

**SECTION-A (GENERAL MEDICINE)**

**Q.No.1. Multiple Choice Questions**

**50x2=100**

1. The treatment of severe dengue infection is monitored by-
  - A. Hemoglobin
  - B. Platelet count
  - C. Hematocrit
  - D. WBC count
  
2. A patient presents with symptoms of chronic diarrhoea, cough and sputum production. He is diagnosed to be suffering from both HIV and pulmonary tuberculosis. What medical management is to be started first-
  - A. Anti-Tuberculosis treatment
  - B. ART
  - C. ATT and ART both simultaneously
  - D. Sequence of beginning ART and ATT is not important
  
3. Radioactive iodine (RAI) uptake is increased in **all except**:
  - A. Graves disease
  - B. Iodine deficiency
  - C. toxic adenoma
  - D. Subacute thyroiditis
  
4. A 40 year old male has prominent jaw, thick soles and palms, enlarged hands and feet along with coarsened facial features, the best diagnostic test for this patient would be:
  - A. IGF
  - B. TSH
  - C. GH
  - D. 8 AM Serum Cortisol

5. A young patient of 25 years presents with sudden onset of flaccid quadriplegia of 3 days duration, Which electrolyte is important to be checked first:-
- A. Magnesium
  - B. Calcium
  - C. Potassium
  - D. Sodium
6. Which statement is **true** about Guillain Barre (LGB) syndrome:
- A. It is a predominantly a motor type of demyelinating polyneuropathy
  - B. Bowel and bladder are usually involved
  - C. Deep tendon reflexes are exaggerated
  - D. Intravenous methyl prednisolone is the treatment of choice
7. Modified end stage liver disease (MELD) score includes all **except**-
- A. Prothrombin time
  - B. Bilirubin
  - C. Albumin
  - D. Creatinine
8. Tertiary hyperparathyroidism is-
- A. Autonomous state due to monoclonal outgrowth of previously hyperplastic parathyroid gland
  - B. Increased sensitivity to serum calcium
  - C. Seen in patients with parathyroid adenoma
  - D. dependent on hypothalamic stimulus

9. A 45 year old man gets admitted with fever, pneumonia and erythematous rash with a black centre (Eschar) on abdomen; the most likely diagnosis is:
- A. Ebola virus disease
  - B. Scrub Typhus
  - C. Relapsing fever
  - D. Leptospirosis
10. Sub-acute combined degeneration of spinal cord (SACD) is caused by deficiency of-
- A. Cynacobalamin
  - B. Pyridoxine
  - C. Thiamine
  - D. Folic acid
11. Hypercalcemia is a feature of all of the following **except**:
- A. Primary & tertiary Hyperparathyroidism
  - B. DiGeorge's syndrome
  - C. Vitamin D intoxication
  - D. Lytic skeletal lesions
12. Significant difference of blood pressure in both upper limbs is found in **all except**:
- A. Supravalvular aortic stenosis
  - B. PDA
  - C. Aortic dissection
  - D. Takayasu's arteritis

13. Regarding dengue fever the following statements are correct **except**:

- A. There is cross immunity amongst all the 4 serotypes
- B. A maculopapular rash generally appears on the trunk on 3<sup>rd</sup> to 5<sup>th</sup> day
- C. Infection by type 2 serotype following a type 1 serotype infection is a risk factor for severe disease
- D. Thrombocytopenia and increased hematocrit are highly suggestive of dengue

14. Procalcitonin can be a helpful marker in the following;

- A. Severe sepsis
- B. ARDS
- C. Dyselectrolytemia
- D. Immune reconstitution inflammatory syndrome (IRIS)

15. Aztreonam has a similar spectrum of efficacy to:

- A. Daptomycin
- B. Linezolid
- C. Amikacin
- D. Quinupristin/Dalfopristin

16. Dumb rabies (paralytic rabies) is characterized by all of the following **except**:

- A. Often misdiagnosed as Guillain Barre syndrome
- B. Hydrophobia/aerophobia
- C. LMN type of paralysis
- D. is as fatal as encephalitic form

