1. In a case of hypertrophic pyloric stenosis, the metabolic disturbance is
   1. Respiratory alkalosis
   2. Metabolic acidosis
   3. Metabolic alkalosis with paradoxical aciduria
   4. Metabolic alkalosis with alkaline urine
   Ans 3

2. Sentinel lymph node biopsy is an important part of the management of which of the following conditions?
   1. Carcinoma prostate
   2. Carcinoma breast
   3. Carcinoma lung
   4. Carcinoma nasopharynx
   Ans 2

3. In hyperthyroidism during pregnancy, which of the following is absolutely contra-indicated?
   1. Surgery
   2. Radioiodine (I 131)
   3. Antithyroid drugs
   4. Iodine
   Ans 2

4. The most premalignant lesion among the following is
   1. Leukoplakia
   2. Erythroplakia
   3. Metaplasia
   4. Dysplasia
   Ans 2

5. A previously healthy 45 year old construction worker develops acute low back pain, right leg pain, and weakness of dorsiflexion of the great toe. True statements regarding this case include which of the following?
   1. Immediate treatment should include analgesics, muscle relaxants, and back strengthening exercises.
   2. The appearance of foot drop would be an early indication for early surgery.
   3. Lumbar laminectomy and excision of any herniated nucleus pulposus should be performed if the presenting symptoms should fail to resolve in 1 week
   4. If the neurological signs but not the back pain resolve in 2 to 3 weeks, proper treatment would include fusion of affected lumbar vertebrae.
   Ans 2

6. A 26 year woman presents with a palpable thyroid nodule, and needle biopsy demonstrates amyloid in the stroma of the lesion. A cervical lymph node is palpable on the same side as the lesion. The preferred treatment should be
   1. Removal of the involved node, the isthmus, and the enlarged lymph node
   2. removal of the involved lobe, the isthmus, a portion of the opposite lobe, and the
enlarged lymph node

3. Total thyroidectomy and modified neck dissection on the side of the enlarged lymph node

4. Total thyroidectomy and irradiation of the cervical lymph nodes

Ans 3

7. A 75 year old woman underwent neck exploration for hyperthyroidism 5 years ago, and a parathyroid adenoma was excised. At the present time, she is recovering from a myocardial infarction 6 weeks ago, and she is in mild congestive heart failure. Her electrocardiogram shows a slow atrial fibrillation. Measurement of her serum calcium shows a level of 13.0 mg/dl and urine calcium is 300 mg/24h. Studies suggest a small mass in the paratracheal position behind the right clavicle. Appropriate management at this time is

1. Observation and repeat calcium levels in two months

2. Repeat neck exploration

3. Treatment with technetium-99

4. Ultrasound guided alcohol injection of the mass

Ans 4

8. A 24 year old man falls to the ground when he is struck in the right temple by a base ball. While being driven to the hospital he lapses into coma. He is unresponsive with a dilated right pupil when he reaches the emergency department. The most appropriate step in initial management is

1. CT scan of the head

2. Craniotomy

3. Doppler ultrasound examination of the neck

4. X rays of the skull and cervical spine

Ans 2

9. All the following are correct about radiologic evaluation of a patient with Cushing’s syndrome except

1. Adrenal CT scan distinguishes adrenal cortical hyperplasia from an adrenal tumor

2. CT of sella tursica is diagnostic when a pituitary tumor is present

3. MRI of the adrenals may distinguish adrenal adenoma from carcinoma

4. Petrosal sinus sampling is the best way to distinguish tumor from an ectopic ACTH producing tumor

Ans 2

10. Ten days after a splenectomy for abdominal trauma, a 23 year old man complains of upper abdominal and lower chest pain exacerbated by deep breathing. He is anorectic but ambulatory and otherwise making satisfactory progress. On physical examination, his treatment is 38.2 C rectally, and he has decreased breath sounds at the left lung base. His abdominal wound appears to be healing well, bowel sounds are active, and there are no peritoneal signs. Rectal examination is negative. The white blood cell count is 12,500/mm$^3$ with a shift to the left. Chest x-rays show plate like atelectasis of the left lung field. Abdominal x-rays show a nonspecific gas pattern in the bowel and an air fluid level in the left upper quadrant. Serum amylase is 150 Somogyi units per dl. The most likely diagnosis

1. Subphrenic abscess
2. Subfascial wound infection
3. Pancreatitis
4. Pulmonary embolism

Ans 1

11. A 59 year old woman had a left femoral venous thrombosis during a pregnancy 30 yrs ago. The left greater saphenous vein had been stripped at age 21. She now presents with a large non healing ulceration over medial calf, which has progressed despite bedrest, elevation and use of a support stocking. Descending phlebography of the left leg demonstrates a patent deep venous system. With free flow of dye from the groin to foot. The first profunda femoris valve is competent. Appropriate management might include which of the following?
   1. Division of the superficial femoral vein in the groin and transplantation of its distal end below the level of the competent profunda valve
   2. Saphenous venous crossover graft with anastomosis of the end of the right saphenous vein onto the side of the left common femoral vein
   3. Left iliofemoral venous thrombectomy with creation of a temporary arteriovenous fistula
   4. Subfascial ligation of perforating veins in the left calf

Ans 1

12. A 16 year old girl who has nonpitting edema of recent onset affecting her right leg but no other symptoms is referred for evaluation. True statements about this patient include all the following except
   1. A lymphangiogram probably will show hypoplasia of the lymphatics
   2. Prophylactic antibiotics are indicated
   3. Elastic support and diuretics will restore the affected limb to normal appearance
   4. A variety of operations will restore the affected limb to a normal appearance

Ans 4

13. A 14 year old girl sustains a steam burn measuring 6 by 7 inches over the ulnar aspect of her right forearm. Blisters develop over the entire area of the burn wound, and by the time the patient is seen 6 hour after the injury, some of the blisters have ruptured spontaneously. In addition to debridement of the necrotic epithelium, all the following therapeutic regimens might be considered appropriate for this patient except
   1. Application of silver sulfadiazine and daily washes, but no dressing
   2. Application of Polyvinylpyrrolidone foam, daily washes and a light occlusive dressing changed daily
   3. Application of mafenide acetate cream, but no daily washes or dressing
   4. Heterograft application with sutures to secure in place and daily washes, but no washes

Ans 4

14. A man 70 kgs is transferred to a burn centre 4 weeks after sustaining a 2nd and 3rd degree burn injury to 45% of his total body surface area. Prior to accident the patient’s weight was 90 kgs. The patient has not been given anything by mouth since the injury, except for antacids because of a previous ulcer history. On examination the patients burn wound are clean, but only minimal healing is evident and thick adherent eschar present. The patient’s abdomen is soft and non distended and active bowel sounds are heard. His stools are trace
positive for and he has a reducible right inguinal hernia, which appears to be easily reducible. He has poor range of motion of all involved joints and has developed early axillary and popliteal fossae flexion contractures. In managing this patient at this stage of his injury, top priority must be given to correcting

1. The open, poorly healing burn wounds by surgical excision and grafting
2. The inguinal hernia by surgical repair using local anesthetic
3. The nutritional status by enteral supplementation or parenteral hyperalimentation
4. By increasing the dose of antacids and adding cimetidine

Ans 3

15. On her third of hospitalization, a 70 year old woman who is being treated for acute cholecystitis develops increased pain and tenderness in the right upper quadrant with a palpable mass. Her temperature rises to 104 F and her BP falls to 80/60. Hematemesis and melena ensue and petechiae are noted. Laboratory studies reveal thrombocytopenia, prolonged PT, and decreased fibrinogen level. The most important step in the correction of this patient's coagulopathy

1. Administration of heparin
2. administration of fresh frozen plasma
3. Administration of Epsilon amino caproic acid
4. Exploratory laparotomy

Ans 4

16. A 64 year old previously healthy man is admitted to a hospital because of a closed head injury and ruptured spleen following an automobile accident. During the first 4 days of hospitalization, following laparotomy and splenectomy, he receives 5% dextrose ½ normal saline solution at a rate of 125 mL/hr. Recorded daily fluid outputs include 450-600 mL of nasogastric tube drainage and 700-1000 mL of urine. The patient is somnolent, but easily aroused until the morning of the 5th hospital day, when he is noted to be in deep coma, by the afternoon he begins having seizures. The following laboratory data are obtained.

Serum electrolytes: Na 130, K 1.9, Cl 96 and HCO$_3$ 19
Serum osmolality 260 mosm/L
Urine electrolytes: Na 61, K 18.

Which of the following statements about diagnosis or treatment of this patient’s condition is true?

1. His Hypokalemia is probably secondary to metabolic acidosis
2. An emergency carotid arteriogram should be obtained as the first step in his management
3. An i.v infusion of 20 ml of 50% Magnesium Sulphate should be given over a 4 hour period as the first step in his management
4. A small quantity of hypertonic saline solution should be given as the first of his management

Ans 4

17. An ultrasound in a 3 year old child shows a 3 cm circumscribed hypoechoic mass in the abdomen. The diagnosis is most likely to be

1. Neuroblastoma
2. Wilm’s tumor
3. Oncocytoma
4. Renal cell carcinoma
   
   Ans 2

18. A 6 month old child was found to have grade IV vesicoureteric reflux. The bladder wall is normal. The treatment of choice would be
   1. Ureteric reimplantation
   2. Teflon injection to ureteric orifices
   3. Antibiotics and observe
   4. Endoscopic ureteric resection
   
   Ans 1

19. All are seen in thrombosis except
   1. Intermittent claudication
   2. Migratory superficial thrombophlebitis
   3. Raynaud’s phenomenon
   4. Absent popliteal pulsation
   
   Ans 4

20. A patient with external hemorrhoids develops pain while passing stools. The nerve mediating this pain is
   1. Hypogastric nerve
   2. Pudendal nerve
   3. Splanchnic visceral nerve
   4. Sympathetic plexus
   
   Ans 2

21. A patient operated for carcinoma colon 4 months back now presents with a 2 cm solitary mass in the liver. The best line of management is
   1. Radiotherapy
   2. Radiofrequency ablation
   3. Resection
   4. CT scan
   
   Ans 3

22. The triad as originally described by Zollinger and Ellison is
   1. Hypergastrinemia, raised gastric acid output, beta cell tumor
   2. Hypergastrinemia, raised gastric acid output, non beta cell tumor
   3. Hyochlorhydria, raised gastric acid output, beta cell tumor
   4. Tumor of papilla of Vater, hypergastrinemia, raised gastric acid output
   
   Ans 2

23. The most appropriate route for the administration of significant proteins and calories to a patient comatose for a long period after an automobile accident is by
   1. Nasogastric tube feedings
2. Gastrostomy tube feedings
3. Jejunostomy tube feedings
4. Total parenteral nutrition

Ans 3

24. A patient is admitted to the hospital with burns. The young intern doing the saphenous cut down noted that the patient developed pain and paresthesia along the dorsomedial aspect of the leg following the procedure. The nerve most likely to have been involved is
1. Saphenous nerve
2. Sural nerve
3. Superficial peroneal nerve
4. Deep peroneal Nerve

Ans 1

25. An edentulous patient has carcinoma of the oral cavity infiltrating into the alveolar margin. Which of the following would not be indicated in managing the case?
1. Segmental mandibulectomy
2. Marginal mandibulectomy with removal of the outer table
3. Marginal mandibulectomy with removal of upper half of mandible
4. Radiotherapy

Ans 2

26. A 9 month old infant presented with features of intestinal obstruction. On barium enema, the diagnosis was confirmed to be intussusception. The most likely etiology would be
1. Meckel’s diverticulum
2. Hypertrophic Peyer’s patch
3. Mucosal polyp
4. Lipoma

Ans 2

27. A newborn presenting with intestinal obstruction showed on abdominal Xray multiple air fluid levels. The diagnosis is not likely to be
1. Pyloric obstruction
2. Duodenal atresia
3. Ileal atresia
4. Ladd’s bands

Ans 3

28. In gastric outlet obstruction in a duodenal ulcer patient, the site of obstruction is most likely to be
1. Antrum
2. Duodenum
3. Pylorus
4. Pyloric canal

Ans 1
29. The treatment modality of achalasia which has the maximum probability of causing a recurrence is
   1. Pneumatic dilatation
   2. Laparoscopic myotomy
   3. Botulinum toxin
   4. Open surgical myotomy
   Ans 3

30. True adenocarcinoma of esophagus is most likely to be due to
   1. Achalasia
   2. Barret’s esophagus
   3. Patterson Brown syndrome
   4. Scleroderma
   Ans 2

31. Epithelium of Barret’s mucosa is
   1. Ciliated columnar
   2. Columnar
   3. Stratified squamous
   4. Squamous
   Ans 2

32. The least recurrence of gastric hypersecretion following surgery for peptic ulcer is seen with
   1. Vagotomy with gastrojejunostomy
   2. Antrectomy with vagotomy
   3. Highly selective vagotomy
   4. Truncal vagotomy
   Ans 2

33. All the following indicates early gastric cancer except
   1. Involvement of mucosa
   2. Involvement of mucosa and submucosa
   3. Involvement of mucosa, submucosa and muscularis
   4. Involvement of mucosa, submucosa and adjacent lymph nodes
   Ans 3

34. Gastric malignancy is predisposed with
   1. Duodenal ulcer
   2. Gastric hyperplasia
   3. Intestinal metaplasia III
   4. Blood group O
   Ans 3

35. Thyroid storm is seen in all except
   1. Thyrotoxicosis
2. Surgery for thyroiditis
3. Surgery on thyroid
4. I 131 therapy in thyrotoxicosis
   Ans 4

36. In a young patient with Aplastic anemia, the treatment of choice is
   1. ATG
   2. Bone marrow transplantation
   3. Danazol
   4. G-CSF
   Ans 2

37. Investigation of choice for invasive amebiasis is
   1. Indirect hemagglutination
   2. ELISA
   3. Counter immune electrophoresis
   4. Microscopy
   Ans 2

38. Stimulation with TSH is useful for the diagnosis of
   1. Prolactin
   2. ACTH
   3. Growth hormone
   4. PTH
   Ans 4

39. In which of the following conditions does hyperglycemia occur
   1. Addison’s disease
   2. Uremia
   3. Acromegaly
   4. Fever
   Ans 3

40. Hypergastrinemia with hypochlorhydria is seen in
   1. Zollinger Ellison Syndrome
   2. VIPoma
   3. Pernicious anemia
   4. Glucagonoma
   Ans 3

41. Increased anion gap in urine signifies
   1. Increased ammonium
   2. Increased H⁺
3. Increased K⁺
4. Increased Mg²⁺
   Ans 1

42. Raised anion gap in blood is seen in all the following except
   1. Diabetic ketoacidosis
   2. Renal failure
   3. Chronic respiratory failure
   4. Antifreeze ingestion
   Ans 3

43. In Conn’s syndrome, all the following are seen except
   1. Hypokalemia
   2. Hypernatremia
   3. Hypertension
   4. Edema
   Ans 4

44. In pheochromocytoma all the following are seen except
   1. Episodic hypertension
   2. Orthostatic hypotension
   3. Wheezing
   4. Headache
   Ans 3

45. A 35 year old lady, Kamli, presenting with severe headache was found to have a thyroid nodule with ipsilateral enlarged cervical lymph nodes. She gave a history of her mother dying of thyroid cancer. Which of the following investigations should be done prior to surgery?
   1. Urinary metanephrine
   2. Hydroxy indole acetic acid in urine
   3. Urinary metanephrine and VMA
   4. T₃, T₄ and TSH
   Ans 3

46. A diabetic patient with blood glucose of 600 mg/dL, Na 122 mEq/L was treated with insulin. After giving insulin the blood glucose decreased to 100 mg/dL. What changes in blood Na level is expected?
   1. Increase in Na level
   2. Decrease in Na level
   3. No change would be expected
   4. Na would return to previous level spontaneously on correction of blood glucose
   Ans 4
47. A young lady with spontaneous abortions has a history of joint pains and fever. She currently presents with thrombosis of her leg vein. Her APTT is prolonged. The diagnosis is most likely to be
1. Inherited protein C and S deficit
2. Factor XII deficiency
3. Antiphospholipid antibody syndrome
4. Increased antithrombin III levels
   Ans 3

48. In antiphospholipid antibody syndrome all the following are seen except
1. Recurrent fetal loss
2. Neurological symptoms
3. Thrombocytosis
4. Prolonged APTT
   Ans 3

49. Prophylactic spinal irradiation is given in all except
1. Acute lymphatic leukemia
2. Non Hodgkin’s lymphoma
3. Hodgkin’s lymphoma
4. Small cell carcinoma of lung
   Ans 3

50. Craniospinal irradiation is useful in which of the following conditions?
1. Pilocytic astrocytoma
2. Oligodendrogloma
3. Medulloblastoma
4. Oncocytoma
   Ans 3

51. Medullary cystic disease of the kidney is best diagnosed by
1. Ultrasound
2. Nuclear scan
3. Urography
4. Biopsy
   Ans 4

52. A patient presents with hypertension and dizziness. The X-ray shows anterior rib notching. The diagnosis is most likely to be
1. Pheochromocytoma
2. Coarctation of the aorta
3. Neurofibromatosis
4. Marfan syndrome
53. All the following are true regarding Ramsay Hunt syndrome except
   1. It has a viral etiology
   2. VII nerve is involved
   3. VIII nerve may be involved
   4. Excellent prognosis if spontaneous recovery occurs

Ans 4

54. Renal vein thrombosis is most likely in which of the following conditions?
   1. Membranous Glomerulonephritis
   2. Membranoproliferative Glomerulonephritis
   3. Rapidly progressive Glomerulonephritis
   4. Minimal Change disease

Ans 1

55. Renal osteodystrophy differs from nutritional and metabolic rickets due to the presence of
   1. Hyperphosphatemia
   2. Hypercalcemia
   3. Hypophosphatemia
   4. Hypocalcemia

