**A- Pediatric propedeutic, general pediatrics, first aid and pediatrics emergencies:**

1. Pediatric history

2. Physical examination in pediatrics, age-specific features

3. Neonate with low birth weight: classification, main characteristics of the period, common diseases

4. Healthy neonate: physical examination findings, main characteristics of the period, common diseases

5. Infant and toddler: main characteristics of the period, growth and development, common diseases

6. Preschooler and young-schooler: main characteristics of the period, growth and development, common diseases

7. Adolescent: main characteristics of the period, growth and development, common diseases

8. Assessment of growth and development

9. Breastfeeding (composition of breast milk, comparison with arteficial milk formula, importance, contraindications)

10. Nutrition of the child in infancy and toddler age, risks of alternative diets

11. Artificial milk formulas, types of formulas

12. Basic and advanced cardiopulmonary resuscitation of neonate and child

13. Acute expiratory dyspnea – clinical manifestation, differential, therapeutic approach

14. Acute inspiratory dyspnea – clinical manifestation, differential, therapeutic approach

15. Foreign body in airways and gastrointestinal tract

16. Allergic reaction, anaphylactic shock

17. The most common intoxications in childhood

18. Burn injury

19. Disorders of consciousness, convulsions, differential, first aid

20. Acute abdomen in pediatrics

21. Oral and parenteral rehydration, realimentation

22. Specific features of pediatric pharmacotherapy

23. Vaccinations: principles and its importance, vaccination schedule, obligatory and voluntary vaccinations, adverse effects

24. Neonatal screening

25. Preventive examination in primary pediatric care, screening in pediatrics

26. Early neonatal care

27. Life-threatening congenital malformations in neonate

28. Birth traumas

29. Prenatal diagnosis and genetic tests in pediatrics, indications, methods

30. Specific features of biochemistry and hematology tests in children

31. Blood-gas and acidobasic status analyses, interpretation

32. Pneumopathies in neonates, RDS

33. Apnoe, acute life-threatening conditions in infancy (ALTE, SIDS), differential dg

34. Shock (classification, causes, treatment)

35. Circulatory failure in children, causes, clinical manifestations, treatment

36. Respiratory failure in children, causes, clinical manifestations, treatment

37. Acute gastroenteritis in children

38. Neonatal sepsis – early and late

**B- Special Pediatrics:**

1. Epilepsy in children, febrile seizures

2. Congenital heart malformations

3. ADHD, autism

4. Disorders of adenohypophysis

5. Disorders of sexual differentiation

6. Disorders of adrenal glands

7. Deficiency of fat-soluble vitamins

8. Deficiency of water-soluble vitamins

9. Diabetes mellitus type I

10. Obesity, treatment and complications

11. Peri-, myocarditis and endocarditis in children

12. Cardiomyopathy and heart arrhythmias in children

13. Congenital malformations of respiratory tract

14. Tuberculosis in children

15. Upper respiratory tract infection, clinical manifestations and treatment

16. Acute bronchitis, acute bronchiolitis

17. Pneumonia in children

18. Cystic fibrosis

19. Asthma bronchiale

20. Congenital malformation of gastrointestinal tract

21. Gastroesophageal reflux, infant colic

22. Diseases of liver in pediatric age,

23. Diseaes of gall-bladder and pancreas

24. Inflammatory bowel diseases

25. Urinary tract infections in children

26. Nephrotic syndrome

27. Acute and chronic renal failure

28. Acute glomerulonephritis, nephritic syndrome

29. Miction disorders and enuresis

30. Congenital malformations or urinary tract

31. Perinatal hypoxia and asphyxia

32. Eating disorders

33. Syndrome of risk behavior in adolescence, drug-abuse, possibilities of intervention

34. Reactive arthritis, rheumatic fever, juvenile idiopathic arthritis

35. Systemic autoimmune disorders

36. Primary systemic vasculitis

37. Congenital and acquired coagulopathies in children

38. Leukemia and lymphomas in children

39. CNS tumors in children

40. Solid tumors in children (except CNS tumors)

41. Intrauterine infections

42. Parasitic infections

43. Atopic eczema, seborrheic dermatitis

44. Intertrigo, purulent skin disorders

45. Child abuse and neglect syndrome (CAN)

48. Disorders of carbohydrate metabolism

49. Disorders of lipid metabolism

50, Disorders of amino acids metabolism

51. Lysosomal disorders

**C- Differential diagnosis, investigation and treatment plan:**

1. Neuroinfections, differential and treatment

2. Developmental delay, differential and treatment

3. Neuromuscular disorders, differential

4. Hypotonia of neonate and infant, differential

5. Failure to thrive in infancy and toddler age, differential

6. Abdominal pain, differential

7. Vomiting, differential

8. Diarrhea, differential

9. Stooling, constipation disorders, differential

10. Proteinuria in children, differential

11. Hematuria in children, differential

12. Polyuria, differential

13. Cough, differential

14. Hypertension, differential

15. Hypoglycemia, differential

16. Joint swelling, differential

17. Musculoskeletal pain, differential

18. Anemia, differential

19. Hyperbilirubinemia, differential and treatment

20. Hepatopathy and hepatomegaly, differential

21. Splenomegaly, differential

22. Gastrointestinal bleeding, differential

23. Immunodeficiencies, differential

24. Common childhood exanthems, differential

25. Oedemas, differential

26. Growth disorders, differential

27. Disorders of calcium-phosphate metabolism, differential

28. Thyroid gland disorders, differential

29. Premature and delayed puberty, differential

30. Lymphadenopathy, differential

32. Headache, differential

33. Heart murmurs, differential

34. Malabsorption syndromes in children, differential

35. Fever, hyperpyrexia, body temperature: definitions, therapy

**Imaging methods, anatomical order:**

Head

Thorax

Abdomen

Skeleton