17. Mortality in severe *Falciparum* malaria is directly related to all **except** :
- A. Hypothermia
  - B. Uncontrolled seizures
  - C. High parasitic index
  - D. Elevated ammonia level in CSF
18. Allergic bronchopulmonary Aspergillosis is characterized by all of the following **except**:
- A. Elevated Ig E levels
  - B. Eosinophilia
  - C. Proximal bronchiectasis
  - D. Intravenous Fluconazole is the treatment of choice
19. The causative organisms for HUS (hemolytic uremic syndrome) are:
- A. *Cl. Difficile* & *Cryptosporidium*
  - B. *E.Coli* & *Shigella*
  - C. *Cholera* & *E.Coli*
  - D. *Campylobacter* & *Shigella*
20. Which of the following is not useful in the treatment of Scrub typhus:
- A. Azithromycin
  - B. Rifampicin
  - C. Quinolone
  - D. Doxycycline
21. A patient of rheumatoid arthritis presents with acute pain in the knee and calf. The most likely diagnosis is-
- A. Venulitis of the leg veins
  - B. Ruptured baker's cyst
  - C. Superinfection with *Borrelia Burgdorferi*
  - D. Associated Inclusion Body Myositis

22. HLA-B27 association is seen in all of the following **except**:

- A. RA
- B. Reactive arthritis
- C. Psoriatic arthritis
- D. Ulcerative colitis with extraintestinal involvement

23. Foster Kennedy syndrome is -

- A. B/L optic atrophy
- B. B/L papilledema
- C. Ipsilateral optic atrophy and contralateral papilledema
- D. None of the above

24. Acute hyperkalemia is associated with which of the following ECG changes:

- A. Widening of QRS complex
- B. Prolongation of the ST segment
- C. A decrease in the PR segment
- D. Elevation of PR segment

25. A patient presents with recurrent pain abdomen, CBC reveals pancytopenia and flow cytometry shows deficient CD 59 & 55 population of RBC and granulocytes. The diagnosis is:

- A. MDS
- B. PNH
- C. P5N deficiency
- D. HUS (Hemolytic uremic syndrome)

26. A patient with H/o DVT develops sudden onset breathlessness, in order to rule out pulmonary embolism, the first screening investigation of choice would be-
- A. Pulmonary angiography
  - B. CT angiography
  - C. Echocardiography
  - D. Plasma D-Dimer Assay
27. A 60 year old hypertensive patient presents with acute onset dizziness, difficult in swallowing, nasal regurgitation and nystagmus, the likely site of lesion is :
- A. Thalamus
  - B. Lateral part of medulla
  - C. Motor Cortex
  - D. Posterior column of spinal cord
28. A 22 year old patient with a history of paroxysmal wheeze, epistaxis, numbness and weakness of both legs along with pulmonary infiltrates presents to you , the most likely diagnosis is:
- A. Wegner's Granulomatosis
  - B. Churg Strauss syndrome
  - C. Rheumatoid arthritis
  - D. Bronchial asthma
29. A 25 yr. old patient presents with scaling, seborrhea, erythematous rash, depression and paresthesias. The probable diagnosis is deficiency of:
- A. Pantothenic acid
  - B. Flavonoids
  - C. Niacin
  - D. B5 deficiency

30. Diarrhoea, alopecia, muscle wasting, depression and rash over extremities and face are associated with -

- A. Copper
- B. Selenium
- C. Chromium
- D. Zinc

31. Which of the following mineral deficiency causes Cardiomyopathy

- A. Selenium
- B. Molybdenum
- C. Zinc
- D. Phosphorus

32. Metabolic syndrome is characterized by all of the following **except**:

- A. Abdominal girth of 102cm in Male
- B. Serum LDL >150 mg
- C. Insulin resistance
- D. Hypertension

33. Wernicke's encephalopathy is characterized by:

- A. Ophthalmoplegia, ataxia, confusion
- B. Megaloblastic mania
- C. 25% glucose is the preferred treatment
- D. Occurs due to folate deficiency

34. Contra indications for the use of ACE Inhibitors include all of the following **except**:

- A. Acute Renal failure.
- B. Bilateral Renal artery stenosis
- C. Pregnancy
- D. Albuminuria



35. Following statements are true **except**:

- A. HPV (human papilloma virus) vaccination can prevent cervical neoplasia
- B. Hepatitis B vaccination is useful in prevention of HCC (hepatocellular carcinoma)
- C. Incidence of stomach cancer is reduced by H. pylori eradication treatment
- D. Use of NSAID's reduces the risk of developing myocardial infarction

36. A 25 years old pregnant female develops thyrotoxicosis the most appropriate treatment would be:

- A.  $\beta$ -blockers to control sympathetic activity
- B. Methimazole
- C. RAI ablation
- D. Propylthiouracil

37. The treatment of choice in a patient of Acute MI with V. Tachycardia is

- A. IV Amiodarone
- B. IV Xylocaine
- C. IV Procainamide
- D. Electroversion With 100 J of energy

38. Heliotrope Rash is seen in

- A. Still's disease
- B. Dermatomyositis
- C. Lyme disease
- D. Systemic lupus erythematosus

