

**Paper II - SECTION A
(GENERAL MEDICINE)**

Part I: Multiple Choice Questions

[50X2=100]

- 1) Rivaroxaban is an anticoagulant with mechanism of action as:
 - A) Factor Xa inhibition
 - B) Direct thrombin inhibition
 - C) Vitamin K antagonism
 - D) Low molecular weight heparin

- 2) Most specific symptom of temporal arteritis is:
 - A) Visual loss
 - B) Jaw claudication
 - C) Temporal headache
 - D) Polymyalgia rheumatic

- 3) A 30 year old female presents with fever, weight loss, cough and epistaxis since 4 months. Chest radiography reveals nodular pulmonary infiltrates with cavitation. Urine examination reveals active sediments with RBC casts. Likely diagnosis is:
 - A) Pulmonary tuberculosis
 - B) Sarcoidosis
 - C) Histoplasmosis
 - D) Granulomatosis with polyangitis

- 4) Culture of sputum of young girl with cystic fibrosis yields predominant bluish green mucoid colonies of oxidase positive gram negative bacilli after aerobic incubation at 37°C and 42°C the likely organism is:
 - A) Klebsiella Pneumoniae
 - B) Pseudomonas aeruginosa
 - C) Burkholderia cepacia
 - D) Burkholderia Pseudomallei

5) Lipoatrophy can occur in patients treated with:

- A) Abacavir
- B) Tenofovir
- C) Stavudine
- D) Maraviroc

6) Sausage digit is seen in:

- A) Rheumatoid arthritis
- B) Juvenile idiopathic arthritis
- C) Enteropathic arthritis
- D) Psoriatic arthritis

7) All of the following are criteria for Septic shock EXCEPT:

- A) Sepsis
- B) Vasopressor therapy needed to elevate MAP to ≥ 65 mmHg
- C) Serum lactate concentration > 2 mmol/L after fluid resuscitation
- D) Elevated BNP levels

8) Aldosterone escape is:

- A) Escape from the salt and water retaining effect of aldosterone
- B) Escape of aldosterone from the stimulating effect of ACTH
- C) Escape from the natriuretic effect of aldosterone
- D) None of the above

9) Sterile pyuria is characteristic of:

- A) Chronic hydronephrosis
- B) Renal cell carcinoma
- C) Renal tuberculosis
- D) Nephroblastoma

10) A patient on Phenytoin develops rash with oral ulcers. The following antibody test would clinch the diagnosis:

- A) Anti centromere antibody
- B) Anti smith antibody
- C) Anti histone antibody
- D) Anti double stranded DNA antibody

11) All of the following are predominant motor neuropathy **EXCEPT**:

- A) Acute inflammatory demyelinating polyradiculoneuropathy
- B) Porphyric neuropathy
- C) Lead intoxication
- D) Arsenic intoxication

12) Treatment of Multiple sclerosis is:

- A) Interferon alpha
- B) Interferon beta
- C) Infliximab A
- D) Interferon gamma

13) All about Mediterranean diet is true **EXCEPT**:

- A) Characterized by a high intake of plant-based foods and olive oil, a moderate intake of fish and poultry, and low intakes of dairy products
- B) Reduces both LDL and HDL
- C) Associated with reduction in insulin resistance and endothelial dysfunction
- D) Maintains total fat at approximately 35-40%

14) GBS is mostly characterized by all **EXCEPT**:

- A) Motor weakness
- B) Facial paralysis
- C) Posterior column sensory loss
- D) H/o preceding viral/bacterial infection holds an important clue

15) Vitamin B12 deficiency can give rise to all of the following, **EXCEPT**:

- A) Myelopathy
- B) Dementia
- C) Peripheral neuropathy
- D) Myopathy

16) Following statements about Kussmaul's sign are true **EXCEPT**:

- A) Observed predominantly in left ventricular failure
- B) Increased CVP during inspiration
- C) Caused by severe right sided heart failure
- D) Frequent in constrictive pericarditis

17) All of the following statements are true about Hemolytic uremic syndrome, EXCEPT:

- A) Uremia
- B) Thrombocytopenia
- C) Positive Direct Coomb's test (DCT)
- D) Fibrinogen normal

18) Lower Motor Neuron lesion is characterized by:

- A) Flaccid paralysis.
- B) Exaggerated Jaw Jerk
- C) Spasticity
- D) Positive Babinski sign

19) Hemiballismus is caused by lesions of the:

- A) Caudate nucleus
- B) Contralateral sub-thalamic nucleus
- C) Putamen
- D) Substantia Nigra

20) What is the initial test that is most commonly used for HCV screening?

