

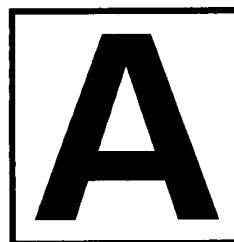
**DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO**

**T.B.C. : SDFJ-U-DVR**

**Test Booklet Series**

**Serial**

**1058757**



**TEST BOOKLET**

**GENERAL MEDICINE AND PEDIATRICS**

**Paper I**

**Time Allowed : Two Hours**

**Maximum Marks : 250**

**INSTRUCTIONS**

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET **DOES NOT** HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS, ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
2. Please note that it is the candidate's responsibility to encode and fill in the Roll Number and Test Booklet Series Code A, B, C or D carefully and without any omission or discrepancy at the appropriate places in the OMR Answer Sheet. Any omission/discrepancy will render the Answer Sheet liable for rejection.
3. You have to enter your Roll Number on the Test Booklet in the Box provided alongside.   
**DO NOT** write *anything else* on the Test Booklet.
4. This Test Booklet contains **120** items (questions). Each item comprises four responses (answers). You will select the response which you want to mark on the Answer Sheet. In case, you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose **ONLY ONE** response for each item.
5. You have to mark all your responses **ONLY** on the separate Answer Sheet provided. See directions in the Answer Sheet.
6. All items carry equal marks.
7. Before you proceed to mark in the Answer Sheet the response to various items in the Test Booklet, you have to fill in some particulars in the Answer Sheet as per instructions sent to you with your Admission Certificate.
8. After you have completed filling in all your responses on the Answer Sheet and the examination has concluded, you should hand over to the Invigilator **only the Answer Sheet**. You are permitted to take away with you the Test Booklet.
9. Sheets for rough work are appended in the Test Booklet at the end.
10. **Penalty for wrong answers :**  
**THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY A CANDIDATE IN THE OBJECTIVE TYPE QUESTION PAPERS.**
  - (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, **one-third (0.33)** of the marks assigned to that question will be deducted as penalty.
  - (ii) If a candidate gives more than one answer, it will be treated as a **wrong answer** even if one of the given answers happens to be correct and there will be same penalty as above to that question.
  - (iii) If a question is left blank, i.e., no answer is given by the candidate, there will be **no penalty** for that question.

**DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO**

1. A 60-year-old man comes to emergency with history of chest pain, which is acute onset. The ECG shows ST depression and T waves inversion. Cardiac biomarkers in blood are not elevated. What will be the appropriate management ?
  - (a) Oxygen + Aspirin + Ticagrelor + Metoprolol
  - (b) Oxygen + Sublingual nitroglycerin + Antiplatelets + Streptokinase
  - (c) Antiplatelets + LMW Heparin subcutaneous
  - (d) Oxygen + Sublingual nitroglycerin + Digoxin
  
2. A victim is found unconscious at the roadside. As a trained rescuer, after checking the victim's response and pulse, you decide on resuscitation. What is the recommended ratio of chest compression to ventilation during CPR ?
  - (a) 90 : 4
  - (b) 60 : 2
  - (c) 30 : 2
  - (d) 60 : 1
  
3. Which one of the following is *not* a differential diagnosis of ST segment elevation in ECG ?
  - (a) Acute pericarditis
  - (b) Trauma to ventricles
  - (c) Hypothermia
  - (d) Hypocalcemia
  
4. Which one of the following is a non-shockable rhythm in respect to use of AED (Automatic External Defibrillator) ?
  - (a) Monomorphic ventricular tachycardia
  - (b) Polymorphic ventricular tachycardia
  - (c) Ventricular fibrillation
  - (d) Pulseless electrical activity
  
5. A 50-year-old man reports to Emergency with breathlessness, palpitations and acute chest pain. On auscultation, there is systolic murmur at apex and ECG shows ST elevations in anterior chest leads. Which one of the following would be the next choice of investigation ?
  - (a) Cardiac marker troponin T/I
  - (b) Echocardiography
  - (c) TMT
  - (d) 24-hour holter monitoring
  
6. Which of the following electro-cardio-graphic findings are manifestations of digitalis intoxication ?
  1. Ventricular bigeminy
  2. Ventricular tachycardia
  3. Atrial flutter
  4. Atrial tachycardia with variable block
 Select the correct answer using the code given below :
  - (a) 1, 2 and 3
  - (b) 1, 2 and 4
  - (c) 1, 3 and 4
  - (d) 2, 3 and 4
  
7. According to modified WHO classification of Heart Disease in Pregnancy, which cardiac lesion is a contraindication for pregnancy ?
  - (a) Hypertrophic cardiomyopathy
  - (b) Uncomplicated, small or mild pulmonary stenosis
  - (c) Successfully repaired Tetralogy of Fallot
  - (d) Pulmonary arterial hypertension
  
