Day 3 - Take Home Test - Paced, Blocks, Junctional

True/False

Indicate whether the sentence or statement is true or false.

1. An escape rhythm is initiated by a lower pacemaker site when the sinoatrial (SA) node slows or fails to initiate an impulse.

2. The pacemaker cells in the AV junction are located near the nonbranching portion of the bundle of His.

3. The AV node does not contain pacemaker cells.

4. The QRS complex associated with a complete (third-degree) AV block is always wide.

5. Second-degree AV block type I is likely to progress rapidly to a complete (third-degree) AV block without warning.

Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

6. A beat originating from the AV junction that appears later than the next expected sinus beat is called
   a. Junctional escape beat
   b. Period of SA block
   c. Premature junctional complex (PJC)
   d. Premature atrial complex (PAC)

7. A junctional escape rhythm occurs because of:
   a. Multiple irritable sites firing within the AV junction
   b. Intrathoracic pressure changes associated with the normal respiratory cycle
   c. Severe chronic obstructive pulmonary disease
   d. Slowing of the rate of the heart's primary pacemaker

8. Which of the following dysrhythmias is more commonly seen with an anterior wall myocardial infarction?
   a. Second-degree AV block type II
   b. Third-degree AV block with a narrow-QRS
   c. Second-degree AV block type I
   d. AV nodal reentrant tachycardia

9. 2:1 AV block is characterized by:
   a. Irregular P to P intervals
   b. Irregular R to R intervals
   c. Regular P to P intervals and regular R to R intervals
   d. Irregular P to P intervals and regular R to R intervals
10. In pacing, "threshold" refers to:
   a. The ability of a pacemaker to recognize and respond to intrinsic electrical activity
   b. The minimum level of electrical current needed to consistently depolarize the myocardium
   c. A pacing lead with a single electrical pole at the distal tip of the pacing lead through which the stimulating pulse is delivered
   d. The ability of a pacemaker to increase the pacing rate in response to physical activity or metabolic demand

Short Answer

11. Complete the following ECG criteria for a junctional escape rhythm.
   Rate
   Rhythm
   P waves
   PR interval
   QRS duration

12. Complete the following ECG criteria for an accelerated junctional rhythm.
   Rate
   Rhythm
   P waves
   PR interval
   QRS duration

13. Identify the following rhythm:

   Identification:

14. Identify the following rhythm:

   Identification:
15. Identify the following rhythm:

Identification:

16. Identify the following rhythm:

Identification:

17. Identify the following rhythm:

Identification:

18. Identify the following rhythm:

Identification:

19. Identify the following rhythm:

Identification:
20. Identify the following rhythm:

Identification:

21. Identify the following rhythm:

Pacing Type Interval
Rate
Rhythm
P waves
PR interval
QRS duration
Identification:

22. Identify the following rhythm:

Identification:

23. Identify the following rhythm:

Identification:
24. Identify the following rhythm:

Identification:

25. An ECG rhythm strip shows a regular ventricular rhythm at a rate of 44, more P waves than QRS complexes (the P waves occur regularly), a variable PR interval, and a QRS duration of 0.10 sec. What is the rhythm?

26. An ECG rhythm strip shows an irregular ventricular rhythm at a rate of 46–54 bpm, more P waves than QRS complexes (the P waves occur regularly), lengthening PR intervals, and a QRS duration of 0.08 sec. What is the rhythm?

27. Indicate the ECG criteria for the following dysrhythmias.

<table>
<thead>
<tr>
<th>Ventricular Rhythm</th>
<th>Second-Degree AV Block Type II</th>
<th>Third-Degree AV Block</th>
</tr>
</thead>
<tbody>
<tr>
<td>PR interval</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QRS width</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

28. Indicate the ECG criteria for the following dysrhythmias.

<table>
<thead>
<tr>
<th>Ventricular Rhythm</th>
<th>Second-Degree AV Block Type I</th>
<th>Third-Degree AV Block</th>
</tr>
</thead>
<tbody>
<tr>
<td>PR interval</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QRS width</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

29. Indicate the ECG criteria for the following dysrhythmias.

<table>
<thead>
<tr>
<th>Ventricular Rhythm</th>
<th>Second-Degree AV Block Type I</th>
<th>Second-Degree AV Block Type II</th>
</tr>
</thead>
<tbody>
<tr>
<td>PR interval</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QRS width</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

30. Complete the following ECG criteria for third-degree AV block.

| Rate | Rhythm | P waves | PR interval | QRS duration |
|------|--------|---------|-------------|--------------|--------------|
|      |        |         |             |              |              |
31. Complete the following ECG criteria for second-degree AV block type II.
   Rate
   Rhythm
   P waves
   PR interval
   QRS duration

32. Complete the following ECG criteria for second-degree AV block type I.
   Rate
   Rhythm
   P waves
   PR interval
   QRS duration

33. Complete the following ECG criteria for first-degree AV block.
   Rate
   Rhythm
   P waves
   PR interval
   QRS duration

34. List two (2) AV blocks that may occur at the level of the bundle branches.
   1.
   2.

35. List two (2) AV blocks that may occur at the level of the bundle of His.
   1.
   2.

36. Identify the following rhythm:

   Identification:
37. Identify the following rhythm:

Pacing _______ Type _______ Interval ________
Rate
Rhythm
P waves
PR interval
QRS duration
Identification: 

38. Identify the following rhythm:

Identification: 

39. Identify the following rhythm:

Identification: 
40. Identify the following rhythm:

Pacing Type Interval
Rate
Rhythm
P waves
PR interval
QRS duration
Identification:

41. Identify the following rhythm:

Identification:

42. Identify the following rhythm:

Identification:
43. Identify the following rhythm:

Pacing _____ Type _____ Interval _____
Rate _____
Rhythm _____
P waves _____
PR interval _____
QRS duration _____

Identification: __________

44. Identify the following rhythm:

Identification: __________

45. Identify the following rhythm:

Identification: __________

46. What does “rate modulation” refer to?

47. In pacing, what does “sensitivity” refer to?
48. Identify the following rhythm:

Pacing Type Interval

Rate

Rhythm

P waves

PR interval

QRS duration

Identification:

49. Identify the following rhythm:

Pacing Type Interval

Rate

Rhythm

P waves

PR interval

QRS duration

Identification:

50. Identify the following rhythm:

Pacing Type Interval

Rate

Rhythm

P waves

PR interval

QRS duration

Identification: