Cardiac HealthStream Telemetry Practice Exam (Sample)

Study Guide

Everything you need from our exam experts!

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Introduction

Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.

This guide was designed to help you do exactly that.

Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.

The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:

- **Practice answering questions under realistic conditions,**
- **Improve accuracy and speed,**
- **Review explanations to strengthen weak areas, and**
- **Approach the exam with greater confidence.**

We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.

Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.

Let's begin.

How to Use This Guide

This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here’s how to get the most out of your Examzify study guide:

1. Start with a Diagnostic Review

Skim through the questions to get a sense of what you know and what you need to focus on. Your goal is to identify knowledge gaps early.

2. Study in Short, Focused Sessions

Break your study time into manageable blocks (e.g. 30 – 45 minutes). Review a handful of questions, reflect on the explanations.

3. Learn from the Explanations

After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.

4. Track Your Progress

Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.

5. Simulate the Real Exam

Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.

6. Repeat and Review

Don’t just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning. Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.

There’s no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly, adapt the tips above to fit your pace and learning style. You've got this!

Questions

1. Torsades de Pointes is described as

A. Smooth, uniform QRS complexes.

B. Corkscrew appearance and prolonged QTc.

C. Narrow QRS with upright P waves.

D. Monomorphic, regular VT.

2. Premature Ventricular Complex (PVC) occurs when

A. Atrial site generates an impulse before next regular sinus beat.

B. Ventricular site generates an impulse before next regular sinus beat.

C. SA node fails temporarily.

D. AV node blocks conduction.

3. Which structure serves as the backup pacemaker with a typical rate of 40-60 bpm?

A. AV Node, 40-60 bpm

B. SA Node, 60-100 bpm

C. Bundle of His, 40-60 bpm

D. Purkinje Fibers, 14-40 bpm

4. What is a hallmark of Bundle Branch Block on ECG?

A. Wide QRS complex, sometimes with bunny ears

B. No QRS change, rhythm normal

C. Short PR interval with narrow QRS

D. Absent P waves

5. Sinus Tachycardia is best described as which rhythm?

A. Atrial Fibrillation with Rapid Ventricular Response

B. Ventricular Tachycardia

C. Sinus Tachycardia

D. Torsades de Pointe

6. VT Polymorphic features are

A. QRS morphology remains constant.

B. P waves before each QRS.

C. Narrow QRS complexes.

D. QRS morphology varies in shape and amplitude.

7. From a six-second strip, what is the multiplier after counting R waves in 30 small squares?

A. ×10

B. ×5

C. ×2

D. ×20

8. Sinus Bradycardia is defined by rate.

A. <60

B. 60-100

C. >100

D. Rate varies

9. Which pattern on ECG is associated with Atrial Flutter?

A. Irregular rhythm with no P waves

B. Classic "Saw tooth pattern" with flutter waves

C. Wide QRS complexes

D. P waves preceding each QRS with regular rhythm

10. What is the typical rate for a junctional escape rhythm?

A. 40-60 bpm

B. 60-100 bpm

C. <40 bpm

D. >100 bpm

Answers

1. B
2. B
3. A
4. A
5. C
6. D
7. A
8. A
9. B
10. A

Explanations

1. Torsades de Pointes is described as

A. Smooth, uniform QRS complexes.

B. Corkscrew appearance and prolonged QTc.

C. Narrow QRS with upright P waves.

D. Monomorphic, regular VT.

Torsades de Pointes is a polymorphic ventricular tachycardia that occurs when the QT interval is prolonged. The key visual cue on the ECG is a twisting, corkscrew pattern of the QRS complexes as they appear to rotate around the baseline. This happens because the extended repolarization phase makes the ventricles more susceptible to afterdepolarizations that trigger beats at varying times, changing the direction and amplitude of the QRS with each beat. So the corkscrew appearance paired with a prolonged QT interval is the hallmark of torsades de Pointes. The other descriptions fit different ECG patterns: smooth, uniform QRS complexes describe a uniform, monomorphic rhythm; narrow QRS with upright P waves points to normal sinus rhythm or a non-ventricular origin; monomorphic, regular VT is a single-shaped (non-twisting) ventricular tachycardia.