8. A 35-year-old patient presents in the Emergency with sudden onset palpitations. His heart rate is 150/minute and gets reverted after carotid massage. The most probable diagnosis is :
  - (a) Paroxysmal supraventricular tachycardia
  - (b) Ventricular tachycardia
  - (c) Ventricular fibrillation
  - (d) Atrial flutter with block

9. Which one of the following statements is correct regarding Opening Snap in cardiac auscultation ?
- It is a high pitched diastolic sound.
  - It is due to opening of stenosed aortic valve.
  - It indicates pulmonary arterial hypertension.
  - It precedes the aortic component of second heart sound.
10. A 35-year-old labourer worker consulted a local medical practitioner for recurrent attack of chest pain. His elder brother had similar complaint and died at the age of 40 years. The labourer worker was advised to take sublingual nitroglycerin at the time of chest pain. But after taking nitroglycerin, the chest pain increased in intensity. Which one of the following is most likely ?
- Hypertrophic obstructive cardiomyopathy
  - Chronic type A dissection of aorta
  - Degenerative mitral regurgitation
  - Sub-acute bacterial endocarditis involving aortic valve
11. A patient with atrial fibrillation on regular treatment presents with photosensitivity, skin discoloration and peripheral neuropathy. Which drug may be implicated ?
- Digoxin
  - Disopyramide
  - Amiodarone
  - Bisoprolol
12. Which of the following are categorised under obstructive lung disease ?
- Bronchial asthma
  - Bronchiectasis
  - Bronchiolitis
  - Pulmonary sarcoidosis
- Select the correct answer using the code given below :
- 1, 2 and 3
  - 1, 2 and 4
  - 1, 3 and 4
  - 2, 3 and 4
13. Risk factors for development of COPD include which of the following ?
- Tobacco smoking
  - Recurrent infection
  - Coal dust exposure
  - High socio-economic status
- Select the correct answer using the code given below :
- 1, 2 and 3
  - 1, 2 and 4
  - 1, 3 and 4
  - 2, 3 and 4
14. Which one of the following is *not* an aim of asthma therapy ?
- Peak expiratory flow circadian variation < 20%
  - No emergency visits
  - Minimal use of inhaled corticosteroid
  - Minimal use of beta-2-agonists
15. A 65-year-old male smoker has been diagnosed with Chronic Obstructive Pulmonary Disease (COPD). On pulmonary function testing, the  $FEV_1/FVC < 0.7$  and  $FEV_1 = 42\%$  of predicted. The severity of airflow obstruction in this patient as per GOLD criteria is :
- Mild
  - Moderate
  - Severe
  - Very severe

16. A 40-year-old patient of bronchial asthma presents with acute severe breathlessness. Indications for giving him assisted ventilation for acute severe asthma include which of the following ?

- (a)  $\text{PaO}_2 < 80$  mm of Hg,  $\text{PaCO}_2 < 45$  mm of Hg
- (b)  $\text{PaO}_2 > 60$  mm of Hg,  $\text{PaCO}_2 > 45$  mm of Hg
- (c)  $\text{PaO}_2 < 60$  mm of Hg,  $\text{PaCO}_2 > 45$  mm of Hg
- (d)  $\text{PaO}_2 < 80$  mm of Hg,  $\text{PaCO}_2 > 45$  mm of Hg

17. Which of the following are the non-metastatic extra-pulmonary manifestations of lung cancer ?

- 1. Carcinoid syndrome
- 2. Nephrotic syndrome
- 3. Horner's syndrome
- 4. Lambert-Eaton syndrome

Select the correct answer using the code given below :

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

18. A 60-year-old obese person (weighing 110 kg) has been complaining of excessive sleepiness in day time, morning headache, irritability and mood disturbances. Patient also has history of dry mouth, nocturnal heartburn, diaphoresis of the chest and neck. Which one of the following will be the best investigation to diagnose the patient ?

- (a) Ambulatory Blood Pressure Monitoring (ABPM)
- (b) 24-hour Holter Monitoring
- (c) Echocardiography
- (d) Overnight Polysomnogram

19. Which of the following drugs trigger bronchial asthma ?

- 1. Sulfonamides
- 2. Aspirin
- 3. ACE inhibitors
- 4. Beta blockers

Select the correct answer using the code given below :

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

20. A patient with Crohn's disease underwent ileal resection. Which of the following complications may develop in this patient ?

- 1. Oxalate rich renal calculi
- 2. Diarrhoea
- 3. Fat malabsorption
- 4. Hyponatremia

Select the correct answer using the code given below :

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

21. Protein losing enteropathy due to obstruction of intestinal lymphatic vessels is seen in which of the following conditions ?

- 1. Intestinal lymphangiectasia
- 2. Constrictive pericarditis
- 3. Eosinophilic gastroenteritis
- 4. Whipple's disease

Select the correct answer using the code given below :

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

22. Which one of the following viruses is associated with development of Acute Liver Failure and high mortality in pregnancy ?

