

MCI 2002
SOLVED
QUESTIONS AND ANSWERS

Anatomy

Q 1. All the following are derivatives of the neural crest, except:

- A. Melanocyte
- B. Adrenal medulla
- C. Sympathetic ganglia
- D. Cauda equina

Ans. D

Q 2. Which of the following is true regarding gastrulation:

- A. Establishes all the three germ layers
- B. Occurs at the caudal end of the embryo prior to its cephalic end
- C. Involves the hypoblastic cells of inner cell mass
- D. Usually occurs at 4 weeks

Ans. A

Q 3. All the following features are seen in neurons from dorsal root ganglia, except:

- A. They have centrally located nuclei
- B. They are derived from neural crest cells
- C. They are multipolar
- D. They contain lipofuscin granules

Ans. C

Q 4. Elastic cartilage is found in:

- A. Auditory tube
- B. Nasal septum
- C. Articular cartilage
- D. Costal cartilage

Ans. A

Q 5. The weight of the upper limb is transmitted to the axial skeleton by:

- A. Coracoclavicular ligament
- B. Coracoacromial ligament
- C. Costoclavicular ligament
- D. Coracohumeral ligament

Ans. A

Q 6. The superficial external pudendal artery is a branch of:

- A. Femoral artery
- B. External iliac artery
- C. Internal iliac artery
- D. Aorta

Ans. A

Q 7. Diaphragmatic hernia can occur through all the following, except:

- A. Esophageal opening
- B. Costovertebral triangle
- C. Costal and sternal attachment of diaphragm
- D. Inferior vena cava opening

Ans. D

Q 8. Ureteric constriction is seen at all the following positions, except:

- A. Ureteropelvic junction
- B. Ureterovesicle junction
- C. Crossing of iliac artery
- D. Ischial spine

Ans. D

Q 9. All the following are true regarding blood supply to the kidney , except:

- A. Stellate veins drain superficial zone
- B. It is site of portosystemic anastomosis
- C. The renal artery divides into five segmental arteries before entering the hilum
- D. Its segmental arteries are end-arteries

Ans. B

Q 10. A patient with external hemorrhoids develops pain while passing stools. The nerve mediating this pain is:

- A. Hypogastric nerve
- B. Pudendal nerve
- C. Splachnic visceral nerve
- D. Sympathetic plexus

Ans. B

Q 11. Which of the following muscles is supplied by mandibular nerve:

- A. Masseter
- B. Buccinator
- C. Tensor veli palati
- D. Posterior belly of digastric

Ans. C

Q 12. The sensory supply of the palate is through all of the following, except:

- A. Facial nerve
- B. Hypoglossal nerve
- C. Glossopharyngeal nerve
- D. Maxillary division of trigeminal nerve

Ans. B

Q 13. All of the following are features of large intestine, except:

- A. Large intestine secretes acidic mucus which helps in formation of stools
- B. It is a site of mucocutaneous junction
- C. Its epithelium contains goblets cells in large numbers
- D. Absorbs salt and water

Ans. A

Q 14. In flexion and abduction of shoulder all of the following structures are compressed except:

- A. Subacromial bursa
- B. Long head of biceps
- C. Suprascapular nerve
- D. Supraspinatus tendon

Ans. C

Physiology

Q 15. SI unit for measuring blood pressure is:

- A. Torr
- B. mmHg
- C. kPa
- D. Bar

Ans. C

Q 16. Glucose mediated insulin release is mediated through:

- A. ATP dependent K⁺ channels
- B. cAMP
- C. Carrier modulators
- D. Receptor phosphorylation

Ans. A

Q 17. Sudden decrease in serum calcium is associated with:

- A. Increased thyroxine and PTH secretion
- B. Increased phosphate
- C. Increased excitability of muscle and nerve
- D. Cardiac conduction abnormalities

Ans. C

Q 18. Ablation of the 'somatosensory area 1' of the cerebral cortex leads to:

- A. Total loss of pain sensation
- B. Total loss of touch sensation
- C. Loss of tactile localization but not of two point discrimination
- D. Loss of tactile localization and two point discrimination

Ans. D

Q 19. Non shivering thermogenesis in adults is due to:

- A. Thyroid hormone
- B. Brown fat between the shoulders
- C. Adrenaline from adrenal medulla
- D. Muscle metabolism

Ans. C

Q 20. In metabolic acidosis, which of the following changes are seen:

- A. Increased K⁺ excretion
- B. Decreased K⁺ excretion
- C. Increased Na⁺ excretion
- D. Increased Na⁺ reabsorption

Ans. B

Q 21. Tropomyosin:

- A. Helps in the fusion of actin and myosin
- B. Covers myosin and prevents attachments of actin and myosin
- C. Slides over myosin
- D. Causes Ca²⁺ release

Ans. B

Q 22. TRH stimulation testing is useful in diagnosis of disorders of following hormones:

- A. Insulin
- B. ACTH
- C. Prolactin
- D. PTH

Ans. C

Q 23. During muscular exercise all are seen except:

- A. Increase in blood flow to muscles
- B. Stroke volume increases
- C. O₂ dissociation curve shifts to left
- D. O₂ consumption increases

Ans. C

Biochemistry

Q 24. "All enzymes are not proteins." This statement is justified by:

- A. All enzymes do not follow the Michaelis Menten hypothesis
- B. RNAs act as ribozymes
- C. Antibodies take part in the catalysis of many reactions
- D. Metals are involved in attachment to enzymes and catalysts

Ans. B

Q 25. Enzymes mediating transfer of one molecule to another are:

- A. Transferases
- B. Oxidases
- C. Lysases
- D. Peptidases

Ans. A

Q 26. In which of the following reactions is magnesium required:

- A. Na⁺K⁺ ATPase
- B. Dismutase
- C. Phosphatase
- D. Aldolase

Ans. A

Q 27. In oxidative phosphorylation, the ATP production and respiratory chain are linked by:

- A. Chemical methods
- B. Physical methods
- C. Chemiosmotic methods
- D. Conformational changes

Q Ans. C

Q 28. Thiamine level is best monitored by:

- A. Transketolase level in RBC
- B. Thiamine level in blood
- C. G-6-PD activity
- D. Reticulocytosis

Ans. A

Q 29. Vitamin B12 and folic acid supplementation in megaloblastic anemia leads to the improvement of anemia due to:

- A. Increased DNA synthesis in bone marrow
- B. Increased hemoglobin production
- C. Erythroid hyperplasia
- D. Increased iron absorption

Ans. A

Q 30. Nitric oxide synthase:

- A. Is inhibited by Ca⁺⁺
- B. Catalyses a dioxygenase reaction
- C. Accepts electrons from NADH
- D. Requires NADH, FAD, FMN & heme iron

Ans. D

Q 31. Phenylalanine is the precursor of all the following, except:

- A. Tyrosine
- B. Epinephrine
- C. Thyroxine
- D. Melatonin

Ans. D

Q 32. In a well fed state, acetyl CoA obtained from diet is least used in the synthesis of:

- A. Palmitoyl CoA
- B. Citrate
- C. Acetoacetate
- D. Oxalosuccinate

Ans. C

Q 33. Substrate level phosphorylation in citric acid cycle is seen in the conversion of: -ketoglutarate to

- A. Acetoacetate to Succinyl CoA
- B. Succinyl CoA to succinate
- C. Fumarate to malate
- D. Succinate to fumarate

Ans. B

Q 34. Apo B48 and apo B100 are expressed as two different apo-proteins because of difference in:

- A. RNA editing
- B. RNA splicing
- C. Chromosomal loci
- D. Apo-B gene

Ans. A

Q 35. All the following can be used to detect mutation, except:

- A. Single strand conformational polymorphism
- B. Ligase chain reaction
- C. Polymerase chain reaction
- D. DNA sequencing

Ans. B

Q 36. Which of the following is true regarding hydroxy ethyl starch:

- A. It is an anesthetic agent
- B. It is a plasma expander
- C. It is a crystalloid
- D. Used as a nutritional agent

Ans. B

Q 37. Elasticity of the corneal layer of SKIN is due to the presence of:

- A. Histidine
- B. Keratin
- C. Lysine
- D. Cysteine

Ans. B

Q 38. In dividing cells, spindle is formed by:

- A. Ubiquitin
- B. Tubulin
- C. Laminin
- D. Keratin

Ans. B

Q 39. Entropy in a biological system is constant because:

- A. It is an open system
- B. It is a closed system
- C. It is governed by vitalism
- D. Has exothermic-endothermic reactions

