Breast Screening & Diagnostic 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. **Which additional technique is included alongside color imaging to evaluate tissue properties in the diagnostic protocol?**

   A. Elastography

   B. Fremitus

   C. Contrast-enhanced ultrasound

   D. Nuclear medicine study

2. **Which of the following is a direct outcome of properly evaluating and classifying breast lesions on mammo and sono?**

   A. Making appropriate and timely diagnosis

   B. Reducing imaging costs

   C. Increased radiation exposure

   D. Delayed treatment

3. **Which term is described as helpful across several breast tissue evaluation scenarios such as normal tissue, ill-defined borders, and posterior margins?**

   A. Fremitus

   B. Elastography

   C. Doppler

   D. Mammography

4. **Internal echoes within a benign lesion may?**

   A. Become more uniform

   B. Become more irregular

   C. Become more speckled

   D. Disappear

5. **Which feature can 3D imaging help identify to improve lesion characterization?**

   A. Spiculation

   B. Calcifications

   C. Cysts

   D. Edema

6. A complex cyst is described as cystic plus what kind of parts?

A. Concerning solid parts

B. Debris without internal echoes

C. Thin walls only

D. Peripheral vascularity

7. Which term denotes the Upper Outer Quadrant of the left breast?

A. UOQ

B. UIQ

C. LOQ

D. LIQ

8. Which of the following is true about dynamic techniques used in breast ultrasound?

A. Compression, echo palpitation, and fremitus are all used

B. Only compression is used

C. Fremitus is not used in breast imaging

D. Echo palpitation replaces compression

9. When performing a diagnostic or targeted exam, ___ is evaluated?

A. Only a specific area of the breast is evaluated

B. The entire breast is evaluated

C. The axilla only is evaluated

D. No specific area is targeted

10. Breast ultrasound is considered?

A. Technologist Dependent

B. Machine Dependent

C. Radiologist Dependent

D. Patient Dependent

Answers

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

Explanations

1. Which additional technique is included alongside color imaging to evaluate tissue properties in the diagnostic protocol?

A. Elastography

B. Fremitus

C. Contrast-enhanced ultrasound

D. Nuclear medicine study

Elastography adds a measure of tissue stiffness to standard color imaging, giving a mechanical property that helps distinguish benign from malignant areas. In ultrasound, color imaging shows structure and blood flow, while elastography assesses how hard or soft the tissue is. Since malignant tumors tend to be stiffer, elastography provides complementary information that improves lesion characterization and can reduce unnecessary biopsies. There are two common forms: strain elastography, which evaluates relative stiffness from manual or acoustic compression, and shear-wave elastography, which gives a quantitative stiffness value. The other options don't fit this use. Fremitus is a clinical palpation sign, not an imaging technique. Contrast-enhanced ultrasound looks at perfusion using a contrast agent, not tissue stiffness. Nuclear medicine studies track metabolic activity or tracer uptake, which is a different functional assessment entirely.

2. Which of the following is a direct outcome of properly evaluating and classifying breast lesions on mammo and sono?

A. Making appropriate and timely diagnosis

B. Reducing imaging costs

C. Increased radiation exposure

D. Delayed treatment

When breast lesions are evaluated and classified on mammography and ultrasound, the most direct result is an accurate and timely diagnosis that guides how the patient is managed. Using imaging features such as lesion shape, margins, density or calcifications, and, in ultrasound, characteristics like echogenicity and posterior acoustic features, radiologists assign a risk category (for example, BI-RADS). This category directly determines the next step: whether to proceed to biopsy, schedule short-interval follow-up, or manage conservatively if the lesion appears benign. Making the right call here means cancer is caught promptly and treated without unnecessary procedures in benign cases, which is the core of good breast imaging practice. While imaging quality and classification can influence costs or patient workflow, those are indirect effects; the primary, direct outcome of proper evaluation and classification is getting to the correct diagnosis in a timely manner, avoiding delays and guiding appropriate treatment.

3. Which term is described as helpful across several breast tissue evaluation scenarios such as normal tissue, ill-defined borders, and posterior margins?

A. Fremitus

B. Elastography

C. Doppler

D. Mammography

Elasticity imaging, or elastography, is the concept being tested. It adds information about tissue stiffness, which helps in several breast assessment situations. Normal tissue tends to be softer, showing low stiffness. When borders are ill-defined on standard imaging, elastography can highlight a stiffer lesion and better delineate its extent, making margins clearer. For posterior margins, stiffness mapping helps distinguish whether features seen behind or around a lesion are due to the lesion itself rather than artifacts, improving confidence about how far it extends. Since malignant tumors are typically stiffer than surrounding tissue, elastography provides a useful contrast that complements grayscale imaging and can improve characterization across these scenarios. Fremitus is a tactile vibration feature used in other chest exams, not a primary tool for breast imaging. Doppler adds vascular information but doesn't assess tissue stiffness, and mammography shows morphology without the mechanical property information elastography provides.

4. Internal echoes within a benign lesion may?

A. Become more uniform

B. Become more irregular

C. Become more speckled

D. Disappear

Internal echoes reflect the tissue makeup inside a lesion. Benign breast lesions tend to have a uniform, homogeneous echotexture because their internal tissue components are similar throughout. As a result, the internal echoes may become more uniform over time, which aligns with benignity. In contrast, malignant lesions often show irregular, heterogeneous or speckled internal echoes due to mixed tissue elements such as fibrosis, necrosis, calcifications, or varying vascularity, which disrupt uniformity. So a shift toward greater uniformity fits with a benign pattern, while increases in irregularity or speckling would raise suspicion for malignancy. Disappearance of internal echoes is not a typical benign feature.

