

# ARDMS SPI Exam | New SPI Test Answers - Download Demo Free of Reliable SPI Exam Prep

## ARDMS SPI EXAM LATEST 2023-2024 REAL EXAM 50 QUESTIONS AND CORRECT ANSWERS|AGRADE

- D - Answer what is the advantage of using pulsed-wave doppler versus continuous-wave doppler?  
A.allows measurement of higher velocities  
B.increases range ambiguity  
C.reduces the potential for aliasing  
D.provides depth specificity
- D - Answer which parameter is target group C evaluating based on the image?  
A.dead zone  
B.dynamic range  
C.axial resolution  
D.Horizontal distance accuracy
- A - Answer In this image, which target group is used to evaluate dead zone?
- C - Answer which ultrasound parameter directly affects an ultrasound beam's intensity?  
A.TGC  
B.operating frequency  
C.Output power  
D.Frame rate
- D - Answer the center frequency of a transducer depends primarily upon which characteristics of the crystal?  
A.width  
B.length  
C.spacing  
D.thickness
- C - Answer which factor limits image frame rate?  
A.transducer operating frequency  
B.Sample volume size  
C.Speed of sound in tissue  
D.Spatial pulse length
- A - Answer when using a 5MHZ transducer, in which tissue is the ultrasound wavelength shortest?  
A.fat  
B.blood  
C.bone  
D.muscle

DOWNLOAD the newest PassSureExam SPI PDF dumps from Cloud Storage for free: [https://drive.google.com/open?id=1jvIZEEVRfib\\_IKeNpM0foh\\_ABLzFQvv1](https://drive.google.com/open?id=1jvIZEEVRfib_IKeNpM0foh_ABLzFQvv1)

Our SPI real exam dumps are specially prepared for you. Try our SPI study tool and absorb new knowledge. After a period of learning, you will find that you are making progress. The knowledge you have studied on our SPI exam question will enrich your life and make you wise. Do not reject challenging yourself. Your life will finally benefit from your positive changes. Let us struggle together and become better. Then you will do not need to admire others' life. Our SPI Real Exam dumps will fully change your life.

## ARDMS SPI Exam Syllabus Topics:

Topic	Details
Topic 1	<ul style="list-style-type: none"><li>• Perform Ultrasound Examinations: This section of the exam measures skills of Sonographers and covers how to conduct ultrasound procedures while ensuring patient safety and diagnostic accuracy. It includes understanding of imaging protocols, ergonomics, patient care, and the interaction between sound and tissue. Candidates are expected to demonstrate abilities to manage patient encounters, apply 3D</li><li>• 4D and contrast imaging concepts, identify and correct artifacts, and follow confidentiality and privacy standards throughout the scanning process.</li></ul>

Topic 2	<ul style="list-style-type: none"> <li>• <b>Provide Clinical Safety and Quality Assurance:</b> This section of the exam measures skills of Clinical Ultrasound Supervisors and focuses on maintaining safety and quality standards in ultrasound practice. It includes infection control protocols, transducer and machine integrity checks, and quality assurance testing using tissue-mimicking phantoms. The section also requires familiarity with statistical parameters like sensitivity and specificity to evaluate diagnostic performance and ensure consistent, reliable imaging outcomes.</li> </ul>
Topic 3	<ul style="list-style-type: none"> <li>• <b>Manage Ultrasound Transducers:</b> This section of the exam measures skills of Ultrasound Technicians and focuses on the management and proper use of different types of transducers. It evaluates knowledge of transducer components, frequency selection, and application of various 2D, 3D, 4D, and nonimaging transducer concepts. Candidates must show they can choose the appropriate transducer for specific examinations and make necessary frequency adjustments to ensure image quality.</li> </ul>
Topic 4	<ul style="list-style-type: none"> <li>• <b>Apply Doppler Concepts:</b> This section of the exam measures skills of Vascular Sonographers and evaluates understanding and application of Doppler ultrasound principles. It includes knowledge of Doppler angle, flow dynamics, and color and spectral Doppler imaging. The section also covers eliminating aliasing, interpreting waveforms, applying continuous and pulsed wave Doppler, and optimizing Doppler gain and scale to accurately measure blood flow and velocity within vessels.</li> </ul>
Topic 5	<ul style="list-style-type: none"> <li>• <b>Optimize Sonographic Images:</b> This section of the exam measures skills of Diagnostic Medical Sonographers and assesses their ability to enhance image quality using advanced optimization techniques. It includes understanding axial, lateral, elevational, and temporal resolution, as well as manipulating gain, depth, magnification, and dynamic range. Examinees are expected to apply harmonic imaging, spatial compounding, and gray-scale techniques to produce clear, accurate diagnostic images.</li> </ul>