Ans 1

56. A patient has presented to you with pleural effusion. The best site of aspiration of the fluid would be through the
   1. 5th intercostal space in the midclavicular line
   2. 2nd intercostal space close to the sternum
   3. 7th intercostal space in mid axillary line
   4. 10th intercostal space in paravertebral location

Ans 3

57. A 10 year old child presents with anemia and recurrent fractures. The Xray shows diffuse hyperdensity of bone. The diagnosis is most likely to be
   1. Osteogenesis imperfecta
   2. Osteopetrosis
   3. Osteochondroma
   4. Hyperparathyroidism

Ans 2

58. In the JVP, all the following combinations are true except
   1. c wave → atrial systole
   2. ax descent → atrial relaxation
   3. cy descent → ventricular relaxation
4. ya descent → atrial filling  
   Ans 1

59. All the following are correct statements regarding findings in JVP except
   1. Cannon wave → Complete heart block
   2. Slow vy descent → Tricuspid regurgitation
   3. Giant cv wave → Tricuspid stenosis
   4. Increased JVP with prominent pulsations → SVC obstruction  
   Ans 1

60. While inserting a central venous catheter, a patient develops respiratory distress. The most likely cause is
   1. Hemothorax
   2. Pneumothorax
   3. Pleural effusion
   4. Hypovolemia  
   Ans 2

61. The system internationale (SI) unit for blood pressure is
   1. Torr
   2. mm Hg
   3. K Pa
   4. cm H₂O  
   Ans 3

62. Which of the following is not seen in atrial myxoma?
   1. Fever
   2. Increased ESR
   3. Hypertension
   4. Embolic phenomenon  
   Ans 3

63. A patient with nephrotic syndrome with longstanding corticosteroid therapy may develop all the following except
   1. Hyperglycemia
   2. Hypertrophy of muscle
   3. Neuropsychiatric symptoms
   4. Suppression of the pituitary adrenal axis  
   Ans 2

64. All the following statements about acute adrenal insufficiency are true except
   1. Acute adrenal insufficiency is usually secondary to exogenous glucocorticoid administration
   2. Hyperglycemia is usually present
3. Hyperkalemia may present as an acute cardiac problem

4. Hyponatremia occurs as a result of renal tubule sodium reabsorption (***)
   
   Ans 2

65. A patient who came for blood donation was screened and found to be positive for HBsAg and HBeAg. His liver transaminases were normal. The most important next step is
   
   1. Liver biopsy
   2. HBV DNA estimation
   3. Interferon therapy
   4. Observation and follow up
   
   Ans 3

66. Antiretroviral prophylaxis decrease the chances of transmission of HIV to fetus during pregnancy by
   
   1. 35%
   2. 50%
   3. 65%
   4. 75%
   
   Ans 3

67. All are true about De Quervain’s thyroiditis except
   
   1. Raised ESR
   2. Subsides spontaneously
   3. Autoimmune etiology
   4. Pain and swelling of the thyroid occurs
   
   Ans 3

68. Rheumatoid factor in rheumatoid arthritis is important because
   
   1. RA factor is associated with bad prognosis
   2. Absent RA factor rules out the diagnosis of Rheumatoid arthritis
   3. It is very common in childhood Rheumatoid arthritis
   4. It correlates with disease activity
   
   Ans 1

69. Which of the following is seen in ITP?
   
   1. Thrombocytosis
   2. Increased Prothrombin time
   3. Increased Bleeding time
   4. Increased clotting time
   
   Ans 3

70. A female 35 year old patient, Radha, having children aged 5 and 6 years has history of amenorrhea and galactorrhea. Blood examination reveals increased prolactin. The CT of head is
likely to reveal
1. Pituitary adenoma
2. Craniopharyngioma
3. Sheehan syndrome
4. Pinealoma

Ans 1

71. Glucose mediated release of insulin is mediated through
1. ATP dependent K channels
2. cAMP
3. Carrier modulation
4. Receptor phosphorylation

Ans 1

72. All the following are found in brain dead patients except
1. Decreased DTR
2. Absent pupillary reflexes
3. Complete apnea
4. Heart rate not responding to atropine

Ans 1

73. A fracture of the lateral condyle of femur underwent malunion with angulation. Which of the following deformity is likely to occur
1. Genu varum
2. Genu valgum
3. Genu recurvatum
4. Tibia vara

Ans 2

74. Patellar tendon bearing POP cast is to be applied in
1. Femoral fracture
2. Patellar fracture
3. Tibial fracture
4. Medial malleolar fracture

Ans 3

75. Inversion injury of foot is associated with damage to all the following except
1. Lateral malleolus
2. Base of 5th metatarsal bone
3. Sustentaculum tali
4. Extensor digitorum brevis

Ans 4
76. True supracondylar fracture is associated with all except
   1. Extensor variety is more common
   2. Uncommon in > 15 years of age
   3. Varus is the most common deformity
   4. Ulnar nerve is most commonly involved
      Ans 4

77. The nerve most commonly involved in Carpal tunnel syndrome is
   1. Median
   2. Ulnar
   3. Radial
   4. Musculocutaneous
      Ans 1

78. Fracture of surgical neck of humerus causes damage to
   1. Axillary nerve
   2. Radial nerve
   3. Musculocutaneous nerve
   4. Ulnar nerve
      Ans 1

79. The position commonly seen in posterior dislocation of hip is
   1. Internal rotation, flexion and adduction
   2. Internal rotation, extension and adduction
   3. External rotation, flexion and adduction
   4. External rotation, extension and adduction
      Ans 1

80. A 60 year old patient, Ramesh, has an X-ray, an expansile solitary tumor in the center of the metaphysis with endosteal scalloping and with presence of punctuate calcification. The likely diagnosis is
   1. Simple bone cyst
   2. Chondrosarcoma
   3. Osteochondroma
   4. Osteosarcoma
      Ans 2

81. A patient had an accident and sustained fracture of his femur. 48 hours later, he developed tachypnea, disorientation and conjunctival petechiae. The diagnosis is most likely to be
   1. Hypovolumia
   2. Air embolism
   3. Fat embolism
   4. Hyponatremia
82. A child is brought with severe scoliosis. On examination, there is partial fusion of lumbar vertebrae with overlying tuft of hair along with neurological deficit. The diagnosis is most likely to be

1. Caudal regression syndrome
2. Tight spinal band
3. Diastematomyelia
4. Coccygeal cyst

Ans 3

83. The gas which produces systemic toxicity without causing local irritation is

1. Ammonium
2. Carbon monoxide
3. Hydrocyanic acid
4. Sulfur dioxide

Ans 2

84. In a patient with fixed respiratory obstruction Helium is used along with Oxygen instead of plain oxygen because

1. It increases the absorption of oxygen
2. It decreases the turbulence
3. It decreases the dead space
4. For analgesia

Ans 2

85. Upper respiratory tract infection is a common problem in children. All the following anesthetic complications can occur in children with respiratory infections except

1. Bacteremia
2. Halothane granuloma
3. Increased mucosal bleeding
4. Laryngospasm

Ans 2

86. A 2 year old child weighing 6.7 kg and with a history of diarrhea and vomiting for 2 days is brought to the hospital. On examination, the skin when pinched up took almost seconds to return to normal. Which of the following is the most likely diagnosis?

1. No dehydration
2. Some dehydration
3. Severe dehydration
4. Skin pinching is not reliable in making a diagnosis

Ans 1

87. A child was brought 6 hours after a snake bite. On examination a localized edema of less than two inches edema was present at the site of the bite. There were no systemic signs and symptoms.
The most correct management would be

1. Incision and suction
2. Inject antivenom locally
3. Polyvalent antivenom should be started i.v
4. Observe for progression of symptoms

Ans 4

88. In a newborn with respiratory distress syndrome, all the following are true except

1. Increased incidence in < 34 weeks
2. More common in infants of diabetic mothers
3. 100% oxygen is given in treatment
4. Cyanosis is present

Ans 3

89. A newborn was brought with persistent crying and was found to have rashes. On laboratory examination, it was found to have lactic acidosis. The diagnosis is likely to be

1. Organic aciduria
2. Urea cycle defect
3. MELAS with lactic acidosis
4. Aminoacidopathy

Ans 1

90. A 12 week old child should be further evaluated for developmental delay if found to have which of the following defects?

1. Failure to raise head to 90 degrees
2. Fails to vocalize
3. Unable to make babbling noises
4. Does not transfer a red ring even when given in hand

Ans 1

91. A 6 month old infant develops high grade fever which subsided after 3 days following which there was appearance of a generalized rash which too subsided after 48 hours without any residual pigmentation. Which of the following is the most likely diagnosis?

