

**ALL INDIA Postgraduate Medical  
Entrance Examination 2010  
Subject- wise Questions with All  
Options & Answers**

**ANAESTHESIA**

1. A patient with bilirubin value of 8 mg/dl and serum creatinine of 1.9 mg/dl is planned for surgery. What is the muscle relaxant of choice in this patient?

- A. Vecuronium
- B. Pancuronium
- C. Atracurium
- D. Rocuronium

Ans: C.

2. A 25 year old overweight female was given fentanyl-pancuronium anesthesia for surgery. After surgery and extubation she was observed to have limited movement of the upper body and chest wall in the recovery room. She was conscious and alert but voluntary respiratory effort was limited. Her blood pressure and heart rate were normal. The likely diagnosis is:

- A. Incomplete reversal of pancuronium
- B. Pulmonary embolism
- C. Fentanyl induced chest wall rigidity
- D. Respiratory depression

Ans A.

3. All of the following statements about neuromuscular blockage produced by succinylcholine are true, except:

- A. No fade on train of four stimulation
- B. Fade on tetanic stimulation
- C. No post tetanic facilitation
- D. Train of four ratio > 0.4

Ans: B.

4. A 27 year old female was brought to emergency department for acute abdominal pain following which she was shifted to the operation theatre for

laparotomy. A speedy intubation was performed but after the intubation, breath sounds were observed to be decreased on the left side and a high end tidal CO<sub>2</sub> was recorded. The likely diagnosis is:

- A. Endotracheal tube blockage
- B. Bronchospasm
- C. Esophageal intubation
- D. Endobronchial intubation

Ans: D.

**ANATOMY**

5. Hypogastric Sheath is a condensation of

- A. Scarpa's fascia
- B. Colle's fascia
- C. Pelvic fascia
- D. Inferior layer of Urogenital diaphragm

Ans: C. Pelvic fascia

6. Which of the positions best describes the location of celiac plexus

- A. Anterolateral to aorta
- B. Posterolateral to aorta
- C. Anterolateral to sympathetic chain
- D. Anteromedial to sympathetic chain

Ans: A. Anterolateral to aorta

7. (a) Gluteus medius is supplied by

- A. Superior Gluteal Nerve
- B. Inferior Gluteal Nerve
- C. Nerve to Obturator Internus
- D. Nerve to Quadratus Femoris

Ans: A. Superior Gluteal Nerve

(b) Gluteus medius is supplied by

- A. Superior Gluteal Artery
- B. Inferior Gluteal Artery
- C. Obturator Artery
- D. Ilio-inguinal Artery

Ans: A. Superior Gluteal Artery

8. (a) Which of the following tendons passes below the sustentaculum tali

- A. Tibialis Anterior

- B. Tibialis Posterior
  - C. Flexor Digitorum Longus
  - D. Flexor Hallucis longus
- Ans: D. Flexor Hallucis longus

- (b) Which of the following tendons has attachments on sustentaculum Tali
- A. Tibialis Anterior
  - B. Tibialis Posterior
  - C. Flexor digitorum longus
  - D. Flexor Hallucis longus
- Ans: B. Tibialis Posterior

9. Which of the following passes through the foramen magnum
- A. Vertebral artery
  - B. Sympathetic chain
  - C. XIth cranial nerve
  - D. Internal carotid artery
- Ans: A. Vertebral artery

10. All of the following movements occur abduction of shoulder except
- A. Elevation of humerus
  - B. Axial rotation of clavicle
  - C. Medial rotation of scapula
  - D. Acromioclavicular joint movement
- Ans: C. Medial rotation of scapula

11. All of the following are composite muscles, except:
- A. Flexor carpi ulnaris
  - B. Flexor digitorum profundus
  - C. Pectineus
  - D. Biceps femoris
- Ans: A. Flexor carpi ulnaris

12. Urogenital Diaphragm is made up of the following, except:
- A. Deep transverse perineus
  - B. Perineal membrane
  - C. Colle's fascia
  - D. Sphincter Urethrae
- Ans: C. Colle's fascia

13. In post-ductal coarctation of aorta collaterals may be formed by all of the following, except:
- A. Vertebral artery
  - B. Suprascapular artery
  - C. Subscapular artery
  - D. Posterior intercostals artery
- Ans: none

14. Left sided superior vena cava drains into:
- A. Right Atrium
  - B. Left atrium
  - C. Coronary sinus
  - D. Pericardial space
- Ans: A. Right Atrium

## PHYSIOLOGY

15. All of the following statements about bronchial circulation are true, except:
- A. Contribute 2% of systemic circulation
  - B. Contribute to gaseous exchange
  - C. Cause venous admixing of blood
  - D. Provide nutritive function to lung
- Ans: B.

16. An important non-respiratory function of lungs is:
- A. Anion balance
  - B. Sodium balance
  - C. Potassium balance
  - D. Calcium balance
- Ans: B.

