



SNS COLLEGE OF TECHNOLOGY



(An Autonomous Institution)

COIMBATORE-35

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UNIT II:BIODIVERSITY

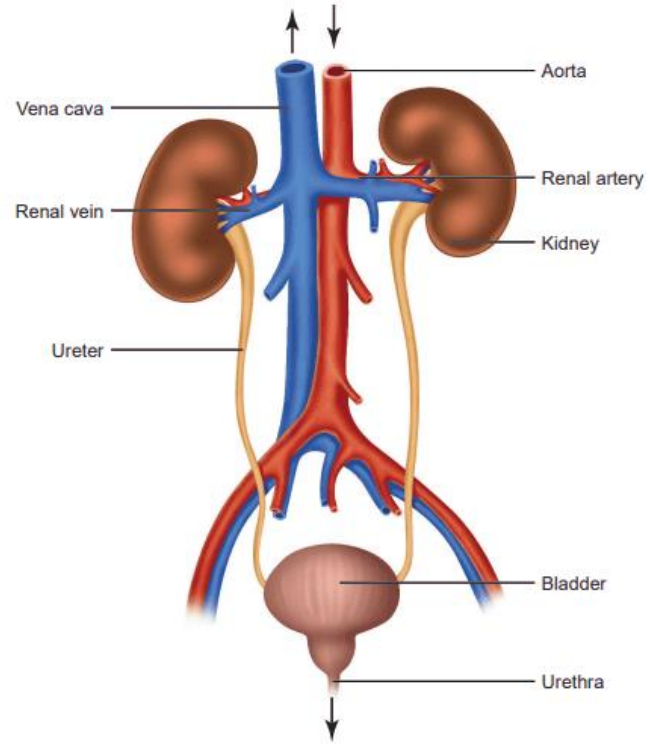
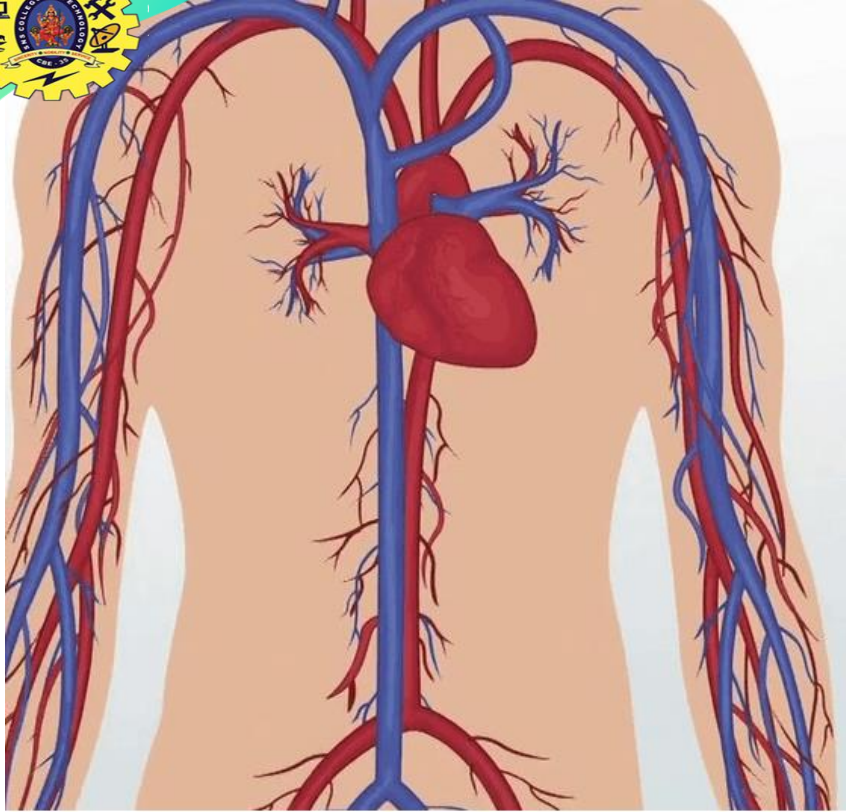
TOPIC: **Circulatory-excretory systems and their functions**





TOPIC OUTLINE







The Circulatory System

- Simply put, the body's circulatory system is the body's transportation system.
- The circulatory system consists of the blood, the heart, the blood vessels, and the lymphatic system. The lymphatic system is in chapter 37.
- The circulatory system transports oxygen, nutrients, disease-fighting materials, cell fragments and proteins used for blood clotting, and the circulatory system distributes heat uniformly throughout the body.



Blood Vessels

- Just like a highway transportation system has roads, on and off ramps, stop lights etc., the circulatory system has blood vessels.
- Oxygen-rich blood is carried away from the heart in blood vessels called arteries. Arteries are strong thick-walled vessels that are elastic and durable. They are able to withstand high pressures exerted by the pumping heart.