1. Fifth disease
2. Roseola infantum
3. Measles
4. Rubella

Ans 2

92. All the following are seen in congenital rubella syndrome except

1. Mental retardation
2. Aortic stenosis
3. Dearness
4. Patent ductus arteriosus
   Ans 2

93 . All are important causes of post neonatal mortality in India except
   1. Respiratory infections
   2. Diarrhea
   3. Malnutrition
   4. Tetanus
   Ans 4

94 . An eleven month child was found to be very restless and hyperactive in the classroom making it
difficult for the other students in the classroom to concentrate. He runs round the class all the day
cannot sit at one place for a long time. He gets very agitated when the toy in his hand is taken away.
The most probable diagnosis is
   1. Autism
   2. Conduct disorder
   3. Attention deficit hyperactivity disorder
   4. Conversion
   Ans 3

95 . All are true regarding hallucinations except
   1. It represents a state of inner mind’s spatial orientation
   2. It is independent of the observer
   3. It is under voluntary control
   4. It is the perception which occurs in the absence of stimulus
   Ans 3

96 . A patient presents has a history of continuous headache for the past 8yrs. Repeated
examinations had failed to reveal any lesion. The patient is not convinced and is convinced that he
has a tumor in his brain. He is referred to a psychiatrist, who, after examination of his case comes to
a conclusion. The diagnosis is most probably
   1. Hypochondriasis
   2. Somatization
   3. Somatoform pain disorder
   4. Obsessive Compulsive Disorder
   Ans 1

97 . Which of the following behavioral problems would suggest an organic brain lesion?
   1. Formal thought disorder
   2. Auditory hallucinations
   3. Visual hallucinations
   4. Depression
98. Delusions are seen in all the following except
   1. Obsessive compulsive disorder
   2. Depression
   3. Mania
   4. Schizophrenia
   Ans 1

99. A known alcoholic stops taking alcohol for 2 days. After which he develops insomnia, altered sensorium, restlessness. The diagnosis is most likely to be
   1. Delirium tremens
   2. Korsakoff’s psychosis
   3. Conversion
   4. Schizophrenia
   Ans 1

100. A patient was brought with a history of behavioral problems. He has episodes of flailing of the arms and legs and he has no memory of these episodes. The diagnosis is most likely to be
   1. Acute panic disorder
   2. Temporal lobe seizures
   3. Generalized anxiety
   4. Hysteria and conversion disorders
   Ans 2

101. A young lady presents with a history of excessive food intake following which she would induce vomiting. The diagnosis is most likely to be
   1. Binge eating disorder
   2. Bulimia nervosa
   3. Anorexia Nervosa
   4. OCD
   Ans 2

102. Regarding cholestasis of pregnancy, all the following statements are true except
   1. Bilirubin more than 5 mg/dL
   2. SGPT/SGOT ratio less than 60 units
   3. Presence of severe itching
   4. Alkaline phosphatase is increased maximally
   Ans 1

103. A young male patient presenting with infertility underwent semen analysis. His sperm count was 15000 with motility 60% and no clot formation and his sperm count being 30000 with 40% normal cells. The interpretation of this would be
   1. Oligospermia
2. Azoospermia
3. Motility disorder
4. Antisperm antibodies

Ans 1

104. All are true about cephalhematoma except
1. Occurs due to subcutaneous edema
2. Seen mostly over occipital bone
3. Treatment is by aspiration
4. Varies in size when the child cries

Ans 4

105. All are true regarding episiotomy except
1. Increases the size of the birth canal
2. Midline episiotomy causes less bleeding and heals early
3. Involvement of rectum is classified as grade 3/4
4. Higher infection rate in mediolateral episiotomy

Ans 2/4

106. All are indications for cesarean section except
1. Placenta previa grade 4
2. Abruptio placenta
3. Carcinoma cervix Stage IB
4. Active herpetic lesion

Ans 2

107. A patient, Shalu, presents with vaginal discharge. Examination of the discharge reveals the presence of Chlamydial infection. The treatment of choice is
1. Azithromycin + contact tracing
2. Doxycycline + Metronidazole
3. Fluconazole + Doxycycline
4. Metronidazole

Ans 1

108. Which of the following is seen in infant of a diabetic mother?
1. Hypercalcemia
2. Hyperglycemia
3. Increased blood viscosity
4. Hyperkalemia

Ans 3

109. A 45 year old female presents with polymenorrhea of 6 months duration. Which of the following is the next best line of management?
1. Dilatation and curettage
2. Oral contraceptives for 3 cycles
3. Progesterone for 3 cycles
4. Hysterectomy
   Ans 4

110. A patient presents with menorrhagia. All the following are possible treatment modalities except
1. NSAIDs
2. Tranexamic acid
3. Progesterone
4. Clomiphene
   Ans 4

111. In a patient suspected to have polycystic ovarian disease, LH and FSH should be examined in which part of the menstrual cycle?
1. 1-3 days
2. 8-10 days
3. 13-16 days
4. 24-28 days
   Ans 3

112. Endometrial carcinoma is predisposed to by all the following except
1. Ethinyl estradiol
2. Tamoxifen
3. Oral contraceptives
4. Nulliparity
   Ans 3

113. Complete failure of fusion of the mullerian duct leads to
1. Uterus didelphys
2. Arcuate uterus
3. Subseptate uterus
4. Unicornuate uterus
   Ans 1

114. A patient with infertility and PID was investigated and was found in hysterosalpingogram to have beaded fallopian tubes with clubbing of the ampullary end. The diagnosis is most likely to be
1. Gonococcus
2. Chlamydia
3. Tuberculosis
4. Ureaplasma
   Ans 3
115. All the following are causes of breech presentation except
   1. Cornual implantation
   2. Uterine malformation
   3. Fetal malformation
   4. Placenta accreta
      Ans 4

116. Which is true regarding instrumental deliveries
   1. The only pre-requisite is full cervical dilatation
   2. If ventouse fails, forceps may be used
   3. Forceps can be used in breech deliveries
   4. Ventouse cannot be used in rotational deliveries (posterior and transverse presentations)
      Ans 3

117. A 25 year old female, Kamla, with mitral stenosis having Class II symptoms, underwent pregnancy. All the following are done for managing this patient except
   1. Application of outlet forceps to cut short the 2nd stage
   2. After delivery of the placenta, intravenous frusemide to be given
   3. Methergine is to be administered after delivery of the anterior shoulder
   4. Antibiotic is to be given
      Ans 3

118. Which of the following changes occurs in the vagina during pregnancy?
   1. pH increases
   2. Increase in lactobacilli
   3. Increase in anaerobic bacteria
   4. Decrease in glycogen content
      Ans 4

119. A patient presented with sudden onset of amenorrhea, hirsutism and voice changes. Which of the following would help in diagnosis?
   1. Testosterone
   2. 17 hydroxy progesterone
   3. Dihydroxy epi androsterone
   4. LH and FSH
      Ans 1

120. The commonest content in vaginal prolapse is
   1. Urethrocele
   2. Cystocele
   3. Enterocele
   4. Rectocele
121. For a menopausal patient having hot flushes, which of the following can be given as treatment?
   1. Ethinyl estradiol
   2. Progesterone
   3. Gonadotropin
   4. Danazol
       Ans 1

122. Exfoliative dermatitis is seen in all the following except
   1. Pityriasis Rosea
   2. Pityriasis Rubra pilaris
   3. Psoriasis
   4. Drug reaction
       Ans 1

123. In a patient, annular erythematous lesions on the trunk were seen circumscribed by collarete scales. The diagnosis is most likely to be
   1. Pityriasis versicolor
   2. Pityriasis Rosea
   3. Pityriasis rubra pilaris
   4. Lichen planus
       Ans 2

124. Wikham’s striae are seen in
   1. Lichen sclerosis
   2. Lichen planus
   3. Lichen atrophicus
   4. Psoriasis
       Ans 2

125. A patient with psoriasis was started on systemic steroids. After stopping treatment, the patient developed generalized pustules all over his body. The cause is most likely to be
   1. Drug induced reaction
   2. Pustular psoriasis
   3. Bacterial infections
   4. Septicemia
       Ans 2

126. To do myringotomy, the incision is put in the posterior inferior region. This is the preferred region for all the following reasons except
   1. It is easily accessible
   2. Damage to chorda tympani is avoided
3. Damage to ossicular chain does not occur
4. It is the least vascular region.
   Ans 4

127. A false positive fistula test is seen in all the following except
   1. Hypermobile ossicular chain
   2. Labyrinthine fistula
   3. Dead ear
   4. Post fenestration
   Ans 3

128. Weber test is done by
   1. Placing the tuning fork on the vertex and examined after partial occlusion of the auditory canal
   2. Placing the tuning fork on the mastoid and assessing the side of better hearing
   3. Placing the tuning fork on the mastoid and examined after partial occlusion of the auditory canal
   4. Placing the tuning fork on the forehead and by assessing the side of better hearing
   Ans 4

129. An eight month old infant had stridor with respiratory difficulty which worsened on crying. On examination, it was found to have a subglottic reddish mass. All the following can be used in the management except
   1. Tracheostomy
   2. Laser vaporization
   3. Corticosteroid
   4. Radiotherapy
   Ans 4

130. A chronic smoker with history of hoarseness was found on examination to have keratosis of the larynx. All the following are possible treatment modalities except
   1. Laser
   2. Radiotherapy
   3. Stripping of the vocal cord
   4. Partial laryngectomy
   Ans 4