Ans. D

Q 40. Which of the following is true regarding a system which favours oscillatory responses:

- A. Has proportional component
- B. Has a greater gain
- C. Has a lesser gain
- D. Positive FEEDBACK system

Ans. D

Q 41. Highest binding of iron is seen with:

- A. Transferrin
- B. Ferritin
- C. Haemoglobin
- D. Ceruloplasmin

Ans. C

Pathology

Q 42. The epithelioid cell and multinucleated giant cells of granulomatous inflammation are derived from:

- A. Basophils
- B. Eosinophils
- C. CD4 T lymphocytes
- D. Monocytes-macrophages

Ans. D

Q 43. The following host tissue responses can be seen in acute infection, except:

- A. Exudation
- B. Vasodilation
- C. Margination
- D. Granuloma formation

Ans. D

Q 44. The following feature is common to both cytotoxic T cells and NK cells:

- A. Synthesize antibody
- B. Require antibodies to be present for action
- C. Effective against virus infected cells
- D. Recognize antigen in association with HLA class II markers

Ans. C

Q 45. In the intra-epithelial region of the mucosa of intestine the predominant cell population is that of:

- A. B cell
- B. T cells
- C. Plasma cells
- D. Basophils

Ans. B

Q 46. In primary tuberculosis, all of the following may be seen except:

- A. Cavitation
- B. Caseation
- C. Calcification
- D. Langerhan giant cell

Ans. A

Q 47. A myocardial infarct showing early granulation tissue has most likely occurred:

- A. Less than 1 hours
- B. Within 24 hours

- C. Within 1 week
- D. Within 1 month

Ans. D

Q 48. A 10 year old boy, died of acute rheumatic fever. All the following can be expected at autopsy except:

- A. Ashoff nodules
- B. Rupture of chordae tendinae
- C. McCallum patch
- D. Fibrinous pericarditis

Ans. B

Q 49. All of the following are seen in asbestosis except:

- A. Diffuse alveolar damage
- B. Calcified pleural plaques
- C. Diffuse pulmonary interstitial fibrosis
- D. Mesotheliomas

Ans. A

Q 50. Macrophages containing large quantities of undigested and partial digested bacteria in intestine are seen in:

- A. Whipple's disease
- B. Amyloidosis
- C. Immunoproliferative small intestinal disease
- D. Vibrio cholerae infection

Ans. A

Q 51. The histological features of celiac disease include all of the following, except:

- A. Crypt hyperplasia
- B. Increase in thickness of the mucosa
- C. Increase in intraepithelial lymphocytes
- D. Increase in inflammatory cells in lamina propria

Ans. B

Q 52. In a chronic alcoholic all the following may be seen in the liver except:

- A. Fatty degeneration
- B. Chronic hepatitis
- C. Granuloma formation
- D. Cholestatic hepatitis

Ans. C

Q 53. Crescent formation is characteristic of the following glomerular disease:

- A. Minimal change disease
- B. Rapidly progressive glomerulonephritis
- C. Focal and segmental glomerulosclerosis
- D. Rapidly non progressive glomerulonephritis

Ans. B

Q 54. Necrotizing papillitis may be seen in all of the following conditions except:

- A. Sickle cell disease
- B. Tuberculous pyelonephritis
- C. Diabetes mellitus
- D. Analgesic nephropathy

Ans. B

Q 55. Disease or infarction of neurological tissue causes it to be replaced by:

- A. Fluid

- B. Neuroglia
- C. Proliferation of adjacent nerve cells
- D. Blood vessel

Ans. B

Q 56. Flat small vegetations in the cusps of both tricuspid and mitral valves are seen in:

- A. Viral myocarditis
- B. Libmann Sach's endocarditis
- C. Rheumatic carditis
- D. Infective endocarditis

Ans. B

Microbiology

Q 57. Bacteria may acquire characteristics by all of the following except:

- A. Taking up soluble DNA fragments across their cell wall from other species
- B. Incorporating part of host DNA
- C. Through bacteriophages
- D. Through conjugation

Ans. B

Q 58. Neonatal thymectomy leads to:

- A. Decreased size of germinal center
- B. Decreased size of paracortical areas
- C. Increased antibody production by B cells
- D. Increased bone marrow production of lymphocytes

Ans. B

Q 59. Staphylococcus aureus differs from Staphylococcus epidermidis by:

- A. Is coagulase positive
- B. Forms white colonies
- C. A common cause of UTI
- D. Causes endocarditis in drug addicts

Ans. A

Q 60. Positive Shick's test indicates that person is:

- A. Immune to diphtheria
- B. Hypersensitive to diphtheria
- C. Susceptible to diphtheria
- D. Carrier of diphtheria

Ans. C

Q 61. In a patient with typhoid, diagnosis after 15 days of onset of fever is best done by:

- A. Blood culture
- B. Widal
- C. Stool culture
- D. Urine culture

Ans. B

Q 62. Which of the following is transmitted by rat urine?

- A. Leptospira
- B. Listeria
- C. Legionella
- D. Mycoplasma

Ans. A

Q 63. All the following are true about Listeria except:

- A. Transmitted by contaminated milk
- B. Gram negative bacteria
- C. Causes abortion in pregnancy
- D. Causes meningitis in neonates

Ans. B

Q 64. Which of the following statement is true about Bacteroides:

- A. It is gram positive bacilli
- B. It is strictly aerobic
- C. It may cause peritonitis
- D. Presence in stool culture indicates need for treatment

Ans. C

Q 65. Heat stable enterotoxin causing food poisoning is caused by all the following except:

- A. Bacillus cereus
- B. Yersinia enterocolitica
- C. Staphylococcus
- D. Clostridium perfringens

Ans. D

Q 66. HIV virus contains:

- A. Single stranded DNA
- B. Single stranded RNA
- C. Double stranded DNA
- D. Double stranded RNA

Ans. B

Q 67. Regarding HIV which of the following is not true:

- A. It is a DNA retrovirus
- B. Contains reverse transcriptase
- C. May infect host CD4 cells other than T-lymphocytes
- D. Causes a reduction in host CD4 cells at late stage of disease

Ans. A

Q 68. CMV retinitis in HIV occurs when the CD4 counts fall below:

- A. 50
- B. 100
- C. 200
- D. 150

Ans. A

Q 69. Epstein Barr virus causes all the following except:

- A. Infectious mononucleosis
- B. Measles
- C. Nasopharyngeal carcinoma
- D. Non Hodgkin's lymphoma

Ans. B

Q 70. In a patient, corneal scraping reveals narrow angled septate hyphae. Which of the following is the likely etiologic agent:

- A. Mucor
- B. Aspergillus
- C. Histoplasma
- D. Candida

Ans. B

Q 71. Which of the following is true regarding globi in a patient with lepromatous

leprosy:

- A. Consists of lipid laden macrophages.
- B. Consists of macrophages filled with AFB
- C. Consists of neutrophils filled with bacteria
- D. Consists of activated lymphocytes

Ans. B

Q 72. The following diagnostic tests are useful for corresponding purposes except:

- A. Zeil-Neelson staining – Detection of mycobacteria
- B. Immunoflorescence – Detection of influenza virus
- C. Specific IgM antibodies – Immunity against rubella
- D. Specific IgM antibodies – Detection of acute infection

Ans. C

Q 73. IL-1 produces:

- A. T lymphocyte activation
- B. Delayed wound healing
- C. Increased pain perception
- D. Decreased PMN release from bone marrow

Ans. A

Q 74. Microfilaria are seen in peripheral blood in which stage of filariasis:

- A. Tropical eosinophilia
- B. Early elephantiasis
- C. Early adenolymphangitis stage
- D. None of the above

Ans. C

Q 75. Confirmation of diagnosis of rota virus infection is by:

- A. Antigen detection in stool by ELISA
- B. Antibody titres in serum
- C. Antigen detection by immunofluorescence
- D. Antigen detection in serum by ELISA

Ans. A

Pharmacology

Q 76. Regarding efficacy and potency of a drug, all are true, except:

- A. In a clinical setup, efficacy is more important than potency
- B. In the log dose response curve, the height of the curve corresponds with efficacy
- C. ED50 of the drug corresponds to efficacy
- D. Drugs that produce a similar pharmacological effect can have different levels of efficacy

Ans. D

Q 77. All the following are selective beta blockers, except:

- A. Atenolol
- B. Esmolol
- C. Bisoprolol
- D. Celiprolol

Ans. D

Q 78. All of the following factors increase the risk of aminoglycoside renal toxicity, except:

- A. Elderly person
- B. Dehydration
- C. Simultaneous use with penicillin
- D. Aminoglycoside administration in recent past

Ans. C

Q 79. In which of the following disorders is administration of barbiturates contraindicated in:

- A. Anxiety disorders
- B. Acute intermittent porphyria
- C. Kernicterus
- D. Refractive status epilepticus

Ans. B

Q 80. Mechanism of action of tianeptin in the brain is:

- A. Selective serotonin reuptake inhibition
- B. Selective norepinephrine reuptake inhibition
- C. Selective serotonin reuptake enhancer
- D. Selective dopamine reuptake inhibition

Ans. C

Q 81. Proton pump inhibitors are most effective when they are given:

- A. After meals
- B. Shortly before meals
- C. Along with H₂ blockers
- D. During prolonged fasting periods

Ans. B

Q 82. Which of the following is correctly matched:

- A. Dimercaprol:Iron
- B. Calcium di-sodium EDTA:Artenic
- C. Penicillamine:Copper
- D. Desferrioxamine:Lead

Ans. C

Q 83. Digoxin is contraindicated in:

- A. Supraventricular tachycardia
- B. Atrial fibrillation
- C. Congestive heart failure
- D. Hypertrophic obstructive cardiomyopathy

Ans. D

Q 84. All the following drugs cause renal failure except:

- A. Cephaloridine
- B. Amphoterecin B
- C. Cefoperazone
- D. Gentamicin

Ans. C

Q 85. All of the following statements are true regarding losartan except:

- A. It is a competitive angiotensin receptor antagonist
- B. It has a long acting metabolite
- C. Associated with negligible cough
- D. Causes hyperuricemia

Q Ans. D

86. Gemcitabine is effective in:

- A. Head and neck cancers
- B. Pancreatic cancer
- C. Small-cell lung cancer
- D. Soft tissue sarcoma

Ans. B

Q 87. All of the following drugs can cross placenta except:

- A. Phenytoin
- B. Diazepam
- C. Morphine
- D. Heparin

Ans. D

Q 88. A highway truck driver has profuse rhinorrhea and sneezing. Which amongst the following drugs would you prescribe him?

- A. Pheniramine
- B. Promethazine
- C. Dimethylhydrazine
- D. Cetirizine

Ans. D

Q 89. The mechanism of action of sodium nitroprusside is:

- A. Increased cAMP
- B. Increased guanylate cyclase
- C. Calcium channel blockage
- D. K⁺ channel opener

Ans. B

Q 90. All the following belong to the steroid receptor superfamily except:

- A. Vitamin D3 receptor
- B. Thyroid receptor
- C. Retinoid receptor
- D. Epinephrine receptor

Ans. D

Q 91. All of the following undergo hepatic metabolism before excretion except:

- A. Phenytoin
- B. Diazepam
- C. Penicillin G
- D. Cimetidine

Ans. C

Q 92. In a patient taking oral contraceptive, the chance of pregnancy increases after taking any of the following drugs except:

- A. Phenytoin
- B. Carbamazepine
- C. Ampicillin
- D. Cimetidine

Ans. D

Q 93. The primary mechanism of action of fluoride on topical application is:

- A. Conversion of hydroxyapatite to fluoroapatite by replacing the -OH ions
- B. Inhibition of plaque bacteria
- C. Form a reservoir in saliva
- D. Improvement in tooth morphology

Ans. A

Q 94. A 65 year old man was consuming opium for 20 years. He stops consumption suddenly and comes to casualty after 2 days. Which is likely to occur due to withdrawal:

- A. Rhinorrhoea
- B. Hypotension
- C. Drowsiness

D. Miosis

Ans. A

Q 95. Which of the following causes hepatic granuloma?

A. Amiodarone

B. Alcohol

C. Cimetidine

D. Metronidazole

Ans. A

Q 96. Coronary steal commonly is seen with:

A. Atenolol

B. Diltiazem

C. Nitroglycerine

D. Dipyridamole

Ans. D

Q 97. A patient is taking ketoconazole for fungal infection develops cold for which he is prescribed terfenadine. Possible interaction between terfenadine and ketoconazole is:

A. Ketoconazole decreases metabolism of terfenadine

B. Terfenadine increases levels of ketoconazole

C. Ketoconazole decreases levels of terfenadine

D. No interaction

Ans. A

Forensic Medicine

Q 98. What would be the race of individual if skull bone having following feature – rounded nasal opening, horseshoe shaped palate, round orbit & cephalic index above 80:

A. Negro

B. Mongol

C. European

D. Aryans

Ans. B

Q 99. A sample to look for uric crystal (gouty tophus) would be submitted to the Pathology laboratory in:

A. Formalin

B. Distilled water

C. Alcohol

D. Normal saline

Ans. C

Q 100. Not a feature of brain death:

A. Complete apnea

B. Absent pupillary reflex

C. Absence of deep tendon reflex

D. heart rate unresponsive to atropine

Ans. C

Q 101. At autopsy, a body is found to have copious fine leathery froth in mouth & nostrils which increased on pressure over chest. Death was likely due to:

A. Epilepsy

B. Hanging

C. Drowning

D. Opium poisoning

Ans. C

Q 102. In fire arm injury, entry-wound blackening is due to:

- A. Flame
- B. Hot gases
- C. Smoke
- D. Deposition from bullet

Ans. D

Q 103. Tentative cut is a feature of:

- A. Fall from the height
- B. Homicidal assault
- C. Accidental injury
- D. Suicidal attempt

Ans. D

Q 104. Gastric lavage is indicated in all cases of acute poisoning ideally because of:

- A. Fear of aspiration
- B. Danger of cardiac arrest
- C. Danger of respiratory arrest
- D. Inadequate ventilation

Ans. A

Q 105. All of the following methods used for detecting heavy metals, except:

- A. Harrison & Gilroy test
- B. Paraffin test
- C. Neutron activation analysis
- D. Atomic absorption spectroscopy

Ans. B

Q 106. The sensation of creping, bugs over the body is a feature of poisoning due to:

- A. Cocaine
- B. Diazepam
- C. Barbiturates
- D. Brown sugar

Ans. A

Q 107. Which type of cattle poisoning occurs due to ingestion of linseed plant:

- A. Aconite
- B. Pilocarpine
- C. Atropine
- D. Hydro cyanic acid

Ans. D

Q 108. A 10 years old child present in casualty with snake bite since six hours. On examination no systemic signs are found & laboratory investigations are normal except localized swelling over the leg < 5 cm. Next step in management would be:

- A. Incision & suction of local swelling
- B. IV antivenom
- C. Subcutaneous antivenom at local swelling
- D. Observe the patient for progression of symptoms wait for antivenom therapy

Ans. D

Q 109. 'Gold chloride' test is done in poisoning with:

- A. Heroin
- B. Barbiturates
- C. Cocaine
- D. Heavy metals

Ans. C

PREVENTIVE AND SOCIAL Medicine

Q 110. Iron and folic acid supplementation forms:

- A. Health promotion
- B. Specific protection
- C. Primordial prevention
- D. Primary prevention

Ans. B

Q 111. The most important function of sentinel surveillance is:

- A. To find the total amount of disease in a population
- B. To plan effective control measures
- C. To determine the trend of disease in a population
- D. To notify disease

Ans. A

Q 112. Serial interval is:

- A. Time gap between primary and secondary case
- B. Time gap between index and primary case
- C. Time taken for a person from infection to develop maximum infectivity
- D. The time taken from infection till a person infects another person

Ans. A

Q 113. All the following are advantages of case control studies except:

- A. Useful in rare disease
- B. Relative risk can be calculated
- C. Odds ratio can be calculated
- D. Cost effective and inexpensive

Ans. B

Q 114. The association between coronary artery disease and smoking was found to be as follows:

CAD No CAD

Smokers 30 20

Non smokers 20 30

The Odds ratio can be estimated as:

- A. 0.65
- B. 0.85
- C. 1.35
- D. 2.25

Ans. D

Q 115. In a prospective study comprising 10,000 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 results?

- A. Beta carotene is protective in lung cancer
- B. Beta carotene and lung cancer have no relation to each other
- C. The study design is not sufficient to draw any meaningful conclusions
- D. Beta carotene is carcinogenic

Ans. B

Q 116. About direct standardization all are true except:

- A. Age specific death rates are not needed

- B. A standard population is needed
- C. Population should be comparable
- D. Two populations are compared

Ans. A

Q 117. Which vaccine is contraindicated in pregnancy?

