

1. An 8 year old child has low-grade fever, arthritis, colicky abdominal pain and a purpuric rash localized on the lower extremities. Laboratory studies reveal a guaiac-positive stool, urinalysis with red blood cell (RBC) casts and mild proteinuria, and a normal platelet count. The most likely diagnosis is:

- a. Systemic lupus erythematosus (SLE)
- b. Idiopathic thrombocytopenic purpura
- c. Poststreptococcal glomerulonephritis
- d. Henoch-Schonleins vasculitis**
- e. Rocky Mountain spotted fever

2. A young man has painful indurations in the peripapillary regions of both mammary glands. The most reasonable action will be:

- a. To remove them
- b. To take an aspirate for bacterial inoculation and cytology
- c. To administer steroids locally
- d. To leave these indurations untouched**
- e. To cut and drain them

3. A 9 year old girl with a history of intermittent wheezing for several years is brought to the pediatrician. The child has been taking no medications for some time. Physical examination reveals agitation and perioral cyanosis. Intercostal and suprasternal retractions are present. The breath sounds are quiet, and wheezing is audible bilaterally. The child is admitted to the hospital. Appropriate interventions might include all of the following EXCEPT:

- a. Prescribe intravenous corticosteroids
- b. Prescribe nebulized metaproterenol
- c. Prescribe intravenous aminophylline
- d. Administer supplemental oxygen
- e. Prescribe nebulized cromolyn sodium**

4. Routine examination of an otherwise healthy child with a history of bronchial asthma reveals AP of 140/90 mm Hg. The most likely cause of the hypertension is:

- a. Obesity
- b. Renal disease**
- c. Chronic lung disease
- d. Theophylline toxicity
- e. Coarctation of the aorta

5. Patient with thyrotoxicosis is in the 2 beds hospital ward of therapeutic department. The area of the ward is 18 m², height 3 m, ventilation rate 2,5/hr. Air temperature - 20°C, relative humidity - 45%, air movement velocity - 0,3 m/s, light coefficient - 1/5, noise level - 30 dB. Do hygienic evaluation of the conditions meet the standards?

- a. High level of noise
- b. All conditions meet the requirements
- c. Non-effective ventilation
- d. Poor lighting
- e. Discomfortable microclimate**

6. The child is 11 m.o. He suffers from nervous-arthritic diathesis. The increased synthesis of what acid is pathogenic at nervous-arthritic diathesis?

- a. Acetic acid
- b. Hydrochloric acid

c. Sulfuric acid

d. Uric acid

e. Phosphoric acid

7. A 10-year-old child complains of fever (temperature is 39°C), frequent painful urination (pollakiuria). Urine test: proteinuria (0,066 g/L), leukocyturia (entirely within eyeshot), bacteriuria (105 colony forming units/mL). What is the most probable diagnosis?

a. Urolithiasis

b. Acute pyelonephritis

c. Dysmetabolic nephropathy

d. Acute glomerulonephritis

e. Acute cystitis

8. A 8-year-old boy has suffered from tonsillitis. In 2 weeks he started complaining of migratory joint pain, edema of joints, restriction of movements, fever. On examination, an acute rheumatic heart disease, activity of the III-rd degree, primary rheumocarditis, polyarthritis; acute course of disease, cardiovascular failure IIA. What medication is to be prescribed?

a. Diprazinum

b. Erythromycin

c. Cefazolin

d. Delagil

e. Prednisone

9. The 10 y.o. boy has complains on headache, weakness, fever 40°C, vomiting, expressed dyspnea, pale skin with flush on right cheek, lag of right hemithorax respiratory movement, dullness on percussion over low lobe of right lung, weakness of vesicular respiration in this zone. The abdomen is painless and soft at palpation. Which disease lead to these symptoms and signs?

a. Flu

b. Pneumonia croupousa

c. Acute appendicitis

d. Intestinal infection

e. Acute cholecystitis

10. A patient with acute respiratory viral infection (3rd day of disease) complains of pain in lumbar region, nausea, dysuria, oliguria. Urinalysis - hematuria (100-200 RBC in eyeshot spot), specific gravity - 1002. The blood creatinin level is 0,18 millimole/l, potassium level - 6,4 millimole/l. Make the diagnosis:

a. Acute renal colic

b. Acute interstitial nephritis

c. Acute glomerylonephritis

d. Acute renal failure

e. Acute cystitis

11. A neonate was born from the 1st gestation on term. The jaundice was revealed on the 2nd day of life, then it became more acute. The adynamia, vomiting and hepatomegaly were observed. Indirect bilirubin level was 275 μmol/L, direct bilirubin level - 5 μmol/L, Hb - 150 g/l. Mother's blood group - O(I), Rh+, child's blood group- A(II), Rh+. What is the most probable diagnosis?

a. Physiological jaundice

b. Hemolytic disease of the neonate (Rh – incompatibility)

c. Jaundice due to conjugation disorder

d. Hepatitis

e. Hemolytic disease of the neonate (ABO incompatibility), icteric type

12. A baby boy was born in time, it was his mother's 1st pregnancy. The jaundice was revealed on the 2nd day of life, then it progressed. The adynamia, vomiting and hepatomegaly were presented. The indirect bilirubin level was 275 $\mu\text{mol/L}$, the direct bilirubin level - 5 $\mu\text{mol/L}$, Hb- 150 g/L. Mother's blood group - O(I), Rh+, child's blood group - A(II), Rh+. Make a diagnosis

a. Hemolytic disease of newborn (ABO incompatibility), icteric type

b. Hepatitis

c. Hemolytic disease of newborn (Rh - incompatibility)

d. Physiological jaundice

e. Jaundice due to conjugation disorder

13. A 3 month old infant suffering from acute segmental pneumonia has dyspnea (respiration rate - 80 per minute), paradoxical breathing, tachycardia, total cyanosis. Respiration and pulse - ratio is 1:2. The heart dullness under normal size. Such signs characterise:

a. Myocarditis

b. Congenital heart malformation

c. Respiratory failure of I degree

d. Respiratory failure of II degree

e. Respiratory failure of III degree

14. The 7 m.o. infant is suffering from acute pneumonia which was complicated by cardiovascular insufficiency and respiratory failure of II degree. The accompanied diagnosis is malnutrition of II degree. Choose the best variant of therapy:

a. Macropen and Penicillin

b. Gentamycin and Macropen

c. Ampiox and Polymixin

d. Ampiox and Amicacin

e. Penicillin and Ampiox

15. A 3 year old child has been suffering from fever, cough, coryza, conjunctivitis for 4 days. He has been taking sulfadimethoxine. Today it has fever up to 39°C and maculopapular rash on its face. Except of rash the child's skin has no changes. What is your diagnosis?

a. Rubella

b. Allergic rash

c. Measles

d. Scarlet fever

e. Pseudotuberculosis

16. A 2 year old girl has been ill for 3 days. Today she has low grade fever, severe catarrhal presentations, slight maculopapular rash on her buttocks and enlarged occipital lymph nodes. What is your diagnosis?

a. Measles

b. Scarlet fever

c. Rubella

d. Adenoviral infection

e. Pseudotuberculosis

17. A 3 year old boy fell ill abruptly: fever up to 39°C, weakness, vomiting. Haemorrhagic rash of various size appeared on his lower limbs within 5 hours. Meningococemia with infective - toxic shock of the 1

degree was diagnosed. What medications should be administered?

- a. Penicillin and immunoglobulin
- b. Penicillin and prednisone
- c. Chloramphenicol succinate and prednisone**
- d. Chloramphenicol succinate and interferon
- e. Ampicillin and immunoglobulin

18. A 7 year old girl has mild form of varicella. Headache, weakness, vertigo, tremor of her limbs, ataxia, then mental confusion appeared on the 5th day of illness. Meningeal signs are negative. Cerebrospinal fluid examination is normal. How can you explain these signs?

- a. Neurotoxic syndrome
- b. Encephalitis**
- c. Meningoencephalitis
- d. Meningitis
- e. Myelitis

19. A 7 y.o. girl fell ill abruptly: fever, headache, severe sore throat, vomiting. Minute bright red rash appear in her reddened skin in 3 hours. It is more intensive in axillae and groin. Mucous membrane of oropharynx is hyperemic. Greyish patches is on the tonsils. Submaxillary lymph nodes are enlarged and painful. What is your diagnosis?

- a. Rubella
- b. Measles
- c. Scarlet fever**
- d. Pseudotuberculosis
- e. Enteroviral infection

20. An 8-year-old boy fell ill acutely: he presents with fever, weakness, headache, abdominal pain, recurrent vomiting, then diarrhea and tenesmus. Stools occur 12 times daily, are scanty, contain a lot of mucus, pus, streaks of blood. His sigmoid gut is tender and hardened. What is your diagnosis?

- a. Dysentery**
- b. Cholera
- c. Escherichiosis
- d. Staphylococcal gastroenteritis
- e. Salmonellosis

21. The child has complains of the "night" and "hungry" abdominal pains. At fibroscopy in area a bulbus of duodenum the ulcerative defect of 4 mms diameter is found, the floor is obstructed with a fibrin, (H.p +). Administer the optimum schemes of treatment:

- a. Trichopolum
- b. Omeprazole - Trichopolum - Claritromicin**
- c. Maalox - Ranitidin
- d. De-nol
- e. Vicalinum - Ranitidin

22. A woman delivered a child. It was her fifth pregnancy but the first delivery. Mothers blood group is A(II)Rh-, newborns - A(II)Rh+. The level of indirect bilirubin in umbilical blood was 58 micromole/l, haemoglobin - 140 g/l, RBC- 3,81012/l. In 2 hours the level of indirect bilirubin turned 82 micromole/l. The hemolytic disease of newborn (icteric-anemic type, Rh-incompatibility) was diagnosed. Choose the therapeutic tactics:

- a. Blood transfusion (conservative therapy)

b. Conservative therapy

c. Replacement blood transfusion (conservative therapy)

d. Symptomatic therapy

e. Antibiotics

23. A mother with an infant visited the pediatrician for expertise advice. Her baby was born with body weight 3,2 kg and body length 50 cm. He is 1 year old now. How many teeth the baby should have?

a. 10

b. 20

c. 6

d. 8

e. 12

24. A mother consulted a pediatrician about her son. Her son was born with body mass of 3 kg and length of 48 cm. He is 1 year old now. What is the required normal mass?

a. 15,0 kg

b. 10,5 kg

c. 11,0 kg

d. 9,0 kg

e. 12,0 kg

25. 6 m.o. infant was born with body's mass 3 kg and length 50 cm. He is given natural feeding. How many times per day the infant should be fed?

a. 7

b. 8

c. 4

d. 5

e. 6

26. Infant is 6,5 months now and is given natural feeding since birth. Body mass was 3,5 kg, with length 52 cm at birth. How many times per day the supplement (up feeding) should be given?

a. 2

b. 1

c. 4

d. 0

e. 3

27. A 2 month old healthy infant with good appetite is given artificial feeding since he turned 1 month old. When is it recommended to start the corrective feeding (fruit juice)?

a. 1,0 months

b. 4,0 months

c. 2,0 months

d. 1,5 months

e. 3,0 months

28. An infant was born with body mass 3 kg and body length 50 cm. Now he is 3 years old. His brother is 7 years old, suffers from rheumatic fever. Mother asked the doctor for a cardiac check up of the 3-year-old son. Where is the left relative heart border located?

a. 1 cm left from the left parasternal line

b. 1 cm right from the left parasternal line

c. 1 cm right from the left medioclavicular line

d. Along the left medioclavicular line

e. 1 cm left from the left medioclavicular line

29. A boy of 7 y.o. had an attack of asthma and distant whistling rales after playing with a dog. In the medical history: atopic dermatitis caused by eating eggs, chicken, beef. What group of allergens is the reason of the development of bronchial asthma attacks?

a. Chemical

b. Epidermal

c. Pollen

d. Dust

e. Itch mite

30. A 14-year-old boy has rheumatism. Over the last 2 years he has had 3 rheumatic attacks. What course of rheumatism does the patient have?

a. Subacute

b. Acute

c. Prolonged

d. Latent

e. Persistent-recurrent

31. The patient with acquired heart failure has diastolic pressure of 0 mm Hg. What heart failure does the child have?

a. Rheumatism

b. Aortic insufficiency

c. Aortic stenosis

d. Mitral stenosis

e. Mitral insufficiency

32. A 12 year old child has the ulcer disease of stomach. What is the etiology of this disease?

a. Helicobacter pylori

b. Lambliosis

c. Influenza

d. Intestinal bacillus

e. Salmonella

33. A nine year old child is at a hospital with acute glomerulonephritis. Clinical and laboratory examinations show acute condition. What nutrients must not be limited during the acute period of glomerulonephritis?

a. Salt

b. Proteins

c. Fats

d. Carbohydrates

e. Liquid

34. An 18-month-old child was taken to a hospital on the 4-th day of the disease. The disease began acutely with temperature 39, weakness, cough, breathlessness. He is pale, cyanotic, has had febrile temperature for over 3 days. There are crepitative fine bubbling rales on auscultation. Percussion sound is shortened in the right infrascapular region. X-ray picture shows non-homogeneous segment infiltration 8-10 mm on the right, the intensification of lung pattern. Your diagnosis:

- a. Interstitial pneumonia
- b. Segmentary pneumonia**

- c. Bronchitis
- d. Grippe
- e. Bronchiolitis

35. A 9-year-old girl has attacks of abdominal pain after fried food. No fever. She has pain in Cera point. The liver is not enlarged. Portion B (duodenal probe) - 50 ml. What is your diagnosis?

- a. Chronic duodenum
- b. Peptic ulcer
- c. Hepatocirrhosis
- d. Acute colitis
- e. Biliary tracts dyskinesia, hypotonic type**

36. A baby was born at 36 weeks of gestation. Delivery was normal, by natural way. The baby has a large cephalohematoma. The results of blood count are: Hb- 120g/l, Er- 3,510¹²/l, total serum bilirubin - 123 mmol/l, direct bilirubin - 11 mmol/l, indirect - 112 mmol/l. What are causes of hyperbilirubinemia in this case?

- a. Disturbance of the conjugative function of liver
- b. Intravascular hemolysis
- c. Erythrocyte hemolysis**
- d. Bile condensing
- e. Mechanical obstruction of the bile outflow

37. A 4-month-old girl with blond hair and blue eyes has "mousy" odor of sweat and urine, delayed psychomotoric development. The most typical laboratory data for this disorder is:

- a. Positive urine ferric chloride test**
- b. High level of glycosaminoglycanes in urine
- c. Low level of thyroid gland hormones in blood
- d. High concentration of chlorides in sweat
- e. High level of oxyproline in urine

38. A neonate is 5 days old. What vaccination dose of BCG vaccine (in mg) is necessary for vaccination of this child?

- a. 0,025 mg
- b. 0,1 mg
- c. 0,2 mg
- d. 0,05 mg**
- e. 0,075 mg

39. 7 y.o. boy with chronic sinusitis and recurrent pulmonary infections has chest X-ray demonstrating a right-sided cardiac silhouette. What is the most likely diagnosis?

- a. alpha-antitrypsin deficiency
- b. Kartagener syndrome**
- c. Bronchiolitis obliterans
- d. Cystic fibrosis (mucoviscidosis)
- e. Laryngotracheomalacia

40. A 2,9-kg term male infant is born to a mother who developed polyhydramnios at 34 weeks gestation. At birth, the Apgar scores were 9 and 9. The infant develops choking and cyanosis with the first feed. In

addition, is unable to place a nasogastric tube. What is the most likely diagnosis?

- a. Tracheal atresia
- b. Respiratory distress syndrome
- c. Choanal atresia
- d. Laryngomalacia
- e. Esophageal atresia**

41. A 4 year old girl was playing with her toys and suddenly she got an attack of cough, dyspnea. Objectively: respiration rate - 45/min, heart rate - 130/min. Percussion revealed dullness of percutory sound on the right in the lower parts. Auscultation revealed diminished breath sounds with bronchial resonance on the right. X-ray picture showed shadowing of the lower part of lungs on the right. Blood analysis revealed no signs of inflammation. The child was diagnosed with foreign body in the right bronchus. What complication caused such clinical presentations?

- a. Atelectasis**
- b. Pneumothorax
- c. Pneumonia
- d. Bronchitis
- e. Emphysema

42. Full term newborn has developed jaundice at 10 hours of age. Hemolytic disease of newborn due to Rh-incompatibility was diagnosed. 2 hours later the infant has indirect serum bilirubin level increasing up to 14 mmol/L. What is most appropriate for treatment of hyperbilirubinemia in this infant?

- a. Infusion therapy
- b. Exchange blood transfusion**
- c. Phenobarbital
- d. Phototherapy
- e. Intestinal sorbents

43. A man, 42 years old, died in a road accident after the hemorrhage on the spot, because of acute hemorrhagic anemia. What minimum percent of the whole blood volume could result in death by acute hemorrhage?

- a. 15-20%
- b. 35-50%
- c. 6-9%
- d. 10-14%
- e. 25-30%**

44. A 6 week old child is admitted because of tachypnea. Birth had been uneventful, although conjunctivitis developed on the third day of life and lasted for about 2 weeks. Physical examination reveals tachypnea, bilateral inspiratory crackles and single expiratory wheezing. Bilateral pneumonia is evident on chest X-ray. The child is afebrile and has no history of fever. White blood cell count is 15109/l, with 28% of eosinophils. The most likely cause of this child's symptoms is:

- a. Varicella
- b. Chlamydia trachomatis**
- c. Mycoplasma pneumoniae
- d. Pneumocystis carinii
- e. Visceral larva migrans

45. A 6 y.o. asthmatic child was taken to the emergency hospital because of severe coughing and wheezing for the last 24 hours. Physical examination reveals that the child is excitable, has intercostal

and suprasternal retractions, expiratory wheezing throughout all lung fields, RR- 60/min. Initial treatment may include the prescription of:

- a. N-acetyl cysteine and cromolyn by inhalation
- b. Parenteral gentamicin
- c. Parenteral phenobarbital
- d. Intravenous fluids in the first 2 h to compensate water deficiency
- e. Subcutaneous epinephrine**

46. A full term infant was born after a normal pregnancy, delivery, however, was complicated by marginal placental detachment. At 12 hours of age the child, although appearing to be in good health, passes a bloody meconium stool. For determining the cause of the bleeding, which of the following diagnostic procedures should be performed first?

