REVIEW SHEET

Conduction System of the Heart and Electrocardiography

Name _____ Lab Time/Date _____

The Intrinsic Conduction System

1. List the elements of the intrinsic conduction system in order, starting from the SA node.

   SA node → _____ → _____ →

   _____ → _____

   At what structure in the transmission sequence is the impulse temporarily delayed? _____

   Why? _____

   _____

2. Even though cardiac muscle has an inherent ability to beat, the intrinsic conduction system plays a critical role in heart physiology.

   What is that role? _____

   _____

Electrocardiography

3. Define *ECG.* _____

   _____

4. Draw an ECG wave form representing one heartbeat. Label the P wave, QRS complex, and T wave; the P-R interval; the S-T segment, and the Q-T interval.

5. Why does heart rate increase during running? _____

   _____

   _____

6. Describe what happens in the cardiac cycle in the following situations.

   1. immediately before the P wave: _____
   2. during the P wave: _____
   3. immediately after the P wave: _____
   4. during the QRS complex: _____
   5. immediately after the QRS complex (S-T segment): _____
   6. during the T wave: _____

7. Define the following terms.

   1. *tachycardia:* _____
   2. *bradycardia:* _____
   3. *fibrillation:* _____

8. Abnormalities of heart valves can be detected more accurately by auscultation than by electrocardiography. Why is this so?

_____

_____

_____

WHY THIS MATTERS

9. Given what you know about the correlation between the ECG waves and the electrical events in the heart, what wave of the ECG tracing would you expect to be affected in atrial fibrillation? Explain.

_____

10. Which is more serious, atrial fibrillation or ventricular fibrillation? _____

    Why? _____

Credits

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