

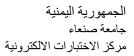


قائمة الاسئلة

مقدمة في الأشعة - المستوى الأول - قسم أشعة - كلية الطب والعلوم الصحية - برامج العلوم الطبية التطبيقية - الفترة الثانية - درجة الامتحان (70) د/ عمار على على عبده شرف الدين

- 1) Any visual object that's modified or altered by a computer or an imaginary object created using a computer
 - 1) + Image
 - 2) Picture
 - 3) Photo
 - 4) photograph
- 2) Accelerating potential (10 25 MV) for
 - 1) Mammography
 - 2) Fluoroscopy
 - 3) + X Ray therapy
 - 4) Computed Tomography (CT scan)
- 3) Wihch Anode (Target) made of a material Rhodium?
 - 1) + Mammography
 - 2) X Ray therapy
 - 3) Computed Tomography (CT scan)
 - 4) DENTAL X RAY
- 4) What is the average photon energy for CTscan?
 - 1) + 60KV
 - 2) MeV 3 10 MeV
 - 3) KV 150 9 MeV
 - 4) 80 160 KV
- 5) Fluoroscopy refers to the continuous acquisition of a sequence of images over time, essentially a real-time x-ray movie of the patient
 - 1) MRI
 - 2) + X RAY
 - 3) Ultrasound (US)
 - 4) Computed Tomography (CT scan)
- 6) are produced by passing x-rays through the body, at a large number of angles, by rotating the x-ray tube around the body. One or more linear detector arrays, opposite the x-ray source, collect the transmission projection data
 - 1) Panoramic Dental X-rays
 - 2) + CT images
 - 3) MRI scanners
 - 4) Nuclear medicine images
- 7) The......detector system is more sensitive to the presence of radioisotopes than SPECT cameras, and thus can detect very subtle pathologies
 - 1) + PET
 - 2) CT scan
 - 3) MRI
 - 4) SPECT
- 8) Positron are positively charged, and are emitted by some radioactive isotopes such as fluorine 18 and oxygen 15.
 - 1) proton
 - 2) beta
 - 3) alpha
 - 4) + electron

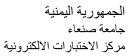
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9)	Because ultrasound isharmful than ionizing radiation to a growing fetus, ultrasound imaging is preferr in obstetric patients.	rec
) - few	
) - more	
) + less	
10)		
10)	Both the speed and direction of blood flow can be measured using imaging technology	
) - CT scan	
) + Doppler Ultrasound Imaging	
) - SPECT	
	- Magneto EncephaloGraphy	
11)	The nuclear medicine modality, Single Photon Emission Computed Tomography uses emission of	
	gamma rays resulting from the interaction of radiopharmaceutical substance with the target tissue.	
) - PET	
) - Magneto EncephaloGraphy	
) - MRI	
) + SPECT	
12)	Understanding Image medium: tissue is a static property that causes attenuation of an external	
,	radiation beam in X-ray imaging modality.	
) - resolution	
) - Contrast	
) + density	
) - intensity	
12)	•	
13)	is related primarily to the proton density and to	
	relaxation phenomena	
	resolution CT scan	
	- Emission Computed Tomography) SPECT)	
	- Contrast in ultrasound	
) + Contrast in MRI	
14)	In ultrasound imaging, the wavelength of sound is the fundamental limit of	
) + spatial resolution	
) - Contrast	
) - density	
) - intensity	
15)	Muchx-ray energies are used in mammography than any other radiographic applications.	
) - higher	
) - more	
) - equivalent	
) + lower	
16)	During a examination, the x-ray tube rotates in a semicircle around the patient's head, starting	าลา
10)	one side of the jaw and ending at the other side.	, 41
) - Computed Tomography (CT scan)	
) + panoramic x-ray	
	Mammography	
4.5) - DENTAL X RAY	
17)	is useful for monitoring blood flow through arteries.	
	Ultrasound Imaging (US)	
	+ MR angiography (MRI)	
	- Single Photon Emission Computed Tomography (SPECT)	

