

# Topic lists for Pediatrics final exam

## I. Topic list

1. General aspects of biochemical and microbiological investigations
2. Normal psychomotor development in childhood (different age groups). Child growth percentiles. Anthropometry.
3. Prevention of infectious disease, immunisation
4. Nutrition of the healthy infant: breastfeeding and weaning. Breastmilk composition. Energy requirements.
5. Definition, causes and investigation of malnutrition
6. Perinatal definitions. Perinatal mortality.
7. Newborn care, Apgar score
8. Neonatal resuscitation
9. Perinatal asphyxia
10. Disorders of neonatal cardiovascular adaptation
11. Disorders of neonatal respiratory adaptation and lung diseases
12. Haematological disorders of neonatal adaptation (polycythaemia, haemolytic disease of the newborn)
13. Neonatal jaundice, differential diagnosis of jaundice.
14. Brain injury in neonates. Neonatal seizures
15. Neonatal infections
16. Acute surgical problems in the neonate
17. Complications of prematurity (BPD, ROP, NEC)
18. Sudden infant death syndrome
19. Paediatric resuscitation
20. Type of shocks and their treatment
21. Type of genetic disorders. Methods of chromosomal analysis.
22. Chromosomal abnormalities
23. Monogenic and polygenic disorders. Mitochondrial inheritance.
24. Clinical signs in congenital metabolic disorders
25. Diagnostic tools in congenital metabolic disorders
26. Congenital metabolic disorders of glucose and glycogen metabolism
27. Congenital metabolic disorders of amino acid metabolism
28. Porphyrias
29. Dyslipidaemias
30. Lipid storage disorders
31. Primary immunodeficiency
32. Phagocytic disorders
33. Secondary immunodeficiency
34. Juvenile idiopathic arthritis
35. Joint infections. Infection related arthritis.
36. Systemic autoimmune diseases
37. Vasculitis in children
38. The most common allergic disease (except asthma bronchiale)
39. Congenital anomalies of the central nervous system. Hydrocephalus.
40. Infantile cerebral palsy
41. Central nervous system infections
42. Parainfectious and immune mediated inflammations of the central nervous system. Sclerosis multiplex.
43. Guillan-Barré syndrome
44. Neurocutaneous syndromes
45. Head injury and it's complications

46. Seizures
47. Facial palsy
48. Neuromuscular disorders
49. Myopathies
50. Acyanotic congenital heart diseases
51. Cyanotic congenital heart diseases
52. Myocarditis
53. Cardiomyopathies
54. Heart failure
55. Hypertension in children
56. Deep vein thrombosis

## **II. Topic list**

1. Disorders of the ear
2. Common disorders of the nose and sinuses
3. Mouth and throat disorders
4. Laryngeal disorders
5. Obstructive sleep apnoea
6. Congenital disorders of the lung
7. Epiglottitis, tracheitis
8. Obstructive bronchitis
9. Asthma bronchiale
10. Pneumonias
11. Cystic fibrosis
12. Aspiration, foreign body of the airway
13. Pneumothorax
14. Disorders of the oesophagus
15. Disorders of the stomach
16. Ileus, intussusception
17. Bowel motility disorders (Hirschsprung-disease)
18. Disorders of malabsorption
19. Coeliac disease
20. Inflammatory bowel disease
21. Indirect hyperbilirubinemia
22. Cholestasis
23. Acute liver failure, acute hepatitis
24. Metabolic diseases of the liver
25. Autoimmune hepatitis
26. Disorders of the exocrine pancreas
27. Disorders of hypophysis
28. Disorders of the adrenal glands
29. Growth disorders
30. Disorders of puberty
31. Gonadal disorders
32. Disorders of the thyroid gland
33. Disorders of the parathyroid
34. Diabetes mellitus
35. Congenital anomalies of the urinary tract
36. Cystic renal disorders
37. Glomerular disorders
38. Haemolytic uremic syndrome
39. Henoch-Schönlein purpura
40. Tubular disorders

41. Urinary tract infections
42. Acute renal failure
43. Chronic renal failure
44. Urinary lithiasis
45. Surgical disorders of external and internal genitals
46. Leukocyte disorders
47. Platelet disorders
48. Thrombosis, thrombophilia
49. Leukaemias
50. Lymphoma
51. Histiocytosis syndromes
52. Brain tumors
53. Neuroblastoma
54. Retinoblastoma
55. Nephroblastoma
56. Neoplasms of the liver
57. Neoplasms of bone
58. Soft tissue sarcomas
59. Gonadal and germ cell neoplasms
60. Bone marrow transplant

### **III. Topic list (Differential diagnosis)**

1. The unconscious child
2. Paediatric headaches
3. Sore throat
4. Fever of unknown origin
5. Paediatric rashes
6. Allergic skin diseases
7. Cough
8. Heart murmurs
9. Arrhythmias
10. Principles of fluid and electrolyte balance and their disorders
11. Principles of acid-base balance and its disorders
12. Hypo-, and hyperglycaemia
13. Obesity in children
14. Lymphadenopathy
15. Acute abdomen
16. Abdominal mass
17. Chronic abdominal pain
18. Differential diagnostics of vomiting
19. Differential diagnostics of diarrhoea
20. Eating disorders in children
21. Behavioural disorders in children
22. Hematemesis
23. Bloody stool
24. Anaemia in children
25. Haemostatic disorders
26. Hepatomegaly, splenomegaly
27. Differential diagnostic of oedema
28. Haematuria
29. Polyuria, polydipsia
30. Causes of enuresis in children