- a. Barium enema**
- b. Gastric lavage with normal saline
- c. Platelet count, prothrombin time, and partial thromboplastin time
- d. An upper gastrointestinal series
- e. An Apt test

47. In the 43rd week of gestation a long, thin infant was delivered. He is apneic, limp, pale, and covered with "pea soup" amniotic fluid. The first step in the resuscitation of this infant at delivery should be:

- a. Artificial ventilation with endotracheal tube
- b. Artificial ventilation with bag and mask
- c. Suction of the trachea under direct vision**
- d. Administration of 100% oxygen by mask
- e. Catheterization of the umbilical vein

48. A newborn infant has mild cyanosis, diaphoresis, poor peripheral pulse, hepatomegaly and cardiomegaly. Respiratory rate is 60 breaths per minute, and heart rate is 230 beats per minute. The child most likely has congestive heart failure caused by:

- a. Atrial flutter and partial atrioventricular block
- b. A ventricular septal defect and transposition of the great vessels
- c. Paroxysmal atrial tachycardia**
- d. Hypoplastic left heart syndrome
- e. A large atrial septal defect and valvular pulmonary stenosis

49. A 6-year-old boy was brought to the emergency room with a 3-hour history of fever up to 39.5°C and sore throat. The child looks alert, anxious and has a mild inspiratory stridor. You should immediately:

- a. Obtain an arterial blood gas and start an IV line
- b. Examine the throat and obtain a culture
- c. Admit the child and place him in a mist tent
- d. Prepare to establish an airway**
- e. Order a chest x-ray and lateral view of the neck

50. A 7 d.o. boy is admitted to the hospital for evaluation of vomiting and dehydration. Physical examination is otherwise normal except for minimal hyperpigmentation of the nipples. Serum sodium and potassium concentrations are 120 meq/L and 9 meq/L respectively. The most likely diagnosis is:

- a. Congenital adrenal hyperplasia**
- b. Secondary hypothyroidism
- c. Hyperaldosteronism
- d. Panhypopituitarism

e. Pyloric stenosis

51. A 7 y.o. boy has crampy abdominal pain and a rash on the back of his legs and buttocks as well as on the extensor surfaces of his forearms. Laboratory analysis reveals proteinuria and microhematuria. He is most likely to be affected by:

a. Systemic lupus erythematosus

b. Polyarteritis nodosa

c. Dermatomyositis

d. Anaphylactoid purpura

e. Poststreptococcal glomerulonephritis

52. A 5-year-old boy was progressively getting worse compared to the previous 2 months. A chest x-ray has shown right middle lobe collapse. A tuberculin skin test was strongly positive. What is the most characteristic finding in primary tuberculosis?

a. Hematogenous dissemination leading to extrapulmonary tuberculosis

b. Hilar or paratracheal lymph node enlargement

c. Cavity formation

d. Atelectasis with obstructive pneumonia

e. Miliary tuberculosis

53. A girl is 12 y.o. Yesterday she was overcooled. Now she is complaining on pain in suprapubic area, frequent painful urination by small portions, temperature is 37,8°C. Pasternatsky symptom is negative. Urine analysis: protein - 0,033 g/L, WBC- 20-25 in f/vis, RBC- 1-2 in f/vis. What diagnosis is the most probable?

a. Acute glomerulonephritis

b. Dysmetabolic nephropathy

c. Acute cystitis

d. Acute pyelonephritis

e. Urolithiasis

54. The girl of 11 y.o. She is ill for 1 month. She has "butterfly"-type rash on face (spots and papules), pain and swelling of small joints on arms and legs, signs of stomatitis (small-sized ulcers in mouth). CBC: Hb- 80 g/L, RBC- 2,91012/L, WBC- 15109/L, ESR- 40 mm/hour. Urinalysis: protein- 0,33 g/L. What is the most probable diagnosis?

a. Dermatomyositis

b. Systemic lupus erythematosus

c. Periarteritis nodosa

d. Juvenile rheumatoid arthritis, systemic type

e. Acute rheumatic fever

55. An infant aged 1 year on the third day of common cold at night developed inspiratory stridor, hoarse voice and barking cough. Physical examination revealed suprasternal and intercostal chest retractions. There is a bluish skin discoloration mostly seen over the upper lip. The respiratory rate is 52 per min and pulse- 122 bpm. The body temperature is 37,5°C. What disease does the infant have?

a. Acute laryngitis

b. Acute bronchiolitis with respiratory distress

c. Acute epiglottitis

d. Acute infectious croup due to viral laryngotracheitis

e. Bronchopneumonia without complications

56. A newborn aged 3 days with hyperbilirubinemia (428 $\mu\text{mol/L}$) developed following disorders. From beginning there were severe jaundice with poor suckling, hypotonia and hypodynamia. Little bit later periodical excitation, neonatal convulsions and neonatal primitive reflexes loss are noted. Now physical examination reveals convergent squint, rotatory nystagmus and setting sun eye sign. How to explain this condition?

- a. Spastic cerebral palsy
- b. Encephalopathy due to hyperbilirubinemia**
- c. Brain tumour
- d. Skull injury
- e. Hydrocephalus

57. A 3-year-old child has been admitted to a hospital because of ostealgia and body temperature rise up to 39°C . Objectively: the patient is in grave condition, unable to stand for ostealgia, there is apparent intoxication, lymph nodes are enlarged up to 1,5 cm. Liver can be palpated 3 cm below the costal margin, spleen - 2 cm below the costal margin. In blood: RBCs - $3,0 \times 10^{12}/\text{l}$, Hb - 87 g/l, colour index - 0,9, thrombocytes - $190 \times 10^9/\text{l}$, WBCs - $3,2 \times 10^9/\text{l}$, eosinophils - 1, stab neutrophils - 1, segmented neutrophils - 0, lymphocytes - 87, monocytes - 2, ESR - 36 mm/h. What examination should be conducted in order to specify the diagnosis?

- a. Ultrasound
- b. Lymph node biopsy
- c. Computer tomography
- d. Sternal puncture**
- e. Lymph node puncture

58. Apgar test done on a newborn girl at 1st and 5th minute after birth gave the result of 7-8 scores. During the delivery there was a short-term difficulty with extraction of shoulder girdle. After birth the child had the proximal extremity dysfunction and the arm couldn't be raised from the side. The shoulder was turned inwards, the elbow was flexed, there was also forearm pronation, obstetric palsy of brachial plexus. What is the clinical diagnosis?

- a. Intracranial haemorrhage
- b. Trauma of right hand soft tissues
- c. Trauma of thoracic spine
- d. Right hand osteomyelitis
- e. Duchenne-Erb palsy**

59. Examination of a 9-month-old girl revealed skin pallor, cyanosis during excitement. Percussion revealed transverse dilatation of cardiac borders. Auscultation revealed continuous systolic murmur on the left from the breastbone in the 3-4 intercostal space. This murmur is conducted above the whole cardiac region to the back. What congenital cardiac pathology can be suspected?

- a. Pulmonary artery stenosis
- b. Defect of interventricular septum**
- c. Coarctation of aorta
- d. Defect of interatrial septum
- e. Fallot's tetrad

60. A worker was temporarily off work because of illness for 16 days, was under out-patient treatment. The doctor in charge issued a sick-list first for 5 days, then prolonged it for 10 days. Who can further prolong the sick-list of this patient?

- a. The doctor in charge of the case with the permission of the head of department
- b. Working ability expertise committee**

c. The doctor in charge of the case together with the head of department

d. Deputy head physician on the working ability expertise

e. The head of department

61. A 13 y.o. patient was treated in dermatological hospital for atopic dermatitis exacerbation. He was discharged in the condition of clinical remission. What recommendations should the doctor give to prevent exacerbations?

a. Use of neutral creams to protect skin

b. Systematic use of local corticosteroids

c. Avoidance of skin insolation

d. Systematic skin disinfection

e. Frequent skin washing with detergents

62. On the 21 day after appearance of vesiculous chickenpox rash a 7-year-old child developed ataxia, nystagmus, intention tremor, muscle hypotonia. Liquor analysis shows insignificant lymphocytic pleocytosis, slightly increased protein rate. What complication is it?

a. Acute nephritis

b. Postherpetic neuralgia

c. Purulent meningitis

d. Pneumonitis

e. Encephalitis

63. An 8 year old boy suffering from haemophilia was undergoing transfusion of packed red cells. Suddenly he got pain behind the breastbone and in the lumbar area, dyspnea, cold sweat. Objectively: pale skin, heart rate - 100/min, AP- 60/40 Hg; oliguria, brown urine. For treatment of this complication the following drug should be administered:

a. Adrenaline

b. Lasix

c. Prednisolone

d. Aminophylline

e. Analgine

64. After objective clinical examination a 12 year old child was diagnosed with mitral valve prolapse. What complementary instrumental method of examination should be applied for the diagnosis confirmation?

a. Veloergometry

b. Echocardiography

c. Phonocardiography

d. Roentgenography of chest

e. ECG

65. A full-term child survived antenatal and intranatal hypoxia, it was born in asphyxia (2-5 points on Apgar score). After birth the child has progressing excitability, there are also vomiting, nystagmus, spasms, strabismus, spontaneous Moros and Babinskys reflexes. What localization of intracranial hemorrhage is the most probable?

a. Subdural hemorrhage

b. Small cerebral tissue hemorrhages

c. Subarachnoid hemorrhage

d. Periventricular hemorrhages

e. Hemorrhages into the brain ventricles

66. A 15 y.o. boy was twice attacked by bees, as a result he had severe anaphylactic shock. What is the most effective prophylaxis method?

- a. Protective clothing
- b. Desensibilisation by means of bee venom extract**
- c. Long-term prophylactic treatment with antihistamines
- d. Prescription of corticosteroids for summer
- e. Limitation of outside staying during summer months

67. A 9-year-old boy has been suffering from bronchoectasis since he was 3. Exacerbations occur quite often, 3-4 times a year. Conservative therapy results in short periods of remission. The disease is progressing, the child has physical retardation. The child's skin is pale, acrocyanotic, he has "watch glass" nail deformation. Bronchography revealed saccular bronchiectases of the lower lobe of his right lung. What is the further treatment tactics?

- a. Surgical treatment**
- b. Physiotherapeutic treatment
- c. Tempering of the child's organism
- d. Sanatorium-and-spa treatment
- e. Further conservative therapy

68. A child with tetralogy of Fallot is most likely to exhibit:

- a. Normal oxygen tension (PaO₂) in the left ventricle
- b. Increased pressure in the right ventricle**
- c. Increased pulse pressure
- d. Increased pulmonary blood flow
- e. Normal pressure gradient across the pulmonary valve

69. A 2-months-old child after preventive vaccination had a prolonged hemorrhage from the vaccination place and due to those an intramuscular hematoma. During examination of the child a considerable rise of prothrombin consumption and a significant prolongation of the activated partial thromboplastin time were found. What is the most probable diagnosis?

- a. Inborn afibrinogenemia
- b. Hemophilia**
- c. Henoch-Schoenlein disease
- d. Werlhof's disease
- e. Hemorrhagic disease of the neonate

70. A 10 y.o. boy with hemophilia has signs of acute respiratory viral infection with fever. What of the mentioned antifebrile medications are contraindicated to this patient?

- a. Panadol extra
- b. Acetylsalicylic acid**
- c. Pipolphen
- d. Analgin
- e. Paracetamol

71. A 7-year-old child is sick for 2 weeks with running nose, was taking nasal drops. The boy suffers with alimentary allergy. He applied to doctor due to suppurative and bloody discharges from nose, maceration of ala nasi and upper lip. Rhinoscopy results: there are whitish-greyish areas at nasal septum. Mucous membrane of oropharynx is not changed. What is the most probable disease?

- a. Adenovirus
- b. Allergic rhinitis**

c. Sinusitis (maxillar sinus)

d. Diphtheria of the nose

e. Rhinovirus

72. A child is 4 years old, has been ill for 5 days. There are complaints of cough, skin rash, $t^{\circ}38,2^{\circ}\text{C}$, face puffiness, photophobia, conjunctivitis. Objectively: there is bright, maculo-papulous, in some areas confluent rash on the face, neck, upper chest. The pharynx is hyperemic. There are seropurulent discharges from the nose. Auscultation revealed dry rales in lungs. What is the most likely diagnosis?

a. Measles

b. Scarlet fever

c. Enterovirus exanthema

d. Rubella

e. Adenoviral infection

73. A 10 month old boy has been ill for 5 days after consumption of unboiled milk. Body temperature is $38-39^{\circ}\text{C}$, there is vomiting, liquid stool. The child is pale and inert. His tongue is covered with white deposition. Heart sounds are muffled. Abdomen is swollen, there is borborygmus in the region of umbilicus, liver is enlarged by 3 cm. Stool is liquid, dark-green, with admixtures of mucus, 5 times a day. What is the most probable diagnosis?

a. Acute shigellosis

b. Rotaviral infection

c. Staphylococcal enteric infection

d. Escherichiosis

e. Salmonellosis

74. A 3 year old child with weight deficiency suffers from permanent moist cough. In history there are some pneumonias with obstruction. On examination: distended chest, dullness on percussion over the lower parts of lungs. On auscultation: a great number of different rales. Level of sweat chloride is 80 millimol/l. What is the most probable diagnosis?

a. Pulmonary hypoplasia

b. Mucoviscidosis (cystic fibrosis)

c. Recurrent bronchitis

d. Bronchial asthma

e. Bronchiectasis

75. A 12 y.o. child with acute glomerulonephritis presented with hypertensive syndrom during first days of the disease. What is the role of angiotensin II in the pathogenesis?

a. Increases erythropoietin production

b. Increases renine level

c. Increases heart output

d. Inhibits depressive action of prostaglandins

e. Intensifies production and secretion of aldosterone

76. A full-term infant is 3 days old. On the different parts of skin there are erythemas, erosive spots, cracks, areas of epidermis peeling. The infant has scalded skin syndrome. Nikolskys symptom is positive. General condition of the infant is grave. Anxiety, hyperesthesia, febrile temperature are evident. What is the most probable diagnosis?

a. Phlegmon of newborn

b. Impetigo neonatorum

c. Mycotic erythema

d. Exfoliative dermatitis

e. Fingers pseudofurunculosis

77. District pediatrician examines a healthy carried 1-month-old child. The child is breast-fed. Prophylaxis of what disease will the doctor recommend to do first?

a. Hypotrophia

b. Anemia

c. Rachitis

d. Spasmophilia

e. Parathropy

78. A 7 y.o. boy has been treated in a hospital for a month. At the time of admission he had evident edemata, proteinuria - 7,1 g/L, protein content in the daily urine - 4,2 g. Biochemical blood analysis reveals permanent hypoproteinemia (43,2 g/L), hypercholesterolemia (9,2 mmol/L). What variant of glomerulonephritis is the most probable?

a. Isolated urinary

b. Nephritic

c. Nephrotic

d. Hematuric

e. Mixed

79. A 3 y.o. girl has had a temperature rise up to 38.0°C, rhinitis, dry superficial cough, flabbiness, appetite loss. Palpation didn't reveal any changes over her lungs. Percussion sound has a wooden resonance, auscultation revealed puerile breathing, no rales. In blood: leukopenia, lymphocytosis, increased ESR. What is the most probable diagnosis?

a. Recurrent bronchitis, acute condition

b. Acute obstructive bronchitis

c. Acute simple tracheitis

d. Acute simple bronchitis

e. Bilateral microfocal pneumonia

80. A 5-year-old girl with the transitory immunodeficiency according to T-system has a clinical picture of a right-sided pneumonia during 2 months. How pneumonia progress can be described?

a. Delaying

b. Chronic

c. Acute

d. Wavelike

e. Recidivating

81. A 12 y.o. girl took 2 pills of aspirine and 4 hours later her body temperature raised up to 39-40.0°C. She complains of general indisposition, dizziness, sudden rash in form of red spots and blisters. Objectively: skin lesions resemble of second-degree burns, here and there with erosive surface or epidermis peeling. Nikolskys symptom is positive. What is the most probable diagnosis?

a. Polymorphous exudative erythema

b. Pemphigus vulgaris

c. Acute epidermal necrosis

d. Bullous dermatitis

e. Duhrings disease

82. A 5-year-old child had an attack of palpitation with nausea, dizziness, generalized fatigue. On ECG:

tachycardia with heartbeat rate of 220/min. Ventricle complexes are deformed and widened. P wave is absent. What medication is to be prescribed to provide first aid?

a. Lydocain

b. Seduxen

c. Strophantin

d. Novocainamides

e. Isoptin

83. Examination of a 4 month old child revealed some lemon-yellow squamae with fatty crusts on the scalp. What is the most probable diagnosis?

a. Pseudofurunculosis

b. Infantile eczema

c. Milk crust

d. Strophulus

e. Gneiss

84. A neonate from gestation with severe gestosis of the second half was born on the 41st week with 2400 g birth weight and 50cm long. On physical examination: skin is flaccid, subcutaneous fatty cellular tissue is thin, muscle hypotonia, new-born period reflexes are decreased. Internal organs are without pathological changes. How would you estimate this child?

a. Postmature infant

b. Term infant with normal body weight

c. Premature infant

d. Immature infant

e. Term infant with pre-natal growth retardation

85. A child was taken to a hospital with focal changes in the skin folds. The child was anxious during examination, examination revealed dry skin with solitary papulous elements and ill-defined lichenification zones. Skin eruption was accompanied by strong itch. The child usually feels better in summer, his condition is getting worse in winter. The child has been artificially fed since he was 2 months old. He has a history of exudative diathesis. Grandmother by his mothers side has bronchial asthma. What is the most likely diagnosis?

a. Atopic dermatitis

b. Seborrheal eczema

c. Urticaria

d. Strophulus

e. Contact dermatitis

86. A boy, aged 9, was examined: height - 127 cm (-0,36), weight - 28,2 kg (+0,96), chest circumference - 64,9 cm (+0,66), lung vital capacity - 1520 ml (-0,16). What is the complex assessment of the child's physical development?

a. Excessive

b. Below the average

c. Disharmonious

d. Apparently disharmonious

e. Harmonious

87. 2 weeks after recovering from angina an 8-year-old boy developed edemata of face and lower limbs. Objectively: the patient is in grave condition, AP- 120/80 mm Hg. Urine is of dark brown colour. Oliguria is present. On urine analysis: relative density - 1,015, protein - 1,2 g/l, RBCs are leached and cover the

whole vision field, granular casts - 1-2 in the vision field, salts are represented by urates (big number).

What is the most likely diagnosis?

- a. Acute glomerulonephritis with nephrotic syndrome, hematuria and hypertension
- b. Acute glomerulonephritis with nephrotic syndrome
- c. Acute glomerulonephritis with nephritic syndrome**
- d. Acute glomerulonephritis with isolated urinary syndrome
- e. Nephrolithiasis

88. A 14 year old child suffers from vegetovascular dystonia of pubertal period. He has got sympathoadrenal attack. What medicine should be used for attack reduction?

- a. Corglicone
- b. Obsidan**
- c. Amysyl
- d. No-shpa
- e. Aminophylline

89. A 4 month old child fell seriously ill: body temperature rose up to 38,5°C, the child became inert and had a single vomiting. 10 hours later there appeared rash over the buttocks and lower limbs in form of petechiae, spots and papules. Some haemorrhagic elements have necrosis in the centre. What is the most probable disease?

