

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE ASKED TO DO SO

25-0002-AB

TEST BOOKLET

Time Allowed: 3.00 hours

PAPER – II

Maximum Marks: 300

INSTRUCTIONS TO CANDIDATES

Read the instructions carefully before answering the questions: -

1. This Test Booklet consists of **20 (twenty)** pages.
2. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS BOOKLET **DOES NOT** HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
3. Please note that it is the candidate's responsibility to fill in the Roll Number and other required details carefully and without any omission or discrepancy at the appropriate places in the OMR Answer Sheet and the Separate Answer Booklet. Any omission/discrepancy will render the OMR Answer Sheet and the Separate Answer Booklet liable for rejection.
4. Do not write anything else on the OMR Answer Sheet except the required information. Before you proceed to mark in the OMR Answer Sheet, please ensure that you have filled in the required particulars as per given instructions.
5. Use **only Black Ball Point Pen** to fill the OMR Answer Sheet.
6. This Test Booklet is divided into 3 (three) sections – **Section A, Section B and Section C.**
7. All three sections are **Compulsory.**
8. **Section A consist of Multiple Choice-based Questions.** The answers to these questions have to be marked in the **OMR Answer Sheet** provided to you.
9. **Section B and Section C consist of Conventional Questions.** The answers to these questions have to be written in the **Separate Answer Booklet** provided to you.
10. In Section A, each item (question) comprises of 04 (four) responses (answers). You are required to select the response which you want to mark on the OMR 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.
11. After you have completed filling in all your responses on the OMR Answer Sheet and the Answer Booklet(s) and the examination has concluded, you should hand over to the Invigilator **only the OMR Answer Sheet and the Answer Booklet(s).** You are permitted to take the Test Booklet with you.
12. **Penalty for wrong answers in Multiple Choice-based Questions:**
THERE WIL BE PENALTY FOR WRONG ANSWERS MARKED BY A CANDIDATE.
 - (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** of the marks assigned to the 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 the 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.

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GENERAL MEDICINE

SECTION – A

Choose the correct answers for the following questions: (50X2=100)

1. Which NYHA grade is inability to carry out any physical activity without discomfort is?
 - a) Garde I
 - b) Grade II
 - c) Grade III
 - d) Grade IV
2. Which of the following is not a determinant of stroke volume?
 - a) Preload
 - b) After load
 - c) End systolic volume
 - d) Myocardial contractility
3. Angle of Louis corresponds to which vertebral level?
 - a) T5
 - b) T1
 - c) C7
 - d) T6
4. All of the following are obstructive lung diseases except –
 - a) Asthma
 - b) COPD
 - c) Bronchiolitis
 - d) Asbestosis
5. Which one of the following is not a static lung function test?
 - a) Vital capacity
 - b) Maximum breathing capacity
 - c) Tidal volume
 - d) Residual volume
6. Change in lung volume per unit change in time is called –
 - a) Work of breathing
 - b) Closing capacity
 - c) Compliance
 - d) Functional residual capacity
7. Which of the following hormones regulates peristaltic activity?
 - a) Gastrin
 - b) Motilin
 - c) Enteroglucagon
 - d) Neurotensin

8. Which of the following is not an indication for upper GI endoscopy?

- a) Dyspepsia
- b) Dysphagia
- c) Rectal bleeding
- d) Duodenal biopsies

9. All of the following are actions of cholecystokinin except -

- a) Gall bladder contraction
- b) Relaxation of sphincter of Oddi
- c) Satiety
- d) Decreased acid secretion