17. Maximum water reabsorption in the gastrointestinal tract occurs in:
- A. Stomach
  - B. Jejunum
  - C. Ileum
  - D. Colon
- Ans: B.

18. The primary action of Nitric oxide (NO) in the gastrointestinal tract is:
- A. Vasodilatation

- B. Vasoconstriction  
 C. Gastrointestinal smooth muscle relaxation  
 D. Gastrointestinal slow smooth muscle contraction  
 Ans: C.

19. Hot water bottle relieves pain of abdominal spasm by:  
 A. Stimulation of adrenergic fibers  
 B. Stimulation of cholinergic fibers  
 C. Inhibition of cold receptors  
 D. Inhibition of heat receptors  
 Ans: A.

20. Vitamin K deficiency coagulation factors include:  
 A. II and III  
 B. IX and X  
 C. III and V  
 D. VIII and XII  
 Ans: B, IX and X

21. During heavy exercise the cardiac output (CO) increase upto five fold while pulmonary arterial pressure rises very little. This physiological ability of the pulmonary circulation is best explained by:  
 A. Increase in the number of open capillaries  
 B. Sympathetically mediated greater distensibility of pulmonary vessels  
 C. Large amount of smooth muscle in pulmonary arteries  
 D. Smaller surface area of pulmonary circulation  
 Ans: A.

22. Venous return to heart during quiet standing is facilitated by all of the following factors, except:  
 A. Calf muscle contraction during standing  
 B. Valves in perforators  
 C. Sleeves of deep fascia

- D. Gravitational increase in arterial pressure  
 Ans: D.

23. During cardiac imaging the phase of minimum motion of heart is:  
 A. Late systole  
 B. Mid systole  
 C. Late diastole  
 D. Mid diastole  
 Ans: D.

24. Insulin secretion is inhibited by:  
 A. Secretin  
 B. Epinephrine  
 C. Growth hormone  
 D. Gastrin  
 Ans: B.

25. Which of the following is not seen in humans:  
 A. Estrous cycle  
 B. Menstrual cycle  
 C. Endometrial cycle  
 D. Ovarian cycle  
 Ans: A.

26. Lesions of the lateral cerebellum cause all of the following, except:  
 A. Incoordination  
 B. Intention tremor  
 C. Resting tremor  
 D. Ataxia  
 Ans: C.

27. Basal Metabolic Rate depends most closely on:  
 A. Lean body mass  
 B. Body mass index  
 C. Obesity  
 D. Body surface area  
 Ans: A.

28. Decreased Basal Metabolic Rate is seen in:  
 A. Obesity

- B. Hyperthyroidism
  - C. Feeding
  - D. Exercise
- Ans: A.

29. Low CSF protein may be seen in all of the following conditions, except:
- A. Recurrent lumbar puncture
  - B. Hypothyroidism
  - C. Pseudotumor cerebri
  - D. Infants
- Ans: B.

## BIOCHEMISTRY

30. Sphingomyelinase deficiency is seen in:
- A. Niemann – pick disease
  - B. Farber’s disease
  - C. Tay Sach’s disease
  - D. Krabbe’s disease
- Ans: A.

31. Which of the following lipoproteins does not move towards charged end in electrophoresis?
- A. VLDL
  - B. LDL
  - C. HDL
  - D. Chylomicrons
- Ans: D.

32. Insulin like fructans are used as prebiotics as they are non digestible. Resistance to digestion in the upper GI tract results from:
- A. Absence of Digestive enzyme in the upper GIT
  - B. Beta configuration of anomeric C2
  - C. Low pH of the stomach
  - D. Presence of alpha-osidic linkages
- Ans: B.

33. Method of chromatography in which molecules that are negatively charged are

- selectively released from stationary phase into the positively charged molecules in mobile phase is termed.
- A. Affinity chromatography
  - B. Ion – Exchange chromatography
  - C. Adsorbion chromatography
  - D. Size – exclusion chromatography
- Ans: B.

34. Which of the following techniques is used for detection of variation in DNA sequence and Gene expression?
- A. Northern Blot
  - B. Southern Blot
  - C. Western Blot
  - D. Microarray
- Ans: D.

35. Which of the following tests is not used for detection of specific aneuploidy?
- A. FISH
  - B. RT-PCR
  - C. QF-PCR
  - D. Microarray
- Ans: D.

36. Prenatal Diagnosis of hemophilia is best done by:
- A. PCR
  - B. Linkage analysis
  - C. Cytometry
  - D. Microarray
- Ans: A.

37. Rothera’s test used for detection of
- A. Proteins
  - B. Glucose
  - C. Fatty Acid
  - D. Ketones
- Ans: D.

38. Which of the following liver enzymes is predominantly mitochondrial?
- A. SGOT (AST)
  - B. SGPT (ALT)
  - C. GGT

D. 5' Nucleotidase

Ans: A.

## PHARMACOLOGY

39. (a) Mechanism of action of Theophylline in Bronchial Asthma include all of the following except:

- A. Phosphodiesterase inhibition
- B. Adenosine receptor antagonism
- C. Increased Histone deacetylation
- D. Beta-2 receptor stimulation

Ans: D.