- a. Haemorrhagic vasculitis
- b. Scarlet fever
- c. Rubella
- d. Influenza
- e. Meningococemia**

90. A 5-year-old child had strong headache, vomiting, ataxy, dormancy, discoordination of movements, tremor of the extremities on the 8th day of the disease. It was followed by rise in body temperature, vesiculosis rash mainly on the skin of the body and the hairy part of the head. At the second wave of the fever a diagnosis of encephalitis was given. What disease complicated encephalitis in this case?

- a. Enterovirus infection
- b. Herpetic infection
- c. Measles
- d. German measles
- e. Chicken pox**

91. A 13 year old girl was admitted to the cardiological department because of pain in the muscles and joints. Examination of her face revealed an edematous erythema in form of butterfly in the region of nose bridge and cheeks. What is the most probable diagnosis?

- a. Dermatomyositis
- b. Rheumatism
- c. Systemic lupus erythematosus**
- d. Rheumatoid arthritis
- e. Periarthritis nodosa

92. A 4 y.o. boy was admitted to the hospital with complaints of dyspnea, rapid fatigability. His anamnesis registers frequent respiratory diseases. On percussion: heart borders are dilated to the left and upwards. On auscultation: amplification of the SII above pulmonary artery, a harsh systolodystolic "machine" murmur is auscultated between the II and the III rib to the left of breast bone, this murmur is conducted to all other points including back. AP is 100/20 mm Hg. What is the most probable diagnosis?

- a. Isolated stenosis of pulmonary arterial orifice
- b. Interventricular septal defect
- c. Opened arterial duct**
- d. Interatrial septal defect
- e. Valvar aortic stenosis

93. A 12 year old girl complains about abrupt weakness, nausea, dizziness, vision impairment. The day before she ate home-made stockfish, beef. Examination revealed skin pallor, a scratch on the left knee, dryness of mucous membranes of oral pharynx, bilateral ptosis, mydriatic pupils. The girl is unable to read a simple text (mist over the eyes). What therapy would be the most adequate in this case?

- a. Parenteral disintoxication
- b. Gastric lavage
- c. Parenteral introduction of antitetanus serum
- d. Parenteral introduction of polyvalent antitbotulinic serum**
- e. Parenteral introduction of antibiotics

94. A child from the first non-complicated pregnancy but complicated labor had cephalhematoma. On the second day there developed jaundice. On the 3th day appeared changes of neurologic status: nystagmus, Graefes sign. Urea is yellow, feces- golden-yellow. Mothers blood group is A(II)Rh-, child- A(II)Rh+. On the third day childs Hb is 200 g/L, RBC- 6,11012/L, bilirubin in blood - 58 mk mol/L due to unconjugated bilirubin, Ht- 0,57. What is the childs jaundice explanation?

- a. Brain delivery trauma**
- b. Hemolytic disease of newborn
- c. Fetal hepatitis
- d. Bile ducts atresia
- e. Physiologic jaundice

95. A child was delivered severely premature. After the birth the child has RI symptoms, anasarca, fine bubbling moist rales over the lower lobe of the right lung. Multiple skin extravasations, bloody foam from the mouth have occurred after the 2 day. On chest X-ray: atelectasis of the lower lobe of the right lung. In blood: Hb-100 g/L, Ht- 0,45. What is the most probable diagnosis?

- a. Edematous-hemorrhagic syndrome**
- b. Pulmonary edema
- c. Congenital pneumonia
- d. Hyaline membrane disease
- e. Disseminated intravascular clotting syndrome

96. An infant is 2 d.o. It was full-term born with signs of intrauterine infection, thats why it was prescribed antibiotics. Specify, why the gap between antibiotic introductions to the new-born children is longer and dosage is smaller compared to the older children and adults?

- a. The newborns have diminished blood pH
- b. The newborns have bigger hematocrit
- c. The newborns have lower concentration of protein and albumins in blood
- d. The newborns have reduced activity of glucuronil transferase
- e. The newborns have a lower level of glomerular filtration**

97. A 10-year-old child is sick with chronic viral hepatitis B with marked activity of the process. Total bilirubin - 70?mol/L, direct - 26?mol/L, indirect - 44?mol/L. AST - 6,2 mmol/L, ALT - 4,8 mmol/L. What mechanism underlies the transaminase level increase of this patient?

- a. Cytolysis of hepatocytes**

- b. Hypersplenism
- c. Failure of bilirubin conjugation
- d. Intrahepatic cholestasis
- e. Failure of the synthetical function of the liver

98. A 12-year-old girl applied to doctor with complaints of swelling on the front part of the neck. The doctor diagnosed hyperplasia of the thyroid gland of the second degree, euthyroidism. Ultrasound suspected autoimmune thyroiditis. Blood was taken for titre of antibodies to thyroglobulin. What titre of antibodies will be diagnostically important?

- a. 1:250
- b. 1:100**
- c. 1:150
- d. 1:50
- e. 1:200

99. A 14-year-old girl has been presenting with irritability and tearfulness for about a year. A year ago she was also found to have diffuse enlargement of the thyroid gland (II grade). This condition was regarded as a pubertal manifestation, the girl didn't undergo any treatment. The girl's irritability gradually gave place to a complete apathy. The girl got puffy face, soft tissues pastosity, bradycardia, constipations. Skin pallor and gland density progressed, the skin got a waxen hue. What disease may be assumed?

- a. Autoimmune thyroiditis**
- b. Thyroid carcinoma
- c. Juvenile basophilism
- d. Subacute thyroiditis
- e. Diffuse toxic goiter

100. In the anamnesis of a 2-year-old girl there are recurrent pneumonias with signs of obstruction. There are heterogeneous moist and dry rales, respiration is weakened. Dense, viscous secretion is difficult to hawk. There are "drumsticks", physical retardation. What is the most probable diagnosis?

- a. Bronchial asthma
- b. Recidivating bronchitis
- c. Mucoviscidosis, pulmonary form**
- d. Congenital pulmonary polycystosis
- e. Pulmonary tuberculosis

101. A 2 month old full-term child was born with weight 3500 g and was on the mixed feeding. Current weight is 4900 g. Evaluate the current weight of the child:

- a. Hypotrophy of the II grade
- b. Paratrophy of the I grade
- c. 150 g less than necessary
- d. Hypotrophy of the I grade
- e. Corresponding to the age**

102. A 2 m.o. breast-fed child suffers from cheek skin hyperemia, sporadic papulous elements on the skin of the chest and back following the apple juice introduction. The child is restless. What is the initial pediatrician's tactics?

- a. Apply ointment with corticosteroids to affected skin areas
- b. Clarify mother's diet and exclude obligate allergens**
- c. Administer general ultraviolet irradiation
- d. Refer to prescribe dermatologist

e. Treat with claritine

103. A 5 month old boy was born prematurely, he didn't suffer from any disease at the infant age and later on. Examination at an outpatient's hospital revealed paleness of skin, sleepiness. Blood count: Hb - 95 g/l, erythrocytes - 3,51012/l, reticulocytes - 90/00, colour index - 0,7, osmotic stability of erythrocytes - 0,44-0,33%, serum iron - 4,9 micromole/l. What is the most probable cause of anemia?

a. Hemogenesis immaturity

b. Erythrocyte hemolysis

c. B12 deficit

d. Iron deficit

e. Infectious process

104. A 7 y.o. child had elevation of temperature to 40°C in anamnesis. For the last 3 months he presents fusiform swelling of fingers, ankle joints and knee joint, pain in the upper part of the sternum and cervical part of the spinal column. What is the most probable diagnosis?

a. Juvenile rheumatic arthritis

b. Toxic synovitis

c. Osteoarthritis

d. Septic arthritis

e. Rheumatism

105. An 8 year old girl complains about joint pain, temperature rise up to 38°C, dyspnea. Objectively: the left cardiac border is deviated by 2,5 cm to the left, tachycardia, systolic murmur on the apex and in the V point are present. Blood count: leukocytes - 20,0109/l, ESR - 18 mm/h. What sign gives the most substantial proof for rheumatism diagnosis?

a. Fever

b. Accelerated ESR

c. Arthralgia

d. Leukocytosis

e. Carditis

106. A 5 y.o. child with stigmas of dysmaturational changes (small chin, thick lips, open mouth, hyperthelorum) has systolic murmur in the second intercostal to the right of the sternum. The murmur passes to the neck and along the sternum left edge. The pulse on the left brachial artery is weakened. BP on the right arm is 110/60 mm Hg, on the left - 100/60 mm Hg. ECG results: hypertrophy of the right ventricle. What defect is the most probable?

a. Defect of interatrial septum

b. Defect of interventricular septum

c. Aortic stenosis

d. Coarctation of the aorta

e. Open aortic duct

107. A 1,5 y.o. child fell ill acutely with high temperature 38°C, headache, fatigue. The temperature declined on the fifth day, muscular pain in the right leg occurred in the morning, there were no movements and tendon reflexes, sensitivity was reserved. What is the initial diagnosis?

a. Osteomyelitis

b. Hip joint arthritis

c. Viral encephalitis

d. Polyarthropathy

e. Polyomyelitis

108. A 2 m.o. child with birth weight 5100 g has jaundice, hoarse cry, umbilical hernia, physical development lag. Liver is +2 cm enlarged, spleen is not enlarged. In anamnesis: delayed falling-away of umbilical cord rest. In blood: Hb- 120 g/L, erythrocytes - 4,51012/L, ESR- 3 mm/h. Whole serum bilirubin is 28 mcmmole/L, indirect - 20 mcmmole/L, direct - 8 mcmmole/L. What is the most probable diagnosis?

a. Cytomegalovirus infection

b. Congenital hypothyreosis

c. Hemolytic anemia

d. Congenital hepatitis

e. Conjugated jaundice

109. A 3 year old child fell acutely ill, body temperature rose up to 39,5°C, the child became inert, there appeared recurrent vomiting, headache. Examination revealed positive meningeal symptoms, after this lumbar puncture was performed. Spinal fluid is turbid, runs out under pressure, protein concentration is 1,8 g/l; Pandy reaction is +++, sugar concentration is 2,2 millimole/l, chloride concentration - 123 millimole/l, cytosis is 2,35109 (80% of neutrophils, 20% of lymphocytes). What is the most probable diagnosis?

a. Brain tumour

b. Purulent meningitis

c. Serous tuberculous meningitis

d. Serous viral meningitis

e. Subarachnoid haemorrhage

110. A 13 y.o. girl complains of having temperature rises up to febrile figures for a month, joint ache, periodical skin rash. Examination revealed steady enhancing of ESR, LE-cells. What is the most probable diagnosis?

a. Rheumatics

b. Systemic lupus erythematosus

c. Systemic scleroderma

d. Juvenile rheumatoid arthritis

e. Acute lymphoblast leukaemia

111. A child is 1 y.o. Within the last months after the beginning of supplemental feeding the child has appetite loss, diarrhea with massive defecation, sometimes vomiting. Objectively: body temperature is normal. Body weight is 7 kg. Evident pallor of skin, leg edema, enlarged abdomen. Coprogram shows a lot of fatty acids and soaps. The child was diagnosed with celiac disease and prescribed gluten-free diet. What should be excluded from the dietary intake in this case?

a. Digestible carbohydrates

b. Cereals - wheat, oats

c. Fruit

d. Milk and dairy produce

e. Animal protein

112. An 8 y.o. boy complains of constant cough along with discharge of greenish sputum, dyspnea during physical activities. At the age of 1 year and 8 months he fell ill for the first time with bilateral pneumonia that had protracted course. Later on there were recurrences of the disease 5-6 times a year, during the remission periods there was constant productive cough. What examination results will be the most important for making a final diagnosis?

a. Spirometry

b. Bronchography

c. Bacterial inoculation of sputum

d. Roentgenography of thorax organs

e. Bronchoscopy

113. A mother of a 5 y.o. girl consulted a doctor about daughters involuntary urination at night, nightmares, sleep disorders, slow gaining of body weight. Objectively: malnutrition, intellectual development is good, the girl can read and explains common situations quite adultly. Her skin is very pale, liver is enlarged in size. Her mother suffers from cholelithiasis. What type of diathesis is the most probable in the child's case?

a. Urine acid diathesis

b. Allergic diathesis

c. Lymphohypoplastic diathesis

d. Gouty diathesis

e. Exudative diathesis

114. A 10 year old girl complains about abdominal pain that is arising and getting worse after eating rough or spicy food. She complains also about sour eructation, heartburn, frequent constipations, headache, irritability. She has been suffering from this for 12 months. Objectively: the girl's diet is adequate. Tongue is moist with white deposit at the root. Abdomen is soft, painful in its epigastric part. What study method will help to make a diagnosis?

a. Fractional examination of gastric juice

b. Intragastral pH-metry

c. Esophagogastrroduodenoscopy

d. Contrast roentgenoscopy

e. Biochemical blood analysis

115. A 40 h.o. child age has hyperosthesia, CNS depression, dyspepsia. Sepsis is suspected. What should the differential diagnosis be made with?

a. Hyperkalemia

b. Hypomagnesemia

c. Hypocalcemia

d. Hyperbilirubinemia

e. Hypoglycemia

116. A 1,5 y.o. child fell seriously ill: chill, body temperature rise up to 40,10C, then rapid dropping to 36,20C, skin is covered with voluminous hemorrhagic rash and purple cyanotic spots. Extremities are cold, face features are sharpened. Diagnosis: meningococcosis, fulminant form, infection-toxic shock. What antibiotic must be used at the pre-admission stage?

a. Penicillin

b. Gentamycin

c. Sulfamonometoxin

d. Soluble Levomycetine succinate

e. Lincomycin

117. A 10 year old boy suffers from chronic viral hepatitis type B with maximal activity. What laboratory test can give the most precise characteristic of cytolysis degree?

a. Test for whole protein

b. Transaminase test

c. Takata-Ara test

d. Weltmans coagulation test

e. Prothrombin test

118. A 6 y.o child complains of thirst, polyuria, increased appetite for 2 months with weight loss for 3 kg. There has been nocturnal enuresis during last week. On examination: hyperglycemia 14 mol/L. The diagnosis is diabetes mellitus I type. What is the genesis of this disease?

- a. Viral
- b. Neurogenic
- c. Virus-bacterial
- d. Autoimmune**
- e. Bacterial

119. A 10 y.o. child who is at oligoanuretic stage of acute renal insufficiency has got sensations of pricking in the mucous membrane of oral cavity and tongue, extremities numbness, reduced reflexes, respiratory disturbance, arrhythmia. What are these symptoms caused by?

- a. Hyperazotemia
- b. Hyponatremia
- c. Hyperkaliemia**
- d. Acidosis
- e. Alkalosis

120. Examination of a 12 year old child revealed diffuse thyroid enlargement of the II degree. Heart auscultation revealed dullness of heart sounds, heart rate was 64/min. The child has frequent constipations, anemia. Concentration of thyreoglobulin antibodies is increased. What disease might have caused such symptoms?

- a. Endemic goiter
- b. Autoimmune thyroiditis**
- c. Thyroid carcinoma
- d. Diffuse toxic goiter
- e. Thyroid hyperplasia

121. A 13 y.o. teenager who suffers from hemophilia A was taken to the hospital after a fight at school. His diagnosis is right-sided hemarthros of knee joint, retroperitoneal hematoma. What should be primarily prescribed?

- a. Fresh frozen plasma**
- b. Washed thrombocytes
- c. Dry plasma
- d. Placental albumin
- e. Aminocapronic acid

122. A 3 m.o. child fell seriously ill, body temperature rised up to 37,8°C, there is semicough. On the 3-rd day the cough grew worse, dyspnea appeared. On percussion: tympanic sound above lungs, on auscultation: a lot of fine moist and wheezing rales during expiration. What is the most probable diagnosis?

- a. Acute respiratory viral infection, bronchitis with asthmatic component
- b. Acute respiratory viral infection, focal pneumonia
- c. Acute respiratory viral infection, bronchopneumonia
- d. Acute respiratory viral infection, bronchitis
- e. Acute respiratory viral infection, bronchiolitis**

123. A mother of a newborn child suffers from chronic pyelonephritis. She had acute respiratory viral disease before the labor. Labor in time, with prolonged period without waters. A child had erythematous eruption on the 2 day, then there were seropurulent vesicles for about 1cm large. Nikolskys symptom is

positive. Erosions have occurred after vesicle rupture. The child is flabby. The temperature is subfebrile. What is the most probable diagnosis?

- a. Vesiculopustulosis
- b. Sepsis
- c. Ritters dermatitis
- d. Newborn pemphigus**
- e. Pseudofurunculosis

124. Mother of a newborn child suffers from chronic pyelonephritis. She survived acute respiratory viral infection directly before labour. Delivery was at term, the period before discharge of waters was prolonged. On the 2-nd day the child got erythematous rash, later on - vesicles about 1 cm large with seropurulent content. Nikolskys symptom is positive. Dissection of vesicles results in erosions. The child is inert, body temperature is subfebrile. What is the most probable diagnosis?

- a. Pseudofurunculosis
- b. Vesicular pustulosis
- c. Impetigo neonatorum**
- d. Sepsis
- e. Ritters dermatitis

125. A child was born at 34 weeks of gestation in bad condition. The cardinal symptoms show respiratory disorders: sound prolonged expiration, additional muscles taking part in breathing, crepitation rales on the background of the rough breath sounds. Assessment according to Silvermans scale was 0, in 3 hours- 6 with presence of clinical data. What diagnostic method can determine pneumopathys type in the child?

- a. Proteinogram
- b. Immunologic investigation
- c. Blood test
- d. Blood gases
- e. Chest X-ray**

126. A 9 year old boy has been suffering from diabetes mellitus for a year. He gets insulin injections (humulin R, NPH), the dose makes up 0,4 units per 1 kg of body weight a day. Insulin is introduced subcutaneously (into the shoulder) by means of a syringe. What measures should be taken in order to prevent lipodystrophy?

- a. To reduce insulin dose
- b. To limit fats in the boys diet
- c. To change point of introduction**
- d. To apply periodically other types of insulin
- e. To administer antioxidants

127. During intramuscular DTP vaccination in clinic, a 3 m.o. child developed signs of laryngospasm, paleness of skin, cyanosis of lips, "cock cry", stop of respiration, tension of the whole body with overturned backward head. Allergological history of the child is not complicated. What is the most probable diagnosis?

- a. Anaphylactic shock, clonic spasms
- b. Cerebral haemorrhage, tonic spasms
- c. Meningism, clonic and tonic spasms
- d. Spasmophilia, tonic spasms**
- e. Meningoencephalitic reaction, clonic and tonic spasms

128. A child was born with body weight 3250 g and body length 52 cm. At the age of 1,5 month the actual

weight is sufficient (4350 g), psychophysical development corresponds with the age. The child is breast-fed, occasionally there are regurgitations. What is the cause of regurgitations?

- a. Pylorospasm
- b. Pylorostenosis
- c. Aerophagia**
- d. Acute gastroenteritis
- e. Esophageal atresia

129. A 10-year-old girl consulted a doctor about thirst, frequent urination, weight loss. She has been observing these symptoms for about a month. Objectively: no pathology of internal organs was revealed. What laboratory analysis should be carried out in the first place?

