

***Basic Arrhythmias, 8e (Walraven)***  
**Chapter 1 Electrophysiology**

1) The inherent rate of the SA node is \_\_\_\_\_ bpm.

- A) 30-60
- B) 40-60
- C) 60-100
- D) 100-120

Answer: C

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Learning Obj.: 1.3

2) The inherent rate of the AV junction is \_\_\_\_\_ bpm.

- A) 20-40
- B) 40-60
- C) 60-100
- D) 100-120

Answer: B

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Learning Obj.: 1.3

3) The inherent rate of the ventricle is \_\_\_\_\_ bpm.

- A) 20-40
- B) 40-60
- C) 60-100
- D) 100-120

Answer: A

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Learning Obj.: 1.3

4) The built-in rate of each of the three major areas of the conduction system is referred to as the \_\_\_\_\_ rate.

- A) fast
- B) heart
- C) escape
- D) inherent

Answer: D

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Learning Obj.: 1.3

5) What term is used to refer to the process of electrical discharge and the flow of electrical activity?

- A) Repolarization
- B) Depolarization
- C) Polarization
- D) Polarized

Answer: B

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Learning Obj.: 1.2

6) If polarizing is considered the ready state, then \_\_\_\_\_ would be considered the recovery state.

- A) discharge
- B) polarization
- C) repolarization
- D) depolarization

Answer: C

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Learning Obj.: 1.2

7) After leaving the area of the AV node, impulses go through the \_\_\_\_\_ to reach the right and left bundle branches.

- A) Purkinje fibers
- B) Bundle of His
- C) AV junction
- D) SA node

Answer: B

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Learning Obj.: 1.3

8) Part of the parasympathetic branch of the autonomic nervous system is the \_\_\_\_\_ nerve.

- A) vagus
- B) coronary
- C) aortic
- D) pericardial

Answer: A

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Learning Obj.: 1.4

9) When stimulated, the \_\_\_\_\_ branch of the nervous system increases heart rate, AV conduction, and irritability.

- A) parasympathetic
- B) sympathetic
- C) pacemaker
- D) inherent

Answer: B

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Learning Obj.: 1.4

10) Which cardiac cells are responsible for initiating and conducting pacemaker impulses?

- A) Motor cells
- B) Mechanical cells
- C) Electrical cells
- D) Atrioventricular cells

Answer: C

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Learning Obj.: 1.1

11) Which is the normal pacemaker of the heart?

- A) SA node
- B) AV node
- C) AV junction
- D) Ventricle

Answer: A

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Learning Obj.: 1.3

12) Which of the following is NOT a part of the normal cardiac conduction system?

- A) Coronary sinus
- B) AV node
- C) Purkinje Fibers
- D) Internodal pathways

Answer: A

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Learning Obj.: 1.1

13) What is the term for the fail-safe mechanism that allows a lower pacemaker to take over when a higher site fails?

- A) Polarization
- B) Irritability
- C) AV conduction
- D) Escape

Answer: D

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Learning Obj.: 1.4

14) Which of the following best explains the mechanism called *irritability*?

- A) The ventricles repolarize before they are ready.
- B) The normal pacemaker slows down and gives up control.
- C) A lower pacemaker site speeds up to take control of the heart.
- D) The normal pacemaker changes its inherent rate.

Answer: C

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Learning Obj.: 1.4

15) Which of the following does NOT happen when the sympathetic branch is stimulated?

- A) Heart rate increases.
- B) The heart becomes more irritable.
- C) Impulses go faster through the AV node.
- D) Ventricular conduction slows down.

Answer: D

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Learning Obj.: 1.4