(b) Mechanism of action of Theophylline in bronchial asthma in:

- A. Phosphodiesterase Inhibition
- B. Mast cell stabilization
- C. Leukotriene Antagonism
- D. Beta-2 agonist

Ans: A.

40. Narrow therapeutic index is seen with:

- A. Desipamine
- B. Lithium
- C. Penicillin
- D. Diazepam

Ans: B.

41. Which of the following is a 'Protein pump inhibitor'?

- A. Ranitidine
- B. Misoprostol
- C. Omeprazole
- D. Laxatidine

Ans: C.

42. Methyldopa is primarily used in:

- A. Parkinsonism
- B. Pregnancy Induced hypertension
- C. Hirsutism
- D. Refractory hypertension

Ans: B.

43. Fetal Hydantoin Syndrome is caused by

- A. Phenytoin
- B. Alcohol
- C. Tetracycline
- D. Sodium valproate

Ans: A.

44. Which of the following drugs should not be used with Rivastigmine in patients with Alzheimer's except:

- A. SSRI
- B. Tricyclic Antidepressant
- C. RIMA
- D. Atypical Antidepressants

Ans: B.

45. Ethosuxamide is the drug of choice for:

- A. Generalized Tonic clonic seizures
- B. Complex partial seizures
- C. Absence seizures
- D. Myoclonic seizures

46. Which of the following about Opioid receptor antagonists is false?

- A. Naloxone can be used for treatment of opioid induced constipation
- B. Naltrexone may be used for treatment of alcohol dependence
- C. Nalmefine has a longer half life than Naloxone
- D. Naloxone is more potent than Naltrexone

Ans: D.

47. L-Dopa is combined with Carbidopa in the treatment of parkinsonism to:

- A. Decrease the efficacy of levodopa
- B. Inhibit peripheral decarboxylation of levodopa
- C. Increase the dose of levodopa required
- D. inhibit conversion of levodopa to dopamine in the CNS

Ans: B.

48. All of the following statements about Phenytoin are true, except:

- A. Follows saturation kinetics
  - B. Is teratogenic
  - C. Is highly protein bound
  - D. Stimulates insulin secretion
- Ans: D.

49. Which of the following teratogenic effects in incorrectly matched
- A. Phenytoin – Cleft lip / palate
  - B. Zidovudine – Skull Defects
  - C. Valproate – Neural tube effects
  - D. Warfarin – Nasal bone dysplasia
- Ans: B.

50. All of the following agents are used for prophylaxis of migraine, except
- A. Propanalol
  - B. Valproate
  - C. Topiramate
  - D. Ethosuxamide
- Ans: D.

51. MAO inhibitors should not be used with
- A. Pethidine
  - B. Pentazocine
  - C. Buprenorphine
  - D. Morphine
- Ans: A > B.

52. Serotonin syndrome may be precipitated by all of the following medications, except:
- A. Chlorpromazine
  - B. Pentazocine
  - C. Buspirone
  - D. Meperidine
- Ans: A.

53. A young male presents with meningococcal meningitis and allergy to penicillin. Which is the most suitable drug:
- A. Chloramphenicol
  - B. Meropenem
  - C. Ciprofloxacin

- D. Teicoplanin
- Ans: A.

54. All of the following drugs may cause Hirsutism, except
- A. Danazol
  - B. Phenytoin
  - C. Norethisterone
  - D. Flutamide
- Ans: D.

55. Most common congenital anomaly associated with lithium
- A. Cardiac Malformations
  - B. Neural tube defects
  - C. Renal anomaly
  - D. Fetal Hydatoid syndrome
- Ans: A.

56. Which of the following should be monitored in patient receiving linezolid therapy?
- A. Renal function
  - B. Liver function
  - C. Auditory function
  - D. Platelet count
- Ans: D.

57. All of the following statements about thalidomide are true, except:
- A. It has been re introduced for its activity in ENL.
  - B. Developed as antiemetic in pregnancy but withdrawn because of phacomelia
  - C. Used for new and relapsed cases of multiple myeloma
  - D. Most common side effects are diarrhea and euphoria
- Ans: D.

58. Pancreatitis occurs with:
- A. Abacavir
  - B. Zidovudine
  - C. Lamivudine
  - D. Didanosine
- Ans: D.

59. Which of the following agents is recommended for treatment of Gastrointestinal Stromal Tumors (GIST)?

- A. Sorafenib
- B. Imatinib
- C. Gefitinib
- D. Erlotinib

Ans: B.

60. Amphoterecin B toxicity can be lowered by

- A. Giving it with Glucose
- B. Decreasing the dose
- C. Using Liposomal Delivery systems
- D. Combining with flucytosine

Ans: C > D.

61. Which of the following newer drugs has activity on both HER 1 and HER 2 new Receptors?

- A. Erlotinib
- B. Gefitinib
- C. Canertinib
- D. Lapatinib

Ans: D.