- A) HCV RNA by PCR
- B) Anti-HCV (ELISA) Ab
- C) Liver biopsy
- D) Liver function tests

21) Which one of the following treatment for active ulcerative colitis would be preferable in male patients who are concerned about fertility?

- A) 5-aminosalicylic acid
- B) Sulfasalazine
- C) Methotrexate
- D) Lenalidomide

22) Autoimmune hemolytic anemia is an example of which type of hypersensitivity reaction?

- A) Type I Hypersensitivity reaction
- B) Type II Hypersensitivity reaction
- C) Type III Hypersensitivity reaction
- D) Type IV Hypersensitivity reaction

23) Which of the following have shown efficacy in treating Non alcoholic fatty liver disease (NAFLD)?

- A) Vitamin E
- B) Thiamine
- C) Pentoxifyline
- D) All of the above

24) Which of these microbes is the most likely cause of nosocomial pneumonia in a patient in the ICU?

- A) Coagulase-negative staphylococci
- B) *Staphylococcus aureus*
- C) *Pseudomonas aeruginosa*
- D) *Pneumocystis jiroveci*

25) All of the following are common consequences of congenital heart disease in the adult EXCEPT:

- A) Eisenmenger syndrome
- B) Polycythemia
- C) Infective endocarditis
- D) Pulmonary embolism

26) RAI uptake is increased in:

- A) Subacute thyroiditis
- B) Toxic Multinodular goitre
- C) On medications with Levothyroxine
- D) Struma ovarii

- 27) Which of the following is **NOT** associated with the diagnostic criteria for ARDS?
- A) Bilateral infiltrates on chest x-ray
 - B) Acute onset
 - C) Pulmonary capillary wedge pressure >19
 - D) Refractory hypoxaemia ($\text{PaO}_2:\text{FiO}_2 < 200$)
- 28) Which one of the following skin changes is **NOT** typically seen in patients with diabetes mellitus?
- A) Necrobiosis lipoidica
 - B) Acanthosis nigricans
 - C) Lipohypertrophy
 - D) Livedo reticularis
- 29) A 65 years old male presents with Ipsilateral 3rd nerve palsy and contralateral hemiplegia: the most probable diagnosis is:
- A) Benedict's syndrome
 - B) Millard Gubler's syndrome
 - C) Weber's syndrome
 - D) Wallenberg syndrome
- 30) Which of the following will **NOT** have a high reticulocyte count?
- A) Autoimmune haemolytic anemia
 - B) Polycythemia
 - C) Chronic blood loss
 - D) Aplastic anemia
- 31) Massive splenomegaly is **NOT** a characteristic feature of:
- A) Infectious mononucleosis
 - B) Polycythaemia rubra vera
 - C) Chronic myeloid leukaemia
 - D) Tropical splenomegaly syndrome
- 32) Most common opportunistic CNS infection in AIDS:
- A) Neurocysticercosis
 - B) Toxoplasmosis
 - C) Cryptococcosis
 - D) Aspergillosis

33) Which of the following is longest acting insulin?

