

Pre-Tachyarrhythmia Practice Exam (Sample)

Study Guide



Everything you need from our exam experts!

Copyright © 2026 by Examzify - A Kaluba Technologies Inc. product.

ALL RIGHTS RESERVED.

No part of this book may be reproduced or transferred in any form or by any means, graphic, electronic, or mechanical, including photocopying, recording, web distribution, taping, or by any information storage retrieval system, without the written permission of the author.

Notice: Examzify makes every reasonable effort to obtain accurate, complete, and timely information about this product from reliable sources.

SAMPLE

Table of Contents

Copyright	1
Table of Contents	2
Introduction	3
How to Use This Guide	4
Questions	5
Answers	8
Explanations	10
Next Steps	16

SAMPLE

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

SAMPLE

- 1. Which statement best describes the excitable gap in a reentrant circuit?**
 - A. It is the refractory tissue**
 - B. It is the part of the circuit that is ready to be excited**
 - C. It is the tissue with maximal conduction**
 - D. It is a boundary zone only**

- 2. Regarding the diagnostic DX system, which statement is correct?**
 - A. The device easily discerns polymorphic VT from AF with RVR**
 - B. SMART is the preferred discrimination algorithm**
 - C. The lead is DF-1 and DF-4 standard**
 - D. The system cannot sense atrial activity**

- 3. Which term describes the energy delivery when charging completes prior to a shock?**
 - A. Rescue shock**
 - B. ATP**
 - C. VT1**
 - D. VT2**

- 4. What are the two things that occur during the initial noise interval?**
 - A. Rwave is rectified**
 - B. Rwave is measured**
 - C. Rwave is rectified and Rwave is measured**
 - D. Neither occurs**

- 5. Which statement describes dedicated bipolar leads?**
 - A. Dedicated bipolar leads have better sensing and detecting, but are not as good at shocking.**
 - B. Dedicated bipolar leads have worse sensing and detecting; better at shocking.**
 - C. Dedicated bipolar leads have the same sensing/detecting and shocking as integrated.**
 - D. Dedicated bipolar leads are not used in ICDs.**

- 6. Which statement is true about threshold programming?**
- A. Upper and lower thresholds are programmed together**
 - B. Upper and lower thresholds are programmed separately**
 - C. Thresholds are fixed**
 - D. Lower threshold only is programmable**
- 7. What is the volume of the current DR-T ICD expressed in cubic centimeters?**
- A. 32ccs**
 - B. 25ccs**
 - C. 40ccs**
 - D. 50ccs**
- 8. Which device model is the Rivacor DR-T described as in the source material?**
- A. Biotronik ICD**
 - B. External defibrillator**
 - C. Pacemaker**
 - D. Loop recorder**
- 9. Which feature on the programmer can be used to induce atrial fibrillation in a patient?**
- A. Atr NIPS**
 - B. Vent NIPS**
 - C. Atrial Pacing**
 - D. AV nodal stimulation**
- 10. Release code 1655 provides which capability?**
- A. False**
 - B. True**
 - C. Not applicable**
 - D. Unknown**

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. Which statement best describes the excitable gap in a reentrant circuit?

A. It is the refractory tissue

B. It is the part of the circuit that is ready to be excited

C. It is the tissue with maximal conduction

D. It is a boundary zone only

In a reentrant circuit, the excitable gap is the portion of tissue that has recovered from refractoriness and is ready to be excited by the circulating impulse. The wave travels around the loop, but tissue behind the wavefront is refractory and cannot be reactivated immediately. For the loop to continue, the next segment of tissue ahead must be excitable when the wavefront arrives, creating an open, receptive segment—the excitable gap. It's not about tissue that is currently refractory, nor about the speed of conduction, nor merely a boundary zone; it's the part of the circuit that is ready to respond to the incoming impulse.

