1. Best investigation for bone metastases:
a) MRI
b) CT Scan
c) Bone scan
d) X- ray
Answer: Bone scan
Explanation:
Bone scans:
Bone scans are the most sensitive routine imaging modality to try and identify both
sclerotic and lytic lesions.
In most cases they demonstrate increased uptake (hot spot) although occasionally
(in very aggressive purely lytic lesions) a photopaenic defect (cold spot) may be visible.
This test is useful because it shows the entire skeleton, so it can sometimes show
bone metastasis that is not yet causing symptoms.
Indications for bone scinti-scanning include staging in asymptomatic patients, evaluating persistent pain in the presence of equivocal or negative radiographic findings, determining the extent of bone metastases in patients with positive radiograph findings, differentiating metastatic from traumatic fractures by assessing
the pattern of involvement, and determining the therapeutic response to metastases.
PET scan
PET scanning can help in identifying bone metastases at an early stage of growth,
before host reactions to the Osteo-blasts occur.
FDG-PET scanning depicts early malignant bone-marrow infiltration because of the
early increased glucose metabolism in neoplastic cells.

CT scans
CT scans are valuable in the evaluation of focal abnormalities seen on bone scintiscans that cannot be confirmed by using radiographs.
Moreover, CT scanning is useful in further assessment of radio-graphically negative
areas in patients who are symptomatic and in whom metastases are suggested clinically.
CT is useful in guiding needle biopsy of lesions in bones with complex shapes such
as the vertebrae and the ilia.

2. Aortic knuckle shadow on X-ray chest PA, obliterated by consolidation of which
portion of lung?
a) Upper Lingula
b) Lower Lingula
c) Apex of lower lobe
d) Posterior part of upper lobe
Answer: Posterior part of upper lobe
Explanation:
Aortic knuckle:
The aortic knuckle represents the left lateral edge of the aorta as it arches backwards over the left main bronchus, and pulmonary vessels.
Apico-posterior segment of left upper lobe lies adjacent to the aortic knuckle. Lesion here obliterates the aortic shadow.

3. CT least accurate for:
a) 1 cm of aneurysm in hepatic artery
b) 1 cm of lymph node in para-aortic region
c) 1 cm of pancreas mass in tail
d) 1 cm gall stone
Answer: 1 cm gall stones
Explanation:
Ultrasound is considered the gold standard for detecting cholelithiasis.
Trans-abdominal ultra-sonography is extremely accurate for gallstones > 2 mm in
diameter.
Endoscopic ultra-sonography can detect stones as small as 0.5 mm in the gallbladder or biliary system.
CT is less helpful than ultra-sonography in identifying biliary obstruction but often
provides the best assessment of the pancreas.
Some gallstones may be isodense to bile and may therefore be missed by CT.
4. Dose of radiation required for hematological syndrome:
a) 2.5 cGy
b) 10 cGy
c) 100 cGy
d) 200 cGy
Answer: 100 cGy
Explanation:
The hematopoietic syndrome is the dominant manifestation after whole-body doses
of about 1 to 6 Gy and consists of a generalized pancytopenia.

Bone marrow stem cells are significantly depleted, but mature blood cells in circulation are largely unaffected. Circulating lymphocytes are an exception. Doses less than 100 cGy are not typically associated with leukemia.

AIPGMEE 2001

1. A neonate presents with respiratory distress, contra-lateral mediastinal shift and
multiple cystic air filled lesions in the chest. Most likely diagnosis is
a) Congenital diaphragmatic hernia
b) Congenital lung cysts
c) Pneumonia
d) None of the above
Answer: Congenital diaphragmatic hernia

2. Ground glass appearance is not seen in
a) Hyaline membrane disease
b) Pneumonia
c) Left to right shunt
d) Obstructive TAPVC
Answer: Left to right shunt

3. Drug that is radio-protective
a) Paclitaxel
b) Vincristine
c) Amifostine
d) Etoposide
Answer: Amifostine

4. Most radiosensitive Tumour of the following is
a) Ca kidney
b) Ca colon
c) Ca pancreas
d) Ca cervix
Answer: Ca cervix

AIPGMEE 2002

1. Which of the following ha mot penetrating power?
a) α- particle
b) β-particle
c) γ-radiation
d) Electron beam
Answer: γ-radiation

2. What contrast is needed for proper radiographic image is a heavy bony built person?
a) ↑ mA

b) ↑ KVP
c) ↑ exposer time
d) ↑ developing time
Answer: ↑ mA

3. Pappu a 2 yrs old boy is brought with sudden onset of stridor and respiratory difficulty. The chest examination reveals decreased breath sounds & wheezes in the
right side. The chest X-ray showed an opaque right hemi-thorax. Which of the following is the most likely diagnosis?
a) Pneumothorax
b) Acute epiglottitis
c) Massive pleural effusion
d) Foreign body aspiration
Answer: Foreign body aspiration

4. A child with acute respiratory distress shows hyperinflation of unilateral lung in
chest X-ray. Most likely cause for above presentation is
a) Staphylococcal bronchopneumonia
b) Aspiration pneumonia
c) Congenital lobar emphysema
d) Foreign body aspiration
Answer: Foreign body aspiration

5. Abdominal Ultra-sonography in a 3 year old boy shows a solid well circumscribed
hypo-echoic renal mass. Most likely diagnosis is
a) Wilm's tumor
b) Renal cell carcinoma
c) Mesoblastic nephroma
d) Oncocytoma
Answer: Wilm's tumor

6. A newborn presenting with intestinal obstruction &constipation showed, on abdominal X-ray, multiple air fluid levels. The diagnosis is not likely to be
a) Pyloric obstruction
b) Duodenal atresia
c) Ileal atresia
d) Ladd's bands
Answer: Pyloric obstruction

7. Which one of the following statement is false about loculated pleural effusion?
a) They form obtuse angles against the mediastinum/chest wall when viewed in profile
b) They have un-sharp margins when viewed enface
c) They do not conform to segmental distribution
d) The opacity may show air bronchogram
Answer: The opacity may show air bronchograms

8. Radiographic appearance of Pindborg's tumor is
a) Onion peel appearance
b) Sun burst appearance
c) Cherry blossom appearance
d) Driven snow appearance
Answer: Driven snow appearance

9. Cranio-spinal irradiation is employed in the treatment of
a) Oligo-dendroglioma
b) Pilocytic Astrocytoma
c) Mixed oligo-Astrocytoma
d) Medulloblastoma
Answer: Medulloblastoma

10. Prophylactic cranial irradiation is indicated in the treatment of all of the following; except:
a) Small cell Ca of lung
b) ALL
c) Hodgkin's lymphoma
d) NHL
Answer: Hodgkin's lymphoma

AIPGMEE 2003

1. Which endocrine disorder is associated with epiphyseal dysgenesis?
a) Hypothyroidism
b) Cushing's syndrome
c) Addison's disease
d) Hypo-parathyroidism
Answer: Hypothyroidism

2. Fraying and cupping of metaphyses of long bones in a child does not occur in:
a) Rickets

b) Lead poisoning
c) Metaphyseal dysplasia
d) Hypophosphatasia
Answer: Lead poisoning
3. High resolution computed tomography of the chest is the ideal modality for evaluating
a) Pleural effusion
b) Interstitial lung disease
c) Lung mass
d) Mediastinal adenopathy
Answer: Interstitial lung disease

4. Which one of the following is a recognized X-ray feature of rheumatoid arthritis?
a) Juxta-articular Osteosclerosis
b) Sacroiliitis
c) Bone erosion
d) Peri-articular calcification
Answer: Bone erosion

5. Extensive pleural thickening and calcification especially involving the diaphragmatic pleura are classical features of
a) Coal worker's pneumoconiosis
b) Asbestosis
c) Silicosis
d) Siderosis
Answer: Asbestosis

6. CT scan of a patient with history of head injury shows a biconvex hyper-dense
lesion displacing the grey-white matter interface. The most likely diagnosis is
a) Sub-dural hematoma
b) Diffuse axonal injury
c) Extra-dural hematoma
d) Hemorrhagic contusion
Answer: Extra-dural hematoma

7. Which of the following is the best choice to evaluate radiologically a posterior
fossa tumor?
a) CT scan
b) MRI
c) Angiography

d) Myelo-graphy

Answer: MRI

8. An eight year old boy presents with back pain and mild fever. His plain X-ray of
the dorso-lumbar spine reveals a solitary collapsed dorsal vertebra with preserved
disc spaces. There was on associated soft tissue shadow. The most likely diagnosis
is
a) Ewing's sarcoma
b) Tuberculosis
c) Histiocytosis
d) Metastasis
Answer: Histiocytosis
9. Most suitable radioisotope of iodine for treating hyperthyroidism is
a) I-123
b) I-125
c) I-131
d) I-132
Answer: I-131
10. Which of the following radio-isotopes is commonly used as a source for external
beam radiotherapy in the treatment of cancer patients?
a) Strontium - 89
b) Radium - 226
c) Cobalt - 59
d) Cobalt – 60
Answer: Cobalt – 60
AIPGMEE 2004
1. A patient is suspected to have vestibular schwannoma. The investigation of choice for its diagnosis is
a) Contrast enhanced TC scan
b) Gadolinium enhanced MRI
c) SPECT
d) PET scan
Answer: Gadolinium enhanced MRI
2. In scurvy all of the following radiological signs are seen except
a) Pelican spur
b) Soap bubble appearance
c) Zone of demarcation near epiphysis

d) Frenkel's line
Answer: Soap bubble appearance

3. On radiography widened duodenal 'C' loop with irregular mucosal pattern on upper gastrointestinal barium series is most likely due to:
a) Chronic pancreatitis
b) Carcinoma head of pancreas
c) Duodenal ulcer
d) Duodenal ileus
Answer: Carcinoma head of pancreas
4. Which of the following is the most penetration beam
a) Electron beam
b) 8 MV photons
c) 18 MV photons
d) Proton beam
Answer: 18 MV photons
5. The radiation tolerance of whole liver is
a) 15 Gy
b) 30 Gy
c) 40 Gy
d) 45 Gy
Answer: 40 Gy
6. In which malignancy postoperative radiotherapy is minimally used?
a) Head and neck
b) Stomach
c) Colon
d) Soft tissue sarcomas
Answer: Stomach
7. Which of the following is not a CT scan feature of acute pancreatitis?
a) Ill defined outline of the pancreas
b) Enlargement of the pancreas
c) Poor contrast enhancement
d) Dilated main pancreatic duct
Answer: Dilated main pancreatic duct
8. Which of the following is the classic CT appearance of an acute subdural hematoma?
a) Lentiform- shaped hyper-dense lesion
b) Crescent- shaped hypo-dense lesion
c) Crescent – shaped hyper-dense lesion
d) Lentiform- shaped hypo-dense lesion
Answer: Crescent – shaped hyper-dense lesion

