

# **Module 14: Cardiovascular System — Keys to Success**

## **Key Learning Objectives**

### **1. Cardiovascular System Overview**

- Identify the components of the cardiovascular system
- Describe the functions of the cardiovascular system
- Explain the concept of a closed circulatory system
- Compare systemic and pulmonary circulation

### **2. Heart Anatomy**

- Describe the structure of the heart (chambers, valves, vessels)
- Trace the path of blood through the heart
- Identify the coronary circulation
- Explain the structure of the heart wall

### **3. Cardiac Cycle and Heart Sounds**

- Describe the cardiac cycle (systole and diastole)
- Explain what causes heart sounds
- Understand cardiac output and factors that affect it
- Interpret basic electrocardiograms (ECGs)

### **4. Electrical Conduction System**

- Describe the electrical conduction system of the heart
- Explain the roles of the SA node, AV node, and Purkinje fibers
- Understand how the heart maintains its rhythm
- Describe how the nervous system influences heart rate

## 5. Blood Vessels

- Compare the structure and function of arteries, veins, and capillaries
- Explain how vessel structure relates to function
- Describe blood flow and blood pressure dynamics
- Understand the exchange of materials at capillaries

## 6. Blood and Blood Pressure

- Describe the composition of blood
  - Explain the functions of blood components
  - Understand how blood pressure is measured and regulated
  - Identify cardiovascular disorders and their risk factors
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## Study Tips

1. **Trace blood flow** through the heart and body
2. **Draw labeled diagrams** of heart structure
3. **Compare vessel types** in tables
4. **Practice reading ECGs** with basic examples
5. **Connect lifestyle factors** to cardiovascular health