## 153/2014

- Regarding Barium Enema examination, which of the following is not true?
  - (A) instant enema is used in ulcerative colitis
  - (B) soap and water enema is better than complete bowel wash in the preparation of double contrast barium enema
  - (C) pnematosis intestinalis is a rare complication of barium enema study
  - (D) 24 hour post evacuation film is a must to rule out Hirshsprung's disease
- 2. Regarding IVP examination, which of the following is not true?
  - (A) delayed nephrogram is a sign of decreased renal function
  - (B) ball pyelogram is described in contracted kidneys
  - (C) adequate hydration of the patient is essential when ionic contrast medium is used
  - (D) erect films are used to evaluate nephroptosis
- 3. Regarding emergency IVP examination, which of the following is not true?
  - (A) done in casualty without any prior preparation of patient
  - (B) limited films like KUB, 5 minute and 15 minute films, full bladder are taken
  - (C) usually done for evaluating renal trauma or acute ureteric obstruction
  - (D) contrast dose is 1 ml of 300 mg of Iodine/kg body weight
- 4. Regarding MCU examination, which of the following is not true?
  - (A) oblique films are better to visualize the VUR
  - (B) urinary bladder must be filled before doing MCU
  - (C) most common indication in children is recurrent UTI
  - (D) obstructive lesions of female lower urinary tract is much lower than the boys.
- 5. Regarding Double contrast examination of GIT, which of the following is not true?
  - (A) used for evaluation of mucosal ulcers
  - (B) used for evaluation of obstructive lesions
  - (C) uses high density of barium for surface coating
  - (D) useful when single contrast study fails to detect small lesions
- Regarding CT scan machine, which of the following is not true?
  - (A) tube rating is given by mHu
  - (B) slip ring technology is used in helical scanning
  - (C) 3<sup>rd</sup> generation CT scanners are rotate-fixed type
  - (D) flat pannel detectors are used in 64 slice scanners
- 7. Regarding Rare earth screens, which of the following is not true?
  - (A) emits green light
  - (B) are more effective than calcium tungstate screens
  - (C) are more cheaper than blue light emitting screens
  - (D) are used for high quality X-ray examinations
- 8. Regarding imaging of biliary tract, which of the following is not true?
  - (A) Direct cholangiography provides the most precise delineation of the anatomy of biliary ducts
  - (B) ERCP is the best technique to differentiate benign from malignant disease
  - (C) MRI is the best technique for evaluation of the wall of extrahepatic biliary ducts
  - (D) Cholangiography is the most accurate technique for determining the precise level of obstruction

- 9. Regarding 1st generation fluoroscopy, which of the following is not true?
  - (A) consists of X-ray tube, X-ray table and fluoroscopic screen
  - (B) fluoroscopic material was barium flurocyanide
  - (C) green screen was synonym for fluoroscopy
  - (D) examination was carried out in a dark room wearing red goggles
- 10. Regarding discovery of X-rays, which of the following is not true?
  - (A) Wilhelm Conrad Roentgen was a German physicist
  - (B) discovered X-rays on November 8th, 1895
  - (C) noticed fluorescence of small piece of paper coated with barium platinocyanide- which lead to the discovery of X-rays
  - (D) noticed Nobel prize for physics in 1902
- 11. Regarding SI units, which of the following is not true?
  - (A) SI unit of radionuclide activity is Becquerel
  - (B) SI unit of absorbed dose is Rad
  - (C) SI unit of magnetic flux density is tesla
  - (D) SI unit of charge is coulomb
- 12. Regarding X-ray tube filament, which of the following is not true?
  - (A) X-ray tube current refers to number of electrons flowing per second from filament to target
  - (B) filament is tungsten wire about 0.2 mm in diameter
  - (C) tungsten must be heated to at least 2000 degrees C for thermionic emission
  - (D) tungsten is selected as filament because of high melting point and has little tendency to vapourise
- 13. Regarding Heel effect, which of the following is not true?
  - (A) intensity of X-ray beam that leaves X-ray tube is not uniform throughout all Portion of beam is called heel effect
  - (B) intensity of film exposed on the anode side of tube is significantly less than cathode side
  - (C) heel effect is less noticeable when small FFD are used
  - (D) in equal target film distances, heel effect will be less for smaller films
- 14. Regarding X-ray image intensifier, which of the following is not true?
  - (A) input Phosphor in old image intensifier was Zinc-cadmium sulfide
  - (B) input Phosphor in newer image intensifier is cesium iodide
  - (C) cesium iodide crystals are oriented in horizontal direction
  - (D) phosphor thickness of cesium iodide is 3 times less than Zn-Cd-Sulfide
- 15. Regarding X-ray image intensifier, which of the following is not true?
  - (A) photocathode is a photoemissive metal (commonly a combination of antimony and cesium compounds)
  - (B) photocathode is directly applied of Cs I input Phosphor
  - (C) electrostatic focusing lens is made up of aluminium
  - (D) photoelectrons are produced from the photocathode proportional to the intensity of light from input Phosphor
- 16. Regarding X-ray image intensifier, which of the following is not true?
  - (A) Accelerating anode has positively charged
  - (B) output Phosphor is silver activated zinc-cadmium sulfide
  - (C) thin layer of aluminium is plated onto the fluorescent screen to prevent stray radiation
  - (D) glass tube of the image intensifier is about 2 4 mm thick