131. The treatment of choice of a glottic cancer with stage $T_1N_0M_0$ is
   1. Brachytherapy
   2. External beam radiotherapy
   3. Laryngectomy
   4. Chemotherapy
   Ans 2
132. A 2 year old child develops acute respiratory distress and was brought to the casualty. On examination, there were decreased breath sounds with wheeze on the right side. The Chest Xray showed diffuse opacity in the right hemithorax. Which of the following is the most likely diagnosis?
   1. Pneumothorax
   2. Foreign body aspiration
   3. Pleural effusion
   4. Unilateral emphysema
   
   Ans  2

133. A young boy, ram lal developed respiratory distress. On examination, the Chest Xray showed hyperinflation of one lung. Which of the following is the most possible diagnosis?
   1. Congenital lobar emphysema
   2. Foreign body aspiration
   3. Bronchiectasis
   4. Atelectasis
   
   Ans  2

134. A 2 year old boy presented with fever. On examination, he had a respiratory rate of 50 per minute with bilateral crepitations and no chest indrawing. Cyanosis was present. Which of the following is the most likely diagnosis?
   1. Pneumonia
   2. No pneumonia
   3. Severe pneumonia
   4. Upper respiratory tract infection
   
   Ans  1

135. Epiphora is
   1. An epiphenomenon of ophthalmic allergy
   2. Excess flow of tears due to blockade of nasolacrimal duct
   3. Ectropion is the most common cause
   4. Due to irritation of cornea by eyelashes
   
   Ans 2

136. You have been referred a case of open angle glaucoma. Which of the following would be important point in diagnosing the case?
   1. Shallow anterior chamber
   2. Optic disc cupping
   3. Narrow angle
   4. Visual acuity and refractive error
   
   Ans 2

137. Tonography is important in
   1. Detecting the formation of aqueous humor
2. Detecting the drainage of aqueous humor
3. Gives continuous intraocular pressure tracings
4. Represents field changes

Ans 2

138. Cone is the most sensitive cell in the retina. It picks up images from a mix of red, blue and yellow colors. Abnormality in color perception needing increased use of red color for normal perception is
1. Protanomaly
2. Deuteranomaly
3. Tritanomaly

Ans 1

139. Which color would be best for foveal color testing?
1. Red and Green
2. Blue and Green
3. Yellow and Green
4. Red and Blue

Ans 1

140. Omar has hypermetropia needs + 1.5 D glasses for distant vision. What would happen to his near vision when his glasses slip down his nose?
1. Distorted
2. Remains unchanged
3. Becomes better
4. Becomes worse

Ans 1

141. A 12 year old child with complaints of headache and decreased vision has visual acuity of 6/36 in the right eye and 6/6 in the left eye. On Retinoscopy at 66 cms, the right eye showed correction of 1.5 D and left eye 5 D. The anterior chamber and fundus of the eye were normal. What may be the cause of decreased vision in the right eye?
1. Amblyopia
2. Anisometropia
3. Optic neuritis
4. Refractive error

Ans 1

142. Oculomotor nerve paralysis causes all the following except
1. Medial rectus
2. Lateral rectus
3. Inferior oblique
4. Levator palpebrae superioris
143. A patient with photophobia and redness of the eye, on examination, showed vertically oval and mid dilated pupil. The diagnosis is
   1. Acute congestive glaucoma
   2. Iridocyclitis
   3. Keratitis
   4. Conjunctivitis
   Ans 1

144. In a patient with Wernicke’s presents with hemianopic pupillary response, the most likely site of involvement is
   1. Optic nerve
   2. Optic tract
   3. Lateral geniculate body
   4. Optic radiation
   Ans 2

145. You are asked to examine the peripheral field of vision of a patient. On examination you normally find decreased field of vision
   1. Upwards
   2. Downwards
   3. Looking towards right side (temporal)
   4. Looking towards left side (Nasal)
   Ans 1

146. Which of the following is seen in Pindborg’s tumor?
   1. Sunray appearance
   2. Onion peel appearance
   3. Driven snow appearance
   4. Cherry Blossom appearance
   Ans 3

147. All the following are true about loculated pleural effusion except
   1. It makes an obtuse angle with the chest wall
   2. The margins are diffuse when viewed end on
   3. Not confined to any bronchopulmonary segment
   4. Air bronchograms are seen within the opacity
   Ans 1

148. The maximum penetration among the following is seen with which ray
   1. Alpha
   2. Beta
3. Gamma
4. Electron beam
   Ans 3

149. In a patient having heavy dense bones, penetration is best achieved by
   1. Increase in mA
   2. Increase in kVp
   3. Increased exposure time
   4. Increased developing time
   Ans 2

150. Measurement of intravascular pressure by a pulmonary catheter should be done
   1. At end expiration
   2. At peak of inspiration
   3. During mid expiration
   4. During mid inspiration
   Ans 2

151. The cumulative pregnancy rate for Levonorgestrel Intrauterine Device (LN-IUD) for a period of 5 years is
   1. 0.5
   2. 1.0
   3. 1.5
   4. 2.0
   Ans

152. About direct standardization all are true except
   1. Age specific death rate is not needed
   2. A standard population is needed
   3. Population should be comparable
   4. Two populations are compared
   Ans 1

153. Active and passive immunity should be given together in all except
   1. Tetanus
   2. Rabies
   3. Measles
   4. Hepatitis B
   Ans 3

154. Which of the following statements is true regarding pertussis?
   1. Neurological complication rate of DPT is 1 in 50000
2. Vaccine efficacy is more than 95%
3. Erythromycin prevents spread of disease between children
4. Leukocytosis correlates with the severity of cough

Ans 3

155. Xavier and Yogender stay in the same hostel of the same university. Xavier develops infection with Group B meningococcus. After a few days, Yogender develops infection due to Group C meningococcus. All the following are true statements except

1. Educate students about meningococcal transmission and take preventive measures
2. Chemoprophylaxis against both Group B and Group C
3. Vaccine prophylaxis of contacts of Xavier
4. Vaccine prophylaxis of contacts of Yogender

Ans 3

156. Acute flaccid paralysis is reported in a child aged

1. 0-3 years
2. 0-5 years
3. 0-15 years
4. 0-25 years

Ans 3

157. The infectivity of chicken pox lasts for

1. Till the last scab falls off
2. 6 days after onset of rash
3. 3 days after onset of rash
4. Till the fever subsides

Ans 2

158. All the following are sexually transmitted infections except

1. Candida
2. Group B streptococcus
3. Hepatitis B
4. Echinococcus

Ans 4

159. Which vaccine is contraindicated in pregnancy?

1. Rubella
2. Diphtheria
3. Tetanus
4. Hepatitis B

Ans 1

160. Positive Schick test indicates
1. Immunity to diphtheria
2. Susceptibility to diphtheria
3. Hypersensitivity to diphtheria
4. Infection with diphtheria
   Ans 2

161. Carriers are important in all the following except
   1. Polio
   2. Typhoid
   3. Measles
   4. Diphtheria
   Ans 3

162. The most important function of sentinel surveillance is
   1. To find total amount of disease in a population
   2. To plan effective control measures
   3. To determine the trend of disease in a population
   Ans 1

163. Iron and Folic acid supplementation forms
   1. Health promotion
   2. Specific protection
   3. Primordial prevention
   4. Primary prevention
   Ans 2

164. Serial interval is
   1. Time gap between primary and secondary case
   2. Time gap between index and primary case
   3. Time taken for a person from infection to develop maximum infectivity
   4. The time taken from infection till a person infects another person
   Ans 1

165. All the following are advantages of case control studies except
   1. Useful in rare diseases
   2. Relative risk can be calculated
   3. Odds ratio can be calculated
   4. Cost-effective and inexpensive
   Ans 2

166. For a 60 kg Indian male, the minimum daily protein requirement has been calculated to be 40 g (mean) ± 10 (Standard deviation). The recommended daily allowance of protein would be
   1. 60 g/ day
2. 70 g/day  
3. 40 g/day  
4. 50 g/day  

Ans 1

167. Cereals and proteins are considered complementary since

1. Cereals are deficient in methionine
2. Cereals are deficient in methionine and pulses are deficient in lysine
3. Cereals are deficient in lysine and pulses are deficient in methionine
4. Both cereals and pulses contain threonine  

Ans 3

168. The biological oxygen demand indicates

1. Organic matter
2. Bacterial content
3. Anaerobic bacteria
4. Chemicals  

Ans 1

169. A population study showed a mean glucose of 86 mg/dL. In a sample of 100 showing normal curve distribution, what percentage of people have glucose above 86%?

1. 65  
2. 50  
3. 75  
4. 60  

Ans 2

170. In a study, variation in cholesterol was seen before and after giving a drug. The test which would give its significance is

1. Unpaired t test
2. Paired t test
3. Chi square test
4. Fisher’s test  

Ans 2

171. The correlation between variables A and B in a study was found to be 1.1. This indicates

1. Very strong correlation
2. Moderately strong correlation
3. Weak correlation
4. Computational mistake in calculating correlation  

Ans 4

172. The association between coronary artery disease and smoking was found to be as follows.
### Coronary Art Dis versus No Coronary Art Dis

<table>
<thead>
<tr>
<th></th>
<th>Coronary Art Dis</th>
<th>No Coronary Art Dis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Smokers</strong></td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td><strong>Nonsmokers</strong></td>
<td>20</td>
<td>30</td>
</tr>
</tbody>
</table>

The Odds ratio can be estimated as:

1. 0.65
2. 0.8
3. 1.3
4. 2.25

Ans 4

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173. In a prospective study comprising 10000 subjects, 6000 subjects were put on beta carotene and 4000 were not. 3 out of the first 6000 developed lung cancer and 2 out of the second 4000 developed lung cancer. What is the interpretation of the above?