10. In which region is transplanted kidney palpable?

- a) Right hypochondriac
- b) Right lumbar
- c) Right iliac
- d) Hypochondrium

11. For which organ is DTPA scan used?

- a) Kidneys
- b) Liver
- c) Pancreas
- d) Heart

12. Which of the following hormones is secreted by the kidneys?

- a) Glucagon
- b) Renin
- c) Vasopressin
- d) Insulin

13. Which of the following is the fourth cranial nerve?

- a) Trochlear
- b) Trigeminal
- c) Auditory
- d) Accessory

14. Vomiting has excitatory effect of which neurotransmitter?

- a) Dopamine
- b) Histamine
- c) Acetylcholine
- d) Serotonin

15. What is the CSF pressure in multiple sclerosis on lumbar puncture?

- a) Increased
- b) Decreased
- c) Normal or increased
- d) Normal

16. Which is the site of haematopoiesis at the time of birth?
- a) Liver
 - b) Spleen
 - c) Bones
 - d) Yolk sac
17. What is the normal life span of red blood cells?
- a) 10 days
 - b) 90 days
 - c) 45 days
 - d) 120 days
18. Which of the following is not a vitamin K dependent clotting factor?
- a) XI
 - b) II
 - c) VII
 - d) IX
19. All of the following are Type II autoimmune polyglandular syndromes except -
- a) Pernicious anemia
 - b) Addison's disease
 - c) Vitiligo
 - d) Type I diabetes mellitus
20. Which one of the following conditions does not have normal T4 levels?
- a) T3-hyperthyroidism
 - b) Sub-clinical hyperthyroidism
 - c) Secondary hypothyroidism
 - d) Subclinical hypothyroidism
21. All of the following are the ocular features of graves' disease except -
- a) Exophthalmos
 - b) Enophthalmos
 - c) Lid lag
 - d) Ophthalmoplegia
22. Which of the following diseases belongs to Fredrickson type III hyperlipidemia?
- a) Familial hypercholesterolemia
 - b) Familial combined hyperlipidemia
 - c) Remnant hyperlipidemia
 - d) Plurimetabolic syndrome
23. Which apolipoprotein is synthesized in intestines?
- a) AI
 - b) B₁₀₀
 - c) CII
 - d) E

24. All of the following are HMG CoA reductase inhibitors except –
- a) Colestipol
 - b) Simvastatin
 - c) Pravastatin
 - d) Atorvastatin
25. Which one of the following is not a free sugar?
- a) Cellulose
 - b) Sucrose
 - c) Lactose
 - d) Maltose
26. What is the body mass index in extreme obesity?
- a) 18.5-24.9
 - b) 25.0-29.9
 - c) 30.0-39.9
 - d) > 40
27. All of the following are conditionally essential amino acids except -
- a) Tryptophan
 - b) Cysteine
 - c) Tyrosine
 - d) Glycine
28. A small solid elevation of skin, less than 0.5 cm in diameter is called as –
- a) Macule
 - b) Papule
 - c) Plaque
 - d) Papilloma
29. Which of the following is skin disease associated with generalized pruritus?
- a) Urticaria
 - b) Scabies
 - c) Lichen planus
 - d) Xeroderma
30. Which of the following conditions runs within the family?
- a) Seborrheic eczema
 - b) Discoid eczema
 - c) Asteatotic eczema
 - d) Atopic eczema
31. Bone gain effect in bone remodeling is caused by all except -
- a) Glucocorticoids
 - b) Oestrogen
 - c) Testosterone
 - d) Mechanical loading

32. Which of the following does not present as periarticular lesion in elbow pain?
- a) Tennis elbow
 - b) De quervain's tenosynovitis
 - c) Golfer's elbow
 - d) Olecranon bursitis
33. All of the following are features of osteoarthritis except -
- a) Heberden's nodes
 - b) Bouchard's nodes
 - c) Baker's cyst
 - d) Thumb-base squaring
34. All of the following are neurotic disorders except -
- a) Panic disorder
 - b) Post-traumatic stress disorder
 - c) Neurasthenia
 - d) Manic and bipolar disorder
35. Which of the following conditions does not belong to functional psychosis?
- a) Delirium tremens
 - b) Severe depression
 - c) Mania
 - d) Schizophrenia
36. Which one is not a symptom of somatic depressive disorder?
- a) Reduced appetite
 - b) Anhedonia
 - c) Loss of libido
 - d) Fatigue
37. Which of the following diseases does not have transplacental route of transmission?
- a) Rabies
 - b) Rubella
 - c) Cytomegalovirus infection
 - d) Syphilis
38. Which vaccine is a toxoid?
- a) Measles
 - b) Poliomyelitis
 - c) Meningococcal A and C
 - d) Diphtheria
39. Which is a rare complication of infectious mononucleosis?
- a) Severe pharyngeal oedema
 - b) Antibiotic induced rash
 - c) Chronic fatigue syndrome
 - d) Agammaglobulinemia