- 17. Regarding increased True Fog, which of the following is not true?
  - (A) caused by low speed film
  - (B) caused by contaminated or exhausted developer
  - (C) caused by excessive time/temperature development
  - (D) caused by improper film storage
- 18. Regarding subject contrast, which of the following is not true?
  - (A) low kVp will produce high subject contrast
  - (B) kVp has no effect on film blackening
  - (C) mAs controls film blackening
  - (D) attenuation by photoelectric effect makes the most important contribution to the subject contrast
- 19. Regarding conventional tomography, which of the following is not true?
  - (A) tomographic angle is the amplitude of tube travel expressed in degrees
  - (B) section thickness is inversely proportional to amplitude of tube travel
  - (C) zonography utilizes tomographic arc of less than 10 degree
  - (D) wide angle tomography is best for tissues with high contrast (bone)
- 20. Regarding ERCP, which of the following is not true?
  - (A) is the definitive investigation in suspected case of pancreatic divism and annular pancreas
  - (B) is contra indicated in all types of acute pancreatitis
  - (C) is used to take biopsy and to relieve obstruction by doing sphincterotomy
  - (D) is more sensitive than CT to identify small intra ductal neoplasm and calculus
- 21. Regarding Enteroclysis, which of the following is not true?
  - (A) bilbao-dotter tube tip is placed just distal to DJ flexure
  - (B) single and double contrast studies can be done
  - (C) is the most sensitive investigation in suspected case of small bowel malignancy
  - (D) can detect subtle adhesions and most valuable in sub acute small intestinal obstruction
- 22. Regarding barium swallow, which of the following is not true?
  - (A) can detect asymptomatic esophageal webs
  - (B) is the definitive investigation in suspected dysphagia lusoria
  - (C) double contrast study will show early mucosal lesions
  - (D) water soluble contrast must be used in early post operative patients
- 23. Regarding Barium meal, which of the following is not true?
  - (A) true lateral view of stomach should be taken in post operative patients and suspected gastric ulcer
  - (B) RAO is taken to unwind the C-loop
  - (C) erect films are useful in suspected volvulus
  - (D) gastro-esophageal varices are best assessed in barium filled phase
- 24. Regarding barium meal follow through, which of the following is not true?
  - (A) 50% diluted barium is used in single contrast study
  - (B) in all cases of intestinal obstruction, barium meal follow through is the initial study of choice
  - (C) erect films are useful in suspected diverticulosis
  - (D) transit time can be reduced by using cold water for diluting barium

