

AIIMS PG NOV 2016
(Based on Memory)

1. Postherpetic neuralgia is defined as pain lasting beyond how many weeks
 - (a) 1 week
 - (b) 2 weeks
 - (c) 3 weeks
 - (d) 4 weeks

2. A 24-years-female presents with patchy hair loss in the right temporal and occipital region. Examination reveals non-scarring alopecia with multiple small broken hairs. Scrapings from scalp show mild inflammation, perifollicular hemorrhage and surrounding mild lymphocytes infiltration. What is the likely diagnosis?
 - (a) Alopecia areata
 - (b) Androgenic alopecia
 - (c) Loose anagen hair
 - (d) Trichotillomania

3. What is the ratio of chest compressions and breaths when a lone person is giving cardiopulmonary resuscitation
 - (a) 30:1
 - (b) 30:2
 - (c) 15:1
 - (d) 10:1

4. Why 100% oxygen is administered after nitrous oxide is discontinued on emergency from anesthesia?
 - (a) Second gas effect
 - (b) Diffusion hypoxia
 - (c) For adequate analgesia
 - (d) As air is costlier than oxygen

5. Non visualization of gallbladder in hepatic scintigraphy is suggestive of:
 - (a) Chronic cholecystitis
 - (b) Carcinoma gallbladder
 - (c) Acute cholecystitis
 - (d) Gallstones obstructing CBD

6. A surgeon to decide to operate a patient under epidural anesthesia. 3% xylocaine with adrenaline is used for administering epidural anesthesia. The patient suddenly develops hypotension after 3 minutes to administration. What is the likely cause for this?
 - (a) Systemic absorption of the drug
 - (b) Vasovagal effect
 - (c) Allergy to the drug preparation
 - (d) Penetration into the subarachnoid space

7. Pigmentation of nail is caused by all of these drugs except:
 - (a) Cyclophosphamide
 - (b) Chlorpropazine

- (c) Chloroquine
- (d) Amiodarone

8. A 12-years-old boy presented with gradually progressive annular plaque on his buttocks with central scarring. What is the most likely diagnosis?

- (a) Granuloma annular
- (b) Lupus vulgaris
- (c) Tinea cruris
- (d) Annular psoriasis

9. During laryngoscopy and intubation procedure, all of these are true except:

- (a) A sight pressure may be applied at the cricoids cartilage
- (b) The laryngoscope is held in the right hand introduced from the right side of the patient.
- (c) The neck is fixed with extension at the atlanto occipital joint
- (d) After incisor to pull up the tongue and visualize the vocal cords

10. An elderly female had her house destroyed in an earthquake. Following this, she presented to your office with complaints of anxiety, sadness, lack of sleep, anger palpitations and despair, consider the following statements:

- (a) The lady is suffering from acute stress reaction.
 - (b) The defense mechanism involved is projection
 - (c) Drug of choice in this situation is risperidone
 - (d) She needs referral to a psychiatrist for psychotherapy which of the following statement are true?
- (a) a and c
 - (b) b and d
 - (c) a, and c
 - (d) a and d

11. A-22-years-old male comes to your with complains of frequenting checking of doors even when they are locked. He is distressed about this fact. He is subsequently diagnosed to have obsessive compulsive disorder. Consider the following statements:

- (a) Repression and reaction formation are the defense mechanisms involved
 - (b) SSRIS are the drug of choice
 - (c) Risperidone may be used in SSRIS resistant cases to augment the response
 - (d) Systemic desensitization is the psychotherapy of choice which of the above are correct statements:
- (a) a and b
 - (b) b and c
 - (c) b, c and d
 - (d) a, b, c and d

12. Which of these is the correct sequence of Maslow's hierarchy of needs?

- (a) Safety – physiological needs – self – actualization – Belonging – self – esteem
- (b) Physiological needs – Safety – Belonging – self – esteem– self – actualization
- (c) Safety – self – actualization – Belonging – physiological needs – self – esteem
- (d) Self – actualization – physiological needs – Safety – Belonging – self – esteem

13. A person has been referred to you by the court. You find a discrepancy between history and examination findings. Which of these conditions you should be aware of in this situation?

- (a) Malingering

- (b) Factitious
- (c) Somatization syndrome
- (d) Dissociative fugue

14. According to the Who definition of hearing loss, what is the value to classify as profound hearing loss?

- (a) 61 – 71 dB
- (b) > 81 dB
- (c) > 91 dB
- (d) > 101 dB

15. Maximum contribution to the refractive power of the eye is by which part of the eye?

- (a) Anterior surface of cornea
- (b) Anterior surface of lens
- (c) Posterior surface of lens
- (d) Posterior surface of cornea

16. What is the usual weight of rabbit used in ophthalmologist experiments?

- (a) 1.5 kg
- (b) 5 – 7 kg
- (c) 2.5 kg
- (d) 10 – 12 kg

17. Which of these is the correct definition of blindness as per NPCB?

- (a) Diminution of field vision to 20 Or less in better eye
- (b) Inability of a person to count fingers from a distance of 3 meters
- (c) Vision 6/60 or less with best possible spectacle correction in the better eye
- (d) Vision 4/60 or less with best possible spectacle correction in the better eye

18. What is the power of the lens that should be used with indirect ophthalmoscope to visualize the retina?

- (a) + 90 D
- (b) + 58 D
- (c) + 60 D
- (d) + 20 D

19. A woman present with complete wound dehiscence 4 – days after a laparotomy. After prescribing antibiotics for the infection, the surgeon decides to suture the wound. Which of these suture material should he use?