- A) Lispro
- B) Aspart
- C) Glargine
- D) Human Mixtard Insulin in a ratio of 50:50

34) Metabolic syndrome is characterized by all **EXCEPT**:

- A) Fasting glucose ≥ 100 mg/dL
- B) Serum cholesterol ≥ 200 mg/dL
- C) Triglyceride > 150 mg/dl
- D) Waist circumference ≥ 102 cm (40 in) in men

35) Root value for knee jerk is:

- A) L3 -L4
- B) L1-L2
- C) L4-L5
- D) D12-L1

36) A 40 years old man presents with a 3 days history of severe chest pain , sharp and tearing in nature , radiating to the back. Patient's vitals are heart rate -95/min, respiratory rate - 20/min, temperature - 37°C , BP- 176/96 mm Hg , with a negative Trop-T: the most likely diagnosis is:

- A) A.Acute Myocardial infarction
- B) B.Aortic Dissection
- C) C.Pulmonary embolism
- D) D. Pneumonia

37) Antibiotic stewardship includes all of the following **EXCEPT**:

- A) Preventing antibiotic misuse in hospital
- B) Performing antibiotic cost analysis
- C) Reducing C. difficile rates in hospital
- D) Promote intravenous antibiotics over oral therapy

38) Treatment of choice for multiple myeloma is:

- A) Bortezomib with Lenalidomide
- B) Busulfan
- C) Oral thalidomide
- D) Oral steroids with bisphosphonates

39) Following is the first drug of choice for plasmodium falciparum in a **PREGNANT** lady:

- A) Artemesin based therapy
- B) Chloroquine alone
- C) Quinine plus doxycycline
- D) Clindamycin

40) A nursing student has just completed her hepatitis B vaccine series. On reviewing her laboratory studies (assuming she has no prior exposure to hepatitis B), you will find:

- A) Positive test for hepatitis B surface antigen
- B) Antibody against hepatitis B surface antigen (anti-HBs) alone
- C) Antibody against hepatitis core antigen (anti-HBc)
- D) Antibody against both surface and core antigen

41) Criteria for GESTATIONAL Hypertension include all **EXCEPT**:

- A) New onset hypertension with SBP ≥ 140 mmHg and/or diastolic BP ≥ 90 mmHg
- B) SBP ≥ 160 mmHg and/or diastolic BP ≥ 110 mmHg
- C) Seen at ≥ 20 weeks of gestation
- D) Absence of proteinuria or new signs of end organ damage

42) H pylori is associated with all of the following **EXCEPT**:

- A) Chronic atrophic gastritis
- B) Gastric carcinoma
- C) Gastric lymphoma
- D) Inflammatory bowel disease

43) CD 55, 59 mutation is seen in:

- A) PCV
- B) ALL
- C) CML
- D) PNH

44) Which of the following is **NOT** a feature of chronic liver failure:

- A) Bleeding manifestations including petechiae
- B) Bilateral arcus senilis
- C) Palmar erythema
- D) Loss of axillary and pubic hair

- 45) Which of the following is **TRUE** about Celiac disease **EXCEPT**:
- A) Classic symptoms include diarrhea, steatorrhea, weight loss and growth retardation.
 - B) Endoscopic mucosal biopsy of the duodenum is standard method of confirmation.
 - C) Recommended test is IgA tissue transglutaminase (IgA tTG) antibody.
 - D) Usually not associated with other autoimmune diseases
- 46) According to WHO 2017 criteria, the hallmark of Polycythemia vera is:
- A) Hematocrit > 59 % in females and > 60 % in males
 - B) Hematocrit > 48 % in females and > 49 % in males
 - C) Hematocrit > 50 % in females and > 50 % in males
 - D) Hematocrit > 39 % in females and > 50 % in males
- 47) Severe Haemophilia A is characterized by Factor VIII activity:
- A) < 5%
 - B) < 1%
 - C) Between 1 to 5%
 - D) Between 6 to 10%
- 48) In Chronic myeloid leukemia, Philadelphia chromosome is results from translocation of:
- A) Long arm of chromosome 9 to short arm of chromosome 22
 - B) Long arm of chromosome 9 to long arm of chromosome 22
 - C) Long arm of chromosome 22 to short arm of chromosome 9
 - D) Short arm of chromosome 22 to short arm of chromosome 9
- 49) Mycobacterium-avium complex prophylaxis in HIV is indicated at CD 4 count:
- A) Less than 100
 - B) Less than 200
 - C) Less than 50
 - D) No relationship with CD 4 count
- 50) An 80-year-old male complains of a 3-day history of a painful rash extending over the left half of his forehead and down to his left eyelid. There are weeping vesicular lesions on physical examination. Which of the following is the most likely diagnosis?
- A) Impetigo
 - B) Adult chickenpox
 - C) Zoster ophthalmicus
 - D) Herpes simplex