- a. Glucose tolerance test
- b. Glucosuric profile
- c. Glucose in urine test on the base of daily diuresis
- d. Acetone in urine test
- e. Blood glucose analysis on an empty stomach**

130. A 2 y.o. boy was admitted to the hospital with weight loss, unstable feces, anorexia, following the semolinas introduction (since 5 months). The child is adynamic, flabby, his skin is pale and dry, subcutaneous fat layer is emaciated. Distended and tensed abdomen, tympanitis on percussion of the upper part of abdomen, splashing sounds, feces are foamy, of light color, foul. On coprocytogram: a lot of neutral fat. What is the most probable cause of the disease?

- a. Disaccharidase insufficiency
- b. Celiakia (celiac disease)**
- c. Intestinal dysbacteriosis
- d. Mucoviscidosis (cystic fibrosis)
- e. Chronic enteritis

131. A child with chronic cardialitis, cardial insufficiency IIA that is being treated with digoxin has got progressing bradycardia, nausea, vomiting, dizziness, sleep disorders. ECG results: extrasystole, PQ-0,18. What is the most probable cause of this condition?

- a. Acute enteric infection
- b. Hypokaliemia
- c. Pulmonary edema
- d. Atrioventricular heart block of the I degree
- e. Cardiac glucosides overdose or intolerance**

132. A child is 1 day old. During delivery there had been problems with extraction of shoulders. Body weight is 4300,0. Right arm hangs down along the body, hand is pronated, movement in the arm is absent. "Scarf" symptom is positive. What is the most probable diagnosis?

- a. Tetraparesis
- b. Total right-sided obstetric paralysis**
- c. Distal right-sided obstetric paralysis
- d. Proximal right-sided obstetric paralysis
- e. Hemiparesis

133. A 10 y.o. child has average indices of body length and her chest circumference exceeds average indices, body weight index is heightened due to lipopexia. Functional characteristics of physical development are below average. Physical development of this child can be estimated as:

- a. Deeply disharmonic**

b. Disharmonic

- c. Below average
- d. Average
- e. Harmonic

134. An 11-yearold girl was taken by an acute disease: she got pain in the lumbar region, nausea, vomiting, frequent urination, body temperature 39°C. Objectively: the abdomen is soft, painful on palpation in the lumbar region. Common urine analysis revealed considerable leukocyturia, bacteriuria. The urine contained colibacilli. What is the most likely diagnosis?

- a. Acute vulvovaginitis
- b. Acute glomerulonephritis
- c. Acute appendicitis
- d. Chronic glomerulonephritis

e. Acute pyelonephritis

135. A 3 year old boy has petechial eruption. Examination revealed no other pathological changes. Thrombocyte number is $20 \times 10^9/\text{l}$; haemoglobin and leukocyte concentration is normal. What is the most probable diagnosis?

- a. Acute lymphoblastic leukemia
- b. Systemic lupus erythematosus
- c. Schonlein-Henoch disease
- d. Disseminated intravascular coagulopathy

e. Immune thrombocytopenic purpura

136. A 4-year-old boy in 2 weeks after the tonsillitis had edema, headache, vomiting three times per day. On physical exam: rise of blood pressure, urine is of meat slops color. What is the most probable diagnosis?

- a. Pyelonephritis
- b. Cystitis
- c. Urethritis

d. Glomerulonephritis

e. Interstitial nephritis

137. A newborn child has purulent discharges from the umbilical wound, skin around the umbilicus is swollen. Objectively: the child's skin is pale, of yellow-greyish colour, generalized hemorrhagic rash. Body temperature is of hectic nature. What is the most probable diagnosis?

a. Sepsis

- b. Hemolytic disease of newborn
- c. Omphalitis
- d. Thrombocytopenia
- e. Hemorrhagic disease of newborn

138. A 7 y.o. boy was admitted to the hospital. He complains of unpleasant sensations in the heart region, pain in the epigastrium, dizziness, vomiting. Objectively: evident paleness of skin, dyspnea, jugular pulse. Heart borders are within the normal range. Heart sounds are clear, HR- 170/min, small pulse. AP- 90/50 mm Hg. EKG showed: paroxysm of ventricular tachycardia. The paroxysm can be suppressed by:

a. Strophanthine

b. Lidocaine

- c. Enalapril
- d. Morphine

e. Nifedipine

139. A child is 2 m.o. Inguinofemoral folds contain acutely inflamed foci with distinct borders in form of spots that are slightly above the surrounding areas due to skin edema. The rash has appeared during the week. Vesiculation and wetting are absent. What is the most probable diagnosis?

- a. Infantile eczema
- b. Psoriasis
- c. Complicated course of scabies
- d. Napkin-area dermatitis**
- e. Dermatomycosis

140. 15 minutes after the second vaccination with diphtheria and tetanus toxoids and pertussis vaccine a 4 month old boy manifested symptoms of Quinckes edema. What medication should be applied for emergency aid?

- a. Seduxen
- b. Prednisolone**
- c. Adrenalin
- d. Heparin
- e. Furosemide

141. An 8 y.o. boy was ill with B hepatitis one year ago. In the last 2 months he has complaints of fatiguability, sleep disorder, appetite loss, nausea, especially in the mornings. Skin isn't icterious, liver and spleen are 1 cm below the costal margins, painless. Alanine aminotransferase activity is 2,2 mcmol/L. How can this condition be estimated?

- a. Development of chronic hepatitis**
- b. Biliary dyskinesia
- c. Development of liver cirrhosis
- d. Residual effects of old viral hepatitis type B
- e. Recurrence of viral hepatitis type B

142. On the third day of life an infant's skin got icteric colouring. The child was born with body weight of 3,200 kg, body length of 52 cm. The child is active. There is puerile respiration above the lungs. Respiratory rate is 36/min, heart sounds are rhythmic, heart rate is 130/min. Abdomen is soft, liver comes out from the edge of costal arch by 2 cm, spleen is not palpable. Feces are in form of meconium. What is the most probable diagnosis?

- a. Hemolytic disease of newborn
- b. Minkowsky-Shauffard disease
- c. Biliary tracts atresia
- d. Physiologic jaundice**
- e. Neonatal sepsis

143. A 1,5-year-old child was taken by an acute disease: body temperature up to 39°C, frequent vomiting up to 5 times. Nervous system tests revealed positive Kernig's and Brudzinkski's signs. The given symptoms relate to:

- a. Meningeal signs**
- b. Motor disorder syndrome
- c. Infectious toxicosis signs
- d. Encephalic syndrome
- e. Discoordination syndrome

144. A pediatrician had a conversation with a mother of a 7-month-old breast-fed boy and found out that the child was fed 7 times a day. How many times should the child of such age be fed?

a. 5 times

b. 4 times

c. 7 times

d. 6 times

e. 3 times

145. A 3 month old child has occiput alopecia, anxious sleep, excessive sweating. What disease might be suspected?

a. Anemia

b. Spasmophilia

c. Rachitis

d. Phosphate diabetes

e. Chondrodystrophy

146. A 2,5 m.o. child has got muscle hypotony, sweating, occipital alopecia. Along with massage and therapeutic exercises the child was prescribed vitamin D. What dosage and frequency are correct?

a. 1000 IU every day

b. 500 IU every day

c. 3000 IU every day

d. 500 IU every other day

e. 1000 IU every other day

147. On the 15-th day after a minor trauma of the right foot a patient felt malaise, fatigability, irritability, headache, high body temperature, feeling of compression, tension and muscular twitching of his right crus. What disease can it be?

a. Acute thrombophlebitis

b. Thromboembolism of popliteal artery

c. Anaerobic gas gangrene

d. Erysipelas

e. Tetanus

148. A 10-year-old girl was admitted to a hospital with carditis presentations. It is known from the anamnesis that two weeks ago she had exacerbation of chronic tonsillitis. What is the most likely etiological factor in this case?

a. Pneumococcus

b. Staphylococcus

c. Streptococcus

d. Klebsiella

e. Proteus

149. A full-term infant has respiratory rate of 26/min, heart rate of 90/min, blue skin, muscle hypotonia. During catheter suction of mucus and amniotic fluid from the nose and mouth the child reacted with a grimace. Low reflexes. Auscultation revealed weakened vesicular respiration above lungs. Heart sounds are loud. After 5 minutes the respiration became rhythmic, at the rate of 38/min, heart rate of 120/min. What is the most likely diagnosis?

a. Inborn pneumonia

b. Bronchopulmonary dysplasia

c. Respiratory distress syndrome

d. Asphyxia

e. Birth trauma

150. A 9 year old boy had acute respiratory viral infection. After it there appeared polydipsia, polyuria, weakness, nausea. Examination revealed the following symptoms: mental confusion, dry skin, soft eyeballs, Kussmauls respiration, acetone smell from the mouth, muffled heart sounds, soft and painless abdomen. Blood sugar was 19 millimole/l. What acute condition is it?

- a. Cerebral coma
- b. Hyperosmolar coma

c. Ketoacidotic coma

- d. Hepatic coma
- e. Acute renal insufficiency

151. Head circumference of a 1-month-old boy with signs of excitement is 37 cm, prefontanel is 2x2 cm large. After feeding the child regurgitates small portions of milk; stool is normal in its volume and composition. Muscle tone is within norm. What is the most likely diagnosis?

- a. Meningitis
- b. Microcephaly
- c. Craniostenosis

d. Pylorospasm

e. Pylorostenosis

152. On the second day after preventive vaccination a 2-year-old boy presented with abdominal pain without clear localization, body temperature rose up to 38°C. On the third day the child got red papular haemorrhagic eruption on the extensor surfaces of limbs and around the joints. Knee joints were edematic and slightly painful. Examination of other organs and systems revealed no pathological changes. What is the most likely diagnosis?

- a. Meningococemia
- b. Thrombocytopenic purpura

c. Haemorrhagic vasculitis

- d. Urticaria
- e. DIC syndrome

153. On the 6th day of life a child got multiple vesicles filled with seropurulent fluid in the region of occiput, neck and buttocks. General condition of the child is normal. What disease should be suspected?

- a. Impetigo neonatorum
- b. Impetigo
- c. Epidermolysis bullosa

d. Vesiculopustulosis

e. Miliaria

154. A newborn girl has Apgar score of 7-8 points at the 1-5 minutes after birth. During the labor there was a brief difficulty with extraction of the shoulder girdle. After birth the baby presents with disturbed function of the proximal segment and forced position of the right arm. The shoulder is rotated inwards, the elbow is extended, the forearm is pronated, and the whole upper limb resembles an arm of a doll. What is the most likely clinical diagnosis in this case?

- a. Intracranial hemorrhage
- b. Soft tissue injury of the right arm
- c. Thoracic spine trauma
- d. Osteomyelitis of the right arm

e. Erb-Duchenne palsy

155. Disease onset was acute. A child developed general weakness, pain in the joints, and elevated temperature. Later these signs became accompanied by itching skin rash manifested as erythematous spots 2- 5 mm in size. The rash gradually turned hemorrhagic. Large joints are painful and swollen; pain attacks periodically occur in the paraumbilical area; there are signs of intestinal hemorrhage. What is the most likely diagnosis?

a. Rheumatism

b. Hemorrhagic vasculitis (Henoch-Schonlein purpura)

c. Hemorrhagic meningoencephalitis

d. Scarlet fever

e. Streptococcal impetigo

156. A 13-year-old girl for the last two weeks has been complaining of dyspnea and shin and foot edemas that appear after a physical exertion. In the morning the edemas significantly decrease. Clinical examination revealed enlarged liver and coarse systolic murmur over the heart area. Blood test and urinalysis are without changes. What is the most likely cause of edemas in this child?

a. Heart failure

b. Acute pyelonephritis

c. Hepatic cirrhosis

d. Angioneurotic edema

e. Nephrotic syndrome

157. A 7-year-old boy has severe pulmonary mucoviscidosis (cystic fibrosis). He complains of dyspnea and blood expectoration. Objectively he presents with lagging physical development, acrocyanosis, hepatomegaly, drumstick fingers, and nail plates resembling a "clock face". Provisional diagnosis of chronic pulmonary heart disease is made. What examination would be the most informative for diagnosis confirmation?

a. Ultrasound of the liver

b. Doppler echocardiography

c. Chest X-ray

d. Electrocardiography

e. Rheography of the pulmonary artery

158. Mother of a 5-year-old child noticed on the the head of her child a round "bald" spot 3 cm in diameter. All the hairs in the focus are broken off at the length of 5-6 mm. The day before the child was petting a stray cat. Make the diagnosis:

a. Superficial trichophytosis

b. Psoriasis

c. Alopecia areata

d. Microsporia

e. Deep trichophytosis

159. A 2-year-old child with persisting cough and subfebrile body temperature after a case of URTI developed dyspnea, cyanosis of the nasolabial triangle, percussion dullness and weakened respiration in the lower lobe of the right lung, and a slight mediastinal displacement to the left. What pulmonary pathology is likely to cause this clinical presentation?

a. Pleurisy

b. Pneumonia

c. Bronchitis

- d. Atelectasis
- e. Emphysema

160. During examination a 4-month-old child with meningococcemia presents with acrocyanosis, cold extremities, tachypnea, and thready pulse, blood pressure of 30/0 mm Hg, anuria, and sopor. What clinical syndrome is it?

- a. Exicosis
- b. Neurotoxicosis
- c. Toxic shock syndrome**
- d. Encephalic syndrome
- e. Acute renal failure

161. At night a 2-year-old child with upper respiratory tract infection suddenly developed dyspnea with labored inspiration. Objectively the skin is pale, perioral cyanosis and slight acrocyanosis are observed. Breathing is loud, respiration rate is 32/min. Jugular, supra- and infraclavicular fossae retract during breathing. Respiration is coarse on auscultation. Heart sounds are clear and sonorous, heart rate is 120/min. What condition was complicated by the development of the upper respiratory tract infection?

- a. Stenosing laryngotracheitis**
- b. Obstructive bronchitis
- c. Bronchial asthma
- d. Bronchiolitis
- e. Airway foreign body

162. A 1-year-old child with a case of URTI suddenly developed noisy respirations with difficult inspiration, intercostal retractions, and barking cough on the 2nd night after the disease onset. What is the most likely diagnosis?

- a. Acute bronchiolitis
- b. Stenosing laryngotracheobronchitis**
- c. Bronchial asthma
- d. Acute pulmonary inflammation
- e. Acute bronchitis

163. A 10-year-old boy with symptoms of arthritis and myocarditis was brought to a hospital. Based on clinical examination the provisional diagnosis of juvenile rheumatoid arthritis was made. What symptom is the most contributive for the diagnostics of this disease?

- a. Reduced mobility of the joints in the morning**
- b. Affection of the large joints
- c. Increased heart rate
- d. Enlarged heart
- e. Regional hyperemia of the joints

164. A 7-year-old girl has been twice treated with antibacterial agents for urinary tract infection. US shows no severe renal defects. The child presents with recurrence of leukocyturia and bacteriuria, elevated body temperature up to 38.5°C, and pain in her left lumbar area. What examination should be conducted first to clarify the cause of urinary infection recurrence?

- a. Immunogram
- b. Radioisotope renography
- c. Excretory urography
- d. Retrograde pyelography
- e. Micturating cystourethrography**

165. A child is 1 year old. After solid food was introduced into the diet, within the last several months the child developed loss of appetite, diarrhea with large amount of feces, and occasional vomiting. Body temperature remains normal. Body weight is 7 kg. The child is very pale, has leg edemas and extremely distended abdomen. Feces analysis detects high levels of fatty acids and soaps. Diagnosis of celiac disease was made and gluten-free diet was prescribed. What should be excluded from the diet in this case?

a. Cereals - wheat, oats

b. Fruits

c. Easily digestible carbohydrates

d. Animal protein

e. Milk and dairy products

166. A 7-year-old boy has been an inpatient for 1.5 months. He had been brought to the hospital with complaints of edemas all over his body, low urine output, and headache. Clinical urinalysis: proteins - 7.1 g/L, leukocytes - 1-2 in the vision field, erythrocytes - 3-4 in the vision field. During the course of treatment the edemas gradually dissipated, headache abated, diuresis normalized. Daily urine proteins - 3 g/L. Biochemical blood test: total protein - 43.2 g/L, urea - 5.2 mmol/L, cholesterol - 9.2 mmol/L. What glomerulonephritis syndrome is the most likely to be present in the patient?

a. Isolated urinary

b. Nephritic

c. Nephrotic

d. Hematuric

e. Mixed

167. A 3-month-old child with signs of rickets presents with positive Chvostek, Trousseau, and Maslov signs. One day ago the parents witnessed a cyanotic attack in their child - the child broke into a cold sweat, the eyes bulged, and respiratory arrest occurred. One minute later the child drew in a loud breath and the child's condition normalized again. What is the cause of the described signs of the disease?

a. Increase of blood calcium levels

b. Increase of blood phosphorus levels

c. Metabolic acidosis

d. Decrease of blood calcium levels

e. Decrease of blood phosphorus levels

168. A newborn with gestational age of 31 weeks presents with hypotonia and depressed consciousness. Hematocrit is 35%, general cerebrospinal fluid analysis shows increased content of erythrocytes and protein, and low glucose. These data correspond with the clinical presentation of:

a. Intrauterine infection

b. Intracranial hemorrhage

c. Sepsis

d. Meningitis

e. Anemia

169. A newborn has Apgar score of 9. When should this infant be put to the breast?

a. After 12 hours

b. On the 2nd day

c. On the 3rd day

d. In the delivery room

e. After 2 hours

170. A 3-week-old infant developed large, flaccid vesicles with purulent contents on the skin of chest and abdomen. The vesicles rupture quickly. Make the provisional diagnosis:

- a. Vesiculopustulosis
- b. Pemphigus syphiliticus
- c. Pseudofurunculosis
- d. Pemphigus neonatorum**
- e. Toxic erythema

171. 10 hours after birth a child developed jaundice, hypotonia, hyporeflexia, and moderate hepatosplenomegaly. Feces and urine are of normal color. Umbilical cord blood bilirubin is 51 $\mu\text{mol/L}$ due to unconjugated bilirubin levels. In venous blood: erythrocytes - $3.5 \cdot 10^{12}/\text{L}$, Hb- 140 g/L, reticulocytes - 1.5%, bilirubin - 111 $\mu\text{mol/L}$, conjugated - 11 $\mu\text{mol/L}$, ALT- 40 U/L, AST30 U/L. Mother's blood group is A(II) Rh(-), child's blood group is A(II) Rh(+). What laboratory test can confirm the diagnosis?

- a. Measurement of erythrocyte osmotic resistance
- b. Viral hepatitis markers analysis
- c. Coombs test**
- d. Erythrocytometry
- e. Measurement of glucose 6-phosphate dehydrogenase levels in erythrocytes

172. A 6-month-old child on breastfeeding is hospitalized in the inpatient department. After the child recovers, the doctor recommends the mother to start introducing solid food to the child's diet. What products should be introduced to the child's diet first?