- (a) Vicryl
- (b) Mersilic
- (c) Catgut
- (d) Ethilon

20. Which of the following causes formation?

- (a) Movement at fracture site
- (b) Rigid immobilization
- (c) Compression plating
- (d) Intraosseous nailing

21. Partograph represents various stages of labor with respect to time. True about partograph is all except –

- (a) Each small square represents one hour
- (b) Alert and action lines are separated by a difference of 4 hours
- (c) Partograph recording should be started at a cervical dilation of 4 cm
- (d) Send the patient to first referral unit if the labor progression line crosses the alert line

22. The following graph represents the stages of labor. Which of the following statements is true about the graph C?

- (a) Secondary arrest after progression of labor
- (b) Prolonged active phase of labor
- (c) Prolonged latent phase / primary arrest of labor
- (d) Normal labor in a primigravida

23. Which of the following statement is not true about cervical cancer screening guidelines according to who?

- (a) Pap smear should repeated yearly in woman of reproductive age group
- (b) HPV test should be done five yearly in woman between age of 30 to 49 years
- (c) VIA/VILI is more reliable at older age as it becomes easier to identify the transformation one with age
- (d) Pap smear can be repeater less frequency if it comes out negative for 3 consecutive years

24. What is done for screening of Down's syndrome in first trimester?

- (a) Beta HCG and PAPP – A
- (b) Unconjugated estradiol and PAPPA
- (c) AFP and Inhibin A
- (d) AFP and Beta HCG

25. What does of misoprostol is used orally to control bleeding in partum heamorrhage?

- (a) 1000 micrograms
- (b) 400 micrograms
- (c) 800 micrograms
- (d) 600 micrograms

26. The following graph represents the stages of labor. What is the maximum capacity of bakri balloon which used in post partum heamorrhage?

- (a) 200 ml
- (b) 300 ml
- (c) 500 ml
- (d) 1000 ml

27. A 38 week primigravida presented to the labor room with minimal labor pains and contraction. On heart rate of the patient is 86 / min and blood pressure is 126 /76 mm Hg. What should be done next?

- (a) Give oxytocin to augment labor
- (b) Observe the patient and wait for increase in uterine contractions
- (c) Sedate the patient by and give phenergan to decrease labor pains
- (d) Induce labor by artificial rupture of membranes

28. What is the drug of choice for precocious puberty in girls?

- (a) GNRH analogues

- (b) Danazol
- (c) Cyproterone acetate
- (d) Medroxy progesterone acetate

29. A young female presents to you with primary amenorrhea. Examination reveals normal breast development and absent axillary hairs. Pelvic examination shows a normally developed vagina with citomegaly. On ultrasound, gonads are visible in the inguinal region. What is the likely diagnosis?

- (a) Complete androgen insensitivity syndrome
- (b) Partial androgen insensitivity syndrome
- (c) Grandal dysgenesis
- (d) Mayer Rakitansky Kuster Huser syndrome

30. Which of the following statements is true regarding medical abortion?

- (a) Can only be done up to 72 days
- (b) Ultrasound should be done in all cases
- (c) Only a person certified under MTP act can perform medical termination of pregnancy
- (d) If the patient has an LUCD in situ, it doesn't need to be removed

31. What should be the ideal temperature in delivery room?

- (a) 20 – 23 degrees C
- (b) 25 – 28 degrees C
- (c) 30 – 35 degrees C
- (d) 37 degrees C

32. Ideal route of drug delivery in neonatal resuscitation is

- (a) Intraosseous
- (b) Through umbilical artery
- (c) Through peripheral vein
- (d) Through umbilical vein

33. An unresponsive patient has been brought to you by the police. What is the first thing you will do?

- (a) Start chest compressions immediately
- (b) Check carotid pulse
- (c) Check for response and call help
- (d) Start rescue breaths

34. In which of the diseases is the following appearance of calve seen in a child?

- (a) Spinal muscular atrophy
- (b) Muscular dystrophy
- (c) Myopathy
- (d) Peripheral neuropathy

35. Ponderal index is:

- (a) Head circumference to abdominal circumference ratio
- (b) Mid – upper arm circumference to head circumference ratio
- (c) Weight in kilograms by cube of height in meters
- (d) Square root of height in feet by weight in grams

36. A neonate presented with jaundice on first day of life. How will you manage?

- (a) Observe only as it is mostly physiological jaundice
- (b) Exchange transfusion
- (c) Phototherapy
- (d) Liver function tests and liver biopsy as it is mostly due to cholestasis

37. Which of the following is a true diverticulum of esophagus?

- (a) Zenker's diverticulum
- (b) Meckel diverticulum
- (c) Epiphrenic diverticulum
- (d) Parabronchial diverticulum

38. What is the recommended dose of steroid for attaining fetal lung maturity?

- (a) inj. Betamethasone 12 mg for 2 doses 12 hours apart
- (b) inj. Betamethasone 12 mg for 2 doses 24 hours apart
- (c) inj. Dexamethasone 6 mg for 4 doses 24 hours apart
- (d) inj. Dexamethasone 12 mg for 2 doses 12 hours apart

39. A 45-year-old patient presented to you with ongoing massive hematemesis. The patient is alert and hemodynamically stable. What will be the first step in management?

