

1. The highest percentage of polyunsaturated fatty acids are present in:

1. Groundnut oil.
2. Soybean oil.
3. Margarine.
4. Palm oil.

2. Vitamin A deficiency is considered a public health problem if prevalence rate of night blindness in children between 6 months to 6 years is more than:

1. 0.01%
2. 0.05%
3. 0.1%
4. 1.0%

3. All of the following indicators are included in Physical Quality of Life Index (PQLI) except:

1. Infant mortality rate
2. Life expectancy at age one
3. Literacy rate
4. Per capita income

4. In all of the following diseases chronic carries are found except:

1. Measles
2. Typhoid.
3. Hepatitis B
4. Gonorrhoea

5. Specificity of screening test is the ability of test to detect:

1. True positives
2. False positives
3. False Negatives
4. True Negatives

6. Anagen phase of the hair indicates:

1. The phase of activity and growth
2. The phase of transition
3. The phase of resting
4. The phase of degeneration.

7. 'Chancre redux' is a clinical feature of:

1. Early relapsing syphilis
2. Late syphilis
3. Chancroid
4. Recurrent herpes simplex infection

8. Max Joseph's space is a histopathological feature of:

1. Psoriasis vulgaris.
2. Lichen planus
3. Pityriasis rosea
4. Parapsoriasis

9. Ivermectin is indicated in the treatment of:

1. Syphilis
2. Scabies
3. Tuberculosis
4. Dermatophytosis

10. The main cytokine, involved in erythema nodosum leprosum (ENL) reaction, is:

1. Interleukin-2
2. Interferon - gamma.
3. Tumor necrosis factor - alpha.
4. Macrophage colony stimulating factor

11. The following drug is not used for the treatment of type II lepra reaction:

1. Chloroquin
2. Thalidomide
3. Cyclosporine
4. Corticosteroids

Ans. -1

12. The following test is not used for diagnosis of leprosy:

1. Lepromin test
2. Slit skin smear
3. Fine needle aspiration cytology.
4. Skin biopsy.

Ans. -1

13. Air-borne contact dermatitis can be diagnosed by:

1. Skin biopsy
2. Patch test
3. Prick test
4. Estimation of serum IgE levels

Ans. -2

14. The malunion of supracondylar fracture of the humerus most commonly leads to:

1. Flexion deformity.
2. Cubitus varus.
3. Cubitus valgus.
4. Extension deformity

Ans. -2

15. A 30 year old male resents with numbness of both lower limbs and right upper limb. Examination reveals pulse 88/ minute and B P – 160/110 mm of Hg. He also has digital gangrene involving right 2nd and 3rd finger, urine routine examination is unremarkable microscopic examination shows RBC's hemogram and serum biochemistry is within normal limits. What is the most probable diagnosis?

1. Systemic lupus erythematosus
2. Polyarteritis nodosa
3. Malignant Hypertension
4. Churg-Strauss syndrome

Ans. -2

16. All of the following are used for giving skeletal traction, except:

1. Steinmann's pin.
2. Kirschner's wire
3. Bohler's stirrup
4. Rush pin

Ans. -4

17. All of the following are complications of supracondylar fracture of humerus in children, except:

1. Compartment syndrome.
2. Myositis ossificans.
3. Malunion.
4. Non Union.

Ans. -4

18. The lesions associated with recurrent dislocation of shoulder include all, except:

1. Hill – Sach’s lesion.
2. Bankart’s lesion
3. Capsular laxity
4. Supraspinatus tear

Ans. -4

19. All of the following are the causes of sudden increase in pain in osteochondroma, except:

1. Sarcomatous change
2. Fracture
3. Bursitis
4. Degenerative changes

Ans. -3

20. All of the following muscles have dual nerve supply, except:

1. Brachialis
2. Pectineus
3. Flexor digitorum superficialis
4. Flexor digitorum profundus.

21. In general, the last muscle to be rendered aknetic with retrobulbar anesthetic block is:

1. Superior rectus.
2. Superior oblique
3. Inferior oblique
4. Levator palpebral superioris.

Ans. -\*

22. Whichone of the following statements, concerning persistent hyperplastic primary vitreous (PHPV) is not true?

1. It is generally unilateral
2. Visual prognosis is usually good.
3. It may calcify
4. It is most easily differentiated from retinoblastoma by the presence of exophthalmos or cataract.

Ans. -\*

23. The laser procedure, most often used for treating iris neovascularization, is :

1. Goniophotocoagulation

2. Laser trabeculoplasty
3. Panretinal photocoagulation (PRP)
4. Laser iridoplasty.

Ans. -\*

24. Which of the following is the most important factor in the prevention of endophthalmitis in cataract surgery?

1. Preoperative preparation with povidone-iodine.
2. One week antibiotic therapy prior to surgery.
3. Trimming of eyelashes
4. Basal cell carcinoma

Ans. -2

25. A recurrent chalazion should be subjected to histopathologic evaluation to exclude the possibility of:

1. Squamous cell carcinoma.
2. Sebaceous cell carcinoma.
3. Malignant melanoma.
4. Basal cell carcinoma.

Ans. -3

26. Amyloid deposits stain positively with all of the following except:

1. Congo-red
2. Crystal violet
3. Methenamin silver
4. Thioflavin T

Ans. -3

27. The crystalline lens derives its nourishment from:

1. Blood vessels.
2. Connective tissue
3. Aqueous and vitreous
4. Zonules

Ans. -\*

28. Band shaped keratopathy is caused by:

1. Amyloid
2. Calcium
3. Monopolysaccharide
4. Lipid

Ans. -3

29. Bitemporal hemianopic field defect is characteristic of :

1. Glaucoma
2. Optic neuritis
3. Pituitary tumour
4. Retinal detachment

Ans. -2

30. The afferent pathway for light papillary reflex is:

1. Trigeminal nerve
2. Optic nerve
3. Abducent nerve
4. Ciliary nerve

Ans. -2

31. 'Fracture-ala signature' is:

1. Gutter fracture
2. Depressed fracture
3. Ring fracture
4. Sutural separation

Ans. -2

32. A dead body is having cadaveric lividity of bluish green colour. The most likely cause of death is by poisoning due to :

1. Hydrocyanic acid
2. Hydrogen sulphide
3. Oleander
4. Sodium nitrite

Ans. -1

33. When a surgeon wants to send the autopsy specimen for virological examination, it should be preserved in:

1. 50 % glycerin
2. 10 % formalin
3. Rectified spirit
4. Saturated solution of common salt

