



## The Circulatory System and Its Parts

### The Circulatory System:

The human body functions like a complex machine with multiple organ systems.

#### Key systems:

- i. Digestive system
- ii. Respiratory system
- iii. Excretory system

### Function of the Circulatory System::

Transports oxygen, nutrients, and cell waste through blood.

Similar to a delivery truck but carries essential substances instead of packages.

Works continuously without a break to maintain bodily functions.

### Parts of the Circulatory System:

#### i. The Heart

Multi-chambered, muscular organ.

Pumps blood throughout the body.

#### ii. Blood

A tissue composed of:

- **Plasma:** The liquid portion carrying nutrients, hormones, and waste.
- **Red Blood Cells (RBCs):** Transport oxygen.
- **White Blood Cells (WBCs):** Fight infections.
- **Platelets:** Help in blood clotting.

#### iii. Blood Vessels

Network of channels that carry blood:

- **Arteries:** Carry oxygen-rich blood away from the heart.
- **Veins:** Carry oxygen-depleted blood back to the heart.
- **Capillaries:** Tiny vessels where the exchange of oxygen, nutrients, and waste occurs.