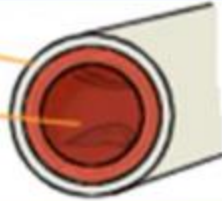



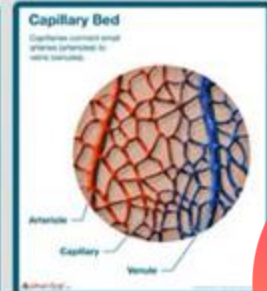
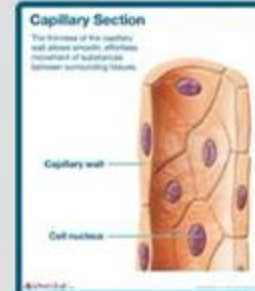
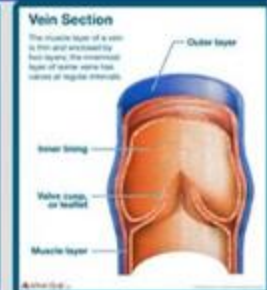
Blood Vessels

- When arteries get closer to their intended destination (usually an organ or a tissue), they begin branching off into thin-walled delicate vessels known as capillaries.
- Capillaries are microscopic blood vessels where the exchange of important substances and wastes occurs.
- After the blood travels through the capillaries they enter the veins, which carry oxygen-poor blood back to the heart.



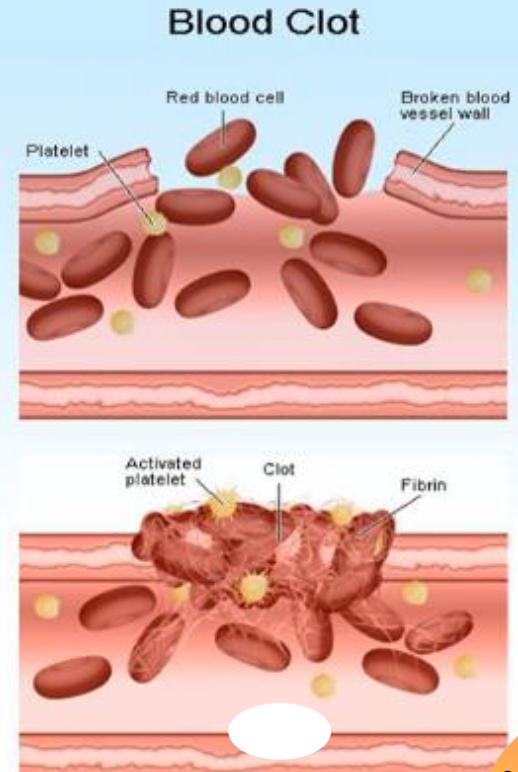
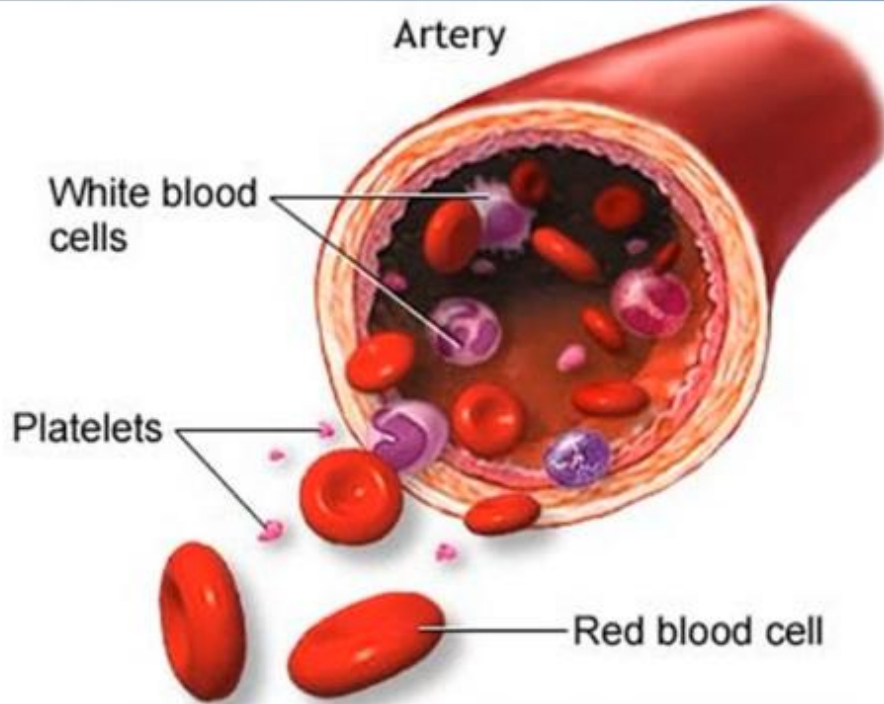
Arteries and Veins