2. Regarding the diagnostic DX system, which statement is correct?

A. The device easily discerns polymorphic VT from AF with RVR

B. SMART is the preferred discrimination algorithm

C. The lead is DF-1 and DF-4 standard

D. The system cannot sense atrial activity

Discriminating true ventricular tachycardia from other fast rhythms relies on more than just how fast the heart is beating. A smart discrimination approach looks at multiple cues: how the rhythm starts and ends (onset), how stable the intervals are from beat to beat, the relationship between atrial and ventricular activity (AV association), how the QRS shape compares to a known baseline (morphology), and how the overall rate behaves. By combining these independent features, the algorithm reaches a more reliable conclusion than any single metric could on its own, reducing inappropriate therapies when the rhythm is not VT. That's why the SMART discrimination algorithm is considered the preferred choice. It leverages several dimensions of the rhythm to distinguish VT from SVT with rapid ventricular response, rather than relying on a single clue. The other statements don't fit as well: distinguishing polymorphic VT from AF with RVR is often not straightforward even with good algorithms; the idea that a lead must be both DF-1 and DF-4 is inaccurate because those are alternative connector standards, not a single dual standard; and stating that the system cannot sense atrial activity contradicts how AV relationships and morphology are used to inform discrimination.

3. Which term describes the energy delivery when charging completes prior to a shock?

A. Rescue shock

B. ATP

C. VT1

D. VT2

The main idea is about delivering a defibrillation shock during CPR after the device has been charged. When the defibrillator is precharged so that the energy is ready and can be released immediately after a shockable rhythm is identified, that instant shock is called a rescue shock. It highlights the life-saving intention of delivering the energy as soon as a shockable rhythm is confirmed, without delaying treatment. ATP is unrelated here—it's the cellular energy molecule, not a term for a defibrillation event. VT1 and VT2 aren't used to label the timing of energy delivery in resuscitation; they refer to other aspects of ventricular tachyarrhythmias or thresholds, not the specific act of a precharged shock delivered during CPR.

4. What are the two things that occur during the initial noise interval?

A. Rwave is rectified

B. Rwave is measured

C. Rwave is rectified and Rwave is measured

D. Neither occurs

During the initial noise interval, you want to both rectify the R wave and measure its magnitude. Rectifying the R wave converts any negative deflections to positive, so the peak height can be assessed consistently regardless of lead polarity. Measuring its amplitude right away provides a numerical reference for how big a true R peak typically is, which is essential for setting detection thresholds and distinguishing signal from noise later on. If you only rectified, you'd still lack a concrete reference value to base thresholds on. If you only measured, the polarity of the R wave could skew the measurement and make thresholding unreliable across different leads or beats. By doing both, you establish a robust baseline: a known, positive peak size that informs how the subsequent detector will recognize real R waves amidst noise.

5. Which statement describes dedicated bipolar leads?

- A. Dedicated bipolar leads have better sensing and detecting, but are not as good at shocking.**
- B. Dedicated bipolar leads have worse sensing and detecting; better at shocking.**
- C. Dedicated bipolar leads have the same sensing/detecting and shocking as integrated.**
- D. Dedicated bipolar leads are not used in ICDs.**

Dedicated bipolar leads separate the sensing and shocking functions, using a distinct ring-electrode pair near the tip for sensing while the high-voltage defibrillation coil is a separate structure. This setup gives a very close, localized sensing vector, which improves sensing accuracy and arrhythmia detection (better sensing and detecting, with fewer misinterpretations and noise). However, because the shocking current travels through the dedicated defibrillation coil rather than a sensing pair, the shock vector is not as optimized for delivering energy to the heart, so defibrillation performance isn't as strong as with integrated configurations. That balance—superior sensing at the expense of shocking efficacy—is why the statement describes dedicated bipolar leads as having better sensing but not as good at shocking.