- A. Rubella
- B. Diphtheria
- C. Tetanus
- D. Hepatitis B

Ans. A

Q 118. Which of the following statements is true regarding pertussis?

- A. Neurological complication rate of DPT is 1 in 50000
- B. Vaccine efficacy is more than 95%
- C. Erythromycin is useful for prophylaxis
- D. The degree of polymorphonuclear leukocytosis correlates with the severity of cough

Ans. C

Q 119. Drugs A & B are both used for treating a particular SKIN infection. After one standard application, drug A eradicates the infection in 95% of both adults and children. drug B eradicates the infection in 47% of adults & 90% of children. There are otherwise no significant pharmacological differences between the two drugs, and there are no significant side effects. However, the cost of drug A is twice that of drug B. Dr. Sunil, a general practitioner, always uses drug B for the first treatment, and resorts to drug A if the infection persists. Dr. Sudhir, another general practitioner, always uses drug A for adults and drug B for children. Ignoring indirect costs, which of the following statement is incorrect:

- A. Drug A is more effective than B for treating children
- B. Drug A is more cost-effective than drug B for treating children
- C. Drug A is more cost-effective than drug B for treating adults
- D. Dr. Sudhir's regime achieves a higher level of cost-effectiveness than Dr. Sunil's

Ans. B

Q 120. The infectivity of chicken pox lasts for:

- A. Till the last scab falls off
- B. 6 days after onset of rash
- C. 3 days after onset of rash
- D. Till the fever subsides

Ans. B

Q 121. Carriers are important in all the following except:

- A. Polio
- B. Typhoid
- C. Measles
- D. Diphtheria

Ans. C

Q 122. Acute flaccid paralysis is reported in a child aged:

- A. 0-3 years
- B. 0-5 years
- C. 0-15 years
- D. 0-25 years

Ans. C

Q 123. A 2-years-old boy, presented with cough, fever & difficulty in breathing. His

RR 50/min. There was no chest indrawing. Auscultation of chest reveals bilateral crepitations. The most probable diagnosis is:

- A. Very severe pneumonia
- B. Severe pneumonia
- C. Pneumonia
- D. No pneumonia

Ans. C

Q 124. Active and passive immunity should be given together in all except:

- A. Tetanus
- B. Rabies
- C. Measles
- D. Hepatitis B

Ans. C

Q 125. Cereals and proteins are considered complementary because:

- A. Cereals are deficient in methionine
- B. Cereals are deficient in methionine and pulse are deficient in lysine
- C. Cereals are deficient in lysine and pulses are deficient in methionine
- D. Cereal proteins contain non-essential amino-acids, while pulse proteins contain essential amino acids

Ans. C

Q 126. For a 60 kg Indian male, the minimum daily protein requirement has been calculated to be 40 g (mean) & standard deviation is 10. The recommended daily allowance of protein would be:

- A. 60 g/day
- B. 70 g/day
- C. 40 g/day
- D. 50 g/day

Ans. A

Q 127. 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%?

- A. 65 B. 50
- C. 75 D. 60

Ans. B

Q 128. The best method to show the association between height and weight of children in a class is by:

- A. Bar chart
- B. Line diagram
- C. Scatter diagram
- D. Histogram

Ans. C

Q 129. The correlation between variables A and B in a study was found to be 1.1. This indicates:

- A. Very strong correlation
- B. Moderately strong correlation
- C. Weak correlation
- D. Computational mistake in calculating correlation

Ans. D

Q 130. The biological oxygen demand indicates:

- A. Organic matter

- B. Bacterial content
- C. Anaerobic bacteria
- D. Chemicals

Ans. A

Q 131. In a surveillance centre for hepatitis B, in a low prevalence area, the method for testing for hepatitis B was single ELISA. This policy was changed to double testing in series. This would result in the following 2 parameters of the test being affected:

- A. Increased specificity and positive predictive value
- B. Increased sensitivity and positive predictive value
- C. Increased sensitivity and negative predictive value
- D. Increased specificity and negative predictive value

Ans. A

Q 132. In a study, variation in cholesterol was seen before and after giving a drug. The test of significance would be:

- A. Unpaired t test
- B. Paired t test
- C. Chi square test
- D. Fisher test

Ans. B

Q 133. Ravi and Ashok stay in the same hostel of the same university. Ravi develops infection with group B meningococcus. After a few days Ashok develops infection due to group C meningococcus. All the following are true statements except:

- A. Educate students about meningococcal transmission and take preventive measures
- B. Chemotherapy to all against both group B and group C
- C. Vaccine prophylaxis of contacts of Ravi
- D. Vaccine prophylaxis of contacts of Ashok

Ans. C

Q 134. All of the following are common cause of post neonatal infant mortality in India, except:

- A. Tetanus
- B. Malnutrition
- C. Diarrhoeal diseases
- D. Acute respiratory infection

Ans. A

Q 135. True about 'total fertility rate' is:

- A. Sensitive indicator of family planning achievement
- B. Completed family size
- C. Number of live births per 1000 married women in reproductive age group
- D. Average number of girls born to a woman

Ans. B

Q 136. 'Silent epidemic' of the century is:

- A. Coronary artery disease
- B. Chronic liver disease
- C. Chronic obstructive lung disease
- D. Alzheimer's disease

Ans. D

Medicine

Q 137. The following condition is not associated with an increased anion-gap type of metabolic acidosis:

- A. Shock
- B. Ingestion of ante-freeze
- C. Diabetic ketoacidosis
- D. COPD

Ans. D

Q 138. Acute metabolic acidosis:

- A. Has biphasic effect on K⁺ excretion
- B. Does not effect K⁺ excretion significantly
- C. Decreases urinary K⁺ excretion
- D. Increases urinary K⁺ excretion

Ans. C

Q 139. Urinary anion gap an indication of excretion of:

- A. Ketoacids
- B. Na
- C. H⁺ ion
- D. K⁺ ion

Ans. B

Q 140. The most common mode of inheritance of congenital heart disease is:

- A. Autosomal dominant
- B. Autosomal recessive
- C. SEX linked dominant
- D. Multifactorial

Ans. D

Q 141. Which one of the following is an autosomal dominant disorder:

- A. Cystic fibrosis
- B. Hereditary spherocytosis
- C. Sickle cell anemia
- D. G-6-PD deficiency

Ans. B

Q 142. Which type diabetes is HLA associated:

- A. Type I diabetes
- B. Tyep II diabetes
- C. Malnutrition related type disease
- D. Pregnancy related type diabetes

Ans. A

Q 143. All of the following are sexually transmitted, except:

- A. Candida albicans
- B. Echionococcus
- C. Molluscum contagiosum
- D. Group B streptococcus

Ans. B

Q 144. All of the following infections may be transmitted via blood transfusion, except:

- A. Parvo B19
- B. Dengue virus
- C. Cytomegalovirus
- D. Hepatitis G virus

Ans. B

Q 145. Hypoglycemia is a recognized feature of all of the following conditions except:

- A. Uremia
- B. Acromegaly
- C. Addison's disease
- D. Hepatocellular failure

Ans. B

Q 146. All of the following feature may be seen in thrombotic thrombocytopenic purpura, except:

- A. Fever
- B. HEMOLYSIS
- C. Hypertension
- D. Low platelet count

Ans. C

Q 147. The following laboratory determinants is abnormally prolonged in ITP:

- A. APTT
- B. Prothrombin time
- C. Bleeding time
- D. Clotting time

Ans. C

Q 148. PNH is associated with all of the following condition except:

- A. Aplastic anemia
- B. Increased LAP scores
- C. Venous thrombosis
- D. Iron deficiency anemia

Ans. B

Q 149. A 20 years adult presents with severe hypoplastic anemia. What is most effective treatment:

- interferonA.
- B. IL-2
- C. ATG therapy
- D. Bone marrow transplant

Ans. D

Q 150. Which of the following is not commonly seen in polycythemia vera?