62. Tyrosine kinase inhibitors are used in the treatment of

- A. Gastrointestinal stromal tumors (GIST)
- B. Acute myeloid leukemia
- C. Neurofibromatosis
- D. Small cell carcinoma lung

Ans: A.

63. Which of the following statements about Mycophenolate Mofetil is not true?

- A. Most common adverse effect is Nephrotoxicity
- B. Used in Transplant rejection
- C. It is a prodrug and converted to Mycophenolic acid
- D. Is not used with Azathioprine

Ans: A.

64. Which of the following drugs is recommended for the treatment of Heparin induced thrombocytopenia?

- A. Abciximab
- B. Lepirudin
- C. Warfarin
- D. Alteplase

Ans: B.

65. All of the following statements about Trientine are true, except:

- A. More potent than penicillamine and orally absorbed
- B. Alternative to penicillamine in non tolerant
- C. Not given with iron within two hours of ingestion
- D. May cause iron deficiency anemia

Ans: A.

66. Allopurinol is used in the treatment of

- A. Osteoarthritis
- B. Gout
- C. Rheumatoid Arthritis
- D. Ankylosing spondylitis

Ans: B.

67. In equivalent concentrations, steroids are more potent in which form:

- A. Gel
- B. Cream
- C. Ointment
- D. Lotion

Ans: C.

## **PATHOLOGY**

68. Caspases are involved in:

- A. cell division
- B. necrosis
- C. apoptosis
- D. Inflammation

Ans: C.

69. (a) Actions of Bradykinin include all of the following, except:

- A. Vasodilatation
- B. Bronchodilatation
- C. Increased vascular permeability
- D. Pain

Ans: B.

(b) What is the most important role of Bradykinin in acute inflammation?

- A. Increase in vascular permeability
- B. Vasodilatation
- C. Mediation of pain
- D. Bronchoconstriction

Ans: A.

70. Heterozygous sickle cell anemia gives protection against:

- A. G6PD
- B. Malaria
- C. Thalassemia
- D. Dengue fever

Ans: B.

71. Burkitt's Lymphoma is associated with:

- A. t (8:14)
- B. t (11:14)
- C. t (15:17)
- D. t (14:18)

Ans: A.

72. Translocation t (2:8)(p12;q24) is associated with:

- A. Chronic Myeloid leukemia (CML)
- B. Acute Myeloid Leukemia (LML)
- C. T cell - ALL
- D. Burkitt's Lymphoma

Ans: D.

73. (a) The characteristic feature of apoptosis on light microscopy is

- A. cellular swelling
- B. nuclear compaction
- C. intact cell membrane
- D. Cytoplasmic eosinophilia

Ans: B.

(b) All of the following are features of apoptosis, except

- A. Cellular swelling
- B. nuclear compaction
- C. intact cell membrane
- D. Cytoplasmic eosinophilia

Ans: A.

74. (a) PNH is associated with deficiency of:

- A. DAF
- B. MIRL
- C. GPI Anchored protein
- D. All of the above

Ans: D.

(b) PNH is associated with deficiency of:

- A. DAF (Decay accelerating factor)
- B. MIRL (Membrane inhibitor of reactive lysis)
- C. GPI Anchored Protein (Glycosyl phosphatidyl inositol anchored proteins)
- D. LFA (Lymphocyte function associated antigen)

Ans: C.

75. Plasmacytoid lymphomas may be associated with:

- A. IgG
- B. IgM
- C. IgA
- D. IgE

Ans: B.

76. Which of the following have most friable vegetation?

- A. Infective endocarditis
- B. Libman Sack's endocarditis
- C. Rheumatic heart disease
- D. SLE

Ans: A.

77. Characteristic pathological finding in carcinoid heart disease is:



- A. Fibrous endocardial thickening of right ventricle, tricuspid valve & pulmonary valve
  - B. Endometrial thickening of tricuspid valve with severe tricuspid stenosis
  - C. Collagen rich, elastic deposits in endocardium of right ventricle and pulmonary valve
  - D. Calcification of tricuspid and pulmonary valve
- Ans: A.

78. A female presents with history of progressive breathlessness. Histology shows heterogenous patchy fibrosis with several fibroblastic foci. The most likely diagnosis is:

- A. Cryptogenic organizing pneumonia
  - B. Non specific interstitial pneumonia
  - C. Usual interstitial pneumonia
  - D. Desquamative interstitial pneumonia
- Ans: C.

79. Chromophobe variant of renal cell carcinoma is associated with

- A. VHL gene mutations
  - B. Trisomy of 7 and 17 (+7, +17)
  - C. 3 p deletions (3p-)
  - D. Monosomy of 1 and Y (-1, -Y)
- Ans: D.

80. All of the following condition are associated with granulomatous pathology, except:

- A. Wegner's granulomatosis (WG)
  - B. Takayasu Arteritis (TA)
  - C. Polyarteritis Nodosa (Classic PAN)
  - D. Giant cell arteritis (GCA)
- Ans: C.

