



Test Booklet Serial No.....

Series No.:

Number	of	Questions	:	80	
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Time Allowed: 1 hour 20 minutes

Booklet Contains Pages: 24

Max. Marks: 320

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- 1. Each question carries **4 marks**. For each correct response the candidate will get 4 marks. For each incorrect answer, **1 mark** will be deducted from the total score.
- 2. Use only BLUE / BLACK BALL POINT PEN for darkening the appropriate circle completely.

  For example:

  (B)
  (C)
  (D)
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1.	The	most common CNS complication of mumps is:-	
	(A)	Encephalitis	
	(B)	Aseptic meningitis	
	(C)	Gullain barre syndrome	
	(D)	Cerebellar ataxia	
2.	The	gender of human fetus is distinguishable at gestational	age:-
	(A)	8 weeks	
	(B)	10 weeks	
	(C)	12 weeks	
	(D)	16 weeks	
3.	An i	infant starts staring at their own hand at :-	
	(A)	2 months	
	(B)	3 months	
	(C)	4 months	
	(D)	6 months	
4.	Endo	omorphic somatotype of physical pattern is characteriz	ed by :-
	(A)	Stocky built and abundant soft tissue	
	(B)	Stocky built and abundant bony tissue	
	(C)	Stocky built and less muscle mass	
	(D)	Light bone structure and small body mass	

- 5. Congenital varicella syndrome can occur if mother gets chickenpox at:-
  - (A) 7-20 weeks of gestation
  - (B) 22-26 weeks of gestation
  - (C) 28-32 weeks of gestation
  - (D) 36-40 weeks of gestation
- 6. True statement for Pneumocystis Jeruveci:
  - (A) Is an obligate intracellular intracellular organism
  - (B) Can cause disease outside respiratory system
  - (C) Can have normal chest x-ray with prominent clinical signs
  - (D) May be usually diagnosed by serology
- 7. A couple brings their 7 year old daughter to clinic concerned about her development. She has a history speech, ataxia with a broad based gait and also has been diagnosed with epilepsy. She has a strange affect characterized by inappropriate laughter. Her karyotype is normal. What is the most likely diagnosis in this patient?
  - (A) Alice in Wonderland syndrome
  - (B) Angelman syndrome
  - (C) Asperger's syndrome
  - (D) Prader-Will sundrome
- 8. Causes of dilated pupils include:-
  - (A) Argyll Robertson pupil
  - (B) Ethylene glycol poisoning
  - (C) Myotonic dystrophy
  - (D) Organophosphate poisoning



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- 9. Which of the following statements regarding Phenylketonuria is correct?
  - (A) Serum tyrosine levels are typically low
  - (B) Urinary phenylalanine metabolites are typically high
  - (C) Mental retardation does not occur is the patient who adheres to a phenylalanine free diet
  - (D) Inheritance is X-linked recessive
- 10. A 2 years old child weighing 8 Kg presents with pallor and poor appetite. His Hb is 6 gm/dl, MCV is 65, RDW is 12% and RBC count is 6 million/cumm. P/S shows Microcytic hypochromic blood picture. What is the most likely diagnosis?
  - (A) Beta Thalassemia trait
  - (B) Sideroblastic anemia
  - (C) Iron deficiency anemia
  - (D) Lead toxicity
- 11. A well breast fed baby at 36 hours of life has been found to have jaundice. His serum bilirubin level is 16 mg/dl, the blood group of mother and baby are O-negative and A-negative. The blood peripheral smear shows spherocytes and reticulocytes. What is the likely diagnosis?
  - (A) Hereditary spherocytosis
  - (B) ABO incompatibility
  - (C) Breast milk associated jaundice
  - (D) Alpha Thalassemia

- 12. A 2 week old neonate presented with hypotonia, lethargy and poor feeding. He was born at term with 3 kg weight and had no feeding problem till 5 days. On admission: he was found to be severely hypotonic, lethargic with poor neonatal reflexes and needed mechanical ventilation. His Hb was 12 gm, WBC count 12,000/cumm, platelets normal, blood glucose 75 mgdl. Lactate 206 mmol/l, CSF lactate and ammonia normal. MRI head was normal but the EEG showed epileptic encephalopathy. What is the likely diagnosis?
  - (A) Non Ketotic hyperglycinemia
  - (B) Paroxysmal disorders
  - (C) Organic acidemia
  - (D) Fatty acid oxidation disorders
- 13. The minimum bed strength of a special care newborn unit in a district hospital with 3000 deliveries per year and for referral admission of outborn babies under Govt. of India's facility based newborn care program is:
  - (A) 9
  - (B) 12
  - (C) 15
  - (D) 20
- 14. Which of the following vaccine is developed by reverse vaccinology technique?
  - (A) Human papilloma virus vaccine
  - (B) Meningococcal B vaccine
  - (C) Varicella Zoster vaccine
  - (D) Dengue vaccine

