

1. <b>acoustic impedance</b>	a measure of how easy it is to transmit sound waves through a medium; it is equal to the product of the density of the material and the velocity of sound through it	17. <b>imaging</b>	the process of creating an image of the interior of the human body by using ultrasound, x-rays, radio waves or electromagnetic waves or gamma rays
2. <b>a-scan</b>	an ultrasound scan in which a single transducer scans along a line in the body and the resulting echoes are plotted as a function of time	18. <b>Larmour frequency</b>	the frequency of precession of a proton or electron in a uniform magnetic field
3. <b>biopsy</b>	the removal of a small amount of tissue for medical examination	19. <b>magnetic moment</b>	a measure of the turning effect of a spinning charge in a magnetic field; it determines how difficult it is for the charge to align its axis of rotation in the direction of an external magnetic field
4. <b>b-scan</b>	an ultrasound scan where a linear array of transducers scans a plane in the body (a slice from front to back)	20. <b>magnetic resonance imaging (MRI)</b>	a non-invasive technique used to produce images of tissues inside the body using radio-frequency energy and strong magnetic fields
5. <b>coherent bundles</b>	bundles of optical fibres in which the individual fibres are kept in the same relative positions in the bundle at both ends	21. <b>nuclear imaging</b>	the use of radioisotopes to produce an image of the internal organs
6. <b>computerised axial tomography (CAT)</b>	a non-invasive technique that uses x-rays to produce images of various internal parts of the body	22. <b>optical fibres</b>	glass fibres with an outer layer that has a lower radioactive index than the inner layer; used to transmit light over distances and around corners
7. <b>current loops</b>	occur when current is moving in a circle; a current loop acts like a bar magnet		
8. <b>Doppler effect</b>	the apparent change in frequency when there is a relative motion between a source of sound and the observer		
9. <b>echocardiography</b>	the use of ultrasound and the Doppler effect to diagnose heart (cardiac) problems		
10. <b>electromagnets</b>	made by passing electric current through a conductor, which acts as a magnet		
11. <b>endoscopes</b>	devices that use optic fibres to look inside the body; endoscopes assist in observing internal organs and in obtaining tissue samples for biopsy		
12. <b>endoscopy</b>	the medical examination of the interior of the body by inserting an endoscope through an opening in the body		
13. <b>fibre optics</b>	a technology where light travels through fine glass tubes (optic fibres) as a result of total internal reflection		
14. <b>gamma rays</b>	high-energy photons emitted during radioactive decay		
15. <b>half-life</b>	the time it takes for half the given mass of a radioactive element to change into a new element		
16. <b>hertz</b>	a unit of frequency equal to one cycle per second		