Artery	<p>thick, elastic wall</p> <p>small lumen</p> 
Vein	<p>thin wall</p> <p>large lumen</p> <p>valve</p> 
Capillary	<p>single cell wall</p> 





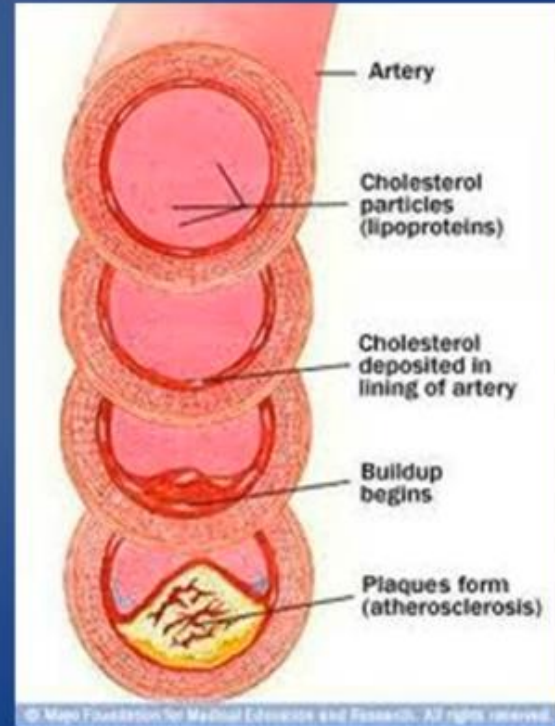
The Blood





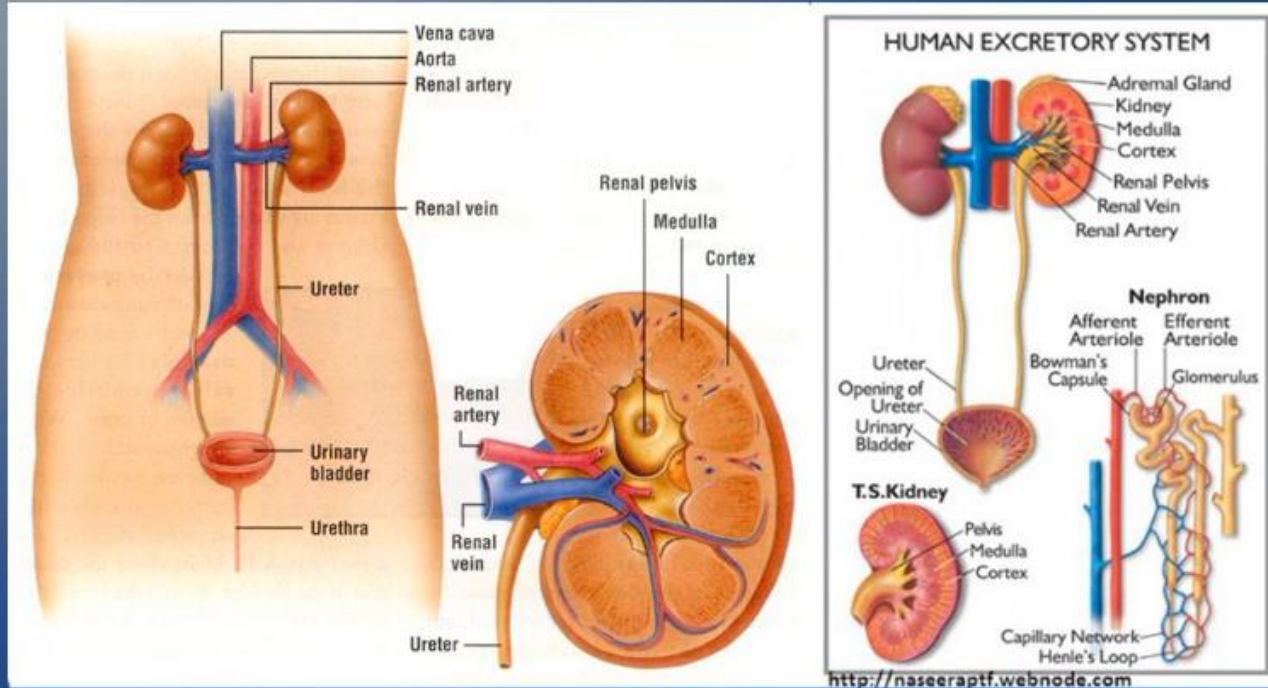
Circulatory System Disorders

- Heart attacks occur when blood is prevented from returning to the heart.
- Strokes occur when blood is prevented from reaching the brain.
- Heart attacks result in damage to the heart or death. Strokes most often result in brain damage.





The Excretory System





RECAP....



...THANK YOU