1. Beta carotene is protective in lung cancer
2. Beta carotene is not protective in lung cancer
3. The study design is not sufficient to draw any meaningful conclusions
4. Beta carotene is carcinogenic

Ans 2

174. The best method to show the association between height and weight of children in a class is by:

1. Bar chart
2. Line diagram
3. Scatter diagram
4. Histogram

Ans 4

175. In a low prevalence area for Hepatitis B, a double ELISA test was decided to be performed in place of a single test which used to be done. This would cause an increase in the:

1. Specificity and positive predictive value
2. Sensitivity and positive predictive value
3. Sensitivity and negative predictive value
4. Specificity and negative predictive value

Ans 1

176. Retroviruses contain:

1. DNA polymerase
2. Reverse transcriptase
3. Segmented DNA
4. ds DNA
   Ans 2
177. Ureteric constriction is seen at all the following positions except
   1. Ureteropelvic junction
   2. Ureterovesical junction
   3. Crossing of iliac artery
   4. Ischial spine
   Ans 4
178. A patient with complete transaction of the spinal cord at the C7 level will show all the following except
   1. Anesthesia below the level of lesion
   2. Areflexia
   3. Hypotension
   4. Limited respiratory effort
   Ans 4
179. In unexplained hypotension, which part of the vertebra should be examined?
   1. Upper cervical
   2. Lumbar
   3. Thoracic
   4. Lower cervical
   Ans 3
180. In dividing cells, spindle is formed by
   1. Ubiquitin
   2. Tubulin
   3. Laminin
   4. Keratin
   Ans 2
181. The superficial external pudendal artery is a branch of
   1. Femoral artery
   2. External iliac artery
   3. Internal iliac artery
   4. Aorta
   Ans 1
182. The weight of the upper limb is transmitted to the axial skeleton by
   1. Coracoclavicular ligament
2. Coracoacromial ligament
3. Costoclavicular ligament
4. Coracohumeral ligament

Ans 1

183. Which of the following muscles is supplied by mandibular nerve

1. Masseter
2. Buccinator
3. Tensor veli palati
4. Posterior belly of digastric

Ans 3

184. Elastic cartilage is found in

1. Auditory tube
2. Nasal septum
3. Articular cartilage
4. Costal cartilage

Ans 1

185. The sensory supply of the palate is through all the following except

1. Facial nerve
2. Hypoglossal nerve
3. Glossopharyngeal nerve
4. Maxillary division of trigeminal

Ans 2

186. Diaphragmatic hernia can occur through all the following except

1. Esophageal opening
2. Costovertebral triangle
3. Costal and sternal attachment of diaphragm
4. Inferior vena caval opening

Ans 1

187. All the following are true regarding blood supply to the kidney except

1. Arcuate artery is an end artery
2. It is a site for portal systemic anastomosis
3. The renal artery divides into five segmental arteries before entering the hilum

Ans 2

188. All the following are derivatives of the neural crest except

1. Melanocyte
2. Adrenal medulla
3. Sympathetic ganglia
4. Cauda equina
   Ans 4

189. Which of the following is true regarding gastrulation?
   1. Leads to formation of the three germ layers
   2. Occurs at the caudal end prior to the cranial end
   3. Inner cell mass gives rise to the yolk sac
   4. Usually occurs at 4 weeks
      Ans 1

190. All the following are true about dorsal root ganglia except
   1. Occurs in the cranial nerves
   2. Derivative of neural crest
   3. Contains multipolar cells
   4. Contains lipofuscin granules
      Ans 3

191. Which of the following is required for the synthesis of nitric oxide?
   1. NADPH, NAD, FMN
   2. Dioxygenase
   3. NADH
   4. NADH, FAD
      Ans 4

192. Which of the following is true regarding hydroxyl ethyl starch?
   1. It is an anesthetic agent
   2. It is a plasma expander
   3. It is a crystalloid
   4. Used as a nutritional agent
      Ans 2

193. In a well fed state, acetyl CoA obtained from diet is least used in the synthesis of
   1. Palmitoyl CoA
   2. Citrate
   3. Acetoacetate
   4. Oxalosuccinate
      Ans 3

194. Substrate level phosphorylation is seen in conversion of
   1. Acetoacetate to alpha keto glutarate
   2. Succinyl CoA to Succinate
   3. Fumarate to malate
   4. Succinate to fumarate
195. Elasticity of the corneal layer of skin is due to the presence of
   1. Histidine
   2. Keratin
   3. Lysine
   4. Cysteine
   Ans 4

196. Apo B 48 and apo B 100 differ due to
   1. RNA splicing
   2. Apo B gene
   3. Chromosomal loci
   4. Gene rearrangement
   Ans 1

197. "All enzymes are not proteins." This statement is justified by
   1. All enzymes do not follow the Michaelis Menten hypothesis
   2. RNA acts as ribozymes
   3. Antibodies take a part in the catalysis of many reactions
   4. Metals are involved in attachment and catalysis
   Ans 2

198. Enzymes mediating transfer of one molecule to another are
   1. Transferases
   2. Oxidases
   3. Lyases
   4. Peptidases
   Ans 1

199. In oxidative phosphorylation, the ATP production and respiratory chain are linked by
   1. Chemical methods
   2. Physical methods
   3. Chemiosmotic methods
   4. Conformational changes
   Ans 3

200. In which of the following reactions is Magnesium required?
   1. Na-K ATPase
   2. Transferases
   3. Phosphatases
   4. Aldolases
   Ans 1
201. Thiamine level is best monitored by
   1. Transketolase level in blood
   2. Thiamine level in blood
   3. G6PD activity
   4. Reticulocytosis

   Ans 1

202. Vitamin B\textsubscript{12} and folic acid supplementation in megaloblastic anemia leads to the improvement of anemia due to
   1. Increased DNA synthesis in bone marrow
   2. Increased Hemoglobin production
   3. Erythroid hyperplasia
   4. Increased iron absorption

   Ans 1

203. Phenylalanine is the precursor of all the following except
   1. Tyrosine
   2. Epinephrine
   3. Thyroxine
   4. Melatonin

   Ans 4

204. All the following can be used to detect mutation except
   1. Single chain polymorphism
   2. Ligase chain reaction
   3. Polymerase chain reaction
   4. Genome sequence chain

   Ans 2

205. Sudden decrease in serum calcium is associated with
   1. Increased thyroxin and PTH
   2. Increased phosphate
   3. Increased sensitivity of muscle and nerve
   4. Cardiac conduction abnormality

   Ans 3

206. Ablation of the "somatosensory area 1" of the cerebral cortex leads to
   1. Total loss of pain sensation
   2. Total loss of touch sensation
   3. Loss of tactile localization but not two point discrimination
   4. Loss of tactile localization and two point discrimination
207. Nonshivering thermogenesis in adults is due to
1. Thyroid hormone
2. Brown fat between the shoulders
3. Noradrenaline
4. Muscle metabolism
   Ans 1

208. In metabolic acidosis, which of the following changes are seen?
1. Increased $K^+$ excretion
2. Increased $K^+$ reabsorption from tubules
3. Increased $Na^+$ excretion
4. Increased $Na^+$ reabsorption
   Ans 2

209. Tropomyosin is involved in
1. Helps in the fusion of actin and myosin
2. Covers myosin and prevents attachment of actin and myosin
3. Slides over myosin
4. Causes $Ca^{2+}$ release
   Ans 2

210. Entropy in a biological system does not increase because
1. It is an open system
2. It is a closed system
3. It is governed by vitalism
4. It is not related to thermodynamics
   Ans 2

211. Which of the following is true regarding a system which favors oscillatory responses?
1. Proportional component
2. Has a greater gain
3. Has a lesser gain
4. Positive feedback system
   Ans 2

212. The most common cause for female pseudohermaphroditism is
1. Ovarian dysgenesis
2. Congenital adrenal hyperplasia
3. Virilising ovarian tumors
4. Exogenous androgen
213. In a chronic alcoholic all the following are seen in the liver except
   1. Fatty degeneration
   2. Chronic hepatitis
   3. Granuloma formation
   4. Cholestatic hepatitis

   Ans 3

214. All the following are causes for granuloma of the liver except
   1. Sarcoidosis
   2. Candidiasis
   3. Hepatic metastasis
   4. Halothane

   Ans 3

215. Corkscrew esophagus is seen in which of the following conditions?
   1. Carcinoma esophagus
   2. Scleroderma
   3. Achalasia cardia
   4. Diffuse esophageal spasm

