

body's tissues, while veins carry oxygen-poor blood back to the heart. Capillaries are small, thin blood vessels that connect arteries and veins and allow for the exchange of nutrients and waste products between the blood and the body's tissues.

❖ The blood itself is composed of plasma, red blood cells, white blood cells, and platelets. Plasma is a yellowish liquid that makes up about 55% of blood volume and carries nutrients, hormones, and waste products. Red blood cells, which make up about 45% of blood volume, contain hemoglobin and transport oxygen from the lungs to the body's tissues. White blood cells help fight infections, and platelets are essential for blood clotting.

❖ The cardiovascular system plays a crucial role in maintaining homeostasis in the body, regulating body temperature, and transporting essential substances such as oxygen, nutrients, and hormones to the body's tissues. Any disruption to this system can lead to various cardiovascular diseases, including hypertension,