

**Exam Questions for PEDIATRICS for the 5-th course students**  
**Medical Faculty for International Students 2023-2024 academic year**  
**(speciality 1-79 01 01 «General Medicine»)**

1. Neonatology: definitions, neonatal mortality and morbidity. Levels of perinatal care in the Republic of Belarus.
2. The main risk groups of newborns at the time of birth. Organization of observation in the maternity hospital for newborns according to the risk group.
3. Risk groups and health groups of newborns when they are discharged home, the principles of their formation. Observation of newborns in a polyclinic, depending on the health group.
4. Physiological adaptation to extrauterine life. The newborn transitional period: physiological loss of body weight, hormonal crisis, simple and toxic erythema, renal uric acid infarction, transient hyperthermia. Management.
5. Physical and neuromuscular maturity. New Ballard Score for gestational age assessment.
6. Newborn physical examination.
7. Full-term newborn baby. Anatomical and physiological features of a full-term baby.
8. Organization of feeding of full-term newborns. Benefits of breastfeeding (protective factors of breast milk). Calculation full-term newborn's nutrition needs.
9. Types of feeding: breast feeding, mixed feeding, artificial feeding. Special milk formulas for artificial feeding during the first year of life.
10. Premature newborn baby. Causes of premature birth. Anatomical and physiological features of a premature baby. Nursing care of premature babies. The first care stage of premature newborns (ensuring the optimal temperature, feeding, prevention of infection).

11. Levels of medical care for premature newborns. Physical and neuromuscular features of premature newborns in the first year of life. Prevention of anemia, rickets in premature babies.
12. Special characteristic of bilirubin metabolism in neonates.
13. Classification of neonatal jaundice. Physiological jaundice of newborns. Management.
14. Characteristics of physiological jaundice and pathological jaundice.
15. Breastfeeding jaundice. Breast milk jaundice, Jaundice in newborns with low or high hormone levels (infant of diabetic mother, hypothyroidism). Clinical characteristic, diagnosis, treatment.
16. Jaundice due to decreased excretion of bilirubin: Rotor's Syndrome, Dubin-Johnson Syndrome. Clinical characteristic, diagnosis, treatment.
17. Jaundice due to disorders of hepatic uptake and conjugation: Gilbert Syndrome, Crigler-Najjar Syndrome Type I&II, Lucey-Driscoll Syndrome. Clinical characteristic, diagnosis, treatment.
18. Differential diagnosis of neonatal jaundice.
19. Definition of hemolytic disease of the fetus and newborn. Frequency, mortality. Causes of hemolytic disease: Rh, ABO incompatibility.
20. Classification of hemolytic disease of the fetus and newborn. Clinical symptoms of hemolytic disease of the fetus and newborn (hydrops fetalis, edema, icteric, anemic forms).
21. Hemolytic disease of the fetus and newborn. Etiology and factors contributing to the development of the disease. Pathogenesis.
22. Protective mechanisms in hemolytic disease of the newborn (Rhesus, ABO system). Specific prevention of hemolytic disease of the newborn.
23. Kernicterus (Acute Bilirubin Encephalopathy). Clinical characteristic. Treatment, prognosis, prevention.
24. Diagnostic criteria for hemolytic disease of the fetus and newborn.
25. Treatment of neonatal jaundice with unconjugated hyperbilirubinemia.

26. Frequency and proportion in the structure of morbidity and mortality of pyoinflammatory diseases in newborns. Classification of focal infections.
27. Focal infections of skin: vesiculopustulosis, bullous pemphigoid, Ritter's exfoliative dermatitis of the newborn. Etiology, clinical characteristic, treatment, prevention.
28. Focal infections of the umbilical stump (omphalitis) and soft tissues (necrotizing phlegmon of newborns). Etiology, clinical characteristic, treatment, prevention.
29. Neonatal sepsis. Definition, frequency, mortality. Risk factors.
30. Neonatal sepsis. Classification. Interpretation of concepts: SIRS, neonatal sepsis, severe neonatal sepsis, septic shock, multiple organ failure.
31. Neonatal sepsis. Etiology, pathogenesis.
32. Clinical characteristic of neonatal sepsis.
33. Sofa scale.
34. Diagnosis of neonatal sepsis.
35. Basic principles of treatment and prevention of neonatal sepsis. Infant observation.
36. Rickets. Definition. Predisposing and etiological factors. Vitamin D metabolism. Pathogenesis.
37. Rickets. Classification. Clinical presentation of mild, moderate and severe rickets. Diagnostic work-up.
38. Rickets. Treatment. Antenatal and postnatal prophylaxis.
39. Hypervitaminosis D. Definition. Predisposing and etiological factors. Pathogenesis.
40. Hypervitaminosis D. Classification. Clinical presentation. Diagnostic work-up.
41. Hypervitaminosis D. Treatment of acute and chronic intoxication of vit. D. Prevention. Rehabilitation.
42. Spasmophilia. Definition. Etiopathogenesis. Clinical presentation. Diagnostic work-up. Treatment. Prevention.