- (a) Hepatitis A virus
- (b) Hepatitis E virus
- (c) Hepatitis C virus
- (d) Hepatitis B virus

23. Consider the following statements with regard to "Anorexia of Aging" :

1. Declining chemosensory function (smell and taste)
2. Reduced efficiency of chewing
3. Slowed gastric emptying
4. Alterations in the neuro-endocrine axis

Which of the above statements are associated with early satiety and weight loss in elderly ?

- (a) 3 and 4 only
- (b) 1, 2 and 4 only
- (c) 1, 2, 3 and 4
- (d) 1, 2 and 3 only

24. Consider the following statements :

1. Type-1 HRS (Hepato-Renal Syndrome) is characterized by a rapid deterioration in renal function, within 1 – 2 weeks of presentation.
2. Type-2 HRS is characterized by a moderate and stable or slowly progressive renal dysfunction.
3. HRS is seen in patients with large ascites in case of cirrhosis.

Which of the above statements is/are correct ?

- (a) 1 only
- (b) 3 only
- (c) 1 and 2 only
- (d) 1, 2 and 3

25. Which one of the following is the serological marker of immunization with Hepatitis B vaccine ?

- (a) HBsAg
- (b) Anti-HBs
- (c) HBcAg
- (d) Anti-HBc

26. Infection with which of the following organisms can cause a syndrome which is clinically indistinguishable from achalasia of the oesophagus ?

- (a) *Trypanosoma cruzi*
- (b) *Schistoma haematobium*
- (c) *Mycobacterium leprae*
- (d) *Plasmodium falciparum*

27. Consider the following statements in respect of *Helicobacter Pylori* :

1. It is a gram positive, spiral-shaped bacterium.
2. It uses an adhesion molecule (BabA) to bind to the 'Lewis b' antigen on gastric epithelial cells.
3. It produces 'urease' enzyme that helps to raise the pH around the bacterium.
4. It exclusively colonises only 'gastric-type' epithelium.

Which of the above statements are correct ?

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

28. The quadruple therapy regime (or OBMT regime) for *Helicobacter Pylori* eradication comprises which of the following drugs ?

- (a) Omeprazole, Bismuth subcitrate, Metronidazole, Tetracycline
- (b) Ofloxacin, Bismuth subcitrate, Metronidazole, Tetracycline
- (c) Omeprazole, Beclomethasone, Metronidazole, Tacrolimus
- (d) Omeprazole, Beclomethasone, Mometasone, Tetracycline

29. Cystic fibrosis disorder is :

- (a) Autosomal dominant
- (b) Autosomal recessive
- (c) X-linked dominant
- (d) X-linked recessive

30. Which of the following diseases may be associated with Coeliac disease ?

- 1. Type-2 Diabetes mellitus
- 2. IgA deficiency
- 3. Down syndrome
- 4. Turner's syndrome

Select the correct answer using the code given below :

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

31. Consider the following statements regarding Coeliac disease :

- 1. There is a strong association of the disease with Human Leukocyte Antigen, HLA-DQ2/DQ8.
- 2. There is intolerance to gluten found in wheat, rye, barley and oats.
- 3. In the elderly, the disease presents with symptoms ranging from florid malabsorption, weight loss and anemia to oral ulceration, dyspepsia and bloating.
- 4. In suspected patients, small bowel biopsy is contraindicated.

Which of the above statements are correct ?

- (a) 1, 2 and 3
- (b) 2 and 3 only
- (c) 1 and 2 only
- (d) 1, 3 and 4

32. Asymptomatic bacteriuria is defined as the presence of more than :

- (a)  $10^5$  organisms/mL in the urine of apparently healthy asymptomatic patients.
- (b)  $10^4$  organisms/mL in the urine of apparently healthy asymptomatic patients.
- (c)  $10^3$  organisms/mL in the urine of apparently healthy asymptomatic patients.
- (d)  $10^2$  organisms/mL in the urine of apparently healthy asymptomatic patients.