- a. Buckwheat porridge
- b. Vegetable puree**
- c. Grated apple
- d. Fermented dairy products
- e. Semolina porridge

173. The 5-year-old child has been ill for 2 weeks. Cough attacks developed first and were then followed by reprises. During coughing the child's face turns red and cervical veins bulge. The cough attacks induce vomiting. X-ray shows intensified bronchial pattern. Blood test: leukocytes - $16 \times 10^9/\text{L}$, lymphocytes - 72%, erythrocyte sedimentation rate - 4 mm/hour. What is the most likely diagnosis?

- a. Foreign body
- b. Pertussis**
- c. Pneumonia
- d. Obstructive bronchitis
- e. Adenovirus infection

174. A 3-year-old child presents with dyspnea that abates in the sitting position, occasional loss of consciousness and seizures, delayed physical development, cyanosis, drumstick fingers. Echocardiography detects aortic dextraposition, ventricular septal defect, pulmonary artery stenosis, and right ventricular hypertrophy. What is the most likely diagnosis?

- a. Coarctation of the aorta
- b. Ventricular septal defect
- c. Acquired valvular disease
- d. Tetrad of Fallot**
- e. Transposition of the great vessels

175. A 15-year-old girl complains of dizziness and sensation of lack of air that she develops in emotionally straining situations. Relief occurs after she takes corvalol. Objectively: hyperhidrosis and marble-like

pattern of the skin of her palms and feet. Clinical and instrumental examination revealed no organic changes in the central nervous, cardiovascular, and respiratory systems. What provisional diagnosis can be made?

- a. Obstructive bronchitis
- b. Stenosing laryngotracheitis
- c. Acute epiglottitis
- d. Somatoform autonomic dysfunction**
- e. Bronchial asthma

176. A 1.5-month-old child on breastfeeding presents from birth with daily vomiting, irregular liquid foamy feces, and meteorism, which are resistant to antibacterial and probiotic therapy; no increase of body mass is observed. The child's condition improved, when breastmilk was substituted with "NAN low lactose" formula. What pathology is it?

- a. Lactase deficiency**
- b. Infectious enteritis
- c. Functional dyspepsia
- d. Drug-induced enteritis
- e. Intestinal lamblasis (Giardiasis)

177. A 13-year-old girl for a month has been complaining of fatigability, dull pain in her right subcostal area, abdominal distension, and constipations. Abdominal palpation reveals positive Kehr, Murphy, and Ortner signs, while Desjardins and Mayo-Robson points are painless. Total bilirubin is 14.7 $\mu\text{mol/L}$, predominantly indirect, ALT- 20 U/L, AST- 40 U/L, amylase - 6.3 mmol/L. Echocholecystography shows practically no contraction of the gallbladder. Make the provisional diagnosis:

- a. Hyperkinetic biliary dyskinesia
- b. Acute pancreatitis
- c. Chronic hepatitis
- d. Hypokinetic biliary dyskinesia**
- e. Chronic pancreatitis

178. A 22-day-old infant developed subcutaneous red nodes from 1.0 to 1.5 cm in size on the scalp; later the nodes suppurated. Temperature increased up to 37.7°C, intoxication symptoms appeared, regional lymph nodes enlarged. Complete blood count: anemia, leukocytosis, neutrocytosis, increased ESR. What diagnosis can be made?

- a. Vesiculopustulosis
- b. Pemphigus
- c. Pseudofurunculosis**
- d. Scalp phlegmon
- e. -

179. A 10-year-old boy was brought into the hospital with complaints of expiratory dyspnea, respirations are 30/min. He explains his state by a change in the weather conditions. For the last 4 years the boy has been registered for regular check-ups due to his diagnosis of third degree persistent bronchial asthma. To provide emergency aid for this child, first he needs to be given:

- a. Salbutamol or short-acting β_2 -agonists**
- b. Adrenaline
- c. Claritin (Loratadine)
- d. Euphylline (Aminophylline)
- e. Dexamethasone

180. A 3-year-old child has been brought to a hospital with complaints of pain in the legs, fever, and loss of appetite. Objectively: pale skin and mucosa, hemorrhagic rash. Lymph nodes are enlarged, painless, dense and elastic, not matted together. Bones, joints, and abdomen are painful. The liver and spleen are enlarged. Hemogram: Hb- 88 g/L, color index - 1.3, platelets - $80 \times 10^9/L$, leukocytes - $25.8 \times 10^9/L$, lymphoblasts - 70%, ESR- 52 mm/hour. Make the provisional diagnosis:

- a. Infectious mononucleosis
- b. Hemorrhagic vasculitis (Henoch-Schonlein purpura)
- c. Thrombocytopenic purpura
- d. Acute rheumatic fever
- e. Acute leukemia**

181. During an outdoors school event in hot weather, a 10-year-old girl lost her consciousness. Body temperature - 36.7°C . Objectively her skin is pale and cold to touch, her pupils are dilated. Blood pressure - 90/50 mm Hg. Heart rate - 58/min. What pathology occurred in this case?

- a. Sunstroke
- b. -
- c. Sympathicotonic collapse
- d. Paralytic collapse
- e. Syncope**

182. A 13-year-old girl has 30% of excessive body mass, she started to gain weight at the age of 3. She has a family history of obesity. Her height and sexual development are normal for her age. The appetite is excessive. She complains of periodical headaches. Blood pressure - 120/80 mm Hg. Subcutaneous fat is evenly distributed, she has no stretch marks. There is juvenile acne on her face. What type of obesity is it?

- a. Hypothalamic obesity
- b. Hypothalamic syndrome of puberty
- c. Hypothyroid obesity
- d. Alimentary constitutive obesity**
- e. Adrenal obesity

183. An 8-year-old girl complains of frequent painful urination in small amounts and urinary incontinence. The signs have been present for 2 days already. She explains her disease by overexposure to cold. Costovertebral angle tenderness is absent. Complete blood count is without pathologies. Urine test: leukocytes - 20-30 in the vision field, erythrocytes - 40-50 in the vision field, unchanged, bacteriuria. What is the most likely diagnosis?

- a. Vulvitis
- b. Glomerulonephritis
- c. Urolithiasis
- d. Cystitis**
- e. Pyelonephritis

184. An 8 year old child has low-grade fever, arthritis, colicky abdominal pain and a purpuric rash localized on the lower extremities. laboratory studies reveal a guaiac-positive stool, urinalysis with red blood cell (RBC) casts and mild proteinuria, and a normal platelet count. The most likely diagnosis is:

- a. Idiopathic thrombocytopenic purpura
- b. Poststreptococcal glomerulonephritis
- c. Systemic lupus erythematosus (SLE)
- d. Rocky Mountain spotted fever
- e. Henoch-Schonleins vasculitis**

185. A young man has painful indurations in the peripapillary regions of both mammary glands. The most reasonable action will be:

- a. To leave these indurations untouched
- b. To cut and drain them
- c. To administer steroids locally
- d. To take an aspirate for bacterial inoculation and cytology
- e. To remove them

186. A 9 year old girl with a history of intermittent wheezing for several years is brought to the pediatrician. The child has been taking no medications for some time. Physical examination reveals agitation and perioral cyanosis. Intercostal and suprasternal retractions are present. The breath sounds are quiet, and wheezing is audible bilaterally. The child is admitted to the hospital. Appropriate interventions might include all of the following textbfEXCEPT:

- a. Prescribe nebulized cromolyn sodium
- b. Administer supplemental oxygen
- c. Prescribe nebulized metaproterenol
- d. Prescribe intravenous corticosteroids
- e. Prescribe intravenous aminophylline

187. Routine examination of a child with a history of bronchial asthma reveals AP of 140/90 mm Hg. The most likely cause of the hypertension is:

- a. Chronic lung disease
- b. Theophylline overdose
- c. Renal disease
- d. Coarctation of the aorta
- e. Obesity

188. Routine examination of an otherwise healthy child with a history of bronchial asthma reveals AP of 140/90 mm Hg. The most likely cause of the hypertension is:

- a. Theophylline toxicity
- b. Coarctation of the aorta
- c. Obesity
- d. Renal disease
- e. Chronic lung disease

189. Patient with thyreotoxicosis is in the 2 beds hospital ward of therapeutic department. The area of the ward is 18 m², height 3 m, ventilation rate 2,5/hr. Air temperature - 20°C, relative humidity - 45%, air movement velocity - 0,3 m/s, light coefficient - 1/5, noise level - 30 dB. Do hygienic evaluation of the conditions meet the standards?

- a. Non-effective ventilation
- b. High level of noise
- c. All conditions meet the requirements
- d. Discomfortable microclimate
- e. Poor lighting

190. The child is 11 m.o. He suffers from nervous-arthritic diathesis. The increased synthesis of what acid is pathogenic at nervous-arthritic diathesis?

- a. Sulfuric acid
- b. Uric acid
- c. Phosphoric acid

- d. Acetic acid
- e. Hydrochloric acid

191. A 10-year-old child complains of fever (temperature is 39°C), frequent painful urination [pollakiuria]. Urine test: proteinuria [0,066 g/L], leukocyturia [entirely within eyeshot], bacteriuria [10⁵ colony forming units/mL]. What is the most probable diagnosis?

- a. Dysmetabolic nephropathy
- b. Acute glomerulonephritis
- c. Acute pyelonephritis
- d. Acute cystitis
- e. Urolithiasis

192. A 8-year-old boy has suffered from tonsillitis. In 2 weeks he started complaining of migratory joint pain, edema of joints, restriction of movements, fever. On examination, an acute rheumatic heart disease, activity of the III-rd degree, primary rheumocarditis, polyarthritis; acute course of disease, cardiovascular failure IIA. What medication is to be prescribed?

- a. Cefazolin
- b. Diprazinum
- c. Erythromycin
- d. Prednisone
- e. Delagil

193. The 10 y.o. boy has complains on headache, weakness, fever 40°C, vomiting, expressed dyspnea, pale skin with flush on right cheek, lag of right hemithorax respiratory movement, dullness on percussion over low lobe of right lung, weakness of vesicular respiration in this zone. The abdomen is painless and soft at palpation. Which disease lead to these symptoms and signs?

- a. Pneumonia croupousa
- b. Acute appendicitis
- c. Flu
- d. Acute cholecystitis
- e. Intestinal infection

194. A patient with acute respiratory viral infection (3rd day of disease) complains of pain in lumbar region, nausea, dysuria, oliguria. Urinalysis - hematuria (100-200 RBC in eyeshot spot), specific gravity - 1002. The blood creatinin level is 0,18 millimole/l, potassium level - 6,4 millimole/l. Make the diagnosis:

- a. Acute renal failure
- b. Acute cystitis
- c. Acute renal colic
- d. Acute interstitial nephritis
- e. Acute glomerulonephritis

195. A neonate was born from the 1st gestation on term. The jaundice was revealed on the 2nd day of life, then it became more acute. The adynamia, vomiting and hepatomegaly were observed. Indirect bilirubin level was 275 μ mol/L, direct bilirubin level - 5 μ mol/L, Hb - 150 g/l. Mother's blood group - 0[I], Rh+, child's blood group- A[II], Rh+. What is the most probable diagnosis?

- a. Physiological jaundice
- b. Hemolytic disease of the neonate [Rh - incompatibility]
- c. Jaundice due to conjugation disorder
- d. Hepatitis
- e. Hemolytic disease of the neonate [ABO incompatibility], icteric type

196. A neonate was born from the 1st gestation on term. The jaundice was revealed on the 2nd day of life, then it became more acute. The adynamia, vomiting and hepatomegaly were observed. Indirect bilirubin level was 275 $\mu\text{mol/L}$, direct bilirubin level - 5 $\mu\text{mol/L}$, Hb- 150 g/l. Mothers blood group - 0(I), Rh+, child's blood group - A(II), Rh+. What is the most probable diagnosis?

a. Hemolytic disease of the neonate (ABO incompatibility), icteric type

b. Hepatitis

c. Hemolytic disease of the neonate (Rh - incompatibility)

d. Physiological jaundice

e. Jaundice due to conjugation disorder

197. A baby boy was born in time, it was his mother's 1st pregnancy. The jaundice was revealed on the 2nd day of life, then it progressed. The adynamia, vomiting and hepatomegaly were presented. The indirect bilirubin level was 275 $\mu\text{mol/L}$, the direct bilirubin level - 5 $\mu\text{mol/L}$, Hb- 150 g/L. Mother's blood group - 0(I), Rh+, child's blood group - A(II), Rh+. Make a diagnosis

a. Hepatitis

b. Jaundice due to conjugation disorder

c. Hemolytic disease of newborn (ABO incompatibility), icteric type

d. Physiological jaundice

e. Hemolytic disease of newborn (Rh - incompatibility)

198. A 3 month old infant suffering from acute segmental pneumonia has dyspnea (respiration rate - 80 per minute), paradoxical breathing, tachycardia, total cyanosis. Respiration and pulse - ratio is 1:2. The heart dullness under normal size. Such signs characterise:

a. Respiratory failure of I degree

b. Myocarditis

c. Congenital heart malformation

d. Respiratory failure of III degree

e. Respiratory failure of II degree

199. The 7 m.o. infant is suffering from acute pneumonia which was complicated by cardiovascular insufficiency and respiratory failure of II degree. The accompanied diagnosis is malnutrition of II degree. Choose the best variant of therapy:

a. Gentamycin and Macropen

b. Ampiox and Polymixin

c. Macropen and Penicillin

d. Penicillin and Ampiox

e. Ampiox and Amicacin

200. A 3 year old child has been suffering from fever, cough, coryza, conjunctivitis for 4 days. He has been taking sulfadimethoxine. Today it has fever up to 39°C and maculopapular rash on its face. Except of rash the child's skin has no changes. What is your diagnosis?

a. Measles

b. Rubella

c. Pseudotuberculosis

d. Scarlet fever

e. Allergic rash

201. A 2 year old girl has been ill for 3 days. Today she has low grade fever, severe catarrhal presentations, slight maculopapular rash on her buttocks and enlarged occipital lymph nodes. What is your diagnosis?

- a. Adenoviral infection
- b. Pseudotuberculosis
- c. Scarlet fever
- d. Measles

e. Rubella

202. A 3 year old boy fell ill abruptly: fever up to 39°C, weakness, vomitng. Haemorrhagic rash of various size appeared on his lower limbs within 5 hours. Meningococcemia with infective - toxic shock of the 1 degree was diagnosed. What medications should be administered?

- a. Chloramphenicol succinate and interferon
- b. Ampicillin and immunoglobulin
- c. Penicillin and prednisone
- d. Penicillin and immunoglobulin

e. Chloramphenicol succinate and prednisone

203. A 7 year old girl has mild form of varicella. Headache, weakness, vertigo, tremor of her limbs, ataxia, then mental confusion appeared on the 5th day of illness. Meningeal signs are negative. Cerebrospinal fluid examination is normal. How can you explain these signs?

- a. Meningitis
- b. Myelitis
- c. Neurotoxic syndrome

d. Encephalitis

e. Meningoencephalitis

204. A 7 y.o. girl fell ill abruptly: fever, headache, severe sore throat, vomiting. Minute bright red rash appear in her reddened skin in 3 hours. It is more intensive in axillae and groin. Mucous membrane of oropharynx is hyperemic. Greyish patches is on the tonsills. Submaxillary lymph nodes are enlarged and painful. What is your diagnosis?

a. Enteroviral infection

b. Scarlet fever

- c. Rubella
- d. Measles
- e. Pseudotuberculosis

205. An 8-year-old boy fell ill acutely: he presents with fever, weakness, headache, abdominal pain, recurrent vomiting, then diarrhea and tenesmus. Stools occur 12 times daily, are scanty, contain a lot of mucus, pus, streaks of blood. His sigmoid gut is tender and hardened. What is your diagnosis?

a. Escherichiosis

b. Dysentery

- c. Cholera
- d. Salmonellosis
- e. Staphylococcal gastroenteritis

206. A woman delivered a child. It was her fifth pregnancy but the first delivery. Mothers blood group is A(II)Rh-, newborns - A(II)Rh+. The level of indirect bilirubin in umbilical blood was 58 micromole/l, haemoglobin - 140 g/l, RBC- $3,8 \times 10^{12}/l$. In 2 hours the level of indirect bilirubin turned 82 micromole/l. The hemolytic disease of newborn (icteric-anemic type, Rh-incompatibility) was diagnosed. Choose the therapeutic tactics:

- a. Conservative therapy
- b. Symptomatic therapy

c. Antibiotics

d. Replacement blood transfusion (conservative therapy)

e. Blood transfusion (conservative therapy)

207. A mother with an infant visited the pediatrician for expertise advice. Her baby was born with body weight 3,2 kg and body length 50 cm. He is 1 year old now. How many teeth the baby should have?

a. 6

b. 8

c. 12

d. 10

e. 20

208. A mother consulted a pediatrician about her son. Her son was born with body mass of 3 kg and length of 48 cm. He is 1 year old now. What is the required normal mass?

a. 12,0 kg

b. 15,0 kg

c. 9,0 kg

d. 11,0 kg

e. 10,5 kg

209. 6 m.o. infant was born with body mass 3 kg and length 50 cm. He is given natural feeding. How many times per day the infant should be fed?

a. 5

b. 6

c. 4

d. 8

e. 7

210. Infant is 6,5 months now and is given natural feeding since birth. Body mass was 3,5 kg, with length 52 cm at birth. How many times per day the supplement (up feeding) should be given?

a. 4

b. 2

c. 1

d. 3

e. 0

211. A boy of 7 y.o. had an attack of asthma and distant whistling rales after playing with a dog. In the medical history: atopic dermatitis caused by eating eggs, chicken, beef. What group of allergens is the reason of the development of bronchial asthma attacks?

a. Itch mite

b. Chemical

c. Dust

d. Pollen

e. Epidermal

212. A 14-year-old boy has rheumatism. Over the last 2 years he has had 3 rheumatic attacks. What course of rheumatism does the patient have?

a. Prolonged

b. Subacute

c. Persistent-recurrent

- d. Latent
- e. Acute

213. The patient with acquired heart failure has diastolic pressure of 0 mm Hg. What heart failure does the child have?

- a. Mitral insufficiency
- b. Rheumatism
- c. Mitral stenosis
- d. Aortal stenosis
- e. Aortal insufficiency**

214. A 12 year old child has the ulcer disease of stomach. What is the etiology of this disease?

- a. Intestinal bacillus**
- b. Salmonella
- c. Influenza
- d. Lambliosis
- e. Helicobacter pylory

215. A nine year old child is at a hospital with acute glomerulonephritis. Clinical and laboratory examinations show acute condition. What nutrients must not be limited during the acute period of glomerulonephritis?