>> New SPI Test Answers <<

## Reliable SPI Exam Prep, SPI Actual Test

Don't need a lot of time and money, only 30 hours of special training, and you can easily pass your first time to attend ARDMS Certification SPI Exam. PassSureExam are able to provide you with test exercises which are closely similar with real exam questions.

## ARDMS Sonography Principles and Instrumentation Sample Questions (Q83-Q88):

### NEW QUESTION # 83

What happens to the amount of attenuation if the path length is doubled?

- A. Quadrupled
- **B. Doubled**
- C. Halved
- D. Quartered

**Answer: B**

Explanation:

Attenuation in ultrasound is directly proportional to the path length. If the path length is doubled, the amount of attenuation is also doubled. Attenuation refers to the reduction in the amplitude and intensity of the ultrasound wave as it travels through tissue, primarily due to absorption, reflection, and scattering. The relationship is linear, so doubling the distance the sound wave travels will result in twice the amount of attenuation.

ARDMS Sonography Principles and Instrumentation guidelines

Krenkau, F. W. (2015). Diagnostic Ultrasound: Principles and Instruments. Elsevier.

### NEW QUESTION # 84

Which artifact displays reflectors more shallow than their actual position?

- A. Section thickness
- **B. Range ambiguity**
- C. Mirror image
- D. Ring-down

**Answer: B**

Explanation:

Range ambiguity artifact occurs when echoes from one pulse are received after the next pulse has been emitted, leading to the incorrect placement of echoes at shallower depths than their true location. This artifact typically happens when the PRF is set too high, causing the ultrasound system to interpret delayed echoes as coming from the current pulse rather than the previous one. This results in reflectors appearing closer to the transducer than they actually are.

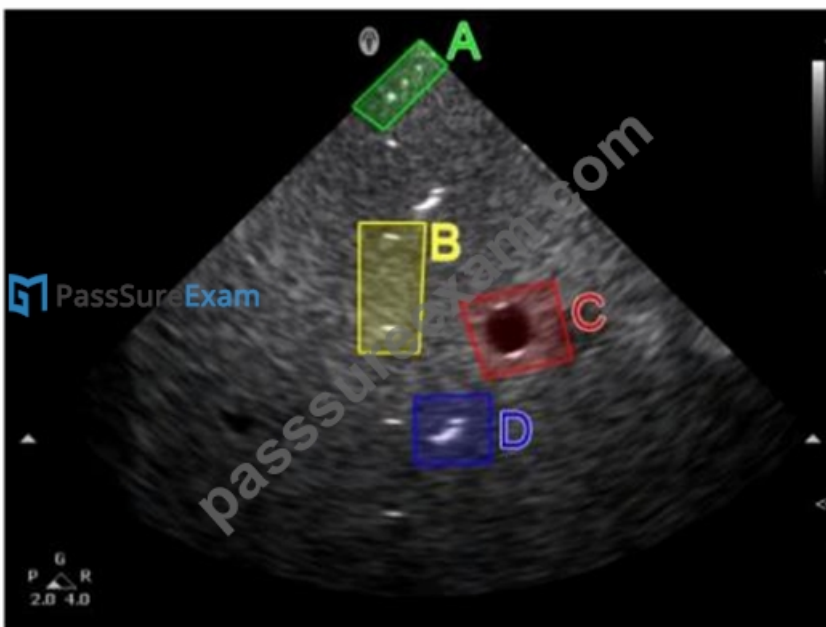
Reference:

ARDMS Sonography Principles & Instrumentation Guidelines

Kremkau FW. Sonography Principles and Instruments. 9th ed. Philadelphia, PA: Elsevier; 2016.