   Ans 4

216. In polycythemia vera, all the following are seen except
   1. Hyperuricemia
   2. Thrombosis
   3. Evolution into acute leukemia
   4. Spontaneous bacterial infection

   Ans 4

217. All the following are seen in paroxysmal nocturnal hemoglobinuria except
   1. Increased leukocyte alkaline phosphatase
   2. Aplastic anemia
   3. Thrombosis
   4. Iron deficiency anemia

   Ans 1

218. In thrombotic thrombocytopenic purpura, all the following are seen except
   1. Fever
   2. Hypertension
   3. Thrombocytopenia
   4. Anemia

   Ans 2
219. In Henoch-Schonlein purpura, which of the following is seen?
   1. Blood in stool
   2. Recurrent infections
   3. Thrombocytopenia
   4. Intracranial hemorrhage
      Ans 1

220. Increased venous thrombosis in pregnancy is due to
   1. Increased antithrombin III levels
   2. Increased hepatic production of clotting factors
   3. Changes in blood viscosity
   4. Increased progesterone
      Ans 2

221. An 18 year old girl, Vimla, was diagnosed to have ulcerative colitis. All the following conditions are associated with it except
   1. Sclerosing cholangitis
   2. Iritis
   3. Ankylosing spondylitis
   4. Pancreatitis
      Ans 4

222. A patient with history of wheezing, bronchospasm and hemoptysis has bilateral perihilar bronchiectatic shadows on Chest skiagram. The diagnosis is most likely to be
   1. Idiopathic pulmonary fibrosis
   2. Sarcoidosis
   3. Allergic bronchopulmonary aspergillosis
   4. Fibrosing alveolitis
      Ans 3

223. HLA association in Diabetes mellitus is seen in
   1. Type I
   2. Type II
   3. MODY
   4. Malnutrition associated
      Ans 1

224. In primary tuberculosis, all the following are seen except
   1. Cavitation
   2. Caseation
   3. Calcification
   4. Langhan giant cell
225. The most common tumor of the salivary gland is
1. Mucoepidermoid tumor
2. Warthin’s tumor
3. Acinic cell tumor
4. Pleomorphic adenoma
Ans 4

226. Crescents in renal biopsy is seen in
1. Membranous Glomerulonephritis
2. Membranoproliferative Glomerulonephritis
3. Rapidly progressive Glomerulonephritis
4. Post Streptococcal Glomerulonephritis
Ans 3

227. Necrotizing papillitis is seen in all except
1. Sickle cell disease
2. Tuberculous pyelonephritis
3. Diabetes mellitus
4. Analgesic nephropathy
Ans 2

228. All the following are seen in asbestosis except
1. Mesothelioma
2. Pleural plaque
3. Calcification
4. Diffuse interstitial fibrosis
Ans 4

229. A 10 year old boy, Pappu, died of acute rheumatic fever. All the following can be expected on autopsy except
1. Aschoff nodules
2. Rupture of chordae tendinae
3. MacCallum patch
4. Fibrinous pericarditis
Ans 2

230. Kamli, a 50 year old lady presents episodic hypertension and gives a history of repeated episodes of flushing. All the following can be associated with this except
1. von Hippel Lindau’s disease
2. Tuberous sclerosis
3. Marfan syndrome


4. von Recklinghausen’s disease
   Ans 3

231. The intestinal biopsy findings in celiac sprue are all except
   1. Infiltration of lymphocytes in the lamina propria
   2. Crypt hyperplasia
   3. Mucosal thickening
   4. Inflammatory cells in submucosa
   Ans 3

232. An intestinal biopsy specimen showed macrophages with partially and completely digested bacteria. Which of the following conditions could produce such a picture?
   1. Whipple’s disease
   2. Immunoproliferative Small Intestinal Disease
   3. Cholera
   4. Lymphoma
   Ans 1

233. All the following are true about large intestine except
   1. Large intestine secretes acidic mucus which helps in the formation of stools
   2. It is a site of mucocutaneous junction
   3. Its epithelium contains goblet cells in large numbers
   4. Absorbs salt and water
   Ans 1

234. Disease or infarction of neurological tissue causes it to be replaced by
   1. Fluid
   2. Neuroglia
   3. Proliferation of adjacent nerve cells
   4. Blood vessel
   Ans 2

235. A 2 year old child with Down syndrome was investigated. Her father was found to have a balanced 21-21 translocation. What is the chance of the next offspring to have Down syndrome?
   1. 0%
   2. 4%
   3. 50%
   4. 100%
   Ans 3

236. The tumor most commonly metastasizing to bone is
   1. Neuroblastoma
   2. Wilm’s tumor
3. Glioma
4. Sarcoma
   Ans 1

237. Which of the following does not cause interstitial lung disease?
   1. Tobacco smoke
   2. Sulfur dioxide
   3. Thermophilic actinomycetes
   4. Coal dust
      Ans 1

238. The most common inheritance pattern of congenital heart disease is
   1. Autosomal dominant
   2. Autosomal recessive
   3. Sporadic mutations
   4. Multifactorial
      Ans 4

239. In granuloma, epithelial and giant cells are derived from
   1. T cells
   2. B cells
   3. Plasma cells
   4. Monocyte/ macrophages
      Ans 4

240. Gouty tophi for microscopic examination is transferred in
   1. Formalin
   2. Alcohol
   3. Distilled water
   4. Normal saline
      Ans 2

241. The most common genetic disorder causing liver disease in children is
   1. Hemochromatosis
   2. Alpha 1 antitrypsin deficiency
   3. Glycogen storage diseases
   4. Cystic fibrosis
      Ans 2?

242. Which among the following shows Autosomal dominant inheritance 'except' (given in exam!!)
   1. Sickle cell anemia
   2. Cystic fibrosis
   3. Hereditary spherocytosis
4. Glucose 6 phosphate dehydrogenase deficiency  
   Ans 3 (treat as if there is no misprint)

243. All the following statements are true regarding Losartan except  
   1. It is a competitive angiotensin receptor antagonist  
   2. It has a long acting active metabolite  
   3. Associated with negligible cough  
   4. Causes hyperuricemia  
   Ans 4

244. All the following are selective beta blockers except  
   1. Esmolol  
   2. Bisoprolol  
   3. Acebutolol  
   4. Celiprolol  
   Ans 4

245. A patient on treatment for glaucoma develops blepharoconjunctivitis. The drug implicated is  
   1. Dipivefrine  
   2. Pilocarpine  
   3. Lanatoprost  
   4. Timolol  
   Ans 4

246. All the following drugs cause renal failure except  
   1. Cephaloridine  
   2. Amphoterecin B  
   3. Cefoperazone  
   4. Gentamicin  
   Ans 3

247. Drug A and drug B are 2 drugs to treat a skin lesion. Drug A cured 95% adults and children. Drug B cured 47% adults and 90% children. Drug A was twice as costly as drug B. Two general practitioners, Dr. Raman and Dr. Yogender use these drugs. Dr. Raman prescribes drug A to all patients. Dr. Yogender prescribes drug B at first and drug A if there is no response to drug B. Without considering indirect costs, which of the following is incorrect?  
   1. Drug A is more beneficial than B in adults  
   2. Drug B is more cost effective than drug A in children  
   3. Dr. Yogender’s approach is more cost effective than Dr. Raman’s for children  
   4. Dr. Raman’s approach is more cost effective than Dr. Yogender’s for children  
   Ans 4

248. Regarding efficacy and potency of a drug, all are true except  
   1. In a clinical setup, efficacy is more important than potency
2. The log dose response curve, the height of the curve corresponds with efficacy
3. \( ED_{50} \) of the drug corresponds to efficacy
4. For a given pharmacological effect, different drugs should have different efficacy

Ans 4

249. A highway truck driver has profuse rhinorrhea and sneezing. Which among the following drugs would you prescribe to him?
   1. Pheniramine
   2. Promethazine
   3. Dimenhydrinate
   4. Cetrizine

Ans 4

250. A 60 year old man taking opium for 20 years stops suddenly and presents after 2 days. Which of the following is likely to occur in him due to withdrawal?
   1. Rhinorrhea
   2. Pupillary constriction
   3. Hypotension
   4. Drowsiness

Ans 1

251. A 60 year old man taking opium for 20 years stops suddenly and presents after 2 days. Which of the following is likely to occur in him due to withdrawal?
   1. Rhinorrhea
   2. Pupillary constriction
   3. Hypotension
   4. Drowsiness

Ans 1

252. Digoxin is contraindicated in
   1. Supraventricular tachycardia
   2. Atrial fibrillation
   3. Congestive heart failure
   4. Hypertrophic obstructive cardiomyopathy

Ans 4

253. Gemcitabine is effective in cancers of the
   1. Head and neck
   2. Pancreas
   3. Lung
   4. Soft tissue sarcoma

Ans 2
254. Tianeptine is an antidepressant which is very popular nowadays. It’s mechanism of action is by
1. Selective serotonin reuptake enhancer
2. Selective norepinephrine reuptake inhibitor
3. Selective serotonin reuptake inhibitor
4. Norepinephrine agonist
   Ans 1