- 15. Which of the following statement is correct regarding prevention of parent to child transmission of HIV in highly endemic states of India as per NACO guidelines?
  - (A) One dose of Nevirapine to mother at the onset of labour and one dose of Nevirapine to newborn
  - (B) Mothers should be treated with Zidovudine and Nevirapine from 14 weeks of pregnancy till delivery
  - (C) Mother should be treated with three drug ART starting from 14 weeks till mother to child risk period
  - (D) Treat mother with triple drug ART starting from 14 weeks and continue till the risk period of mother to child transmission with Nevirapine for 6 weeks to baby if on exclusive breast feed
- 16. Critical level of Sound pressure level in neonatal intensive care unit should not exceed:—
  - (A) 30 db
  - (B) 35 db
  - (C) 40 db
  - (D) 45 db
- 17. WHO treatment formula "F-100" for treatment of hospitalized patients with severe acute malnutrition has protein of gm/100 ml:-
  - (A) 0.9
  - (B) 1.5
  - (C) 2.0
  - (D) 2.9

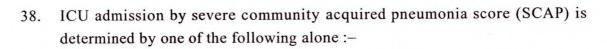
- 18. An atrioventricular septal defect is different from an ostium secondum atrial septal defect because the atrio ventricular septal defect :-
  - (A) Does not manifest heart failure
  - (B) Does not create volume overload
  - (C) Has the same ECG findings
  - (D) Produces an early tendency for pulmonary hypertension
- 19. Excess of Vitamin D can cause:
  - (A) Neuropathy .
  - (B) Pseudotumour cerebri
  - (C) Oxaluria
  - (D) Hypercalcemia
- 20. The length of the "tip to the vocal cord guide" of an endotracheal tube size of 3 is:-
  - (A) 2.0 mm
  - (B) 2.2 mm
  - (C) 2.4 mm
  - (D) 2.6 mm
- 21. Myocardial contractility is mainly determined by:-
  - (A) Extracellular ca<sup>++</sup> in resting state
  - (B) Fast inward current through L-type ca<sup>++</sup> channels
  - (C) Absolute quantity of ca++ crossing sarcolemma
  - (D) Induced ca<sup>++</sup> release from sarcoplasma reticulum

- 22. Loud P, is best defined as:-
  - (A) P, heard in mitral area
  - (B) P, heard in left parasternal area in end inspiration
  - (C)  $P_2$  heard in right  $2^{nd}$  intercostal space
  - (D) P, heard in left parasternal area in end expiration
- 23. On ECG Left main Coronary artery disease is denoted by :-
  - (A) Inferior ST depression, ST elevation in avR > V1
  - (B) Anterior ST depression, ST elevation in V1 > avR
  - (C) Anterior ST depression, ST elevation in avR > V1
  - (D) Inferior ST depression, ST elevation in V1 > avR
- 24. Restrictive diastolic filling pattern on echo is denoted by:-
  - (A) E/A > 1.5,  $\uparrow$  deceleration time,  $\uparrow LAP$
  - (B) E/A < 1,  $\downarrow$  deceleration time,  $\uparrow LAP$
  - (C) E/A > 1.5,  $\downarrow$  deceleration time,  $\uparrow LAP$
  - (D) E/A > 1.5,  $\uparrow$  deceleration time,  $\downarrow LAP$
- 25. Drug of Choice for wide complex tachyarrhythmia of unknown origin is:-
  - (A) Quinidine
  - (B) Flecainide
  - (C) Sotalol
  - (D) Procainamide

Refractory hypertension in a middle aged women may be controlled by addition of:-(A) Clonidine Torsemide (C) Cilnidipine (D) Spironolactone 27. In cases of atherosclerotic renal artery stenosis response to vascular repair is best indicated by:-(A) Gadolinium contrast MRA showing proximal renal artery stenosis (B) Presence of collateral vessels to the ischaemic kidney on angiography (C) Lateralizing renal vein renin ratio of > 1.5 (D) Significant pressure gradient across the renal artery lesion . 28. Treatment of obstructive sleep apnoea is useful when Epworth sleepiness score is:-(A) > 8(B) > 10(C) > 12(D) > 1529. In ventilation associated pneumonia the most sensitive component of improvement in CPIS is:-(A) Leucocytosis reduction (B) Fever below 38.9°C (C) Chest radiography clearing (D) Improvement in oxygenation (PaO<sub>2</sub>/FiO<sub>2</sub> > 250) 8