9. The first investigation of choice in a patient with suspected subarachnoid

hemorrhage should be
a) Non- contrast computed tomography
b) CSF examination
c) Magnetic resonance imaging (MRI)
d) Contrast-enhanced computed tomography
Answer: Non- contrast computed tomography
10. Radio isotopes are used in the following techniques except
a) Mass spectroscopy
b) RIA
c) ELISA
d) Sequencing of nucleic acid
Answer: ELISA
AIPGMEE 2005
1. Gamma camera in nuclear medicine is used for
a) Organ imaging
b) Measuring the radioactivity
c) Monitoring the surface contamination
d) RIA
Answer: b > a
2. In radionuclide imaging the most useful radio pharmaceutical for skeletal imaging
is
a) Gallium 67
b) Technetium-sulphur-colloid (99mTc-Sc)
c) Technetium-99m (99mTc)
d) Technetium-99m linked to Methylene dis-phosphonate (99mTc-MDP)
Answer: Technetium-99m linked to Methylene dis-phosphonate (99mTc-MDP)
3. Which of the following radioisotope is not used as permanent implant?
a) Iodine-125
b) Palladium-103
c) Gold-198
d) Cesium -137
Answer: Cesium -137
4. The technique employed in radiotherapy to counteract the effect of tumour motion due to breathing is known as:
a) Arc technique
b) Modulation
c) Gating
d) Shunting
Answer: Gating
5. At t= 0 there are 6X1023 radioactive atoms of a substance which decay with a

disintegration constant (λ) equal to 0.01/sec. What would be the initial decay rate?
a) 6 X 1023
b) 6 X 1022
c) 6 X 1021
d) 10 X 1020
Answer: 6 X 1021
6. The gold standard for the diagnosis of osteoporosis is
a) Dual energy X-ray absorptiometry
b) Single energy X-ray absorptiometry
c) Ultrasound
d) Quantitative computed tomography
Answer: Dual energy X-ray absorptiometry
7. The most sensitive imaging modality for diagnosis Ureteric stones in a patient
with acute colic is?
a) X-ray KUB region
b) Ultra-sonogram
c) Non contrast CT scan of the abdomen
d) Contrast enhanced CT scan of the abdomen
Answer: Non contrast CT scan of the abdomen
8. Which of the following ultrasound marker is associated with greatest increased
risk for trisomy 21 in fetus?
a) Echogenic foci in heart
b) Hyper-echogenic bowed
c) Choroid plexus cysts
d) Nuchal edema
Answer: Nuchal edema

9. Which one of the following is the most preferred route to perform cerebral angiography?
a) Trans-femoral route
b) Trans-axillary route
c) Direct carotid puncture
d) Trans-brachial route
Answer: Trans-femoral route
9. Which one of the following tumors shows calcification on CT scan?
a) Ependymoma
b) Medulloblastoma
c) Meningioma
d) CNS lymphoma
Answer: Meningioma

AIPGMEE 2006

1. Which one of the following has the maximum ionization potential?
a) Electron
b) Proton
c) Helium ion
d) Gamma photon
Answer: Helium ion

2. All of the following radioisotopes are used as systemic radio-nuclide, except
a) Phosphorus 32
b) Strontium 89
c) Iridium 192
d) Samarium 153
Answer: Iridium 192

3. Phosphorus 32 emits
a) Beta particles
b) Alfa particles
c) Neutrons
d) X-rays
Answer: Beta particles

4. Which of the following is used in the treatment of differentiated thyroid cancer?
a) 131I
b) 99m Tc
c) 32P
d) 131I-MIBG
Answer: 131I

5. All of them use non- ionizing radiation except
a) Ultra-sonography
b) Thermography
c) MRI
d) Radiography
Answer: Radiography

6. Which of the following imaging techniques gives maximum radiation exposure to
the patient?
a) Chest X-ray
b) MRI
c) CT scan
d) Bone- Scan
Answer: Bone- Scan

7. The ideal timing of radiotherapy for Wilms tumor after surgery is
a) Within 10 days

b) Within 2 weeks
c) Within 3 weeks
d) Any time after surgery
Answer: Within 10 days

8. The most radiosensitive tumor among the following is:
a) Bronchogenic carcinoma
b) Carcinoma parotid
c) Dysgerminoma
d) Osteogenic sarcoma
Answer: Dysgerminoma
9. Which of the following cause rib-notching on the chest radiograph?
a) Bidirectional Glem shunt
b) Modified Blalock-Taussing shunt
c) IVC occlusion
d) Coarctation of aorta
Answer: Coarctation of aorta
10. Which is the objective sign of identifying pulmonary plethora in a chest radiograph?
a) Diameter of the main pulmonary artery> 16 mm
b) Diameter of the left pulmonary artery > 16 mm
c) Diameter of the descending right pulmonary artery > 16 mm
d) Diameter of the descending left pulmonary artery > 16 mm
Answer: Diameter of the descending right pulmonary artery > 16 mm
11. The procedure of choice for the evaluation of an aneurysm is
a) Ultra-sonography
b) Computed tomography
c) Magnetic resonance imaging
d) Arteriography
Answer: Arteriography
12. The most sensitive imaging modality to detect early renal tuberculosis is:
a) Intravenous urography
b) Computed tomography
c) Magnetic resonance imaging
d) Ultra-sonography
Answer: Intravenous urography
13. The most accurate investigation for assessing ventricular function is:
a) Multi-slice CT
b) Echocardiography
c) Nuclear scan
d) MRI
Answer: Echocardiography

14. The most important of significance of renal artery stenosis on an angiogram is
a) A percentage diameter stenosis >70%
b) Presence of collaterals
c) A systolic pressure gradient > 20 mm Hg across the lesion
d) Post – stenotic dilatation of the renal artery
Answer: Presence of collaterals
15. The MR imaging in multiple sclerosis will show lesions in
a) White matter
b) Grey matter
c) Thalamus
d) Basal ganglia
Answer: White matter
AIPGMEE 2007
1. Investigation of choice for a lesion of the temporal bone
a) X-ray
b) USG
c) CT Scan
d) MRI
Answer: CT scan
2. A young male is brought unconscious to the hospital with external injuries. CT
brain showed No midline shift. Basal cistern was compressed with multiple small
hemorrhages. What is the likely diagnosis?
a) Cerebral contusion
b) Cerebral laceration
c) Multiple infarcts
d) Diffuse axonal injuries
Answer: Diffuse axonal injuries
3. A 45 years old female complains of progressive weakness and spasticity of the
lower limb with difficulty in micturition. CT shows an intra-dural mid-dorsal midline
enhancing lesion the likely diagnosis is
a) Meningioma
b) Intra-dermal lipoma
c) Neuro-epithelial cyst
d) Dermoid cyst
Answer: Meningioma
4. Basal ganglia calcification is seen in all except
a) Hypo-parathyroidism
b) Wilson’s disease

c) Perinatal hypoxia
d) Fahr's syndrome
Answer: Wilson's disease

5. Radio-contrast is contraindicated in all except
a) Obesity
b) Dehydration
c) Patient on metformin
d) Renal failure
Answer: Obesity
6. Which of the following isotopes is used for RAIU?
a) I123
b) I125
c) I 131
d) I132
Answer: I123
AIPGMEE 2008
1. Photoelectric effect can be best described as in
a) Interaction between high energy incident photon and the inner shell electron
b) Interaction between low energy incident photon and the outer shell electron
c) Interaction of the high energy incident photon and the outer shell electron
d) Interaction between a low energy incident photon and the inner shell electron
Answer: Interaction between a low energy incident photon and the inner shell electron
2. Allergic reaction to radio-logical contrast agents are
a) Anaphylactic reaction
b) IgE mediated reaction
c) Urticaria
d) Edema
Answer: Anaphylactic reaction
3. Which of the following is the most radiosensitive phase of the cell cycle?
a) G2M
b) G2
c) S
d) G1
Answer: G2M

4. Which of the following agents is used to measure glomerular filtration rate (GFR)?
a) Iodohippurate
b) Tc99m-DTPA
c) Tc99m-MAG3
d) Tc99m-DMSA

Answer: Tc99m-DTPA
5. Flaring of anterior ends of the ribs is characteristically seen in
a) Neurofibromatosis
b) Scurvy
c) Rickets
d) Hypothyroidism
Answer: Rickets
6. Inferior rib notching is seen in
a) Coarctation of aorta
b) Marfan's syndrome
c) Rickets
d) SLE
Answer: Coarctation of aorta

a) Cephalization of pulmonary vascularity
b) Pleural effusion
c) Kerley B lines
d) Alveolar pulmonary edema
Answer: Cephalization of pulmonary vascularity
8. Earliest sign of left atrial enlargement is
a) Posterior displacement of esophagus
b) Widening of carinal angle
c) Elevation of left bronchus
d) Double shadow of right border
Answer: Posterior displacement of esophagus
9. Which of the following is the most common feature of aortitis on chest X-ray?
a) Calcification of ascending aorta
b) Calcification of descending aorta
c) Calcification of pulmonary artery
d) Focal oligemia
Answer: Calcification of ascending aorta
10. Investigation of choice for detection and characterization of interstitial lung disease is:
a) MRI
b) Chest X-ray
c) High resolution CT scan (HRCT)
d) Ventilation perfusion scan (VP scan)
Answer: High resolution CT scan (HRCT)
11. Best radiographic view for fracture of C1-C2 vertebrae is:
a) AP view
b) Odontoid view
c) Lateral view

d) Oblique view
Answer: Odontoid view
12. All of the following are diagnostic feature of ileo-cecal tuberculosis on barium
follow through; except
a) Apple-core sign
b) Pulled up contracted angle
c) Widening of ileocecal angle
d) Strictures involving the terminal ileum
Answer: Apple-core sign
AIPGMEE 2009
1. Focal and diffuse thickening of gall bladder wall with high amplitude reflections
and comet tail artifacts on USG suggest the diagnosis of
a) Xantho-granulomatous cholecystitis
b) Carcinoma of gall bladder
c) Adenomyomatosis
d) Cholesterolosis
Answer: Adenomyomatosis

2. Which of the following is not a CT feature of adrenal adenoma?
a) Low attenuation
b) Homogenous density and well defined borders
c) Enhances rapidly, contrast stays in it for a relatively longer time and washes out
late
d) Calcification is rare
Answer: Enhances rapidly, contrast stays in it for a relatively longer time and washes out late
3. The sensitivity of mammography is low in young females because
a) Less glandular tissue and more fat
b) Young females are less cooperative
c) Young breast have dense tissue
d) Because of less fat content
Answer: Young breast have dense tissue
4. Which of the following does not contain fat on mammography?
a) Post-traumatic cyst
b) Hamartoma
c) Seborrheic Keratosis
d) Galactocele
Answer: Seborrheic Keratosis
5. The most sensitive investigation for DCIS (Ductal carcinoma in situ) of breast

a) MRI
b) USG
c) PET
d) Mammography
Answer: Mammography
6. Which of the following is not a MRI feature of mesial temporal sclerosis?
a) Atrophy of Mamillary body
b) Atrophy of fornix
c) Blurring of grey whit matter junction of ipsilateral temporal lobe
d) Atrophy of hippocampus
Answer: Blurring of grey whit matter junction of ipsilateral temporal lobe
7. Pruning of pulmonary arteries is seen in
a) Pulmonary hypertension
b) Chronic bronchitis
c) Pulmonary infections
d) Pulmonary transplant
Answer: Pulmonary hypertension
8. Which of the following is not true regarding ossified posterior longitudinal ligament (OPLL)?
a) Most commonly involves thoracic spine
b) Gradient echo MR sequence may overestimate the canal stenosis
c) MRI is best for diagnosis
d) Low signal intensity on all MR sequences
Answer: Most commonly involves thoracic spine

9. Test of choice for reversible myocardial ischemia
a) Thallium Scan
b) MUGA Scan
c) Resting ECHO
d) Coronary angiography
Answer: Thallium Scan
AIPGMEE 2010
1. Walls of the CT scanner room are coated with
a) Lead
b) Glass
c) Tungsten
d) Iron
Answer: Lead
2. The major difference between X-rays and light is
a) Energy
b) Mass
c) Speed
d) Type of wave