Part II: Write briefly about ANY FIVE of following

[5X4=20]

1. Management of Paroxysmal Supraventricular Tachycardia
2. Clinical features and treatment of Aortic stenosis
3. Management of Tubercular meningitis.
4. Clinical features and diagnosis of Multiple Myeloma
5. Idiopathic pulmonary fibrosis
6. Clinical picture and management of Wilson's disease
7. Polycythemia Vera
8. Complications and treatment of snake bite.
9. Clinical features and treatment of Osteoporosis
10. Diagnosis and treatment of celiac disease

Part III: Discuss in detail ANY TWO of the following

[2x15=30]

11. Diabetic ketoacidosis (DKA)
12. Clinical features and management of Systemic Lupus Erythematosus (SLE)
13. Status Epilepticus
14. Etiopathogenesis and management strategies of Adult respiratory distress syndrome

**Paper II - SECTION B
(PAEDIATRICS)**

Part I: Multiple Choice Questions

[50X2=100]

- 1) All the following are possible cause of Precocious Puberty except –
 - A) Mc Cune Albright syndrome
 - B) Anorexia Nervosa
 - C) Hypothyroidism
 - D) Neurofibromatosis

- 2) What is underlying genetic cause for Pradarwilli Syndrom-
 - A) Triploidy on Chromosome 21
 - B) Maternal uniparental isodisomy of Chromosome 7
 - C) Deletion of paternal copies of genes on Chromosome 15
 - D) Monosomy X

- 3) Intrauterine growth retardation can be caused by all of the following agents except-
 - A) Nicotin
 - B) Alcohol
 - C) Propranolol
 - D) Phenothiazine

- 4) A 7 year old boy with reduced weight and height for last one year is likely to have which of the following condition-
 - A) Mal Nutrition
 - B) Chronic Infection
 - C) Lymphoma
 - D) Varicella

- 5) Foetal respiratory movements occur earliest at what weeks-
 - A) 12 weeks
 - B) 11 weeks
 - C) 16 weeks
 - D) 20 weeks

- 6) Antenatal diagnosis of all following conditions is possible except-
- A) Down's syndrome
 - B) Anencephaly
 - C) Huntinton's chorea
 - D) Severe combined Immunodeficiency
- 7) Foetal Bradycardia is defined as when heart rate is-
- A) Less than 100 beats per minute
 - B) Less than 120 beats per minute
 - C) Less than 150 beats per minute
 - D) Less than 120 beats per minutes for a period of 15 minutes continuous monitoring
- 8) Foetal growth is maximally affected by which of the hormone –
- A) Insulin
 - B) Growth hormone
 - C) Cortisol
 - D) Thyroxin
- 9) In assymetrical IUGR- which of organ is not affected-
- A) Subcutaneous tissue
 - B) Liver
 - C) Muscle
 - D) Brain
- 10) A 5 year child is assessed developmental age of 1 year. What would be his development Quotient-
- A) 100
 - B) 80
 - C) 60
 - D) 20
- 11) 18 months old baby present with recurrent episodes of excessive crying followed by occasional seizure at 9 months of age. The most likely diagnosis-
- A) Epilepsy
 - B) Anoxic spells
 - C) Breath holding spells
 - D) Vasovagal attack