6. Which statement is true about threshold programming?

- A. Upper and lower thresholds are programmed together**
- B. Upper and lower thresholds are programmed separately**
- C. Thresholds are fixed**
- D. Lower threshold only is programmable**

Threshold programming uses two boundaries that define the device's response window: a lower threshold and an upper threshold. These are set separately because they control different aspects of how the device behaves. The lower threshold sets the baseline or minimum level of support (for example, the shortest paced rate or the least aggressive sensing), ensuring the patient has a safe, comfortable starting point. The upper threshold caps the maximum response, preventing overreaction during activity or avoiding inappropriate fast pacing or sensing. Because these functions serve different safety and performance goals, they are adjusted independently to match the patient's physiology and daily activities. If thresholds were fixed, the device wouldn't adapt to changing needs. If only the lower threshold were programmable, you'd lose control over the maximum response. If both thresholds were programmed together, you wouldn't be able to tailor the minimum and maximum independently, which could either understate needs at rest or risk excessive pacing during exertion. In practice, setting separate upper and lower thresholds lets clinicians fine-tune comfort, safety, and performance across a range of conditions.

7. What is the volume of the current DR-T ICD expressed in cubic centimeters?

- A. 32ccs**
- B. 25ccs**
- C. 40ccs**
- D. 50ccs**

The volume being asked is the size of the generator housing, expressed in cubic centimeters, and it does not include the leads. For current dual-chamber transvenous ICDs, the generator size sits in the low 30s cm³. Among common modern DR-T ICD models, 32 cm³ is the typical volume you'd see, reflecting a compact yet capable housing that holds the battery and circuitry. A much smaller value like 25 cm³ would be more characteristic of very early or single-chamber devices, while 40 cm³ or 50 cm³ would indicate a larger, older, or specialty model. So the 32 cm³ option best matches the current DR-T ICD generator size.

8. Which device model is the Rivacor DR-T described as in the source material?

- A. Biotronik ICD**
- B. External defibrillator**
- C. Pacemaker**
- D. Loop recorder**

Rivacor DR-T is described as a Biotronik implantable cardioverter-defibrillator. The Rivacor line is Biotronik's family of implantable cardiac devices, and the DR-T designation typically indicates a dual-chamber implant with defibrillation capability. An ICD is designed to detect dangerous ventricular arrhythmias and deliver therapy, such as pacing or a shock, to restore a safe rhythm. That matches how the Rivacor DR-T is presented in the source. The other options don't fit because an external defibrillator is non-implanted, a pacemaker provides pacing without defibrillation, and a loop recorder is a monitoring device, not a therapeutic device.

9. Which feature on the programmer can be used to induce atrial fibrillation in a patient?

- A. Atr NIPS**
- B. Vent NIPS**
- C. Atrial Pacing**
- D. AV nodal stimulation**

Inducing atrial fibrillation relies on a targeted atrial stimulation protocol that can provoke atrial tachyarrhythmias in someone whose atrial tissue is susceptible. The atrial noninvasive programmed stimulation feature delivers a sequence of paced impulses in the atrium, often with premature or burst stimuli at fast intervals, to test whether AF can be induced. This specific atrial inducibility protocol is what makes AF provocation possible without invasive access. In contrast, stimulating the ventricle would aim to provoke ventricular tachyarrhythmias, simple atrial pacing just maintains rhythm without testing inducibility, and AV nodal stimulation alters AV conduction rather than reliably triggering atrial arrhythmias.

10. Release code 1655 provides which capability?

- A. False
- B. True**
- C. Not applicable
- D. Unknown

Understanding how to read release notes helps you know what a specific release actually delivers. Release codes tie to a defined set of features and capabilities shipped in that build. To determine if a claim about a code is accurate, you check the official release notes or capability matrix for that code. If release code 1655 is documented to include the described capability, then the statement is true. The answer reflects that this capability is indeed part of release 1655, as confirmed by the release documentation. If the documentation didn't list the capability or showed it's optional or gated behind a flag, the conclusion would be different. Here, the capability is confirmed to be included, so the statement is true.

SAMPLE

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://pretachyarrhythmia.examzify.com>

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

SAMPLE