33. Renal transplant offers the best chance of long-term survival in ESRD and is cost-effective. Which one of the following is **not** a contraindication to renal transplantation ?
- Active malignancy
  - Children less than one year
  - Adults more than 75 years
  - Diabetes mellitus
34. Which of the following are the mechanisms for anemia in Chronic Kidney Disease ?
1. Deficiency of erythropoietin
  2. Folate and Vitamin B12 deficiency
  3. Toxic effects of uraemia on bone marrow
  4. Reduced utilization of dietary iron
- Select the correct answer using the code given below :
- 1, 2 and 3
  - 1, 2 and 4
  - 1, 3 and 4
  - 2, 3 and 4
35. The leading cause of Chronic Kidney Disease (CKD) globally is :
- Diabetic nephropathy
  - Glomerulonephritis
  - Hypertension-associated CKD
  - Polycystic kidney disease
36. The presence of Beevor's sign on neurological examination is characteristic of spinal cord lesion at which one of the following levels ?
- T3 - T4
  - T7 - T8
  - T9 - T10
  - None of the above
37. Which one of the following statements is correct regarding lower motor neuron type of lesion ?
- Fasciculation is absent.
  - Deep tendon reflexes are increased.
  - Clonus is present.
  - Plantar reflex shows flexor response.
38. Which one of the following is the single strongest risk factor for dementia ?
- Increasing age
  - Alcoholism
  - Positive family history
  - Systemic illness
39. Massive retinal hemorrhage with 'blood and thunder' appearance and vision loss is caused by which of the following ?
- Central retinal artery occlusion
  - Central retinal vein occlusion
  - Hypertensive retinopathy
  - Anterior optic neuropathy
40. Visual hallucination is characteristic of which type of dementia ?
- Diffuse Lewy body dementia
  - Frontotemporal dementia
  - Alzheimer's dementia
  - Vascular dementia

41. A 37-year-old mother of two children has bilateral headache that worsens with emotional stress; pain is less severe in the early part of the day but becomes more severe in the evening; there is tenderness over skull vault. Both children are not doing well in school. What is the most likely diagnosis ?

- (a) Cluster headache
- (b) Tension type headache
- (c) Trigeminal neuralgia
- (d) Migraine

42. Which of the following are the causes of polyneuropathy ?

- 1. HIV
- 2. Alcohol
- 3. Phenytoin
- 4. Rifampicin

Select the correct answer using the code given below :

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

43. Consider the following statements regarding Intracerebral Hemorrhage (ICH) :

- 1. It accounts for 35% of all strokes.
- 2. Most common site of hypertensive ICH is cerebral cortex.
- 3. Use of cocaine and methamphetamine is a frequent cause of stroke in young age.
- 4. Hypertensive ICH usually results from spontaneous rupture of small penetrating artery deep in brain.

Which of the above statements are correct ?

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

44. A 21-year-old young lady presents with unilateral facial weakness. She is unable to close her eye on the affected side and there are vesicles in her ear. She is suffering from :

- (a) 8<sup>th</sup> Cranial Nerve Palsy
- (b) 3<sup>rd</sup> Cranial Nerve Palsy
- (c) 5<sup>th</sup> Cranial Nerve Palsy
- (d) 7<sup>th</sup> Cranial Nerve Palsy

45. Lesion of dominant parietal lobe causes which of the following ?

- 1. Dysphasia
- 2. Acalculia
- 3. Dyslexia
- 4. Contralateral neglect

Select the correct answer using the code given below :

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

46. Which of the following are the clinical features of Neurofibromatosis-1 ?

- 1. Angiomas
- 2. Axillary freckles
- 3. Cutaneous schwannomas
- 4. Neurofibromas

Select the correct answer using the code given below :

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



47. Which of the following are clinical features of Parkinson's disease ?

1. Bradykinesia
2. Rigidity
3. Spastic gait
4. Mask-like face

Select the correct answer using the code given below :

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

48. Which one of the following statements is correct for an individual with blood group AB ?

- (a) A antigen on RBC; Anti-B antibody in plasma.
- (b) A and B antigens on RBC; no antibody in plasma.
- (c) B antigen on RBC; Anti-A antibody in plasma.
- (d) No antigen on RBC; Anti-A and Anti-B antibodies in plasma.

49. Which one of the following is unlikely to be associated with eosinophilia ?

- (a) Loeffler's syndrome
- (b) Toxocariasis
- (c) Trichinella spiralis
- (d) Tuberculosis

50. Which one of the following is a tumour marker for carcinoma of pancreas ?

- (a) Alpha-fetoprotein
- (b) CA-125
- (c) Calcitonin
- (d) CA-19-9

51. Which of the following statements regarding G6PD enzyme deficiency are correct ?

1. It is an X-linked deficiency.
2. Geographical distribution parallels the malaria belt.
3. Consumption of fava beans is protective.
4. Transfusion support may be life saving.

Select the correct answer using the code given below :

- (a) 1 and 3 only
- (b) 1, 2 and 4
- (c) 1 and 4 only
- (d) 2, 3 and 4

52. Which of the following investigations indicate active hemolysis ?

1. Increased reticulocyte count
2. Increased conjugated bilirubin
3. Increased urinary urobilinogen
4. Decreased haptoglobin

Select the correct answer using the code given below :

- (a) 1, 2 and 3
- (b) 1 and 4 only
- (c) 1, 3 and 4
- (d) 2 and 3 only

53. Which type of anemia can be caused by the drug Dapsone ?

- (a) Iron deficiency anemia
- (b) Sideroblastic anemia
- (c) Spur cell anemia
- (d) Hemolytic anemia