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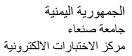
- Positron Emission Tomography (PET)
- In a nuclear camera records x- or gamma-ray emissions from the patient from a series of different 18) angles around the patient.
 - PET
 - 2) CT scan
 - 3) **MRI**
 - 4) SPECT
- The (e+)combines with an electron (e-) from the surrounding tissue, and the mass of both the e+ and 19) the e- is converted by annihilation into pure energy, following Einstein's famous equation E = mc2.
 - positron
 - 2) neutrons
 - 3) alpha
 - 4) beta
- 20) is different to all the other techniques. It doesn't put anything into a patients body. No X rays/Strong Magnetic Fields/Radio waves/Radiotracers
 - MR angiography (MRI) 1)
 - Ultrasound Imaging (US) 2)
 - Positron Emission Tomography (PET)
 - Magneto EncephaloGraphy (MEG)
- It is an imaginary line that divides the body into front and back. 21)
 - Axial 1)
 - 2) Sagittal
 - 3) Coronal
 - Lateral
- 22) The patient is in an inclined position 45 degrees from the x-ray receiver.
 - Lateral side 1)
 - Oblique 2)
 - 3) Anteroposterior PA
 - Anteroposterior AP
- 12 g of radioactive material in a place, and after 60 days, it was found that the remaining amount of this 23) radioactive material is 0,75 g. . Calculate the half-life of this radioactive substance
 - 12.5 days 1)
 - 2) 7.5 days
 - 3) days 30
 - + 15 days
- A sample of radioactive material weighing 200 g. 24)

How many of them are left after half an hour if

you know that the half-life is ten minutes.

- g100 1)
- 2) g50
- 3) g25
- It is an acronym for Source-Image Distance, which is the distance between the x-ray tube source and the 25) Bucky beam receiver
 - SID usually 6 m 1)
 - 2) SID usually 100 cm
 - SID usually 10 cm 3)
 - SID usually 100 mm
- RPO It is an acronym for 26)

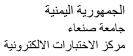
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- 1) Left Anterior Oblique
- 2) Right Anterior Oblique
- 3) + Right Posterior Oblique
- 4) Left Posterior Oblique
- The inclination is of two types: either upward towards the head and is called,or it is tilted down towards the feet and here it is called
 - 1) RPO RAO
 - 2) .caudal cephalad
 - 3) LAO LPO
 - 4) + cephalad caudal.
- 28) ASIS Anterior Superior Iliac Spine this examination shows the
 - 1) Cervical AP
 - 2) Thoracic AP
 - 3) + Pelvis AP
 - 4) Lumbar Spine AP
- 29) An imaginary line that divides the human body into above and below.
 - 1) + Axial
 - 2) Sagittal
 - 3) Coronal
 - 4) Lateral
- 30) The duration of the..... imaging machine is 30 45 minutes
 - 1) + MRI
 - 2) X RAY
 - 3) Ultrasound (US)
 - 4) Computed Tomography (CT scan)
- In MRI, the patient is placed in the magnetic field, and a pulse of waves is generated by antennas ("coils") positioned around the patient.
 - 1) sound
 - 2) microwaves
 - 3) + radio
 - 4) seismic
- 32) Ultrasound refers to sound with a frequency above
 - 1) + 20,000Hz
 - 2) 2000Hz
 - 3) 200Hz
 - 4) 20Hz
- 33) Very sensitvive metabolic tool. It is advantage for......
 - 1) MRI
 - 2) + Nuclear medicine
 - 3) Ultrasound (US)
 - 4) Computed Tomography (CT scan)
- Mainly anatomical and only "reasonable " spatial resolution. These disadvantages for......
 - 1) MRI
 - 2) Nuclear medicine
 - 3) + Ultrasound (US)
 - 4) Computed Tomography (CT scan)
- 35) is a specialized x-ray projection imaging technique useful for detecting breast anomalies such as masses and calcifications.
 - 1) DENTAL X RAY

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- 2) + Mammography
- 3) Computed Tomography (CT scan)
- 4) panoramic x-ray