81. Electron microscopy is diagnostic in:

- A. Goodpasture's syndrome
  - B. Alport's syndrome
  - C. Wegener's syndrome
  - D. Chung strauss syndrome
- Ans: B.

82. Which of the following is the most characteristic ultrastructural feature of paraganglioma on electron microscopy?

- A. Shrunken mitochondria
  - B. Large Golgi apparatus
  - C. Frequent mitoses
  - D. Dense core neuroendocrine granules
- Ans: D.

83. Which of the following is a marker of langerhans cell histiocytosis?

- A. CD 1a
  - B. CD 10
  - C. CD 30
  - D. CD56
- Ans: A.

84. Hypercoagulation in nephritic syndrome is caused by

- A. Loss of Antithrombin III
  - B. Decreased fibrinogen
  - C. Decreased metabolism of vitamin K
  - D. Increase in protein C
- Ans: A.

85. Which of the following markers is specific for Gastro intestinal stromal tumors (GIST)?

- A. CD 117
  - B. CD 34
  - C. CD 23
  - D. S - 1000
- Ans: A.

86. Down's syndrome is most commonly caused by:

- A. Maternal nondisjunction
  - B. Paternal Nondisjunction
  - C. Translocation
  - D. Mosaicism
- Ans: A.

87. Cystic fibrosis is inherited as an autosomal recessive condition. A normal couple has one daughter affected with the

disease. They are now planning to have another child. What is the cause of her sibling being affected by the disease?

- A. 0
- B.  $\frac{1}{2}$
- C.  $\frac{1}{4}$
- D.  $\frac{3}{4}$

Ans: C.

88. Males are more commonly affected than females in:

- A. Autosomal Dominant
- B. Autosomal Recessive
- C. X-linked dominant
- D. X-linked recessive

Ans: D.

## MICROBIOLOGY

89. Peptide binding site on class I MHC molecules for presenting processed antigen to CD8 T cells is formed by:

- A. Proximal domain to alpha subunits
- B. Distal domain of alpha subunit
- C. Proximal domains of Alpha and Beta subunit
- D. Distal domains of alpha and beta subunit

Ans: B.

90. All of the following statements about staphylococcus aureus are true, except:

- A. Most common source of infection is cross infection from infected people
- B. About 30% of general population is healthy nasal carriers
- C. Epidermolysin and TSS toxin are superantigens
- D. Methicillin resistance is chromosomally mediated.

Ans: A.

91. A child presents with sepsis. Bacteria isolated showed beta hemolysis on blood agar, resistance to bacitracin, and a

positive CAMP test. The most probable organism causing infection is:

- A. *S. pyogenes*
- B. *S. agalactiae*
- C. *Enterococcus*
- D. *S. pneumoniae*

Ans: B.

92. All of the following statements about *El-Tor* Vibrios are true, except:

- A. Humans are the only reservoir
- B. Can survive in ice cold water for 2-4 weeks
- C. Killed boiling for 30 seconds
- D. Enterotoxin can have direct effects on other tissues besides intestinal epithelial cells.

Ans: D.

93. Isolation of *Chlamydia* from tissue specimen can be done by

- A. ELISA (Enzyme linked immune assay)
- B. Yolk sac inoculation
- C. Direct immunofluorescence antibody test (DFA)
- D. Polymerase chain reaction (PCR)

Ans: B.

94. *Varicella Zoster* remains latent in:

- A. Trigeminal ganglion
- B. T cells
- C. B cells
- D. Macrophages

Ans: A.

95. Most common genital lesion in HIV patient is:

- A. *Chlamydia*
- B. Herpes
- C. Syphilis
- D. *Candida*

Ans: B.

96. A diabetic patient present with bloody nasal discharge, orbital swelling and pain. Culture of periorbital pus showed

branching septate hyphae. Which of the following is the most probable organism involved?

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

Ans: C.

97. (a) All of the following statements about Penicillin binding proteins (PBP) are true, except:

- A. PBP's are localized on the outer face of cell wall
- B. PBP's are essential for cell wall synthesis
- C. PBP's act as carboxypeptidases and transpeptidases
- D. Alteration in PBP's is the primary bases of resistance in MRSA

Ans: A.

(b) All of the following statements about Penicillin Resistance are true, except:

- A. Beta lactamase production is the most common mechanism of resistance
- B. Alteration in target PBPs is an important resistance mechanism in Gram negative bacteria
- C. Alteration in permeability / penetration of antibiotic causes resistance only in gram negative bacteria
- D. Beta lactamase production causes resistance in both gram positive and gram negative bacteria

Ans: B.

98. Which of the following may cause biliary obstruction?

- A. Ancylostoma
- B. Entrobium
- C. Strongyloides
- D. Clonorchis

Ans: D.

99. A young woman complains of recurrent rhinitis, nasal discharge and bilateral nasal blockage since one year. She also had history of allergy and asthma. On examination, multiple polyps with mucosal thickening and impacted secretions are seen in nasal cavities. Biopsy was taken and the material on culture showed many hyphae with dichotomous branching typically at 45 degree. Which of the following is most likely organism responsible?