- (a) Do an urgent upper GI endoscopy
- (b) Put the patient in recovery position and secure airway
- (c) Insert a cannula and start IV
- (d) Send for blood transfusion

40. Which one of these is a muscle splitting incision?

- (a) Kocher's incision
- (b) Lanz incision
- (c) Rutherford – Morrison incision
- (d) Pfannenstiel incision

41. In a child surgery was done for biliary stricture with hepatojejunostomy. Postoperative bilirubin level after 2 weeks was 6 mg / dl from a preoperative level of 12 mg / dl. The reason for this could be

- (a) Normal lowering of bilirubin takes time
- (b) Delta bilirubin
- (c) Anastomotic stricture
- (d) Mistake in job technique

42. Which of these Scoring system is helpful in assessing severity of wound infection?

- (a) South anapton grading scale
- (b) ASA classification
- (c) Glasgow score
- (d) APGAR

43. After midline laparotomy you have been asked to suture the incision. What length of suture material will you choose?

- (a) 2x incision length
- (b) 4x incision length
- (c) 6x incision length
- (d) 8x incision length

44. In a patient with obstructive jaundice, the bilirubin level is 40 mg/dl. What is the possible explanation for such a high level?

- (a) Liver Failure
- (b) Renal Failure
- (c) Complete obstruction of common bile duct
- (d) Malignant obstruction

45. A 44-years-old male underwent VATS thymectomy for Myasthenia gravis. During surgery, the pleural was accidentally injured. The surgeon decided to put a drain in the pleural cavity. Which of these statement is correct about the timing of removed of intercostals chest tube?

- (a) After partial expansion of lungs and < 50 ml output from drain for 2 consecutive days
- (b) After complete expansion of lungs and < 30 ml output from drain for 2 consecutive days
- (c) On 4th day, irrespective of the output from the drain and lung expansion
- (d) After complete expansion of lungs and < 20 ml output from drain for 2 consecutive days

46. Identify the instrument shown below:

- (a) DPL catheter
- (b) Laparoscopic port trocar
- (c) Peritoneal dialysis catheter
- (d) Endoscopic ultrasound probe

47. A neonate presented with cicatrizing skin lesions all over the body with hypoplasia of all limbs. An MRI of the brain revealed diffuse cerebral atrophy. An ophthalmologic evaluation reveals chorioretinitis. Which of these tests is most likely to show a positive result in this patient?

- (a) Anti – HCMV antibodies
- (b) Anti – toxoplasma antibodies
- (c) Anti – VZV antibodies
- (d) Anti – rubella antibodies

48. A neonate on routine examination at birth was found to have hepatomegaly. Rest of the examination was normal. Which antibodies were found to be positive. What sequelae in later life is the child at risk of?

- (a) Renal failure
- (b) Sensorineural hearing loss
- (c) Hepatic fibrosis
- (d) Mental Retardation

49. A child presented at 2 years of age with delayed motor development mental retardation and finger biting. He was normal at birth. He subsequently develops cerebral palsy arthritis and dies due to renal failure at age of 25 years. What is the likely enzyme deficiency implicated?

- (a) HGPRT deficiency
- (b) ADA deficiency
- (c) Hexosaminidase deficiency
- (d) Ornithine transcarbamyl deficiency

50. Cerebellar lesion can produce all of these except?

- (a) Ataxic Gait
- (b) Past Pointing
- (c) Resting tremor

(d) Nystagmus

51. All of these muscles have parallel oriented fibers except:

- (a) Sartorius
- (b) Rectus abdominis
- (c) Tibialis anterior
- (d) Sternohyoid

52. Calcium absorption from gut is increased by all except:

- (a) Phytates
- (b) Vitamin D
- (c) Alkaline PH in gut
- (d) Protein in diet

53. Which of these nerve root is the control center for the Stapedial reflex?

- (a) Superior olivary complex
- (b) Lateral lemniscus
- (c) Inferior colliculus
- (d) Medial geniculate body

54. Countercurrent mechanism is not seen in

- (a) Eyes
- (b) Testes
- (c) Kidney
- (d) Intestine

55. Diffusion capacity of carbon monoxide is decreased in all except:

- (a) Polycythemia
- (b) Interstitial lung disease
- (c) Emphysema
- (d) Pulmonary vascular disease

56. Anterior $\frac{2}{3}$ rd of the tongue is demarcated from the posterior $\frac{1}{3}$ rd by:

- (a) Passavant's ridge
- (b) Circumvallate papillae
- (c) Sulcus terminalis
- (d) Epiglottis