A

- 25. Regarding HSG, which of the following is not true? usually done at the 10th day of LMP (A) (B) pregnancy is the absolute contraindication (C) when done with Foley's catheter, endocervix could not be assessed (D) is the best modality for detecting congenital uterine malformations 26. Regarding Conventional X-ray tube, which of the following is not true? space charge effect will limit the flow of electrons from filament (B) focusing cup is made from nickel (C) in a double filament X-ray tube, one filament will be larger than the other stereoscopic angiographic tube, more than 3 filaments are used (D) 27. Regarding Conventional X-ray tube, which of the following is not true? aged tubes acquire a bronze Coloured sunburn due to vapourisation of tungsten (B) only less than 1% of energy of the electrons are converted into X-rays (C) anode angle varies from 6 - 20 degrees (D) as the anode angle is made smaller, the apparent focal spot becomes larger 28. Regarding Conventional X-ray tube, which of the following is not true? anode rotation speed is 3000 - 3600 rpm (B) lubricant for anode rotation is metallic silver anode stem is made up of beryllium (C) (D) compound anode is made up of molybdenum/graphite and tungsten, thin layer of tungstenrhenium alloy attached to the disc serves as actual target 29. Regarding photoelectric effect, which of the following is not true? always yield 3 end products namely characteristic radiation, negative photoelectron and positive ion the tighter an electron is bound in the orbit, less likely it is to be involved in photoelectric (B) reaction (C) enhances natural tissue contrast incident photon must have sufficient energy to overcome the binding energy of electron 30. Regarding factors determining the quantity of scatter radiation, which of the following is not true? (A) FFD (B) field size (C) part thickness (D) kilo voltage (kVp)
- 31. Regarding attenuation, which of the following is not true?
  - (A) is the reduction in the intensity of X-ray beam either by absorption or reflection
  - (B) attenuation of polychromatic and monochromatic beams are exponential
  - (C) amount of attenuation depends on energy of radiation, atomic number and density of electron/gram of tissue
  - (D) high atomic number elements attenuate more radiation
- 32. Regarding Autotransformer, which of the following is not true?
  - (A) consists of a double winding wound on a laminated closed core
  - (B) provides voltage for X-ray tube filament current
  - (C) provides voltage for primary of high voltage transformer
  - (D) works on principle of self induction

- 33. Regarding Filament circuit, which of the following is not true?
  - (A) filament transformer, primary winding obtain high voltage from high voltage transformer
  - (B) current flow is typically 3 5 A
  - (C) filament transformer is a step down transformer
  - (D) filament transformer is placed in the same oil filled grounded metal tank as the high voltage transformer
- 34. Regarding inherent filtration, which of the following is not true?
  - (A) materials responsible are glass envelope, insulating oil and window in the housing
  - (B) varies between 0.5 1 mm aluminium equivalent
  - (C) beryllium window tubes are used to increase inherent filtration
  - (D) filtration increases the mean energy of X-ray beam
- 35. Regarding added filtration, which of the following is not true?
  - (A) aluminium is an excellent filter for low energy radiations
  - (B) copper is an excellent filter for high energy radiations
  - (C) copper is never used by itself as filter material
  - in combined filter, aluminium absorbs most of the radiation and copper absorbs characteristic radiation of aluminium
- 36. Regarding K-edge filters, which of the following is not true?
  - (A) make use of k-absorption edge of elements with atomic numbers more than 60
  - (B) offer advantages when imaging barium and iodine
  - (C) heavy metal filters decreases high energy photons, but increases low energy photons
  - (D) heavy metal filters offers decreased absorbed dose and increase image contrast
- 37. Regarding X-ray beam restrictors, which of the following is not true?
  - (A) collimator is the best all round X-ray beam restrictor
  - (B) when decreasing the size of X-ray field by the collimators, factor must be reduced to keep the radiographic density constant
  - (C) PBL is automatic collimator
  - (D) collimator functions as decrease in scatter radiation
- 38. Regarding grids, which of the following is not true?
  - (A) interspace materials are either aluminium or organic compounds
  - (B) grids with aluminium interspace material are stronger than organic interspaces
  - (C) invented by Dr. Gu-stave Bucky in 1913
  - (D) exposure factors when using aluminium interspaces are lower
- 39. Regarding grid ratio, which of the following is not true?
  - (A) grid cassette fairly have high grid ratio
  - (B) higher the grid ratio, better is the function
  - (C) parallel grids are used in fluoroscopic spot film device
  - (D) grid ratios are indicated at the top of grid by the manufacturer
- 40. Regarding grid, which of the following is not true?
  - (A) primary transmission indicates only the primary radiation absorbed
  - (B) Bucky factor indicates the absorption of secondary radiation
  - (C) higher the grid ratio, the contrast improvement factor will be high
  - (D) the contrast improvement factor is the ultimate test of grid performance

