Breast Ultrasound Practice Test (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. What can you do to better visualize a sebaceous cyst on ultrasound?

A. Use a stand-off pad

B. Use a low-frequency probe

C. Increase gain

D. Apply Doppler imaging

2. In gynecomastia, what is the typical sonographic appearance?

A. Hypoechoic to hyperechoic tissue beneath the areola representing glandular and fibrous tissue

B. Simple cyst in the breast

C. Hyperechoic fatty mass

D. Ductal dilation without tissue proliferation

3. Macrocalcifications in the breast are generally considered to be:

A. Benign

B. Suspicious for cancer

C. Indicative of infection

D. Explainable only by trauma

4. Can a breast biopsy clip be seen on ultrasound?

A. Yes, and it is easily seen on ultrasound

B. Yes, but it is typically difficult to see on ultrasound

C. No, it cannot be seen on ultrasound

D. Only after surgical excision

5. A sentinel node biopsy is best described as which type of procedure?

A. Surgical biopsy of the primary tumor

B. Nuclear medicine procedure to assess axillary lymph nodes

C. Imaging study to map breast ducts

D. Biopsy of a non-palpable mass

6. What is the median age range for phyllodes tumor incidence?

A. 10-20

B. 20-30

C. 30-50

D. 60-70

7. Which term is used to describe rupture contained within the capsule (alternative to intracapsular)?

A. Intra-capsular implant rupture

B. Intracapsular implant rupture

C. Linguini sign - MRI

D. Extra-capsular implant rupture

8. During breast ultrasound, which structure is visualized to confirm penetration of the breast tissue from skin to chest wall?

A. Pectoral muscles

B. Heart

C. Lungs

D. Ribs

9. Where are the ribs in relation to the pectoralis muscle?

A. Anterior to the pectoralis muscles

B. Superior to the pectoralis muscles

C. Posterior to the pectoralis muscles

D. Medial to the pectoralis muscles

10. Which modality yields a better breast tissue sample, FNA or core biopsy?

A. Fine-needle aspiration (FNA)

B. Core biopsy

C. Ultrasound-guided FNA

D. MRI-guided biopsy

Answers

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

Explanations

1. What can you do to better visualize a sebaceous cyst on ultrasound?

A. Use a stand-off pad

B. Use a low-frequency probe

C. Increase gain

D. Apply Doppler imaging

Focusing on improving visualization of superficial skin lesions is key here. A stand-off pad provides an extra acoustic layer between the skin and the probe, which moves the focal point to the shallow depth where a sebaceous cyst sits. This reduces near-field clutter and beam widening, helping the ultrasound image resolve the lesion's margins more clearly and show features like posterior acoustic enhancement and any internal debris. In practice, this makes the cyst appear more distinctly against the surrounding tissue. Using a low-frequency probe would lessen image resolution for superficial structures, so it isn't ideal. Increasing gain might brighten the image but doesn't improve the depth-specific resolution or reveal finer details. Doppler imaging isn't helpful for a typical sebaceous cyst, since these lesions are usually avascular; Doppler adds little value unless there's concern for inflammatory hyperemia in an infected lesion.

2. In gynecomastia, what is the typical sonographic appearance?

A. Hypoechoic to hyperechoic tissue beneath the areola representing glandular and fibrous tissue

B. Simple cyst in the breast

C. Hyperechoic fatty mass

D. Ductal dilation without tissue proliferation

Gynecomastia is defined by proliferation of glandular and fibrous tissue directly beneath the areola. On ultrasound, this subareolar tissue appears as a band or small triangular/fan-shaped area behind the nipple-areolar complex, and its echogenicity can vary from hypo- to hyper-echogenic compared with surrounding fat, depending on the amount of fibrous versus glandular tissue present. This variability in appearance reflects the tissue makeup rather than fluid or fat alone. It is not a simple cyst (which would be an anechoic fluid-filled structure), not a fatty mass (which would be predominantly echogenic fat without a glandular component), and not just ductal dilation without tissue proliferation.

3. Macrocalcifications in the breast are generally considered to be:

A. Benign

B. Suspicious for cancer

C. Indicative of infection

D. Explainable only by trauma

Macrocalcifications are large, coarse calcium deposits in the breast that most often reflect benign, degenerative changes such as aging tissue, involution, fibroadenomas, oil cysts, or prior surgery/trauma. On mammography they typically appear as well-defined, chunky, popcorn-like or eggshell patterns with wide spacing, which is characteristic of benign processes. This appearance and distribution explain why they are generally considered benign and not interpreted as cancer. Infections or trauma can cause calcifications, but they do not usually produce the classic large, well-circumscribed macrocalcification patterns, whereas cancer more often shows small, irregular, or pleomorphic microcalcifications rather than these large, coarse deposits.