Ans. -4

34. The fingerprint pattern may be impaired permanently in cases of :

1. Eczema
2. Scalds
3. Scabies
4. Leprosy

Ans. -3

35. The most reliable criteria in Gustafson's method of age estimation is:

1. Attrition
2. Secondary dentin deposition
3. Transparency of root
4. Cementum apposition

Ans. -1

36. The ideal place to record body temperature in dead body is:

1. Rectum
2. Axilla
3. Mouth
4. Groin

Ans. -\*

37. Priapism occurs in

1. Snakebite
2. Ratti poisoning
3. Cantharide poisoning
4. Arsenic poisoning

Ans. -4

38. The risk of endometrial carcinoma is the highest with the following histological pattern of endometrial hyperplasia:

1. Simple hyperplasia without atypia
2. Simple hyperplasia with atypia
3. Complex hyperplasia without atypia
4. Complex hyperplasia with atypia

Ans. -4

39. The risk of Asherman syndrome is the highest if Dilation and Curettage (D & C) is done for the following condition:

1. Medical termination of pregnancy.
2. Missed abortion
3. Dysfunctional uterine bleeding
4. Post partum haemorrhage

Ans. -4

40. With which of the following types of viral hepatitis infection in pregnancy, the maternal mortality is the highest?

1. Hepatitis-A
2. Hepatitis-B
3. Hepatitis-C
4. Hepatitis-E

Ans. -1

41. Which of the following is the best way of preventing development of deep vein thrombosis (DVT) in post operative period?

1. Early ambulation
2. Physiotherapy
3. Prophylactic heparin
4. Low dose aspirin

Ans. -3

42. In the Manning scoring system of biophysical profile for fetal monitoring which parameter is not included:

1. Fetal tone
2. Fetal gross body movements.
3. Oxytocin challenge test
4. Non stress test

Ans. -2

43. The pseudomyxoma peritonei occurs as a complication of the following ovarian tumour:

1. Serous cystadenoma
2. Mucinous cystadenoma
3. Dysgerminoma
4. Gonadoblastoma

Ans. -2

44. A 27-year primigrvida presents with pregnancy induced hypertension with blood pressure of 150/100 mm of Hg at 32 week of gestation with no other complications. Subsequently, her blood pressure is controlled on treatment. If there are no complications, the pregnancy should be best terminated at:

1. 40 Completed weeks
2. 37 Completed weeks
3. 35 Completed weeks
4. 34 Completed weeks

Ans. -3

45. A 13-year-old young girl presents in the casualty with acute pain the lower abdomen. She has history of cyclical pain for last 6 months and she has not attained her menarche yet. On local genital examination, a tense bulge in the region of hymen was seen. The most probable diagnosis is:

1. Rockytansky Kuster Huser syndrome
2. Testicular feminization syndrome
3. Imperforate hymen
4. Asherman's syndrome

Ans. -1

46. In which of the following heart diseases maternal mortality is found to be highest?

1. Eisenmenger's complex
2. Coarctation of aorta
3. Mitral stenosis
4. Aortic stenosis

Ans. -2

47. All of the following are the complications in the new born of the diabetic mother except:

1. Hyper bilirubinemia
2. Hyperglycemia
3. Hypocalcemia
4. Hypomagnesemia



Ans. -4

48. The shortest diameter in fetal head is:

1. Biparietal diameter
2. Suboccipito frontal diameter
3. Occipito frontal diameter
4. Bitemporal diameter

Ans. -3

49. A twenty year old patient presented with early pregnancy for Medical Termination of Pregnancy (MTP) in day care facility. What will be the anesthetic induction agent of choice?

1. Thiopentone
2. Ketamine
3. Propofol
4. Diazepam

Ans. -2

50. Which organ is the primary site of hematopoiesis in the fetus before midpregnancy?

1. Bone
2. Liver
3. Spleen
4. Lung

Ans. -4

51. Which one of the following is the description used for the term allodynia during pain management?

1. Absence of pain perception
2. Complete lack of pain sensation.
3. Unpleasant sensation with or without a stimulus
4. Perception of an ordinarily nonnoxious stimulus as severe pain

Ans. -3

52. Which of the following inhalational agents has the minimum blood gas solubility coefficient?

1. Isoflurane.
2. Sevoflurane.
3. Desflurane.
4. Nitrous oxide.

Ans. -4

53. Which of the following is the neuromuscular blocking agent with the shortest onset of action?

1. Mivacurium
2. Vecuronium.
3. Rapacuronium.
4. Succinylcholine.

Ans. -3

54. Administration of Glucose solution is prescribed for all of the following situations except:

1. Neonates
2. Child of a diabetic mother
3. History of unconsciousness
4. History of hypoglycemia

Ans. -1

55. Which one of the following brain tumors is highly vascular in nature?

1. Glioblastoma.
2. Meningiomas.
3. C P angle epidermoid.
4. Pituitary adenomas.

Ans. -1

56. Which of the following cranial nerves present in the posterior fossa?

1. 3rd to 12th
2. 4th to 12th
3. 5th to 12th
4. 6th to 12th

Ans. -4

57. All of the following drugs are used for managing status epilepticus except:

1. Phenytoin.
2. Diazepam.
3. Thiopentone sodium.
4. Carbamazepine.

Ans. -3

58. Cushing's Triad includes all except:

1. Hypertension.
2. Bradycardia.
3. Hypothermia.
4. Irregular respiration.

Ans. -4

59. The causes of systemic secondary insult to injured brain include all of the following except:

1. Hpercapnia.
2. Hypoxaemia.
3. Hypotension
4. Hypothermia.

Ans. -4

60. Neostigmine antagonizes nondepolarizing blockade by all of the following mechanisms, except:

1. Decreasing the break down of Acetylcholine at the motor end plate.
2. Preventing K efflux from the cell.
3. Increasing the release of Acetylcholine at the motor endplate.
4. Depolarization of the motor endplate.

ans: -1

61. All of the following factors influence hemoglobin dissociation curve, except:

1. Calcium gluconate.
2. CO<sub>2</sub> tension.
3. Temperature.
4. Betablockers.

Ans. -4

62. All of the following are used for treatment of hyperkalaemia except:

1. Calcium gluconate.
2. Sodium bicarbonate.
3. Intravenous infusion of glucose with insulin.
4. Betablockers.

Ans. -1

63. A 30 year old patient presented with history of jaundice for 10 days. His liver function tests showed bilirubin of 10 mg/dl, SGOT/SGPT – 1100/1450, serum alkaline phosphatase – 240 IU. He was positive for HbsAg. What should be the confirmatory test to establish acute hepatitis B infection?

