

## Question Bank

# Medical Physics

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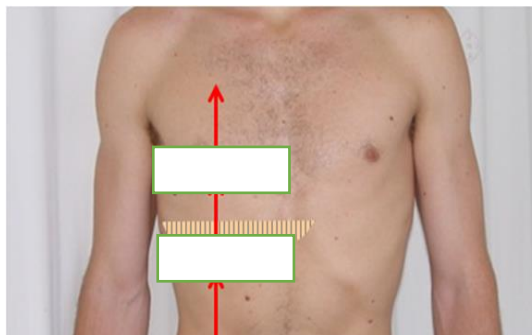
Q1/

1. The common unit of sound pressure or intensity \_\_\_\_\_.
  2. The closed bell stethoscope is used for listening to lung sounds, which are of \_\_\_\_\_ than heart sounds
  3. The volume of the Stethoscope tubs should also be small, and there should be little \_\_\_\_\_ of sound to the walls of the tube.
  4. Sounds with frequencies above 20 000 hertz are called \_\_\_\_\_.
  5. A device that converts \_\_\_\_\_ to \_\_\_\_\_ or vice versa is called transducer.
  6. The thinner the crystal(transducer), the \_\_\_\_\_ frequency at which it will oscillate.
  7. The reference sound intensity  $I_0$  is \_\_\_\_\_.
  8. The act of listening to sounds with a stethoscope is called \_\_\_\_\_.
  9. 1bel = \_\_\_\_\_ dB
  10. When a sound wave passes through tissue, there is some loss in the energy due to the \_\_\_\_\_ effects
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Q2/

Percussion in Medicine/The quality of the sound:

Resonant =



Dull =

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Q4/ What are the main differences between Ultrasound Transducer types?

Q5/ Application of A- scans in ophthalmology can be divided into two areas that are concerned with obtaining information for use in the:

Q6/ The amount of the reflection echo (Ultrasound wave) depends primarily upon the:

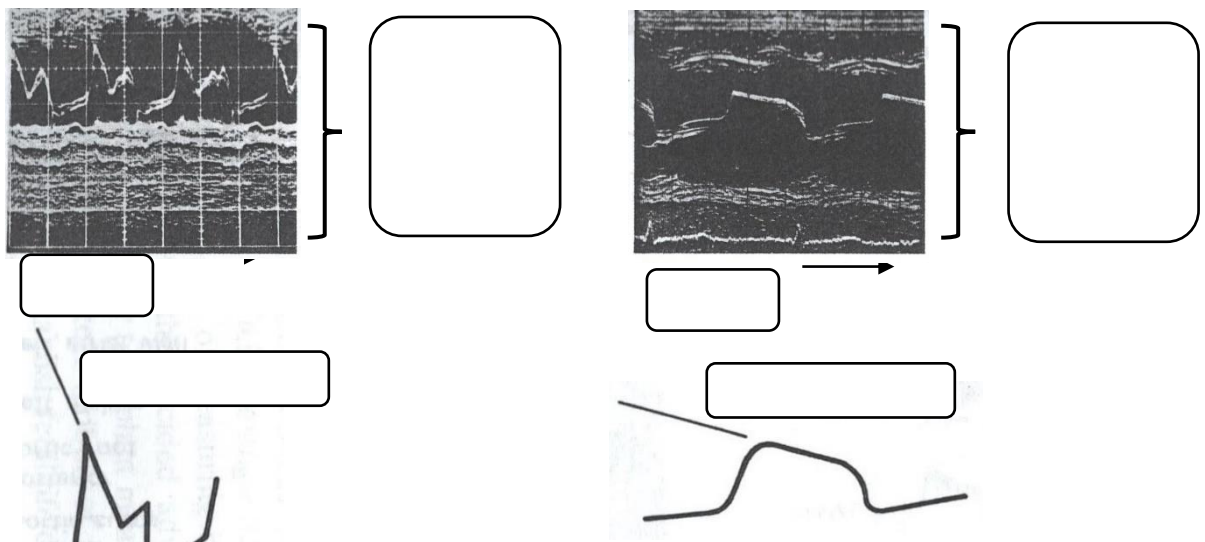
Q7/ Comparison between A&B Ultrasound Modes.

Q8/

1. absorption coefficient is  $2\alpha$ , the intensity decreases more rapidly than the amplitude with \_\_\_\_\_.
2. The closed bell stethoscope is used for listening to \_\_\_\_\_.
3. The volume of the Stethoscope tubs should also be \_\_\_\_\_.
4. Sounds with frequencies less than 20 hertz are called \_\_\_\_\_.
5. Ultrasound often gives more information than an \_\_\_\_\_ and it is less \_\_\_\_\_ for the fetus.
6. The thinner the crystal(transducer), the \_\_\_\_\_ the frequency at which it will oscillate.
7. Threshold intensity level of hearing (TOH) equal to \_\_\_\_\_.
8. When sound wave hits the body, part of the wave is \_\_\_\_\_ and part is \_\_\_\_\_ in to the body.