Answer: Energy
3. Which of the following is the most ionizing radiation?
a) Alpha
b) Beta
c) X rays
d) Gamma
Answer: Alpha
4. Which of the following statements best describes background radiation?
a) Radiation in the background of nuclear reactors
b) Radiation in the background during radiological investigations
c) Radiation present constantly from natural sources
d) Radiation from nuclear fall out
Answer: Radiation present constantly from natural sources
5. Which of the following best estimates the amount of radiation delivered to an organ in the radiation field?
a) Absorbed dose
b) Equivalent dose
c) Effective dose
d) Exposure dose
Answer: Absorbed dose
6. Which of the following statements about stochastic effects of radiation is true?
a) Severity of effect is a function of dose
b) Probability of effect is a function of dose
c) It has a threshold
d) Erythema and cataract are common examples
Answer: Probability of effect is a function of dose

7. Egg on side appearance is seen in

a) TOF
b) TAPVC
c) Uncorrected trans-position of great artery (TGA)
d) Tricuspid atresia
Answer: Uncorrected trans-position of great artery (TGA)
8. All of the following statements about CT scan features of adrenal adenoma are
true; except
a) Calcification is rare
b) Low attenuation
c) Early enhancement with slow wash out of contrast
d) Regular margins

Answer: Early enhancement with slow wash out of contrast
9. A patient presents acute renal failure and Anuria. The USG is normal. Which of
the following investigation will give best information regarding renal function?
a) Intravenous pyelogram
b) Retrograde pyelography
c) Ante-grade pyelography
d) DTPA Scan
Answer: DTPA Scan
10. A dense reno-gram is obtained by
a) Dehydrating the patient
b) Increasing the dose of contrast media
c) Rapid (Bolus) injection of dye
d) Using non ionic media
Answer: Rapid (Bolus) injection of dye

AIPGMEE 2011
1. Best investigation for bone metastases:
a) MRI
b) CT Scan
c) Bone scan
d) X- ray
Answer: Bone scan
2. Aortic knuckle shadow on X-ray chest PA, obliterated by consolidation of which
portion of lung?
a) Upper Lingula
b) Lower Lingula
c) Apex of lower lobe
d) Posterior part of upper lobe
Answer: Posterior part of upper lobe
3. CT least accurate for:
a) 1 cm of aneurysm in hepatic artery
b) 1 cm of lymph node in para-aortic region
c) 1 cm of pancreas mass in tail
d) 1 cm gall stone
Answer: 1 cm gall stones
4. Dose of radiation required for hematological syndrome:
a) 2.5 cGy
b) 10 cGy
c) 100 cGy
d) 200 cGy
Answer: 100 cGy

AIPGMEE 2012

1. Which of the following liver metastasis appear hypo-echoic on USG?
a) Breast cancer
b) Colon cancer
c) Renal carcinoma
d) Mucinous Adenocarcinoma
Answer: Breast cancer

2. All of the following are true about long term sequelae of Cranio-spinal Radiotherapy for children with CNS tumors, except
a) Neuro-cognitive dysfunction
b) Endocrinologic dysfunction
c) Musculo-skeleton hypoplasia
d) Neuropsychological sequelae are independent of radiation dose
Answer: Neuropsychological sequelae are independent of radiation dose

3. Which of the following drugs is a radio-protective agent?
a) Cisplatin
b) Amifostine
c) Methotrexate
d) Colony stimulating factor
Answer: Amifostine

4. The best view to visualize minimal Pneumo-peritoneum is
a) AP view abdomen
b) Erect view abdomen
c) Right lateral decubitus with horizontal beam
d) Left lateral decubitus with horizontal beam
Answer: Left lateral decubitus with horizontal beam

5. All of the following statements about MRI are true; except:
a) MRI is better for calcified lesions
b) MRI is useful for localizing small lesions in the brain
c) MRI is contra-indicated in patient with pacemakers
d) MRI is useful in evaluating bone marrow
Answer: MRI is better for calcified lesions

6. Extra-axial intra-cranial lesion showing contrast enhancement on MRI is suggestive of
a) Meningioma
b) Ependymoma
c) Arachnoid cyst
d) Astrocytoma
Answer: Meningioma

7. The investigation of choice for renal scarring defect in kidney is
a) DMSA Scan
b) DTPA Scan
c) DEXA Scan

d) MCU
Answer: DMSA Scan
8. Bone density is best studied by
a) CT scan
b) DEXA Scan
c) MRI Scan
d) Bone Scan
Answer: DEXA Scan
9. Best investigation for bone metastasis is
a) MRI
b) CT
c) Bone Scan
d) X-ray
Answer: Bone Scan
10. Widened Neural foramina is frequently seen in
a) Neurofibromatosis
b) Tuberous sclerosis
c) Sturge Weber Syndrome
d) Klippel Feil Syndrome
Answer: Neurofibromatosis
11. Chest X-ray of an industrial worker exposed to asbestos over 20 years shows an
ill defined rounded opacity in the lower lobe with a comet tail appearance on PA
view. Which of the following is the most likely diagnosis?
a) Mesothelioma
b) Bronchogenic carcinoma
c) Round atelectasis
d) Pulmonary infarct
Answer: Round atelectasis

[3/16, 8:34 AM] Aipgmee: PGI: Radiology (2006-12)

PGI MAY 2012
1. Highly radiosensitive tumor(s) is/are:
a) Dysgerminoma
b) Seminoma
c) Wilm’s tumour
d) Lymphoma
e) Osteosarcoma
Answer: a, b, c and d
2. True statement regarding Blumer’s shelf:

a) Metastasis around peri-umbilical region
b) Metastasis around ovary
c) Metastasis in peritoneal cul-de-sac
d) Occur due to metastasis from gastric carcinoma
Answer: c and d
3. Contrast dye(s) used in MRI:
a) Gadolinium
b) Iodine
c) Myodinium
d) Technetium
e) Indium
Answer: Gadolinium
4. Hyper-dense biconvex appearance on cranial CT scan is seen in:
a) Subdural hemorrhage
b) Extra-dural hemorrhage
c) Foreign body
d) Intra-cerebral hemorrhage
e) Hypertensive hemorrhage
Answer: Extra-dural hemorrhage
5. Prophylactic cranial irradiation is/ are given in:
a) AML
b) ALL
c) Small cell Ca of lung
d) Glioblastoma multiforme
e) Non-Hodgkin's lymphoma
Answer: b, c, d and e
6. Radiological finding(s) of eosinophilic granuloma is/are:
a) Hilar involvement
b) Miliary shadowing
c) Honey comb appearance
d) Whiteout lung
e) Splitting of pleura
Answer: a, b and c
7. X-ray view of choice for lumbar spondylosis is/are
a) AP view
b) PA view
c) Lateral view
d) Lt Oblique view
e) Right oblique view
Answer: a and c
8. Hyper-intense cortico-spinal tract on T2WI MRI is/are seen in:
a) Astrocytoma
b) Amyotrophic lateral sclerosis

c) Hemo-Chondromatosis
d) Wilson disease
e) Multiple lacunar infarcts of the brain

Answer: b and e
9. Radiological feature(s) of mitral stenosis is/are all except:
a) Double atrial shadow
b) Straightening of left heart border
c) Splaying of bronchi
d) Prominent aortic knuckle
e) Kerley B lines
Answer: Prominent aortic knuckle
10. Light bulb appearance in MRI scan is/are seen in:
a) Pheochromocytoma
b) Adrenal adenoma
c) Adrenal cortical tumor
d) Adrenal calcification
e) Adrenocortical carcinoma
Answer: Pheochromocytoma
PGI NOV 2011
1. J-shaped sella is/are seen in
a) Mucopolysaccharidosis
b) Achondroplasia
c) Optic chiasm glioma
d) Neurofibromatosis I
e) Lithium carbonate
Answer: Al

PGI MAY 2011
1. High energy accelerator produces
a) X-ray
b) Electron
c) Gamma rays
d) Neutron
e) Proton
Answer: X-ray
2. True about electromagnetic radiation
a) Pair production occur for low energy
b) Infrared is an EM radiation
c) Compton scattering occur for intermediate energy
d) X-ray is EM radiation
Answer: b, c and d
3. Attenuation value (Hounsfield unit) of <zero (i.e. negative) on TC is seen in

a) Muscle
b) Bone
c) Fat
d) Air
e) Blood
Answer: c and d
PGI NOV 2010
1. Low dose radiation cause
a) Lung cancer
b) AML
c) Cervical cancer
d) Glioma
e) Meningioma
Answer: a, b, d and e
2. Left border of heart on chest X-ray is formed by
a) Aortic arch
b) Left pulmonary artery
c) Right atrium
d) Left ventricle
e) Right ventricle
Answer: a, b and d
3. Radio-nucleotide (s) used in external beam therapy
a) Iodine-131
b) Co-60
c) Cs 137
d) Ra 226
e) Ir 192
Answer: b, c and e

4. True about virtual colonoscopy
a) Provide endo-luminal view
b) Biopsy can be taken
c) CT and MRI used
d) Used even when conventional colonoscopy fails
e) Used for screening of ca colon
Answer: a, c, d and e
5. Bare orbit is/are seen in
a) Metastasis
b) Neuroblastoma
c) Optic nerve glioma
d) Osteomyelitis
e) Pseudo-tumor cerebri
Answer: Metastasis

PGI MAY 2010

1. Which is/are false about T. of radio-isotopes?
a) Ra-226: 1626 year
b) I- 131: 60 years
c) Co-60: 5.26 years
d) Ir-192: 74 years
e) Cs-137: 30 years
Answer: b and d

2. Radium emits
a) α Rays
b) β Rays
c) γ Rays
d) Neutron
e) X-ray
Answer: a, b, c, and d

3. Left sided cardiac bulge seen on chest X-ray is/ are due to
a) Enlargement of left atrial appendage
b) Azygous vein enlargement
c) Coronary artery aneurysm
d) Pulmonary edema
e) Right atrial hypertrophy
Answer: Enlargement of left atrial appendage

4. Figure of eight is seen in
a) Total anomalous pulmonary venous connection (TAPVC)
b) Transposition of great arteries (TGA)
c) TOF
d) Ebstein anomaly
e) ASD
Answer: Total anomalous pulmonary venous connection (TAPVC)

5. Earliest investigation for diagnosis of ankylosing spondylitis
a) MRI STIR sequence
b) Bone scan
c) CT scan
d) X-ray
e) USG
Answer: MRI STIR sequence

6. For renal stone, diagnosis is not done by
a) IVP
b) MRI
c) PET-scan
d) USG

e) CT- Scan
Answer: b and c
7. One Becquerel is equal (Dis-integration/sec) to
a) 3.7 x 1010
b) 2.7x 1010
c) 1.7x 1010
d) 3.7x 10-2
e) 1
Answer: 1
8. Isotopes used in relief of metastatic bone pain includes
a) Strontium-89
b) I-131
c) Gold-198
d) P- 32
e) Rhenium-186
Answer: a, b, d and e
9. Teardrop bladder are seen in
a) Pelvic hematoma
b) Pelvic lipomatosis
c) T.B
d) Neurogenic bladder
e) Intra-peritoneal bladder rupture
Answer: a and b
PGI NOV 2009

