सहायक आचार्य (Broad Spec.) (Med. edu.) संवीक्षा परीक्षा - 2020

पुस्तिका में पृष्ठों की संख्या : 32
Number of Pages in Booklet : 32

पुस्तिका में प्रश्नों की संख्या : 180
No. of Questions in Booklet : 180

प्रश्न-पत्र पुस्तिका संख्या /
Question Paper Booklet No. 5201209

BSAPRd-02

Paper Code : 07

SUBJECT : Radio Diagnosis

परीक्षा दिनांक : 11/08/2020

परीक्षा समय : 9:00 To 12:00

समय : 3.00 घण्टे
Time : 3.00 Hours

अधिकतम अंक : 180
Maximum Marks : 180

प्रश्न-पत्र पुस्तिका एवं उत्तर पत्रक के पेपर सील/पॉलिथीन बैग को खोलने के बाद परीक्षार्थी प्रश्न-पत्र पुस्तिका संख्या को उत्तर पत्रक पर सावधानीपूर्वक अंकित करें। इसमें किसी भी प्रकार की त्रुटि होने पर जिम्मेदारी अभ्यर्थी की होगी।

The candidate fill the Question Paper Booklet No. on Answer Sheet carefully after opening the Paper Seal / Polythene bag. Candidate himself shall be responsible for any error.

परीक्षार्थियों के लिए निर्देश

1. **सभी** प्रश्नों के उत्तर दीजिए ।
2. **सभी** प्रश्नों के अंक समान हैं ।
3. प्रत्येक प्रश्न का केवल **एक** ही उत्तर दीजिए ।
4. एक से अधिक उत्तर देने की दशा में प्रश्न के उत्तर को गलत माना जाएगा ।
5. प्रत्येक प्रश्न के चार वैकल्पिक उत्तर दिये गये हैं, जिन्हें क्रमशः 1, 2, 3, 4 अंकित किया गया है । अभ्यर्थी को सही उत्तर निर्दिष्ट करते हुए उनमें से केवल एक गोले अथवा बबल को उत्तर पत्रक पर **नीले बॉल प्वाइंट पेन** से गहरा करना है ।
6. **OMR** उत्तर पत्रक इस परीक्षा पुस्तिका के अन्दर रखा है । जब आपको परीक्षा पुस्तिका खोलने को कहा जाए, तो उत्तर-पत्र निकाल कर ध्यान से केवल **नीले बॉल पॉइंट पेन** से विवरण भरें ।
7. **प्रत्येक गलत उत्तर के लिए प्रश्न अंक का 1/3 भाग काटा जायेगा ।** गलत उत्तर से तात्पर्य अशुद्ध उत्तर अथवा किसी भी प्रश्न के एक से अधिक उत्तर से है । किसी भी प्रश्न से संबंधित गोले या बबल को खाली छोड़ना गलत उत्तर नहीं माना जायेगा ।
8. मोबाइल फोन अथवा इलेक्ट्रोनिक यंत्र का परीक्षा हॉल में प्रयोग पूर्णतया वर्जित है । यदि किसी अभ्यर्थी के पास ऐसी कोई वर्जित सामग्री मिलती है तो उसके विरुद्ध आयोग द्वारा नियमानुसार कार्यवाही की जायेगी ।
9. कृपया अपना रोल नम्बर ओ.एम.आर. पत्रक पर सावधानीपूर्वक सही भरें । गलत अथवा अपूर्ण रोल नम्बर भरने पर **5 अंक** कुल प्राप्तांकों में से काटे जा सकते हैं ।

चेतावनी : अगर कोई अभ्यर्थी नकल करते पकड़ा जाता है या उसके पास से कोई अनधिकृत सामग्री पाई जाती है, तो उस अभ्यर्थी के विरुद्ध पुलिस में प्राथमिकी दर्ज कराते हुए विविध नियमों-प्रावधानों के तहत कार्यवाही की जाएगी । साथ ही विभाग ऐसे अभ्यर्थी को भविष्य में होने वाली विभाग की समस्त परीक्षाओं से विवर्जित कर सकता है ।

INSTRUCTIONS FOR CANDIDATES

1. Answer **all** questions.
2. **All** questions carry equal marks.
3. Only **one** answer is to be given for each question.
4. If more than one answers are marked, it would be treated as wrong answer.
5. Each question has four alternative responses marked serially as **1, 2, 3, 4**. You have to darken only one circle or bubble indicating the correct answer on the Answer Sheet using **BLUE BALL POINT PEN**.
6. The **OMR** Answer Sheet is inside this Test Booklet. When you are directed to open the Test Booklet, take out the Answer Sheet and fill in the particulars carefully with **blue ball point pen** only.
7. **1/3 part of the mark(s) of each question will be deducted for each wrong answer.** A wrong answer means an incorrect answer or more than one answers for any question. Leaving all the relevant circles or bubbles of any question blank will not be considered as wrong answer.
8. Mobile Phone or any other electronic gadget in the examination hall is strictly prohibited. A candidate found with any of such objectionable material with him/her will be strictly dealt as per rules.
9. Please correctly fill your Roll Number in O.M.R. Sheet. **5 Marks** can be deducted for filling wrong or incomplete Roll Number.

Warning : If a candidate is found copying or if any unauthorized material is found in his/her possession, F.I.R. would be lodged against him/her in the Police Station and he/she would liable to be prosecuted. Department may also debar him/her permanently from all future examinations.

इस परीक्षा पुस्तिका को तब तक न खोलें जब तक कहा न जाए ।
Do not open this Test Booklet until you are asked to do so.

1. Which of the following statements is correct about Subarachnoid hemorrhage (SAH) ?

(1) A normal CT within 24 h of onset of symptoms excludes SAH.

(2) The most common etiology is trauma.

(3) Focal interhemispheric blood suggests an anterior communicating artery aneurysm rupture.

(4) Blood in the 4th ventricles is a typical feature of posterior communicating artery aneurysm rupture.

2. Concerning the differentiation between optic nerve glioma and optic nerve sheath meningioma, which is correct ?

(1) A widened optic canal is seen more commonly in optic nerve glioma.

(2) Optic nerve glioma typically shows the 'tram-track' sign on enhancement.

(3) Calcification is more commonly seen with optic nerve glioma.

(4) Optic nerve glioma may cause orbital hyperostosis.

3. Which of the following statement is incorrect about Juvenile angiofibromas ?

(1) Biopsy is contraindicated.

(2) Widening of the pterygopalatine fossa is only seen in advanced cases.

(3) Is the commonest benign nasopharyngeal tumour.

(4) Invasion of the sphenoid sinus occurs in upto two thirds of cases.

4. Which of the following is true regarding round pneumonia ?

(1) It occurs most commonly in the second and third decades of life.