- a. Liquid
- b. Salt
- c. Carbohydrates**
- d. Proteins
- e. Fats

216. An 18-month-old child was taken to a hospital on the 4-th day of the disease. The disease began acutely with temperature 39, weakness, cough, breathlessness. He is pale, cyanotic, has had febrile temperature for over 3 days. There are crepitative fine bubbling rales on auscultation. Percussion sound is shortened in the right infrascapular region. X-ray picture shows non-homogeneous segment infiltration 8-10 mm on the right, the intensification of lung pattern. Your diagnosis:

- a. Bronchiolitis
- b. Interstitial pneumonia
- c. Grippe
- d. Bronchitis
- e. Segmentary pneumonia**

217. A 9-year-old girl has attacks of abdominal pain after fried food. No fever. She has pain in Cera point. The liver is not enlarged. Portion B [duodenal probe] - 50 ml. What is your diagnosis?

- a. Biliary tracts dyskinesia, hypotonic type**
- b. Acute colitis
- c. Peptic ulcer
- d. Chronic duodenum
- e. Hepatocirrhosis

218. A baby was born at 36 weeks of gestation. Delivery was normal, by natural way. The baby has a large cephalohematoma. The results of blood count are: Hb- 120g/l, Er- $3,5 \times 10^{12}/l$, total serum bilirubin - 123 mmol/l, direct bilirubin - 11 mmol/l, indirect - 112 mmol/l. What are causes of hyperbilirubinemia in this case?

- a. Bile condensing
- b. Mechanical obstruction of the bile outflow
- c. Intravascular hemolysis
- d. Disturbance of the conjugative function of liver

e. Erythrocyte hemolysis

219. A 4-month-old girl with blond hair and blue eyes has "mousy" odor of sweat and urine, delayed psychomotoric development. The most typical laboratory data for this disorder is:

- a. Low level of thyroid gland hormones in blood
- b. Positive urine ferric chloride test**
- c. High level of glycosaminoglycans in urine
- d. High level of oxyproline in urine
- e. High concentration of chlorides in sweat

220. A neonate is 5 days old. What vaccination dose of BCG vaccine (in mg) is necessary for vaccination of this child?

- a. 0,1 mg
- b. 0,2 mg
- c. 0,025 mg
- d. 0,075 mg
- e. 0,05 mg**

221. A neonate is 5 days old. What vaccination dose of BCG vaccine (in mg) is necessary for vaccination of this child?

- a. 0,2 mg
- b. 0,05 mg**
- c. 0,075 mg
- d. 0,025 mg
- e. 0,1 mg

222. 7 y.o. boy with chronic sinusitis and recurrent pulmonary infections has chest X-ray demonstrating a right-sided cardiac silhouette. What is the most likely diagnosis?

- a. Cystic fibrosis (mucoviscidosis)
- b. Laryngotracheomalacia
- c. alpha-antitrypsin deficiency
- d. Kartagener syndrome**
- e. Bronchiolitis obliterans

223. A 2,9-kg term male infant is born to a mother who developed polyhydramnios at 34 weeks gestation. At birth, the Apgar scores were 9 and 9. The infant develops choking and cyanosis with the first feed. In addition, is unable to place a nasogastric tube. What is the most likely diagnosis?

- a. Esophageal atresia**
- b. Laryngomalacia
- c. Respiratory distress syndrome
- d. Tracheal atresia
- e. Choanal atresia

224. Full term newborn has developed jaundice at 10 hours of age. Hemolytic disease of newborn due to Rh-incompatibility was diagnosed. 2 hours later the infant has indirect serum bilirubin level increasing up to 14 mmol/L. What is most appropriate for treatment of hyperbilirubinemia in this infant?

a. Exchange blood transfusion

b. Phenobarbital

c. Infusion therapy

d. Intestinal sorbents

e. Phototherapy

225. A man, 42 years old, died in a road accident after the hemorrhage on the spot, because of acute hemorrhagic anemia. What minimum percent of the whole blood volume could result in death by acute hemorrhage?

a. 25-30%

b. 10-14%

c. 35-50%

d. 15-20%

e. 6-9%

226. A 6 week old child is admitted because of tachypnea. Birth had been uneventful, although conjunctivitis developed on the third day of life and lasted for about 2 weeks. Physical examination reveals tachypnea, bilateral inspiratory crackles and single expiratory wheezing. Bilateral pneumonia is evident on chest X-ray. The child is afebrile and has no history of fever. White blood cell count is $15 \times 10^9/l$, with 28% of eosinophils. The most likely cause of this child's symptoms is:

a. *Clamidia trachomatis*

b. *Mycoplasma pneumoniae*

c. Varicella

d. Visceral larva migrans

e. *Pneumocystis carinii*

227. A 6 y.o. asthmatic child was taken to the emergency hospital because of severe coughing and wheezing for the last 24 hours. Physical examination reveals that the child is excitable, has intercostal and suprasternal retractions, expiratory wheezing throughout all lung fields, RR- 60/min. Initial treatment may include the prescription of:

a. Subcutaneous epinephrine

b. Intravenous fluids in the first 2 h to compensate water deficiency

c. Parenteral gentamicin

d. N-acetyl cysteine and cromolyn by inhalation

e. Parenteral phenobarbital

228. A full term infant was born after a normal pregnancy, delivery, however, was complicated by marginal placental detachment. At 12 hours of age the child, although appearing to be in good health, passes a bloody meconium stool. For determining the cause of the bleeding, which of the following diagnostic procedures should be performed first?

a. Gastric lavage with normal saline

b. An Apt test

c. Barium enema

d. An upper gastrointestinal series

e. Platelet count, prothrombin time, and partial thromboplastin time

229. In the 43rd week of gestation a long, thin infant was delivered. He is apneic, limp, pale, and covered with "pea soup" amniotic fluid. The first step in the resuscitation of this infant at delivery should be:

a. Artificial ventilation with bag and mask

b. Administration of 100% oxygen by mask

- c. Catheterization of the umbilical vein
- d. Suction of the trachea under direct vision**
- e. Artificial ventilation with endotracheal tube

230. A newborn infant has mild cyanosis, diaphoresis, poor peripheral pulse, hepatomegaly and cardiomegaly. Respiratory rate is 60 breaths per minute, and heart rate is 230 beats per minute. The child most likely has congestive heart failure caused by:

- a. A ventricular septal defect and transposition of the great vessels
- b. Hypoplastic left heart syndrome
- c. A large atrial septal defect and valvular pulmonary stenosis
- d. Paroxysmal atrial tachycardia**
- e. Atrial flutter and partial atrioventricular block

231. A 6-year-old boy was brought to the emergency room with a 3-hour history of fever up to 39,5°C and sore throat. The child looks alert, anxious and has a mild inspiratory stridor. You should immediately:

- a. Admit the child and place him in a mist tent
- b. Prepare to establish an airway**
- c. Order a chest x-ray and lateral view of the neck
- d. Obtain an arterial blood gas and start an IV line
- e. Examine the throat and obtain a culture

232. A 7 d.o. boy is admitted to the hospital for evaluation of vomiting and dehydration. Physical examination is otherwise normal except for minimal hyperpigmentation of the nipples. Serum sodium and potassium concentrations are 120 meq/L and 9 meq/L respectively. The most likely diagnosis is:

- a. Panhypopituitarism
- b. Hyperaldosteronism
- c. Pyloric stenosis
- d. Secondary hypothyroidism
- e. Congenital adrenal hyperplasia**

233. A 7 y.o. boy has crampy abdominal pain and a rash on the back of his legs and buttocks as well as on the extensor surfaces of his forearms. Laboratory analysis reveals proteinuria and microhematuria. He is most likely to be affected by:

- a. Polyarteritis nodosa
- b. Dermatomyositis
- c. Systemic lupus erythematosus
- d. Poststreptococcal glomerulonephritis
- e. Anaphylactoid purpura**

234. A 5-year-old boy was progressively getting worse compared to the previous 2 months. A chest x-ray has shown right middle lobe collapse. A tuberculin skin test was strongly positive. What is the most characteristic finding in primary tuberculosis?

- a. Miliary tuberculosis
- b. Hematogenous dissemination leading to extrapulmonary tuberculosis
- c. Atelectasis with obstructive pneumonia
- d. Cavity formation
- e. Hilar or paratracheal lymph node enlargement**

235. A girl is 12 y.o. Yesterday she was overcooled. Now she is complaining on pain in suprapubic area, frequent painful urination by small portions, temperature is 37,8°C. Pasternatsky symptom is negative.

Urine analysis: protein - 0,033 g/L, WBC- 20-25 in f/vis, RBC- 1-2 in f/vis. What diagnosis is the most probable?

- a. Dysmetabolic nephropathy
- b. Acute pyelonephritis
- c. Urolithiasis
- d. Acute cystitis**
- e. Acute glomerulonephritis

236. The girl of 11 y.o. She is ill for 1 month. She has "butterfly"-type rash on face (spots and papules), pain and swelling of small joints on arms and legs, signs of stomatitis (small-sized ulcers in mouth). CBC: Hb- 80 g/L, RBC- 2,91012/L, WBC- 15109/L, ESR- 40 mm/hour. Urinalysis: protein- 0,33 g/L. What is the most probable diagnosis?

- a. Juvenile rheumatoid arthritis, systemic type
- b. Acute rheumatic fever
- c. Dermatomyositis
- d. Systemic lupus erythematosus**
- e. Periarteritis nodosa

237. An infant aged 1 year on the third day of common cold at night developed inspiratory stridor, hoarse voice and barking cough. Physical examination revealed suprasternal and intercostal chest retractions. There is a bluish skin discoloration mostly seen over the upper lip. The respiratory rate is 52 per min and pulse- 122 bpm. The body temperature is 37,5°C. What disease does the infant have?

- a. Acute bronchiolitis with respiratory distress
- b. Acute epiglottitis
- c. Acute laryngitis
- d. Bronchopneumonia without complications
- e. Acute infectious croup due to viral laryngotracheitis**

238. A newborn aged 3 days with hyperbilirubinemia (428 mkmol/L) developed following disorders. From beginning there were severe jaundice with poor suckling, hypotonia and hypodynamia. Little bit later periodical excitation, neonatal convulsions and neonatal primitive reflexes loss are noted. Now physical examination reveals convergent squint, rotatory nystagmus and setting sun eye sign. How to explain this condition?

- a. Encephalopathy due to hyperbilirubinemia**
- b. Brain tumour
- c. Spastic cerebral palsy
- d. Hydrocephalus
- e. Skull injury

239. A child is 2 years old. The child complains of hoarse voice, dyspnea with obstructed inspiration. The disease started 3 days ago from dry cough and nose stuffiness. Objectively: general condition is unbalanced, stridor is present. The child's skin is pale. Body temperature is 37,7°C. The palatine arches are hyperemic. There is no deposit. Heart sounds are rhythmic. Auscultation of lungs reveals rough breathing sounds, crepitation is absent. Parainfluenza virus has been detected in nasopharynx lavage. What is the most likely diagnosis?

- a. Diphtheria
- b. Laryngospasm
- c. Epiglottitis
- d. Foreign body
- e. Acute laryngotracheitis**

240. A 3-year-old child has been admitted to a hospital because of ostealgia and body temperature rise up to 39°C. Objectively: the patient is in grave condition, unable to stand for ostealgia, there is apparent intoxication, lymph nodes are enlarged up to 1,5 cm. Liver can be palpated 3 cm below the costal margin, spleen - 2 cm below the costal margin. In blood: RBCs - $3,0 \times 10^{12}/l$, Hb- 87 g/l, colour index - 0,9, thrombocytes - $190 \times 10^9/l$, WBCs - $3,2 \times 10^9/l$, eosinophils - 1, stab neutrophils - 1, segmented neutrophils - 0, lymphocytes - 87, monocytes - 2, ESR - 36 mm/h. What examination should be conducted in order to specify the diagnosis?

- a. Lymph node biopsy
- b. Computer tomography
- c. Ultrasound
- d. Lymph node puncture
- e. Sternal puncture**

241. Apgar test done on a newborn girl at 1st and 5th minute after birth gave the result of 7-8 scores. During the delivery there was a short-term difficulty with extraction of shoulder girdle. After birth the child had the proximal extremity dysfunction and the arm could not be raised from the side. The shoulder was turned inwards, the elbow was flexed, there was also forearm pronation, obstetric palsy of brachial plexus. What is the clinical diagnosis?

- a. Duchenne-Erb palsy**
- b. Right hand osteomyelitis
- c. Trauma of right hand soft tissues
- d. Intracranial haemorrhage
- e. Trauma of thoracic spine

242. Examination of a 9-month-old girl revealed skin pallor, cyanosis during excitement. Percussion revealed transverse dilatation of cardiac borders. Auscultation revealed continuous systolic murmur to the left of the breastbone in the 3-4 intercostal space. This murmur is conducted above the whole cardiac region to the back. What congenital cardiac pathology can be suspected?

- a. Defect of interatrial septum
- b. Fallot's tetrad
- c. Pulmonary artery stenosis
- d. Defect of interventricular septum**
- e. Coarctation of aorta

243. A worker was temporarily off work because of illness for 16 days, was under out-patient treatment. The doctor in charge issued a sick-list first for 5 days, then prolonged it for 10 days. Who can further prolong the sick-list of this patient?

- a. Deputy head physician on the working ability expertise
- b. The head of department
- c. Working ability expertise committee
- d. The doctor in charge of the case with the permission of the head of department
- e. The doctor in charge of the case together with the head of department**

244. A 13 y.o. patient was treated in dermatological hospital for atopic dermatitis exacerbation. He was discharged in the condition of clinical remission. What recommendations should the doctor give to prevent exacerbations?

- a. Systematic skin disinfection
- b. Avoidance of skin insolation
- c. Frequent skin washing with detergents
- d. Systematic use of local corticosteroids

e. Use of neutral creams to protect skin

245. On the 21 day after appearance of vesiculous chickenpox rash a 7-year-old child developed ataxia, nystagmus, intention tremor, muscle hypotonia. Liquor analysis shows a low-grade lymphocytic pleocytosis, slightly increased protein rate. What complication is it?

a. Encephalitis

- b. Pneumonitis
- c. Postherpetic neuralgia
- d. Acute nephritis
- e. Purulent meningitis

246. An 8-year-old boy suffering from haemophilia was undergoing transfusion of packed red cells. Suddenly he felt pain behind the breastbone and in the lumbar area, dyspnea, cold sweat. Objectively: pale skin, heart rate - 100/min, AP - 60/40 mm Hg; oliguria, brown urine. For the treatment of this complication the following drug should be administered:

- a. Lasix
- b. Aminophylline
- c. Analgine

d. Prednisolone

- e. Adrenaline

247. A 3-year-old child has been diagnosed with type I diabetes mellitus, hyperosmolar coma. The laboratory confirmed the diagnosis. Which laboratory findings are characteristic for such condition?

a. Hyperglycemia and high indicators of acid-base balance

b. High hyperglycemia without ketonemia

- c. Hyperglycemia and glucosuria
- d. Hyperglycemia and ketonemia
- e. Hyperglycemia and ketonuria

248. A 3-year-old child was playing in a playpen when he suddenly developed paroxysmal cough and shortness of breath. Objectively: dry cough, mixed dyspnea. Lung auscultation revealed some wheezes. Breathing sounds on the right are diminished. The child doesn't mix with other children. Immunization is age-appropriate. What pathological condition can be suspected?

- a. Pertussis
- b. Bronchial asthma
- c. Pneumonia
- d. Acute respiratory viral infection

e. Foreign body in the respiratory tracts

249. A 10-year-old child has been followed-up for the dilated cardiomyopathy. The child presents with dyspnea, cardialgia. There are dense, nonmobile edemata on the lower extremities and sacrum. Ps-120/min. The cardiac borders are extended transversely. Heart sounds are muffled, there is blowing systolic murmur at the apex and over the xiphoid process. Liver is 3 cm enlarged, urine output is reduced. The blood total protein - 58.6 g/l. In urine: protein - 0,025 g/l, WBCs - 2-4 in the field of vision, RBCs - 2-3 in the field of vision. What is the main mechanism of edema syndrome development:

a. Hypoproteinemia

b. Venous congestion of greater circulation

- c. Peripheral circulation disorder
- d. Venous congestion of lesser circulation
- e. Secondary nephropathy development

250. A full-term child survived antenatal and intranatal hypoxia, it was born in asphyxia (2-5 points on Apgar score). After birth the child has progressing excitability, there are also vomiting, nystagmus, spasms, strabismus, spontaneous Moro and Babinsky reflexes. What localization of intracranial hemorrhage is the most probable?

- a. Hemorrhages into the brain ventricles
- b. Subarachnoid hemorrhage**
- c. Subdural hemorrhage
- d. Small cerebral tissue hemorrhages
- e. Periventricular hemorrhages

251. A 15 y.o. boy was twice attacked by bees, as a result he had severe anaphylactic shock. What is the most effective prophylaxis method?

- a. Prescription of corticosteroids for summer
- b. Limitation of outside staying during summer months
- c. Protective clothing
- d. Desensibilisation by means of bee venom extract**
- e. Long-term prophylactic treatment with antihistamines

252. A 9-year-old boy has been suffering from bronchoectasis since he was 3. Exacerbations occur quite often, 3-4 times a year. Conservative therapy results in short periods of remission. The disease is progressing, the child has physical retardation. The child's skin is pale, acrocyanotic, he has "watch glass" nail deformation. Bronchography revealed saccular bronchiectases of the lower lobe of his right lung. What is the further treatment tactics?

- a. Physiotherapeutic treatment
- b. Further conservative therapy
- c. Surgical treatment**
- d. Sanatorium-and-spa treatment
- e. Tempering of the child's organism

253. A child with tetralogy of Fallot is most likely to exhibit:

- a. Increased pulse pressure
- b. Increased pulmonary blood flow
- c. Increased pressure in the right ventricle**
- d. Normal pressure gradient across the pulmonary valve
- e. Normal oxygen tension (PaO₂) in the left ventricle

254. A 2-months-old child after preventive vaccination had a prolonged hemorrhage from the vaccination place and due to that an intramuscular hematoma. During examination of the child a considerable rise of prothrombin consumption and a significant prolongation of the activated partial thromboplastin time were found. What is the most probable diagnosis?

- a. Henoch-Schoenlein disease
- b. Werlhof's disease
- c. Hemophilia**
- d. Hemorrhagic disease of the neonate
- e. Inborn afibrinogenemia

255. A 10 y.o. boy with hemophilia has signs of acute respiratory viral infection with fever. What of the mentioned antifebrile medications are contraindicated to this patient?

- a. Paracetamol
- b. Panadol extra

- c. Analgin
- d. Pipolphen

e. Acetylsalicylic acid

256. A 7-year-old child is sick for 2 weeks with running nose, was taking nasal drops. The boy suffers with alimentary allergy. He applied to doctor due to suppurative and bloody discharges from nose, maceration of ala nasi and upper lip. Rhinoscopy results: there are whitish-greyish areas at nasal septum. Mucous membrane of oropharynx is not changed. What is the most probable disease?