1. Snowman appearance is seen in
a) Total anomalous pulmonary venous connection
b) Ebstein anomaly
c) Tetralogy of fallot
d) VSD
e) Transposition of great vessel
Answer: Total anomalous pulmonary venous connection
2. Kerley B lines seen in
a) Pleural effusion
b) Mitral stenosis
c) Pericardial effusion
d) Interstitial edema
e) Lymphangitis carcinomatosis
Answer: b, d and e
3. Egg on side appearance is seen in
a) TAPVC
b) Ebstein anomaly
c) TGA

d) TOF
e) VSD
Answer: TGA
4. The phase of cell cycle, most sensitive to radiation is/are
a) M Phase b) G-2 phase
c) S phase
d) Early G-1 phase
e) G-0 phase
Answer: a and b
5. IVP of polycystic kidney disease shows
a) Cobra head
b) Dropping Lilly
c) Flower base appearance
d) Spider leg deformity
e) Fish hook appearance
Answer: Spider leg deformity
6. True about chest X-ray
a) 40% lung tissue seen obscured by bony structure & mediastinum
b) 60% lung tissue seen obscured by bony structure & mediastinum
c) Right dome higher than left dome
d) Right dome pushed up by liver
e) Should be taken in expiration
Answer: a, c and d
PGI JUNE 2009
1. Superior rib notching is/are caused by
a) Hyperparathyroidism
b) Poliomyelitis
c) Blalock-Tausig shunt
d) Marfan syndrome
e) Coarctation of aorta

Answer: a, b and d
2. Egg shell calcification is seen in
a) Sarcoidosis
b) Silicosis
c) Lung Ca
d) Pneumoconiosis
e) Lymphoma following radiation treatment
Answer: a, b, d and e
3. Radiological feature of mitral stenosis treatment
a) Double contour of right heart border
b) Straightening of right heart border
c) Splaying of carinal angle

d) Prominent aortic knuckle
e) Kerley lines
Answer: a, c and e
4. Meningioma on plain radiography reveals
a) Calcification
b) Erosion
c) Sutural diastasis
d) Osteosclerosis
e) Vascular erosion
Answer: a, d and e

5. Isotope (s) used in high brachytherapy
a) Ir 192
b) Co-60
c) Cs 133
d) Ra 226
e) Pd 103
Answer: a and b

PGI DEC 2008

1. Radio-sensitizer drug(s) is/are
a) Misonidazole
b) Actinomycin D
c) Oxygen
d) Hyperthermia
e) Amifostine
Answer: a, b, c and d

PGI JUNE 2008

1. Radiological features of sickle cell anemia except
a) Vertebra plana
b) Floating teeth
c) Bone infarct
d) Marrow hyperplasia
e) Secondary osteomyelitis
Answer: c, d and e

2. Radiological signs of Crohn's disease

a) String sign of cantor

b) Pipe-stem appearance
c) Pseudo polyp
d) Backwash ileitis
Answer: String sign of cantor
3. Dense metaphyseal band is seen on
a) Hyper-vitaminosis-A
b) Hyper-vitaminosis B
c) Scurvy
d) Hyper-vitaminosis D
Answer: Hyper-vitaminosis D
4. Used in radiotherapy
a) Iodine-131
b) Co-60
c) Ir-192
d) Lu-177
e) Iodine-125
Answer: All
5. Thumbprint sign is seen in
a) Candida
b) Aspergillus
c) Thermomyces
d) Epiglottitis
Answer: Epiglottitis
6. Right anterior oblique view of chest X-ray true is /are
a) Cassette near right shoulder
b) Cassette near left shoulder
c) Arch of aorta best seen
d) Left atrial enlargement can be diagnosed
e) Mitral &tricuspid valves better seen
Answer: a, c and d

PGI DEC 2007
1. True about are MRCP
a) MRI is used to obtain the images
b) CT is used for the images
c) It shows the biliary tree
d) Dye has to be injected endo-scopically
e) It is an invasive procedure
Answer: a and c
2. Radiation emits by Ir -192
a) 0.5 MeV
b) 0.6 MeV
c) 0.66 MeV

d) 0.666 MeV
e) 0.47 MeV
Answer: 0.47 MeV
3. Double bubble sign are seen in
a) Duodenal atresia
b) Ileal atresia
c) Pyloric stenosis
d) Pancreatic divisum
e) Volvulus
Answer: a and e

4. Contrasts used in USG
a) Urograffin
b) Ultra-graffin
c) Sonavist
d) Conray
e) Barium
Answer: Sonavist
5. MC cancer due to radiation
a) Leukemia
b) Bronchogenic Ca
c) Thyroid Ca
d) Breast cancer
e) Bone tumour
Answer: Leukemia
PGI JUNE 2007
1. 1 Gray equals to
a) 10 rad
b) 100 rad
c) 1000 rad
d) 10000 rad
Answer: 100 rad

2. Properties of helium are
a) Atomic number 2
b) Viscosity is zero
c) Used in COPD
d) High thermal conductivity
Answer: All
3. Right border of the heart in CXR is/are formed by
a) Pulmonary artery
b) Superior vena cava
c) Right atrium

d) Right ventricle
Answer: b and c
PGI DEC 2006
1. Double bubble sign seen in
a) Duodenal atresia
b) Duodenal stenosis
c) Volvulus
d) Intestinal perforation
Answer: a, b and c

2. Milliary mottling seen in
a) T.B
b) Sarcoidosis
c) Silicosis
d) P. carinii pneumonia
Answer: a and b
3. A patient is presented with a metallic foreign body in eye. Which investigation
should not done
a) MRI
b) USG
c) X-ray
d) CT
Answer: MRI
4. In spondylolisthesis following radiological features are seen
a) Scotty dog
b) Scotty dog wearing a collar
c) Beheaded Scotty dog sign
d) Napoleon sign
Answer: c and d
5. Base of heart is formed by
a) RV
b) LV
c) LV+RV
d) RA+RV
e) RA+LA
Answer: RA+LA
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RADIOLOGY: AIIMS (2001-14)
AIIMS NOV 2014
1. Investigation of choice for appendicitis in children
a) CT
b) Barium meal
c) USG
d) X-ray
Answer: USG
2. Investigation of choice for bronchiectasis
a) HRCT
b) CT guided biopsy
c) Bronchoscopy
d) Arteriography
Answer: HRCT
3. Part of brain presents in Turkish saddle shaped space in cranium
a) Pituitary
b) Frontal lobe
c) Hypothalamus
d) Basal ganglia
Answer: Pituitary
4. One day old child presents with bilious vomiting. Choice of investigation
a) X-ray
b) Baby-gram
c) CT
d) USG
Answer: X-ray
5. Which of the following is the Investigation of choice for evaluation of acute head
injury?
a) NCCT Head
b) CECT Head
c) MRI Brain
d) CT angiography
Answer: NCCT Head
AIIMS MAY 2014
1. Puff of smoke appearance in cerebral angiography
a) Moyamoya disease
b) Cavernous sinus thrombosis
c) Cerebral infarction
d) Carotid artery thrombosis
Answer: Moyamoya disease

2. A child presents with upward gauze palsy and severe headache. CT suggests homogenous supra-sellar mass in posterior third ventricle and MR suggests homogenous iso-tense T1 and iso-tense T2 with high contrast enhancement. What
is diagnosis?
a) Glioma
b) Choroid plexus papilloma
c) Dermoid
d) Teratoma
Answer: Choroid plexus papilloma
AIIMS NOV 2013
1. Neonate with seizures investigation to be done is
a) Trans-cranial USG
b) MRI
c) CT
d) Skull radiography
Answer: Trans-cranial USG
2. Stratosphere sign in M mode USG seen in
a) Pneumothorax
b) Hydrothorax
c) Pleuritis
d) Lung consolidation
Answer: Pneumothorax
3. Most accurate and safe for diagnosis of pregnancy in 6 weeks amenorrhea
a) USG showing fetal cardiac activity
b) Doppler
c) Urine for pregnancy
d) Amniocentesis
Answer: USG showing fetal cardiac activity
AIIMS MAY 2013
1. Which stage of neuro-cysticercosis doesn't show edema on CT scan?
a) Vesicular stage
b) Colloid stage
c) Granular nodular stage
d) Calcified nodular stage
Answer: Calcified nodular stage
2. A patient presents with cough and fever. On X-ray examination, a homogenous
opacity silhouetting the right heart border is seen. Which part of lung is involved?
a) Medial segment of right middle lobe
b) Lateral segment of right middle lobe
c) Anterior segment of right upper lobe

d) Medial basal segment of right lower lobe
Answer: Medial segment of right middle lobe
3. An 8 years old child left sides flank pain and mental retardation. On ultrasound, a
hyper-echoic lesion in the right kidney and multiple lesions in the liver are noted. CT
examination of the abdomen revealed -30 to -50 HU densities of these lesions. What
is most probable diagnosis?
a) von Hippel Lindau Syndrome
b) Tuberous sclerosis
c) Hereditary hemangioblastomas
d) Autosomal recessive polycystic kidney disease
Answer: Tuberous sclerosis
4. Which of the following gland tumor hot spot on tc99 pertechnate scan is?
a) Adeno-lymphoma
b) Adenoid cystic carcinoma
c) Adenocarcinoma
d) Pleomorphic adenoma
Answer: Adeno-lymphoma
AIIMS NOV 2012
1. Ionizing radiation affects which stage of cell cycle
a) G2 S
b) G1 G2
c) G2 M
d) G0 G1
Answer: G2 M
2. Which of the following is true regarding principle of MRCP?
a) Intra-luminal is used to create the three dimensional view of the biliary radicals
and pancreatic duct
b) Use of heavily T2 weighted images without contrast
c) Contrast agent is instilled per-cutaneously into the biliary radicals first and then
MRI done
d) Gadolinium based contrast is used to enhance the biliary radicals and the pancreatic duct
Answer: Use of heavily T2 weighted images without contrast
3. Stereotactic Radiotherapy is used for treatment of
A. Brain tumor
B. Lung carcinoma
C. Cervical carcinoma
D. Renal carcinoma