(2) It is most commonly associated with Klebsiella infection.

(3) It frequently progresses to cavitation.

(4) It is a feature of Q-fever infection.

5. Which of the following is true regarding coarctation of the aorta ?

(1) Adult coarctation is commonly associated with cardiac anomalies.

(2) The ductus arteriosus is usually closed in adult type coarctation.

(3) A short segment of narrowing of the ascending aorta is seen in infantile coarctation.

(4) It is a rare cause of infantile heart failure.

6. Regarding cholangiocarcinoma, which of the following is true ?

(1) The majority are squamous cell carcinomas.

(2) It typically shows delayed enhancement on CT.

(3) Tumours are low signal relative to liver on T2-weighted MRI.

(4) Duodenal obstruction is an early feature.

7. Medullary nephrocalcinosis occurs in which of the following conditions ?

(1) Renal tubular acidosis

(2) Primary hyperoxaluria

(3) Lesch-Nyhan syndrome

(4) All of the above

8. Regarding renal calculi, which of the following is not true ?

(1) More than 50% of staghorn calculi contain magnesium ammonium phosphate (struvite).

(2) Uric acid calculi are nonopaque.

(3) Xanthine stones are not visible on CT.

(4) Crohn's disease predisposes to the formation of oxalate stones.

9. Regarding trauma to the bladder, which of the following is false ?

(1) Approximately 10% of patients with a pelvic fracture have associated bladder injury.

(2) About 50% of bladder ruptures are intraperitoneal.

(3) Extraperitoneal ruptures are most common around the base of the bladder.

(4) About 10% of bladder ruptures are only evident on post-voiding cystography films.

10. Cone-shaped epiphyses are seen in all of the following conditions, except

(1) Ellis Van Creveld syndrome

(2) Hypothyroidism

(3) Multiple epiphyseal dysplasia

(4) Achondroplasia

11. Which of the following is true regarding pigmented villonodular synovitis ?

(1) It is five times more common in females.

(2) Soft tissue calcification is common.

(3) Painful periarticular osteoporosis is an early feature.

(4) It causes well-defined bony erosions on both sides of an affected joint.

12. Which of the following ultrasonographic appearances of axillary lymph nodes are reportedly associated with malignant infiltration ?

(1) Rounded appearance of the lymph node

(2) An increase in vascular resistive index and pulsatility index

(3) Peripheral vascular flow pattern on colour or power Doppler imaging

(4) All of the above

13. Which of the following is not a cause of posterior acoustic shadowing on breast ultrasonography ?

(1) Invasive ductal carcinoma

(2) Ruptured silicone breast implant

(3) Surgical scar

(4) Simple cyst

14. A lesion is noted in the liver on CT and ultrasound. It is inferior, anterior, and to the left of the right hepatic vein, but to the right of the middle hepatic vein. It is inferior of the confluence of the right and left portal veins. According to the Couinaud system, what segment of the liver is the lesion in

(1) Segment 4b

(2) Segments

(3) Segment 6

(4) Segment 8

15. Regarding foetal anomalies, which one of the following is false ?

(1) The triple screen for Down's syndrome refers to the combination of maternal alpha-fetoprotein, oestriol and HCG levels.

(2) Short femur and humerus lengths are indicators of Down's syndrome.

(3) Endocardial cushion defects are strongly associated with Down's syndrome.

(4) Separation of the big toe from the remaining toes is a strong sign of Down's syndrome.

16. Which one of the following signs may be useful to help differentiate between a phlebolith and ureteric calculi ?

(1) Lobster claw sign

(2) Soft-tissue rim sign

(3) Signet ring sign

(4) Nubbin sign

17. Which of the following is not related to the risk of rupture of saccular intracranial aneurysms ?

(1) Size of the aneurysm

(2) Configuration of the aneurysm

(3) Location of the aneurysm

(4) Age of the patient

18. If a patient has a duplicated IVC, the ideal location of an IVC filter would be

(1) Infrarenal right IVC

(2) Suprarenal IVC

(3) Infrarenal left IVC

(4) Filter is contraindicated and thrombolysis should be performed

19. If a radiologist increases the distance between fluoroscopy tube and patient from 1 to 2 m, the radiation dose to patient would become :

(1) 1/2

(2) 1/3

(3) 1/4

(4) 1/8

20. Regarding the use of compression in mammography, compression increases :

(1) Tube loading

(2) X-ray penetration

(3) Average glandular close

(4) Image magnification

21. A 37 year old male undergoes an intravenous urogram and the right ureter is deviated medially in the lumbar region. Which one of the following could explain this finding ?

(1) Psoas muscle hypertrophy

(2) Para-aortic lymphadenopathy

(3) Retrocaval ureter

(4) Abdominal aortic aneurysm

22. A 29 year old woman has an ultrasound scan for right upper quadrant pain and jaundice which reveals biliary ductal dilatation to the level of the common hepatic duct adjacent to a stone in the gallbladder neck. The gallbladder is thick-walled and tender. MRCP confirms these findings and excludes common duct stones. Which one of the following is the most likely diagnosis ?

(1) Primary sclerosing cholangitis

(2) Mirizzi syndrome

(3) Caroli's disease

(4) Acute cholecystitis

23. Which is the first diagnostic study of choice for evaluating upper GI bleeding for varices ?

(1) Esophagoduodenoscopy (EGD)

(2) Esophagography

(3) Contrast enhanced CT

(4) Nuclear medicine tagged red blood cell scan

24. Regarding the portal venous system, which of the following facts is false ?

(1) Direct portography may be achieved by a trans-jugular trans-hepatic approach.

(2) The splenic and superior mesenteric vein join to form the main portal vein.

(3) The extra hepatic portal vein lies anterior to the common bile duct.

(4) The umbilical (distal) portion of the left portal vein supplies the lateral segments 2 and 3 and the inferior portion of segment 4.

25. A 25-year-old male driver was admitted to the Accident & Emergency Department after a road traffic accident. Plain radiography shows a fractured pelvis and the patient is unable to pass urine. The registrar notes blood at the urethral meatus. What is the appropriate management for this condition ?

(1) Foley's catheter insertion to drain urine

(2) Retrograde urethrogram to exclude urethral injury

(3) Micturating cystourethrogram

(4) Antegrade urethrography

26. All the following are radiological features of Crohn's disease on small bowel meal except :

(1) Granular mucosa

(2) Aphthoid ulcers

(3) String sign of Kantor

(4) Cobblestone appearance

27. The imaging modality of choice in suspected brain metastases is :

(1) Contrast-enhanced CT

(2) Non-contrast CT

(3) Diffusion-weighted MR

(4) Contrast-enhanced MR

28. A 32 year old footballer sustains an avulsion injury to the anterior superior iliac spine during training. Which of the following muscles is likely to be affected ?