1. IgM Anti-HBc antibody.
2. HbeAg.
3. HBV DNA by PCR.
4. Anti-HBc antibody.

Ans. -1

64. Which one of the following is the correct statement regarding coronary food flow?

1. Coronary blood flow is directly related to perfusion pressure and inversely related to resistance.
2. Coronary blood flow is inversely related to perfusion pressure and directly related to resistance.
3. Coronary blood flow is directly related to perfusion pressure and also to resistance.
4. Coronary blood flow is directly related to both pressures and resistance.

Ans. -\*

65. The most significant adverse effect of ACE inhibition is:

1. Hypotension.
2. Hypertension.
3. Hypocalcemia.
4. Hypercalcemia rate.

Ans. -4

66. The loading dose of Aminophylline is:

1. 50 – 75 ug/kg.
2. 0.5 – 1.0 mg/kg.
3. 2.0 – 3.5 mg/kg.
4. 5 – 6 mg /kg.

Ans. -1

67. A premature infant is born with a patent ductus arteriosus. Its closure can be stimulated by administration of :

1. Prostaglandin analogue.
2. Estrogen.
3. Anti-estrogen compounds.
4. Prostaglandin inhibitors.

Ans. -4

68. A midline cleft lip is due to the failure of fusion between:

1. Maxillary processes.
2. Medial nasal processes.
3. Medial and lateral nasal process.
4. Medial nasal and maxillary process.

Ans. -4

69. Lumbar hemivertebra results due to the abnormal development of:

1. Dorsal sclerotome.
2. Intermediate cell mass.
3. Notochord.
4. Ventral sclerotome.

Ans. -1

70. The defective migration of neural crest cell results in:

1. Congenital megacolon.
2. Albinism.
3. Adrenogenital hypoplasia.
4. Dentinogenesis imperfecta.

Ans. -3

71. The cardiac jelly formed around the heart tube during early development, contributes to the formation of:

1. Pericardium.
2. Mesocardium
3. Myocardium
4. Endocardium.

Ans. -2

72. A 40 year old female patient presented with dysphagia to both liquids and regurgitation solids and for 3 months. The dysphagia was non-progressive. What is the most likely diagnosis?

1. Carcinoma of the esophagus.
2. Lower oesophageal mucosal ring.
3. Achalasia cardia.
4. Reflux esophagitis with esophageal stricture.

Ans. -4

73. Hyperacusis in Bell's palsy is due to the paralysis of the following muscle:

1. Tensor tympani.
2. Levator veli palatini.
3. Tensor veli palatini.
4. Stapedius.

Ans. -3

74. A 15 year-old boy presented with one day history of bleeding gums, subconjunctival bleed and purpuric rash. Investigations revealed the following results:

Hb- 6.4 gm/dL; TLC – 26,500/mm<sup>3</sup>; prathromibine time – 20 sec with a control of 13 sec; partial thromboplastin time - 50 sec; and Fibrinogen 10 mg/dL. Peripheral smear was suggestive of acute myeloblastic leukemia.

Which of the following is the most likely?

1. Myeloblastic leukemia without maturation.
2. Myeloblastic leukemia with maturation.
3. Promyelocytic leukemia.
4. Myelomonocytic leukemia.

Ans. -1

75. The sodium – potassium pump is an example of:

1. Active transport.
2. Passive transport.
3. Facilitated diffusion.
4. Osmosis.

Ans. -3

76. The type of enzyme inhibition (in which succinate dehydrogenase reaction is inhibited by malonate) is an example of:

1. Noncompetitive.
2. Uncompetitive.
3. Competitive.
4. Allosteric.

Ans. -2

77. In a solution the concentration of hydrogen ion [H<sup>+</sup>] is  $1 \times 10^{-6}$  moles/litre. The pH of the solution will be:

1. Three
2. Six.

3. Nine.
4. Twelve.

Ans. -3

78. The electron flow in Cytochrome C oxidase can be blocked by:

1. Rotenone.
2. Antimycin – A
3. Cyanide.
4. Actinomycin.

Ans. -3

79. Cholera toxin:

1. Increases the levels of intracellular cyclic GMP
2. Acts through the receptor for opiates
3. Cause continued activations of adenylate cyclase.
4. Inhibits the enzyme phosphodiesterase.

Ans. -3

80. The amino acid which is associated with atherosclerosis is:

1. Lysine
2. Homocysteine.
3. Cysteine
4. Alanine

Ans. -2

81. CA – 125 is a marker antigen for the diagnosis of:

1. Colon cancer
2. Brest cancer
3. Brain cancer
4. Ovarian cancer

Ans. -4

82. Which one of the following acts as seconds messenger?

1. Mg<sup>++</sup>
2. Cl<sup>-</sup>
3. Ca<sup>++</sup>
4. PO<sub>4</sub><sup>3-</sup>

Ans. -3

83. A nucleic acid was analyzed and found to contain 32% adenine, 18% guanine, 17% cytosine and 33% thymine. The nucleic acid must be:

1. Single-stranded RNA
2. Single-stranded DNA
3. Double-stranded RNA
4. Double-stranded DNA

Ans. -4

84. The following is a generalized diagram of a typical eukaryotic gene.

What is the most likely effect of a 2bp insertion in the middle of the intron?

1. Normal transcription, altered translation.
2. Defective termination of transcription, normal translation.
3. Normal transcription, defective mRNA splicing.
4. Normal transcription, normal translation.

Ans. -1

85. A randomized trial comparing efficacy of two regimens showed that difference is statistically significant with  $p < 0.001$

1. Type-I error ( $\alpha$ )
2. Type-II error ( $\beta$ )
3. 1-
4. 1-

Ans. -3

86. While applying chi-square test to a contingency table of 4 rows and 4 columns, the degrees of freedom would be:

1. 1.
2. 4.
3. 9.
4. 8.

Ans. -3

87. A diagnostic test for a particular disease has a sensitivity of 0.90 and a specificity of 0.80. A single test is applied to each subject in the population in which the diseased population is 30%. What is the probability that a person, negative to this test, has no disease?