- 12) Normal height with decrease bone age is seen in-
- A) Cushings syndrome
 - B) Hypothyroidism
 - C) Thanatophoric dwarf
 - D) Downs syndrome
- 13) Visual acuity reaches adult acuity by the age-
- A) 7 years
 - B) 9 years
 - C) 5 years
 - D) 3 years
- 14) Commonest cause of Enuresis in children-
- A) Urinary tract infection
 - B) Spina bifida
 - C) Diabetes mellitus
 - D) Psychological stress
- 15) Vitamin K deficiency occur in all except-
- A) Billiary obstruction
 - B) Artificial milk foods
 - C) Oral antibiotic therapy
 - D) Mal absorption
- 16) Prenatal diagnosis is possible for all following except-
- A) Sickle cell trait
 - B) Beta thalassemia
 - C) Ectodermal dysplasia
 - D) Duchene muscular dystrophy
- 17) Cystic fibrosis can present with all except following-
- A) Salt depletion
 - B) Pansinusitis
 - C) Rectal polyposis
 - D) Pancreatitis

18) Most common pathogen of pneumonia in children 5 yrs and older is-

- A) Streptococcus Pneumoniae
- B) Mycoplasma Pneumoniae
- C) gr A Streptococcus
- D) H. Influenza

19) Broncho Pulmonary dysplasia-an accepted definition- Postnatal Oxygen requirement for-

- A) 7 days
- B) 14 days
- C) 21 days
- D) 28 days

20) Commonest extraintestinal manifestation of Coeliac disease-

- A) Short Stature
- B) Arthritis
- C) Aphthous ulcer
- D) Iron deficiency anaemia.

21) Choose the biomarker of bacterial sepsis=

- A) Trop-1
- B) CRP & Procalcitonin
- C) Galactomannan
- D) CA 19-9

22) Serum marker indicating Immune Status after vaccination for Hepatitis B is-

- A) HBeAg
- B) Anti HBcIgM
- C) Anti HBsAg
- D) HBV DNA

23) 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

- 24) Ultra filtrate which is filtered through glomerular capillary wall contains all of the following except-
- A) Electrolytes
 - B) Low molecular weight proteins
 - C) Creatinine
 - D) Albumin
- 25) An autoimmune disease is-
- A) AIDS
 - B) Lupus
 - C) Mumps
 - D) Measles
- 26) What is the major metabolically available storage form of Iron in the body-
- A) Hemosiderin
 - B) Ferritin
 - C) Hemoglobin
 - D) Transferrin
- 27) Vitamin B12 and Folic Acid have similar effects but what separates one from other-
- A) Glossitis
 - B) No neurological symptoms in folic acid
 - C) Muscle wasting
 - D) Dizziness
- 28) What are the treatment option of Wilson's disease-
- A) Penicillamine
 - B) Riboflavin
 - C) B12
 - D) Gluten free diet
- 29) Which medication is known to cause hypokalemia-
- A) Salbutamol
 - B) Inhaled steroid
 - C) Ipratropium bromide
 - D) Magnesium Sulphate

- 30) The primary reason for AIDS, a deadly disease, is that it-
- A) Caused by Virus
 - B) Caused by bacterium
 - C) Destroys key components of body internal defense system
 - D) Causes a breakdown of body's inflammatory system
- 31) Infants are more susceptible to bacterial infections due to low circulating IgG-
- A) In Utero before birth
 - B) 0-3 months age
 - C) 3-12 months age
 - D) 12-24 months age
- 32) A 10 year old (had boil on left thigh and mild fever 1 month ago) presented with headache, malaise, lethargy, decreased urine output and puffiness of face; GUE; RBC Cast ++; albumin ++; low C3 level and normal C4 level. Which of the following is true about this disease-
- A) Nephrotic Syndrome 50%
 - B) Acute renal failure 90%
 - C) Increase ASLO titer 70%
 - D) Hypertension 70%
- 33) In the diarrhoea associated hemolytic uremic syndrome, one of the following has no beneficial role-
- A) Dialysis
 - B) Early intravenous volume expansion
 - C) Control hypertension
 - D) Eculizumab
- 34) Dandy Walker malformation is characterized by following except-
- A) Cystic dilatation of the fourth ventricle
 - B) Herniation of cerebellar tonsils through the foramen magnum
 - C) Hypoplasia of Cerebellar Vermis
 - D) Hydrocephalus