(1) Sartorius

(2) Gracilis

(3) Iliopsoas

(4) Rectus femoris

29. A ten-year-old girl falls and injures her left elbow. No bony injury is demonstrated on plain radiographs. On interpretation of the plain radiographs, which one of the following ossification centres is the least likely to be present ?

(1) Trochlea

(2) Medial epicondyle

(3) Lateral epicondyle

(4) Olecranon

30. A 56-year-old woman who has had chronic wrist pain since a fall several months previously is referred for an MR arthrogram of her wrist with a suspected triangular fibrocartilage complex (TFCC) tear. Which of the following would be the best sequence for visualizing a TFCC tear ?

(1) Tl axial

(2) T2 coronal

(3) Gradient echo sagittal

(4) T2 sagittal

31. Embryonic tissues or structures involved with uterine development include :

(1) Mesoderm

(2) Urogenital sinus

(3) Mesonephric ducts

(4) Endoderm

32. The scrotum of the male develops from :

(1) endoderm of urogenital sinus

(2) urethral groove

(3) urogenital folds

(4) genital or labioscrotal swellings

33. A true hermaphrodite can be distinguished from a pseudohermaphrodite by :

(1) chromosome complement

(2) behavior

(3) appearance of external genitalia

(4) presence of both testicular and ovarian tissue

34. The structures of the female pelvis representing the homologue of the gubernaculum testis are :

(1) cardinal ligament of the uterus

(2) round ligament of the uterus

(3) suspensory ligament of the ovary

(4) medial umbilical ligament

35. The structures listed below are of mesodermal origin EXCEPT :

(1) cortex of the kidney

(2) renal pelvis

(3) ureter

(4) urethra

36. The embryonic origin(s) of the shaft of the penis is/are :

(1) urethral folds

(2) genital tubercle

(3) genital swellings

(4) sinovaginal bulbs

37. Of the following, the item most closely associated with the pons is :

(1) diencephalon

(2) mesencephalon

(3) metencephalon

(4) myelencephalon

38. Of the following, the one most closely associated with the 3rd ventricle is :

(1) telencephalon

(2) diencephalon

(3) mesencephalon

(4) myelencephalon

39. False about cerebrospinal fluid :

(1) It is produced in choroid plexuses

(2) Circulates in the ventricular system of the brain and in the subarachnoid spaces

(3) Re-enters the arterial blood at the arachnoid granulations

(4) Blockage of its circulation can lead to internal or external hydrocephalus

40. A 28 year-old G2P1 female patient comes in for a checkup for the first time. Sonographic dating puts her roughly around 30 weeks. She states she hasn't been taking any prenatal vitamins or any supplements. On ultrasonography, it has also been identified that the fetus has anencephaly. What is the specific abnormality causing this condition ?

(1) defective neural crest migration

(2) neural tube defect

(3) myogenic cell migration defect

(4) defective division of somites

41. Which of the following is an electromagnetic radiation ?

(1) Radio waves

(2) X-rays

(3) Visible Light

(4) All of the above

42. Which of the following statements is true about the linear attenuation coefficient(μ) ?

(1) It depends on the energy of the individual photons but independent of the density of the material

(2) It depends on the atomic number but independent of the energy of the individual photons

(3) It does not depend on the density and the physical thickness of the material

(4) It depends on the density of the material and the energy of the individual photons

43. The unit of Absorbed dose is

(1) Sievert

(2) Gray

(3) Roentgen

(4) Joule

44. According to ICRP, the recommended annual dose limit for the radiation worker is

(1) 50 mSv/year, averaged over defined periods of 5 years

(2) 100 mSv/year

(3) 20 mSv/year, averaged over defined periods of 5 years

(4) 10 mSv/year, averaged over defined periods of 5 years

45. According to ICRP, the current recommendation on the annual dose limit for the lens of the eye for the radiation worker is

(1) 10 mSv

(2) 20 mSv

(3) 30 mSv

(4) 500 mSv

46. The acute exposure threshold dose for the manifestation of early transient erythema in skin is

(1) 0.5 Gy

(2) 1 Gy

(3) 2 Gy

(4) 3 Gy

47. The detector used in the TLD is

(1) $CaSO_4$: Dy

(2) Gas detector

(3) $CdSO_4$

(4) Ag_2O

48. Which of the following is a stochastic effect ?

(1) Erythema

(2) Epilation

(3) Infertility

(4) Cancer

49. Which of the following scenario is a medical exposure ?

(1) Exposure to scattered radiation by the patient comforters

(2) Exposure to background radiation

(3) Exposure to stray radiation by the patients waiting at the waiting area

(4) Exposure to scattered radiation by the radiation worker

50. During an interventional radiologic procedure, an interventional radiologist's fingers are exposed to a dose rate of 1 mSv/h at 1 cm from the patient. What would be the approximate dose rate the interventional radiologist's fingers would be receiving at 50 cm distance away from the patient ?

(1) 0.01 mSv/h

(2) 0.04 mSv/h

(3) 0.0004 mSv/h

(4) 0.25 mSv/h

51. Which of the following X-ray tube-detector movements is used in third generation CT ?

(1) Rotate-fixed

(2) Translate-rotate

(3) Rotate-rotate

(4) None of the above

52. In CT, pitch is known as

(1) Table travel per X-ray tube rotation

(2) Table travel to the total number of images acquired

(3) Table travel per X-ray tube rotation to the total beam collimation

(4) Number of images acquired during one X-ray tube rotation

53. Choose the true statement :

(1) The CT number is based on the linear attenuation coefficient of the water only

(2) The CT number is based on the linear attenuation coefficient of the water and the material of interest

(3) The CT number is based on the linear attenuation coefficient of the material of interest only

(4) The CT number is never based on the linear attenuation coefficient of the material of interest

54. Which of the following affects the noise level in CT ?

(1) Pixel Size

(2) Slice thickness

(3) Radiation Exposure

(4) All of the above

55. In a helical CT scan, the dose-length-product (DLP) can be obtained by

(1) The product of $CTDI_{vol}$ and the scan length

(2) The product of dose within a slice and the 'k' factor

(3) *In vivo* dosimetry

(4) Summation of dose within a slice and the scan length

56. A 35-year-old man was involved in a RTA and sustained a comminuted open fracture of left femur. No other major injury is identified. After 48 hours he becomes acutely short of breath with widespread ill-defined peripheral infiltrates on a supine CXR. Which one of the following is the most likely diagnosis ?

(1) Cardiogenic pulmonary edema

(2) Fat emboli

(3) Hospital acquired pneumonia

(4) Pulmonary contusions

57. A 15-year-old boy is noted to have a solitary lytic lesion expanding the cortex of proximal humerus. An MRI demonstrates multiple fluid levels. What is the most likely diagnosis ?