Answer: Brain tumor
4. A middle aged patient presents with complaint of right hypochondrial pain. On
plain chest X-ray, elevated right hemi-diaphragm is seen. All are following are possible diagnosis except
a) Acute cholecystitis
b) Sub-phrenic abscess
c) Amebic liver abscess
d) Pyogenic liver abscess
Answer: Acute cholecystitis
AIIMS MAY 2012: RADIOLOGY
1. Amifostine is
a) Radio-sensitizer
b) Radio-protector
c) Radio-modifier
d) Radio-mimetic
Answer: Radio-protector
2. "Bracket Calcification" on Skull X-Ray is seen in
a) Tuberous Sclerosis
b) Sturge Webe Syndrome
c) Lipoma of corpus callosum
d) Meningioma
Answer: Lipoma of corpus callosum
3. Maximum Radiation exposure occurs in
a) Bone Scan
b) CT Scan
c) X-ray
d) MRI
Answer: CT scan
4. Non-Iodine containing Contrast is
a) Gadolinium DTPA
b) Visipaque
c) Iohexanol
d) Diatrozoate
Answer: Gadolinium DTPA
5. Stereotactic Radiotherapy is used in
a) Miliary Lung Metastasis
b) Inoperable Stage 1 Lung Tumor
c) Lymphangitis Carcinomatosa
d) Tumor at the base of tongue with new lymph node enlargement
Answer: Inoperable Stage 1 Lung Tumor
6. Most reliable test for diagnosis of spinal TB is
a) MRI

b) PPD
c) X ray spine
d) CT guided biopsy
Answer: CT guided biopsy
7. A child was taken for CECT chest and contrast was injected: child had swelling
which gradually increased. There is numbness. There is pain on passive extension of
fingers. He is not allowing you to touch the arm. Pulse was present. What will you
do?
a) High dose prednisolone
b) Arterial thrombectomy
c) Immediate fasciotomy
d) Anti-histaminics/Anticoagulants
Answer: Immediate fasciotomy
AIIMA NOV 2011
1. In spondylolisthesis which of the following investigation is least useful?
a) CT
b) MR
c) X-Ray spine AP
d) X-Ray spine Lateral
Answer: X-Ray spine AP
2. A patient was diagnosed with intracranial cavernous angioma on the MR scan. MR
finding characteristic of the lesion is
a) Well defined nidus
b) Definite arterial feeders
c) Phlebectasis
d) Pop corn like lesion
Answer: Pop corn like lesion
3. Investigation of choice for lepto-meningeal carcinomatosis
a) PET
b) SPECT
c) Gd enhanced MRI
d) CT scan
Answer: Gd enhanced MRI
4. Which of the following is used to differentiate between the epidermal cyst and
arachnoid cyst?
a) Contrast enhancement
b) T1 MR Sequence
c) DW1 MR Sequence

d) Smooth margin
Answer: DW1 MR Sequence
5. A newborn presents with congestive heart failure, on examination has bulging
anterior fontanellae with a bruit on auscultation. Trans-fontanellar USG shows a hypoechoic midline mass with dilated lateral ventricles. Most likely diagnosis is –
a) Medulloblastoma
b) Encephalocele
c) Vein of Galen malformation
d) Arachnoid cyst
Answer: Vein of Galen malformation
6. A middle aged female presents with slowly progressive weakness of lower limb,
spasticity and recent onset of micturition. On neurological examination there is evidence of dorsal myelopathy. MRI scan of spine reveals mid-dorsal intra-dural
contrast enhancing mass lesion. Diagnosis is
a) Intra-dural lipoma
b) Dermoid cyst
c) Meningioma
d) Epidermoid cyst
Answer: Meningioma
AIIMS MAY 2011
1. Which artery is dissected most commonly following arteriography by femoral route?
a) Celiac trunk
b) Superior mesenteric artery
c) Inferior mesenteric artery
d) Gastro-duodenal artery
Answer: Inferior mesenteric artery
2. Protein losing enteropathy diagnosis, all used except?
a) Tc Albumin
b) Tc dextran
c) In transferrin
d) Tc seclosumab
Answer: Tc seclosumab
3. All of the following are pure beta emitters excepta)
Yttrium – 90
b) Phosphorus – 32
c) Strontium – 90
d) Samarium -153
Answer: Samarium -153

4. Central dot sign is seen in?
a) Primary sclerosing cholangitis
b) Liver Hamartoma
c) Caroli's disease
d) Polycystic liver disease
Answer: Caroli's disease
5. Radiological features of left ventricular heart failure are all, except:
a) Kerly B lines
b) Cardiomegaly
c) Oligemic lung fields
d) Increased flow in upper lobe veins
Answer: Oligemic lung fields
AIIMS MAY 2010
1. A male was brought unconscious to the hospital with external injuries. CT brain
showed no midline shift, but basal cisterns were compressed with multiple small hemorrhages. What is the diagnosis?
a) Cortical contusion
b) Cerebral laceration
c) Multiple infarcts
d) Diffuse axonal injuries
Answer: Diffuse axonal injuries
2. A newborn presents with congestive heart failure, on examination has bulging
anterior fontanellae with a bruit on auscultation. Trans-fontanellar USG shows a hypoechoic midline mass with dilated lateral ventricles. Most likely diagnosis is –
a) Medulloblastoma
b) Encephalocele
c) Vein of Galen malformation
d) Arachnoid cyst
Answer: Vein of Galen malformation
3. A 48 yr old woman with B/L progressive weakness of lower limbs, spasticity &
mild impairment of respiratory movements. MRI shows an intra-dural mid-dorsal
midline enhancing lesion. What is the diagnosis?
a) Intra-dural lipoma
b) Meningioma
c) Neuro-enteric cyst
d) Dermoid cyst
Answer: Meningioma
4. Which of the following feature of thyroid nodule on USG is not suggestive of

malignancy?
a) Hyper-echogenecity
b) Hypo-echogenecity
c) Non-homogenous
d) Micro-calcification
Answer: Hyper-echogenecity
5. Investigation of choice for a lesion of temporal bone–
a) CT
b) MRI
c) USG
d) Plain x-ray
Answer: CT
AIIMS NOV 2010
1. Radiation exposure is the least in the following procedure -
a) Micturating cytourethrogram
b) IVP
c) Bilateral nephrostomogram
d) Spiral CT for stones
Answer: Micturating cytourethrogram
2. Most sensitive test to diagnose ductal carcinoma in situ –
a) Mammography
b) MRI
c) PET
d) USG
Answer: MRI
3. Patient with 6th cranial nerve palsy, T2 weighed MRI showing hyper-intense shadow which shows contrast enhancement in the cavernous sinus, diagnosis is –
a) Schwannoma
b) Meningioma
c) Cavernous sinus hemangioma
d) Astrocytoma
Answer: Schwannoma
4. Frontal sinus can be best visualized by –
a) Caldwell's view
b) Water's view
c) Towne's view
d) Schuller's view
Answer: Caldwell's view
5. Which one of the following is not a CT feature of adrenal adenoma?
a) Low attenuation
b) Homogenous density and well defined borders

c) Enhances rapidly, contrast stays in it for relatively longer time and washes out late
d) Calcification is rare
Answer: Enhances rapidly, contrast stays in it for relatively longer time and washes out late

AIIMS NOV 2009

1. Radiation induced necrosis can be diagnosed by
a) PET
b) CT
c) MRI
d) Biopsy
Answer: PET

2. Which of the following elements is obsolete in radio-therapy?
a) Radium 226
b) Cobalt 60
c) Iridium 192
d) Cesium 137
Answer: Radium 226

3. A child presents with respiratory distress. A vascular ring is suspected. Investigation of choice is
a) PET
b) CT
c) MRI
d) Angiography
Answer: MRI

AIIMS MAY 2009

1. CT or Hounsfield numbers depend upon:
a) Mass density
b) Electron density
c) Atomic number
d) Atomic mass
Answer: Mass density

2. Cerebral blood flow in an asphyxiated child is best measured by
a) NIRS (Near infrared spectroscopy)
b) PET
c) Radio-nuclide imaging
d) MRI Angiography
Answer: NIRS (Near infrared spectroscopy)

3. C-1 and C-2 can be best visualized by
a) AP view
b) Lateral view

c) Oblique view
d) Odontoid view
Answer: Odontoid view
4. Not a radiological finding of papillary necrosis on excretory urogram is
a) Tracks and horns from calyces
b) Ring shadow
c) Increased dense nephrogram
d) Egg in cup appearance
Answer: Increased dense nephrogram
5. Stereotactic radio-surgery uses all modalities except
a) Proton
b) Electron
c) Linear accelerator
d) Gamma knife
Answer: Electron
AIIMS NOV 2008
1. Gold standard investigation for recurrent gastrointestinal stromal tumor is
a) MRI
b) MIBG
c) USG
d) PET CT
Answer: PET CT
2. On abdominal ultrasound gall bladder shows diffuse wall thickening with hyper-echoic nodules at neck and comet tail artifacts. The most likely diagnosis will
be
a) Adenomyomatosis
b) Adenocarcinoma of gall bladder
c) Xantho-granulomatous cholecystitis
d) Cholesterol crystals
Answer: Adenomyomatosis
3. Earliest detectable congenital malformation by USG is
a) Spina bifida
b) Cystic hygroma
c) Anencephaly
d) Encephalocele
Answer: Anencephaly (?)
4. Regarding CT scan all are true except
a) Radiation dose exposure is directly related to the time of exposure
b) Quality of the radiation generated depends upon voltage
c) Decrease in mA decreases radiation dose exposure significantly in pediatric chest
d) 50% reduction in kVp reduces 50% radiation dose

Ans: 50% reduction in kVp reduces 50% radiation dose
AIIMS MAY 2008
1. Snowman appearance on X-ray is seen in which cardiac pathology–
a) Fallot's tetralogy
b) TAPVC
c) TGA
d) Ebstein's anomaly
Answer: TAPVC
2. Egg on side appearance is seen in
a) TOF
b) TAPVC
c) Uncorrected TGA
d) Truncus arteriosus
Answer: Uncorrected TGA
3. If the right cardiac silhouette is obliterated it means the pathology involves
a) Right middle lobe
b) Right lower lobe
c) Right atrium of heart
d) Right ventricle of heart
Answer: Right middle lobe
4. An absolute contraindication of MRI is
a) Pacemaker
b) Prosthetic cardiac valve
c) Insulin pump
d) Cochlear implants
Answer: Pacemaker
5. Most chemo-resistant tumors among the following is
a) Synovial sarcoma
b) Osteo-sarcoma
c) Malignant fibrous histio-cytoma
d) Embryonal rhabdomyosarcoma
Answer: Malignant fibrous histio-cytoma
6. PACS in medial imaging stands for
a) Planned archiving common system
b) Planned archiving computerized system
c) Picture archiving and communication system
d) Picture archiving and computerized system
Answer: Picture archiving and communication system
7. Investigation of choice for acoustic neuroma
a) CT without contrast
b) CT with contrast
c) MRI without contrast
d) MRI with contrast

Answer: MRI with contrast
8. Hair on end appearance is seen in
a) Thalassemia
b) Scurvy
c) Rickets
d) Hemochromatosis
Answer: Thalassemia
9. Which of these is not a sign of increased ICT?
a) Erosion of dorsum sella
b) Sutural diastasis
c) Ballooning of sella
d) Copper beaten appearance
Answer: Ballooning of sella
AIIMS NOV 2007
1. Egg on side appearance is seen in
a) TOF
b) TAPVC
c) Uncorrected TGA
d) Truncus arteriosus
Answer: Uncorrected TGA
2. Floating water lily sign is feature if–
a) Lung Hydatid
b) Bronchial adenoma
c) Lung abscess
d) Aspergilloma
Answer: Lung Hydatid
3. Hampton hump is feature of- AIIMS Nov 07
a) Pulmonary tuberculosis
b) Pulmonary embolism
c) Pulmonary hemorrhage
d) Bronchogenic carcinoma
Answer: Pulmonary embolism
AIIMS MAY 2007
1. Spongy appearance with central sunburst calcification is seen in?
a) Pancreatic Adeno-carcinoma
b) Mucinous cystadenocarcinoma
c) Somatostatinoma
d) Serous cystadenoma
Answer: Serous cystadenoma
2. Most common hormone deficiency seen after intracranial radiation therapy?
a) Prolactin
b) Gonadotropins
c) ACTH

d) Growth hormone
Answer: Growth hormone
3. The diagnostic procedure not done in case of pheochromocytoma?
a) CT scan
b) MRI
c) FNAC
d) MIBG Scan
Answer: FNAC
4. Which of these tumors is least radio-sensitive?
a) Ewing's sarcoma
b) Osteosarcoma
c) Wilm's tumor
d) Neuroblastoma
Answer: Osteosarcoma
AIIMS NOV 2006
1. Most sensitive sonological indicator for aneuploidy is
a) Gestational sac volume
b) Crown-rump length
c) Nuchal translucency
d) Serum Beta HCG level
Answer: Nuchal translucency
2. Most chemo-resistant tumors among the following is
a) Synovial sarcoma
b) Osteosarcoma
c) Malignant fibrous histio-cytoma
d) Embryonal rhabdomyosarcoma
Answer: Malignant fibrous histio-cytoma
3. Bone scan of a patient with Multiple Myeloma shows
a) Diffusely increased uptake
b) Diffusely decreased uptake
c) Hot spots
d) Cold spots
Answer: Cold spots
4. A male was brought unconscious to the hospital with external injuries. CT brain
showed no midline shift, but basal cisterns were compressed with multiple small hemorrhages. What is the diagnosis?
a) Cortical contusion
b) Cerebral laceration
c) Multiple infarcts
d) Diffuse axonal injuries
Answer: Diffuse axonal injuries
AIIMS MAY 2006