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

Ans: B.

## FORENSIC

100. Primary impact injuries are commonly seen on:

- A. Chest
- B. Abdomen
- C. Legs
- D. Head

Ans: C.

101. A woman died within 5 years of marriage under suspicious circumstances. Her parents complained that her in laws used to frequently demand for dowry. Under which of the following sections can a magistrate authorize autopsy of the case:

- A. Section 174 CrPc
- B. Section 176 CrPc
- C. Section 304 IPC
- D. Section 302 IPC

Ans: B.

102. A factory worker presents with excessive salivation, blue lines on gums, tremors, disturbed personality, insomnia and loss of appetite. The most likely poisoning is:

- A. Mercury
  - B. Lead
  - C. Arsenic
  - D. Phosphorus
- Ans: A.

103. Which of the following bullets leaves a visible mark, so that a person can see it:

- A. Tandem bullet
- B. Tracer bullet
- C. Dum dum bullet
- D. Incendiary bullet

Ans: B.

104. Lightening flash can cause injury by all of the following, except:

- A. Direct effect of electric current
- B. Super Heated air
- C. Expanded and repelled air
- D. Compressed air pushed in front of the current

Ans: D.

105. Aconite poisoning causes all except:

- A. Hypersalivation
- B. Tingling and numbness
- C. Increased BP
- D. Chest pain

Ans: C.

106. Which of the following drug is used for Narcoanalysis?

- A. Atropine
- B. Phenobarbitone
- C. Scopolamine
- D. Pethidine

Ans: C.

### SPM

107. Which of the following is associated with emotional valence and is most likely to be influenced by motivation?

- A. Attitude
- B. Belief

- C. Practice
- D. Knowledge

Ans: C.

108. ASHA is posted at:

- A. Village level
- B. Primary Health centre
- C. Community health centre
- D. Subcentre

Ans: A.

109. Movement across socioeconomic levels is termed as:

- A. Social Equality
- B. Social upliftment
- C. Social Mobility
- D. Social insurance

Ans: C.

110. "JSY" stands for:

- A. Janani Surksha yojana
- B. Jeevan swastha yojana
- C. Jan sewa yojna
- D. Jan suraksha yojna

Ans: A.

111. Provision of primary Health care was done by:

- A. Bhole committee
- B. Alma – Ata declaration
- C. Shrivastava committee
- D. National Health policy

Ans: B.

112. Which of the following best reflects the highest level of community participation?

- A. Planning of intervention by community
- B. Intervention based on assessment of community needs
- C. Provision of resources by community
- d. Community supports and cooperates with workers

Ans: A.

113. Which of the following regarding maternal mortality rate (MMR) is not true?

- A. Numerator includes total number of females deaths within 42 days of delivery
- B. Denominator includes still births and abortions
- C. it is expressed as a rate and not ratio
- D. It is expressed per 100

Ans: B.

114. Perinatal mortality rate includes:

- A. Still borns and death within 7 days of birth
- B. Neonatal deaths within 30 days of birth
- C. Abortions and death within 7 days of birth
- D. Deaths between 7 and 28 days of birth

Ans: A.

115. Which of the following is not an essential component of primary health care?

- A. Provision of essential drugs
- B. Cost effectiveness
- C. Immunization against major infectious diseases
- D. Health education

Ans: B.

116. Which of the following is the current trend in health care?

- A. Qualitative enquiry
- B. Community Participation
- C. Equitable distribution
- D. Primary health care

Ans: B.

117. IMNCI differs from IMCI in all of the following, except:

- A. Malaria and anemia are included
- B. 0-7 days neonates are included
- C. Emphasis on management of sick neonates over sick older children
- D. Treatment is aimed at more than one disease at a time

Ans: D.

118. Mass chemoprophylaxis is endemic area is recommended for all of the following, except:

- A. Yaws
- B. Leprosy
- C. Trachoma
- D. Filaria

Ans: B.

119. Rural and urban difference in prevalence is seen in all of the following, except:

- A. Lung cancer
- B. Tuberculosis
- C. Mental illness
- D. Chronic Bronchitis

Ans: B.

120. All of the following factors contribute to Resurgence of malaria, except:

- A. Drug resistance in host
- B. drug resistance in parasite
- C. Drug resistance in vectors
- D. Antigenic variations in parasite

Ans: A.

121. A case of acute flaccid paralysis must be observed for how many days for residual weakness:

- A. 30 days
- B. 42 days
- C. 60 days
- D. 90 days

Ans: C.

122. India aims to eliminate which of the following diseases by 2015:

- A. Malaria
- B. Tuberculosis
- C. Kala Azar
- D. Filariasis

Ans: D.

123. The screening strategy for prevention of blindness from diabetic retinopathy according to the NPCB involves:

- A. Opportunistic screening
- B. High risk screening
- C. Mass screening
- D. Screening by primary care physician

Ans: B.