1. Less than 50%
2. 70%
3. 95%
4. 72%

Ans. -4

88. A physician, after examining a group of patients of a certain disease, classifies the conditions of each one as 'Normal', 'Mild', 'Moderate' or 'Severe'. Which one of the following is the scale of measurement that is being adopted for classification of the disease condition?

1. Normal.
2. Interval.
3. Ratio.
4. Ordinal.

Ans. -2

89. If the birth weight of each of the 10 babies born in a hospital in a day is found to be 2.8 kg., then the standard deviation of this sample will be:-

1. 2.8
2. 0.
3. 1
4. 0.28

Ans. -1

90. Histogram is used to describe:

1. Quantitative data of a group of patients.
2. Qualitative data of a group of patients.
3. Data collected on nominal scale
4. Data collected on ordinal scale

Ans. -1

91. Which of the following is an example of Disability limitation?

1. Reducing occurrence of polio by immunization.
2. Arranging for schooling of child suffering from PRPP.
3. Resting affected limbs in neutral position.
4. Providing calipers for walking.

Ans. -4

92. Which of the following is the 'Least common' complication of measles?

1. Diarrhoea.
2. Pneumonia.
3. Otitis media.
4. SSPE.

Ans. -3

93. Brucellosis can be transmitted by all of the following modes, except:

1. Contact with infected placenta.
2. Ingestion of raw vegetables from infected farms.
3. Person to person transmission.
4. Inhalation of infected dust or aerosol.

Ans. -2

94. Which of the following statements about lepromin test is not true?

1. It is negative in most children in first 6 months of life.
2. It is a diagnostic test.
3. It is an important aid to classify type of leprosy disease.
4. BCG vaccination may convert lepra reaction from negative to positive.



Ans. -2

95. Which one of the following methods is used for the estimation of chlorine demand of water>

1. Chlorometer.
2. Horrock's apparatus.
3. Berkefeld filter.
4. Double pot method.

Ans. -2

96. Lice are not the vectors of:

1. Relapsing fever.
2. Q fever.
3. Trench fever.
4. Epidemic typhus.

Ans. -1

97. You have diagnosed a patient clinically as having SLE and ordered 6 tests. Out of which 4 tests have come positive and 2 are negative. To determine the probability of SLE at this point, you need to know:

1. Prior probability of SLE; sensitivity and specificity of each test.
2. Incidence of SLE and predictive value of each test.
3. Incidence and prevalence of SLE.
4. Relative risk of SLE in this patient.

Ans. -4

98. All of the following predominant motor neuropathy except:

1. Acute inflammatory demyelinating polyradiculoneuropathy..
2. Porphyric neuropathy.
3. Lead intoxication.
4. Arsenic intoxication.

Ans. -3

99. Direct standardization is used to compare the mortality rates between two countries. This is done because of the differences in:

1. Causes of death
2. Numerators.
3. Age of distributions.
4. Denominators.

Ans. -\*

100. Mucin layer tear film deficiency occurs in:

1. Keratoconjunctivitis sicca.
2. Lacrimal gland removal.
3. Canalicular block.
4. Herpetic keratitis.

Ans. -4

101. A case of carcinoma larynx with the involvement of anterior commissure and right vocal cord, developed perichondritis of thyroid cartilage. Which of the following statements is true for the management of this case?

1. He should be given radical radiotherapy as this can be cure early tumours
2. He should be treated with combination of chemotherapy & radiotherapy
3. He should first receive radiotherapy and if residual tumour is present he should undergo laryngectomy
4. He should first undergo laryngectomy and then post-operative radiotherapy.

Ans. -1

102. Which of the following is the most common etiological agent in paranasal sinus mycoses?

1. Aspergillus spp.
2. Histoplasma
3. Conidiobolus coronatus
4. Candida albicans

Ans. -2

103. Which of the following is not typical feature of Meniere's disease?

1. Sensorineural deafness
2. Pulsatile tinnitus
3. Vertigo
4. Fluctuating deafness

Ans. -3

104. Which of the following is not a typical feature of malignant otitis externa?

1. Caused by Pseudomonas aeruginosa
2. Patients are usually old
3. Mitotic figures are high
4. Patient is immune compromised

Ans. -1

105. A 30 year old woman with family history of hearing loss from her mother's side developed hearing problem during pregnancy. Hearing loss is bilateral, slowly progressive, with bilateral tinnitus that bothers her at night. Pure tone audiometry shows conductive hearing loss with an apparent bone conduction hearing loss at 2000 Hz. What is the most likely diagnosis?

1. Otosclerosis
2. Acoustic neuroma
3. Otitis media with effusion
4. Sigmoid sinus thrombosis

Ans. -2

106. Which of the following statements is true of primary grade IV-V vesicoureteric reflux in young children?

1. Renal scarring usually begins in the midpolar regions.
2. Postnatal scarring may occur even in the absence of urinary tract infections
3. Long term outcome is comparable in patients treated with either antibiotic prophylaxis or surgery
4. Oral amoxicillin is the choice antibiotic for prophylaxis

Ans. -4

107. A 3-year-old boy presents with fever, dysuria and gross hematuria. Physical examination shows a prominent suprapubic area which is dull to percussion. Urinalysis reveals red blood cells but no proteinuria. Which of the following is the most likely diagnosis/

1. Acute glomerulonephritis
2. Urinary tract infection
3. Posterior urethral valves
4. Teratoma

Ans. -\*

108. Transient synovitis (toxic synovitis) of the hio is characterized by all of the following, except:

1. May follow upper respiratory infection.
2. ESR and white blood cell counts are usually normal
3. Ultrasound of the joint reveals widening of the joint spce.
4. The hip is typically held in adduction and internal rotation

Ans. -1

109. Enzyme replacement therapy is available for which of the following disorders?

1. Gaucher disease.
2. Niemann Pick disease.
3. Mucopolidosis
4. Metachromatic leukodystrophy

Ans. -4

110. Cardiomyopathy may be seen in all of the following except:

1. Duchenne muscular dystrophy
2. Friedreich's ataxia
3. Type II glycogen storage disease
4. Alkaptonuria

Ans. -4

111. All of the following are true of beta thalassemia major except

1. Splenomegaly
2. Target cells on peripheral smear
3. Microcytic hypochromic anemia
4. Increased osmotic fragility

Ans. -4

112. A couple has two children affected with tuberous sclerosis. O

and laboratory evaluation (including molecular studies) both parents are normal. Which one of the following explains the two affected children in this family?