43. Malnutrition. Definition. Classification. The concept of normotrophy, malnutrition, obesity, kwashiorkor, marasmus. Classic signs of dystrophy.
44. Malnutrition: protein-energy deficiency. Definition. Etiology. Pathogenesis.
45. Malnutrition: protein-energy deficiency. Clinical manifestation by severity of malnutrition.
46. Malnutrition: protein-energy deficiency. Diagnostics. The principles of diet therapy.
47. Malnutrition: protein-energy deficiency. Medical management. Prevention. Rehabilitation.
48. Neuro-arthritic diathesis. Etiology. Pathogenesis. Clinical manifestations. Treatment. Prevention.
49. Obesity. Classification by severity. Diagnostics. The principles of diet therapy.
50. The concept of anomalies of the constitution. Exudative-catarrhal diathesis. Etiology. Pathogenesis. Clinical manifestation. Prevention. Treatment.
51. Lymphatic-hypoplastic diathesis. Etiology. Pathogenesis. Clinical manifestation. Prevention. Treatment.
52. Acute bronchitis in children. Etiology. Clinical manifestation. Diagnosis. Treatment. Prevention. Rehabilitation.
53. Obstructive bronchitis in children. Anatomical and physiological features of the respiratory system, predisposing to the development of obstructive bronchitis. Clinical manifestation. Diagnostic work-up. Treatment. Prevention. Rehabilitation.
54. Bronchiolitis. Definition. Etiology. Pathogenesis. Clinical manifestation. Treatment.
55. Pneumonia in children. Definition. Etiology. Pathogenesis. The concept of community-acquired and hospital-acquired pneumonia. Classification. Clinical manifestation (catarrhal and intoxication syndromes, respiratory symptoms, hematological changes, imaging). Diagnosis. Differential

- diagnosis. Principles of treatment (regimen, nutrition, antibiotic therapy, iv fluid therapy, symptomatic treatment). Rehabilitation. Prevention.
56. Congenital heart defects. Prevalence by age. Etiological factors. Classification. Instrumental diagnostic methods. Treatment principles.
57. ASD. Clinical manifestations. Diagnostics. Treatment. Indications for surgical treatment. Rehabilitation.
58. VSD. Clinical manifestations. Diagnostics. Treatment. Indications for surgical treatment. Rehabilitation.
59. Patent ductus arteriosus. Hemodynamics. Clinical manifestations. Diagnostics. Natural course. Treatment. Rehabilitation.
60. Coarctation of the aorta. Hemodynamics. Clinic. Diagnostics. Natural course. Treatment. Indications for surgical treatment. Rehabilitation.
61. Tetralogy of Fallot. Hemodynamics. Clinical manifestations. Diagnostics. Natural course. Treatment. Emergency medical care for children with a hypoxic spell (Tet spell). Indications for surgical treatment. Rehabilitation.
62. Heart failure. Definition. Classification, etiology, pathogenesis of heart failure. Clinical manifestations and diagnostic criteria for acute, chronic heart failure. Features of heart failure in young children. Treatment (regimen, diet, ACE inhibitors, vasodilators). Cardiac glycosides in children, indications and principles of use. Symptoms of digoxin toxicity.
63. Bronchial asthma. Definition. Etiology: the role of allergy and heredity. Pathogenesis. Classification. Clinical manifestations. Diagnostic criteria for the severity of the course. Diagnostic criteria for the severity of an attack of bronchial asthma. Differential diagnosis. Basic therapy (minimising allergen environmental and food exposure, specific immunotherapy, medical management, stepwise approach). Rehabilitation. Patient education (asthma school). Prevention.
64. Acute rheumatic fever (ARF). Definition. Etiology. Pathogenesis. Classification, diagnostic criteria. Management: stages of treatment.