Q9/

M-scan showing an abnormality called \_\_\_\_\_ (a narrowing of the valve opening).



Q10) Linear transducer uses for various applications, such as:

Q11) When take Ultrasound Picture of the Body, the time for pulses to be reflected is important parameter why?

Q12) The amount of the reflection echo (Ultrasound wave) depends primarily upon the:

Q13) Comparison between A&B Ultrasound Modes.

Q14) Fluid movement through the capillary wall is the result of two pressures: -

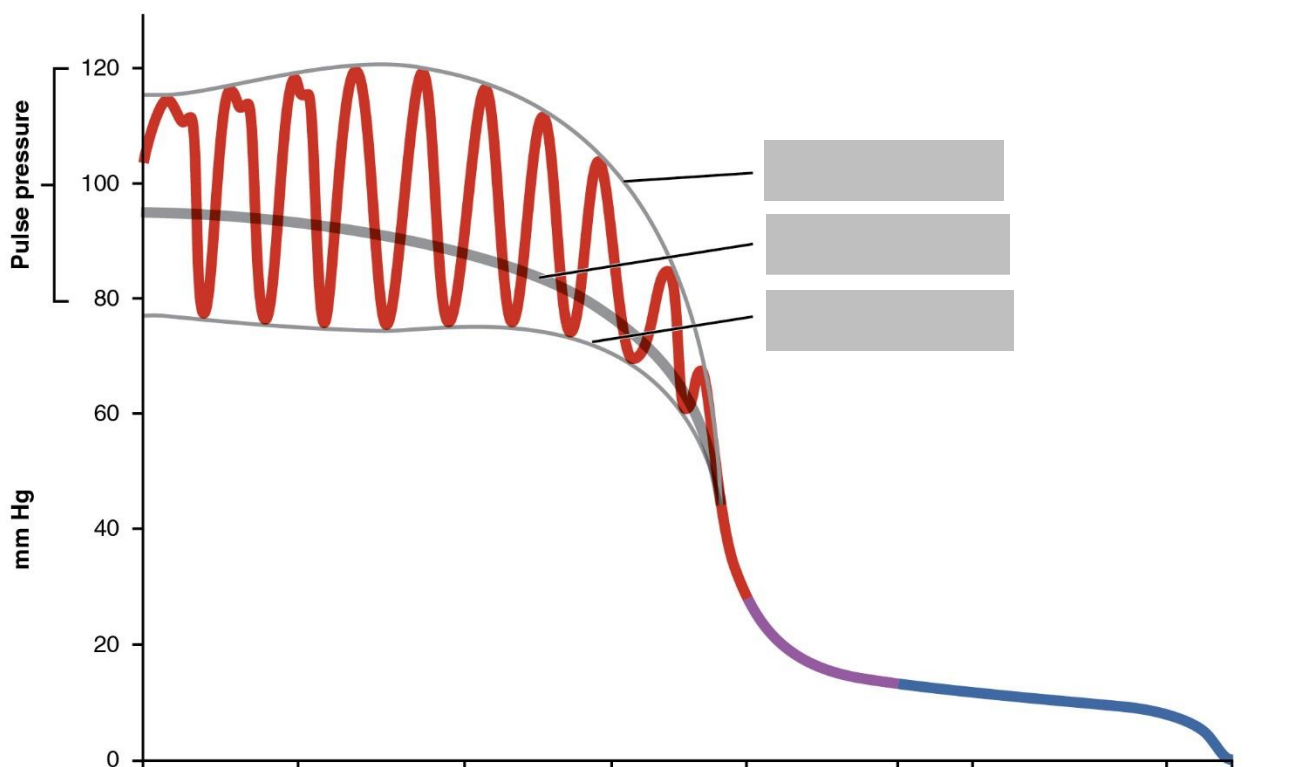
Q15) The heart rate of a person is 180 pulse/min; calculate the action time and the resting time of heart muscle.

Q16) Show the typical pressure – volume relationship in the urinary bladder, by figure.

Q17) Types of the Heart valve defect: -

Q18) Oxygen poisoning occurs when the: -

Q19) Fill the dark boxes on the below graph with suitable words.



Q20/What are the advantages of trabecular bone over compact bone?

Q21/The cross-section area and thickness increase as you go from neck (cervical) region to the lower back (lumber) region, what is the benefit of this?

Q22/Bursa; - is ...

Q23/what are the main Symptoms of Plantar Fasciitis?

Q24/In photon absorpyiometry technique, three problems with the x-ray technique were largely eliminated by using: -

Q25/COG in newborns is higher than in adults why?