57. Parasympathetic nervous system comprises of?

- (a) Cranial nerves 3, 5, 7, 10 and sacral nerves 1 – 5
- (b) Cranial nerves 3, 7, 9, 10 and sacral nerves 2 – 4
- (c) Cranial nerves 5, 7, 9, 10 and sacral nerves 2 – 4
- (d) Cranial nerves 3, 5, 7, 10 and sacral nerves 2 – 4

58. Endo – cochlear potential is –

- (a) + 45 MV
- (b) – 45 MV
- (c) – 60 MV
- (d) + 85 MV

59. Common intermediate in synthesis of steroid hormones is:

- (a) 7 Dihydrocholesterol
- (b) Cortisone
- (c) Pregnenolone
- (d) 7 Hydroxycholesterol

60. The PH of a solution containing 5millimole per liter of H^+ ions is closest to what value?

- (a) 2.3
- (b) 1.7
- (c) 3.5
- (d) 4.2

61. RQ of a person on pure carbohydrate diet will be:

- (a) 1
- (b) 0.7
- (c) 1.2
- (d) 1.5

62. A farmer ingested some unknown poisonous seeds and had pain and vomiting. Soon he developed paralysis of his lower limbs which ascends till it affected the respiratory muscles and he died within two days. Identify the likely cause:

- (a) Strychnine nux – vomica
- (b) Conium maculatum
- (c) Solanum lycopersicum
- (d) Abrusprecatorium

63. Which vitamin is synthesized in vivo in the body by human?

- (a) Folic acid
- (b) Niacin
- (c) Panthothenic acid
- (d) Cyanocobalamin

64. Polysomnography contains all of the following tests except?

- (a) Electroencephalography
- (b) Pulse oximetry
- (c) Electroculography
- (d) Arterial pCo₂ measurement

65. Potential developed due to movement of freely diffusible ions across a semi permeable membrane is calculated using:

- (a) Nernst equation
- (b) Gibbs equation
- (c) Goldman – Hodgkin – Katz equation
- (d) Fick principle

66. Migratory motor complexes in the gut reappear after intervals of:

- (a) 90 min
- (b) 120 min
- (c) 60 min
- (d) 150 min

67. Hyperpolarizing cyclonucleotide (HCN) gated channels have a role in:

- (a) Cardiac rhythm generation

- (b) Generation of mitochondrial ascion potential
- (c) Memory formation
- (d) Myocardial muscle contraction

69. Correctly match the following:

- | Declaration | Motive |
|------------------------------------|------------------------------------|
| (1) Declaration of Geneva | (i) Global health |
| (2) Declaration of Helsinki | (ii) Hippocratic oath |
| (3) Declaration of Tokyo | (iii) Medical Ethics |
| (4) Declaration of Oslo | (iv) Inhuman practices and torture |
| (a) 1 – iii, 2 – ii, 3 – iv, 4 – i | |
| (b) 1 – ii, 2 – iii, 3 – iv, 4 – i | |
| (c) 1 – iv, 2 – i, 3 – ii, 4 – iii | |
| (d) 1 – ii, 2 – iv, 3 – iii, 4 – i | |

70. $\text{HCO}_3/\text{H}_2\text{CO}_3$ is the best buffer because it is?

- (a) PK_a near physiological PH
- (b) Its components can be increased or decreased in the body as needed
- (c) Good acceptor and donor of H^+ ions
- (d) Combination of a weak acid and weak base

71. At physiological PH, which of these amino acids has a positive charge?

- (a) Arginine
- (b) Aspartic acid
- (c) Valine
- (d) Isoleucine

72. All of these processes take place in mitochondria except:

- (a) Beta – oxidation of fatty acids
- (b) DNA synthesis
- (c) Fatty acid synthesis
- (d) Protein synthesis

73. Ammonia from brain is removed as:

- (a) Glutamine
- (b) Alanine
- (c) Urea
- (d) Glutamate

74. CG islands in our DNA are important for:

- (a) Acetylation
- (b) Methylation
- (c) T-RNA synthesis
- (d) DNA replication

75. A patient has normal blood glucose level as estimated by Glucose – Oxidase Peroxidase method, shows positive Benedict's test in urine. Which of the following is likely cause?

- (a) Fructosemia
- (b) Galactosemia
- (c) Denaturation of glucose
- (d) Faulty tests

76. Which of these is most effective for gluconeogenesis?

- (a) Citrate stimulation of acetyl carboxylase
- (b) Acetyl – COA stimulation of pyruvate carboxylase
- (c) Fructose – 2, 6 – piphosphate stimulation of phosphofrukinase – 2
- (d) Fructose – 1, 6 – piphosphate stimulation of phosphofrukinase – 1

77. Which of the following is maximum in HDL as compare to other lipoproteins?

- (a) Cholesterol
- (b) Triglycerides
- (c) Apoproteins
- (d) Fatty acids

78. Change in sex hormone binding globulin will most affect levels of which of these hormones?

- (a) Testosterone
- (b) Estrogen
- (c) Progesterone
- (d) DHEA

79. Rapid source of energy by resynthesizing ATP for excening museles is:

- (a) Glycalysis
- (b) TCA cycle
- (c) Glycogenolysis
- (d) Phosphocreatine

80. A 59 year old presents with pain, numbnees and impaired sensation over half of the face along with ataxia, nystagmus, dysphagia and hoarseness of voice. His pain and thermal sensations over opposite half are impaired, Horner's syndrome is present. Likely cause of the disease is thrombosis of which vessel?

