MEHLMAN CARDIOLOGY PRACTICE EXAM (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

VISIT US ONLINE FOR THE FULL VERSION STUDY GUIDE

https://mehlmancardiology.examzify.com

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 15

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.

SAMPLE

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!

SAMPLE

Questions

SAMPLE

1. If the patient has an abnormal baseline ECG (e.g., BBB), what stress testing should be used?

A. Nuclear perfusion imaging

B. Resting echocardiogram

C. Echo stress test

D. Exercise treadmill test

2. Which statement is true about management of venous disorders?

A. Compression stockings are first-line therapy for both venous insufficiency and varicose veins.

B. Varicose veins require immediate surgery.

C. Venous insufficiency responds only to diuretics.

D. There is no role for compression in venous disease.

3. Which syndrome is associated with supravalvular aortic stenosis and elfin-like facies?

A. Noonan syndrome

B. Williams syndrome

C. Turner syndrome

D. Marfan syndrome

4. Which vessel size is primarily affected in polyarteritis nodosa?

A. Small capillaries

B. Medium-sized arteries

C. Large arteries

D. Veins

5. Which antibiotic is a carbapenem commonly used for broad-spectrum coverage including Pseudomonas in hospital-acquired pneumonia?

A. Ertapenem

B. Ceftriaxone

C. Aztreonam

D. Meropenem

SAMPLE

6. Tricuspid regurgitation in intravenous drug users is best described as which murmur characteristic?

A. Holosystolic murmur that diminishes with inspiration

B. Holosystolic murmur that increases with inspiration

C. Diastolic murmur

D. Continuous murmur

7. Which of the following best characterizes mitral valve prolapse syndrome?

A. Diastolic rumbling murmur at the apex

B. Mid-systolic click with a late systolic murmur

C. Continuous murmur best heard at the left upper sternal border

D. Pulsus bisferiens

8. Which hemodynamic profile is typical for septic shock?

A. CO up, VR up, TPR down, PCWP normal

B. CO down, VR down, TPR up, PCWP down

C. CO up, VR down, TPR up, PCWP normal

D. CO down, VR up, TPR down, PCWP normal

9. On chest radiograph, which finding supports dilated cardiomyopathy?

A. Enlarged cardiac silhouette

B. Small heart silhouette

C. Cardiomegaly with pericardial calcification

D. Normal heart size with mediastinal widening

10. A 68-year-old man with diabetes experiences crushing central chest pain. Three days later, he develops a sudden-onset holosystolic murmur best heard at the left chest. What is the most likely diagnosis?

A. Mitral regurgitation due to papillary muscle rupture

B. Aortic regurgitation due to dissection

C. Tricuspid regurgitation

D. Pericardial tamponade

SAMPLE

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. If the patient has an abnormal baseline ECG (e.g., BBB), what stress testing should be used?

A. Nuclear perfusion imaging

B. Resting echocardiogram

C. Echo stress test

D. Exercise treadmill test

Baseline ECG abnormalities like bundle-branch block make interpretation of exercise ECG stress tests unreliable because the baseline conduction pattern already alters ST-T changes. Stress echocardiography sidesteps that issue by using ultrasound to visualize how the heart's wall moves under stress. If a region shows new or worsened wall-motion abnormalities during stress, that indicates inducible ischemia in that territory. Resting echocardiography can't reveal ischemia, and while nuclear perfusion imaging can assess ischemia, the echo stress test directly evaluates contractile reserve without relying on ECG changes.

2. Which statement is true about management of venous disorders?

A. Compression stockings are first-line therapy for both venous insufficiency and varicose veins.

B. Varicose veins require immediate surgery.

C. Venous insufficiency responds only to diuretics.

D. There is no role for compression in venous disease.

Compression therapy is the foundational approach to venous disorders because it directly improves venous return by providing external pressure that reduces venous pooling, decreases edema, and relieves symptoms. For venous insufficiency, this helps lessen swelling and pain and can prevent progression to complications such as skin changes or ulcers. For varicose veins, compression helps control symptoms and swelling and is typically tried before moving on to invasive options. Surgery is not needed immediately for most patients; it's reserved for those with persistent symptoms, skin changes, or ulcers despite conservative measures, or for cosmetic reasons. Diuretics don't address the underlying valve incompetence and thus aren't a cure for venous insufficiency. There is indeed a role for compression in venous disease, making compression stockings first-line therapy for both venous insufficiency and varicose veins.