- 30. Shadows in upper lobes on X-ray chest are not seen in :-(A) Sarcoidosis (B) Nonspecific Interstitial pneumonia (NSIP) (C) Silicosis (D) ABPA 31. Steroid resistant asthma is defined as failure to respond to:-(A) 40 mg/day oral prednisolone for 2 weeks (B) 60 mg/day oral prednisolone for 1 week (C) 12 mg/day oral dexamethasone for 2 weeks (D) 400 mg/day oral hydrocortisone for 1 week 32. Mixed acid based disorder on ABG is not denoted by :-(A) PCO<sub>2</sub> & HCO<sub>3</sub> moving in opposite directions (B) Respiratory disorder with  $HCO_3^- < 15 \text{ mmol/L or} > 35 \text{ mmol/L}$ (C) Metabolic disorder with maximum compensation having last 2 digits of PH not equal to PCO, (D) Metabolic disorder with  $HCO_3^- < 15 \text{ mmol/L or} > 35 \text{ mmol/L}$ 33. Lung volumes can be normal in the following ILD on x-ray chest:-
  - (A) Sarcoidosis
  - (B) BOOP
  - (C) Desquamative Interstitial pneumonia
  - (D) Berylliosis

- Urinary antigen is useful in diagnosis of:-(A) Legionella pneumonia (B) Mycoplasma pneumonia (C) Coxiella burnetii pneumonia (D) Burkholderia pseudomallei pneumonia 35. Type III respiratory failure is treated by all except :-(A) Invasive high pressure support ventilation (B) Non -invasive positive pressure support ventilation (C) Frequent changes of posture (D) Control of abdominal/Incisional pain In spontaneous breathing trial of mechanically ventilated patients which of the following is not true:-(A) CPAP of 5 cm H<sub>2</sub>O can be used Open T-piece breathing system can be used (C) Trial can be given for 30-120 mins (D) Should be done when PEEP is < 10 cm H<sub>2</sub>O
- 37. Mortality in ARDS can be predicted by :-
  - (A) Extent of hypoxemia
  - (B) Level of PEEP used in mechanical ventilation
  - (C) Extent of alveolar infiltrates on chest X-ray
  - (D) Age > 60 yrs and sepsis



- (A)  $PaO_{2} < 54$  or  $PaO_{2} / Fio < 250$  mm Hg
- (B) Arterial PH < 7.3
- (C) Confusion
- (D) Respiratory rate > 30/min

### 39. Pleural fluid eosinophilia is rarely seen in :-

- (A) Benign asbestosis
- (B) Pulmonary embolism.
- (C) Hodgkin's lymphoma
- (D) Sarcoid pleurisy

## 40. Zollinger Ellison syndrome is diagnosed by all EXCEPT :-

- (A) Fasting gastrin levels of 75-150 pg/ml
- (B) Duodenal ulcer in second part of duodenum
- (C) Diarrhoea with acid peptic disease
- (D) Gastrinomas of duodenal wall

# 41. Type B Gastritis in characterized by all EXCEPT:-

- (A) Malt lymphoma
- (B) Parietal cell antibody
- (C) H pylori dependent
- (D) Present almost universally in > 70 yrs age

- 42. Collagenous colitis is characterized by all EXCEPT:-
  - (A) Female to male ratio 9:1
  - (B) Association with rheumatoid arthritis
  - (C) Association with celiac disease
  - (D) Intra epithelial lymphocytes
- 43. Co-infection with hepatitis B and hepatits C virus can have all EXCEPT:-
  - (A) Prolonged HBSAg antigenemia
  - (B) Lower peak serum transaminase levels
  - (C) Increased risk of fulminant hepatic failure
  - (D) Higher rate of cirrhosis
- 44. Early virological response to treatment of chronic HCV infection is defined as:-
  - (A) 12 weeks HCV RNA fall by 2-log<sub>10</sub> drop
  - (B) 6 weeks HCV RNA fall by 2-log<sub>10</sub> drop
  - (C) 4 weeks HCV RNA fall by 2-log<sub>10</sub> drop
  - (D) 6 weeks HCV RNA fall to undetectable levels
- 45. Which of the following is not true for porphyria cutanea tarda:-
  - (A) 40% have gene for Haemochromatosis
  - (B) 50% have associated hepatitis C
  - (C) May be associated with estrogen medication
  - (D) Hyper pigmentation of trunk and arms