- (a) AICA (Anterior inferior cerebellar artery)
- (b) PICA (Posterior inferior cerebellar artery)
- (c) Basilar
- (d) Pontine vessels

81. All of these structures lie in relation to the left ureter except:

- (a) Mesentery of sigmoid colon
- (b) Bifurcation of common iliac artery
- (c) Quadratus lumborum
- (d) Gonadal vessels

82. Extraembryonic mesoderm is derived from:

- (a) Epiblast
- (b) Primary yolk sac
- (c) Secondary yolk sac
- (d) Hypoblast

83. According to the new RNTCP guidelines, the following is not suspect of tuberculosis?

- (a) Conformed extrapulmonary tuberculosis patient with cough of 2 weeks or more
- (b) HIV-Positive patient with cough of any duration
- (c) Contacts of sputum Positive tuberculosis patient with cough of any duration
- (d) Diabetic person having cough of any duration

84. Which of these is an obligate intracellular pathogen?

- (a) *Listeria monocytogenes*
- (b) *Coxiella burnetii*
- (c) *Legionella pneumophila*
- (d) *Klebsiella*

85. What is the most common clinical manifestation when larvae of ascaris, hookworm and strongyloides migrate through the body?

- (a) Asymptomatic
- (b) Pneumonitis
- (c) Acute dermal reaction
- (d) Anemia

86. Why are schizont and late trophozoite stages of *Plasmodium falciparum* not seen in peripheral blood smear?

- (a) They are sequestered in the spleen
- (b) Due to adherence to the capillary endothelium, they are not seen in peripheral blood
- (c) Due to antigen – antibody reaction and removed
- (d) They are seen in mosquito blood

87. Which of the following is not used in osteoporosis?

- (a) Milnacipran
- (b) PTH
- (c) Strontium ranelate
- (d) Denosumab

88. Which of the following statements is incorrect about rifabutin as compared to rifampicin?

- (a) It has higher bioavailability and stronger activity against all mycobacterium
- (b) It has a longer half – life
- (c) It has lesser drug interactions
- (d) It is preferred in patients with HIV

89. A patient presented to the hospital with severe hydrophobia. You suspect rabies. Obtain corneal scraping from the patient. What test should be done on this specimen for a diagnosis of Rabies?

- (a) RT – PCR for rabies virus
- (b) Negri bodies
- (c) Antibodies to rabies virus
- (d) Indirect immunofluorescence

90. In a suspected patient of dengue, all of these are acceptable investigations at day 3 of presentation except?

- (a) NSI antigen detection
- (b) Viral culture and isolation in C6/36 cell line
- (c) RT – PCR
- (d) Elisa for antibody against Dengue virus

91. All of these are seen in hemolytic anemia except:

- (a) Yellowing of eyes and sclera

- (b) Increased LDH
- (d) Low reticulocyte count

92. The resolving power of a Microscope upon all except:

- (a) Size of the aperture
- (b) Focal length of the eyepiece
- (d) Wavelength of light source used

93. During autopsy of a patient died due to suspected myocardial infarction, the heart was stained with triphenylethylazolum tetrachloride dye. What will be the color of the viable myocardium?

- (a) Blue
- (b) White
- (c) Red
- (d) Dark Brown

94. MHC antigens are absent on:

- (a) Monocyte
- (b) Platelet
- (c) Erythrocyte
- (d) Neutrophil

95. A-26 year female presents with pallor with a hemoglobin of 9.5 mg/dl, PCV 30 mm Hg count of 2 million per cubic millimeters. What is the likely diagnosis?

- (a) Sideroblastic anemia
- (b) Iron deficiency anemia
- (c) Thalassemia
- (d) Folic acid deficiency

96. Fine needle aspiration cytology is not enough to diagnose.

- (a) Papillary Carcinoma of thyroid
- (b) Carcinoma breast
- (c) Adenocarcinoma lung
- (d) Follicular Carcinoma of thyroid

97. How is follicular carcinoma differentiated from benign thyroid disease?

- (a) Invasion of basement membrane
- (b) Presence of mitotic figures
- (c) Orphan Annie eye nuclei
- (d) Staining with calcitonin

98. All of these are seen in MEN – 1 syndrome except:

- (a) Posterior pituitary tumors
- (b) Pancreatic neuroendocrine tumors
- (c) Foregut carcinoid
- (d) Parathyroid hyperplasia

99. Most consistent feature of RPGN is:

- (a) Crescent formation
- (b) Mesangial cell proliferation
- (c) IGA deposition

(d) Loss of foot processes

100. Stain useful for identifying premalignant lesions of the lip is:

- (a) Hematoxylin and eosin
- (b) Toluidine blue
- (c) Giemsa
- (d) Alizarin red

101. All of these stains are used in tattooing except:

- (a) India ink
- (b) Vermillion
- (c) Prussian
- (d) Osmin blue

102. Digoxin is obtained from a plant product and a half of 36 hours. How does this information help us in formulating treatment?