124. All of the following statements about Tuberculosis annual rate of infection (ARI) are true, except:

- A. The average estimated ARI for India in 1.7%.
- B. 1% ARI corresponds 75 new cases of smear positive TB/ 100,00 population
- C. ARI reflects the current trend and effectiveness of control measures
- D. ARI represents the percentage new infections

Ans: B.

125. All of the following statements about scrub are true, except:

- A. caused by *O. Tsutsugamushi*
- B. Mites as reservoirs
- C. Transmitted when adult mites feed on hosts
- D. Tetracycline is the drug of choice

Ans: C.

126. Which of the following statements about confidence limits / interval is true:

- A. Smaller the confidence level larger will be the confidence interval
- B. Less variable the data, wider will be the confidence interval
- C. Sample size does not affect the confidence interval
- D. 95% confidence interval will cover 2 standard errors around the mean

Ans: D.

127. A standard 'z-score' is related to:

- A. Binomial distribution
- B. Normal distribution

C. Chi-square test

D. t-test

Ans: B.

128. A new test for diabetes was carried out of the 80 people who were tested positive, it was found that actually 40 had diabetes and out of 9920 people who were tested negative only 9840 did not have the disease actually. The sensitivity of this new test is:

- A. 33%
- B. 50%
- C. 65%
- D. 99%

Ans: A.

129. Which of the following is not a Synthetic Pyrethroid Compound?

- A. DDT
- B. Permethrin
- C. Proparathrin
- D. Cypermethrin

Ans: A.

130. The population of a community on the 1<sup>st</sup> of June was recorded as 1,65,000. Total no. of new cases of Tuberculosis, recorded from 1<sup>st</sup> January to 31<sup>st</sup> June were 22. Total registered cases of tuberculosis in the community were recorded as 220. what is the incidence of TB in this community per 10 lakh population?

- A. 133
- B. 220
- C. 13.3
- D. 22

Ans: A.

131. All of the following about 'Red Cross' emblem are true, except:

- A. Size of bars in the cross in equal horizontally and vertically
- B. Can be used by personnel of United Nations Organizations (UNO)

- C. Misuse of emblem is punishable offence under Indian Law  
 D. Was convened in Geneva  
 Ans: B.

## MEDICINE

132. A 16 year old young girl present with a history of fatigability weakness and lethargy. Complete blood picture (CBC) reveals a Hemoglobin of 7.0, MCV of 70, MCH of 20 pg/cell and red cell distribution width (RDW) of 20. The most likely diagnosis is:  
 A. Iron deficiency anemia  
 B. Thalassemia Minor  
 C. Thalassemia Major  
 D. Sickle cell trait  
 Ans: A.

133. Which of the following investigations should be done immediately to best confirm a non matched blood transfusion reaction?  
 A. Indirect Coomb's test  
 B. Direct Coomb's test  
 C. Antibody in patient's serum  
 D. Antibody in donor serum  
 Ans: B.

134. Bence Jones proteinuria may be seen in:  
 A. Alpha heavy Chain disease  
 B. Gamma heavy chain disease  
 C. 'Mu' heavy chain disease  
 D. Epsilon heavy chain disease  
 Ans: C.

135. Bence Jones proteins are derived from:  
 A. Alpha Globulins  
 B. Beta Globulins  
 C. Gamma globulins  
 D. Delta globulins  
 Ans: C.

137. Which of the following is a major criteria for diagnosis of polycythemia vera?

- A. Presence of JAK-2 mutation  
 B. Low Erythropoetin levels  
 C. High leucocyte alkaline phosphatase (increase LAP score)  
 D. Thrombocytosis  
 Ans: A.

138. All of the following statements about Fanconi's anemia are true, except:

- A. Autosomal dominant inheritance  
 B. Hypocellular bone marrow  
 C. Congenital Anomalies  
 D. Usually normocytic / macrocytic cell morphology  
 Ans: A.

139. All of the following statements about third heart sound (S3) are true, except:

- A. Occurs due to rapid filling of the ventricles during atrial systole  
 B. Seen in in constrictive pericarditis  
 C. Seen in atrial septal defect (ASD)  
 D. Seen in Ventricular septal defect (VSD)  
 Ans: A.

140. A young asymptomatic female is observed to have a Midsystolic Click on routine examination. Valves are likely to show:

- A. Myxomatous degeneration  
 B. Aschoff bodies  
 C. Calcific degeneration  
 D. Ruptured chordae tendinae  
 Ans: A.

141. Beck's Triad is seen in:

- A. Constrictive Pericarditis  
 B. Cardiac tamponade  
 C. Right ventricular Myocardial infarction (RVMI)  
 D. Restrictive cardiomyopathy

Ans: B.

142. A patient presents with following parameters pH 7.5, p CO<sub>2</sub> 30 mmHg, pO<sub>2</sub> 102 mmhg and HCO<sub>3</sub> 16 meq/l. Which of the following correctly describes the compensatory mechanisms?