1. Plethoric lung fields are seen in all of the following conditions, except:
a) Atrial septal defect (ASD)
b) TAPVC (Total Anomalous Pulmonary venous connection)
c) Ebsteins' anomaly
d) Ventricular septal defect
Answer: Ebsteins' anomaly
2. A 40 years old female patient presented with recurrent headaches. MRI showed
an extra-axial, dural based and enhancing lesion. The most likely diagnosis is:
a) Meningioma
b) Glioma
c) Schwannoma
d) Pituitary adenoma
Answer: Meningioma
3. Which of the following features on mammogram would suggest malignancy?
a) Well defined lesion
b) A mass of decreased density
c) Areas of spiculated micro-calcifications
d) Smooth borders
Answer: Areas of spiculated micro-calcifications
4. On MRI the differential diagnosis of spinal cord edema is:
a) Myelo-dysplasia
b) Myelo-malacia
c) Myelo-schisis
d) Cord tumors
Answer: Myelo-malacia
AIIMS NOV 2005
1. For which malignancy, Intensity Modulated Radiotherapy (IMRT) is the most suitable?
a) Lung
b) Prostate
c) Leukemias
d) Stomach
Answer: Prostate
2. Which of following radioactive isotopes is not used for brachytherapy?
a) Iodine-125
b) Iodine-131
c) Cobalt-60
d) Iridium-192
Answer: Iodine-131
3. Solitary hypoechoic lesion of the liver without septae or debris is most likely to
be:

a) Hydatid cyst
b) Caroli's disease
c) Liver abscess
d) Simple cyst
Answer: Simple cyst
4. The posterior urethra is best visualized by:
a) Static cystogram
b) Retrograde urethrogram
c) Voiding cystogram
d) CT cystogram
Answer: Voiding cystogram
AIIMS MAY 2005
1. Which of the following is the most radio-sensitive tumor?
a) Ewings tumor
b) Hodgkin’s disease
c) Carcinoma cervix
d) Malignant Fibrous Histio-cytoma
Answer: Ewings tumor
2. Which of the following techniques in best for differentiating recurrence of brain
tumor from radiation therapy induced necrosis?
a) MRI
b) Contrast enhanced MRI
c) PET scan
d) CT scan
Answer: PET scan
3. Which of the following is the most common cause of sclerotic skeletal metastasis
in the female patient?
a) Carcinoma breast
b) Carcinoma ovary
c) Endometrial carcinoma
d) Melanoma
Answer: Carcinoma breast
4. Investigation of choice for detection and characterization of interstitial lung disease is
a) MRI
b) Chest X-ray
c) High resolution CT scan
d) Ventilation perfusion scan
Answer: High resolution CT scan
5. Which of the following is the most common cause of a mixed cystic and solid supra-sellar mass seen on cranial MR scan of a 10 old child?

a) Pituitary adenoma
b) Cranio-pharyngioma
c) Optic chiasmal glioma
d) Germinoma
Ans: Cranio-pharyngioma
6. A 40 years old female patient on long term steroid therapy presents with recent
onset of severe pain in the right hip. Imaging modality of choice for the problem is
a) CT scan
b) Bone scan
c) MRI
d) Plain X-ray
Ans: MRI
AIIMS NOV 2004
1. Which of the following organs should always be imaged in a suspected case of
bronchogenic carcinoma?
a) Adrenal
b) Kidney
c) Spleen
d) Pancreas
Answer: Adrenal
2. Which of the following techniques use piezoelectric crystal?
a) USG
b) Xero-radiography
c) X-ray diffraction
d) MR imaging
Answer: USG
3. In computed tomography, the attenuation values are measured in Hounsfield Unit. An attenuation value of 0 HU correspond to
a) Water
b) Air
c) Very dense bone structure
d) Fat
Answer: Water
4. Which one of the following is the earliest radiographic manifestation of childhood
leukemia?
a) Radiolucent transverse metaphyseal bands
b) Diffuse demineralization of bones
c) Osteoblastic lesions in skull
d) Parenchymal pulmonary lesions on chest films

Answer: Radiolucent transverse metaphyseal bands
5. The EEG cabins should be completely shielded by a continuous sheet of wire mesh of copper to avoid the picking of noise from external electromagnetic disturbances. Such a shielding is called as
a) Maxwell cage
b) Faraday cage
c) Edison's cage
d) Ohm's cage
Answer: Faraday cage
AIIMS MAY 2004
1. For the evaluation of blunt abdominal trauma, which of the following imaging
modalities is ideal?
a) USG
b) CT
c) MRI
d) Nuclear Scintigraphy
Answer: CT
2. The investigation of choice for the imaging of urinary tract tuberculosis is
a) Plain X-ray
b) Intra-venous urography
c) USG
d) CT
Answer: Intra-venous urography
3. Sunray appearance on X-ray is suggestive of
a) Chondrosarcoma
b) Ewing's sarcoma
c) Osteogenic Sarcoma
d) Metastatic tumor in bone
Answer: Osteogenic Sarcoma
4. The gold standard for the diagnosis of Osteoporosis is
a) Dual energy X-ray absorption-metry
b) Single energy X-ray absorption-metry
c) Ultra-sonography
d) Quantitative CT
Answer: Dual energy X-ray absorption-metry
5. What dose of radiation therapy is recommended for pain relief in bone metastases?
a) 8 Gy in one fraction
b) 20 Gy in 5 fractions
c) 30 Gy in 10 fractions
d) Above 70 Gy
Answer: 30 Gy in 10 fractions

6. Following are common features of malignant gastric ulcer on barium meal, except:
a) Location of greater curvature
b) Carman's meniscus sign
c) Radiating folds which do not reach the edge of ulcer
d) Lesser curvature ulcer with a nodular rim
Answer:
AIIMS NOV 2003
1. Maximum permissible radiation dose in pregnancy
a) 0.5 rad
b) 1.0 rad
c) 1.5 rad
d) 3.0 rad
Answer: 0.5 rad
2. Radiation therapy to hypoxic tissues may be potentiated by the treatment with
a) Mycostatin
b) Metronidazole
c) Methotrexate
d) Melphalan
Answer: Metronidazole
3. Which one of the following therapeutic mode is commonly employed in intra-operative radio-therapy?
a) Electron
b) Photon
c) X-ray
d) Gamma rays
Answer: Electron (most correct answer)
4. MRI rooms are shielded completely by a continuous sheet or wire mesh of copper
or aluminum to shield the imager from external electro-magnetic radiations. It is called
a) Maxwell cage
b) Faraday cage
c) Edison's cage
d) Ohms cage
Answer: Faraday cage
AIIMS MAY 2003
1. Stereotactic radio-surgery is a form of:
a) Radiotherapy
b) Radioiodine therapy
c) Robotic surgery
d) Cryosurgery
Answer: Radiotherapy

2. Which one of the following imaging modalities is most sensitive for evaluation of
extra-adrenal pheochromocytoma?
a) Ultrasound
b) CT
c) MRI
d) MIBG Scan
Answer: MRI
3. Which of the following imaging modality is most sensitive to detect early renal
tuberculosis?
a) Intravenous urography
b) Ultrasound
c) Computed tomography
d) Magnetic resonance imaging
Answer: Intravenous urography
4. All of the following form radiolucent stones except:
a) Xanthine
b) Cysteine
c) Allopurinol
d) Orotic acid
Answer: Cysteine
5. For the treatment of deep seated tumors, the following rays are used:
a) X-rays and gamma-rays
b) Alpha rays and beta-rays
c) Electrons and positrons
d) High power laser beams
Answer: X-rays and gamma-rays
AIIMS NOV 2002
1. Which of the following imaging modality is most sensitive to detect early renal
tuberculosis?
a) IV urography
b) Ultrasound
c) Computed tomography
d) MRI
Answer: IV urography Explanation:
2. Which of following is the most radiosensitive phase of cell cycle?
a) G1
b) S
c) G2
d) M
Answer: M phase (?)

3. X rays are produced when
a) Electron beam strikes the nucleus of the atom
b) Electron beam strikes the anode
c) Electron beam reacts with the electromagnetic field d) Electron beam strikes the
cathode
Answer: Electron beam strikes the anode
4. Which of the following imaging modalities is most sensitive for evaluation of extra
adrenal pheochromocytoma?
a) USG
b) CT
c) MRI
d) MIGB Scan
Answer: MRI
5. High resolution CT of the lung is a specialized CT technique for greater detail of
lung parenchyma and it utilizes:
a) Special lung filters
b) Thick collimation
c) Bone algorithm for image reconstruction
d) Large field of view
Answer: Bone algorithm for image reconstruction
6. A dense persistent nephrogram may be seen in all of following except:
a) Acute ureteral obstruction
b) Systemic hypertension
c) Severe hydro-nephrosis
d) Dehydration
Answer: Systemic hypertension (?)
7. A young man with TB presents with massive recurrent hemoptysis. For angiographic treatment which vascular structure should be evaluated first?
a) Pulmonary artery
b) Bronchial artery
c) Pulmonary Vein
d) Superior vena cava
Answer: Bronchial artery
8. A 22 years old man presents with a solitary 2 cm space occupying lesion of mixed
echogenecity in the right lobe of the liver on USG. The rest of the liver is normal.
Which of the following test should be done next?
a) Ultrasound guided biopsy of the lesion
b) Hepatic scintigraphy

c) Hepatic angiography
d) Contrast enhanced CT scan of the liver
Answer: Hepatic scintigraphy
9. The most likely diagnosis in a new born who has radio- opaque shadow with an
air -fluid level in the chest along in the chest along with hemi-vertebra of the 6th
thoracic vertebra on plain x-ray isa)
Congenital diaphragmatic hernia
b) Esophageal duplication cyst
c) Bronchogenic cyst
d) Staphylococcal pneumonia
Answer: Bronchogenic cyst
10. The most recent advance in non-invasive cardiac output monitoring is use of:
a) PA catheter
b) Thermo-dilution technique
c) Echocardiography
d) Electrical impedance cardio-graph technology
Answer: Electrical impedance cardio-graph technology
AIIMS MAY 2002
1. In a patient presenting with hemoptysis and purulent cough, the x-ray was found
to be normal. The investigation done to aid in diagnosis is.
a) CT guided biopsy
b) High resolutions CT scan
c) Bronchoscopy
d) MRI
Answer: Bronchoscopy
2. A patient suffering from AIDS came with history of difficulty in breathing and
non-productive cough. The X-ray showed bilateral peri-hilar region opacities. But
there was no adenopathy or effusion. The likely cause of his problem is
a) Pneumocystis carinii pneumonia
b) Kaposi's sarcoma
c) Tuberculosis
d) CMV
Answer: Pneumocystis carinii pneumonia
3. In a patient with mitral stenosis will show all of the following findings on x-ray
except:
a) Raising up of the left bronchus