- (a) To adjust maintenance dose of digoxin required to keep the blood levels within therapeutic range
- (b) Intravenous administration in emergency and urgent dosing
- (c) Long half-life permits alternate day dosing
- (d) It requires a high loading dose to be administered

103. Which of these sites is least commonly preferred for insulin injection?

- (a) Anterior thigh
- (b) Lateral thigh
- (c) Dorsum of arm
- (d) Around umbilicus

104. All of these are potentially serious side effects of thionamide group of antithyroid drugs except:

- (a) Agranulocytosis
- (b) Hepatic dysfunction
- (c) Severe rash
- (d) Anaphylaxis

105. The correct sequence of systemic absorption if a drug is administered through skin is:

- (a) Scrotum > forearm > scalp > postauricular skin > plantar surface
- (b) Scrotum > postauricular skin > forearm > scalp > plantar surface
- (c) Plantar surface > scalp > forearm > postauricular skin > scrotum
- (d) Postauricular skin > forearm > scrotum > scalp > plantar surface

106. An 80 kg male patient presented to the emergency with hypotension and have been instructed to start him on an inotrope at a dose of 10 mcg / kg / min. Each 5ml ampoule of the drug contains 200 mg drug.

You choose 2 ampoules of the drug and decide to mix it with saline to make a 250 ml solution. What should be the flow rate of the drug solution to maintain the BP of the patient (assuming 16 drops = 1ML)?

- (a) 16 drops / min
- (b) 8 drops / min
- (c) 4 drops / min
- (d) 10 drops / min

107. About anti – epileptic drugs, which of the following is an incorrect match?

- | | | |
|--------------------------------|---|-----------------------------|
| 1. Focal
Seizures | Lamotrigine,
Carbamazepine,
Phenytoin | Valproate |
| 2. Absence
Seizure | Carbamazepin | Ethosuximide,
Valproate |
| 3. Myoclonic
Seizures | Vaiproate
Lamotrigine | Clonazepam |
| 4. Generalized
Tonic clonic | Vaiproate
Lamotrigine
Topiramate | Phenytoin,
Carbamzaepine |

- (a) 1
(b) 2
(c) 3
(d) 4

108. An 86-years-old lady presented with severe constipation, she is a known hypertensive on medications for 10 years. In clinic, her BP is 157/98 mm Hg with a heart rate of 58/min. On taking here BP in the supine position it was found to be 90/60 mm Hg. She also has a recent history of depression. She is taking atenolol, Thiazide, imipramine, haloperidol and Docusate. What will be the next best step in management?

- (a) Change atenolol and Thiazide to calcium channel blocker and ACE inhibitor and add bisacodyl for constipations
(b) Change imipramine and haloperidol to fluoxetine and risperidone and add bisacodyl for constipations
(c) Only add bisacodyl for constipations add continue rest of the medications
(d) Discontinue all her medications and start her on steroids

109. A-25-years-old unidentified male from roadside is brought by police to emergency room with disorientation, altered sensorium and vomiting. He has a BP of 90/70 mm Hg. Heart rate of 110/min, temperature – 36.4 °C and respiratory rate of 11/min. On examination, he had bilateral pin-point pupils. What is the suspected diagnosis?

- (a) Pontine hemorrhage
(b) Opioid poisoning
(c) Datura poisoning
(d) Hypothermia

110. Continuous murmur can be heard in all except:

- (a) Patent ductus arteriosus
(b) VCD with aortic regurgitation
(c) Pulmonary AV Fistula
(d) Coronary AV Fistula

111. A patient presents to the emergency with altered sensorium. All of these tests should be done except?

- (a) Non – contrast CT head
(b) Lumbar puncture
(c) Random blood sugar

(d) Complete blood counts

112. A patient diagnosed with carcinoma of lung presented with a serum calcium level of 16.4 mmol/L. What will be the first step in management?

- (a) IV fluids and furosemide
- (b) Immediate hemodialysis
- (c) Disphosphonates
- (d) Chemotherapy with gemcitabine and carboplatin

113. About Transfusion related acute lung injury (TRALI), all are true except

- (a) Mortality is less than 10%.
- (b) Signs and symptoms usually subside within 2-3 weeks of onset
- (c) Supportive care is the mainstay of treatment
- (d) Steroids have a doubtful role in management

114. A 40-year-old female is diagnosed to have epilepsy and is started on phenytoin and valproate. 4 weeks later, she develops a diffuse rash all over her body, which gradually disappears on stopping both the drugs. In how many weeks, will the rash reappear when she is rechallenged with phenytoin and valproate?