54. Which of the following are decreased during pregnancy ?

1. Iron stores
2. Vitamin B12 levels
3. Folate levels
4. Coagulation factors

Select the correct answer using the code given below :

- (a) 1, 2 and 3
- (b) 1 and 2 only
- (c) 1, 3 and 4
- (d) 2, 3 and 4

55. Which one of the following drugs causes direct X-a inhibition ?

- (a) Tirofiban
- (b) Apixaban
- (c) Dabigatran
- (d) Prasugrel

56. A 20-year-old young girl presents with heavy menstrual bleeding, petechiae on her arms and blood blisters in mouth. Her complete blood count shows haemoglobin 7 gm/dL, total leucocyte count 8,700 cells/ $\mu$ L and platelet count of 6,000/ $\mu$ L with peripheral smear showing large platelets. Which is likely the best initial drug treatment for this patient ?

- (a) High dose glucocorticoids
- (b) High dose glucocorticoids with IVIgG
- (c) High dose glucocorticoids with Rituximab
- (d) IVIgG with anti-Rho(D) therapy

57. A 30-year-old female presents with malaise, breathlessness off and on and paresthesias. She is vegetarian by diet. Her investigation revealed Hb - 6.2 gm/dL, MCV - 128 fL, platelet count - 1,20,000/cumm, with blood smear showing macrocytosis and neutrophil hypersegmentation. What is the likely diagnosis ?

- (a) Iron deficiency anemia
- (b) Myelophthisic anemia
- (c) Megaloblastic anemia
- (d) Aplastic anemia

58. Which of the following is the most common dermatologic manifestation of Diabetes mellitus ?

- (a) Xerosis
- (b) Acanthosis nigricans
- (c) Lichen planus
- (d) Necrobiosis lipoidica

59. Which one of the following conditions may result in hypoglycaemia ?

- (a) Critical illness
- (b) Cortisol therapy
- (c) Cushing's disease
- (d) Metabolic syndrome

60. Use of which of the following drugs may result in osteoporosis ?

- 1. Phenytoin
- 2. Lithium
- 3. Methotrexate
- 4. Azathioprine

Select the correct answer using the code given below :

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

61. Which one of the following oral anti-diabetic drugs acts on renal proximal tubules ?

- (a) Alpha glucosidase inhibitors
- (b) GLP-1 analogue
- (c) DPP-4 inhibitors
- (d) SGLT-2 inhibitors

62. Which of the following are short acting insulin ?

- 1. Aspart
- 2. Lispro
- 3. Glargine
- 4. Regular

Select the correct answer using the code given below :

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

63. Hirsutism is seen in which of the following ?

- 1. Polycystic ovarian syndrome
- 2. Congenital adrenal hyperplasia
- 3. Hypothyroidism
- 4. Ovarian tumour

Select the correct answer using the code given below :

- (a) 1 and 2 only
- (b) 1, 2 and 4
- (c) 1, 3 and 4
- (d) 2 and 4 only

64. Which of the following are correct regarding hypothyroidism ?

1. It is more common in females.
2. Autoimmunity is a rare aetiopathogenesis.
3. In pregnancy, increased dose of levothyroxine is required.
4. Suppressed TSH is a risk factor for osteoporosis.

Select the correct answer using the code given below :

- (a) 1, 2 and 3
- (b) 1 and 4 only
- (c) 1, 3 and 4
- (d) 2, 3 and 4

65. Which of the following are correct regarding Diabetes insipidus ?

1. Polyuria and polydipsia are common symptoms.
2. Urine is of low osmolality and specific gravity.
3. Lithium is useful in treatment.
4. It is potentially lethal, if hypothalamic thirst centre is damaged.

Select the correct answer using the code given below :

- (a) 1, 2 and 3
- (b) 1, 2 and 4
- (c) 1 and 4 only
- (d) 2, 3 and 4

66. A 42-year-old lady presents with symptoms of tiredness, constipation, impaired hearing and weight gain in spite of poor appetite. Which of the following are relevant investigations in this case ?

1. TSH level
2. Free T<sub>4</sub> levels (unbound T<sub>4</sub>)
3. Anti-TPO antibodies
4. Radionuclide scan of the thyroid

Select the correct answer using the code given below :

- (a) 1, 2 and 3
- (b) 1, 2 and 4
- (c) 1, 3 and 4
- (d) 2 and 3 only

67. A patient presents with circulatory shock, nausea, vomiting and diarrhoea. A diagnosis of acute adrenal crisis is considered. A blood sample is stored for measurement of serum cortisol and treatment started without delay. Which of the following are appropriate interventions ?