5. Which feature can 3D imaging help identify to improve lesion characterization?

A. Spiculation

B. Calcifications

C. Cysts

D. Edema

3D imaging shines by showing a lesion's margins without the confusing overlap of surrounding tissue, so subtle surface features become more visible. Spiculation—thin radiating strands extending from the edge of a lesion—is a strong sign of invasive growth, and these spicules are easier to spot when tissue overlap is minimized in three-dimensional views. Recognizing spiculation helps distinguish malignant lesions from benign ones and informs how urgently a lesion needs biopsy or further assessment. Calcifications are tiny deposits whose significance depends on pattern and distribution, and while 3D imaging can help localize them, it doesn't enhance their characterization as markedly as it does for margins. Cysts are typically well-defined and fluid-filled, a feature already clear on standard imaging, so 3D methods don't add much for identifying them. Edema reflects diffuse tissue change rather than a discrete lesion feature, so it isn't the primary target of three-dimensional margin assessment.

6. A complex cyst is described as cystic plus what kind of parts?

A. Concerning solid parts

B. Debris without internal echoes

C. Thin walls only

D. Peripheral vascularity

A complex cyst is a lesion that is primarily cystic but contains solid parts. On ultrasound, a simple cyst is completely fluid-filled with anechoic appearance, thin smooth walls, and posterior acoustic enhancement. When solid components are present inside the cyst—such as internal echoes from tissue, septations, or nodules—the lesion is described as complex. These solid parts may also show vascularity on Doppler, which helps differentiate true solid tissue from simple debris. The other options don't define a complex cyst: debris alone doesn't imply true solid tissue inside the cyst, a thin-walled appearance describes a simple cyst, and peripheral vascularity by itself isn't the defining feature of a complex cyst.

7. Which term denotes the Upper Outer Quadrant of the left breast?

A. UOQ

B. UIQ

C. LOQ

D. LIQ

Breast quadrants describe location by dividing the breast into four regions: upper and lower halves, each split into inner (toward the center) and outer (toward the armpit) sides. The term for the top outer region is Upper Outer Quadrant, abbreviated as UOQ. This quadrant sits at the superior outer portion of the breast and is the area closest to the axilla. The other terms refer to the opposite combinations: Upper Inner Quadrant (toward the sternum), Lower Outer Quadrant (lower toward the armpit), and Lower Inner Quadrant (lower toward the sternum).

8. Which of the following is true about dynamic techniques used in breast ultrasound?

A. Compression, echo palpitation, and fremitus are all used

B. Only compression is used

C. Fremitus is not used in breast imaging

D. Echo palpitation replaces compression

Dynamic techniques in breast ultrasound combine how the tissue responds to touch and vibration with how it looks on static images. Compression is routinely used because it sharpens the image, helps separate tissue planes, and shows how a lesion deforms under pressure—benign cysts often collapse or change shape more readily, while solid masses tend to be less compressible and reveal clearer borders. Echo palpation means applying gentle, controlled pressure with the transducer to feel how the lesion and surrounding tissue deform or glide relative to each other; this tactile feedback adds information about softness, mobility, and boundary integrity, which can aid in distinguishing benign from suspicious features. Fremitus involves introducing a small amount of vibration and observing how the tissue transmits that vibration; differences in transmission through a lesion versus the surrounding parenchyma can reveal tissue properties and detect subtle abnormalities not evident on static imaging. Because each maneuver provides distinct and complementary information, using compression, echo palpation, and fremitus together gives a more complete characterization of breast lesions than any single technique alone.

9. When performing a diagnostic or targeted exam, ___ is evaluated?

A. Only a specific area of the breast is evaluated

B. The entire breast is evaluated

C. The axilla only is evaluated

D. No specific area is targeted

In a diagnostic or targeted breast exam, the evaluation is directed at the region of concern. This focused approach allows the radiologist to obtain high-detail information about the specific area that shows a palpable lump, distortion, or abnormality on prior imaging. By concentrating resources on that spot, imaging can be tailored with targeted mammography views, ultrasound of the lesion, or focused MRI sequences to accurately characterize features such as size, margins, internal composition, and any suspicious calcifications. The goal is to quickly determine whether a biopsy is needed or if short-interval follow-up is appropriate. The rest of the breast may be reviewed as needed, but the primary emphasis remains on the area of interest.

10. Breast ultrasound is considered?

A. Technologist Dependent

B. Machine Dependent

C. Radiologist Dependent

D. Patient Dependent

Breast ultrasound performance hinges on who is scanning. The most influential factor is the technologist because image quality and the thoroughness of the exam depend on the operator's technique—how the transducer is placed, the amount of compression applied, the frequency and depth settings, gain, and the systematic way the breast is examined from all angles. These choices affect lesion visibility, margins, and the ability to obtain reproducible images for comparison over time. While the machine and the radiologist's interpretation matter, the acquisition variability and overall quality of the ultrasound study are driven mainly by the technologist's skill. Patient factors can influence the exam, but they don't define the modality's dependence as strongly as the operator's technique.

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://breastscreeningdiagnostic.examzify.com

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