

SAMPLE QUESTIONS FOR ACCREDITATION TEST 2010

1. What is frequency of ultrasound waves ?

1. $< 200\text{H}_2$
 2. $200\text{-}2000\text{ H}_2$
 3. $2000\text{-}20,000\text{ H}_2$
 4. $>20,000\text{H}_2$
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2. Sound is having least velocity in which medium?

1. Bone
 2. Muscle
 3. Water
 4. Air
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3. What is velocity of sound in soft tissues?

1. 1540 cm/s
 2. 1540 m/s
 3. 1540 km/s
 4. 1540 ml/s
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4. Piezoelectric phenomenon is:

1. Pressure measurement in relation to electric current
 2. Change in shape producing vibrations as result of electric current
 3. Artifact in the filed of ultrasound imaging due to electrical interference
 4. Presentation of electric energy in ultrasound machine
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5. Axial resolution is not affected by:

1. Frequency of probe
 2. Pulse length
 3. Depth
 4. Gain
-

6. Out of followings, what type of transducer probe will be most appropriate for echocardiography?

1. Mechanical rotational
2. Mechanical oscillatory
3. Linear array

4. Phased array
 5. Linear phased array broadband
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7. What kind of waves are principally used in harmonic ultrasound?
1. Specular reflection
 2. Scattered reflection
 3. Specular and scattered both
 4. Linear component
 5. None of above
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8. Which one of following is not artifact?
1. Side lobe
 2. Reverberation
 3. Clutter
 4. Attenuation
 5. Post-acoustic shadowing
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9. What is not true about Doppler interrogation?
1. Preferably transducer should be of high frequency
 2. Beam should be parallel to the target
 3. It gives information about functional aspect rather than structural
 4. Range ambiguity is inherent to CW
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10. what is maximum accepted angle abbreviation for Doppler interrogation that requires no angle correction ?
1. 20°
 2. 30°
 3. 60°
 4. 90°
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11. Following change in machine setting will not eliminate aliasing:
1. PRF
 2. Velocity scale
 3. Change to CW mode
 4. Baseline shift
 5. Gain
 6. Depth
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12. Most sensitive method of detecting intracardiac shunt is:
1. Change in cardiac chamber size
 2. Change of stroke volume

3. PW Doppler
 4. Color flow imaging
 5. Contrast imaging
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13. Best temporal resolution is achieved by following mode:

1. M-mode
 2. 2D imaging
 3. Color flow imaging
 4. Contrast imaging
 5. Power mode
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14. Right parasternal view is useful in all except:

1. Interatrial septum visualization
 2. Dextrocardia
 3. Tricuspid valve
 4. Interrogatory aortic flow
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15. Severe aortic stenosis: Which of following is not true?

1. Peak velocity exceeding 6m/s
 2. Systolic gradient starting later than first heart sound
 3. Prolonged acceleration time
 4. Multiple windows are to be interrogated to find out maximum velocity flow
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16. M-mode of pulmonic valve does not show 'a' wave in which of the following

1. Valvular pulmonary stenosis
 2. Infundibular pulmonic stenosis
 3. Pulmonary hypertension with right ventricular failure
 4. Supraventricular pulmonary stenosis
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17. Interventricular septum is having normal movement in

1. Increased right ventricular volume
 2. Isolated right BBB
 3. Constrictive pericarditis
 4. Post cardiac surgery
 5. Isolated Left BBB
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18. Reduced EF slope on M mode of AML is not specific to

1. Mitral stenosis
2. Mitral regurgitation

3. Decreased LV relaxation
 4. LV failure
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19. Measurement of mitral valve area by PHT is not affected by

1. Concomitant MR
 2. Concomitant AR
 3. Soon after balloon mitral valvotomy
 4. Delayed myocardial relaxation
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20. MR jet is underestimated by color flow imaging when?

1. Eccentric jet
 2. Vary large & compliant LA
 3. Acute MR
 4. All of above
 5. None of above
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