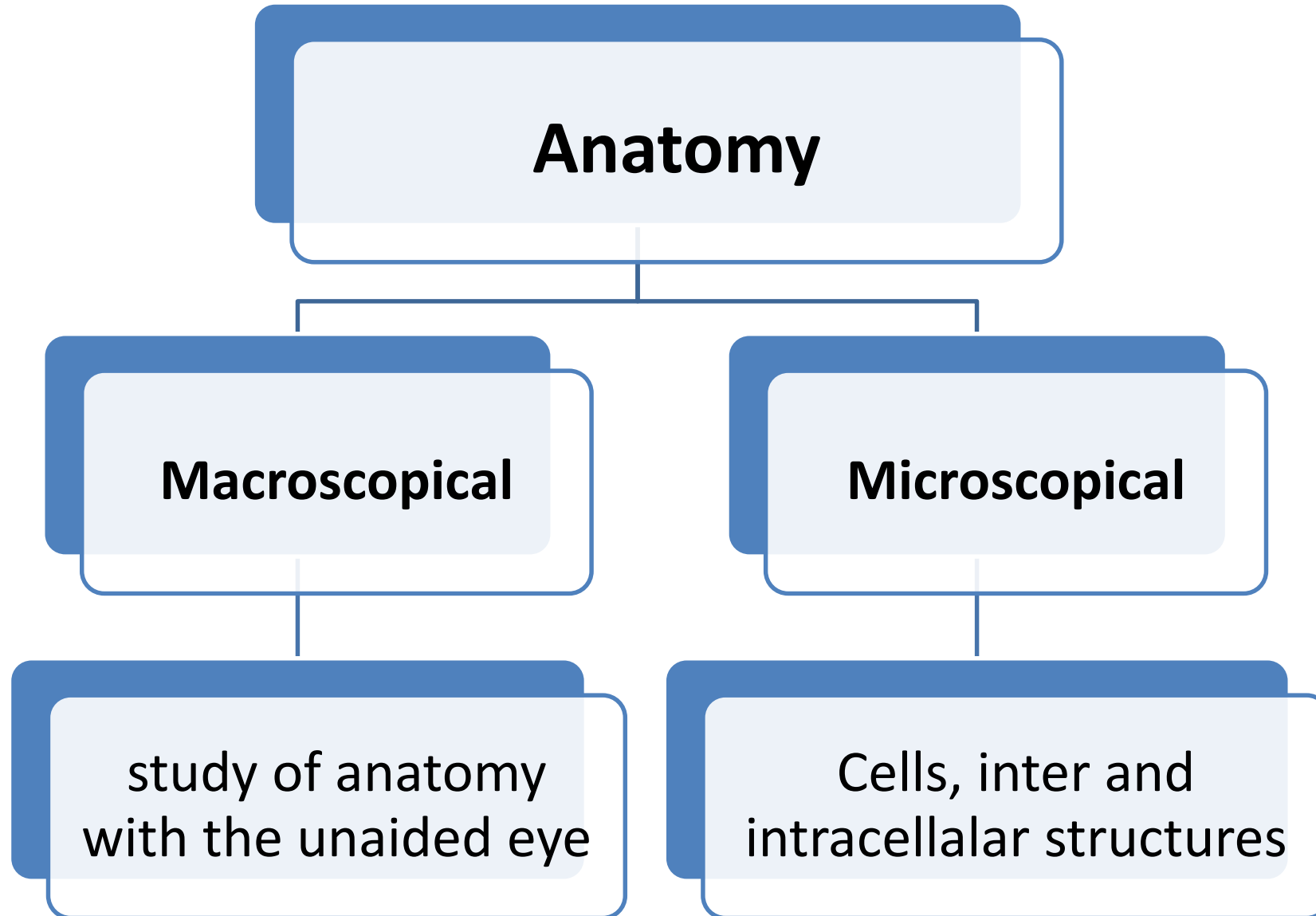
The *anatomical position* is a standardized method for observing or imaging the body.

1. Usual bipedal erect position
2. Upper limbs hangs adducted and palms faces anteriorly.
3. Eyes facing forwards.
4. Feet remain parallel on the same level.

ANATOMICAL POSITION



Divisions



Macroscopical (Gross) anatomy

1. Cadaveric anatomy: study of anatomy of dead bodies.

A. Systemic anatomy.

➤ Locomotor system

- Osteology

- Myology

- Arthrology (joints)

Macroscopical (Gross) anatomy

- Visceral system
 - Alimentary system (GIT)
 - Respiratory system
 - Endocrine system
 - Urogenital system
 - Cardiovascular system
 - Nervous system or neurology
 - Integumentary system or dermatology
- Special senses

Macroscopical (Gross) anatomy

B. Regional anatomy:

- Head
- Neck
- Trunk: back, thorax, abdomen and pelvis
- Upper extremities
- Lower extremities

2. *Developmental Anatomy* – the study of the biological processes that extend from fertilization to the formation of the adult anatomy. Embryology is a subdivision of developmental anatomy that is concerned exclusively with the developmental processes that occur prior to birth.

3. *Comparative Anatomy* – the study of the anatomies of different organisms, drawing contrasts and similarities between the structure and function of the anatomies.
4. *Applied Anatomy* – the practical application of anatomy, typically in a diagnostic or therapeutic clinical procedure, e.g., the application of anatomical knowledge during the performance of a physical examination.

5. *Clinical Anatomy* – It deals with the abnormal condition of the tissue or organs when clinical conditions are examined and compared with the normal conditions

6. *Cross-Sectional Anatomy* – anatomy viewed in the transverse (horizontal) plane of the body.

7. *Neuroanatomy* – the study of the central and peripheral nervous systems.

8. *Surface anatomy* - Surface markings of the body to locate and reveal internal structures through visualization and palpation (gentle touch).

9. *Radiographic Anatomy* (*Radiological Anatomy*)

– the study of anatomy as observed with imaging techniques that are derived from the diagnostic and therapeutic tools of the clinical field of radiology; within clinical practice commonly includes plain film radiography (with or without contrast materials), magnetic resonance imaging (MRI), computed tomography (CT), and ultrasonography.

10. *Living anatomy*: is the observation of the living body.

TECHNIQUES AND METHODS USED TO KNOW ABOUT LIVING ANATOMY

1. Inspection
2. Palpation
3. Percussion
4. Auscultation
5. Endoscopic examination
6. Imaging