- 46. An exclusive feature of type I renal tubular acidosis is:-
  - (A) Short stature
  - (B) Urinary potassium wasting
  - (C) Hypercalciuria
  - (D) Osteomalacia
- 47. Treatment for class V lupus Nephritis is:-
  - (A) Steroids + pulse cyclophosphamide
  - (B) Steroids + Azathioprine
  - (C) Mycophenolate mofetil with/without steroids
  - (D) Tacrolimus + cyclophosphamide
- 48. Hepatorenal syndrome is diagnosed by:-
  - (A) S creatinine > 2.5 mg with liver disease
  - (B) ↑ BUN and urinary sodium of < 10 mmol/L
  - (C) ↑ S creatinine and urinary sodium of > 10 mmol/L
  - (D) Creatinine clearance of < 40 ml/min and urinary sodium of < 10 mmol/L
- 49. IgA nephropathy is not seen in :-
  - (A) Chronic liver disease with cirrhosis
  - (B) Dermatitis herpetiformis
  - (C) Sjogren's syndrome
  - (D) Microscopic polyangiitis



- 50. Pathology of HIV nephropathy is usually:-
  - (A) Membranous glomerulonephritis
  - (B) Focal segmental glomerulosclerosis
  - (C) Mesangioproliferative glomerulonephritis
  - (D) Membranoproliferative glomerulonephritis
- 51. Truncal sensory loss in 'bathing trunk' distribution is a feature of :-
  - (A) Tangier's disease
  - (B) Familial amyloid neuropathy
  - (C) Refsum disease
  - (D) Porphyric neuropathy
- 52. Macular sparing hemianopia is a feature of lesions of :-
  - (A) Optic peduncle
  - (B) Meyer's loop in temporal lobe
  - (C) Fibres in lateral geniculate body
  - (D) Anterior visual cortex
- 53. Internuclear ophthalmoplegia is characterized by all except :-
  - (A) Failure of adducting movements of eye on attempted lateral gaze to opposite side
  - (B) Lesions of medial longitudinal fasciculus on the same side
  - (C) Lesion of medial longitudinal fasciculus and or abducens nucleus on opposite side

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(D) Adduction of eye is normal during convergence gaze

54.	Lam	ambert Eaton myasthemic syndrome is not characterized by :-		
	(A)	Proximal myopathy of lower limbs		
	(B)	Absent deep tendon reflexes		
	(C)	Decremental response on repetitive stimulation on EMG		
	(D)	Can antedate small cell carcinoma of lung		
55.	Dial	petic third Nerve Cranial palsy is characterized by all except :-		
	(A)	Dilated pupil with sluggish light reflex		
	·(B)	Diplopia		
	(C)	Unilateral ptosis		
	(D)	Intense retro orbital pain		
56.	Drug	g induced hallucinations is usually a feature of:-		
	(A)	Dementia with lewy body		
	(B)	Frontotemporal dementia		
	(C)	Cruetzfield Jakob dementia		
	(D)	Vascular dementia		
57.		ercapnic respiratory failure with increased dead space can be seen in all ept:-		
	(A)	Asthma		
	(B)	Cystic fibrosis		
	(C)	Myxedema		
	(D)	Pulmonary fibrosis		

- 58. Features of BiPAP ventilation includes all except:-
  - (A) Inspiratory support decreases work of breathing
  - (B) Inspiratory support prevents alveolar collapse
  - (C) Can be successfully used in COPD
  - (D) PSv level of 5-10 cm  $\rm H_2O$  and CPAP of 3-5 cm  $\rm H_2O$  should be used initially
- 59. Main goal of PEEP during mechanical ventilation is to keep:-
  - (A)  $PaO_2 > 90 \text{ mm Hg with } FiO_2 < 50\%$
  - (B)  $PaO_{2} > 70 \text{ mm Hg with FiO}_{2} < 60\%$
  - (C)  $PaO_2 > 55-60 \text{ mm Hg with } FiO_2 < 60\%$
  - (D)  $PaO_2 > 55-60 \text{ mm Hg with } FiO_2 > 60\%$
- 60. The best biochemical marker of hepatic fibrogenesis is :-
  - (A) Hyaluronan
  - (B) apo Lipoprotein A1
  - (C) α-2 Macroglobulin
  - (D) Haptoglobin
- 61. In ascites due to portal hypertension, a falsely low SAAG could be seen in all except:-
  - (A) Very low serum albumin
  - (B) Systemic hypotension
  - (C) Chylous ascites
  - (D) Very high serum globulin