(1) Aneurysmal bone cyst

(2) Enchondroma

(3) Giant cell tumor

(4) Simple bone cyst

58. A 6-year-old boy undergoes pelvic radiograph for complaints of limp. It reveals loss of height of right femoral head with fragmentation and sclerosis of epiphysis. What is the most likely diagnosis ?

(1) Developmental dysplasia of the hip

(2) Perthe's disease

(3) Septic arthritis

(4) Slipped upper femoral epiphysis

59. Ideal treatment strategy for renal FMD

(1) Angioplasty

(2) Surgical grafting

(3) Autotransplantation

(4) Nephrectomy

60. First percutaneous angioplasty was performed by

(1) Berenstein

(2) Dotter

(3) Rosen

(4) McNamara

61. Reverse halo sign is seen in which of following condition ?

(1) Cryptogenic organizing pneumonia

(2) Idiopathic pulmonary fibrosis

(3) Idiopathic non-specific interstitial pneumonia

(4) Desquamative interstitial pneumonia

62. A young boy has history of fall and sustains injury to the right knee with which extends from articular surface to the epiphyseal plate but not extending to metaphysis. What is Salter-Harris classification of this injury ?

(1) I

(2) II

(3) III

(4) IV

63. A 7-year-old boy having soft blue coloured growth on his right hand. X-ray of hand shows multiple enchondromas. Which of the following feature confirm the diagnosis of Maffucci's syndrome rather than Ollier's syndrome ?

(1) Bilateral predominantly symmetric disease

(2) Soft tissue hemangioma

(3) Discrepancy in arm length

(4) First degree relative also involved

64. According to Revised Atlanta Classification of pancreatitis thick walled heterogeneous fluid collection in setting of acute necrotizing pancreatitis after 4 week is called

(1) Acute peripancreatic fluid collection

(2) Acute necrotic collection

(3) Pseudocyst

(4) Walled off necrosis

65. Which of the following is not a CT feature of hypoperfusion complex in abdominal trauma patient ?

(1) Increased caliber of IVC

(2) Intense adrenal gland enhancement

(3) Increased bowel wall mucosal enhancement

(4) Increased renal cortical enhancement

66. Which of following is specialized response assessment criteria for GIST after imatinib treatment ?

(1) WHO

(2) RECIST

(3) CHOI

(4) PERSIST

67. Premature closure of sagittal suture is called as

(1) Scaphocephaly

(2) Brachycephaly

(3) Plagiocephaly

(4) Trigonocephaly

68. Which of the following is false regarding Infantile hepatic hemangioma ?

(1) Previously known as Infantile hemangioendothelioma

(2) Most common benign hepatic tumor in infants

(3) Contrast CT shows multiple peripheral and centripetal enhancing lesions with persistent delayed enhancement.

(4) Dilatation of aorta below the level of celiac artery

69. Comet -tail sign is seen in

(1) Ureteric stone

(2) Phleboliths

(3) Renal stone

(4) Bladder stone

70. All are causes of small-bowel air fluid levels except

(1) Small-bowel obstruction

(2) Hyperkalemia

(3) Enema cleansing

(4) Paralytic ileus

71. Which of the following is a Hepato-biliary specific MR contrast agent ?

(1) Gadodiamide

(2) Gadoxetate

(3) Gadopentetate

(4) Gadoteridol

72. Which of the following is not a feature of Von Hippel Lindau syndrome

(1) Renal cell carcinoma

(2) CNS Hemangioblastomas

(3) Endolymphatic sac tumor

(4) Acoustic neuroma

73. False statement about Diffuse axonal injury (DAI) is

(1) Also called Traumatic axonal stretch injury

(2) Symptoms are disproportionate to imaging findings

(3) Best detected by DWI MRI, FLAIR (non-hemorrhagis) or SWI (hemorrhagic)

(4) In Stage 2 (Adams and Gennarelli staging) lesions are seen in dorsolateral midbrain and upper pons

74. Luftsichel sign seen in collapse of which lobe of lung ?

(1) Right upper lobe

(2) Right lower lobe

(3) Left upper lobe

(4) Left lower lobe

75. All of following statements are true about sarcoidosis, except

(1) Small, well-defined nodules occurring in perilymphatic distribution.

(2) Mediastinal lymph node enlargement, usually symmetric.

(3) Sarcoidosis stages correlate with disease duration or pulmonary functional abnormalities.

(4) Stage 2, defined as intrathoracic adenopathy associated with pulmonary parenchymal disease.

76. Which of the following is called as Grandmother tumor of pancreas ?

(1) Serous cystadenoma

(2) Mucinous cystadenoma

(3) Intraductal papillary mucinous neoplasm (IPMN)

(4) Solid and pseudopapillary neoplasm (SPEN)

77. Which of the following is not a HRCT feature of Idiopathic pulmonary fibrosis ?

(1) Honey combing

(2) Tractional bronchiectasis

(3) Peripheral and subpleural predominance

(4) Extensive ground glass opacity beyond the area of fibrosis

78. All of the following are multiple sclerosis MS variants/subtypes, except

(1) Marburg disease

(2) Lyme disease

(3) Schilder type

(4) Baló type

79. Eye of the tiger sign on brain MRI seen in which of following ?

(1) Pantothenate kinase-associated neurodegeneration (PKAN)

(2) Canavan disease

(3) Krabbes disease

(4) Alexander disease

80. In trauma patient FAST denotes

(1) Fluid Assesment with Sonography in Trauma

(2) Focused Assesment with Sonography in Trauma

(3) Fast Assesment with Sonography in Trauma

(4) Fine Assesment with Sonography in Trauma

81. Which of the following interaction of X-ray photon with matter do not occur in diagnostic energy range and HAVE no role in diagnostic radiology ?

(1) Coherent scattering

(2) Photoelectric effect

(3) Compton scattering

(4) Pair production

82. Definition of Contrast-induced nephropathy (CIN) is

(1) Absolute increase in serum creatinine of 0.25 mg/dl

(2) Absolute increase in serum creatinine of 0.5 mg/dl

(3) Absolute increase in serum creatinine of 0.75 mg/dl

(4) Absolute increase in serum creatinine of 1.0 mg/dl

83. A 10-year-old boy presented with fracture of the left proximal humerus. Plain radiographs show a pathological fracture and underlying lytic lesion in the metaphysis of the proximal humerus with a small bone fragment in the floor of the lesion. MRI features include intermediate signal on Tl and high signal on T2 with a fluid-fluid level. What is the most likely diagnosis of the underlying bony lesion ?