1. IV normal saline
2. IV hydrocortisone 100 mg stat
3. IV 10% glucose
4. IV KCl as infusion

Select the correct answer using the code given below :

- (a) 1, 2 and 3
- (b) 1 and 2 only
- (c) 1, 3 and 4
- (d) 2, 3 and 4

68. The most common acid-base disturbance in critically ill patients is :

- (a) Chronic respiratory acidosis
- (b) Chronic respiratory alkalosis
- (c) Chronic metabolic acidosis
- (d) Chronic metabolic alkalosis

69. Which of the following are the potentially reversible causes of weight gain ?

1. Insulinoma
2. Cushing's syndrome
3. Sulfonylureas
4. Beta-blockers

Select the correct answer using the code given below :

- (a) 1 and 2 only
- (b) 3 and 4 only
- (c) 2 and 3 only
- (d) 1, 2, 3 and 4

70. Which of the following are the metabolic complications of parenteral nutrition ?

1. Hyperglycemia
2. Liver cirrhosis
3. Fluid overload
4. Hyperphosphatemia

Select the correct answer using the code given below :

- (a) 1, 2 and 3
- (b) 1, 2 and 4
- (c) 3 and 4 only
- (d) 1 and 3 only

71. Pseudomembranous colitis is associated with which one of the following microbes ?

- (a) *Entamoeba histolytica*
- (b) *Salmonella typhi*
- (c) *Escherichia coli*
- (d) *Clostridium difficile*

72. The characteristic rash seen on the face in a case of Parvovirus B19 infection is called :

- (a) Slapped cheek rash
- (b) Butterfly rash
- (c) Melasma like rash
- (d) Christmas tree rash

73. Bartonella infection is an important cause of blood culture negative endocarditis. Clinical diseases caused by Bartonella species in humans include which of the following ?

1. Cat scratch disease
2. Trench fever
3. Carrion's disease
4. Anisakiasis

Select the correct answer using the code given below :

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

74. The causative organism and the vector for scrub typhus are :

- (a) *Orientia tsutsugamushi* and Louse
- (b) *Rickettsia rickettsii* and Trombiculid mite
- (c) *Orientia tsutsugamushi* and Trombiculid mite
- (d) *Rickettsia prowazekii* and Ixodes tick

75. Which of the following are correct regarding tetanus ?

1. Risus sardonicus may be seen.
2. Endotoxin produced has affinity for sensory nerve endings.
3. Lockjaw is painless.
4. Hysteria can mimic tetanus.

Select the correct answer using the code given below :

- (a) 1, 2 and 3 only
- (b) 2 and 4 only
- (c) 1, 3 and 4 only
- (d) 1, 2, 3 and 4

76. A 25-year-old traveller from United Kingdom desires anti-malaria prophylaxis before travelling to India. He has history of seizures and depression. Which of the following drugs can be used ?

1. Doxycycline
2. Atovaquone + Proguanil
3. Chloroquine + Proguanil
4. Mefloquine

Select the correct answer using the code given below :

- (a) 1, 2 and 3
- (b) 1, 2 and 4
- (c) 1 and 3 only
- (d) 3 and 4 only

77. Pulmonary stage is seen in which of the following infections ?

1. *Ascaris lumbricoides*
2. *Strongyloides stercoralis*
3. *Onchocerca volvulus*

Select the correct answer using the code given below :

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

78. Consider the following statements with regard to Amphotericin B :

1. It is a narrow spectrum antifungal agent.
2. It can cause nephrotoxicity.
3. It lacks an oral preparation.
4. Its lipid formulations are less toxic.

Select the correct answer using the code given below :

- (a) 2 and 3 only
- (b) 2, 3 and 4
- (c) 1, 3 and 4
- (d) 2 and 4 only

79. Which one of the following moulds causes mucormycosis, commonly known as 'black fungus' ?

- (a) *Rhizopus*
- (b) *Aspergillus*
- (c) *Candida*
- (d) *Histoplasma*

80. Which of the following infections are caused by mosquito bite ?

1. Malaria
2. Typhus
3. Filariasis
4. Dengue fever

Select the correct answer using the code given below :

- (a) 1, 2 and 3
- (b) 1 and 4 only
- (c) 1, 3 and 4
- (d) 2, 3 and 4

81. Which one of the following is a hallmark of marasmus ?

- (a) Normal body mass index
- (b) Serum albumin < 2.8 g/dL
- (c) Anergy
- (d) Triceps skin fold < 3 mm

82. Anti-Ribonucleoprotein antibody (Anti-RNP) is characteristically seen in which one of the following conditions ?

- (a) Sjogren's syndrome
- (b) Diffuse systemic sclerosis
- (c) Sarcoidosis
- (d) Mixed connective tissue disorder

83. Polyarteritis nodosa has peak incidence between the ages of :

- (a) 10 – 20 years
- (b) 20 – 30 years
- (c) 30 – 40 years
- (d) 40 – 50 years

84. First line drug treatment to reduce fractures in osteoporosis is :

- (a) Bisphosphonates
- (b) Denosumab
- (c) Teriparatide
- (d) Raloxifene

85. Which of the following are tricyclic antidepressants ?

- 1. Amitriptyline
- 2. Dosulepin
- 3. Paroxetine
- 4. Imipramine

Select the correct answer using the code given below :

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

86. Recurrent bouts of binge eating are usually associated with :

- (a) Bulimia nervosa
- (b) Anorexia nervosa
- (c) Post-partum depression
- (d) Personality disorder

87. During physical assessment of a 55-year-old male with low back pain, the quadriceps (knee) reflex was absent. Which of the following nerve roots is most likely to be affected ?