- A. Thrombosis
- B. Hyperuricemia
- C. Prone for acute leukemia
- D. Spontaneous severe infection

Ans. D

Q 151. The following condition is not associated with an anti-phospholipid syndrome:

- A. Venous thrombosis
- B. Recurrent foetal loss
- C. Thrombocytosis
- D. Neurological manifestations

Ans. C

Q 152. Hypergastrinemia with hypochlorhydria is seen in:

- A. Zollinger-Ellison syndrome
- B. VIPoma
- C. Pernicious anemia
- D. Glucagonoma

Ans. C

Q 153. All of the following phases of the jugular venous pulse and their causes are correctly matched, except:

- A. 'c'wave – onset of atrial systole
- B. 'a-x' descent – atrial relaxation
- C. 'v-y' descent – emptying of blood from right atrium into right ventricle
- D. 'y-a' ascent – filling of the right atrium from the vena cava

Ans. A

Q 154. Which of the following is the correct statement regarding findings in JVP:

- A. Cannon wave: Complete heart block
- B. Slow v_y descent: Tricuspid regurgitation
- C. Giant c wave: Tricuspid stenosis
- D. Increased JVP with prominent pulsations: SVC obstruction

Ans. A

Q 155. While inserting a central venous catheter, a patient develops respiratory distress. The most likely cause is:

- A. Hemothorax
- B. Pneumothorax
- C. Pleural effusion
- D. Hypovolemia

Ans. B

Q 156. All of the following are clinical features of myxoma, except:

- A. Fever
- B. Clubbing
- C. Hypertension
- D. Embolic phenomenon

Ans. C

Q 157. Renal vein thrombosis is most commonly associated with:

- A. Diabetic nephropathy
- B. Membranous glomerulonephritis
- C. Minimal change disease
- D. Membranoproliferative glomerulonephritis

Ans. B

Q 158. Characteristic of Henoch-Schonlein purpura is:

- A. Blood in stool
- B. Thrombocytopenia
- C. Intracranial hemorrhage
- D. Susceptibility to infection

Ans. A

Q 159. Renal osteodystrophy differs from nutritional and genetic forms of osteomalacia in having:

- A. Hypocalcaemia
- B. Hypercalcemia
- C. Hypophosphataemia
- D. Hyperphosphatemia

Ans. D

Q 160. Medullary cystic disease of the kidney is best diagnosed by:

- A. Ultrasound
- B. Nuclear scan
- C. Urography

D. Biopsy

Ans. D

Q 161. A patient with nephrotic syndrome on long- standing corticosteroid therapy may develop all the following except:

A. Hyperglycemia

B. Hypertrophy of muscle

C. Neuropsychiatric symptoms

D. Suppression of the pituitary adrenal axis

Ans. B

Q 162. A 40 years old man presented with repeated episodes of bronchospasm and hemoptysis. Chest X-ray revealed perihilar bronchiectasis. The most likely diagnosis is:

A. Sarcoidosis

B. Idiopathic pulmonary fibrosis

C. Extrinsic allergic alveolitis

D. Bronchopulmonary aspergillosis

Ans. D

Q 163. Which of the following is characteristically not associated with the development of interstitial lung disease?

A. Coal dust

B. Sulfur dioxide

C. Thermophilic actinomyces

D. Tobacco smoke

Ans. D

Q 164. A 35 years old man was found +ve for HBsAg and HBeAg, accidentally during screening of blood donation. On laboratory examination SGOT and SGPT are normal. What should you do next:

A. liver biopsy

B. Interferon therapy

C. Observation

D. HBV-DNA estimation

Ans. D

Q 165. A 25 years women presents with bloody diarrhea and is diagnosed as a case of ulcerative colitis. Which of the following condition is not associated:

A. Sclerosing cholangitis

B. Iritis

C. Ankylosing spondylitis

D. Pancreatitis

Ans. D

Q 166. Investigation of choice for invasive amebiasis is:

A. Indirect hemagglutination

B. ELISA

C. Counter immune electrophoresis

D. Microscopy

Ans. B

Q 167. A diabetic patient with BLOOD GLUCOSE of 600 mg/dL and 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?

A. Increase in Na⁺ level

B. Decrease in Na⁺ level

C. No change would be expected
D. Na⁺ would return to previous level spontaneously on correction of BLOOD GLUCOSE :

Ans. A

Q 168. A 20 years young man presents with exertional dyspnoea, headache, and giddiness. On examination, there is hypertension and L VR. X-ray picture shows notching of the anterior ends of the ribs. The most like diagnosis is:

- A. Pheochromocytoma
- B. Carcinoid syndrome
- C. Coarctation of the aorta
- D. Superior mediastinal syndrome

Ans. C

Q 169. Rheumatoid factor in rheumatoid arthritis is important because:

- A. RA factor is associated with bad prognosis
- B. Absent RA factor rules out the diagnosis of rheumatoid arthritis
- C. It is very common in childhood-rheumatoid arthritis
- D. It correlates with disease activity

Ans. A

Q 170. Conn's syndrome is associated with all except:

- A. Hypertension
- B. Hyponatremia
- C. Hypokalemia
- D. Oedema

Ans. D

Q 171. The triad originally described by Zollinger-Ellison syndrome is characterized by:

- A. Peptic ulceration, gastric hypersecretion, non beta cell tumour
- B. Peptic ulceration, gastric hypersecretion, beta cell tumour
- C. Peptic ulceration, achlorhydria, non beta cell tumour
- D. Peptic ulceration, achlorhydria, beta cell tumour

Ans. A

Q 172. All of the following are features of pheochromocytoma except:

- A. Hypertensive paroxysm
- B. Headache
- C. Orthostatic hypotension
- D. Wheezing

Ans. D

Q 173. The treatment of choice in young patient suffering from aplastic anaemia is:

- A. Danazol
- B. G-CSF
- C. Bone marrow transplantation
- D. ATG

Ans. C

Q 174. Raised anion gap in blood is not seen in which of the following?

- A. Renal failure
- B. Antifreeze ingestion
- C. Diabetic ketoacidosis
- D. Chronic respiratory failure

Ans. D

PEDIATRICS

Q 175. A Down syndrome girl has 21/21 translocation and her father is carrier of balanced translocation. Risk of Down syndrome in next pregnancy is:

- A. 100%
- B. 0%
- C. 50%
- D. 25%

Ans. A

Q 176. The following signs would warrant further evaluation of developmental status in a healthy 12 weeks old infant:

- A. Does not vocalize
- B. Does not babble
- C. Does not raise head up to 90°
- D. Does not transfer a bright red ring from one hand to the other, even when the ring is directly placed in the hand of child

Ans. A

Q 177. A 2 years child weighing 6.7 kg presents in the casualty with history of vomiting & diarrhoea for last 2 days. On examination SKIN pinch over the anterior abdominal wall goes quickly to its original position. Interpretation of SKIN pinch test in this child will be:

- A. No dehydration
- B. Some dehydration
- C. Severe dehydration
- D. SKIN pinch can not be evaluated in this child

Ans. D

Q 178. An infant presents with history of seizures & SKIN rashes. Investigations show metabolic acidosis and increased blood ketone levels. This child is likely to be suffering from:

- A. Propionic aciduria
- B. Urea cycle disorder
- C. Phenylketonuria
- D. Multiple carboxylase deficiency

Ans. D

Q 179. With reference to RDS, all of the following statements are true, except:

- A. Usually occurs in infants born before 34 weeks of gestation
- B. Is more common in babies born to diabetic mothers
- C. Leads to cyanosis
- D. Is treated by administering 100% oxygen

Ans. D

Q 180. Which of the following is not a common manifestation of congenital rubella:

- A. Deafness
- B. PDA
- C. Aortic stenosis
- D. Mental retardation

Ans. C

Q 181. An 8 years old boy presented with fever and bilateral cervical lymphadenopathy with prior history of sore throat. There was no hepatomegaly. The peripheral blood smear shows > 20% lymphoplasmacytoid cells. The most likely diagnosis is:

- A. Influenza
- B. Tuberculosis

- C. Infectious mononucleosis
- D. Acute lymphoblastic leukemia

Ans. C

Q 182. The most common genetic cause of liver disease in children is:

- A. Haemochromatosis
- antitrypsin deficiency¹aB.
- C. Cystic fibrosis
- D. Glycogen storage disease

Ans. B

Q 183. Which of the following childhood tumors most frequently metastasizes to the bone:

- A. Neuroblastoma
- B. Ganglioneuroma
- C. Wilms' tumor
- D. Ewing's sarcoma

Ans. A

Q 184. A six months old girl is having recurrent UTI. Ultrasound abdomen shows bilateral hydronephrosis. MCU (micturating cystourethrogram) shows bilateral grade IV vesicoureteral reflux. The treatment of choice is:

- A. Endoscopic injection of polyteflon at the ureteric orifices
- B. Ureteric reimplantation
- C. Bilateral ureterostomy
- D. Prophylactic antibiotics

Ans. B

Q 185. The most common cause of ambiguous genitalia in a newborn is:

- A. 21 hydroxylase deficiency
- hydroxylase deficiency^bB. 11
- C. -hydroxylase deficiency^a17
- hydroxysteroid deficiency^bD. 3