- Indications for the glucocorticoids administration. Primary and secondary prophylaxis. Rehabilitation.
65. Chronic rheumatic disease (CRD). Insufficiency of the mitral valve. Hemodynamics. Clinical manifestations. Diagnostic work-up. Treatment.
  66. Chronic rheumatic disease (CRD): aortic valve insufficiency. Clinical manifestations. Hemodynamics. Treatment.
  67. Chronic rheumatic disease (CRD): mitral stenosis. Clinical manifestations. Hemodynamics. Treatment.
  68. Chronic rheumatic disease (CRD): aortic stenosis. Clinical manifestations. Hemodynamics. Treatment.
  69. Acute rheumatic fever (ARF). Chorea. Clinical manifestations. Diagnosis. Treatment. Rehabilitation.
  70. Glomerulonephritis in children. Definition. Etiology. Classification. Mechanisms of edema formation.
  71. Acute glomerulonephritis with nephritic syndrome. Clinical manifestations. Diagnostic work-up. Treatment. Rehabilitation.
  72. Acute glomerulonephritis with nephrotic syndrome. Clinical manifestations. Diagnostic work-up. Treatment. Rehabilitation.
  73. Acute glomerulonephritis with nephrotic syndrome, hematuria and hypertension. Clinical manifestations. Diagnostic work-up. Treatment. Rehabilitation.
  74. Chronic glomerulonephritis. Definition. Classification. Treatment principles.
  75. Pyelonephritis. Definition. Etiology. Pathogenesis. Classification. Clinical manifestations. Diagnosis.
  76. Pyelonephritis. Treatment principles. Indications and methods of antibiotic prophylaxis. Prevention. Rehabilitation.
  77. Interstitial nephritis. Definition. Etiology. Pathogenesis. Classification. Clinical manifestations. Diagnosis. Treatment. Rehabilitation.
  78. Acute renal failure. Definition. Causes. Pathogenesis. Classification (stages). Clinical manifestations. Diagnosis.

79. Acute renal failure. Treatment by stages. Rehabilitation. Indications for acute dialysis.
80. CRF. Definition. Causes. Pathogenesis. Classification. Clinical manifestations. Diagnosis.
81. CRF. Treatment. Indications and contraindications for chronic dialysis. Rehabilitation.
82. Chronic gastroduodenitis. Definition. Role of *Helicobacter pylori* infection in the etiology. Pathogenesis, pathomorphological changes in the mucous membrane of the stomach and duodenum. Classification. Clinical manifestations. Instrumental examination methods and their role in diagnostics. Diagnostic criteria. Treatment. Prognosis.
83. Peptic ulcer. Definition. Prevalence in childhood. Etiology. The role of *H. pylori* infection, genetic factors in the development of the disease. Pathogenesis. Pathomorphological changes in the mucous membrane of the stomach and duodenum. Formation of ulcerative lesions. Clinical and endoscopic stages of peptic ulcer disease. Classification. Diagnostic criteria. Complications. Treatment. Indications for surgical treatment. Anti-relapse measures.
84. Helminthiasis. Types of helminths and the name of the disease, depending on the type (enterobiasis, ascariasis, trichocephalosis, teniidosis, hymenolipidosis, toxocariasis). Characteristics of helminths, features of the biological cycle, final and intermediate hosts. Clinical manifestations. Diagnostic criteria. Treatment. Prevention.
85. Biliary dyskinesia. Definition. Etiology. Pathogenesis. Clinical manifestations. Diagnosis. Treatment. Prevention.
86. Iron metabolism. Stages of iron deficiency, clinical and laboratory characteristic.
87. Iron deficiency anemia. Etiology. Clinical manifestations. Diagnosis. Laboratory findings. Treatment principles. Prevention. Rehabilitation.

- 88.IgA vasculitis (Henoch-Schonlein purpura). Definition. Etiology. Pathogenesis. Classification. Clinical manifestations. Diagnosis.
- 89.IgA vasculitis (Henoch-Schonlein purpura). Treatment. Prevention. Rehabilitation.
- 90.Immune thrombocytopenic purpura. Classification. Etiology. Pathogenesis. Clinical manifestations. Diagnosis. Treatment.
- 91.Hemophilia. Etiology. Pathogenesis. Classification. Clinical manifestations.
- 92.Hemophilia. Diagnosis. Treatment. Rehabilitation and follow-up.
- 93.Acute lymphoblastic leukemia. Etiology. Clinical manifestations. Diagnosis. Basic principles of treatment. Rehabilitation.
- 94.Acute myeloblastic leukemia. Etiology. Clinical manifestations. Diagnosis. Basic principles of treatment. Rehabilitation.