- (a) L<sub>2</sub>
- (b) L<sub>5</sub>
- (c) L<sub>4</sub>
- (d) S<sub>1</sub>

88. Which of the following conditions are parts of inherited cancer syndrome ?

- 1. Retinoblastoma
- 2. Li-Fraumeni syndrome
- 3. Xeroderma pigmentosum
- 4. Peutz-Jeghers syndrome

Select the correct answer using the code given below :

- (a) 1, 2, 3 and 4
- (b) 1, 2 and 3 only
- (c) 1 and 3 only
- (d) 2 and 4 only

89. Which of the following are the diseases associated with DNA repeat sequences ?

1. Huntington's disease
2. Myotonic dystrophy
3. Friedreich's ataxia
4. Klinefelter syndrome

Select the correct answer using the code given below :

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

90. Cardiac outflow tract defect, thymic hypoplasia, cleft palate and hypocalcemia are clinical features of which gene disorder ?

- (a) Angelman syndrome
- (b) Williams syndrome
- (c) Smith-Magenis syndrome
- (d) DiGeorge syndrome

91. Early hypotension in venomous snakebite is due to which of the following ?

- (a) Pooling of blood in the pulmonary and splanchnic circulation
- (b) Systemic bleeding
- (c) Hemolysis
- (d) Loss of intravascular volume into the soft tissues

92. Gastric aspiration and lavage is contraindicated in which of the following poisonings ?

1. Strong acids
2. Alkalis
3. Petroleum distillates
4. Ethanol

Select the correct answer using the code given below :

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

93. Acetylcysteine is an antidote for which poisoning ?

- (a) Salicylates
- (b) Paracetamol
- (c) Tricyclic antidepressants
- (d) Benzodiazepines

94. Which one of the following is *not* a constituent of treatment of severe hyperkalemia ?

- (a) IV calcium gluconate (10 mL of 10%)
- (b) Beta-2 adrenoceptor antagonist
- (c) Dialysis
- (d) IV sodium bicarbonate

95. Kyasanur Forest Disease is endemic to :

- (a) West Africa
- (b) South America
- (c) South-West India
- (d) Balkans

96. Which one of the following is *not* a usual cause of Type-2 respiratory failure ?

- (a) Guillain-Barré syndrome
- (b) Upper airway obstruction
- (c) Pulmonary embolism
- (d) Flail chest



97. A 10-year-old girl is diagnosed with dengue fever. She has abdominal pain and persistent vomiting. Examination reveals normal blood pressure but the hematocrit is found to be increased. Which of the following is the most appropriate initial fluid management ?

- (a) Ringer lactate @ 3 mL/kg/hour
- (b) Ringer lactate @ 5 mL/kg/hour
- (c) Ringer lactate @ 7 mL/kg/hour
- (d) Ringer lactate @ 10 mL/kg/hour

98. A child presents with headache and vomiting in the emergency room following a fall from the bed. Which one of the following treatment modalities is *not* recommended in the emergency room ?

- (a) Intravenous mannitol administration
- (b) Administration of hypertonic (3%) solution
- (c) Elevate the head end by 30 degrees
- (d) Therapeutic lumbar puncture

99. The recommended ratio for chest compression to breaths administered by a single rescuer during resuscitation of a child in cardiac arrest is :

- (a) 15 : 2
- (b) 30 : 2
- (c) 14 : 1
- (d) 7 : 1

100. A 4-year-old comatose child is assessed by the Modified Glasgow Coma Scale. Which of the following is the correct interpretation of the score given as E2V3M2 for the best eye opening response, best verbal response and best motor response respectively ?

- (a) Eye opening to speech, makes incomprehensible sounds and abnormal flexion
- (b) Eye opening to speech, inappropriate words and abnormal flexion
- (c) Eye opening to pain, moans to pain and abnormal flexion
- (d) Eye opening to pain, cries to pain and extension to pain

101. What will a baby with mild hypothermia feel like, when touched by the back of the hand of an examiner ?

- (a) The entire body will feel cold.
- (b) The abdomen and feet will be warm, but hands will be cold.
- (c) The abdomen will be warm, but the hands and feet will be cold.
- (d) The abdomen, feet and hands will all feel cold.