- 41. Regarding Xeroradiography, which of the following is not true?
  - (A) photoconductor used in amorphous selenium
  - (B) selenium is deposited as a thin layer onto a sheet of aluminium
  - (C) no interface layer is present between selenium and aluminium
  - (D) selenium is deposited by condensation of vaporised liquid in high vacuum on the aluminium sheet
- 42. Regarding Xeroradiography, which of the following is not true?
  - (A) selenium layer is 150 400 microns
  - (B) protective overcoating of xeroradiographic plate is gelatin
  - (C) scoroton/cirotron are the charging devices for xeroradiographic plates
  - (D) sensitivity of the plates to X-rays depends on selenium thickness and on the energy (kVp) of X-ray beam
- 43. Regarding the advantages of Xeroradiographic mammogram from film-screen mammogram, which of the following is not true?
  - (A) high patient absorbed dose
- (B) edge enhancement
- (C) broad exposure latitude
- (D) deletions
- 44. Regarding Circular tomography, which of the following is not true?
  - (A) equipment is cheap
- (B) produces uniform section thickness
- (C) exposure time is short
- (D) parasite streaks are not present
- 45. Regarding Pan tomography, which of the following is not true?
  - (A) produces a panoramic roentgenogram of curved surface
  - (B) X-ray tube rotates, but film holder remains stationary
  - (C) patient remains stationary throughout the examination
  - (D) most commonly used as orthopantomography
- 46. Regarding Photographic density, which of the following is not true?
  - (A) measurement of film blackness is called Photographic density
  - (B) total fog density of fresh X-ray film will average about 0.075
  - (C) total density exhibited by the radiograph is the sum of the density of 2 emulsions in double coated films
  - (D) density is expressed in numbers
- 47. Regarding radiation protection, which of the following is not true?
  - (A) In stochastic effect of radiation exposure, the probability of occurance of side effects increases with increase in absorbed dose
  - (B) annual effective dose equivalent limit for occupational exposure is 30 mSv
  - (C) annual effective dose equivalent limit for lens of eye is 15 rems
  - (D) an individuals effective dose equivalent limit in rems should not exceed his/her age in years
- 48. Regarding protective barriers, which of the following is not true?
  - (A) if a wall holds a fixed film changer (like chest stand for chest radiography), use factor (U) for that particular wall is One
  - (B) use factor (U) for the ceiling is always Zero
  - (C) use factor (U) for the secondary barriers is always Zero
  - (D) occupancy factor (T) for corridors is 1/4

- 49. Regarding original EMI scanner, which of the following is not true?
  - (A) designed specifically for evaluation of brain
  - (B) only 2 detectors were used
  - (C) head was enclosed in water bath during scanning
  - (D) rigid scanner gantry maintained the relative position of the X-ray tube and detectors
- 50. Regarding CT scan, which of the following is not true?
  - (A) detectors are fixed in 4th generation scanners
  - (B) fan beam of X-rays was introduced in 2nd generation scanners
  - (C) in 2nd generation scanners, number of detectors were as many as 30
  - (D) Rotate-rotate scanner was introduced in 1978
- 51. Regarding CT scan, which of the following is not true?
  - (A) X-ray beam is collimated entirely at the level of detectors
  - (B) each detector has its collimator
  - (C) collimator regulates the slice thickness
  - (D) collimator at the detector level is the sole means of controlling scatter radiation
- 52. Regarding Scintillation Crystal detectors, which of the following is not true?
  - (A) 1st generation of CT scan used thallium activated Na I crystals with silicon photodiodes
  - (B) scintillation Crystal will produce light when ionizing radiation reaches them
  - (C) combination of scintillation material and light detector is called scintillation detector
  - (D) detector cross talk decreases resolution
- 53. Regarding resolution of CT scan, which of the following is not true?
  - (A) resolution is expressed in line pairs/mm in CT
  - (B) detector size influences spatial resolution
  - (C) increasing the matrix size will improve high contrast spatial resolution
  - (D) improvement of both contrast resolution and spatial resolution will require increased patient dose
- 54. Regarding CT artifacts, which of the following is not true?
  - (A) motion artifacts are reduced by using faster scan
  - (B) streak artifacts occur at the edge of high contrast objects
  - (C) ring artifacts are common in rotate-rotate geometry
  - (D) cup artifacts of head is due to miscaliberation of detector
- 55. Regarding Radiation units, which of the following is not true?
  - (A) Rem is a unit of absorbed dose
  - (B) As measure of exposure, Roentgen is Independent of area of field size
  - (C) 1 Gray is 100 Rads
  - (D) 1 Sievert is 100 Rems
- 56. Regarding Half value layer, which of the following is not true?
  - (A) is expressed in mm of lead and cm of concrete
  - (B) beam with HVL of 0.2 mm lead is more penetrating than a beam with HVL of 0.1 mm lead
  - (C) HVL is the thickness of specific substance that when introduced into the path of beam reduces exposure rate by one half
  - (D) HVL for 100 kVp X-rays is 0.24 mm lead