39. In Hepatobiliary disease a rise in Serum Alkaline Phosphatase is often associated with a parallel rise in :
- A. Aldolase
  - B. Gamma GT
  - C. Leucocytic Alkaline Phosphatase
  - D. Vasoactive intestinal peptide
40. The most distinguishing feature of PSVT versus VT is the presence of:
- A. Delta waves
  - B. Wide QRS tachycardia
  - C. Typical right bundle branch block
  - D. Capture beats
41. Heparin is indicated in all of the following **except**:
- A. ST elevation MI
  - B. Non ST elevation MI
  - C. Pulmonary Thromboembolism
  - D. Pericarditis complicating MI
42. Pulsus paradoxus is seen in all **except-**
- A. Aortic stenosis
  - B. Acute severe asthma
  - C. Cardiac tamponade
  - D. Constrictive pericarditis
43. The risk of complications of H1N1 influenza is more in the following groups **except** :
- A. Children & elderly
  - B. COPD & Bronchial asthma patients
  - C. Patients on steroids & HIV infection
  - D. The risk is more or less equal in all age groups & depends on the virulence of the virus

44. Lhermitte's phenomenon is seen in-
- A. Radiation myelopathy
  - B. Pseudobulbar palsy
  - C. Motor neuron disease
  - D. Pseudotumor cerebrii
45. In acute liver failure, following are poor prognostic factors **except**:
- A. Decreasing transaminases
  - B. Increasing bilirubin
  - C. Increasing Prothrombin time
  - D. ↑ Globulin levels
46. H1N1 Influenza is best diagnosed at community level by:
- A. Viral culture
  - B. RT-PCR assay on throat swab
  - C. Detecting Viral neutralizing antibodies
  - D. Western blot assay
47. Antibiotic associated colitis is caused by
- A. E. Coli
  - B. Shigella
  - C. Campylobacter jejuni
  - D. Clostridium difficile
48. The following statement regarding Zika virus infection is true
- A. Transmitted by the bite of Culex mosquito
  - B. Associated with bilateral pneumonia and ARDS
  - C. Belongs to Filovirus group
  - D. Congenital transmission leads to microcephaly

49. Choose the biomarker of bacterial sepsis from the following options

- A. Trop-I
- B. CRP & Procalcitonin
- C. Galactomannan
- D. CA 19-9

50. Serum marker indicating immune status after vaccination for Hepatitis B is

- A. HBeAg
- B. Anti HBc IgM
- C. Anti HBs Ag
- D. HBV DNA

**Q.No.2. Write short notes on *any five* of the following. 5x4=20**

- I. Treatment of hypertensive urgency
- II. Serologic & Virologic markers of Hepatitis-B
- III. Celiac disease /sprue
- IV. Etiology and management of acute bacterial meningitis
- V. Treatment of Chronic Myeloid Leukemia
- VI. Complications related to blood transfusion
- VII. Clinical features and management of Acute Gout

VIII. Management of ST elevation Acute MI (Myocardial Infarction)

IX. Treatment of organophosphorus Compound Poisoning

X. Bioterrorism

**Q.No.3. Explain in detail *any two* of the following.**

**2x15=30**

I. H1N1 Influenza

II. Dengue Infection

III. Preventive Cardiology

IV. Common Geriatric disorders

**SECTION-B (PAEDIATRICS)**

**Q.No.1. Multiple Choice Questions**

**50x2=100**

1. All of the following are embryonic hemoglobin except-
  - A. HbF
  - B. HbA2
  - C. Gower-1
  - D. Portland
  
2. All are manifestations of congenital toxoplasmosis except-
  - A. Intracranial calcification
  - B. Chorioretinitis
  - C. Hydrocephalus
  - D. Cerebellar atrophy
  
3. Erythropoietin is produced by the cells of {Inutero}-
  - A. Monocyte - Macrophage origin residing in liver
  - B. Peritubular cells of kidney
  - C. Liver parenchyma
  - D. Bone marrow cells
  
4. ARDS is characterized by all except-
  - A. Bilateral pulmonary infiltrates
  - B. Hypercapnia
  - C. Hypoxia
  - D. Stiff lungs