- A. Respiratory alkalosis
- B. Metabolic Alkalosis
- C. Respiratory Acidosis
- D. Metabolic Acidosis

Ans: D.

143. A 29 year old anxious lady presents with a history of progressive breathlessness and exercise intolerance since four months. Her FVC is 90% and FEV<sub>1</sub> / FVC is 86%. Oxygen saturation after exercise was observed to drop from 92% to 86%. What is the likely diagnosis?

- A. Primary alveolar hypoventilation
- B. Primary pulmonary hypertension
- C. Anxiety disorder
- D. Interstitial lung disease

Ans: B.

144. Accelerated Idioventricular Rhythm (AIVR) is the most common arrhythmia associated with:

- A. Dilated cardiomyopathy
- B. Myocardial Reperfusion
- C. Digitalis intoxication
- D. Myocarditis

Ans: B.

145. Streptokinase and urokinase are contraindicated in:

- A. Intracranial malignancy
- B. Pulmonary embolism
- C. A V fistula
- D. Thrombophlebitis

Ans: A.

146. A truck driver presented with history of fever since four weeks, and dry cough. He also gives a history of weight loss of

about 10 kg. X-ray shows bilateral reticulonodular infiltrates. The most likely diagnosis is:

- A. Tuberculosis
- B. Pneumocystis carinii Pneumonia
- C. Pneumococcal pneumonia
- D. Interstitial lung disease

Ans: B.

147. Cavitory lesions in lung are seen in:

- A. Primary pulmonary tuberculosis
- B. Staphylococcal pneumonia
- C. Pneumoconiosis
- D. Interstitial lung disease

Ans: B.

148. Pre-renal azotemia is characterized by all of the following except:

- A. Fractional excretion of Na < 1%
- B. Urinary osmolality > 500 mosm/kg
- C. Urinary sodium concentration > 40 meq/l
- D. Reversible with replacement fluids

Ans: C.

149. A patient is found to be positive for HBs Ag on routine laboratory evaluation. Other serological tests for hepatitis are unremarkable. He is clinically asymptomatic and liver enzymes are within the normal range. Which of the following best describes his diagnosis?

- A. Inactive HBV carrier
- B. Acute Hepatitis B
- C. Chronic Hepatitis B
- D. Active HBV carrier

Ans: A.

150. A male patient is observed to be HBs Ag antigen positive HBe Ag antigen negative and anti-HBe antibody positive. HBV DNA copies are observed to be 100,000/ml while SGOT and SGPT are elevated to 6 times the upper limit of



normal value. What is the likely diagnosis?

- A. HBV surface mutant
- B. HBV precore mutant
- C. Wild HBs Ag
- D. Inactive HBV carrier

Ans: B.

151. (a) A patient presents with unconjugated hyperbilirubinemia and presence of urobilinogen in urine. Which amongst the following is the least likely diagnosis?

- A. Hemolytic jaundice
- B. Crigler Najjar syndrome
- C. Gilbert's syndrome
- D. Dubin Johnson syndrome

Ans: D.

(b) A patient presents with unconjugated hyperbilirubinemia and elevated urobilinogen levels in urine. The most diagnosis is:

- A. Hemolytic Jaundice
- B. Crigler Najjar syndrome
- C. Gilbert's Syndrome
- D. Dubin Johnson Syndrome

Ans: A.

152. A lady presented with no progressive dysphagia only for solids. Barium study showed proximal esophageal dilatation with distal constriction. The most likely diagnosis is:

- A. Peptic Stricture
- B. Carcinoma esophagus
- C. Achalasia cardia
- D. Lower esophageal ring

Ans: D.

153. A young girl presents with abdominal pain and a recent change in bowel habit, with passage of mucus in stool. There is no associated blood in stool and symptoms are increased with stress. The most likely diagnosis is:

- A. Irritable bowel syndrome
- B. Ulcerative colitis
- C. Crohn's disease
- D. Amebiasis

Ans: A.

154. Which of the following statements about lung carcinoma is true:

- A. Squamous cell variant accounts for 70% of all lung cancers
- B. Oat cell variant typically present with cavitation
- C. Oat cell variant is typically associated with hilar adenopathy
- D. Adenocarcinoma variant is typically central in location

Ans: C.

155. Plasma urea / creatinine ratio of 20:1 may be seen in:

- A. Rhabdomyolysis
- B. Ureteric calculi
- C. Pre-renal failure
- D. Chronic Glomerulonephritis

Ans: C.

156. An elderly patient presents with a prolonged history of weakness and lethargy. On examination he is found to be anemic and stool is positive for occult blood. Which of the following is the investigation of choice?

- A. Colonoscopy
- B. Barium meal
- C. Barium enema
- D. CT abdomen

Ans: A.

157. Which of the following statements about Wilson's disease is true:

- A. Low serum ceruloplasmin and low urinary copper
- B. Low serum ceruloplasmin and high urinary copper
- C. High serum ceruloplasmin and low urinary copper