1. Non penetrance
2. Uniparental diasomy
3. Genomic imprinting
4. Germline mosaicism

Ans. -4

113. Conjugated hyperbilirubinemia is seen in

1. Gilbert's syndrome
2. Crigler Najjar syndrome
3. Breast milk jaundice
4. Dubin Johnson syndrome

Ans. -2

114. Which of the following does not establish a diagnosis of congenital CMV infection in a neonate?

1. Urine culture of CMV
2. IgG CMV antibodies in hepatocytes
3. Intra-nuclear inclusionbodies in hepatocytes
4. CMV viral DNA in blood by polymerase chain reaction

Ans. -4

115. In a child with acute liver failure, the most important prognostic factor for death is:

1. Increasing transaminases
2. Increasing Bilirubin
3. Increasing prothrombin time
4. Gram negative sepsis

Ans. -3

116. Which of the following circulating antibodies has the best sensitivity and specificity for the diagnosis of celiac disease?

1. Anit-endomysial antibody
2. Anti-tissue transglutaminase antibody
3. Anti-gliadin antibody
4. Anti-reticulin antibody

Ans. -4

117. A 45-year-old male having a long history of cigarette smoking presented with gangrene of left foot. An amputation of the left foot was done. Representative sections from the specimen revealed presence of arterial thrombus with neutrophilic infiltrate in the arterial wall. The inflammation also extended into the neighboring veins and nerves. The most probable diagnosis is:

1. Takayasu arteritis.
2. Giant cell arteritis
3. Hypersensitivity angiitis
4. Thromboangitis obliterans

Ans. -1

118. A 50-year-old male presented with signs and symptoms of restrictive heart disease. A right ventricular endo-myocardial biopsy revealed deposition of extra cellular eosinophilic hyaline material. On transmission electron microscopy, this material is most likely to reveal the presence of :

1. on branching filaments of indefinite length
2. Cross banded fibres with 67 nm periodicity.
3. Weber Palade bodies.
4. Concentric whorls of lamellar structures

Ans. -3

119. An undifferentiated malignant tumour on immunohistochemical stain shows cytoplasmic positivity of most of the mtumour cell for cytokeratin. The most probable diagnosis of the tumour is:

1. Sarcoma.
2. Lymphoma.
3. Carcinoma
4. Malignant Melanoma

Ans. -3

120. Sections from a solid-cystic unilateral ovarian tumour in 30 year old female show a tumour composed of diffuse sheets of small cells with doubtful nuclear grooving and scanty cytoplasm. No Call-Exner bodies are seen. The ideal immunohistochemistry panel would include:

1. Vementin, epithelial membrane antigen, inhibin, CD99
2. Desmin, S- 100 protein, smooth muscle antigen, cytokeratin
3. Chromogranin, CD 45, CD 99, CD 20
4. CD 3, chromagranin, Cd 45, synaptophysin

Ans. -1

121. A 50-year-old lady presented with a 3 moth history of pain in the lower third of the right thigh. There was no local swelling; tenderness was present on deep pressure. Plain X-rays showed an ill-defined intra medullary lesion with blotchy calcification at the lower end of the right femoral diaphysis, possibly enchondroma or chondrosarcoma. Sections showed a cartilaginous tumour. Which of the following histological features (if seen) would be helpful to differentiate the two tumours?

1. Focal necrosis and lobulation
2. Tumour permeation between bone trabeculae at periphery.
3. Extensive myxoid change
4. High cellularity

Ans. -2

122. The differential diagnoses of lesion, histologically resembling giant cell tumour in the small bones of the hands or feet, includes all of the follwing except:

1. Aneurysmal bone cyst
2. Fibrosarcoma
3. Osteosarcoma

#### 4. Hyperparathyroidism

Ans. -\*

123. As regards to intraocular retinoblastoma, which one of the following statements is false?

1. 94% of cases are sporadic
2. Patients with sporadic retinoblastoma do not pass their genes to their offsprings.
3. Calcificatinin thetumor can be detected on ultrasound scan
4. Presence of extraocular extension

Ans. -\*

124. Which of the following is not of prognostic significance in choroidal melanoma?

1. Presence of retinal detachment
2. Size of the tumor
3. Cytology of the tumor cells
4. Presence of extraocular extension

Ans. -3

125. Which of the following hemoglobin (Hb) estimation will be diagnostically helpful ina case of beta thalassemia trait?

1. Hb-F
2. Hb-A1C
3. Hb-A2
4. Hb-H

Ans. -4

126. Appropriate material for antenatal diagnosis of genetic disorders include all of the following except:

1. Fetal blood
2. Amniotic fluid
3. Chorionic villi.
4. Maternal urine.

Ans. -2

127. Which of the following statements about carcinogenesis is false?

1. Asbestos exposure increases the incidence of lung cancer
2. Papilloma viruses produce tumours in animals but not in humans
3. Exposure to aniline dyes predisposes to cancer of the urinary bladder.
4. Hepatitis B virus has been implicated in hepatocellular carcinoma

Ans. -3

128. Which of the following is an example of disorders of sex chromosomes?

1. Marfan's syndrome
2. Testicular feminization syndrome
3. Klinefelter's syndrome
4. Down's syndrome

Ans. -4

129. Which of the following statements on lymphoma is not true?

1. A single classification system for Hodgkin's disease (HD) is almost universally accepted
2. HD more often tends to remain localized to a single group of lymph nodes and spreads by contiguity
3. Several types of non hodgkins lymphoma (NHL) may have a leukemic phase.
4. In general, follicular (nodular) NHL has worse prognosis compared to diffuse NHL.