3. Which syndrome is associated with supravalvular aortic stenosis and elfin-like facies?

A. Noonan syndrome

B. Williams syndrome

C. Turner syndrome

D. Marfan syndrome

In Williams syndrome, a deletion on chromosome 7q11.23 that includes the elastin gene leads to vascular abnormalities, especially supravalvular aortic stenosis, due to defects in the arterial wall elasticity. The facial features are described as elfin-like, and patients often have a sociable personality with relatively strong verbal skills despite some cognitive impairment. This distinctive combination of supravalvular aortic stenosis and elfin-like facies is characteristic of Williams syndrome. Noonan syndrome tends to feature pulmonary valve stenosis and different facial traits; Turner syndrome involves short stature and webbed neck with possible coarctation rather than supravalvular stenosis; Marfan syndrome is marked by tall stature, long limbs, and aortic root dilation rather than elfin facies.

SAMPLE

4. Which vessel size is primarily affected in polyarteritis nodosa?

A. Small capillaries

B. Medium-sized arteries

C. Large arteries

D. Veins

Polyarteritis nodosa preferentially involves medium-sized muscular arteries. The key feature is transmural inflammation with fibrinoid necrosis of the arterial media, which creates aneurysms and segments of occlusion that disrupt blood flow to organs. This size-focused pattern explains why kidneys and mesenteric organs are commonly affected, producing hypertension and abdominal pain, while tiny vessels (capillaries, venules) are not the primary targets and large arteries are less typically involved.

5. Which antibiotic is a carbapenem commonly used for broad-spectrum coverage including Pseudomonas in hospital-acquired pneumonia?

A. Ertapenem

B. Ceftriaxone

C. Aztreonam

D. Meropenem

The key idea is needing an antibiotic with very broad coverage that includes Pseudomonas for hospital-acquired pneumonia. Carbapenems fit that profile, and among them meropenem offers reliable activity against Pseudomonas as well as a wide range of Gram-positive cocci and anaerobes, which is important because HAP often involves mixed flora. Meropenem also tends to have favorable pharmacology for lung infections, with good tissue penetration and a lower risk of seizures than some alternatives like imipenem. Ertapenem, while broad, does not cover Pseudomonas, so it's not suitable when Pseudomonas is a concern. Aztreonam covers many Gram-negatives including Pseudomonas but lacks Gram-positive and anaerobic coverage, so it's not as broad as needed for typical HAP pathogens. Ceftriaxone does not have Pseudomonas activity, making it insufficient for this scenario. Thus, meropenem is the best choice for broad-spectrum coverage including Pseudomonas in hospital-acquired pneumonia.

6. Tricuspid regurgitation in intravenous drug users is best described as which murmur characteristic?

A. Holosystolic murmur that diminishes with inspiration

B. Holosystolic murmur that increases with inspiration

C. Diastolic murmur

D. Continuous murmur

The key idea is how right-sided heart murmurs behave with respiration. Tricuspid regurgitation flows back into the right atrium during systole, and inspiration increases venous return to the right heart. That extra blood makes the regurgitant jet louder, so the murmur grows louder with inspiration—a phenomenon known as Carvallo's sign. In IV drug users, tricuspid valve endocarditis is a common cause of tricuspid regurgitation, so this scenario fits TR well. The murmur itself is holosystolic and best heard along the left lower sternal border, and its intensity increases with inspiration. The other options don't fit: a diastolic murmur isn't characteristic of TR, and a continuous murmur suggests something like a PDA or other vascular shunt rather than TR. A holosystolic murmur that diminishes with inspiration would be more typical of a left-sided murmur, not TR.

