



قائمة الاسئلة

نظم التصوير الرقمي - (5454) - المستوى الثالث - قسم اشعة - نفقة خاصة - كلية الطب والعلوم الصحية - الفترة الأولى - درجة الامتحان (70)

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- 1) provide a choice of quick exposures or high resolution:
 - 1) - Two main parts of the circuit
 - 2) Two filaments
 - 3) - Two transformers
 - 4) - All above are true
- 2) is old standard unit for measuring the activity of a given radioactive sample :
 - 1) - Becquerel's .
 - 2) Curie
 - 3) - Gray
 - 4) - All above are false
- 3) The measure of the quantity of x-radiation is :
 - 1) Rontgen
 - 2) - Rem or Sieverts
 - 3) - Rad or Gray
 - 4) - All above are false
- 4) is it provides the sharpness of the small focal spot with the heat capacity of the large focal spot:
 - 1) Advantage of Line focus
 - 2) - angling the anode target
 - 3) - Effective focal spot
 - 4) - All above are false
- 5) is a device programmed to terminate the radiographic exposure time:
 - 1) - Main Circuit Timers
 - 2) - Milliamperere-Second Timers
 - 3) All answers are false
 - 4) - All above are true
- 6) They absorbed of more secondary radiation than other:
 - 1) - Parallel grid
 - 2) Focused grid
 - 3) - Stationary grid
 - 4) - All above are true
- 7) The anode is the side of the tube :
 - 1) Positive side .
 - 2) - Negative side .
 - 3) - All answer are false .
 - 4) - All answer are true .
- 8) is a device found underneath the exam table, a drawer like device that the cassette and grid is slid into before shooting x-ray:
 - 1) - filter
 - 2) - A couch
 - 3) A bucky
 - 4) - All answer are true .
- 9) is the beam projected onto the patient :
 - 1) - The actual focal spot
 - 2) The effective focal spot
 - 3) - X-Ray beam





- 4) - All answer are false
- 10) occur when a high energy electron ionizes an inner shell electron and then that hole is filled by an outer shell electron:
- 1) Characteristic of X-Rays
 - 2) - Bremsstrahlung X-rays
 - 3) - All Answers are true
 - 4) - All answer are false
- 11) X-ray Filters absorb radiation of:
- 1) - longer wavelengths or all of the soft/weak undesirable radiation
 - 2) - Lower wavelengths that has the soft/weak undesirable radiation
 - 3) longer wavelengths or some of the soft/weak undesirable radiation
 - 4) - All Answers are true
- 12) The higher the grid ratio & frequency :
- 1) The higher the contrast improvement factor
 - 2) - The best improvement image contrast
 - 3) - All answers are true
 - 4) - All answer are false
- 13) A target window is constructed in the glass envelope to :
- 1) - allow less temperture & beam of the photons
 - 2) allow less scatter & attenuation of the photons
 - 3) - All answer are false
 - 4) - All answers are true
- 14) Exposure factor my need to be change :
- 1) when increasing collimation .
 - 2) - when decreasing collimation.
 - 3) - when collimation contrast .
 - 4) - All answer are false
- 15) the 15% rule will always :
- 1) change the contrast of the image .
 - 2) - change the density of the image .
 - 3) - change the contrast or density of the image .
 - 4) - All answer are false
- 16) to change density :
- 1) - only kvp should be changed .
 - 2) only mAs should be changed.
 - 3) - kvp and mAs should be changed.
 - 4) - All answers are true
- 17) step down transformer in x ray machines is used for :
- 1) - Supplying the high voltage for x-ray tube .
 - 2) - Indicating the voltage applied across the x-ray tube .
 - 3) Supplying power to heat the filament of the x-ray tube .
 - 4) - All answers are true
- 18) modify the voltage of incoming AC electrical signals to increase or decrease the voltage in circuit :
- 1) Transformer .
 - 2) - Control panel .
 - 3) - High frequency generator .
 - 4) - All answers are true
- 19) convert DC signal into sinusoidal waveform with high frequency :
- 1) - Rectifier





- 2) - Transformer
3) High frequency generator .
4) - All answers are true
- 20) provide the electrical power needed to accelerate the flow of electrons from the cathode to the anode :
1) - High voltage circuit .
2) The filament circuit .
3) - Autotransformer
4) - All answer are false
- 21) consist of step-up transformer and other components :
1) High voltage circuit .
2) - The filament circuit .
3) - Timer circuit.
4) - All answers are true
- 22) automatically terminates radiographic exposures when the intensity of x-ray will be sufficient on film :
1) - Timer circuit.
2) Automatic exposure control .
3) - All answer are true
4) - All answer are false
- 23) indicating the voltage applied across the x-ray tube by :
1) - step up transformer.
2) Autotransformer .
3) - step down transformer.
4) - All answer are false
- 24) convert AC into the direct current (DC) required by the x-ray tube by :
1) Rectifier
2) - Transformer
3) - Control panel .
4) - All answer are false
- 25) the measurement unit of absorbed dose is the :
1) - Becquerel's .
2) - rem or Sieverts .
3) rad or gray
4) - All answer are false
- 26) are the most useful for diagnostic imaging
1) Characteristic of X-Rays
2) - Bremsstrahlung X-rays
3) - All answer are false
4) - All answer are true
- 27) Smaller target angles will produce ----- effective focal spots and sharper images
1) Smaller
2) - no effect
3) - higher
4) - All answer are false
- 28)in kVp increases the efficiency of x-ray production
1) increase
2) - decrease
3) - no effect
4) - All answer are false
- 29) The lower grid ratio and frequency the the contrast improvement factor





- 1) - higher
2) lower
3) - no effect
4) - All answer are false
- 30) the area of the target material being bombarded by electrons from the filament
- 1) - Effective focal spot
2) Actual focal spot
3) - Line-Focus
4) - All answer are false
- 31)the change in direction the more loss of energy and therefore the higher energy photon
- 1) The greater
2) - The lesser
3) - All answer are false
4) - All answer are true
- 32) the beam projected onto the patient
- 1) - Actual focal spot
2) - Line-Focus
3) Effective focal spot
4) - All answer are true
- 33) The glass envelope is made of
- 1) - lead
2) Pyrex
3) - iron
4) - All answer are true
- 34) Located within the glass tube
- 1) - Stator
2) Rotor
3) - All answer are true
4) - All answer are false
- 35) Receives the electrons emitted from the cathode by :
- 1) anode
2) - Cathode
3) - filaments
4) - focusing cup