b) Double atrial shadow
c) Kink (posterior displacement) in the esophagus in barium swallows
d) Obliteration of retro-sternal shadow on lateral x ray
Answer: Obliteration of retro-sternal shadow on lateral x ray
4. Egg shell calcification is characteristically seen in
a) Silicosis
b) Sarcoidosis
c) Asbestosis
d) Berylliosis
Answer: Silicosis
5. A patient with solitary pulmonary nodule. The best investigation to come to a diagnosis would be
a) MRI
b) CT scan
c) Ultrasound
d) Imaging guided FNAC
Answer: Imaging guided FNAC
AIIMS NOV 2001
1. Neuro-endocrinal tumors can be best detected by
a) PET scan
b) HRCT Scan
c) MRI
d) Radio-nucleotide Scan
Answer: Radio-nucleotide Scan
2. Para meningeal Rhabdomyosarcoma is best diagnosed by
a) MRI
b) SPECT
c) PET
d) CT scan
Answer: MRI
AIIMS MAY 2001
1. A boy presented in the OPD with minimal pleural effusion on the right side. The
best method to detect this would be:
a) Left side chest X-ray
b) Right side chest X-ray
c) Right lateral decubitus chest X-ray
d) Left lateral decubitus chest X-ray
Answer: Right lateral decubitus chest X-ray
2. CT scan of head showing a Tram track appearance ina)
Neurofibroma
b) Tuberous sclerosis
c) Von Hippel Lindau disease

d) Sturge weber syndrome
Answer: Sturge weber syndrome
[3/17, 11:57 AM] Aipgmee: Final Year/ Intern/ Post-intern: March 2015 to Nov 2015
Crack PGMEE: Anesthesia
www.crackpgmee.com
1. In high spinal anesthesia, what is seen?
a) Hypotension and bradycardia
b) Hypotension and Tachycardia
c) Hypertension and bradycardia
d) Hypertension and tachycardia
Ans: Hypotension and bradycardia
Explanation:
Cardiovascular side effects of spinal anesthesia are myocardial depression, decreased cardiac output, heart block, hypotension, bradycardia, ventricular arrhythmias (including ventricular tachycardia and ventricular fibrillation), and cardiac arrest.
2. A patient selected for surgery who was induced with thiopentone I.V. through one
of the ante-cubital veins complains of severe pain of the whole hand. The next line
of management is
a) Give IV propofol through the same needle
b) Give IV ketamine through the same needle
c) Give IV lignocaine through the same needle
d) Leave it alone
Ans: Give IV lignocaine through the same needle Explanation:
Intra-arterial injection of thiopentone can occur inadvertently, especially if an aberrant superficial artery is present at the medial aspect of the ante-cubital fossa.
Accidental intra-arterial injection can cause arterio-spasm and severe pain along the
course of the artery with blanching of the arm and fingers. Any patient complaint of
pain warrants stopping the injection. The following have been suggested:
1. Dilute the injected Pentothal by removing the tourniquet and any restrictive garments.
2. Leave the needle in place, if possible.
3. Inject the artery with a dilute solution of papaverine, 40 to 80 mg, or 10 ML of 1%
procaine, to inhibit smooth muscle spasm.
4. If necessary, perform sympathetic block of the brachial plexus and/or stellate

ganglion to relieve pain and assist in opening collateral circulation. Papaverine can
be injected into the subclavian artery, if desired.
5. Unless otherwise contraindicated, institute immediate heparinization to prevent
thrombus formation.
6. Consider local infiltration of an alpha-adrenergic blocking agent such as phentolamine into the vasospastic area.
7. Provide additional symptomatic treatment as required.
3. A patient in the ICU was on invasive monitoring with intra-arterial cannulation
through the right radial artery for the last 3 days. Later, he developed swelling and
discoloration of the right hand. The next line of management is
a) Stellate ganglion block
b) Brachial block
c) Radial nerve block on the same side
d) Application of lignocaine jelly over the site
Ans: a (?)
Common complications of intra-arterial cannulation through the right radial artery
are as follows:
Temporary arterial occlusion (radial artery)
Hematoma/bleeding
Rare complications are as follows:
Infection/sepsis
Thrombosis
Ischemia
Nerve injury
Arteriovenous fistula
Pseudo-aneurysm
Compartment syndrome
Air embolism
The stellate ganglion is part of the sympathetic network formed by the inferior cervical and first thoracic ganglia. It receives input from the para-vertebral sympathetic chain and provides sympathetic efferents to the upper extremities, head, neck, and heart. The infiltration of local anesthetic has been used to treat a variety of disorders, but it is primarily performed in the setting of reflex sympathetic
dystrophy.
Indications for stellate ganglion blocks typically fall into 1 of 2 categories, as follows:

Pain syndromes: These conditions include complex regional pain syndromes (CRPSs)
type I (reflex sympathetic dystrophy [RDS]) and type II (causalgia), hyperhidrosis,
refractory angina, phantom limb pain, herpes zoster, and pain of the head and neck.
Arterial vascular insufficiency: These conditions include Raynaud syndrome, scleroderma, obliterative vascular diseases, vasospasm, trauma, and emboli. No benefit is seen in patients with venous insufficiency.
[3/17, 2:35 PM] Aipgmee: Final Year/ Intern/ Post-intern: March 2015 to Nov 2015
Crack PGMEE: Anesthesia
www.crackpgmee.com
4. A patient who was on aspirin for a long period was selected for an elective surgery. What should be done?
a) Stop aspirin for 7 days
b) Infusion of fresh frozen plasma
c) Infusion of platelet concentrate
d) Go ahead with the surgery maintaining adequate hemo-stasis
Ans: Stop aspirin for 7 days
Explanation:
Aspirin imparts its primary antithrombotic effects through the inhibition of PGH-synthase/ COX by the irreversible acetylation of a specific serine moiety (serine
530 of COX-1 and serine 516 of COX-2) and is ≈170-fold more potent in inhibiting
COX-1 than COX-2.
Platelets cannot generate new COX, the effects of aspirin last for the duration of the
life of the platelet (≈10 days). As little as 20% of platelets have normal COX activity,
hemostasis may be normal.
5. Anesthetic agent of choice in renal failure is
a) Methoxyflurane
b) Isoflurane
c) Enflurane
d) None of the above
Ans: b
Explanation:
Fluorinated compounds, such as methoxyflurane and enflurane, are nephro-toxic
and should be avoided in patients with CKD.
6. The gas which produces systemic toxicity without causing local irritation is

a) Ammonia
b) Carbon monoxide
c) Hydrocyanic acid
d) Sulfur dioxide
Ans: b
Explanation:
Carbon monoxide is colorless, odorless, and tasteless, non-irritating but highly toxic
gas.
It combines with hemoglobin to produce carboxy-hemoglobin.
The most common symptoms of CO poisoning are headache, dizziness, weakness,
nausea, vomiting, chest pain, and confusion. High levels of CO inhalation can cause
loss of consciousness and death.
[3/17, 6:41 PM] Aipgmee: Final Year/ Intern/ Post-intern: March 2015 to Nov 2015
Crack PGMEE: Anesthesia
www.crackpgmee.com
7. Induction agent that may cause adrenal cortex suppression
a) Ketamine
b) Etomidate
c) Propofol
d) Thiopentione
Ans: b
Explanation:
Etomidate is a short acting intravenous anesthetic agent used for the induction of
general anesthesia and for sedation for short procedures.
Etomidate suppresses corticosteroid synthesis in the adrenal cortex by reversibly
inhibiting 11-beta-hydroxylase, an enzyme important in adrenal steroid production;
it leads to primary adrenal suppression.
8. Which of the following volatile anesthetic agents should be preferred for induction
of anesthesia in children?
a) Enflurane
b) Isoflurane
c) Sevoflurane
d) Desflurane
Ans: c
Explanation:

Sevoflurane is a rapid, potent, halogenated volatile anesthetic with low solubility in
blood.
It is a non- irritant, of low pungency and children accept it easily. Therefore, sevoflurane is often used to induce and maintain anesthesia in children.
Sevoflurane anesthesia in children after induction of anesthesia with midazolam and
thiopental does not cause epileptiform EEG.
9. Which one of the following anesthetic agents causes a rise in the intracranial pressure?
a) Sevoflurane
b) Thiopentone sodium
c) Lignocaine
d) Propofol
Ans: a
Explanation:
Anesthetic agents causing increased intracranial pressure:
Sevoflurane
Nitrous oxide
Methoxyflurane
Isoflurane
Enflurane
Desflurane
Halothane
Ketamine
Althesin
[3/17, 9:29 PM] Aipgmee: Final Year/ Intern/ Post-intern: March 2015 to Nov 2015
Crack PGMEE: Anesthesia
www.crackpgmee.com
10. Which of the following is the muscle relaxant of choice in renal failure?
a) Rapacurium
b) Pancuronium
c) Atracurium
d) Rocuronium
Ans: c
Explanation:
Atracurium is a new, non-depolarizing muscle relaxant which rapidly breaks down in
vivo and appears to require neither renal nor hepatic function for its elimination.
It is spontaneously broken down in the plasma by a non-enzymatic chemical process
“Hofmann’s degradation”. Thus it is non-cumulative.

It could be used in patients with either liver or kidney disease.
It is the relaxant of choice in fragile patients and in renal failure.
11. Which of the following Opioids is not given intrathecally?
a) Remifentanil
b) Morphine
c) Sufentanil
d) Fentanyl
Answer: Remifentanil
Explanation:
Remifentanil is indicated as an analgesic agent for use during induction and/or maintenance of general anesthesia.
Remifentanil is for intravenous use only and must not be administered by epidural
or intrathecal injection as glycine is present in the formulation, causing temporary
motor paralysis.
Remifentanil is contra-indicated in patients with known hypersensitivity to remifentanil and other fentanyl analogues or any other component of the preparation.
12. Which of the following statements about propofol is not true?
a) It is contraindicated in porphyria
b) It does not trigger malignant hyperthermia
c) Commercial preparation contains egg
d) Suited for day care surgery
Answer: It is contraindicated in porphyria
Explanation:
Propofol contains soybean oil and egg lecithin.
Propofol Injectable Emulsion has been used safely in patients with a history of porphyria or malignant hyperthermia.
[3/17, 10:02 PM] Aipgmee: Final Year/ Intern/ Post-intern: March 2015 to Nov 2015
Crack PGMEE: Anesthesia
www.crackpgmee.com
16. Which of the following anesthetic drugs is contraindicated in CRF?
a) Morphine
b) Fentanyl
c) Pethidine
d) Atracurium
Answer: Pethidine
Explanation:
Drugs contraindicated in CRF:
Enflurane
Pancuronium