- 57. Regarding secondary barriers, which of the following is not true?
  - (A) secondary barriers provide protection from stray radiation
  - (B) no secondary barrier is required for areas protected by primary barrier
  - (C) kVp and patient thickness plays a role in determining secondary barriers requirements
  - regarding inverse square attenuation of scattered radiation, the distance is measured from the centre of the patient
- 58. Regarding leakage radiation, which of the following is not true?
  - (A) maximum permissible leakage exposure 1 meter from a diagnostic X-ray tube is 0.5 R/hour
  - (B) leakage radiation is the radiation that passes through the lead shielding in the tube housing when the beam is turned on
  - (C) leakage radiation will occur even if the collimator shutter is completely closed
  - (D) Half value method is useful to reduce leakage radiation to permissible levels
- 59. Regarding Intensifying screens, which of the following is not true?
  - (A) reflecting coat is made up of titanium dioxide
  - (B) light produced by calcium tungstate crystal is seen by the eyes as violet colour
  - (C) thick phosher will result in slow speed
  - (D) high speed means less detail of film
- 60. Regarding Computerized Radiography, which of the following is not true?
  - (A) the latent image will be readable only up to 1 hour
  - (B) uses a photo stimulable Phosphor as image receptor
  - (C) commonly used Phosphor is europium activated barium flurobromide
  - (D) CR plate is scanned with light from thallium neon laser
- 61. Regarding Developing agents ingredients, which of the following is not true?
  - (A) alkali
- (B) hardening agent (C) preservative
- (D) antifogants
- 62. Regarding movement of grids, which of the following is not true?
  - (A) invented by Hollis's E Potter in 1921
  - (B) will decrease the patient radiation dose
  - (C) are reciprocating
  - (D) will move a little time more than the exposure time to avoid grid lines
- 63. Regarding Air gap technique, which of the following is not true?
  - (A) in chest radiography FFD is increased to 8 feet
  - (B) an alternative method to reduce scatter radiation
  - (C) 1st inch of air gap improves contrast more than any subsequent inches
  - (D) used in 2 clinical situations, chest radiography and magnification radiography
- 64. Regarding Superconducting magnets, which of the following is not true?
  - (A) take advantage of zero resistance that certain materials at very low temperatures
  - (B) the power supply must be maintained throughout
  - (C) entire magnetic system must be at about 4 degree K
  - (D) low temperature is maintained with liquid helium
- 65. Regarding Superconducting magnets, which of the following is not true?
  - (A) Quenching result in loss of magnetization and liquid helium
  - (B) high field strength is main advantage
  - (C) rapid quenching results in release of large amounts of nitrogen
  - (D) main disadvantage is the high cost

66.	Regarding spin echo MRI scan, which of the following is not true ?		
771	(A) spin echo sequence with short TR will produce T1-weighted image		
	(B) long TR maximizes T1 differences		
	spin echo sequence with long TE will produce T2-weighted image     long TE maximizes T2 differences		
67.	Regarding comparison of surface coils to body coils, which of the following is not true?  (A) easy to use (B) better spatial resolution (C) better signal to noise ratio (D) limited field		
68.	Regarding noise in MRI, which of the following is <b>not</b> true?  (A) decreased by small voxel size (B) decreased by long TR  (C) decreased by short TE (D) decreased by surface coils		
69.	Regarding manual processing, which of the following is <b>not</b> true?  (A) time temperature method is the rule  (B) acid bath shortens developing time  (C) washing time is double the fixing time  (D) channel type hangers are less economical than clip type hangers		
70.	Regarding automatic processing, which of the following is <b>not</b> true?  (A) processing time is 90 seconds (B) liquid chemicals is must (C) rinsing stage is omitted (D) processing is done at room temperature		
71.	Regarding dark room, which of the following is not true?  (A) safe light should be 3 feet above wet bench  (B) inlet pipe of developer tank must be at the bottom  (C) outlet pipe of fixer tank must be at the bottom  (D) alcohol thermometer should be used		
72.	Regarding conventional dark room, which of the following is <b>not</b> true?  (A) safe light should be red colour  (B) capacity of fixer tank should be double the developer tank  (C) running water should be used for washing  (D) agitation helps in fixing process		
73.	Regarding chest radiography, which of the following is not true?  (A) usual radiation dose is 0.5 mSv  (B) apical view is taken for suspected middle lobe collapse  (C) expiratory view is taken for suspected foreign body  (D) calcification are better seen with high kV radiography		
74.	Regarding high kV radiography, which of the following is <b>not</b> true?  (A) uses 120 and more kVp  (B) decreases subject contrast  (C) higher grid ratio needed  (D) useful in barium studies of GIT		
75.	Regarding scaphoid radiography, which of the following is <b>not</b> true?  (A) in PA with hand adducted, centering will be midway between the radial and ulnar styloid processes		
	(B) in anterior oblique view, centering will be on ulnar styloid process		
	(C) in posterior oblique view, centering will be on radial styloid process		
	(D) in lateral view, centering will be on radial styloid process		