40. All of the following are musculoskeletal manifestations of brucellosis except –
- a) Myocarditis
 - b) Synovitis
 - c) Osteomyelitis
 - d) Psoas abscess
41. Weil's disease is seen in –
- a) Toxoplasmosis
 - b) Leptospirosis
 - c) Cytomegalovirus infection
 - d) Borreliosis
42. Which is not a recognized form of infection with *Bacillus anthracis* –
- a) Cutaneous
 - b) Gastrointestinal
 - c) Renal
 - d) Pulmonary
43. All are herpes type I infections except –
- a) Cold sores
 - b) Whitlows
 - c) Genital infections
 - d) Burkitt's lymphoma
44. Which one of the following is a non-infectious cause of bloody diarrhoea?
- a) Intussusception
 - b) Non-typhoidal salmonellae
 - c) Entero-invasive *E. coli*
 - d) *Vibrio parahaemolyticus*
45. Sexual form of malarial parasite is –
- a) Sporozoite
 - b) Gametocyte
 - c) Merozoite
 - d) Hypnozoite
46. What is the loading dose of quinine in the treatment of *P. falciparum* malaria?
- a) 10 mg/kg
 - b) 15mg/kg
 - c) 20 mg/kg
 - d) 5 mg/kg
47. Which of the following is not a rickettsial fever?
- a) Rocky mountain spotted fever
 - b) Scrub typhus
 - c) Epidemic typhus
 - d) Yellow fever

48. Hook worm infection is caused by –
- a) *Necator americanus*
 - b) *Strongyloides stercoralis*
 - c) *Ascaris lumbricoides*
 - d) *Enterobius vermicularis*
49. Which of the following is not a feature of early congenital syphilis?
- a) Maculo-papular rash
 - b) Neurosyphilis
 - c) Condylomata lata
 - d) Mucus patches
50. Which one of the following is not a route of transmission of HIV?
- a) Vertical
 - b) Sexually
 - c) Touch
 - d) Needle sharing

SECTION – B

Answer any 3 (three) of the following questions: (3X6=18)

1. With the help a suitable diagram, describe the coronary circulation and the conduction system of heart.
2. Describe the bronchopulmonary segments of lung with their applied clinical importance.
3. Define peptic ulcer. Elaborate the etiology, pathology, clinical features and management of gastric ulcer.
4. Explain the etiopathogenesis, clinical features and management of chronic pyelonephritis.
5. Classify epilepsy. Write a short note on the management of epilepsy. What is status epilepticus?

SECTION - C

Answer any 2 (two) of the following questions: (2X16=32 marks)

1. Define heart failure. Explain the pathophysiology, types, clinical features, management and complications of heart failure.
2. Define bronchial asthma. Describe the etiology, pathophysiology, clinical features and management of bronchial asthma.
3. What is gastro esophageal reflux disease? Elaborate the pathophysiology, clinical features, management and complications of gastro esophageal reflux disease.
4. Discuss the pathogenesis, clinical features, diagnosis, management and complications of malaria. Write a note on the life cycle of malarial parasite.

PEDIATRICS

SECTION – A

Choose the correct answers for the following questions: (50X2=100)

1. Toddler belongs to which growth period?
 - a) 1-3 yrs
 - b) 3-6 yrs
 - c) 6-12 yrs
 - d) First year
2. The child sits in tripod position (with own support) at what age?
 - a) 6 months
 - b) 3 months
 - c) 5 months
 - d) 8 months
3. A child develops bidextrous reach at what age?
 - a) 6 months
 - b) 4 months
 - c) 9 months
 - d) 12 months
4. A child waves 'bye bye' at what age?
 - a) 3 months
 - b) 6 months
 - c) 9 months
 - d) 12 months
5. All of the following are disorders of humoral immunodeficiency except-
 - a) IgA deficiency
 - b) IgG sub-class deficiency
 - c) Transient hypogammaglobulinemia of infancy
 - d) Hyper IgM syndrome
6. A state of protection from the disease due to the presence of antibody is called as-
 - a) Seroprotection
 - b) Seroconversion
 - c) Immunogenicity
 - d) Vaccine effectiveness
7. Which of the following are live attenuated vaccines except-
 - a) BCG
 - b) Rabies
 - c) OPV
 - d) Varicella

8. Which of the following is the treatment option for gonorrhea?
- a) Azithromycin
 - b) Acyclovir
 - c) Ceftriaxone
 - d) Benzathine penicillin
9. What is the age group for early puberty?
- a) 17-19 years
 - b) 14-16 years
 - c) 8-10 years
 - d) 10-13 years
10. All are the mental health problems faced by adolescents except-
- a) Anorexia nervosa
 - b) Anxiety disorder
 - c) Adjustment disorder
 - d) Delinquent behavior
11. Which of the following is not a social challenge faced by adolescents?
- a) Increased use of personal electronic gadgets
 - b) Pollution
 - c) Peer pressure
 - d) Early marriage
12. All of the following are signs of left-sided heart failure except-
- a) Jugular venous engorgement
 - b) Tachpnea
 - c) Tachycardia
 - d) Rales in chest
13. Heart assumes the four chambered shape by when in intrauterine life?
- a) 10th week
 - b) 6th week
 - c) 8th week
 - d) 4th week
14. Which of the following is not a left to right shunt?
- a) ASD
 - b) VSD
 - c) MR
 - d) PDA
15. For the assessment of congenital heart disease, Nadas' criteria require-
- a) One major or one minor
 - b) Two major or two minor
 - c) Two major or one minor
 - d) One major or two minor