- a. Allergic rhinitis
- b. Sinusitis (maxillar sinus))
- c. Adenovirus
- d. Rhinovirus

e. Diphtheria of the nose

257. A 10-year-old boy underwent treatment in cardiological department for rheumatism, I acute attack of rheumatic fever, active phase, II degree. The patient was discharged in satisfactory condition. Which drug should be chosen for prevention of rheumatism recurrence?

- a. Erythromycin
- b. Bicillinum-1

c. Bicillinum-5

- d. Ampicillin
- e. Oxacillin

258. A child is 4 years old, has been ill for 5 days. There are complaints of cough, skin rash, $t^{\circ} - 38,2^{\circ}\text{C}$, face puffiness, photophobia, conjunctivitis. Objectively: there is bright, maculo-papulous, in some areas confluent rash on the face, neck, upper chest. The pharynx is hyperemic. There are seropurulent discharges from the nose. Auscultation revealed dry rales in lungs. What is the most likely diagnosis?

- a. Scarlet fever
- b. Adenoviral infection

c. Measles

- d. Rubella
- e. Enterovirus exanthema

259. A 10 month old boy has been ill for 5 days after consumption of unboiled milk. Body temperature is $38-39^{\circ}\text{C}$, there is vomiting, liquid stool. The child is pale and inert. His tongue is covered with white deposition. Heart sounds are muffled. Abdomen is swollen, there is borborygmus in the region of umbilicus, liver is enlarged by 3 cm. Stool is liquid, dark-green, with admixtures of mucus, 5 times a day. What is the most probable diagnosis?

- a. Escherichiosis
- b. Staphylococcal enteric infection

c. Salmonellosis

- d. Acute shigellosis
- e. Rotaviral infection

260. A 3 year old child with weight deficiency suffers from permanent moist cough. In history there are some pneumonias with obstruction. On examination: distended chest, dullness on percussion over the lower parts of lungs. On auscultation: a great number of different rales. Level of sweat chloride is 80 millimol/l. What is the most probable diagnosis?

a. Mucoviscidosis (cystic fibrosis)

- b. Recurrent bronchitis

- c. Pulmonary hypoplasia
- d. Bronchiectasis
- e. Bronchial asthma

261. A 12 y.o. child with acute glomerulonephritis presented with hypertensive syndrom during first days of the disease. What is the role of angiotensin II in the pathogenesis?

- a. Inhibits depressive action of prostaglandins
- b. Increases heart output
- c. Intensifies production and secretion of aldosterone
- d. Increases erythropoietin production
- e. Increases renin level

262. A full-term infant is 3 days old. On the different parts of skin there are erythemas, erosive spots, cracks, areas of epidermis peeling. The infant has scalded skin syndrome. Nikolskys symptom is positive. General condition of the infant is grave. Anxiety, hyperesthesia, febrile temperature are evident. What is the most probable diagnosis?

- a. Impetigo neonatorum
- b. Mycotic erythema
- c. Phlegmon of newborn
- d. Fingers pseudofurunculosis
- e. Exfoliative dermatitis

263. District pediatrician examines a healthy carried 1-month-old child. The child is breast-fed. Prophylaxis of what disease will the doctor recommend to do first?

- a. Spasmophilia
- b. Parathyroid
- c. Anemia
- d. Hypotrophy
- e. Rachitis

264. A 7-year-old boy has been managed for a month. Immediately after hospitalization there were apparent edemata, proteinuria - 7,1 g/l, daily urine protein - 4,2 g. Biochemical blood test shows persistent hypoproteinemia (43,2 g/l), hypercholesterolemia (9,2 millimole/l). The patient is most likely have the following type of glomerulonephritis:

- a. Hematuric
- b. Combined
- c. Nephritic
- d. Isolated urinary
- e. Nephrotic

265. A 7 y.o. boy has been treated in a hospital for a month. At the time of admission he had evident edemata, proteinuria - 7,1 g/L, protein content in the daily urine - 4,2 g. Biochemical blood analysis reveals permanent hypoproteinemia (43,2 g/L), hypercholesterolemia (9,2 mmol/L). What variant of glomerulonephritis is the most probable?

- a. Nephritic
- b. Hematuric
- c. Mixed
- d. Nephrotic
- e. Isolated urinary

266. A 3 y.o. girl has had a temperature rise up to 38°C, rhinitis, dry superficial cough, flabbiness, appetite loss. Palpation didn't reveal any changes over her lungs. Percussion sound has a wooden resonance, auscultation revealed puerile breathing, no rales. In blood: leukopenia, lymphocytosis, increased ESR. What is the most probable diagnosis?

a. Bilateral microfocal pneumonia

b. Acute simple tracheitis

c. Recurrent bronchitis, acute condition

d. Acute obstructive bronchitis

e. Acute simple bronchitis

267. A 5-year-old child had an attack of palpitation with nausea, dizziness, generalized fatigue. On ECG: tachycardia with heartbeat rate of 220/min. Ventricle complexes are deformed and widened. P wave is absent. What medication is to be prescribed to provide first aid?

a. Isoptin

b. Novocainamides

c. Strophantin

d. Lidocaine

e. Seduxen

268. Examination of a 4 month old child revealed some lemon-yellow squamæ with fatty crusts on the scalp. What is the most probable diagnosis?

a. Strophulus

b. Milk crust

c. Gneiss

d. Pseudofurunculosis

e. Infantile eczema

269. A neonate from gestation with severe gestosis of the second half was born on the 41st week with 2400 g birth weight and 50cm long. On physical examination: skin is flaccid, subcutaneous fatty cellular tissue is thin, muscle hypotonia, new-born period reflexes are decreased. Internal organs are without pathological changes. How would you estimate this child?

a. Immature infant

b. Premature infant

c. Term infant with pre-natal growth retardation

d. Postmature infant

e. Term infant with normal body weight

270. A child is 7 months old. Birth weight was 3450, the child is breastfed. Supplemental feeding was introduced on time. Determine the daily protein requirements for the child:

a. 4,0 g/kg

b. 3,0 g/kg

c. 2,5 g/kg

d. 2,0 g/kg

e. 3,5 g/kg

271. 2 weeks after recovering from angina an 8-year-old boy developed edemata of face and lower limbs. Objectively: the patient is in grave condition, AP- 120/80 mm Hg. Urine is of dark brown colour. Oliguria is present. On urine analysis: relative density - 1,015, protein - 1,2 g/l, RBCs are leached and cover the whole vision field, granular casts - 1-2 in the vision field, salts are represented by urates (big number). What is the most likely diagnosis?

- a. Acute glomerulonephritis with isolated urinary syndrome
- b. Nephrolithiasis
- c. Acute glomerulonephritis with nephrotic syndrome
- d. Acute glomerulonephritis with nephrotic syndrome, hematuria and hypertension
- e. Acute glomerulonephritis with nephritic syndrome**

272. A 14 year old child suffers from vegetovascular dystonia of pubertal period. He has got sympathoadrenal attack. What medicine should be used for attack reduction?

- a. Amysyl
- b. No-shpa
- c. Obsidan**
- d. Aminophylline
- e. Corglicone

273. A child is 9 months old. The patients body temperature is 36,7°C, the skin is pale, humid, there is pain in leg muscles. There is no extremities mobility, sensitivity is present. The child has been diagnosed with poliomyelitis. The causative agent of this disease relates to the following family:

- a. Paramyxovirus
- b. Adenovirus
- c. Rotavirus
- d. Picornavirus**
- e. Tohovirus

274. A 4 month old child fell seriously ill: body temperature rose up to 38,5°C, the child became inert and had a single vomiting. 10 hours later there appeared rash over the buttocks and lower limbs in form of petechiae, spots and papules. Some haemorrhagic elements have necrosis in the centre. What is the most probable disease?

- a. Rubella
- b. Haemorrhagic vasculitis
- c. Scarlet fever
- d. Meningococemia**
- e. Influenza

275. A 13 year old girl was admitted to the cardiological department because of pain in the muscles and joints. Examination of her face revealed an edematous erythema in form of butterfly in the region of nose bridge and cheeks. What is the most probable diagnosis?

- a. Systemic lupus erythematosus**
- b. Dermatomyositis
- c. Periarthritis nodosa
- d. Rheumatoid arthritis
- e. Rheumatism

276. A 12 year old girl complains about abrupt weakness, nausea, dizziness, vision impairment. The day before she ate home-made stockfish, beef. Examination revealed skin pallor, a scratch on the left knee, dryness of mucous membranes of oral pharynx, bilateral ptosis, mydriatic pupils. The girl is unable to read a simple text (mist over the eyes). What therapy would be the most adequate in this case?

- a. Parenteral introduction of antitetanus serum
- b. Parenteral introduction of polyvalent antitoxin serum**
- c. Parenteral introduction of antibiotics
- d. Parenteral disintoxication

e. Gastric lavage

277. A child from the first non-complicated pregnancy but complicated labor had cephalhematoma. On the second day there developed jaundice. On the 3th day appeared changes of neurologic status: nystagmus, Graefes sign. Urea is yellow, feces- golden-yellow. Mothers blood group is A(II)Rh-, child- A(II)Rh+. On the third day childs Hb- 200 g/L, RBC- $6,1 \times 10^{12}/L$, bilirubin in blood - 58 mk mol/L due to unconjugated bilirubin, Ht- 0,57. What is the childs jaundice explanation?

a. Physiologic jaundice

b. Bile ducts atresia

c. Fetal hepatitis

d. Brain delivery trauma

e. Hemolytic disease of newborn

278. A full-term baby (the 1st uncomplicated pregnancy, difficult labour) had a cephalogematoma. On the 2nd day there was jaundice, on the third the following changes in neurological status appeared: nystagmus, Graefe syndrome. Urine was yellow, feces were of golden-yellow colour. Mothers blood group is A (II) Rh-, the babys one - A (II) Rh+. On the third day the childs Hb was 200g/l, RBCs - $6,1 \times 10^{12}/l$, blood bilirubin - 58 micromole/l at the expense of unbound fraction. What caused the jaundice in the child?

a. Biliary atresia

b. Fetal hepatitis

c. Physiological jaundice

d. Neonatal anaemia

e. Craniocerebral birth trauma

279. After birth a child was pale and had arrhythmical breathing. Oxygen therapy didnt have any effect. Pulse was weak and rapid. It was difficult to measure arterial pressure accurately. There were no edemata. What is the most likely reason for these symptoms?

a. Congenital pneumonia

b. Asphyxia

c. Intracranial haematoma

d. Congestive heart failure

e. Intrauterine sepsis

280. A child was delivered severely premature. After the birth the child has RI symptoms, anasarca, fine bubbling moist rales over the lower lobe of the right lung. Multiple skin extravasations, bloody foam from the mouth have occurred after the 2 day. On chest X-ray: atelectasis of the lower lobe of the right lung. In blood: Hb-100 g/L, Ht- 0,45. What is the most probable diagnosis?

a. Hyaline membrane disease

b. Congenital pneumonia

c. Disseminated intravascular clotting syndrome

d. Pulmonary edema

e. Edematous-hemorrhagic syndrome

281. A 10-year-old child is sick with chronic viral hepatitis B with marked activity of the process. Total bilirubin - 70 μ mol/L, direct - 26 μ mol/L, indirect - 44 μ mol/L. AST - 6,2 mmol/L, ALT - 4,8 mmol/L. What mechanism underlies the transaminase level increase of this patient?

a. Cytolysis of hepatocytes

b. Hypersplenism

c. Failure of bilirubin conjugation

- d. Intrahepatic cholestasis
- e. Failure of the synthetic function of the liver

282. A 14-year-old girl has been presenting with irritability and tearfulness for about a year. A year ago she was also found to have diffuse enlargement of the thyroid gland (II grade). This condition was regarded as a pubertal manifestation, the girl didn't undergo any treatment. The girl's irritability gradually gave place to a complete apathy. The girl got puffy face, soft tissue pastosity, bradycardia, constipations. Skin pallor and gland density progressed, the skin became of a waxen hue. What disease may be suspected?

- a. Diffuse toxic goiter
- b. Subacute thyroiditis
- c. Juvenile basophilism
- d. Autoimmune thyroiditis**
- e. Thyroid carcinoma

283. In the anamnesis of a 2-year-old girl there are recurrent pneumonias with signs of obstruction. There are heterogeneous moist and dry rales, respiration is weakened. Dense, viscous secretion is difficult to hawk. There are "drumsticks", physical retardation. What is the most probable diagnosis?

- a. Recidivating bronchitis
- b. Congenital pulmonary polycystosis
- c. Pulmonary tuberculosis
- d. Mucoviscidosis, pulmonary form**
- e. Bronchial asthma

284. On the 3rd day of life a baby presented with haemorrhagic rash, bloody vomit, black stool. Examination revealed anaemia, extended coagulation time, hypoprothrombinemia, normal thrombocyte rate. What is the optimal therapeutic tactics?

- a. Epsilon-aminocaproic acid
- b. Sodium ethamsylate
- c. Vitamin K**
- d. Fibrinogen
- e. Calcium gluconate

285. A 2 month old full-term child was born with weight 3500 g and was on the mixed feeding. Current weight is 4900 g. Evaluate the current weight of the child:

- a. 150 g less than necessary
- b. Hypotrophy of the II grade
- c. Paratrophy of the I grade
- d. Corresponding to the age**
- e. Hypotrophy of the I grade

286. A 2 m.o. breast-fed child suffers from cheek skin hyperemia, sporadic papulous elements on the skin of the chest and back following the apple juice introduction. The child is restless. What is the initial pediatrician's tactics?

- a. Refer to prescribe dermatologist
- b. Treat with claritine
- c. Apply ointment with corticosteroids to affected skin areas
- d. Clarify mother's diet and exclude obligate allergens**
- e. Administer general ultraviolet irradiation

287. A 5 month old boy was born prematurely, he didn't suffer from any disease at the infant age and later on. Examination at an outpatient's hospital revealed paleness of skin, sleepiness. Blood count: Hb - 95 g/l, erythrocytes - $3,5 \times 10^{12}/l$, reticulocytes - 90/100, colour index - 0,7, osmotic stability of erythrocytes - 0,44-0,33%, serum iron - 4,9 micromole/l. What is the most probable cause of anemia?

- a. Hemogenesis immaturity
- b. Erythrocyte hemolysis
- c. B12 deficit
- d. Iron deficit**
- e. Infectious process

288. A 7 y.o. child had elevation of temperature to 40°C in anamnesis. For the last 3 months he presents fusiform swelling of fingers, ankle joints and knee joint, pain in the upper part of the sternum and cervical part of the spinal column. What is the most probable diagnosis?

- a. Toxic synovitis
- b. Rheumatism
- c. Juvenile rheumatic arthritis**
- d. Septic arthritis
- e. Osteoarthritis

289. An 8 year old girl complains about joint pain, temperature rise up to 38°C , dyspnea. Objectively: the left cardiac border is deviated by 2,5 cm to the left, tachycardia, systolic murmur on the apex and in the V point are present. Blood count: leukocytes - $20,0 \times 10^9/l$, ESR - 18 mm/h. What sign gives the most substantial proof for rheumatism diagnosis?

- a. Fever
- b. Accelerated ESR
- c. Arthralgia
- d. Leukocytosis
- e. Carditis**

290. A 5 y.o. child with stigmas of dysmaturational syndrome (small chin, thick lips, opened mouth, hyperthelorum) has systolic murmur in the second intercostal to the right of the sternum. The murmur passes to the neck and along the sternum left edge. The pulse on the left brachial artery is weakened. BP on the right arm is 110/60 mm Hg, on the left - 100/60 mm Hg. ECG results: hypertrophy of the right ventricle. What defect is the most probable?

- a. Open aortic duct
- b. Aortic stenosis**
- c. Defect of interatrial septum
- d. Defect of interventricular septum
- e. Coarctation of the aorta

291. A 1,5-year-old child fell ill acutely with high temperature 38°C , headache, fatigue. The temperature declined on the fifth day, muscular pain in the right leg occurred in the morning, there were no movements and tendon reflexes, sensitivity was reserved. What is the initial diagnosis?

- a. Polyarthropathy
- b. Viral encephalitis
- c. Polyomyelitis**
- d. Osteomyelitis
- e. Hip joint arthritis

292. A 3-year-old child has been delivered to a hospital in soporose state with considerable amyotonia,

inhibition of tendon and periosteal reflexes. Miosis and asthenocoria are also present. Corneal reflexes are preserved. Pulse is rapid and weak. AP- 80/50 mm Hg. The parents suspect the child of accidental taking some tablets. Such clinical presentations are typical for intoxication with the following tableted drugs:

- a. Antropine drugs
- b. Barbiturates
- c. Beta-2-adrenoceptor agonists
- d. Tranquilizers**
- e. Antihypertensive drugs

293. A 2 m.o. child with birth weight 5100 g has jaundice, hoarse cry, umbilical hernia, physical development lag. Liver is +2 cm enlarged, spleen is not enlarged. In anamnesis: delayed falling-away of umbilical cord rest. In blood: Hb- 120 g/L, erythrocytes - $4,5 \times 10^{12}/L$, ESR- 3 mm/h. Whole serum bilirubin is 28 mcmmole/L, indirect - 20 mcmmole/L, direct - 8 mcmmole/L. What is the most probable diagnosis?

- a. Conjugated jaundice
- b. Cytomegalovirus infection
- c. Congenital hepatitis
- d. Hemolytic anemia
- e. Congenital hypothyreosis**

294. A 5-year-old child developed an acute disease starting from body temperature rise up to $38,5^{\circ}C$, running nose, cough and conjunctivitis. On the 4th day the child presented with maculo-papular rash on face. Body temperature rose again up to $39,2^{\circ}C$. Over the next few days the rash spread over the whole body and extremities. Mucous membrane of palate was hyperemic, there was whitish deposition on cheek mucous membrane next to molars. What is your provisional diagnosis?

- a. Enterovirus diseases
- b. Rubella
- c. Acute viral respiratory infection
- d. Yersinia
- e. Measles**

295. A 3 year old child fell acutely ill, body temperature rose up to $39,5^{\circ}C$, the child became inert, there appeared recurrent vomiting, headache. Examination revealed positive meningeal symptoms, after this lumbal puncture was performed. Spinal fluid is turbid, runs out under pressure, protein concentration is 1,8 g/l; Pandy reaction is +++, sugar concentration is 2,2 millimole/l, chloride concentration - 123 millimole/l, cytois is $2,35 \times 10^9$ (80% of neutrophils, 20% of lymphocytes). What is the most probable diagnosis?

- a. Brain tumour
- b. Purulent meningitis**
- c. Serous tuberculous meningitis
- d. Serous viral meningitis
- e. Subarachnoid haemorrhage

296. A child is 1 y.o. Within the last months after the beginning of supplemental feeding the child has appetite loss, diarrhea with massive defecation, sometimes vomiting. Objectively: body temperature is normal. Body weight is 7 kg. Evident pallor of skin, leg edemata, enlarged abdomen. Coprogram shows a lot of fatty acids and soaps. The child was diagnosed with celiac disease and prescribed gluten-free diet. What should be excluded from the dietary intake in this case?