### NEW QUESTION # 85

Which target group in this image of a tissue-mimicking phantom is used to evaluate axial resolution?



- A. Option A
- B. Option C
- **C. Option B**
- D. Option D

**Answer: C**

Explanation:

In the given image of a tissue-mimicking phantom, Option B (yellow box) is used to evaluate axial resolution. Axial resolution refers to the ability of the ultrasound system to distinguish between two structures that are close to each other along the path of the ultrasound beam (i.e., parallel to the beam). The targets in Option B are typically aligned in such a way to test the system's capacity to differentiate between structures that are situated closely together along the beam's axis. Reference:

ARDMS Sonography Principles and Instrumentation guidelines

"Sonography: Principles and Instruments" by Joan P. Baker and Marveen Craig

### NEW QUESTION # 86

Which characteristics are associated with an ideal imaging transducer?

- A. Broad bandwidth; high quality factor
- B. Narrow bandwidth; high quality factor
- C. Narrow bandwidth; low quality factor
- **D. Broad bandwidth; low quality factor**

**Answer: D**

Explanation:

Comprehensive and Detailed Explanation From Exact Extract:

Ideal imaging transducers have broad bandwidths (allowing multiple frequencies for better axial resolution and flexibility) and a low quality factor (which indicates efficient damping, leading to short pulses and better image quality).

According to sonography instrumentation reference:

"Imaging transducers operate with broad bandwidth and low quality factor to achieve short pulse duration and optimal axial resolution." Therefore, the correct answer is B: Broad bandwidth; low quality factor.

-

### NEW QUESTION # 87

What does this image demonstrate?



- A. Presence of flow
- B. Direction of flow
- **C. Color aliasing**
- D. Color inversion

**Answer: C**

Explanation:

Color aliasing in Doppler ultrasound occurs when the velocity of blood flow exceeds the Nyquist limit, causing the color display to wrap around and display high velocities incorrectly as the opposite direction. This phenomenon is characterized by a mix of colors that indicate flow in both directions at the same location. In the provided image, there is a clear presence of color aliasing, as evidenced by the abrupt color change across the vessel, which is not consistent with normal flow patterns.

References:

American Registry for Diagnostic Medical Sonography (ARDMS) Sonography Principles and Instrumentation guidelines.

### NEW QUESTION # 88

.....

During nearly ten years, our SPI exam questions have met with warm reception and quick sale in the international market. Our SPI study materials are not only as reasonable priced as other makers, but also they are distinctly superior in the many respects. With tens of thousands of our loyal customers supporting us all the way, we believe we will do a better job in this career. More and more candidates will be benefited from our excellent SPI training guide!

**Reliable SPI Exam Prep:** <https://www.passsureexam.com/SPI-pass4sure-exam-dumps.html>

- 2025 Latest PassSureExam SPI PDF Dumps and SPI Exam Engine Free Share: [https://drive.google.com/open?id=1jvIZEEVRfib\\_IKeNpM0foh\\_ABLzFQwv1](https://drive.google.com/open?id=1jvIZEEVRfib_IKeNpM0foh_ABLzFQwv1)

2025 Latest PassSureExam SPI PDF Dumps and SPI Exam Engine Free Share: [https://drive.google.com/open?id=1jvIZEEVRfib\\_IKeNpM0foh\\_ABLzFQwv1](https://drive.google.com/open?id=1jvIZEEVRfib_IKeNpM0foh_ABLzFQwv1)