4. Can a breast biopsy clip be seen on ultrasound?

A. Yes, and it is easily seen on ultrasound

B. Yes, but it is typically difficult to see on ultrasound

C. No, it cannot be seen on ultrasound

D. Only after surgical excision

A breast biopsy clip can be seen on ultrasound, but its visibility is variable and often not straightforward. Clips are designed to be radiopaque on mammography, and when they are seen on ultrasound they usually appear as a small, bright echogenic spot with some posterior shadowing. However, factors such as the clip's size, the design of the marker, the amount of surrounding scar or fibrous tissue, and the ultrasound frequency or angle can make the marker hard to distinguish. Because of this variability, clinicians often find that the clip is detectable on ultrasound in many cases but not reliably in all patients. When the clip isn't clearly visible on ultrasound, prior imaging (like mammography or MRI) and other localization methods guide subsequent procedures.

5. A sentinel node biopsy is best described as which type of procedure?

A. Surgical biopsy of the primary tumor

B. Nuclear medicine procedure to assess axillary lymph nodes

C. Imaging study to map breast ducts

D. Biopsy of a non-palpable mass

The main idea being tested is that sentinel node biopsy uses a radioactive tracer to map the breast's lymphatic drainage and identify the first lymph node(s) that receive tumor drainage—the sentinel node—for targeted biopsy. This mapping and localization rely on nuclear medicine techniques (lymphoscintigraphy and intraoperative radiotracer detection with a gamma probe) to determine which node should be removed for pathologic evaluation. The procedure combines this nuclear medicine step with a surgical biopsy of the identified node, but its purpose is to assess axillary nodal status with minimal disruption, rather than sampling the primary tumor or performing a standard imaging study of ducts. In this sense, it is best described as a nuclear medicine procedure to assess axillary lymph nodes, guiding the surgical biopsy of the sentinel node.

6. What is the median age range for phyllodes tumor incidence?

A. 10-20

B. 20-30

C. 30-50

D. 60-70

Phyllodes tumors arise most commonly in middle-aged women, with the median age around the fourth decade. That places the typical incidence center in the 30s to 50s, making 30-50 the best description of the median range. Rang es at the extremes (10-20 or 60-70) are not representative of where most cases fall, and 20-30 is a bit younger than the usual midpoint. In practice, the majority occur in women in their 30s to 50s, with the center around age 40, which fits the 30-50 range.

7. Which term is used to describe rupture contained within the capsule (alternative to intracapsular)?

A. Intra-capsular implant rupture

B. Intracapsular implant rupture

C. Linguini sign - MRI

D. Extra-capsular implant rupture

Rupture contained within the implant capsule means the silicone shell has ruptured but the gel stays inside the fibrous capsule surrounding the implant. This situation is described using the hyphenated term intra-capsular implant rupture, which is the alternative spelling to intracapsular. It signals that the rupture is confined to the capsule and does not spill into the surrounding breast tissue. In contrast, extra-capsular rupture means silicone has escaped the capsule into the breast tissue. The linguine sign is an MRI finding that can indicate an intracapsular rupture, but it's an imaging sign rather than the descriptive term for the rupture itself.

8. During breast ultrasound, which structure is visualized to confirm penetration of the breast tissue from skin to chest wall?

A. Pectoral muscles

B. Heart

C. Lungs

D. Ribs

Visualizing the pectoralis major muscle provides the key landmark to confirm you have reached the chest wall. This muscle lies directly beneath the breast tissue, so seeing it on ultrasound shows that the scan has traversed skin, subcutaneous tissue, and glandular/retromammary layers all the way to the chest wall. The heart and lungs aren't routinely used landmarks in this window, and ribs appear as bright lines with shadowing rather than a reliable deep boundary marker. So, identifying the pectoralis major muscle is how you confirm penetration to the chest wall.

9. Where are the ribs in relation to the pectoralis muscle?

A. Anterior to the pectoralis muscles

B. Superior to the pectoralis muscles

C. Posterior to the pectoralis muscles

D. Medial to the pectoralis muscles

The pectoralis major sits on the anterior chest wall, covering the front surface. The ribs and intercostal muscles lie deeper behind that muscle, toward the body's back, so the ribs are posterior to the pectoralis muscles. In ultrasound terms, you'd see the superficial pectoralis layer overlying the deeper rib cage; the ribs themselves are not in front of or above the muscle but behind it.

10. Which modality yields a better breast tissue sample, FNA or core biopsy?

A. Fine-needle aspiration (FNA)

B. Core biopsy

C. Ultrasound-guided FNA

D. MRI-guided biopsy

The main idea is tissue architecture matters for a reliable breast diagnosis. A core biopsy retrieves a small cylinder of tissue, preserving the arrangement of ducts, lobules, and surrounding stroma. That allows the pathologist to evaluate invasiveness, differentiate benign from malignant processes, assess tumor grade, and perform essential tests such as receptor status (ER, PR, HER2) and other stains. In contrast, fine-needle aspiration collects only individual cells or small cell clusters, so there's no preserved tissue structure. This cytology-only sample can be nondiagnostic or misleading because it lacks architectural context, making it harder to distinguish certain cancers from benign conditions and to assess invasion accurately. Image guidance doesn't change this fundamental difference: ultrasound-guided sampling can be a core biopsy or an FNA, but the "better sample" in terms of diagnostic completeness is a core biopsy, which is why it's the preferred modality for breast tissue diagnosis.

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://breastultrasound.examzify.com

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