(1) Unicameral bone cyst

(2) Aneurysmal bone cyst

(3) Telangiectatic osteosarcoma

(4) Giant cell tumour

84. A 40-year-old man presents with right knee pain. Plain radiography shows a large joint effusion. MRI of the knee shows multiple foci of low signal intensity seen in the synovium on Tl, T2 and gradient-echo sequences. There is a moderate joint effusion. The most likely diagnosis is

(1) Pigmented villonodular synovitis

(2) Rheumatoid arthritis

(3) Synovial sarcoma

(4) Synovial chondromatosis

85. A 70-year-old man presents after falling down stairs and sustaining injury to the neck. An open-mouth view shows increased space between the dens and medial border of lateral masses of Cl. CT shows fracture of the anterior and posterior arch of the Cl vertebra. What is the most likely diagnosis ?

(1) Hangman's fracture

(2) Clay shoveller's fracture

(3) Jefferson fracture

(4) Extension teardrop fracture

86. A 35-year-old woman with mucocutaneous pigmentation on the hands and feet and in a circumoral distribution presents with cramping abdominal pain. She is found to have iron deficiency anaemia. Plain radiography of the abdomen suggested small bowel obstruction. Contrast-enhanced CT demonstrates jejunal intussusception. The most likely diagnosis is

(1) Familial adenomatous polyposis

(2) Peutz-Jeghers syndrome

(3) Leiomyoma small bowel

(4) Melanoma with bowel metastases

87. Which of the following is Iso-osmolar Non-ionic Contrast Media ?

(1) Iodixanol

(2) Iohexol

(3) Iopamidol

(4) Iopromide

88. A true hermaphrodite can be distinguished from a pseudohermaphrodite by :

(1) chromosome complement

(2) presence of both testicular and ovarian tissue

(3) behaviour

(4) appearance of external genitalia

89. A 2-year-old child present to emergency department with suspected fracture of ulna. On radiograph old fracture also seen with inconsistent history given by parents. Clinically non accidental injury (NAI) was suspected and skeletal survey performed. Which of the following is false regarding NAI ?

(1) Fractures of multiple ages

(2) Classic metaphyseal lesion

(3) Rib fractures, especially of anterior end

(4) Epiphyseal separation

90. An 8-year-old boy presents with a history of recurrent chest infections. The chest radiograph shows a mass lesion in left lower zone. Contrast enhanced CT shows a 6 cm lobulated, multicystic lesion in the left lower lobe containing solid and cystic components. There is a feeding artery from the thoracic aorta into the lesion and draining via pulmonary vein. What is the most likely diagnosis ?

(1) Extralobar sequestration

(2) Intralobar sequestration

(3) Congenital cystic adenomatoid malformation

(4) Abscess

91. A 35-year-old man presents with cough. Chest radiograph shows a low volume right lung and a gently curving tubular shadow coursing from the lower part of right inferior pulmonary artery towards the right costovertebral angle. The shadow widens as it descends towards the diaphragm. What is the most likely diagnosis ?

(1) Pulmonary sequestration

(2) Congenital venolobar Syndrome

(3) Wandering vein

(4) Swyer-James syndrome

92. In a case of anaphylaxis, the proper dose of adrenaline injection is

(1) 1 mL of 1 :1000 adrenaline IV

(2) 0.5 mL of 1 :1000 adrenaline IM

(3) 1 mL of 1 :10,000 adrenaline IV

(4) 0.5 mL of 1 : 10,000 adrenaline IM

93. According to ICRP, the recommended annual dose limit for the radiation worker is

(1) 50 mSv/year, averaged over defined periods of 5 years

(2) 20 mSv/year, averaged over defined periods of 5 years

(3) 100 mSv/year

(4) 10 mSv/year, averaged over defined periods of 5 years

94. A 14-year-old, short girl presents with back pain. Radiographs of the lumbar spine show reducing interpedicular distance when progressing down the lumbar spine. There is exaggerated lumbar lordosis and marked scalloping of the posterior vertebral bodies. The most likely diagnosis is

(1) Achondroplasia

(2) Thanatophoric dysplasia

(3) Marfan syndrome

(4) Hurley syndrome

95. A 35-year-old man presents with headache and ataxia. CT of the brain shows a 6 cm cystic lesion in the right cerebellar hemisphere with a small enhancing nodule at the margin of the cyst. The most likely diagnosis is

(1) Necrotic metastasis

(2) Haemangioblastoma

(3) Juvenile pilocytic astrocytoma

(4) Cysticercosis

96. A 25-year-old man presents to emergency after trauma with unilateral proptosis, chemosis, reduced visual acuity and a bruit over his right orbit. Gadolinium-enhanced MRI of the orbits shows abnormal contrast enhancement of the right periorbital soft tissues and extraocular muscles. The superior ophthalmic vein is also dilated. What is the most likely diagnosis ?

(1) Carotid-cavernous fistula

(2) Graves' disease

(3) Orbital pseudotumour

(4) Cavernous haemangioma orbit

97. Most common artery affected by fibromuscular dysplasia (FMD) is

(1) Internal carotid artery

(2) Renal artery

(3) Subclavian artery

(4) Common femoral artery

98. Which of the following is not a HRCT feature of Nonspecific Interstitial Pneumonia (NSIP) ?

(1) Basal and peripheral predominance of ground-glass opacity and reticulation

(2) Extensive Honey combing

(3) Relative subpleural sparing in the dorsal regions of the lower lobes

(4) Mild fibrosis, traction bronchiectasis and interlobular interstitial thickening

99. A 65-year-old man with history of recent surgery presents to the Emergency Department complaining of shortness of breath, pleuritic chest pain and haemoptysis. D-dimer levels were measured and found to be significantly elevate. A CXR is performed as part of the initial set of investigations. Which one of the following is the most likely CXR finding ?

(1) A normal chest radiograph

(2) Localised peripheral oligaemia

(3) Peripheral airspace opacification

(4) Pleural effusion

100. A chest X-ray of a patient demonstrates a solitary cystic structure within the left lower lobe, measuring approximately 6 cm in diameter. The peripheral aspect of the cystic structure lies in contact with the chest wall and appears slightly flattened. Within this structure there appears to be a floating membrane. What is the most likely diagnosis ?