16. Extra thoracic obstruction produces –
- a) Inspiratory sounds
 - b) Expiratory sounds
 - c) Both inspiratory and expiratory sounds
 - d) Crepts
17. All of the following are features of tracheal obstruction except-
- a) Expiratory stridor
 - b) Normal cry
 - c) Less severe dyspnea
 - d) Brassy cough
18. Which of the following is not a feature of severe acute laryngotracheobronchitis?
- a) Restless appearance
 - b) Stridor at rest
 - c) Marked tachypnea
 - d) Room air SpO₂ > 92%
19. Which of the following is not an inhaled corticosteroid?
- a) Formoterol
 - b) Fluticasone
 - c) Budesonide
 - d) Beclomethasone
20. All are non-gastrointestinal causes of vomiting except –
- a) Raised ICP
 - b) Hepatitis
 - c) Diabetes ketoacidosis
 - d) Drug induced
21. All of the following are anorectal causes of constipation except –
- a) Anteriorly placed anus
 - b) Anal stenosis
 - c) Hirschprung disease
 - d) Sacral teratoma
22. Which is not a bacterial cause of acute diarrhea?
- a) E. coli
 - b) Bacillus cereus
 - c) S. sonnei
 - d) Giardia lamblia
23. All are features of small bowel diarrhea except -
- a) Blood in stool
 - b) Steatorrhea
 - c) Periumbilical pain
 - d) Offensive smell of stool

24. Which of the following test involves phosphate as a substrate?
- a) Blood anion gap
 - b) Blood parathormone
 - c) Minimum urinary pH
 - d) Plasma ADH
25. All are glomerular causes of hematuria except –
- a) Post-infectious glomerulonephritis
 - b) IgA nephropathy
 - c) Cystic renal disease
 - d) Membranoproliferative glomerulonephritis
26. Which of the following is not a feature of non-glomerular hematuria?
- a) Dysuria
 - b) Family history of calculi
 - c) RBC casts in urine are absent
 - d) Hypertension
27. Which one of the following is associated with tubular proteinuria?
- a) Renal tubular acidosis
 - b) Nephrotic syndrome
 - c) Amyloidosis
 - d) Alport syndrome
28. Which of the following is not an adverse effect of prednisolone?
- a) Cushingoid habitus
 - b) Leukopenia
 - c) Hypertension
 - d) Short stature
29. All are the causes of convulsions in the neonatal period (7-30 days) except –
- a) Hypocalcemia
 - b) Hypomagnesemia
 - c) Inadvertent injection of LA into fetal scalp during paracervical block
 - d) Tetanus neonatorum
30. What is the initial dose of diazepam for the management of acute seizures in pediatric patients?
- a) 0.-0.5 mg/kg
 - b) 0.1-0.4 mg/kg
 - c) 0.1-0.2 mg/kg
 - d) 0.1-0.3 mg/kg

31. What is the maintenance infusion rate of pentobarbital for the treatment of refractory status epilepticus?
- a) 1-5 mg/kg/hr
 - b) 2-10 mg/kg/hr
 - c) 0.1-1 mg/kg/hr
 - d) 3-5 mg/kg/hr
32. Which one of the following is a side effect of phenytoin?
- a) Bone marrow depression
 - b) Hirsutism
 - c) Photophobia
 - d) Hypercortisolism
33. According to WHO, anemia in children 6 months to 5 years is defined as Hb -
- a) <10 g/dl
 - b) <11.5 g/dl
 - c) <11 g/dl
 - d) <12 g/dl
34. All are inborn errors of folate metabolism except -
- a) Congenital folate metabolism
 - b) Dihydrofolate reductase deficiency
 - c) N-methyl tetrahydrofolate homocysteine methyl transferase deficiency
 - d) Methyl malonic aciduria
35. Which one of the following is acquired cause of hemolytic anemia?
- a) Malaria
 - b) Hemoglobinopathies
 - c) Red cell membrane defects
 - d) Lipid membrane defects
36. Which one of the following is an inherited coagulation disorder?
- a) Liver disease
 - b) Von Willebrand disease
 - c) Vitamin K deficiency
 - d) Warfarin overdose
37. All are congenital causes of growth hormone deficiency except -
- a) Isolated GH deficiency
 - b) Pituitary aplasia
 - c) Histiocytosis
 - d) Anencephaly
38. All are the causes of polyuria due to impaired urinary concentration except-
- a) Septo-optic dysplasia
 - b) Head trauma
 - c) Craniopharyngioma
 - d) Diabetes mellitus