2. Premature Ventricular Complex (PVC) occurs when

A. Atrial site generates an impulse before next regular sinus beat.

B. Ventricular site generates an impulse before next regular sinus beat.

C. SA node fails temporarily.

D. AV node blocks conduction.

Premature ventricular contraction happens when an impulse starts in a ventricular ectopic focus and triggers a beat earlier than the next expected sinus beat. This is exactly what the option states: a ventricular site generates an impulse before the next regular sinus beat. On ECG, you'd see a wide, bizarre QRS complex that often occurs without a preceding P wave and is followed by a compensatory pause. If the impulse came from the atria, you'd expect a premature atrial contraction, which typically has a normal or narrow QRS because the ventricles are still activated through the normal pathway and often shows a preceding P wave. If the SA node failed temporarily, you'd get a pause or arrest rather than an early beat. If the AV node blocked conduction, you'd see a dropped beat or a markedly altered PR interval, not an early ventricular beat.

3. Which structure serves as the backup pacemaker with a typical rate of 40-60 bpm?

A. AV Node, 40-60 bpm

B. SA Node, 60-100 bpm

C. Bundle of His, 40-60 bpm

D. Purkinje Fibers, 14-40 bpm

The heart relies on a hierarchy of pacemakers, with the SA node normally setting the rhythm at about 60–100 bpm. If the SA node fails or its signals don't reach the ventricles, another automatic focus can take over—the AV node. The AV node has an intrinsic firing rate around 40–60 bpm, which is slower than the SA node but fast enough to sustain a heartbeat. This makes it the classic backup pacemaker, or escape rhythm, when the primary pacemaker isn't driving. In contrast, Purkinje fibers pace much more slowly (roughly 20–40 bpm) and would only take over if both the SA node and AV node failed, which is why they aren't the usual backup pace. The bundle of His is part of the conduction pathway and doesn't typically set the rhythm by itself as a backup pacemaker.

4. What is a hallmark of Bundle Branch Block on ECG?

A. Wide QRS complex, sometimes with bunny ears

B. No QRS change, rhythm normal

C. Short PR interval with narrow QRS

D. Absent P waves

The key sign is a widened QRS complex from delayed ventricular activation due to a block in one of the bundle branches. A QRS duration greater than about 120 ms signals a bundle branch block. In right bundle branch block you often see a wide QRS with an rsR' pattern in the right precordial leads (V1–V2), sometimes described as bunny ears; in left bundle branch block you get broad, notched R waves in the lateral leads (I, aVL, V5–V6). Other options don't fit because normal QRS duration, short PR with narrow QRS, or absent P waves point to different problems (no BBB, pre-excitation, or atrial/AV conduction issues).

5. Sinus Tachycardia is best described as which rhythm?

A. Atrial Fibrillation with Rapid Ventricular Response

B. Ventricular Tachycardia

C. Sinus Tachycardia

D. Torsades de Pointe

Sinus tachycardia is a fast but regular rhythm that keeps the normal electrical pathway starting from the sinus node. On the ECG you'll see a P wave before every QRS complex, a normal PR interval, and a narrow QRS, but the rate is above 100 beats per minute. This means it's the same sinus rhythm as normal heartbeats, just faster, rather than a rhythm arising from another part of the heart or with abnormal conduction. This distinguishes it from atrial fibrillation with rapid ventricular response, which would show no discrete P waves and an irregular rhythm; from ventricular tachycardia, which usually has wide, abnormal QRS complexes; and from torsades de pointes, which is a polymorphic VT with twisting QRS morphology.