5. In alkaptonuria hyper pigmentation is seen in all of the following except-
- A. Ear
  - B. Articular cartilage
  - C. Nose
  - D. Sclera
6. All of the following may be seen in a case of cystic fibrosis except-
- A. Recurrent pneumonias
  - B. Steatorrhea
  - C. Metabolic acidosis
  - D. Hypochloremia
7. All of the following congenital heart diseases are ductus arteriosus blood flow dependent except-
- A. Hypoplastic left heart syndrome
  - B. Truncus arteriosus
  - C. Obliterated aortic arch
  - D. Transposition of great arteries with intact ventricular septum
8. A 6 years old male child presented with history of polyuria and polydipsia. Investigation showed serum sodium = 150 mEq/l, potassium = 4.6 mEq/l,  $\text{HCO}_3^-$  = 21 mEq/l, S. Osmolality = 300 mosml/l, BUN = 50. Urine specific gravity = 1.005. The most probable diagnosis is-
- A. Bartters syndrome
  - B. Renal tubular acidosis
  - C. Diabetes insipidus
  - D. SIADH
9. A 2 month old child presented with hypotonia and hyporeflexia. There is history of polyhydramnios and decreased fetal movements during intrauterine period. The most probable diagnosis is-
- A. Muscular dystrophy
  - B. Congenital myotonia
  - C. Spinal muscular atrophy
  - D. Congenital myasthenia gravis

10. All of the following are associated with Kawasaki disease except-
- A. Conjunctivitis
  - B. Truncal rash
  - C. Thrombocytopenia
  - D. Cervical lymphadenopathy
11. All of the following conditions are characterized by proximal muscle weakness except-
- A. Polymyositis
  - B. Duchenne muscular dystrophy
  - C. Spinal muscular atrophy
  - D. Myotonic dystrophy
12. Platelet count is reduced in all of the following conditions except-
- A. Systemic lupus erythematosus
  - B. Idiopathic thrombocytopenic purpura
  - C. Thrombotic thrombocytopenia purpura
  - D. Henoch Schonlein purpura
13. Palmomenthal reflex is seen in lesions of-
- A. Occipital lobe
  - B. Temporal lobe
  - C. Parietal lobe
  - D. Frontal lobe
14. Hematopoiesis in bone marrow is evident by \_\_\_\_\_ week of gestation {inutero}-
- A. 6-8 Wks
  - B. 8-10 Wks
  - C. 10-12 Wks
  - D. 12-14 Wks



15. Moderate elevations of HbF may be seen in all of the following conditions except-
- A. Hemolytic anemia
  - B. Leukemia
  - C. Aplastic anaemia
  - D. Iron deficiency anaemia
16. All of the following causes microangiopathic hemolytic anemia except-
- A. DIC
  - B. HUS
  - C. Hypertension
  - D. Sequestration
17. A 2 year old child was brought to primary health center with complaints of fever and cough for the past 2 days. On examination his weight is 10 kg respiratory rate is 40 per min, and chest indrawing present. The most appropriate management is-
- A. Classify as pneumonia, start antibiotics and advice to follow-up after 2 days
  - B. Classify as pneumonia and refer urgently to higher center
  - C. Classify as severe pneumonia and refer urgently
  - D. Classify as severe pneumonia, start antibiotic and refer urgently
18. A child presented with recurrent urinary tract infection. The most common underlying anomaly is-
- A. Renal calculi
  - B. Neurogenic bladder
  - C. Posterior urethral valves
  - D. Vesicoureteric reflux
19. Trigonocephaly is-
- A. Premature closure of SAGGITAL Suture
  - B. Premature closure of CORONAL Suture
  - C. Premature closure of METOPIC Suture
  - D. Premature closure of ALL Sutures

20. The term parahemophilia refers to-
- A. Factor X deficiency
  - B. Factor VII deficiency
  - C. Factor V deficiency
  - D. Fibrinogen deficiency
21. Evans syndrome is characterized by autoimmune hemolytic anemia with-
- A. Neutropenia
  - B. Lymphopenia
  - C. Thrombocytopenia
  - D. Pancytopenia
22. A neonate is being investigated for jaundice and hypoglycemia with hepatomegaly. His investigations showed increased serum lactate and uric acid levels. Liver biopsy showed large hepatocytes with fat and glycogen deposition. Diagnosis is-
- A. Galactosemia
  - B. Glycogen storage disorder
  - C. Gaucher disease
  - D. Tyrosinemia
23. A 1 year old child was evaluated for metabolic acidosis. Investigation showed Na = 142 mEq/l, K = 3.2 mEq/l, Ca = 8.5 mg/dl, Mg = 2.2 mg/dl, Phosphate = 3 mg/dl, pH = 7.21, HCO<sub>3</sub> = 10 mEq/l and Chloride = 110 mEq/l. The plasma anion gap is-
- A. 25
  - B. 0
  - C. 32
  - D. 35
24. Breast milk at room temperature can be stored for-
- A. 4 hours
  - B. 8 hours
  - C. 12 hours
  - D. 24 hours