62. Treatment of choice for Lamivudine resistant chronic HBV infection: (A) Tenofovir alone (B) Entecavir alone (C) Lamivudine + Tenofovir (D) Lamivudine + Entecavir 63. True about Celiac disease all except :-(A) Spontaneous remission occurs during the 2<sup>nd</sup> decade of life which may be permanent in some (B) Absence of DQ2/DQ8 excludes the diagnosis (C) A small intestinal biopsy is required to establish the diagnosis (D) Anti EMA and anti tTg antibodies are linked to the pathogenesis and histopathological changes characteristic of the disease All the following are common movement disorders in Wilson's disease except :-64. (A) Myoclonus (B) Tremor (C) Dystonia (D) incoordination 65. Breast milk to serum concentration ratio of the following anti-epileptic drug (AED) is maximum:-(A) Valproate

(B) Levetiracetam

(C) Carbamazepine

(D) Ethosuximide

- 66. Most common cause of seizures in a patient with HIV infection is :-
  - (A) Cerebral Toxoplasmosis
  - (B) Primary CNS Lymphoma
  - (C) Cryptococcal meningitis
  - (D) Progressive multifocal leukoencephalopathy
- 67. Following markers are used to assess disease activity in SLE except :-
  - (A) Anti-ds DNA
  - (B) Complement C3
  - (C) Anti-Ro
  - (D) NGAL
- 68. Regarding the anti CCP antibody in Rheumatoid arthritis the following statements are true except:—
  - (A) It is included in the new 2010 ACR-EULAR criteria
  - (B) May be detected in sera long before clinical disease
  - (C) It has a specificity of 60-70%
  - (D) It has important prognostic significance
- 69. Beside β2 microglobulin the following parameter is also used by the international staging system for multiple myeloma:—
  - (A) Serum globulin
  - (B) Serum albumin
  - (C) Circulating plasma cells
  - (D) M-protein in serum



- 70. The best investigation to establish the diagnosis of Polycythaemia Vera is:-
  - (A) JAK 2 mutation
  - (B) Serum erythropoietin
  - (C) Bone marrow cytology
  - (D) Red cell distribution width
- 71. True about Disseminated intravascular coagulation (DIC) are all except :-
  - (A) Most sensitive test is FDP
  - (B) Schistocytes are common in the Peripheral Smear
  - (C) Fibrinogen levels falls acutely in all cases
  - (D) PT and APTT may be normal in chronic DIC
- 72. The most important indication of ICT drain in Parapneumonic effusion is:-
  - (A) Pus is aspirated on pleurocentesis
  - (B) Loculated effusion is present
  - (C) Pleural fluid culture is positive for Klebsiella
  - (D) If fluid separates the lung from the chest wall by > 10 mm on lateral decubitus Xray
- 73. Contrast induced nephropathy is characterized by all except :-
  - (A) Diabetics are more susceptible
  - (B) Serum creatinine peaks in 3-5 days
  - (C) Active urinary sediments
  - (D) Resolve within a week

74. Waxy casts are seen in :-		y casts are seen in :-		
	(A)	Chronic renal failure		
	(B)	Nephrotic syndrome		
	(C)	Interstitial nephritis		
	(D)	Transplant rejection		
75.	One of the following situations is not associated with high Trans tubular K-gradient (TTKG):-			
	(A)	Loop diuretics .		
	(B)	Osmotic diuresis		
	(C)	Liquorice use		
	(D)	Distal RTA		
76.	• True	about Vasopressin antagonists all except :-		
	(A)	Conivaptan also has action on the V1A receptor		
	(B)	They are not approved for use in acute hyponatremia		
	(C)	Strict fluid restriction is an essential component of management		
	(D)	Can lead to rapid correction of hyponatremia with consequent ODS		
77.	Dec	rease in the anion gap (AG) is associated with all except:		
	(A)	Lithium intoxication		
	(B)	Cation exchange resins		
	(C)	Plasma cell dyscrasias		
	(D)	Nephrotic syndrome		

- 78. Fall in serum albumin by 1g/dl from the normal value (4.5g/dl) alters the Anion Gap as follows:—
  - (A) AG decrease by 2.5 meq/L
  - (B) AG increase by 2.5 meq/L
  - (C) AG fall by 1.5 meq/L
  - (D) Does not change the AG at all
- 79. The ABG of a patient with DKA have PH 6.90 and HCO3 10 meq/L, what would be the most appropriate respiratory compensation (PaCO2) in the absence of any mixed acid base disturbance:—
  - (A) 21-25 mmHg
  - (B) 26-30 mmHg
  - (C) 30-34 mmHg
  - (D) 34-38 mmHg
- 80. Pyridoxine is used as an antidote for all except :-
  - (A) Isoniazid
  - (B) Wernicke's encephalopathy
  - (C) Hydralazine
  - (D) Fungus (Gyromitra esculenta)