6. VT Polymorphic features are

A. QRS morphology remains constant.

B. P waves before each QRS.

C. Narrow QRS complexes.

D. QRS morphology varies in shape and amplitude.

Polymorphic ventricular tachycardia shows QRS complexes that change shape and amplitude from beat to beat. This variation happens because the ventricular activation vector shifts with each beat, so the depolarization pattern isn't fixed. A classic example is torsades de pointes, where the QRS morphology and axis rotate around the baseline as the rhythm continues. Because the origin of activation isn't the same location with every beat, you don't get a single, consistent QRS appearance. By contrast, a rhythm with a constant QRS shape is more characteristic of monomorphic VT, where the ventricular activation pattern stays the same each beat. If P waves reliably precede each QRS, that points toward atrial involvement with AV conduction rather than a pure ventricular tachycardia pattern. A narrow QRS complex would suggest a supraventricular mechanism with rapid conduction, not a ventricular tachycardia. Therefore, the defining feature of polymorphic VT is that the QRS morphology varies in shape and amplitude.

7. From a six-second strip, what is the multiplier after counting R waves in 30 small squares?

A. ×10

B. ×5

C. ×2

D. ×20

The rate is estimated from a fixed time window by scaling to a minute. A six-second ECG strip spans 30 large squares (each large square is 0.2 seconds). Counting R waves in those 30 large squares and multiplying by 10 gives the heart rate in beats per minute, because 60 seconds divided by 6 seconds equals 10. So the multiplier is 10. If you were counting in small squares, 30 small squares equals 1.2 seconds, which would require a multiplier of 60/1.2 = 50 to scale to a minute. But with the standard six-second window using large squares, the correct multiplier is 10.

8. Sinus Bradycardia is defined by rate.

A. <60

B. 60-100

C. >100

D. Rate varies

Sinus bradycardia is a slow heart rate that originates from the normal sinus node with a regular rhythm. In adults, it is defined as a heart rate below 60 beats per minute, so the description with a rate less than 60 is the correct definition. A rate of 60-100 beats per minute is considered normal resting heart rate, while a rate above 100 is tachycardia. Saying the rate simply varies does not define bradycardia, because the key feature is a distinctly low rate, not variability. Keep in mind that in some healthy individuals like well-trained athletes or during sleep, a rate under 60 can be normal, but the defining threshold remains <60 bpm.

9. Which pattern on ECG is associated with Atrial Flutter?

A. Irregular rhythm with no P waves

B. Classic "Saw tooth pattern" with flutter waves

C. Wide QRS complexes

D. P waves preceding each QRS with regular rhythm

Atrial flutter creates a rapid, organized atrial rhythm that produces distinctive flutter waves, giving a sawtooth appearance on the ECG. These flutter waves reflect the consistent, reentrant atrial activity and are often best seen in leads II, III, aVF, and V1. The atrial rate is typically about 250–350 beats per minute, and the ventricular rate depends on how many atrial impulses are conducted through the AV node (commonly resulting in a regular rhythm with patterns like 2:1 conduction). This sawtooth pattern is the hallmark that sets atrial flutter apart from other rhythms. What would not fit as well: an irregular rhythm with no distinct P waves suggests atrial fibrillation; wide QRS complexes could indicate a conduction problem or other arrhythmias; P waves preceding each QRS with a regular rhythm points to normal sinus rhythm. The sawtooth flutter waves specifically point to atrial flutter.

10. What is the typical rate for a junctional escape rhythm?

A. 40-60 bpm

B. 60-100 bpm

C. <40 bpm

D. >100 bpm

When the primary pacemaker (the SA node) isn't driving the heart, a backup pacemaker in the AV junction can take over. The AV junction has a slower intrinsic firing rate than the SA node, so its escape rhythm usually appears in the 40–60 beats per minute range. This distinguishes it from ventricular escape rhythms, which tend to be slower (often under 40 bpm), and from normal or tachycardic rhythms, which are faster (over 100 bpm). So the typical rate for a junctional escape rhythm is 40–60 bpm.

Next Steps

Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.

As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.

If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.

Or visit your dedicated course page for more study tools and resources:

https://cardiachealthstreamtelemetry.examzify.com

We wish you the very best on your exam journey. You've got this!