(1) Aspergillosis

(2) Hydatid disease

(3) Mycoplasma pneumoniae

(4) Tuberculosis

101. Superior pancreaticoduodenal artery is a branch of

(1) gastroduodenal artery

(2) celiac artery

(3) superior mesenteric artery

(4) inferior mesenteric artery

102. Diffuse abnormal low SI in liver and spleen in MRI is suggestive of

(1) haemochromatosis

(2) Wilson's disease

(3) Addison's disease

(4) Metastases

103. Portal vein gas may be seen in all except

(1) necrotizing enterocolitis

(2) gastric emphysema

(3) post sphincterotomy

(4) volvulus

104. Central stellate fibrovascular scar is classical for

(1) Inflammatory adenoma

(2) FNH

(3) Hemangioma

(4) HCC

105. Which subtype of hepatic adenoma has the highest chance of malignancy ?

(1) Beta-catenin mutated

(2) HNF-1-alpha

(3) Inflammatory

(4) Telengiectatic

106. Cirrhosis typically affects which segment of liver

(1) medial segment of left lobe

(2) lateral segment of left lobe

(3) all the segments

(4) posterior segment of right lobe

107. All are true regarding Fibrolamellar carcinoma except

(1) occurs in 5-35-year-age-group

(2) contains a central scar

(3) calcification

(4) hyperintense scar on T2W MR

108. All are true regarding Budd-Chiari syndrome except

(1) obstruction of hepatic veins

(2) atrophy of caudate lobe

(3) hypertrophy of caudate lobe

(4) obstruction of IVC

109. Normal portal pressure is

(1) 8-12 mm Hg

(2) 0-4 mm Hg

(3) 4-8 mm Hg

(4) 10-12 mm Hg

110. All are pancreatic manifestations of cystic fibrosis except

(1) fatty replacement

(2) calcification

(3) pancreatic cysts

(4) ductal obstruction

111. The commonest cystic lesion in pancreas is

(1) mucinous cyst

(2) pseudocyst

(3) serous cyst

(4) simple cyst

112. 'Moth-eaten' nephrogram is seen in

(1) Renal vein thrombosis

(2) Arteriovenous malformation

(3) Polyarteritis nodosa

(4) Fibromuscular dysplasia

113. Subcapsular renal hematoma can result in all except

(1) non-function

(2) hypertension

(3) Page kidney

(4) macroscopic hematuria

114. All are major factors of contrast induced nephropathy except

(1) impaired renal function

(2) age over 70

(3) dehydration

(4) large dose of contrast media

115. Contrast induced nephropathy is defined as

(1) rise of serum creatinine by more than 20%

(2) rise of serum creatinine by more than 25%

(3) rise of serum creatinine by more than 30%

(4) rise of serum creatinine by more than 35%

116. Measures to avoid Contrast induced nephropathy

(1) use low osmolality contrast media

(2) use minimum dose

(3) adequate hydration

(4) All of the above

117. Idiosyncratic anaphylactoid contrast reactions are due to all except

(1) inhibition of cholinesterase

(2) release of histamine

(3) erythrocyte damage

(4) anxiety

118. Example of isotonic contrast media

(1) lohexol

(2) loversol

(3) lodixanol

(4) lothalamte

119. The osmolality of isotonic contrast media is

(1) 70

(2) 300

(3) 150

(4) 250

120. Severe adverse reaction to contrast media is seen in

(1) Thyrotoxic goitrous patients

(2) Asthmatics

(3) Renal patients

(4) All of the above

121. Principles of Radiation Protection

(1) Justification

(2) Optimization

(3) Limitation

(4) All of the above

122. All are causes of unilateral elevation of diaphragm except

(1) Scoliosis

(2) Pulmonary hypoplasia

(3) Obesity

(4) Phrenic nerve palsy

123. Collar sign in CT is seen in

(1) splenic rupture

(2) liver rupture

(3) common bile duct rupture

(4) diaphragmatic rupture

124. Associations of thymoma include all except

(1) Myasthenia gravis

(2) Hypergammaglobuliaemia

(3) Hypogammaglobulinaemia

(4) Red cell aplasia

125. All are foregut duplication cysts except

(1) bronchogenic cyst

(2) enteric cyst

(3) neurenteric cyst

(4) thymic cyst

126. Which one of his drug treatments is the most likely to have caused the pleural effusions ?

(1) Amoxycillin

(2) Bleomycin

(3) Frusemide

(4) Propranolol

127. Which radiological finding is most likely to suggest a diagnosis of pneumonia due to Klebsiella pneumoniae rather than Legionella pneumophildi ?

(1) Bulging fissures

(2) Mediastinal lymphadenopathy

(3) Pleural effusion

(4) Pneumothorax

128. Which one of the following is not a cause of unilateral hypertranslucent hemithorax ?

(1) MacLeod's syndrome

(2) Poland's syndrome

(3) Poliomyelitis

(4) Pulmonary agenesis and hypoplasia

129. A 15-year-old girl had meconium ileus at birth and has subsequently suffered with recurrent chest infections, poor weight gain, loose malodorous stools and multiple gallstones. Which of the following findings is most likely to be present on the CXR ?

(1) Bronchiectasis with a predominant upper lobe distribution.

(2) Ground glass opacity

(3) Pleural effusion

(4) Reduced lung volumes

130. A chest x-ray of 50-year male with shortness of breath shows that the right atrial border is a little indistinct. On the lateral view there is a triangular density with its apex directed towards the lung hilum. Which one of the following is the most likely diagnosis ?

(1) Left upper lobe collapse

(2) Right middle lobe collapse

(3) Right lower lobe collapse

(4) Right upper lobe collapse

131. CT scan in a 55-year-old female patient with Cushing's syndrome reveals a calcified polypoidal tumour with intense enhancement lying external to the left main bronchus, with a smaller intraluminal component causing partial left lower lobe obstruction. What is the most likely diagnosis ?

(1) Bronchial carcinoid

(2) Bronchial chondroma

(3) Bronchial haemangioma

(4) Bronchial hamartoma

132. Chest x-ray of 70-year-old man with history of cough and shortness of breath, reveal multiple discrete, spherical and well-defined pulmonary nodules with a peripheral distribution. Some calcification is noted within some of these nodules but cavitation is not evident. What is the most likely primary tumour ?

(1) Adenocarcinoma of the colon

(2) Anaplastic thyroid carcinoma

(3) Chondrosarcoma of the femur

(4) Invasive ductal carcinoma of the breast

133. On Chest x-ray of 58-year-old man, there are bilateral, peripheral reticular opacities seen at the lung bases. On HRCT chest, there is a subpleural basal reticular pattern with areas of honeycomb change seen. Which one of the following is the most likely diagnosis ?

(1) Cryptogenic Organising Pneumonia (COP)

(2) Desquamative Interstitial Pneumonia (DIP)

(3) Nonspecific Interstitial Pneumonia (NSIP)

(4) Usual Interstitial Pneumonia (UIP)

134. Which of the following HRCT finding is more likely to suggest a diagnosis of NSIP rather than UIP ?

(1) Honeycombing

(2) Mediastinal lymphadenopathy

(3) Prominent ground glass attenuation

(4) Upper lobe predominance

135. Case of sarcoidosis on chest x-ray demonstrates bilateral hilar lymphadenopathy with bilateral well-defined parenchymal nodules. The diagnosis is most likely to be ?