Ans. A

Dermatology

Q 186. Multiple erythematous annular lesions with peripheral collarette of scales arranged predominantly over trunk are seen in:

- A. Pityriasis versicolor
- B. Pityriasis rubra
- C. Pityriasis rosea
- D. Pityriasis lichenoides

Ans. C

Q 187. All of the following are given for the treatment of pityriasis versicolor, except:

- A. Ketoconazole
- B. Griesofiiilvin
- C. Clotrimazole
- D. Selenium sulphide

Ans. B

Q 188. A patient with PSORIASIS was started on systemic steroids. After stopping treatment, the patient developed generalized pustules all over the body. The cause is most likely to be:

- A. Drug induced reaction
- B. Pustular PSORIASIS
- C. Bacterial infections

D. Septicemia

Ans. B

Q 189. Wickham's striae are seen in:

A. Lichen nitidus

B. Lichenoid eruption

C. Lichen striates

D. Lichen planus

Ans. D

Q 190. Griseofulvin is given for the treatment of fungal infection in finger nail dermatophytosis for:

A. 4 weeks

B. 6 weeks

C. 2 months

D. 3 months

Ans. D

Q 191. After 3 days of fever patient developed maculoerythematous rash that lasted for 48 hours. The most likely diagnosis is:

A. Fifth disease

B. Rubella

C. Measles

D. Roseola infantum

Ans. D

Q 192. Exfoliative dermatitis can be due to all the following diseases, except:

A. Drug hypersensitivity

B. Pityriasis rubra

C. Pityriasis rosea

D. PSORIASIS

Ans. C

Q 193. Genital elephantiasis is caused by:

A. Donovanosis

B. Congenital syphilis

C. Herpes genitalis

D. Lymphogranuloma venereum

Ans. D

Psychiatry

Q 194. All of the following are features of hallucination, except:

A. Depends on will of the observer

B. Occurs in inner subjective space

C. It is a vivid sensory perception

D. It occurs in absence of perceptual stimulus

Ans. A

Q 195. The following is suggestive of an organic cause of the behavioural symptoms:

A. Formal thought disorder

B. Auditory hallucinations

C. Delusion of fruit

D. Visual hallucinations

Ans. D

Q 196. Delusion is not present in:

A. Delirium

B. Mania

- C. Depression
- D. Compulsive disorder

Ans. D

Q 197. An alcoholic is brought to the casualty, 3 days after he quit alcohol, with the complaint of irrelevant talking. On examination, he is found to be disoriented in time, place and person. He also has visual illusions and hallucinations. There is no history of head injury. The most probable diagnosis is:

- A. Dementia praecox
- B. Delirium tremens
- C. Schizophrenia
- D. Korsakoff psychosis

Ans. B

Q 198. Ram Lal, a 45 years old male came to the psychiatric OPD complaining of continuous, dull, non- progressive headache for the last 8 years. The patient has seen numerous neurologists in the belief that he has a brain tumor even though all his investigations have been normal. The patient insisted that he had a brain tumor and requested yet another workup. Psychiatric evaluation reveals disease conviction in the background of normal investigations. The most probable diagnosis is:

- A. Hypochondriasis
- B. Somatization disorder
- C. Somatoform pain disorder
- D. Conversion disorder

Ans. A

Q 199. A patient presented with short lasting episodic behavioural changes which include agitation & dream like state with thrashing movements of his limbs. He does not recall these episodes & has no apparent precipitating factor. The most likely diagnosis is:

- A. Schizophrenia
- B. Temporal lobe epilepsy
- C. Panic episodes
- D. Dissociative disorder

Ans. D

Q 200. A young lady presented with repeated episodes of overeating followed by purging after use of laxatives. She is probably suffering from:

- A. Bulimia nervosa
- B. Schizophrenia
- C. Anorexia nervosa
- D. Binge eating disorder

Ans. A

Q 201. An 11 years old boy is all the time so restless that the rest of the class is unable to concentrate. He is hardly ever in his seat and roams around the hall. He has difficulty in playing quietly. The most likely diagnosis is:

- A. Attention-deficit hyperactivity disorder
- B. Conduct disorder
- C. Depressive disorder
- D. Schizophrenia

Ans. A

Surgery

Q 202. A patient suddenly experienced pain radiating along the medial border of the dorsum of foot. Which of the following nerve is most likely to be accidentally ligated:

- A. Sural nerve
- B. Saphenous nerve
- C. Deep peroneal nerve
- D. Genicular nerve

Ans. B

Q 203. In an adult patient with pleural effusion, the most appropriate site for pleurocentesis done by inserting a needle is in:

- A. 5th intercostal space in midclavicular line
- B. 7th intercostal space in midaxillary line
- C. 2nd intercostal space adjacent to the sternum
- D. 10th intercostal space adjacent to the vertebral column

Ans. B

Q 204. Measurements of intravascular pressure by a pulmonary artery catheter should be done:

- A. At end expiration
- B. At peak of inspiration
- C. During mid inspiration
- D. During mid expiration

Ans. A

Q 205. A 24 years old man falls on the ground when he is struck in the right temple by a baseball. While being driven to the hospital, he lapses into coma. He is unresponsive with the dilated right pupil when he reaches the emergency department. The most important step in initial management is:

- A. Craniotomy
- B. CT scan of the head
- C. X-ray of the skull and cervical spine
- D. Doppler ultrasound examination of the neck

Ans. A

Q 206. Kamla Rani, 75 years old woman, presents after 6 weeks with post myocardial infarction with mild CHF. There was past history of neck Surgery for parathyroid adenoma 5 years ago. EKG shows slow atrial fibrillation. Serum Ca^{2+} 13.0 mg/L and urinary Ca^{2+} is 300 g/24 h. On examination there is small mass in the paratracheal position behind the right clavicle. Appropriate management at this time is:

- A. Repeat neck Surgery
- B. Treatment with technetium -99
- C. Observation and repeat serum Ca^{2+} in two months
- D. Ultrasound-guided alcohol injection of the mass

Ans. D

Q 207. Not a feature of de Quervain's disease:

- A. Autoimmune in etiology
- B. Raised ESR
- C. Tends to regress spontaneously
- D. Painful & associated with enlargement of thyroid

Ans. A

Q 208. A 35 years old woman has had recurrent episodes of headache and sweating. Her mother had renal calculi and died of thyroid cancer. Physical observations revealed a thyroid nodule and ipsilateral enlarged cervical lymph nodes. Before performing thyroid Surgery the woman's physician should order:

- A. Thyroid scan

- B. Estimation of hydroxy indole acetic acid in urine
- C. Estimation of urinary metanephrines, VMA and catecholamines
- D. Estimation of TSH, and TRH levels in serum

Ans. C

Q 209. All of the following are associated with thyroid storm, except:

- A. Surgery for thyroiditis
- B. Surgery for thyrotoxicosis
- C. Stressful illness in thyrotoxicosis
- D. I131 therapy for thyrotoxicosis

Ans. A

Q 210. Needle biopsy of solitary thyroid nodule in a young woman with palpable cervical lymph nodes on the same sides demonstrates amyloid in stroma of lesion.

Likely diagnosis is:

- A. Medullary carcinoma thyroid
- B. Follicular carcinoma thyroid
- C. Thyroid adenoma
- D. Multinodular goitre

Ans. A

Q 211. A 26 years old 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:

- A. Removal of the involved node, the isthmus, and the enlarged lymph node
- B. Removal of the involved lobe, the isthmus, a portion of the opposite lobe, and the enlarged lymph node
- C. Total thyroidectomy and modified neck dissection on the side of the enlarged lymph node
- D. Total thyroidectomy and irradiation of the cervical lymph nodes

Ans. C

Q 212. The most common tumor of the salivary gland is:

- A. Mucoepidermoid tumor
- B. Warthin's tumor
- C. Acinic cell tumor
- D. Pleomorphic adenoma

Ans. D

Q 213. The premalignant condition with the highest probability of progression to malignancy is:

- A. Dysplasia
- B. Hyperplasia
- C. Leucoplakia
- D. Erythroplakia

Ans. D

Q 214. An old man who is edentulous developed squamous cell CA in buccal mucosa that has infiltrated to the alveolus. Following is not indicated in treatment:

- A. Radiotherapy
- B. Segmental mandibulectomy
- C. Marginal mandibulectomy involving removal of the outer table only
- D. Marginal mandibulectomy involving removal of upper half of mandible

Ans. C

Q 215. Corkscrew esophagus is seen in which of the following condition?