- 76. Regarding shoulder radiography, which of the following is not true?
  - (A) in supine AP film, centering will be on head of humerus
  - (B) in erect AP is preferable than supine AP in suspected dislocation of gleno humeral joint
  - (C) in erect AP film, centering will be on head of humerus
  - (D) in lateral oblique view, centering will be on head of humerus
- 77. Regarding Knee radiography, which of the following is not true?
  - (A) lateral-horizontal beam is used in all cases of suspected fracture
  - (B) erect AP view is taken as a stress view
  - (C) curved cassette is used for inter condylar view to reduce OFD
  - (D) central ray directed 90 degrees caudally to demonstrate posterior part of inter condylar notch
- 78. Regarding cervical radiography, which of the following is not true?
  - (A) in anterior oblique view, tube is tilted cranially
  - (B) shoulder should be depressed in lateral view to see the C 7 vertebra clearly
  - (C) in posterior oblique view, the foramina demonstrated are on the side nearer the X-ray tube
  - (D) lateral view centered on the prominence of thyroid cartilage through C4 vertebra
- 79. Regarding skull radiography, which of the following is not true?
  - (A) fronto nasal articulation is called nasion
  - (B) glabella is a bony prominence just above nasion
  - anthropological base line extends from the infra orbital point to the center of external auditory meatus
  - (D) orbito-meatal plane is about 10 degrees to the anthropological plane
- 80. Regarding sella tursica, which of the following is not true?
  - (A) tuberculum sellae is an anterior structure
  - (B) dorsum sellae is posterior structure
  - (C) most sensitive investigation for pituitary mass lesions is MRI
  - (D) Lateral radiograph is centered at a point 2.5 cm above and behind the external auditory meatus
- 81. Regarding petrous bone radiography, which of the following is not true?
  - (A) anterior oblique view is called Stockholm view
  - (B) occipito frontal view is called per orbital view
  - (C) anterior oblique in a skull unit is called Stockholm view
  - (D) in Sten vers view, central ray is angled 12 degrees cephaloid
- 82. Regarding PNS radiography, which of the following is not true?
  - (A) occipito mental projection helps to project petrous temporal below the floor of maxillary sinuses
  - (B) open mouth occipito mental view stretches the upper lip avoiding it causing a confusing soft tissue shadow over lower antra
  - (C) lateral view for sphenoid should be centered at a point 2.5 cm posterior to the outer canthus of eye
  - (D) occipito-frontal 10 degree cephaloid is used to demonstrate sphenoid sinus
- 83. Regarding Chest radiography, which of the following is not true?
  - (A) using air gap technique, OFD is increased to 20 cm
  - (B) penetrated chest X-ray is done by increasing 10 kVp
  - (C) using air gap technique, FFD is increased to 300 cm
  - (D) effect of back scatter from the wall can be prevented by suspending a piece of lead rubber on the rear of the chest stand immediately behind the cassette holder

- 84. Regarding speed ratio for different intensifying screens using similar speed films, which of the following is **not** true?
  - (A) rare earth 3 8