25. First sign of puberty in girls is-
- A. Pubarche
  - B. Thelarche
  - C. Growth spurt
  - D. Menarche
26. Roseola infantum is caused by-
- A. Parvovirus
  - B. HHV 6
  - C. CMV
  - D. EBV
27. Colic generally disappears by age-
- A. 1 year
  - B. 2 year
  - C. 4 months
  - D. 8 months
28. Meconium contains all except-
- A. Lanugo
  - B. Bacterial flora
  - C. Epithelial debris
  - D. Bilirubin
29. Pseudoparalysis is seen in-
- A. Scurvy
  - B. Rickets
  - C. Polio
  - D. Osteopetrosis
30. Karyotype of patient with Androgen insensitivity syndrome is-
- A. 46XX
  - B. 46XY
  - C. 47XXY
  - D. 45XO

31. FDA approved indication of GH therapy are all except-
- A. Idiopathic short stature
  - B. Chronic renal failure
  - C. Small for gestational age
  - D. Laron syndrome
32. Starting dose of levothyroxine for congenital hypothyroidism-
- A. 1.6-1.8  $\mu\text{g}/\text{kg}$  body weight
  - B. 5 - 7  $\mu\text{g}/\text{kg}$  body weight
  - C. 8 - 10  $\mu\text{g}/\text{kg}$  body weight
  - D. 12 - 15  $\mu\text{g}/\text{kg}$  body weight
33. Which of the following is not a feature of VDDR type 2 -
- A. High 1, 25 OH cholecalciferol level
  - B. Alopecia
  - C. Gene is located at 10 q
  - D. Hypocalcemia
34. Familial short stature has following feature-
- A.  $BA = HA < CA$
  - B.  $BA = CA < HA$
  - C.  $BA = CA > HA$
  - D.  $BA = CA = HA$
35. Which of the following is not a feature of Cushing syndrome in children -
- A. Proximal muscle weakness
  - B. Growth retardation
  - C. Weight gain
  - D. Moon facies
36. Prenatal growth is affected by all except-
- A. GH
  - B. IGF-1
  - C. Nutrition
  - D. Insulin

37. Definition of short stature includes all except-
- A. Height below 2 SD of mean
  - B. Growth velocity below 25<sup>th</sup> centile
  - C. Growth velocity below 2 SD
  - D. Height below 3<sup>rd</sup> centile of mean
38. Constitutional delay in growth includes all except-
- A. More common in boys
  - B. Height velocity is delayed
  - C. BA = HA < CA
  - D. Growth is normal during 1<sup>st</sup> year of life
39. CRF is characterized by all except -
- A. Low IGF -1 level
  - B. High IGF BP-1 level
  - C. Low GH level
  - D. FDA approved dose of GH is 0.35 µgm/kg/week in CRF
40. Noonan syndrome includes all except-
- A. Known as male Turner syndrome
  - B. Occurs equally in males & females
  - C. Mental subnormality is present in 25-50%
  - D. Delayed puberty is due to gonadal failure.
41. Russel silver syndrome includes all except-
- A. Small triangular facies
  - B. Precocious puberty
  - C. Paternal uniparental disomy
  - D. Hemihypertrophy

42. Laron syndrome is characterized by all except-

- A. Low IGF -1 level
- B. Low IGF BP - 3 level
- C. Low GH level
- D. Clinical phenotype resemble GH deficiency

43. Achondroplasia includes all except -

- A. AD inheritance
- B. Defect in FGF 23
- C. Disproportionate short stature
- D. Short limb dwarfism

44. Which of the following is not true for GH therapy-

- A. Causes fluid retention
- B. Causes hypoglycemia
- C. Causes slipped capital femoral epiphyses
- D. Causes gynecomastia

45. Obesity with short stature includes all except-

- A. Hypothyroidism
- B. Cushing syndrome
- C. Exogenous obesity
- D. Prader-Willi syndrome

46. All are causes of excess height except-

- A. Klinefelter syndrome
- B. Beckwith-Weidman syndrome
- C. Turner syndrome
- D. Hypogonadism

47. All are Features of Growth hormone deficiency except-

- A. Frontal bossing
- B. Chubby cheeks
- C. Hypoplastic nasal bridge
- D. Low pitched voice

48. PIT – 1 mutation includes all except -

- A. Somatotrophs
- B. Lactotrophs
- C. Thyrotrophs
- D. Corticotrophs

49. Obesity is characterized by-

- A. High GH production
- B. Low GH production
- C. Normal GH production
- D. None

50. Rhizomelia means

- A. Shortness of distal part of limb
- B. Shortness of proximal part of limb
- C. Shortness of middle part of limb
- D. Small cranium