(1) Stage 1 Sarcoidosis

(2) Stage 2 Sarcoidosis

(3) Stage 3 Sarcoidosis

(4) Stage 4 Sarcoidosis

136. HRCT in a 44-year-old woman with history of increasing shortness of breath reveal, mediastinal lymphadenopathy, well-defined nodular opacities found subpleurally and along the broncho vascular bundles. There is a predominantly mid to upper zone distribution with some air trapping demonstrated. Which one of the following is the most likely diagnosis ?

(1) Acute extrinsic allergic alveolitis

(2) Langerhans cell histiocytosis

(3) Lymphangioleiomyomatosis

(4) Sarcoidosis

137. Which of the following feature would make a diagnosis of Extrinsic allergic alveolitis (EAI) more likely than Respiratory bronchiolitis—interstitial lung disease (RB-ILD) ?

(1) A normal chest radiograph

(2) A positive smoking history

(3) Exposure to paint sprays

(4) Poorly defined centrilobular nodules

138. A 30-year-old patient has presented with a non-productive cough, fatigue, weight loss and a fever. As a result of an abnormality seen on a CXR, an HRCT chest is performed and demonstrates multiple thin-walled cysts within the lung parenchyma. Which additional finding is most likely to suggest a diagnosis of Langerhans cell histiocytosis (LCH) rather than lymphangioleiomyomatosis ?

(1) A smoking history

(2) Female sex

(3) Increased lung volumes

(4) No zonal predilection

139. A 30-year-old woman presents with a history of a low grade fever, malaise, anorexia and weight loss. She also reports pleuritic type chest pain. A CXR shows bilateral small pleural effusions with linear band atelectasis at both bases. No other chest abnormality is seen. Which one of the following is the most likely diagnosis ?

(1) Ankylosing spondylitis

(2) Dermatomyositis

(3) Scleroderma

(4) Systemic lupus erythematosus

140. A 42-year-old man presents with rhinitis, sinusitis and otitis media. In addition, he has dyspnoea and pleuritic chest pain and has had episodes of haemoptysis. His records indicate that he has had a recent renal biopsy which diagnosed the presence of focal necrotising glomerulonephritis. Which one of the following is the most likely radiological finding demonstrated on chest CT ?

(1) Lobular mass with feeding and draining vessels

(2) Mediastinal lymphadenopathy

(3) Multiple cavitating lung parenchymal nodules

(4) Parenchymal mass lesion with lobar collapse

141. Which one of the following CT signs is least likely to be associated with traumatic rupture of the hemidiaphragm ?

(1) Discontinuity of the hemidiaphragm

(2) Herniation of the colon into the chest

(3) The 'collar sign'

(4) The 'target sign'

142. A 30-year-old patient admitted to the Emergency Department after road traffic accident. A supine CXR demonstrates a pneumomediastinum and a right-sided pneumothorax that has not responded to the insertion of an appropriately sited chest drain. The right lung is seen to sag towards the floor of the right hemithorax. Which one of the following is the most likely diagnosis ?

(1) Flail chest

(2) Pneumopericardium

(3) Ruptured oesophagus

(4) Tracheobronchial rupture

143. Which one of the following line/tube tip locations corresponds with the ideal position ?

(1) Central venous pressure catheter within the inferior vena cava

(2) Endotracheal tube 5 cm above the carina

(3) Nasogastric tube within the lower oesophagus

(4) Peripherally inserted central line catheter within the brachiocephalic vein

144. Which of the following radiological finding on HRCT would suggest a diagnosis of idiopathic pulmonary fibrosis rather than congestive heart failure ?

(1) Honeycomb destruction

(2) Peribronchial cuffing

(3) Pleural effusion

(4) Upper lobe blood diversion

145. A CXR in a 59-year-old woman shows bilateral airspace opacification with a predominantly central distribution. In addition, there are thickened interlobular septa seen in the subpleural lung and the walls of the visible airways appear thickened and a little indistinct. Which one of the following is the most likely diagnosis ?

(1) Idiopathic pulmonary fibrosis

(2) Pulmonary infarct

(3) Pulmonary lobar collapse

(4) Pulmonary oedema

146. HRCT scan in 48-year-old man presents with a cough, fever and two episodes of haemoptysis demonstrates multiple nodules throughout both lungs with no zonal predilection. Cavitation is seen in some of the nodules and others have areas of ground glass opacification surrounding them. Which one of the following is the most likely diagnosis ?

(1) Metastatic lung disease

(2) Multiple pulmonary infarcts

(3) Rheumatoid lung nodules

(4) Wegener's granulomatosis

147. Which of the following finding on HRCT suggest a diagnosis of alveolar proteinosis rather than eosinophilic lung disease ?

(1) A 'crazy-paving' pattern of the lung parenchyma

(2) Airway opacification with a peripheral predilection

(3) Mediastinal lymphadenopathy

(4) Pleural effusion

148. Which of the following is not a thrombolytic agent ?

(1) Streptokinase

(2) Urokinase

(3) Heparin

(4) Reteplase

149. Which one of the following statements is true regarding the radiographic appearance of lung metastases ?

(1) Calcification is commonly seen in lung metastases.

(2) Cavitation is most commonly seen in squamous cell carcinoma metastases.

(3) They are usually central in distribution.

(4) They are usually irregular in shape and ill defined.

150. A CXR in 49-year-old man demonstrates a 'white out' of the left hemithorax with displacement of the mediastinum towards the left. What is the most likely explanation ?

(1) Diaphragmatic hernia

(2) Extensive consolidation

(3) Lung collapse

(4) Mesothelioma

151. Which of the following is a contraindication for TIPSS ?

(1) Congestive cardiac failure

(2) Refractory ascites

(3) Gastric variceal hemorrhage

(4) Hepatic hydrothorax

152. Which of the following is not a liquid embolic agent ?

(1) Onyx

(2) N-butyl Cyanoacrylate

(3) Polyvinyl Alcohol

(4) Ethanol

153. Which of the following is used to reverse the action of heparin ?

(1) Vitamin - K

(2) Protamine Sulphate

(3) Streptokinase

(4) Clopidogrel

154. Which of the following is a treatment option for hepatocellular carcinoma ?

(1) Transarterial Chemoembolisation

(2) Radio embolisation using Yttrium 90

(3) Radiofrequency Ablation

(4) All of the above

155. How will you retrieve a broken catheter in main pulmonary artery ?

(1) Through femoral artery

(2) Through femoral vein

(3) Through radial artery

(4) Any of the above routes

156. Kissing Balloon angioplasty is performed in which of the following condition ?

(1) Renal artery stenosis

(2) Superior mesenteric artery stenosis

(3) Aortic bifurcation narrowing

(4) Popliteal stenosis

157. Which of the following is a non invasive treatment option for large uterine fibroid ?

(1) Uterine artery stenting

(2) Ovarian vein embolization

(3) Internal iliac vein embolization

(4) Uterine artery embolization

158. Which of the following is not a sclerosing agent ?

(1) Sodium Tetradecyl Sulphate

(2) Polyvinyl alcohol

(3) Hypertonic saline

(4) Ethanolamine oleate

159. Which one of the following modalities is most sensitive for evaluating a patient of extra adrenal pheochromocytoma ?