- (a) 1 week
- (b) 2 weeks
- (c) 3 weeks
- (d) 4 weeks

115. Which of these infections cause a non-distributed rash?

- (a) Epidemic typhus
- (b) Typhoid
- (c) Measles
- (d) Secondary syphilis

116. Which of these is not true regarding iron supplementation in iron deficiency anemia?

- (a) Administer a small diluted dose first prior to infusion to look for any allergy to iron preparation
- (b) Oral iron therapy should be stopped once the patient achieves a hemoglobin of > 12 mg/dl
- (c) If gastric intolerance to oral iron therapy occurs, all patients should be administered parenteral forms.
- (d) Parenteral iron supplementation is required in a patient with HB of less than 7 mg/dl

117. Which of the following drugs can be given in renal failure safely?

- (a) Saxagliptin
- (b) Sitagliptin
- (c) Vidagliptin
- (d) Linagliptin

118. Thrombocytopenia causing drugs are all except

- (a) Cephalosporin
- (b) Multivitamins Containing Vitamin K
- (c) NSAIDs
- (d) Anti-depressants

119. Which of the following drugs can be used in benzodiazepine toxicity?

- (a) Protamine sulphate

- (b) Flumazenil
- (c) Barbiturate
- (d) Ethyl alcohol

120. Metformin causes a server, sometimes life – threatening side effect of lactic acidosis. All of the following factors increase the risk of lactic acidosis except

- (a) Liver dysfunction
- (b) Advanced age
- (c) Smoking
- (d) Renal failure

121. Drug advertisement letter is a necessary component of each drug formulation and contains various information about the drug like drug dosing, frequency and half life which of the following information need not be given in the drug advertisement latter

- (a) Research papers and other articles preparing efficiency of the drug
- (b) Date of expiry of the drug
- (c) Race, but serious life threatening adverse effects
- (b) Common, not so serious adverse effects

122. A patient presented with history of vomiting for last three days. On examination, signs of dehydration were present. On further investigation, the patient was found to have raised creatinine, a ph = 7.22, pco₂ = 30mm Hg, Hco₃ = 9 meq, Na⁺ = 138 meq and k⁺ = 3.4meq/l identify the acid base abnormality observed in this patient?

- (a) Metabolic acidosis
- (b) Metabolic alkalosis
- (c) Mixed metabolic acidosis and metabolic alkalosis
- (d) Mixed metabolic acidosis and respiratory acidosis

123. Calculate the base deficit in a patient of weight 75 kg with aph = 6.96, pco₂ = 30mm Hg and Hco₃ = CmEq/l?

- (a) 300mEq
- (b) 400mEq
- (c) 500mEq
- (d) 800mEq

124. Metered dose inhalers are used in management of asthma. To use a MDI, it is recommended to shake will before use breath out, bring the inhaler to your mouth, start to breath in slowly, press the tap of you inhaler over and keep breathing in slowly until you have taken a fall breath and then hold your breath for 10 seconds. Some patients might need a second puff of MDI for some patient might need a second puff of MDI symptomatic relief. Which of these instructions for reusing the MDI is not correct?

- (a) Wait for iminute between two puffs
- (b) Shake the inhaler again before use
- (c) Carefully rinse your mouth and throat
- (d) Clean the inhaler before use

125. Palivizumab is a humanized monoclonal antibody. For which of the following conditions has it been approved for?

- (a) Cocksackie virus
- (b) Avain influenza
- (c) Parainfluenza

(d) Respiratory syncytial virus

126. A 2-month-old child was brought to the sub center by his mother with complaints of fever for two days. Weight of the child is 2 kg. On examination, the child is restless and irritable, skin pinch went back in 2 second, oral mucosa is dry and eyes were sunken. There were ten pustules on his forehead? What should be done at the sub center?

- (a) Refer to higher centre with mother giving frequent sips of ORS
- (b) Immediately admit the child, give IV fluids and then refer to higher center
- (c) Give first doses of antibiotic and refer to higher center
- (d) Send child home with few packets of ORS and call after 3 days.

127. Which of the following is the most common symptom of aortoiliac occlusive disease?

- (a) Calf claudication
- (b) Gluteal claudication
- (c) Impotence
- (d) Symptomless

128. What is the frequency of laser used in cataract surgery.

- (a) 10⁻¹⁵ seconds
- (b) 10⁻¹² seconds
- (c) 10⁻⁶ seconds
- (d) 10⁻³ seconds

129. A sexually active male presented with warts on his penis which of these strains of HIV is most commonly the cause of these lesions?

- (a) HPV 6 and 11
- (b) HPV 16 and 18
- (c) HPV 1, 2 and 3
- (d) HPV 3, 5

130. An abandoned dead male fetus was found and bought by police for autopsy. The following was the report "Eyes are open, papillary membrane is absent, crown Rump length is 23 cm, tests are at the superficial inguinal ring and weight of the fetus is 1000 g" What is the estimated age of the fetus?

- (a) 5 months
- (b) 6 months
- (c) 7 months
- (d) 8 months

131. A 38-years-old female presented to the emergency with extensive burns. The patient had grade 3 burns on the face back, upper arms and forearms along with singeing of hair. Which of these is not a proof of inhalation burs?

- (a) Yellow colored sputum
- (b) Singeing of eyebrow and facial hair
- (c) Blackish soot deposit on posterior part of tongue
- (d) Hoarseness & stridor of voice

132. A 20-years-old patient presented to the emergency with altered sensorium. NCCT revealed hydrocephalus, requiring urgent neurosurgical intervention. The patient had nobody accompanying or any identity proof. Under which of these sections of Indian penal code, the

neurosurgeon can perform the procedure without obtaining an informed consent from a guardian?