(B) fast tungststate - 2

(C) standard - 1

- (D) high definition less than 0.5
- 85. Regarding chest radiography, which of the following is not true?
  - (A) AP and lateral views of trachea should be taken in forced expiration
  - (B) 5 kV to be increased when taking an expiratory chest radiograph to demonstrate small pneumothorax
  - (C) trachea divides at the level of T6 vertebra
  - (D) 5 degree caudal angulation given for chest radiography to reduce radiation to lens and head
- 86. Regarding supine AP chest radiography, which of the following is not true?
  - (A) spine AP chest, an FFD of at least 1.2 meters is must
  - (B) in spine AP chest, maximum lung demonstration is lost due to absence of gravity effect
  - (C) central ray is directed to the sternal notch
  - (D) exposure is taken on full forced inspiration
- 87. Regarding Chest radiography oblique views, which of the following is not true?
  - (A) Patients with heavy breasts, anterior oblique views are preferred
  - (B) Anterior fractures are demonstrated using anterior oblique views
  - (C) In RAO, patient is rotated at an angle of 10 60 degrees from the coronal
  - (D) In posterior oblique, patient is rotated at an angle of 45 55 degrees from the coronal
- 88. Regarding neonatal chest radiography, which of the following is not true?
  - (A) baby supine with back against the cassette, usually results in reverse lordotic projection
  - (B) in correct projection, clavicles will be seen superimposed on lung apices
  - (C) upper edge of the cassettes should be positioned above long apices
  - (D) correct positioning will be leaning the baby forward and angling the tube 5 10 degrees cranially
- 89. Regarding abdominal radiography, which of the following is not true?
  - (A) plain X-ray is taken to visualize abnormal gas/fluid/calcification in acute abdomen
  - (B) exposure is made in arrested respiration usually after full expiration
  - (C) high mAs and very short exposure time is used
  - (D) plain X-ray should include the diaphragms above and pubic symphysis below
- 90. Regarding long exposure radiography technique, which of the following is not true?
  - (A) used in thoracic spine
  - (B) lowest mA station is chosen
  - (C) patient is immobilized and holds breath
  - (D) radiation dose increased
- 91. Regarding radiography, which of the following is not true?
  - (A) for zygomatic arches, recommended projection is fronto-occipital, 30 degree caudal
  - (B) for maxillae, recommended projection is anterior oblique, 10 degree cephaloid
  - (C) for mandible, recommended projection is lateral, 30 degree cephaloid
  - (D) for nasal bones, recommended projection is supero-inferior occlusal

92.	Regarding base of skull radiography basic view (A) sub-mento vertical 20 degrees caudal (B) lateral (C) sub-mento vertical (D) fronto-occipital 30 degree caudal	s, which of the following is not true?	
93.	Regarding recommended views for post operative check X-ray of hip, which of the following is not true?  (A) AP single hip  (B) lateral single hip		
		lateral neck of femur	
94.	Regarding recommended views for radiography of sternum in non traumatic pathological conditions, which of the following is not true?		
		anterior oblique-tube angled lateral	
95.	Regarding intra oral radiography, which of the (A) oblique lateral view (B) (C) occlusal radiography (D)	following is <b>not</b> true ? bite wing radiography peri apical radiography	
96.	Regarding recommended views for PNS radiography, which of the following is not true?  (A) occipito mental for maxillary antra  (B) occipito frontal 15 degree caudal for frontal sinus  (C) occipito frontal 10 degree cephaloid for sphenoid sinus  (D) anterior oblique for anterior ethmoid sinus		
97.	Regarding Tempero mandibular joint radiography, which of the following is not true?  (A) if patient has dentures, it should be removed  (B) lateral 25 degree caudal is the basic view  (C) both sides are examined separately  (D) 3 exposures are made with teeth clenched, mouth open and mouth closed, jaws relaxed		
98.	Regarding radiography of heart and aorta, which of the following is not true?  (A) PA view is centered at T6 vertebra  (B) FFD is kept at 180 cm  (C) RAO is taken with the coronal plane forms 60 degree angle to the film  (D) in RAO, the aortic arch is opened out to show the trans radiant aortic window		
99.	Regarding radiography of acute abdomen, which of the following is <b>not</b> true?  (A) supine AP view is useful to differentiate small bowel and large bowel obstruction  (B) PA or AP chest is taken for ruling out basal lung pathology  (C) horizontal ray films are taken to see fluid levels  (D) erect AP abdomen is more sensitive than chest PA view to see a small quantity of gas under diaphragm		
100.	Regarding radiography of urinary tract, which of the following is <b>not</b> true?  (A) no gonadal shielding is possible for females if whole of urinary tract to be visualized  (B) during IVP, compression is applied at the level of umbilicus  (C) posterior obliques are taken to know the relationship of opacities to the renal tract  (D) high mA and short exposure time is used		