- A. Carcinoma esophagus

- B. Scleroderma
- C. Achalasia cardia
- D. Diffuse esophagus spasm

Ans. D

Q 216. Treatment for achalasia associated with high rate of recurrence:

- A. Pneumatic dilatation
- B. Laparoscopic myotomy
- C. Opefl surgical myotomy
- D. Botulinum toxin

Ans. D

Q 217. Barrett's esophagus is:

- A. Lower esophagus lined by columnar epithelium
- B. Upper esophagus lined by columnar epithelium
- C. Lower esophagus lined by ciliated epithelium
- D. Lower esophagus lined by pseudostratified epithelium

Ans. A

Q 218. The adenocarcinoma of esophagus develops in:

- A. Barrett's esophagus
- B. Long standing achalasia
- C. Corrosive stricture
- D. Alcohol abuse

Ans. A

Q 219. The lowest recurrence of peptic ulcer is associated with:

- A. Gastric resection
- B. Vagotomy + drainage
- C. Vagotomy + antrectomy
- D. Highly selective vagotomy

Ans. C

Q 220. Risk factor for development of gastric CA:

- A. Blood group O
- B. Duodenal ulcer
- C. Intestinal hyperplasia
- D. Intestinal metaplasia type III

Ans. D

Q 221. In a case of hypertrophic pyloric stenosis, the metabolic disturbance is:

- A. Respiratory alkalosis
- B. Metabolic acidosis
- C. Metabolic alkalosis with paradoxical aciduria
- D. Metabolic alkalosis with alkaline urine

Ans. C

Q 222. All the following indicates early gastric cancer except:

- A. Involvement of mucosa
- B. Involvement of mucosa and submucosa
- C. Involvement of mucosa, submucosa and muscularis
- D. Involvement of mucosa, submucosa and adjacent lymph nodes

Ans. C

Q 223. In gastric outlet obstruction in a peptic ulcer patient, the site of obstruction is most likely to be:

- A. Antrum
- B. Duodenum

- C. Pylorus
- D. Pyloric canal

Ans. B

Q 224. Ramesh met an accident with a car and has been in 'deep coma' for the last 15 days. The most suitable route for the administration of protein and calories is by:

- A. Jejunostomy tube feeding
- B. Gastrostomy tube feeding
- C. Nasogastric tube feeding
- D. Central venous hyperalimentation

Ans. A

Q 225. A 10 months old infant present with acute intestinal obstruction. Contrast enema X-ray shows the intussusception. Likely cause is:

- A. Peyer's patch hypertrophy
- B. Meckel's diverticulum
- C. Mucosal polyp
- D. Duplication cyst

Ans. A

Q 226. After undergoing Surgery , for carcinoma of colon, a 44 year old patient developed single liver metastasis of 2 cm. What do you do next:

- A. Resection
- B. Chemo-radiation
- C. Acetic acid injection
- D. Radiofrequency ablation

Ans. A

Q 227. Ten days after a splenectomy for blunt abdominal trauma, a 23 years 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 temperature is 38.2°C(108°F) rectally, and he has decreased breath sounds at the left lung base. His abdominal wound appears to be healing well, bowel sound are active and there are no peritoneal signs. Rectal examination is negative. The WBC count is 12,500 per mm³ with a shift to left. Chest X-ray shows 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/ dl (normal 60 to 80). The most likely diagnosis is:

- A. Subphrenic abscess
- B. Pancreatitis
- C. Pulmonary embolism
- D. Subfascial wound infection

Ans. A

Q 228. Sentinel lymph node biopsy is an important part of the management of which of the following conditions?

- A. Carcinoma prostate
- B. Carcinoma breast
- C. Carcinoma lung
- D. Carcinoma nasopharynx

Ans. B

Q 229. A man who weighs 70 kg (154 pounds) is transferred to a burn center 4 weeks after sustaining a second and third-degree burn injury to 45% of his total body surface area. Prior to accident, the patients weight was 90 kg (198 pounds). The

patient has not been given anything by mouth since the injury except for antacids because of previous ulcer history. On physical examination, the patient's burn wounds are clean, but only minimal healing is evident and thick adherent eschar is present. The patient's abdomen is soft and nondistended, and active bowel sounds are heard. His stools are trace-positive for blood, and he has a 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:

- A. The presence of blood in stools by the increasing the dose of antacids and H1 receptor blocker
- B. The open, poorly healing burn wounds treated by surgical excision and grafting
- C. The inguinal hernia treated by surgical repair using local Anaesthesia
- D. The nutritional status by oral supplementation or parenteral hyperalimentation

Ans. D

Q 230. A 14 years old girl sustains a steam bum measuring 6 by 7 inches over the ulnar aspect of her right forearm. Blisters develop over the entire area of the bum wound, and by the time the patient is seen 6 hours after the injury, some of the blisters have ruptured spontaneously. In addition to debridement of the necrotic epithelium, all the following therapeutic regiments might be considered appropriate for this patient except:

- A. Application of silver sulfadiazine and daily washes, but no dressing
- B. Application of polyvinylpyrrolidone foam, daily washes and a light occlusive dressing changed daily
- C. Application of mafenide acetate cream, but no daily washes or dressing
- D. Heterograft application with sutures to secure it in place and daily washes, but no dressing

Ans. D

Q 231. All of the following are the clinical features of thromboangitis obliterans except:

- A. Raynaud's phenomenon
- B. Claudication of extremities
- C. Absence of popliteal pulse
- D. Migratory superficial thrombophlebitis

Ans. C

Q 232. Rani, a 16 years old girl who has non-pitting edema of recent onset affecting her right leg but no other symptoms is referred for evaluation. True statements about this patient include:

- A. Prophylactic antibiotics are indicated
- B. A lymphagiongram will show hypoplasia of the lymphatics
- C. Elastic stocking and diuretics will lead to a normal appearance of the limb
- D. A variety of operations will ultimately lead to a normal appearance of the limb

Ans. B

Q 233. Kamla, a 59 years old woman, has a left femoral vein thrombosis during a pregnancy 30 year ago. The left greater saphenous vein had been stripped at age 21. She now presents with a large non healing ulceration over the medial left calf, which has continuously 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:

- A. Division of the superficial femoral vein in the groin and transposition of its distal end onto the profunda femoris vein below the level of the competent profunda valve
- B. Saphenous venous crossover graft with anastomosis of the end of the right saphenous vein onto the side of competent femoral vein
- C. Ligated iliofemoral venous thrombectomy with creation of the temporary arteriovenous fistula
- D. Subfascial ligation of perforating veins in the left calf.

Ans. A

Q 234. On her third day of hospitalization, a 70 years old woman who is being treated with antibiotics for acute cholecystitis develops increased pain and tenderness in the right upper quadrant with a palpable mass. Her temperature rises to 40°C (104°F) her blood pressure falls to 80/60 mmHg. Hematemesis, and melena ensue and petechiae are noted. Laboratory studies reveal thrombocytopenia, prolonged prothrombin time, and a decreased fibrinogen level. The most important step in the correction of this patient's coagulopathy is:

- A. Exploratory laparotomy
- B. Administration of heparin
- aminocaproic acideC. Administration of
- D. Administration of fresh frozen plasma

Ans. A

Q 235. A 64 years old previously healthy man is admitted to a hospital because of a closed head injury and ruptured spleen following a road side automobile accident. During the first 4 days of hospitalization, following laparotomy and splenectomy, he receives 5% dextrose, 0.5% normal saline solution at a rate of 125 mL/h. Recorded daily fluid outputs include 450 to 600 mL of nasogastric drainage and 700 to 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 (mEq/L): Na⁺ 130; K⁺ 1.9; Cl⁻ 96; HCO₃⁻ 19. Serum osmolality 260 mOsm/L. Urine electrolytes (mEq/L): Na⁺ 61; K⁺ 18. Which of the following statements about diagnosis or treatment of this patient's condition is true:

- A. Emergency carotid arteriogram is to be done
- B. Secondary to metabolic acidosis there is hypokalemia
- C. A small quantity of hypertonic saline should be given
- D. IV infusion of 20 ml of 50% MgSO₄ is given over a period of 4 hours

Ans. C

Q 236. All of the following statements about acute adrenal insufficiency are true except:

- A. Hyperglycemia is usually present
- B. Acute adrenal insufficiency usually is secondary to exogenous glucocorticoid administration
- C. Acute adrenal insufficiency presents with weakness, vomiting, fever, and hypotension
- D. Hyponatremia occurs because of impaired renal tubule sodium resorption

Ans. A

Q 237. All of the following are correct statements about radiological evaluation of a patient with Cushing's syndrome except:

- A. MRI of the sella turcica will identify a pituitary cause for Cushing's syndrome
- B. Petrosal sinus sampling is the best way to distinguish a pituitary tumor from an

ectopic ACTH producing tumor.