(1) USG

(2) CT

(3) MRI

(4) MIBG scan

160. 45-year-old hypertensive male presents with sudden onset headache, vomiting and neck stiffness. On examination, he didn't have any focal neurological deficit. His scan showed blood in the sylvian fissure. The most probable diagnosis is -

(1) Meningitis

(2) Ruptured aneurysm

(3) Hypertensive bleed

(4) Stroke

161. Which of the following conditions are not associated with abnormal T2/STIR hyperintensity involving the posterior column of spinal cord ?

(1) Vitamin B12 deficiency

(2) Copper deficiency

(3) Nitrous oxide toxicity

(4) Spinal dural arteriovenous fistula.

162. MR artifacts associated with metallic hardware can reduced by -

(1) Decreasing receiver bandwidth

(2) Avoiding Fast/Turbo spin echo technique with high Echo train length

(3) Scanning at lower field strength (1.5T instead of 3T)

(4) Large field-of-view

163. The Romanus lesion in spondyloarthropathies is secondary to which of the following processes ?

(1) Arthritis

(2) Enthesitis

(3) Discitis

(4) Spondylitis

164. Which structure is most commonly abnormal on MRI exams of the brain in patients with Marchiafava Bignami disease ?

(1) Mammillary bodies

(2) Dentate gyri

(3) Corpus callosum

(4) Thalami

165. What is the most common imaging finding in transient global amnesia ?

(1) T2 prolongation within the hippocampal body.

(2) Punctate focus of restricted diffusion in the mesial temporal lobe.

(3) Gyriform enhancement along the anterior temporal lobe.

(4) Punctate focus of susceptibility within the mesial temporal lobe.

166. The American Heart Association stroke management guidelines published in 2018 for the first time give a level 1A evidence-based recommendation for the use of :

(1) CTP, DWI, or MR perfusion for endovascular selection in patients presenting at 6-24 hours with large vessel occlusion.

(2) Intravenous TPA up to 6 hours after symptom onset.

(3) MRI T2* imaging to exclude microbleeds before either IV TPA or stent-retriever therapy.

(4) CT collateral scoring to select patients for stent-retriever therapy < 4.5 hours.

167. Which of the following techniques is used to reduce metal associated hardware on CT ?

(1) Lower kVp (80-100)

(2) Increasing tube current

(3) Higher pitch

(4) Using thick sections.

168. What is the most typical appearance of a cavernous sinus haemangioma on magnetic resonance imaging ?

(1) T1 hypointense. T2 hypointense, non-enhancing

(2) T1 hypointense, T2 hypointense, avidly enhancing

(3) T1 hypointense, T2 hyperintense, non-enhancing

(4) T1 hypointense, T2 hyperintense, avidly enhancing

169. Which one of the following imaging finding is typically described in Progressive supranuclear palsy ?

(1) Atrophy of the midbrain

(2) Hot cross bun sign

(3) Hyperintensity of the middle cerebellar peduncle

(4) Hyperintense putaminal rim sign.

170. What is most specific imaging finding in CADASIL ?

(1) Bilateral T2/FLAIR hyperintensities in the periventricular white matter

(2) Asymmetric temporal lobe atrophy

(3) Multiple cortical and subcortical infarcts

(4) High T2/FLAIR signal in the subcortical white matter of the anterior temporal lobes.

171. Regarding pancreatic islet cell tumours, which of the following is a correct statement :

(1) Insulinoma is found predominantly in the pancreatic body and tail.

(2) Glucagonoma is the commonest functioning islet cell tumour.

(3) Glucagonoma is a hypervascular tumour.

(4) Glucagonoma undergoes malignant transformation in 5-10%.

172. The following statements regarding Meckel's diverticulum are correct except :

(1) Is present is 2-3% of the population.

(2) Identification of Vitelline artery is pathognomonic.

(3) Located in the mesenteric border of the ileum.

(4) Can present as intussusception in children.

173. In the imaging of acute testicular torsion, all of the following statements are correct except :

(1) On sonography, a reactive hydrocoele is seen after 6 hours.

(2) Surgery is successful in 20% of patients who present between 12 and 24 hours after onset of symptoms.

(3) Colour Doppler ultrasound may show increased blood flow in the the epididymis.

(4) Hyperperfusion of the testicle on colour Doppler ultrasonography makes testicular torsion unlikely.

174. Which of the following statement is correct regarding Langerhans cell histiocytosis (LCH) in children ?

(1) Peak incidence occurs at 10-15 years of age.

(2) The axial skeleton is spared in the majority of cases.

(3) Vertebra plana is most commonly seen in the lumbar spine.

(4) A bevelled edge appearance is characteristic of skull lesions.

175. Which of the following transvaginal ultrasound findings are compatible with pregnancy failure ?

(1) Double decidual reaction.

(2) A 2 mm embryo lacking a cardiac heartbeat.

(3) A gestational sac of 5 mm containing no yolk sac.

(4) Grossly distorted sac shape.

176. All of the following are correct regarding congenital lobar emphysema except

(1) It commonly affects the lower lobes

(2) Bilateral involvement is rare

(3) Underlying vascular markings are present

(4) The affected lobe is opaque after birth

177. The following are features of osteogenesis imperfecta except :

(1) Multiple wormian bones

(2) Most cases involve an autosomal dominant mode of inheritance

(3) Dense, sclerotic bones

(4) Basilar invagination

178. Radiological findings in sickle cell disease include all except :

(1) 'Hair-on-end' skull appearance

(2) Premature conversion of red to fatty bone marrow

(3) Salmonella osteomyelitis

(4) Subperiosteal new bone formation in the tubular bones of the hand and feet

179. Which of the following statement is correct regarding necrotizing enterocolitis (NEC) ?

(1) Most cases occur in term neonates.

(2) Polycythaemia is a risk factor in term neonates.

(3) Onset is always in the first week of life.

(4) Most commonly affects the jejunum.

180. Which of the following statement is false about skull foramina which transmit the named cranial nerves ?

(1) Superior orbital fissure – VIth cranial nerve.

(2) Inferior orbital fissure – IIIrd cranial nerve.

(3) Internal auditory meatus – VIIth cranial nerve.

(4) Foramen rotundum – maxillary division of Vth cranial nerve.

रफ कार्य के लिए स्थान / SPACE FOR ROUGH WORK