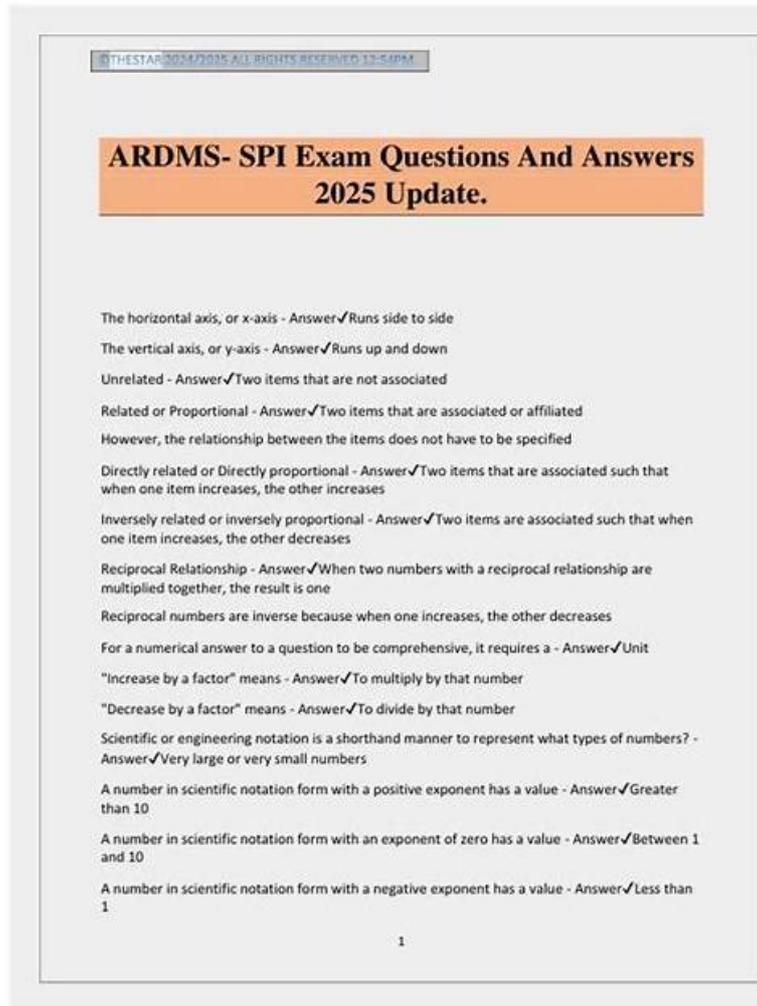


Valid Braindumps ARDMS SPI Free | New SPI Test Registration



P.S. Free & New SPI dumps are available on Google Drive shared by VCEEngine: <https://drive.google.com/open?id=12-Uga8Kz0E9KYkfyala3zAwYnjl-xp>

Our SPI practice engine boosts both the high passing rate which is about 98%-100% and the high hit rate to have few difficulties to pass the test. Our SPI exam simulation is compiled based on the resources from the authorized experts' diligent working and the real exam and confer to the past years' exam papers thus they are very practical. So the content of the SPI Learning Materials is quite fully covered and completed. And we will update it to be the latest.

ARDMS SPI Exam Syllabus Topics:

Topic	Details
Topic 1	<ul style="list-style-type: none"> Optimize Sonographic Images: 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.

Topic 2	<ul style="list-style-type: none"> • 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 and 4D and contrast imaging concepts, identify and correct artifacts, and follow confidentiality and privacy standards throughout the scanning process.
Topic 3	<ul style="list-style-type: none"> • Manage Ultrasound Transducers: 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.
Topic 4	<ul style="list-style-type: none"> • Provide Clinical Safety and Quality Assurance: 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.
Topic 5	<ul style="list-style-type: none"> • Apply Doppler Concepts: 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.

>> Valid Braindumps ARDMS SPI Free <<

New SPI Test Registration | Flexible SPI Testing Engine

It is a truism that an internationally recognized SPI certification can totally mean you have a good command of the knowledge in certain areas and showcase your capacity to a considerable extent. If you are overwhelmed by workload heavily and cannot take a breath from it, why not choose our SPI Preparation torrent? We are specialized in providing our customers with the most reliable and accurate exam materials and help them pass their exams by achieve their satisfied scores. With our SPI practice materials, your exam will be a piece of cake.

ARDMS Sonography Principles and Instrumentation Sample Questions (Q105-Q110):

NEW QUESTION # 105

Which action may reduce the number of lines in a frame without a loss of temporal resolution?

- A. Narrowing the field of view
- B. Decreasing the display depth
- C. Reducing the frame rate
- D. Decreasing the transducer frequency

Answer: A

Explanation:

Narrowing the field of view reduces the number of scan lines that need to be processed per frame. This allows the ultrasound system to maintain or even increase the frame rate without compromising temporal resolution. Temporal resolution, which refers to the system's ability to depict motion accurately, is directly related to the frame rate. Reducing the field of view ensures fewer lines are needed to create each image, thus preserving the frame rate and temporal resolution.