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

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

Ans. A

orthopaedics

Q 238. Carpel tunnel syndrome is due to compression of:

A. Radial nerve

B. Ulnar nerve

C. Palmar branch of the ulnar nerve

D. Median nerve

Ans. D

Q 239. Most common nerve involved in the FRACTURE of surgical neck of humerus is:

A. Median

B. Radial

C. Ulnar

D. Axillary

Ans. D

Q 240. All of the following are associated with supracondylar FRACTURE of humerus, except:

A. It is uncommon after 15 years of age

B. Extension type FRACTURE is more common than the flexion type

C. Cubitus varus deformity commonly results following malunion

D. Ulnar nerve is most commonly involved

Ans. D

Q 241. A 40 years old man, was admitted with FRACTURE shaft femur following a road traffic accident. On 2nd day he became disoriented. He was found to be tachypnoeic, and had conjunctival petechiae. Most likely diagnosis is:

A. Pulmonary embolism

B. Sepsis syndrome

C. Fat embolism

D. Haemothorax

Ans. C

Q 242. Kumar, a 31 years old motorcyclist sustained injury over his right hip joint. X-ray revealed a posterior dislocation of the right hip joint. The clinical attitude of the affected lower limb will be:

A. External rotation, extension & abduction

B. Internal rotation, flexion & adduction

C. Internal rotation, extension & abduction

D. External rotation, flexion & abduction

Ans. B

Q 243. Pappu, 7 years old young boy, had FRACTURE of lateral condyle of femur. He developed malunion as the FRACTURE was not reduced anatomically. Malunion will produce:

A. Genu valgum

B. Genu varum

C. Genu recurvatum

D. Dislocation of knee

Ans. A

Q 244. Patellar tendon bearing POP cast is indicated in the following FRACTURE :

- A. Patella
- B. Tibia
- C. Medial malleolus
- D. Femur

Ans. B

Q 245. Inversion injury at the ankle can cause all of the following except:

- A. FRACTURE tip of lateral malleolus
- B. FRACTURE base of the 5th metatarsal
- C. Sprain of extensor digitorum brevis
- D. FRACTURE of sustentaculum tali

Ans. C

Q 246. A previously healthy 45 years old laborer suddenly develops acute lower back pain with right-leg pain & weakness of dorsiflexion of the right great toe. Which of the following is true:

- A. Immediate treatment should include analgesics, muscle relaxants & back strengthening exercises
- B. The appearance of the foot drop indicates early surgical intervention
- C. If the neurological signs resolve within 2 to 3 weeks but low back pain persists, the proper treatment would include fusion of affected lumbar vertebra
- D. If the neurological signs fail to resolve within 1 week, lumbar laminectomy and excision of any herniated nucleus pulposus should be done

Ans. B

Q 247. Acute osteomyelitis is most commonly caused by:

- A. Staphylococcus aureus
- B. Actinomyces bovis
- C. Nocardia asteroides
- D. Borrelia vincentii

Ans. A

Q 248. A 45 years male presented with an expansile lesion in the centre of femoral metaphysis. The lesion shows endosteal scalloping & punctuate calcifications. Most likely diagnosis is:

- A. Osteosarcoma
- B. Chondrosarcoma
- C. Simple bone cyst
- D. Fibrous dysplasia

Ans. B

Q 249. Raju, a 10 years old child, presents with predisposition to fractures, anemia, hepatosplenomegaly and a diffusely increased radiographic density of bones. The most likely diagnosis is:

- A. Osteogenesis imperfecta
- B. Pyrenodysotosis
- C. Myelofibrosis
- D. Osteopetrosis

Ans. D

Q 250. Hari Vardhman, 9 years old child, presents with scoliosis, hairy tuft in the SKIN of back and neurological deficit. Plain X-rays reveal multiple vertebral anomalies & a vertical bony spur overlying lumbar spine on AP view. The most probable diagnosis is:

- A. Dorsal dermal sinus
- B. Diastematomyelia

- C. Tight filum terminale
- D. Caudal regression syndrome

Ans. B

Q 251. In a patient with head injury, unexplained hypotension warrants evaluation of:

- A. Upper cervical spine
- B. Lower cervical spine
- C. Thoracic spine
- D. Lumbar spine

Ans. C

Q 252. Complete transection of the spinal cord at the C1 level produces all of the following effects except:

- A. Hypotension
- B. Limited respiratory effort
- C. Anaesthesia below the level of the lesion
- D. Areflexia below the level of the lesion

Ans. B

Anaesthesia

Q 253. The gas which produces systemic toxicity without causing local irritation is:

- A. Ammonia
- B. Carbon monoxide
- C. Hydrocyanic acid
- D. Sulfur dioxide

Ans. B

Q 254. In a patient with fixed respiratory obstruction helium is used along with oxygen instead of plain oxygen because:

- A. It increases oxygenation
- B. It decreases turbulence
- C. It decreases the dead space
- D. It provides analgesia

Ans. B

Q 255. Upper respiratory tract infection is a common problem in children. All the following anesthetic complications can occur in children with respiratory infections, except:

- A. Bacteremia
- B. Halothane granuloma
- C. Increased mucosal bleeding
- D. Laryngospasm

Ans. B

Ophthalmology

Q 256. In the normal human right eye, the peripheral field of vision is usually least:

- A. On the left side (nasally)
- B. In the downward direction
- C. In the upward direction
- D. On the right side (temporally)

Ans. C

Q 257. Tonography helps you to determine:

- A. The rate of formation of aqueous
- B. The facility of outflow of aqueous
- C. The levels of intraocular pressure at different times
- D. The field changes

Ans. B

Q 258. Any spectral colour can be matched by a mixture of three monochromatic lights (red, green, blue) in different proportions. If a person needs more of one of the colour for matching than a normal person, then he has a colour anomaly. More red colour is needed in the case of:

- A. Deuteranomaly
- B. Tritanomaly
- C. Protanomaly
- D. Tritanomaly

Ans. C

Q 259. The colours best appreciated by the central cones of our foveo-macular area are:

- A. Red and blue
- B. Blue and green
- C. Red and green
- D. Blue and yellow

Ans. C

Q 260. Epiphora is:

- A. Cerebrospinal fluid running from the nose after FRACTURE of anterior cranial fossa
- B. An epiphenomenon of a cerebral tumor
- C. An abnormal overflow of tears due to obstruction of lacrimal duct
- D. Eversion of lower eyelid following injury

Ans. C

Q 261. A 35 years old hypermetrope is using 1.50 D sphere both eyes. Whenever his glasses slip downward on his nose he will feel that his near vision:

- A. Becomes enlarged
- B. Becomes distorted
- C. Becomes decreased
- D. Remains the same

Ans. A

Q 262. Oculomotor nerve palsy affects all of the following muscles, except:

- A. Medial rectus
- B. Inferior oblique
- C. Lateral rectus
- D. Levator palpebrae superioris

Ans. C

Q 263. Kusum Lata presents with acute painful red eye and mildly dilated vertically oval pupil. Most likely diagnosis is:

- A. Acute retrobulbar neuritis
- B. Acute angle closure glaucoma
- C. Acute anterior uveitis
- D. Severe keratoconjunctivitis

Ans. B

Q 264. You have been referred a middle-aged patient to rule out open angle glaucoma. Which of the following findings will help in the diagnosis:

- A. Cupping of the disc
- B. Depth of anterior chamber
- C. Visual acuity and refractive error
- D. Angle of the anterior chamber

Ans. A

Q 265. In a case of hypertensive uveitis, most useful drug to reduce intraocular pressure is:

- A. Pilocarpine
- B. Latanoprost
- C. Physostigmine
- D. Dipivefrine

Ans. B

Q 266. A patient having glaucoma develops blepharoconjunctivitis after instilling some anti- glaucoma drug. Which of the following drug can be responsible for it:

- A. Timolol
- B. Latanoprost
- C. Dipivefrine
- D. Pilocarpine

Ans. C

Q 267. A 12 years old child complains of headache and decreased vision. On examination he has a visual acuity of 6/36 in the right eye and 6/6 in the left eye . On retinoscopy at 66 cm, the left eye showed correction of 1.5 D and the right eye of 5 D. The anterior chamber and fundus of