- (a) Section 92
- (b) Section 90
- (c) Section 89
- (d) Section 87

133. A doctor used the same needle used in a patient with HIV inject in another patient. The latter patient on testing found to be infected with HIV. The doctor s punishable for this negligence according to which section of India penal code

- (a) Section 269
- (b) Section 203
- (c) Section 202
- (d) Section 166B

134. The following patient was brought for an autopsy. What is the cause of the discoloration of the region?

- (a) Hematoma formation
- (b) Loss of blood
- (c) Methemoglobin
- (d) Sulphmethemoglobin

135. A lady is brought from village, unconscious, about 12 hours after ingesting some kind of unknown poison her heart rate is 103/min, blood pressure in 90/50 mm Hg and respiratory rate is 19/min. Her breath smells like kerosene. Which of the following should not be done in emergency room?

- (a) Vasopressors should be administered intravenously
- (b) Atropine should be administered till singers of recovery
- (c) Gastric lavage should be done
- (d) Immediate airway management

136. St. Anthony's fire refers to poisoning by:

- (a) Aflatoxin
- (b) Ergot alkaloids
- (c) Crotonaria juncea
- (d) Spainsh Fly

137. All of these are suggestive of domestic violence in a child except:

- (a) Bucket Handle fractures of metaphyses
- (b) Corner fractures
- (c) Micro fractures in the metaphyscal region
- (d) Wormian bones

138. A study was done in 3 states to see the mean blood pressure in each community. Health workers were assigned and they visited each house in the three communities. Mean blood pressure in each community was found and compared. What type of study design is represented were?

- (a) Cohort study
- (b) Cross – sectional study
- (c) Case control study
- (d) Field trial

139. A 42-year-old woman from a dry state who ingested rye for long time presented with complaints of weakness in both the lower limbs, nausea and fatigue. Overdue cause of time, she is completely unable to walk. What is the likely cause –

- (a) Lathyrussativus
- (b) Argemonemexicana
- (c) Amanita
- (d) Ergot alkaloids

140. CA-125 is a marker for screening of ovarian cancer. To characterize this test, histopathological confirmation of ovarian cancer was done in a cohort of patients. 60/100 woman who tested positive for this test actually had ovarian cancer. What is the negative predictive value of this test

- (a) 20 / 100
- (b) 40 / 100
- (c) 60 / 100
- (d) 80 / 100

141. Which of these is the best determining the threshold for diagnosis of a positive test?

- (a) Pre – test probability
- (b) Receptor – operator curve
- (c) Pearson coefficient
- (d) Analysis of variance

142. In a cohort study to study association between fracture and disease, the risk ratio was calculated to be equal to 1. What does this signifies?

- (a) There is no association present between the fracture and the disease
- (b) There is positive association between the fracture and the disease
- (c) There is negative association between the fracture and the disease
- (d) Data insufficient to comment

143. A study was conducted to find average intra – ocular pressure. IOP was measured in 400 people and the mean was found to be 25mm Hg with a standard deviation of 10mm Hg. What is the range in which 10p of 95% of the population would be lying?

- (a) 22 – 28 mm Hg
- (b) 20 – 30 mm Hg
- (c) 24 – 26 mm Hg
- (d) 23 – 27 mm Hg

144. Hypereosinophilic syndrome is a disease characterized by elevated eosinophil count in the blood for arrest 6 months, without any recognizable cause, with involvement of either heart, nervous system or bone marrow. What should be the eosinophil count for diagnosis?

- (a) > 500 / mm₃
- (b) > 1000 / mm₃
- (c) > 1500 / mm₃
- (d) > 2000 /mm

ANSWER KEY

1	d	26	c	51	c	76	b	101	b	126	c
2	a	27	b	52	a	77	c	102	a	127	b
3	b	28	a	53	a	78	a	103	b	128	b
4	b	29	b	54	a	79	d	104	d	129	a
5	c	30	c	55	a	80	b	105	b	130	c
6	d	31	b	56	c	81	c	106	b	131	a
7	d	32	d	57	b	82	b	107	b	132	a
8	b	33	b	58	d	83	d	108	b	133	a
9	d	34	b	59	c	84	b	109	b	134	d
10	d	35	c	60	a	85	a	110	c	135	c
11	b	36	c	61	a	86	b	111	b	136	b
12	b	37	d	62	b	87	a	112	a	137	d
13	a	38	b	63	b	88	a	113	b	138	b
14	b	39	b	64	d	89	a	114	a	139	a
15	a	40	b	65	a	90	d	115	d	140	c
16	b	41	c	66	c	91	d	116	b	141	a
17	b	42	a	67	a	92	c	117	d	142	a
18	d	43	b	68	d	93	c	118	b	143	c
19	d	44	b	69	b	94	c	119	b	144	c
20	a	45	d	70	b	95	d	120	c	145	
21	c	46	b	71	a	96	d	121	a	146	
22	a	47	c	72	c	97	a	122	c	147	
23	a	48	b	73	a	98	a	123	c	148	
24	a	49	a	74	b	99	a	124	d	149	
25	d	50	c	75	b	100	b	125	d	150	