SAMPLE

7. Which of the following best characterizes mitral valve prolapse syndrome?

A. Diastolic rumbling murmur at the apex

B. Mid-systolic click with a late systolic murmur

C. Continuous murmur best heard at the left upper sternal border

D. Pulsus bisferiens

Mitral valve prolapse syndrome is classically described by a midsystolic click produced when the mitral leaflets billow into the left atrium during systole, often followed by a late systolic murmur due to accompanying mitral regurgitation. The click is caused by sudden tensing of the valve apparatus as it prolapses, and the subsequent murmur appears if MR is present, peaking in the late portion of systole. The auscultatory findings can shift with maneuvers that change left ventricular volume (standing or Valsalva bring the prolapse earlier and can make the murmur more prominent; squatting delays the click and reduces the murmur). The other patterns described correspond to different conditions: a diastolic rumble at the apex points to mitral stenosis, a continuous murmur at the left upper sternal border to patent ductus arteriosus, and pulsus bisferiens is seen with certain combinations of aortic valve disease. So the best description for this condition is a mid-systolic click with a late systolic murmur.

8. Which hemodynamic profile is typical for septic shock?

A. CO up, VR up, TPR down, PCWP normal

B. CO down, VR down, TPR up, PCWP down

C. CO up, VR down, TPR up, PCWP normal

D. CO down, VR up, TPR down, PCWP normal

Septic shock is a distributive shock where inflammatory mediators cause widespread vasodilation, so systemic vascular resistance falls. To maintain perfusion, the heart usually increases its output, producing a high cardiac output state. Because the problem isn't primarily excess volume, filling pressures stay normal or low rather than elevated. The combination of increased cardiac output, decreased afterload (low total peripheral resistance), and normal filling pressures best fits septic shock. Venous return tends to be preserved or even increased in the early high output phase as the vasodilation lowers afterload and the heart pumps more effectively. This pattern distinguishes septic shock from states with low CO and high filling pressures or high afterload.

9. On chest radiograph, which finding supports dilated cardiomyopathy?

A. Enlarged cardiac silhouette

B. Small heart silhouette

C. Cardiomegaly with pericardial calcification

D. Normal heart size with mediastinal widening

Dilated cardiomyopathy causes dilation of the ventricles, leading to an enlarged heart that appears as an enlarged cardiac silhouette on a chest radiograph. This radiographic finding—cardiomegaly—is the classic clue to ventricular dilation and aligns best with DCM among the options. A small heart silhouette would suggest underfilling or hypovolemia, not dilation. Cardiomegaly with pericardial calcification points to constrictive pericarditis, while a normal-sized heart with mediastinal widening implies other thoracic pathologies such as mediastinal masses or aortic disease rather than DCM.

SAMPLE

10. A 68-year-old man with diabetes experiences crushing central chest pain. Three days later, he develops a sudden-onset holosystolic murmur best heard at the left chest. What is the most likely diagnosis?

A. Mitral regurgitation due to papillary muscle rupture

B. Aortic regurgitation due to dissection

C. Tricuspid regurgitation

D. Pericardial tamponade

After an acute myocardial infarction, a mechanical complication can occur in the first week, with papillary muscle rupture being a classic event around 2–7 days later. The papillary muscles support the mitral valve; when they rupture due to infarction, the mitral leaflets can no longer close properly during systole, causing sudden mitral regurgitation. This explains the abrupt onset of a holosystolic murmur best heard at the left chest (apex) and the rapid development of pulmonary symptoms or heart failure. The other options don't fit this scenario as well. Aortic regurgitation from dissection would produce a diastolic murmur, not a holosystolic one. Tricuspid regurgitation typically yields a holosystolic murmur heard best at the left lower sternal border and is associated with right-sided problems. Pericardial tamponade presents with hypotension, muffled heart sounds, and JVD without a new holosystolic murmur. So the most likely diagnosis is acute mitral regurgitation due to papillary muscle rupture following the MI.

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://mehlmancardiology.examzify.com

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

SAMPLE