Pethidine (Meperidine)
Drugs normally excreted by the kidney can accumulate to toxic levels in patients
with chronic kidney disease (CKD).
Therefore, adjusting dosages or avoiding such drugs, including iodinated contrast in
high-risk patients, is a key management principle in patients with CKD.
Of note is the avoidance of meperidine in patients with CKD or end-stage renal disease (ESRD) because the active metabolite (nor-meperidine) can accumulate and
cause seizures.
[3/19, 9:49 AM] Aipgmee: 1. Rapid induction of anesthesia occurs with which of the
following inhalational anesthetics?
a) Isoflurane
b) Halothane
c) Desflurane
d) Sevoflurane
Answer: Desflurane
Explanation:
The speed of induction of anesthesia in descending order
Nitrous oxide
Desflurane
Sevoflurane
Isoflurane
Halothane
The agents with low blood gas partition coefficient will have faster rate induction.
Desflurane is a greenhouse gas. Desflurane causes 26.8 times the global warming
of sevoflurane.
2. A 5 year old child is scheduled for strabismus correction. Induction of anesthesia
is uneventful. After conjunctival incision, as the surgeon grasps the medial rectus
the anesthesiologist looks at the cardiac monitor. Why do you think he did that?
a) He wanted to check the depth of anesthesia
b) He wanted to be sure that the BP did not fall
c) He wanted to see if there was an oculo-cardiac reflex
d) He wanted to make sure there was no ventricular arrhythmias which normally accompany incision
Ans: c
3. Which muscle relaxant increases intracranial pressure?

a) Mivacurium
b) Atracurium
c) Suxamethonium
d) Vecuronium
Ans: c
4. Which of the following inhaled gases is used to decrease pulmonary artery pressure in adults and infants?
a) Nitrous oxide
b) Nitrogen dioxide
c) Nitric oxide
d) Nitrogen
Ans: c
5. The use of succinyl choline is not contraindicated in
a) Tetanus
b) Closed head injury
c) Cerebral stroke
d) Hepatic failure
Ans: d
6. A 6 year old boy is scheduled for examination of the eye under anesthesia. The
father informed that for the past six months, the child is developing progressive weakness of both legs. His elder sibling had died at age of 14 years. Which drug would you definitely avoid during the anesthetic management?
a) Succinyl choline
b) Thiopentone
c) Nitrous oxide
d) Vecuronium
Ans: a
[3/19, 11:25 AM] Aipgmee: 7. Which of the following statement is not correct for
vancuronium?
a) It has high incidence of cardiovascular side effects
b) It has short duration of neuromuscular block
c) In usual doses the dose adjustment is not required in kidney disease
d) It has high lipophilic property
Ans: a
8. The topical use of which of the following local anesthetics is not recommended?
a) Lignocaine
b) Bupivacaine
c) Cocaine
d) Dibucaine
Ans: b

9. During surgery for aortic arch aneurysm under deep hypothermic circulatory arrest which of the following anesthetic agent administered prior to circulatory arrest that also provides cerebral protection?
a. Etomidate
b. Thiopental sodium
c. Propofol
d. Ketamine
Ans: b
10. In volume cycled ventilation the inspiratory flow rate is set at?
a) 140-160 L/min
b) 110-130 L/min
c) 60-100 L/min
d) 30-50 L/min
Ans: c
11. Following spinal subarachnoid block a patient develops hypotension. This can be
managed by all of the following means except?
a) Lowering the head end
b) Administration of 1 liter of ringer lactate before the block
c) vaso-pressor drug like methoxamine
d) Use of ionotrope like dopamine
Ans: a
12. Which of the following is the shortest acting intravenous analgesic?
a) Remifentanil
b) Fentanyl
c) Alfentanil
d) Sufentanil
Ans: a
[3/19, 6:23 PM] Aipgmee: 13. The following combination of agents are the most
preferred for short day care surgeries?
a) Propofol, fentanyl, isoflurane
b) Thiopentone sodium, morphine, halothane
c) Ketamine, pethidine, halothane
d) Propofol, morphine, halothane
Ans: a
14. During laryngoscopy and endo-tracheal intubation which of the following maneuver is not performed?
a) Flexion of the neck
b) Extension of the head at the atlanto-occipital joint
c) The laryngoscope is lifted upwards levering over the upper incisors
d) In a straight blade laryngoscope, the epiglottis is lifted by the tip
Ans: c

Ref: Lee's Synopsis of Anesthesia
During endo-tracheal intubation a small pillow should be placed under to occiput to
flex the neck and to extend the atlanto-occipital joint.
A straight blade laryngoscope is positioned in the vallecula, anterior to the epiglottis, lifting it out of the visual pathway while exposing the glottis and vocal
folds.
Using upper incisors as lever to lift laryngoscope will cause damage to the upper
incisors.
15. The administration of succinyl choline to a paraplegic patient led to the appearance of dys-arrhythmias, conduction abnormalities and finally cardiac arrest.
The most likely cause is?
a) Hyper-calcemia
b) Hyperkalemia
c) Anaphylaxis
d) Hyper-magnesemia
Ans: b
16. In a young patient who had extensive soft tissue and muscle injury, which of these muscle relaxants used for endo-tracheal intubation might lead to cardiac arrest?
a) Atracurium
b) Suxamethonium
c) Vecuronium
d) Pancuronium
Ans: b
17. A patient was administered epidural anesthesia with 15 ml of 1.5 % lignocaine
with adrenaline for hernia surgery. He developed hypotension and respiratory depression within 3 minutes after administration of the block. The commonest cause would be?
a) Allergy to drug administered
b) Systemic toxicity to drug administered
c) Patient got vasovagal shock
d) Drug has entered the subarachnoid space
Ans: d
18. Pin index system is a safety feature adopted in anesthesia machines to prevent?
a) Incorrect attachment of anesthesia machines
b) Incorrect attachment of anesthesia face masks
c) Incorrect inhalation agent delivery

d) Incorrect gas cylinder attachment
Ans: d
19. The pin index code of nitrous oxide is?
a) 2,5
b) 1,5
c) 3,5
d) 2,6
Ans: c
20. The ideal muscle relaxant used for a neonate undergoing porto-enterostomy for
biliary atresia is?
a. Atracurium
b. Vecuronium
c. Pancuronium
d. Rocuronium
Ans: a
[3/19, 8:30 PM] Aipgmee: 21. In a 2 months old infant undergoing surgery for biliary
atresia, you would avoid one of the following anesthetic?
a) Thiopentone
b) Halothane
c) Propofol
d) Sevoflurane
Ans: b
22. All of the following factors decrease the minimum alveolar concentration (MAC)
of an inhalational anesthetic agent except?
a) Hypothermia
b) Hypo-natremia
c) Hypo-calcemia
d) Anemia
Ans: c
23. Visual analogue scale (VAS) most widely used to measure?
a. Sleep
b. Sedation
c. Pain intensity
d. Depth of anesthesia
Ans: c
24. The narrowest part of larynx in infants is at the cricoid level. In administering
anesthesia this may lead to all except?
a) Choosing a smaller size endo-tracheal tube
b) Trauma to subglottic region

c) Post operative stridor
d) Laryngeal edema
Ans: d
25. Regarding neonatal circumcision, which one of the following is true?
a) It should be done without anesthesia, as it is hazardous to give anesthesia.
b) It should be done without anesthesia, as neonates do not perceive pain as adults.
c) It should be done under local anesthesia only.
d) General anesthesia should be given to neonate for circumcision as they also feel
pain as adults.
Ans: d
[3/20, 9:01 AM] Aipgmee: Final Year/ Intern/ Post-intern: Jan 2015 to June 2015
Crack PGMEE: Obstetrics and Gynecology
www.crackpgmee.com
1. At what level of β-HCG, normal pregnancy can be earliest detected by TVS (Trans vaginal USG)
a) 500 IU/ml
b) 1000 IU/ml
c) 1500 IU/ml
d) 2000 IU/ml
e) 2500 IU/ml
Answer: 1000 IU/ml
Explanation:
First trimester USG- β-HCG level
Gestational sac by TVS-1000-1200 mIU/ml
Gestational sac by TAS-6000 mIU/ml
2. True about stage III B endometrial Ca
a) Vaginal metastasis
b) Lymph nodal metastasis
c) Bowel involvement
d) Lung metastasis
Answer: Vaginal metastasis
Explanation:
New FIGO staging of endometrial cancer:
Carcinoma of the Endometrium
IA-Tumor confined to the uterus, no or < . myometrial invasion
IB-Tumor confined to the uterus, > . myometrial invasion
II-Cervical stromal invasion, but not beyond uterus
IIIA-Tumor invades serosa or adnexa
IIIB-Vaginal and/or para-metrial involvement
IIIC1-Pelvic node involvement

IIIC2-Para-aortic involvement
IVA -Tumor invasion bladder and/or bowel mucosa
IVB-Distant metastases including abdominal metastases and/or inguinal lymph nodes
3. True about endometriosis
a) M.C. in 3rd of 4th decade
b) Premenstrual spotting
c) Endometroid sarcoma is most common malignancy also with it
d) True cyst
e) Seen in first degree relative
Answer: a, b, d and e
Explanation:
Endometriosis:
Age group: 30-40 Years
Familial predisposition (First degree relative)
Seen in high socio-economic status
It is estrogen hormone dependent condition.
Most common site is ovary.
Bilateral cyst or endometrioma (True cyst with columnar epithelial lining
Pre-menstrual spotting, menstrual irregularity, dyspareunia, progressively increasing dys-menorrhea and infertility
[3/20, 2:20 PM] Aipgmee: 4. Indication of amnioinfusion is/are
a) Done in oligo-hydramnios
b) Suspected renal anomalies
c) Done of facilitate labour
d) Used in fetal distress
Answer: a, b and d
Explanation:
Indication of amnioinfusion:
Oligo-hydramnios and cord compression
To dilute and wash out meconium
To improve variable or prolonged deceleration
Renal agenesis
Fetal distress
5. Risk factors for pre-eclampsia
a) Chronic HTN
b) Obesity
c) Placental ischemia
d) Multi-gravida
e) Anti-phospholipid syndrome
Answer: a, c and e
Explanation:
Risk factors for pre-eclampsia:

Nulliparity
Diabetes
Renal disease
HTN
History of pre-eclampsia
Extreme maternal age
Obesity
Multiple gestations
Anti-phospholipid syndrome
6. Zavanelli maneuver done in
a) Shoulder dystocia
b) DTA
c) Retained placenta
d) Face presentation
Answer: Shoulder dystocia
Explanation:
Zavanelli maneuver is an obstetric maneuver that involves pushing back the delivered fetal head into the birth canal in anticipation of performing a cesarean section in case of shoulder dystocia.
[3/20, 5:28 PM] Aipgmee: 7. Drugs used in emergency contraception
a) Levo-norgestrel
b) Estrogen+ progesterone
c) Danazol
d) Mifepristone
e) Misoprostol
Answer: a, b, c and d
Explanation:
Drugs used in emergency contraception:
Estrogen alone- Ethinyl estradiol and conjugated estrogen
Progesterone alone-Levo-norgestrel
Low dose OCPs
Cu IUD
Mifepristone
8. ↓ vascularity of fibroids seen with
a) GnRH agonist
b) Danazol
c) Mifepristone
d) Clomiphene citrate
Answer: a, b and c
Explanation:
Decreased vascularity of fibroids seen with:
Mifepristone
Danazol

GnRH agonist
GnRH antagonist (Same effect as agonist)
Anti-fibrinolystic
PG synthetase inhibitors
9. What is the stage of ovarian Ca with superficial liver metastasis & B/L ovarian
mass?
a) Stage I
b) Stage II
c) Stage III
d) Stage IV
e) Ca in situ
Answer: Stage III
Explanation:
Staging of ovarian Ca:
In stage III, cancer is found in one or both ovaries or fallopian tubes, or has spread
outside the pelvis to other parts of the abdomen and/or to nearby lymph nodes.