Ans. -3

130. Which of the following is characteristically not associated with the development of interstitial lung disease?

1. Organic dusts
2. Inorganic dusts
3. Toxic gases e.g. chlorine, sulphur dioxide
4. Inhalation of tobacco smoke

Ans. -3

131. A peripheral smear with increased neutrophils, basophils, eosinophils, and platelets is highly suggestive of:

1. Acute myeloid leukemia
2. Acute lymphoblastic leukemia
3. Chronic myelogenous leukemia
4. Myelodysplastic syndrome

Ans. -2

132. A patient presents with a platelet count of  $700 \times 10^9/L$  with abnormalities in size, shape and granularity of platelets. WBC count of  $12 \times 10^9/L$ , hemoglobin of 11g/dl and the absence of the Philadelphia chromosome. The most likely diagnosis would be :

1. Polycythemia vera
2. Essential thrombocythemia
3. Chronic myeloid leukemia
4. Leukemoid reaction.

Ans. -2

133. A 70-year-old male has a pathologic fracture of femur. The lesion appears lytic on X-ray film with a circumscribed punched out appearance. The curetting from fracture site is most likely to show which of the following?

1. Diminished and thinned trabecular bone fragments secondary to osteopenia
2. Sheets of atypical plasma cells.
3. Metastatic prostatic adenocarcinoma
4. Malignant cells forming osteoid bone

Ans. -2

134. Which of the following is not a B-cell neoplasm?

1. Hairy cell leukemia.

2. Angiocentric lymphoma
3. Mantle cell lymphoma
4. Burkitt's lymphoma

Ans. -1

135. RET proto oncogene mutation is a hall mark of which of the following tumors?

1. Midullary carcinoma Thyroid.
2. Astrocytoma
3. Paraganglionoma
4. Hurthle cell tumor thyroid

Ans. -1

136. Barrets Esophagus is commonly associated with one of the following:

1. Adenocarcinoma
2. Squamous cell carcinoma
3. Sarcoma
4. Gastrointestinal stromal tumor

Ans. -\*

137. Anticoagulant effect of warfarin is increased by all of the following except:

1. Cimetidine
2. Phytonadione
3. Amiodarone
4. Phenylbutazone

Ans. -4

138. Which of the following fluorinated anaesthetics corrodes metal in vaporizers and breathing systems?

1. Sevoflurane
2. Enflurance
3. Isoflurane
4. Halothane.

Ans. -2

139. The following anesthetic drug cause pain on intravenous administration :

1. Midazolam
2. Propofol
3. Ketamine
4. Thiopentone sodium

Ans. -4

140. Which of the following drugs is contraindicated in a patient with raised intracranial pressure?

1. Thiopentone
2. Propofol
3. Midazolam
4. Ketamine



Ans. -4

141. Which of the following drugs is associated with untoward side effect of renal tubular damage?

1. Cisplatin
2. Streptozotocin
3. Methysergide
4. Cyclophosphamide

Ans. -1

142. The drug imatinib acts by inhibition of

1. Tyrosine kinase
2. Glutathione reductase
3. Thymidile synthetase
4. Protein kinase

Ans. -2

143. Which one of the following is an aromatase inhibitor?

1. Tamoxifen
2. Letrozole
3. Danazol
4. Taxane

Ans. -\*

144. Which of the following chemotherapeutic agents is associated with secondary leukemia?

1. Vinblastine
2. Etoposide
3. Cisplatin
4. Bleomycin

Ans. -4

145. Inhaled nitric oxide is used

1. For stabilizing systemic hemodynamics
2. In case of jaundice
3. To prevent CNS complication
4. For reducing pulmonary hypertension

Ans. -1

146. Which one of the common side effects is seen with fentanyl?

1. Chest wall rigidity
2. Tachycardia
3. Pain in abdomen
4. Hypertension

Ans. -1

147. Vanilloid receptors are activated by:

1. Pain
2. Vibration
3. Touch
4. Pressure

Ans. -3

148. The main difference between REM sleep and wakefulness is:

1. EEG desynchronization
2. Rapid eye movements
3. Decreased muscle tone
4. Penile erection

Ans. -2

149. Which of the following organs secretes zinc in large amount in man?

1. Seminal vesicle
2. Prostate
3. Epididymis
4. Vas

Ans. -2

150. Follicular stimulating hormone receptors are presents on :

1. Theca cells
2. Granulosa cells
3. Leydig cells
4. Basement membrane of ovarian follicle

Ans. -2

151. After how many days of ovulation embryo implantation occurs?

1. 3-5 days
2. 7-9 days
3. 10-12 days
4. 13-15 days

Ans. -1

152. hCG is secreted by :

1. Trophoblast cells.
2. Amniotic membrane
3. Fetal yolk sac
4. Hypothalamus

Ans. -3

153. Estrogen administration in a menopausal woman increase the:

1. Gonadotophin secretion.
2. LDL-cholesterol
3. Bone mass
4. Muscle mass

Ans. -4

154. The sensitivity of the uterine musculature is:

1. Enhanced by progesterone
2. Enhanced by oestrogen
3. Inhibited by oestrogen
4. Enhanced by oestrogen and inhibited by progesterone

Ans. -2

155. In those mammals which are seasonal breeder, the females are receptive only once a year, the cycle is termed as:

1. Follicular
2. Estrous
3. Menstrual
4. Luteal

Ans. -1

156. A patient with Acute Psychosis, who is on haloperidol 20 mg/day for last 2 days, has an episode characterized by tongue protrusion, oculogyric crisis, stiffness and abnormal posture of limbs and trunk without loss of consciousness for last 20 minutes before presenting to casualty. This improved within a few minutes after administration of diphenhydramine HCl. The most likely diagnosis is:

1. Acute Dystonia
2. Akathisia
3. Tardive Dyskinesia
4. Neuroleptic Malignant Syndrome

Ans. -2

157. A 30 year old man who was recently started on haloperidol 30 mg/day developed hyperpyrexia, muscle rigidity, akinesia, mutism, sweating, tachycardia and increased blood pressure. The investigations showed increased WBC count, increased Creatinine Phosphokinase. There is no history of any other drug intake or any signs of infection. The most likely diagnosis is :

1. Drug overdose
2. Neuroleptic Malignant Syndrome
3. Drug induced Parkinsonism
4. Tardive Dyskinesia

Ans. -\*

158. True stereopsis is perceived due to the following:

1. Overlay of contours
2. Motion parallax
3. Bi-nasal disparity
4. Linear perspective

Ans. -4

159. A middle aged person reported to Psychiatric OPD with comp

leaving home, fear of traveling alone and fear of being in a crowd. He develops marked anxiety with palpitations and swelling if he is in these situations. He often avoids public transport to go his place of work. The most likely diagnosis is:

1. Generalised anxiety disorder
2. Schizophrenia
3. Personality disorder
4. Agoraphobia

Ans. -1

160. HIAA is a metabolite of :

1. Serotonin
2. Dopamine
3. Epinephrine
4. Histamine

Ans. -3

161. Which one of the following statements is correct regarding adrenal histoplasmosis:

1. In active disease, calcification is commonly seen.
2. Lymphadenopathy is not seen
3. The adrenal glands are usually symmetrically enlarged
4. Adrenal insufficiency is uncommon

Ans. -3

162. Plethoric lung fields are seen in all of the following conditions except:

1. Atrial septal defect (ASD)
2. TAPVC (Total Anomalous Pulmonary venous connection)
3. Ebstein's anomaly.
4. Ventricular septal defect

Ans. -2

163. 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:

1. Meningioma
2. Glioma
3. Schwannoma
4. Pituitary adenoma

Ans. -3

164. Which of the following features on mammogram would suggest malignancy?

1. Well defined lesion
2. A mass of decreased density
3. Areas of speculated microcalcifications
4. Smooth borders

Ans. -2

165. On MRI in the differential diagnosis of spinal cord edema is:

1. Myelodysplasia
2. Myelomalacia
3. Myelochisis
4. Cord tumors

Ans. -2

166. A 17 years old boy presented with TLC of  $138 \times 109/L$  with 80% blasts on the peripheral smear. Chest X-ray demonstrated a large mediastinal mass. Immunophenotyping of this patient's blasts would most likely demonstrate:

1. No surface antigens (null phenotype)
2. An immature T cell phenotype (Tdt/D34/CD7 positive)
3. Myeloid markers, such as CD 13 CD 33 and CD 15
4. B cell markers, such as CD 19 CD 20 & CD 22

Ans. -\*

167. A 45 year old woman underwent a modified radical mastectomy 4 yr ago. She was treated for multiple bone metastases with cyclophosphamide, doxorubicin, and fluorouracil for 6 months. She is complaining of exertion on exercise, swelling of the legs, and swelling around eyes in the morning. On examination, she has bilateral rales in the lungs, S1, S2 audible, S3, S4 gallop present. Her BP is 149/117 mmHg, PR is 80/min. What is the most likely cause for her cardiac condition?

1. Systolic dysfunction CHF
2. Drug induced cardiac toxicity
3. Metastatic cardiac disease
4. Pneumonia

Ans. -1

168. A 48 year old sports photographer has noticed a small nodule over the upper lip from four months. The nodule is pearly white with central necrosis, teleangiectasia. The most likely diagnosis would be:

1. Basal cell carcinoma
2. Squamous cell carcinoma
3. Atypical melanoma
4. Kaposi sarcoma

Ans. -3

169. A 65 year old miner has lost 7 kgs weight within two months, has presented with cough, and blood streaked sputum. He was treated for pulmonary tuberculosis 10 years ago. He also has drooping of his left eyelid for one month. On physical examination, there is ptosis of the left eye and papillary miosis. Chest X-ray revealed round opacification in the left upper apical lobe. What is the most probable diagnosis?

1. Secondary tuberculosis
2. Adenocarcinoma
3. Squamous cell carcinoma
4. Asbestosis

Ans. -2

170. A 15-year-old boy is injured while playing cricket. X-rays of the leg rule out a possible fracture. The radiologist reports the boy has an evidence of an aggressive bone tumor with both bone destruction and soft tissue mass. The bone biopsy reveals a bone cancer with neural differentiation. Which of the following is the most likely diagnosis?

1. Chondroblastoma
2. Ewing's sarcoma
3. Neuroblastoma
4. Osteosarcoma

Ans. -2

171. "Intestinal angina" is a symptom complex of the following:

1. Postprandial abdominal pain, weight loss, acute mesenteric vessel occlusion.
2. Postprandial abdominal pain, weight loss, chronic mesenteric vessel occlusion
3. Preprandial abdominal pain, weight loss, chronic mesenteric vessel occlusion
4. Preprandial abdominal pain, weight gain, acute mesenteric vessel occlusion.

Ans. -2

172. In which of the following condition acquired (secondary) megacolon is seen?

1. Fissure in-ano
2. Complete absence of parasympathetic ganglion cells
3. Absence of sympathetic ganglion cells
4. Rectal malignancy

Ans. -1

173. One of the following is not correct in papillary carcinoma of thyroid:

1. Can be reliably diagnosed using fine needle aspiration cytology.
2. Always unifocal
3. Typically spreads to the cervical lymph nodes
4. Requires a total thyroidectomy for large tumours.

Ans. -2

174. Which one of the following is the correct statement during operation on the submandibular gland?

1. The submandibular gland is seen to wrap around the posterior border of mylohyoid.
2. The facial artery and vein are divided as they course through the deep part of the gland
3. The hypoglossal nerve is seen to loop under the submandibular duct
4. Damage to the lingual nerve will cause loss of sensation to the posterior third of the

Ans. -1

175. Which of the following statements is incorrect in regard to stones in the gallbladder?

1. Pigment stones are due to increased excretion of conjugated Bilirubin
2. Are considered a risk factor for the development of gallbladder carcinoma
3. 10% of gallstones are radio-opaque

4. A mucocele of the gallbladder is caused by a stone impacted in Hartmann's pouch

Ans. -1

176. Which one of the following statement is incorrect, regarding Meckel's diverticulum?

1. Is found on the anti-mesenteric border of the small intestine
2. Consists of mucosa without a muscle coat
3. Heterotopic gastric mucosa can ulcerate and cause a brisk gastrointestinal bleed
4. A fibrous band between the apex and umbilicus can cause intestinal obstruction

Ans. -2

177. The following ocular structure is not derived from surface ectoderm:

1. Crystalline lens
2. Sclera
3. Corneal epithelium
4. Epithelium of lacrimal glands

Ans. -2

178. A 35 year old premenopausal patient has recently developed a 1.5 cm sized pigmented lesion on her back. Which of the following forms of tissue diagnosis will you recommend for her?

1. Needle biopsy
2. Trucut biopsy
3. Excision biopsy
4. Incisional biopsy

Ans. -3

179. A patient of thrombosis of hepatic veins has been receiving coumarin therapy for duration of three years. Recently, she has developed bleeding tendency. How will you reverse the effect of coumarin?