255. Which of the following is not effective in tinea versicolor?
1. Clotrimazole
2. Ketoconazole
3. Griseofulvin
4. Selenium sulfide
   Ans 3

256. Which of the following drug does not cross the placenta?
1. Carbimazole
2. Heparin
3. Diazepam
4. Phenytin
   Ans 2

257. Which of the following undergoes hepatic metabolism before it is excreted?
1. Phenytin
2. Diazepam
3. Penicillin G
4. Cimetidine
   Ans 2

258. The primary mechanism of action of fluoride on topical application is
1. Conversion of hydroxyapatite to fluoroapatite by replacing the OH ions
2. Inhibition of plaque bacteria
3. Increases anaerobic bacteria
4. Improves the tooth morphology
   Ans 1

259. In a patient taking oral contraceptive, the chance of pregnancy increases after taking which of the following drugs?
1. Phenytin
2. Griseofulvin
3. Ciprofloxacin
4. Cimetidine
   Ans 1/2
260. Barbiturates are absolutely contraindicated in which of the following conditions?
1. Kernicterus
2. Epilepsy
3. Acute intermittent porphyria
4. Alcoholics
   Ans 3

261. The duration of therapy with Griseofulvin for tinea unguium is
1. 4 weeks
2. 6 weeks
3. 2 months
4. 3 months
   Ans 4

262. The renal toxicity of aminoglycosides is increased by all the following except
1. Prior aminoglycoside therapy
2. Concomitant penicillin administration
3. Hypokalemia
4. Advanced age
   Ans 2

263. Proton pump inhibitors are most effective when
1. Given before meals
2. Given with meals
3. Along with an H₂ blocker
4. Given after meals
   Ans 1

264. Hepatic granuloma is caused by which of the following?
1. Alcohol
2. Amiodarone
3. Cimetidine
4. Metronidazole
   Ans 2

265. All the following belong to the steroid receptor superfamily except
1. Vitamin D₃ receptor
2. Thyroid receptor
3. Retinoid receptor
4. Epinephrine receptor
   Ans 4
266. The mechanism of action of sodium nitroprusside is
   1. Increases cAMP
   2. Increases guanylate cyclase
   3. Calcium channel blocker
   4. K channel opener
   Ans 2

267. Which of the following combination is correct
   1. Deferoxamine - lead
   2. Penicillamine - Copper
   3. Dimercaprol - Iron
   4. EDTA - Arsenic
   Ans 2

268. Which of the following is the drug of choice for hypertensive uveitis?
   1. Lanatoprost
   2. Phosphatidyl iodine
   3. Divinyl epinephrine
   4. Pilocarpine
   Ans 3

269. All the following are transmitted by blood transfusion (EXCEPT: not there in exam!!)
   1. Hepatitis G
   2. Cytomegalovirus
   3. Dengue
   4. Parvovirus B 19
   Ans 3

270. In a patient, corneal scraping reveals narrow angled septate hyphae. Which of the following is the likely etiologic agent?
   1. Mucor
   2. Aspergillus
   3. Histoplasma
   4. Candida
   Ans 2

271. The most common cause of ASOM in children is
   1. Streptococcus pneumonia
   2. Hemophilus influenza
   3. E. coli
   4. Moraxella
   Ans 1
The most common cause of osteomyelitis is
1. Staphylococcus aureus
2. Salmonella
3. Streptococcus
4. Tuberculosis
Ans 1

Genital elephantiasis is seen in
1. Donovaniasis
2. Lymphogranuloma venerum
3. Herpes simplex
4. Syphilis
Ans 2

Bacteria acquire characteristics by all of the following except
1. Through plasmids
2. Incorporating part of host DNA
3. Through bacteriophages
4. Through conjugation
Ans 2

An 8 year old patient presented with fever and cervical lymphadenopathy with prior history of sore throat. There was no hepatomegaly. The peripheral blood smear shows more than 20 lymphoplasmacytoid cells. The diagnosis is most likely to be
1. Tuberculosis
2. Infectious mononucleosis
3. Acute leukemia
4. Influenza
Ans 2

Epstein Barr virus causes all the following except
1. Infectious mononucleosis
2. Measles
3. Nasopharyngeal carcinoma
4. Non Hodgkin's lymphoma
Ans 2

In a patient with typhoid, diagnosis after 15 days of onset of fever is best done by
1. Blood culture
2. Widal
3. Stool culture
4. Urine culture  
   Ans 2

278. Heat stable enterotoxin causing food poisoning is caused by all the following except
   1. Bacillus cereus  
   2. Yersinia enterocolitica  
   3. Staphylococcus  
   4. Clostridium perfringens  
   Ans 4

279. Which of the following is transmitted by Rat urine?
   1. Leptospira  
   2. Listeria  
   3. Legionella  
   4. Mycoplasma  
   Ans 1

280. All the following are true about listeria except
   1. Transmitted by contaminated cheese  
   2. Gram negative bacteria  
   3. Causes abortion in pregnancy  
   4. Causes meningitis in neonates  
   Ans 2

281. A patient, Gobi, had lepromatous leprosy. Which of the following is true regarding globi in leprosy?
   1. Consists of lipid laden macrophages  
   2. Consists of macrophages filled with bacteria  
   3. Consists of neutrophils filled with bacteria  
   4. Degenerated neural tissue  
   Ans 2

282. Staphylococcus aureus differs from staphylococcus epidermidis by
   1. Is coagulase positive  
   2. Forms white colonies  
   3. A common cause of UTI  
   4. Causes endocarditis in drug addicts  
   Ans 1

283. HIV virus is a
   1. Single stranded DNA  
   2. Single stranded RNA  
   3. Double stranded RNA
4. Double stranded DNA
   Ans 2

284. Regarding HIV which of the following is not true
   1. It is a DNA retrovirus
   2. It infects CD4 cell
   3. It produce hypergammaglobulinemia by activation of B cells
   4. It can infect monocytes also
      Ans 1

285. CMV retinitis in HIV occurs when the CD4 counts fall below
   1. 50
   2. 100
   3. 200
   4. 150
      Ans 1

286. Which of the following statements is true about Bacteroides
   1. It is a gram positive bacilli
   2. It is strictly aerobic
   3. It can cause peritonitis
   4. Presence in stools culture indicates need for treatment
      Ans 3

287. Which of the following is common to NK cells and Cytotoxic T cells?
   1. Antibody production
   2. Antiviral action
   3. Antibody is required for cytotoxicity
   4. HLA class II is involved
      Ans 2

288. Neonatal thymectomy leads to
   1. Decreased size of germinal center
   2. Decreased size of paracortical areas
   3. Increased antibody production by B cells
   4. Increased bone marrow production of lymphocytes
      Ans 2

289. Intestinal epithelial cells contain
   1. T cells
   2. B cells
   3. Plasma cells
4. Macrophages
   Ans 3

290. All the following are true about acute infection except
   1. Specific IgM antibody occurs in acute infection
   2. Specific IgM indicates rubella immune status
   3. Immunofluorescence indicates influenza infection
   4. ELISA is useful in Hepatitis B infection
      Ans 2?

291. IL-1 is involved in
   1. T lymphocyte activation
   2. Decreased wound healing
   3. Gain in body weight
   4. Macrophage activation
      Ans 1

292. At autopsy, a body was found to have fine froth from the nose and mouth which increased on compression of the chest. Which of the following is the most likely cause of death?
   1. Opioid poisoning
   2. Hanging
   3. Drowning
   4. Cyanide poisoning
      Ans 3

293. A patient with myocardial infarction, after death, underwent autopsy. Microscopic examination of the cardiac tissue as part of autopsy revealed granulation tissue. The time from infarction till death is most likely to be
   1. < 24 hours
   2. < 2 hours
   3. < 10 days
   4. < 1 month
      Ans 3

294. A skull was found which had an oval nasal opening, horseshoe shaped palate, round orbits and a cephalic index greater than 80. The race to which it belongs is most probably belongs is most probably
   1. Negroes
   2. Mongols
   3. Caucasians
   4. Aryans
      Ans 2

295. On firearm injury, blackish discoloration around the entry wound is due to
   1. Flame
2. Smoke
3. Deposition of unburnt powder
4. Hot gases
   Ans 3
296. In cattle poisoning due to the ingestion of linseed oil, which of the following is incriminated
   1. Aconite
   2. Atropine
   3. Pilocarpine
   4. Physostigmine
   Ans 1
297. Endotracheal intubation prior to gastric lavage is done in cases of poisoning
   1. To prevent aspiration
   2. Due to fear of cardiac arrest
   3. For ventilatory support
   4. For easy passage of gastric tube
   Ans 3
298. A drug addict gives history of tactile sensations all over his body. He is likely to have consumed
   1. Cannabis
   2. Cocaine
   3. Heroin
   4. Opium
   Ans 2
299. Tentative cuts are seen in a case of
   1. Homicide
   2. Suicide
   3. Accident
   4. Fall from height
   Ans 2
300. Tests for heavy metals are all except
   1. Harrison and Gilfroy’s test
   2. Neutron
   3. Atomic spectroscopy
   4. Paraffin test
   Ans 4