102. Which of the following manifestations is/are seen in hypocalcemia ?

- (a) Nausea and vomiting
- (b) Dilated cardiomyopathy
- (c) Polyuria
- (d) Polydipsia

103. A 6-week-old infant presents with unconjugated hyperbilirubinemia. Which of the following could be a likely diagnosis ?
- (a) Dubin Johnson syndrome
  - (b) Galactosemia
  - (c) Rotor syndrome
  - (d) Congenital hypothyroidism
104. A mother with polyhydramnios gives birth to a term newborn infant who develops choking and cyanosis on feeding soon after birth. There is excessive drooling and frothing from the mouth. Most likely diagnosis is :
- (a) Anorectal malformation
  - (b) Diaphragmatic hernia
  - (c) Arnold Chiari malformation
  - (d) Tracheoesophageal fistula
105. An infant has just started to watch his mother intently when she talks to him. He has not yet started smiling back. What is the approximate age of the child ?
- (a) 4 weeks
  - (b) 6 weeks
  - (c) 8 weeks
  - (d) 12 weeks
106. A child demonstrates a mature pincer grasp and is able to build a tower of maximum 6 blocks and can make vertical and circular strokes with pencil. His developmental age is around :
- (a) 12 months
  - (b) 18 months
  - (c) 24 months
  - (d) 36 months
107. A typically developing girl is able to creep upstairs, and builds a tower of 2 blocks. Which of the following skills should she also display ?
- (a) Scribbling
  - (b) Running
  - (c) Speaking at least 10 words
  - (d) Exploring drawers
108. A child can ride a tricycle, hop on one foot but cannot skip. He uses alternate feet while going downstairs. Which one of the following motor skills should he be able to perform at this developmental level ?
- (a) Copy a triangle
  - (b) Copy a cross
  - (c) Build a gate with blocks
  - (d) Copy a rectangle

109. Which one of the following skills is a normally developing 2-year-old child unable to perform ?
- Unscrewing a lid
  - Turning a door knob
  - Building a vertical tower of 6 blocks
  - Copying a circle
110. Which one of the following statements is age-appropriate for a normally developing 4-month-old infant ?
- The infant can bring his hands to the midline.
  - The infant has still not attained partial head control.
  - The infant has started to reach out with one hand.
  - The infant has started making monosyllable sounds like 'da' or 'pa'.
111. Which one of the following is used to estimate the surface area of burn injuries in children less than 15 years of age ?
- Berkow body surface area chart
  - Rule of Nines
  - Lund and Browder chart
  - Parkland formula
112. A 4-year-old boy presents with ingestion of many tablets of salicylate. Which one of the following complications is he likely to develop ?
- Hyperkalemia
  - Rhabdomyolysis
  - Prolonged QRS complex in ECG
  - Metabolic acidosis
113. A 3-year-old boy presents with parental concerns regarding delayed development, especially speech. On observation, the clinician notes decreased eye contact, inattentiveness, unresponsive to being called and toe walking. What is the most likely diagnosis ?
- Attention Deficit Hyperactivity Disorder
  - Autism Spectrum Disorder
  - Cerebral Palsy
  - Social Communication Disorder
114. Atomoxetine is prescribed to children with Autism Spectrum Disorder to control symptoms of :
- Anxiety
  - Sleep disturbances
  - Hyperactivity
  - Repetitive behaviour
115. Fractional inactivated intradermal poliovirus vaccine is given at which ages in the National Immunization Schedule ?
- 6 weeks and 10 weeks
  - 6 weeks and 14 weeks
  - 10 weeks and 14 weeks
  - 6 weeks, 10 weeks and 14 weeks
116. Protective efficacy of Varicella vaccine when used for post-exposure prophylaxis (given within 72 hours of contact) is approximately :
- 60%
  - 70%
  - 80%
  - 90%

- 117.** A 10-year-old child presents with difficulty in word recognition, word decoding abilities, difficulty in spelling with normal listening comprehension. The most likely diagnosis is :
- (a) Dyslexia
  - (b) Autism spectrum disorder
  - (c) Rett syndrome
  - (d) Attention deficit hyperactivity disorder
- 118.** Which of the following is the best strategy to use in the management of temper tantrums in a 3-year-old boy ?
- (a) Giving in to the demands
  - (b) Physical punishment
  - (c) Scolding
  - (d) 'Time out'
- 119.** Which one of the following is the correct schedule for home visits by an Accredited Social Health Activist for facility-born newborn babies ?
- (a) On 1, 3, 7, 14, 21 and 28 days of life
  - (b) On 3, 7, 10, 14, 21 and 28 days of life
  - (c) On 3, 7, 14, 21, 28 and 42 days of life
  - (d) On 7, 14, 21, 28, 35 and 42 days of life
- 120.** Which one of the following diseases is covered under Rashtriya Bal Swasthya Karyakram (RBSK) ?
- (a) Rheumatic heart disease
  - (b) Community acquired pneumonia
  - (c) Systemic onset juvenile idiopathic arthritis
  - (d) Nephrotic syndrome

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