1. Protamine injection
2. Vit K injection
3. Infusion of fibrinogen
4. Whole blood transfusion

Ans. -\*

180. A 45 year old gentleman has undergone truncal vagotomy and pyloroplasty for bleeding duodenal ulcer seven years ago. Now he has intractable recurrent symptoms of peptic ulcer. All of the following suggest the diagnosis of Zollinger Ellison syndrome, except:

1. Basal acid output of 15 meq/hour
2. Serum gastrin value of 500 pg/ml
3. Ulcers in proximal jejunum and lower end of esophagus
4. Serum gastrin value of 200 pg/ml with secretin stimulation

Ans. -2

181. It is true regarding Endemic typhus that:

1. Man is the only reservoir of infection
2. Flea is a vector of the disease
3. The rash developing into eschar is a characteristic presentation
4. Culture of the etiological agent in tissue culture is diagnostic modality

Ans. -2

-haemolytic colonies. On Gram staining these were gram positive cocci. In the screening test for identification, the suspected pathogen is likely to be susceptible to the following agent: $\alpha$ 182. An infant had high grade fever and respiratory distress at the time of presentation to the emergency room. The sample collected for blood culture was subsequently positive showing growth of

1. Bacitracin
2. Novobiocin
3. Optochin
4. Oxacillin

Ans. -4

183. A patient admitted to an ICU is on central venous line for the last one week. He is on ceftazidime and amikacin. After 7 days of antibiotics he develops a spike of fever and his blood culture is positive for gram positive cocci in chains, which are catalase negative. Following this, vancomycin was started but the culture remained positive for the same organism even after 2 weeks of therapy. The most likely organism causing infection is:

1. Staphylococcus aureus
2. Viridans streptococci
3. Enterococcus faecalis
4. Coagulase negative Staphylococcus

Ans. 3?

184. In the gut, anaerobic bacteria outnumber the aerobes by a ratio of :

1. 10:1
2. 100:1
3. 1000:1
4. 10,000:1

Ans. 3?

185. With reference to Bacteroides fragilis the following statements are true, except:

1. B. fragilis is the most frequent anaerobe isolated from clinical samples
2. B. fragilis is not uniformly sensitive to metronidazole
3. The lipopolysaccharide formed by B. fragilis is structurally and functionally different from the conventional endotoxin
4. Shock and disseminated intravascular coagulation are common in Bacteroides bacteremia

Ans. -\*

186. The following statements are true regarding leptospirosis, except:

1. It is a zoonosis
2. Man is the dead end host



3. Man is an accidental host
4. Lice act as reservoirs of infection

Ans. ?

187. The single most common cause of pyrexia of unknown origin is:

1. Mycobacterium tuberculosis
2. Salmonella typhi
3. Brucella sp.
4. Salmonella paratyphi A.

Ans. 1

188. Salmonella typhi is the causative agent of typhoid fever. The infective dose of S. typhi is:

1. One bacillus
2. 10<sup>8</sup> - 10<sup>10</sup> bacilli
3. 10<sup>2</sup> - 10<sup>5</sup> bacilli
4. 1 - 10 bacilli

Ans. 4?

189. The mechanisms by which cholera might be maintained during the intervals between peak cholera seasons is :

1. Carrier status in animals
2. Carrier status in man
3. An environmental reservoir
4. Continuous transmission in man

Ans. -\*

190. The endotoxin of the following gram-negative bacteria does not play any part in the pathogenesis of the natural disease:

1. Escherichia coli
2. Klebsiella sp.
3. Vibrio cholerae
4. Pseudomonas aeruginosa

191. On electromyography, all of the following features suggest denervation, except:

1. Unregulated firing of individual muscle fibres
2. Small short-duration polyphasic action potentials
3. Presence of positive sharp waves
4. Spontaneous firing of motor units

Ans. -2

192. Which one of the following is the characteristic feature of juvenile myoclonic epilepsy?

1. Myoclonic seizures frequently occur in morning
2. Complete remission is common
3. Response to anticonvulsants poor
4. Associated absence seizures are present in majority of patients

Ans. -1

193. Prolonged use of one of the following anti convulsant can produce weight loss:

1. Gabapentin
2. Oxcarbazepine
3. Topiramate
4. Valproic acid

Ans. -3

194. A housewife ingests a rodenticide white powder accidentally. She is brought to hospital where the examination shows generalized, flaccid paralysis and an irregular pulse. ECG shows multiple ventricular ectopics, generalized changes with ST-T. Serum potassium is 2.5 mEq/L. The most likely ingested position is:

1. Barium carbonate
2. Superwarfarins
3. Zinc phosphide
4. Aluminium phosphide

Ans. -1

195. In acute pulmonary embolism, the most frequent ECG finding is:

1. S1Q3T3 pattern
2. P pulmonale
3. Sinus tachycardia
4. Right axis deviation

Ans. -4

196. A patient aged 65 years, is diagnosed to have severe aplastic anemia. HLA compatible sibling is available. The best option of treatment is :

1. Anti-thymocyte globulin followed by cyclosporine
2. A conventional bone marrow transplantation from the HLA identical sibling
3. A non-myeloablative bone marrow transplantation from the HLA identical sibling.
4. Cyclosporine

Ans. -2

197. An 18 years old male presented with acute onset descending paralysis of 3 days duration. There is also a history of blurring of vision for the same duration. On examination, the patient has quadriparesis with areflexia. Both the pupils are non-reactive. The most probable diagnosis is :

1. Poliomyelitis
2. Botulism
3. Diphtheria
4. Porphyria

Ans. -2

198. Episodic generalized weakness can occur due to all of the following acute electrolyte disturbances, except :

1. Hypokalemia
2. Hypocalcemia
3. Hyponatremia
4. Hypophosphatemia

Ans. -3

199. A symmetric high-voltage, triphasic slow wave pattern is seen on EEG in the following :

1. Hepatic encephalopathy
2. Uremic encephalopathy
3. Hypoxic encephalopathy
4. Hypercarbic encephalopathy

Ans. -1

200. A 15 year old female presented to the emergence department with history of recurrent epistaxis, hematuria and hematocheza. There was a history of profuse bleeding from the umbilicus stump at birth. Previous investigations revealed normal prothrombin time, activated partial thromboplastin time, thrombin time and fibrinogen levels. Her platelet counts as well as platelet function tests were normal but urea clot lysis test was positive. Which one of the following clotting factor is most likely to be deficient?

1. Factor X.
2. Factor XI.
3. Factor XII.
4. Factor XIII.

Ans. -4