39. Which one of the following is not a primary cause of hypothyroidism?
- a) Germinoma
 - b) Aplasia
 - c) Radiation
 - d) Endemic goiter
40. All are the causes of hypocalcemia due to the deficiency of ionic calcium except-
- a) Phosphate load
 - b) Wilson disease
 - c) Tumor lysis
 - d) Rhabdomyolysis
41. Which of the following is not a feature of aminoacidopathies?
- a) Ketosis
 - b) Normal plasma lactate
 - c) Marked acidosis
 - d) Normal plasma NH_3
42. What is the loading dose of L-arginine for the management of hyperammonemia?
- a) 200 mg/kg
 - b) 400 mg/kg
 - c) 300 mg/kg
 - d) 600 mg/kg
43. All are the features of gray matter diseases except –
- a) Late childhood
 - b) Microcephaly
 - c) Retinal degeneration
 - d) Normal EMG
44. Which enzyme defect is present in von Gierke disease?
- a) Amylo-1,6-glucosidase
 - b) Glucose-6-phosphatase
 - c) Brancher enzyme
 - d) Liver phosphorylase
45. Which of the following is not an infectious cause of fever of unknown origin?
- a) Enteric fever
 - b) Malaria
 - c) Polyarteritis nodosa
 - d) Kala azar
46. In which of the following diseases macular rash is absent?
- a) Measles
 - b) Rubella
 - c) Dengue
 - d) Kawasaki disease

SECTION - B

47. Which one is the cause of false-negative Mantoux test?

- a) Viral infection
- b) BCG vaccination
- c) Infection at the site of test
- d) Infections due to atypical mycobacteria

48. What is the dose of isoniazid in children with tuberculosis?

- a) 10-20 mg/kg/day
- b) 10-15 mg/kg/day
- c) 20-25 mg/kg/day
- d) 15-25 mg/kg/day

49. The dose of pentavalent antimony for the treatment of visceral leishmaniasis is -

- a) 1 mg/kg alternate day
- b) 2 mg/kg/day
- c) 20 mg/kg/day
- d) 2.5 mg/kg/day

50. The dose of tinidazole for the treatment of giardiasis is -

- a) 5-10 mg/kg
- b) 10-15 mg/kg
- c) 1.5 mg/kg
- d) 50 mg/kg

SECTION - C

Answer any 2 (two) of the following questions: (2X10=20)

1. Classify congenital heart diseases. What are the Nadas criteria for the assessment of severity? Explain the hemodynamics, clinical features, complications and management of ventricular septal defect.
2. Explain in detail the pathophysiology, pathology, clinical features, diagnosis and management of a child with bronchial asthma.
3. Describe the causes, risk factors, pathogenesis, assessment, clinical features and management of a child with acute diarrhea.
4. Describe the clinical features, diagnosis and management of a child with minimal change nephrotic syndrome? Discuss about the management of a case of relapse?

SECTION – B

Answer any 3 (three) of the following questions: (3X6=18)

1. Explain in detail the various factors affecting the development of a child.
2. Briefly explain fetal circulation with the help of a suitable diagram. What are the differences between fetal and post-natal circulation?
3. Describe the clinical features, differential diagnosis and management of a case of acute tonsillopharyngitis.
4. Describe the etiopathogenesis, clinical features and management of Hirschsprung disease.
5. Explain the pathology, clinical features, diagnosis and management of a case of post-streptococcal glomerulonephritis.

SECTION – C

Answer any 2 (two) of the following questions: (2X16=32)

1. Classify congenital heart diseases. What are the Nadas criteria for the assessment of severity? Explain the hemodynamics, clinical features, complications and management of ventricular septal defect.
 2. Explain in detail the pathophysiology, pathology, clinical features, diagnosis and management of a child with bronchial asthma.
 3. Describe the causes, risk factors, pathogenesis, assessment, clinical features and management of a child with acute diarrhea.
 4. Describe the clinical features, diagnosis and management of a child with minimal change nephrotic syndrome? Discuss about the management of a case of relapse?
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