Reference:

ARDMS Sonography Principles and Instrumentation guidelines

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

NEW QUESTION # 106

Which structure can be evaluated using M-mode?

- A. Kidneys
- B. Pancreas
- C. Liver
- D. Heart

Answer: D

Explanation:

Comprehensive and Detailed Explanation From Exact Extract:

M-mode (motion mode) ultrasound records the movement of structures along a single scan line over time. It is particularly valuable in cardiac imaging where precise motion of heart valves and walls is evaluated.

Principles and Instrumentation reference:

"M-mode is primarily used in echocardiography to evaluate the motion of cardiac structures with high temporal resolution." Liver, kidneys, and pancreas are evaluated using B-mode, not M-mode.

Therefore, the correct answer is A: Heart.

NEW QUESTION # 107

Which target group in this image of a tissue-mimicking phantom is used for gray-scale evaluation?



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

Answer: A

Explanation:

* Gray-scale evaluation in a tissue-mimicking phantom involves assessing the uniformity and accuracy of the gray-scale representation of the tissues.

* Option C typically contains structures designed to test the machine's ability to accurately depict varying levels of echogenicity, which is essential for proper gray-scale evaluation.

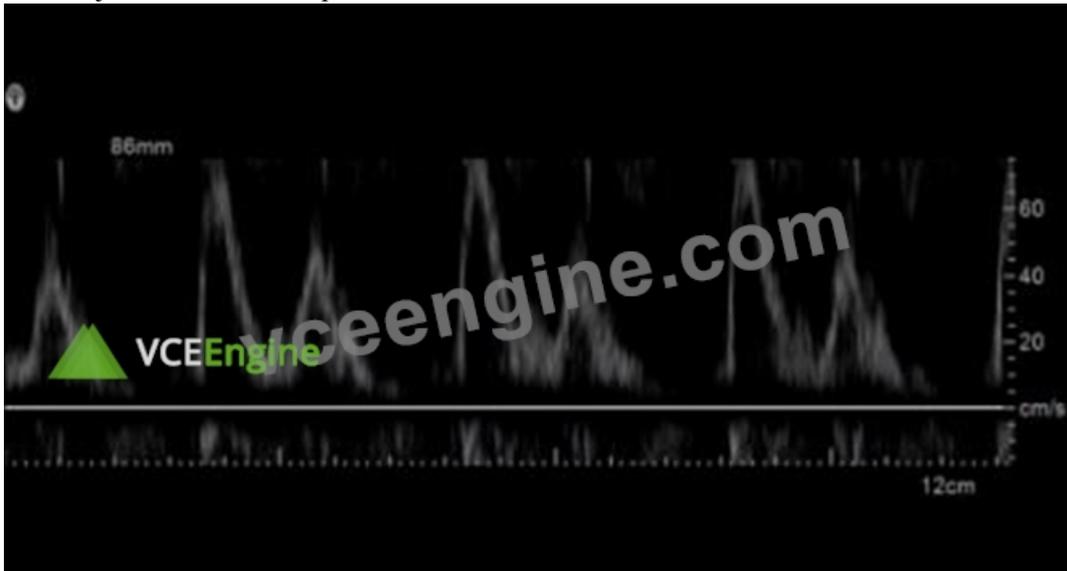
* This area will have a range of echo intensities that help in determining the contrast resolution and the ability of the system to distinguish between different tissue types based on their gray-scale values.

References:

* ARDMS Sonography Principles and Instrumentation guidelines on tissue-mimicking phantoms and image quality evaluation.

NEW QUESTION # 108

Which adjustment is needed to optimize the waveform below?



- A. Increase pulse repetition frequency
- **B. Lower baseline**
- C. Decrease gain
- D. Increase wall filter

Answer: B

Explanation:

The waveform in the image shows spectral Doppler signals that are pushed against the upper limit of the display, indicating that the baseline is too high. Lowering the baseline allows for a better visual representation of the entire Doppler signal within the available display range. This adjustment prevents the waveform from being cut off and helps in accurately interpreting the blood flow characteristics.

Reference:

ARDMS Sonography Principles & Instrumentation Guidelines

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

NEW QUESTION # 109

Which function can decrease noise?

- **A. Persistence**
- B. Frequency
- C. Depth
- D. Sector width

Answer: A

Explanation:

Comprehensive and Detailed Explanation From Exact Extract:

Persistence is a frame averaging function that combines multiple sequential frames to smooth random noise and reduce speckle, particularly effective in stationary or slow-moving structures.

According to official Principles and Instrumentation guidelines:

"Persistence reduces random noise by averaging multiple frames over time, improving image clarity but potentially reducing temporal resolution." A: Increasing frequency improves resolution but may increase attenuation.

B: Sector width affects frame rate.

C: Depth affects penetration but not noise reduction.

NEW QUESTION # 110

.....