- 35) There are several predictors of epilepsy after febrile seizure, highest percent of risk factors for subsequent epilepsy after seizure is-
- A) Complex febrile seizure any type
 - B) Fever < 1 hour before febrile seizure
 - C) Recurrent febrile seizure
 - D) Focal complex febrile seizure
- 36) The fascial port-wine stain of Sturge-Weber Syndrome is characterized by the following except-
- A) Tends to unilateral
 - B) Always involved the upper face and eye lids
 - C) Its distribution is consistent with ophthalmic division of trigeminal nerve
 - D) Most children with port wine stain have SWS
- 37) The most common type of CP (Cerebral Palsy) associated with seizure is -
- A) Spastic hemiplegia
 - B) Spastic Quadriplegia
 - C) Spastic Diplegia
 - D) Hypotonic CP
- 38) The CSF leucocyte count in normal healthy newborn may reach-
- A) 15 leucocyte/mm³
 - B) 20 leucocyte/mm³
 - C) 25 leucocyte/mm³
 - D) 30 leucocyte/mm³
- 39) Grunting is most commonly prominent in one of the following-
- A) Asthma
 - B) HMD
 - C) Croup
 - D) Choanal atresia

40) All of the following are common cause of emesis in childhood except-

- A) Gastroenteritis
- B) Toxic ingestion
- C) Pertussis syndrome
- D) Peptic ulcer

41) All of the following are common causes of GI bleeding in infancy except-

- A) Bacterial enteritis
- B) Intussusception
- C) Meckel's diverticulum
- D) Anal fissure

42) In healthy full term neonate, meconium is passed within 48 hours of birth in-

- A) 99%
- B) 90%
- C) 80%
- D) 70%

43) Which of the following statement regarding Zika virus is true-

- A) Transmitted by the bite of culex mosquito
- B) Associated with bilateral pneumonia and ARDS
- C) Belong to filovirus group
- D) Congenital transmission leads to microcephaly

44) Most common cause of pleural effusion in children is-

- A) TB
- B) Congestive heart failure
- C) Bacterial pneumonia
- D) Malignancy

45) All of the following are embryonic haemoglobin except-

- A) HbF
- B) HbA2
- C) Gower I
- D) Portland

- 46) The first permanent tooth to erupt is-
- A) Central incisor at 6 years
 - B) Molar at 6 years
 - C) Premolar at 6 years
 - D) Lower canine at 6-7 years
- 47) Most commonly used index for nutritional status is-
- A) Height for age
 - B) Weight for height
 - C) BMI
 - D) Weight for age
- 48) Radiological features of Scurvy are similar to that of-
- A) Copper deficiency
 - B) Zinc deficiency
 - C) Vit. D excess
 - D) Vit. A excess
- 49) The most convenient way to confirm a diagnosis of Pellagra in children is-
- A) Skin biopsy
 - B) Response to Niacin treatment
 - C) Physical signs of glossitis, dermatitis
 - D) Urinary pyridine
- 50) Significant difference of blood pressure in upper and lower limbs is found in-
- A) Tetralogy of fallot
 - B) Kawasaki disease
 - C) PDA
 - D) Coarctation of aorta

Part II: Write short notes on ANY FIVE of the following

[5X4=20]

- 1) Management of snake bite
- 2) Role of ECG in diagnosis of congenial heart disease
- 3) Week wise complications of Diphtheria and its management
- 4) Treatment of acute Idiopathic Thrombocyto penia (ITP)
- 5) Screening test for new born
- 6) Causes of Hypo kalemia and treatment
- 7) Treatment of Vit. D deficient Rickets
- 8) Outline to steps of management of severe malnutrition as per WHO guidelines in proper Sequence
- 9) New guidelines for Pediatric TB
- 10) Clinical features and management of cong Hypothyroidism

Part III: Explain in details ANY TWO of the following

[2X15=30]

- 11) Discuss portal hypertension and its management
- 12) Discuss spectrum of Dengue fever and its management
- 13) Discuss Kawasaki disease, its clinical manifestation and management
- 14) Describe in brief PPHN with regard to pathophysiology, diagnosis and management.