- a. Animal protein
- b. Digestible carbohydrates

c. Milk and dairy produce

d. Fruit

e. Cereals - wheat, oats

297. A child is 1 year old. After the recent introduction of complementary feeding the child has presented with loss of appetite, diarrhea with large amounts of feces and occasional vomiting, body temperature is normal. Objectively: body weight is 7 kg, the child is very pale, there are edemata of both legs, abdomen is significantly enlarged. Coprogram shows many fatty acids and soaps. The child has been diagnosed with celiac disease and administered the gluten-free diet. What is to be excluded from the ration?

a. Cereals - wheat and oats

b. Fruit

c. High digestible carbohydrates

d. Animal protein

e. Milk and dairy products

298. A 7-year-old child was brought to a doctor for a check. The child has a 4-year history of bronchial asthma, asthma attacks occur mainly in spring and summer. Allergy tests revealed hypersensitivity to poplar seed tufts, field herbs. What recommendation should be given?

a. Phytotherapy

b. Needle reflexotherapy

c. Physiotherapy

d. Treatment at a health resort

e. Specific hyposensitization

299. An 8 y.o. boy complains of constant cough along with discharge of greenish sputum, dyspnea during physical activities. At the age of 1 year and 8 months he fell ill for the first time with bilateral pneumonia that had protracted course. Later on there were recurrences of the disease 5-6 times a year, during the remission periods there was constant productive cough. What examination results will be the most important for making a final diagnosis?

a. Bacterial inoculation of sputum

b. Roentgenography of thorax organs

c. Bronchography

d. Bronchoscopy

e. Spirography

300. A mother of a 5 y.o. girl consulted a doctor about daughter's involuntary urination at night, nightmares, sleep disorders, slow gaining of body weight. Objectively: malnutrition, intellectual development is good, the girl can read and explains common situations quite adultly. Her skin is very pale, liver is enlarged in size. Her mother suffers from cholelithiasis. What type of diathesis is the most probable in the child's case?

a. Gouty diathesis

b. Exudative diathesis

c. Lymphohypoplastic diathesis

d. Allergic diathesis

e. Urine acid diathesis

301. A 10 year old girl complains about abdominal pain that is arising and getting worse after eating rough or spicy food. She complains also about sour eructation, heartburn, frequent constipations, headache, irritability. She has been suffering from this for 12 months. Objectively: the girl's diet is adequate. Tongue is moist with white deposit at the root. Abdomen is soft, painful in its epigastric part. What study method

will help to make a diagnosis?

- a. Biochemical blood analysis
- b. Esophagogastroduodenoscopy**
- c. Fractional examination of gastric juice
- d. Intra-gastral pH-metry
- e. Contrast roentgenoscopy

302. A 1,5 y.o. child fell seriously ill: chill, body temperature rise up to 40,1°C, then rapid dropping to 36,2°C, skin is covered with voluminous hemorrhagic rash and purple cyanotic spots. Extremities are cold, face features are sharpened. Diagnosis: meningococcosis, fulminant form, infection-toxic shock. What antibiotic must be used at the pre-admission stage?

- a. Soluble Levomycetine succinate**
- b. Lincomycin
- c. Sulfamonometoxin
- d. Gentamycin
- e. Penicillin

303. A 10 year old boy suffers from chronic viral hepatitis type B with maximal activity. What laboratory test can give the most precise characteristic of cytolysis degree?

- a. Weltmans coagulation test
- b. Prothrombin test
- c. Test for whole protein
- d. Transaminase test**
- e. Takata-Ara test

304. A 10 y.o. child who is at oligoanuretic stage of acute renal insufficiency has got sensations of pricking in the mucous membrane of oral cavity and tongue, extremities numbness, reduced reflexes, respiratory disturbance, arrhythmia. What are these symptoms caused by?

- a. Alkalosis
- b. Hyperkalemia**
- c. Hyperazotemia
- d. Hyponatremia
- e. Acidosis

305. Examination of a 12 year old child revealed diffuse thyroid enlargement of the II degree. Heart auscultation revealed dullness of heart sounds, heart rate was 64/min. The child has frequent constipations, anemia. Concentration of thyroglobulin antibodies is increased. What disease might have caused such symptoms?

- a. Thyroid carcinoma
- b. Diffuse toxic goiter
- c. Autoimmune thyroiditis**
- d. Thyroid hyperplasia
- e. Endemic goiter

306. An 8-year-old girl has been admitted to the cardiology department. Objectively: there is a skin lesion over the extensor surfaces of joints with atrophic cicatrices, depigmentation, symmetrical affection of skeletal muscles (weakness, edema, hypotrophy). What disease are these changes most typical for?

- a. Systemic lupus erythematosus
- b. Reiters disease
- c. Systemic scleroderma

d. Nodular periarteritis

e. Dermatomyositis

307. A 13 y.o. teenager who suffers from hemophilia A was taken to the hospital after a fight at school. His diagnosis is right-sided hemarthrosis of knee joint, retroperitoneal hematoma. What should be primarily prescribed?

a. Washed thrombocytes

b. Aminocaproic acid

c. Fresh frozen plasma

d. Placental albumin

e. Dry plasma

308. A 3 m.o. child fell seriously ill, body temperature rised up to 37,8°C, there is semicough. On the 3-rd day the cough grew worse, dyspnea appeared. On percussion: tympanic sound above lungs, on auscultation: a lot of fine moist and wheezing rales during expiration. What is the most probable diagnosis?

a. Acute respiratory viral infection, bronchitis

b. Acute respiratory viral infection, bronchopneumonia

c. Acute respiratory viral infection, bronchiolitis

d. Acute respiratory viral infection, bronchitis with asthmatic component

e. Acute respiratory viral infection, focal pneumonia

309. On the 1st day of life a full-term girl (2nd labour) weighing 3500g, with Apgar score of 8 points, presented with jaundice. Indirect bilirubin of blood - was 80 micromole/l, 6 hours later - 160 micromole/l. What is the optimal method of treatment?

a. Phototherapy

b. Phenobarbital treatment

c. Enterosorbents

d. Exchange blood transfusion

e. Infusion therapy

310. A child was born at a gestational age of 34 weeks in grave condition. The leading symptoms were respiratory distress symptoms, namely sonorous and prolonged expiration, involving additional muscles into respiratory process. The Silverman score at birth was 0 points, in 3 hours it was 3 points with clinical findings. Which diagnostic study will allow to diagnose the form of pneumopathy?

a. Determination of blood gas composition

b. Clinical blood test

c. X-ray of chest

d. Proteinogram

e. Immunoassay

311. A 10-year-old girl consulted a doctor about thirst, frequent urination, weight loss. She has been observing these symptoms for about a month. Objectively: no pathology of internal organs was revealed. What laboratory analysis should be carried out in the first place?

a. Glucose in urine test on the base of daily diuresis

b. Glucose tolerance test

c. Glucosuric profile

d. Blood glucose analysis on an empty stomach

e. Acetone in urine test

312. After a 10-year-old child had been bitten by a bee, he was delivered to a hospital. There were lip, face and neck edemata. The patient felt hot and short of breath. Objectively: breathing was laboured and noisy. There were foamy discharges from the mouth, cough. The skin was pale and cold. There was bradypnoea. Heart sounds were muffled and arrhythmic. Thready pulse was present. What diagnosis was made by the expert in resuscitation?

a. Cerebral coma

b. Anaphylactic shock

c. Bronchial asthma

d. Quinckes edema

e. Acute cardiovascular collapse

313. A 3-year-old girl presents with pertussis-like cough with thick sputum. There have been persistent changes in lungs since the age of 6 months when she was first diagnosed with acute pneumonia. Chloride concentration in the perspiration is 112 mEq/l. The child has been diagnosed with mucoviscidosis. What is the basis for autosomal recessive disease - mucoviscidosis?

a. Pulmonary artery hypoplasia

b. Inadequate transport of sodium and chloride ions

c. Deposition of calcium triphosphates and carbates in the alveoles

d. α 1-antitrypsin deficiency

e. Pulmonary cysts

314. 15 minutes after the second vaccination with DTP vaccine a 4-month-old boy exhibited the symptoms of Quinckes edema. What medication should be given for emergency aid?

a. Adrenalin

b. Heparin

c. Prednisolone

d. Furosemide

e. Seduxen

315. A full-term baby was born with body weight of 3200 g, body length of 50 cm, Apgar score - 8-10 points. What is the optimum time for the first breast-feeding?

a. First 48 hours

b. After 48 hours

c. First 6 hours

d. First 24 hours

e. First 30 minutes

316. A 3-year-old child has been taken to a pediatrician. He has no recent history of any diseases. Objective examination revealed no pathology of the internal organs. The child needs the routine immunization against the following disease:

a. Type B hepatitis

b. Poliomyelitis

c. Measles, rubella, parotitis

d. Diphtheria and tetanus

e. Pertussis

317. A 10-year-old girl was admitted to a hospital with carditis presentations. It is known from the anamnesis that two weeks ago she had exacerbation of chronic tonsillitis. What is the most likely etiological factor in this case?

a. Staphylococcus

- b. Klebsiella
- c. Proteus
- d. Streptococcus**
- e. Pneumococcus

318. Head circumference of a 1-month-old boy with signs of excitement is 37 cm, prefontanel is 2x2 cm large. After feeding the child regurgitates small portions of milk; stool is normal in respect of its volume and composition. Muscle tonus is within norm. What is the most likely diagnosis?

- a. Microcephaly
- b. Craniostenosis
- c. Meningitis
- d. Pylorostenosis
- e. Pylorospasm**

319. On the second day after preventive vaccination a 2-year-old boy presented with abdominal pain without clear localization, body temperature rose up to 38°C. On the third day the child got red papular haemorrhagic eruption on the extensor surfaces of limbs and around the joints. Knee joints were edematic and slightly painful. Examination of other organs and systems revealed no pathological changes. What is the most likely diagnosis?

- a. Haemorrhagic vasculitis**
- b. Meningococemia
- c. DIC syndrome
- d. Urticaria
- e. Thrombocytopenic purpura

320. On the 6th day of life a child got multiple vesicles filled with seropurulent fluid in the region of occiput, neck and buttocks. General condition of the child is normal. What disease should be suspected?

- a. Miliaria
- b. Impetigo neonatorum
- c. Vesiculopustulosis**
- d. Impetigo
- e. Epidermolysis bullosa

321. An 8 year old child has low-grade fever, arthritis, colicky abdominal pain and a purpuric rash llocalized on the lower extremities. laboratory studies reveal a guaiac-positive stool, urinalysis with red blood cell (RBC) casts and mild proteinuria, and a normal platelet count. The most likely diagnosis is:

- a. Henoch-Schonleins vasculitis**
- b. Rocky Mountain spotted fever
- c. Poststreptococcal glomerulonephritis
- d. Idiopathic thrombocytopenic purpura
- e. Systemic lupus erythematosus (SLE)

322. A young man has painful indurations in the peripapillary regions of both mammary glands. The most reasonable action will be:

- a. To administer steroids locally
- b. To leave these indurations untouched**
- c. To cut and drain them
- d. To remove them
- e. To take an aspirate for bacterial inoculation and cytology

323. A 9 year old girl with a history of intermittent wheezing for several years is brought to the pediatrician. The child has been taking no medications for some time. Physical examination reveals agitation and perioral cyanosis. Intercostal and suprasternal retractions are present. The breath sounds are quiet, and wheezing is audible bilaterally. The child is admitted to the hospital. Appropriate interventions might include all of the following textbfEXCEPT:

- a. Administer supplemental oxygen
- b. Prescribe intravenous aminophylline
- c. Prescribe nebulized cromolyn sodium**
- d. Prescribe intravenous corticosteroids
- e. Prescribe nebulized metaproterenol

324. Patient with thyreotoxicosis is in the 2 beds hospital ward of therapeutic department. The area of the ward is 18 m², height 3 m, ventilation rate 2,5/hr. Air temperature - 20°C, relative humidity - 45%, air movement velocity - 0,3 m/s, light coefficient - 1/5, noise level - 30 dB. Do hygienic evaluation of the conditions meet the standards?

- a. All conditions meet the requirements
- b. Discomfortable microclimate**
- c. Poor lighting
- d. Non-effective ventilation
- e. High level of noise

325. A 10-year-old child complains of fever (temperature is 39°C), frequent painful urination [pollakiuria]. Urine test: proteinuria [0,066 g/L], leukocyturia [entirely within eyeshot], bacteriuria [105 colony forming units/mL]. What is the most probable diagnosis?

- a. Acute cystitis
- b. Urolithiasis
- c. Acute glomerulonephritis
- d. Dysmetabolic nephropathy
- e. Acute pyelonephritis**

326. The 10 y.o. boy has complains on headache, weakness, fever 40°C, vomiting, expressed dyspnea, pale skin with flush on right cheek, lag of right hemithorax respiratory movement, dullness on percussion over low lobe of right lung, weakness of vesicular respiration in this zone. The abdomen is painless and soft at palpation. Which disease lead to these symptoms and signs?

- a. Acute cholecystitis
- b. Flu
- c. Intestinal infection
- d. Acute appendicitis
- e. Pneumonia crouposa**

327. A baby boy was born in time, it was his mothers 1st pregnancy. The jaundice was revealed on the 2nd day of life, then it progressed. The adynamia, vomiting and hepatomegaly were presented. The indirect bilirubin level was 275 μmol/L, the direct bilirubin level - 5 μmol/L, Hb- 150 g/L. Mothers blood group - 0(I), Rh+, childs blood group - A(II), Rh+. Make a diagnosis

- a. Hemolytic disease of newborn (Rh - incompatibility)
- b. Hemolytic disease of newborn (ABO incompatibility), icteric type**
- c. Hepatitis
- d. Jaundice due to conjugation disorder
- e. Physiological jaundice

328. A neonate was born from the 1st gestation on term. The jaundice was revealed on the 2nd day of life, then it became more acute. The adynamia, vomiting and hepatomegaly were observed. Indirect bilirubin level was 275 μmol/L, direct bilirubin level - 5 μmol/L, Hb- 150 g/l. Mothers blood group - O(I), Rh+, child's blood group - A(II), Rh+. What is the most probable diagnosis?

- a. Hepatitis
- b. Jaundice due to conjugation disorder
- c. Hemolytic disease of the neonate (ABO incompatibility), icteric type**
- d. Physiological jaundice
- e. Hemolytic disease of the neonate (Rh - incompatibility)

329. A 3 month old infant suffering from acute segmental pneumonia has dyspnea (respiration rate - 80 per minute), paradoxical breathing, tachycardia, total cyanosis. Respiration and pulse - ratio is 1:2. The heart dullness under normal size. Such signs characterise:

- a. Respiratory failure of III degree**
- b. Respiratory failure of II degree
- c. Congenital heart malformation
- d. Myocarditis
- e. Respiratory failure of I degree

330. The 7 m.o. infant is suffering from acute pneumonia which was complicated by cardiovascular insufficiency and respiratory failure of II degree. The accompanied diagnosis is malnutrition of II degree. Choose the best variant of therapy:

- a. Ampiox and Polymixin
- b. Ampiox and Amicacin**
- c. Penicillin and Ampiox
- d. Macropen and Penicillin
- e. Gentamycin and Macropen

331. A 3 year old child has been suffering from fever, cough, coryza, conjunctivitis for 4 days. He has been taking sulfadimethoxine. Today it has fever up to 39°C and maculopapular rash on its face. Except of rash the child's skin has no changes. What is your diagnosis?

- a. Allergic rash
- b. Scarlet fever
- c. Pseudotuberculosis
- d. Measles**
- e. Rubella

332. A 3 year old boy fell ill abruptly: fever up to 39°C, weakness, vomiting. Haemorrhagic rash of various size appeared on his lower limbs within 5 hours. Meningococemia with infective - toxic shock of the 1 degree was diagnosed. What medications should be administered?

- a. Chloramphenicol succinate and prednisone**
- b. Penicillin and immunoglobulin
- c. Ampicillin and immunoglobulin
- d. Chloramphenicol succinate and interferon
- e. Penicillin and prednisone

333. A 7 y.o. girl fell ill abruptly: fever, headache, severe sore throat, vomiting. Minute bright red rash appear in her reddened skin in 3 hours. It is more intensive in axillae and groin. Mucous membrane of oropharynx is hyperemic. Greyish patches is on the tonsils. Submaxillary lymph nodes are enlarged and painful. What is your diagnosis?

- a. Measles
- b. Pseudotuberculosis
- c. Enteroviral infection
- d. Scarlet fever**
- e. Rubella

334. A woman delivered a child. It was her fifth pregnancy but the first delivery. Mothers blood group is A(II)Rh-, newborns - A(II)Rh+. The level of indirect bilirubin in umbilical blood was 58 micromole/l, haemoglobin - 140 g/l, RBC- $3,8 \times 10^{12}/l$. In 2 hours the level of indirect bilirubin turned 82 micromole/l. The hemolytic disease of newborn (icteric-anemic type, Rh-incompatibility) was diagnosed. Choose the therapeutic tactics:

- a. Antibiotics
- b. Replacement blood transfusion (conservative therapy)**
- c. Blood transfusion (conservative therapy)
- d. Conservative therapy
- e. Symptomatic therapy

335. A mother with an infant visited the pediatrician for expertise advice. Her baby was born with body weight 3,2 kg and body length 50 cm. He is 1 year old now. How many teeth the baby should have?

- a. 8**
- b. 12
- c. 6
- d. 20
- e. 10

336. 6 m.o. infant was born with bodys mass 3 kg and length 50 cm. He is given natural feeding. How many times per day the infant should be fed?

- a. 6
- b. 7
- c. 5**
- d. 8
- e. 4

337. Infant is 6,5 months now and is given natural feeding since birth. Body mass was 3,5 kg, with length 52 cm at birth. How many times per day the supplement (up feeding) should be given?

- a. 3
- b. 0
- c. 4
- d. 2**
- e. 1

338. A 2 month old healthy infant with good appetite is given artificial feeding since he turned 1 month old. When is it recommended to start the corrective feeding (fruit juice)?

- a. 3,0 months
- b. 1,0 months
- c. 1,5 months
- d. 2,0 months
- e. 4,0 months**

339. An infant was born with body mass 3 kg and body length 50 cm. Now he is 3 years old. His brother is

7 years old, suffers from rheumatic fever. Mother asked the doctor for a cardiac check up of the 3-year-old son. Where is the left relative heart border located?

- a. 1 cm right from the left medioclavicular line
- b. 1 cm left from the left parasternal line
- c. 1 cm right from the left parasternal line
- d. 1 cm left from the left medioclavicular line**
- e. Along the left medioclavicular line

340. A boy of 7 y.o. had an attack of asthma and distant whistling rales after playing with a dog. In the medical history: atopic dermatitis caused by eating eggs, chicken, beef. What group of allergens is the reason of the development of bronchial asthma attacks?

- a. Dust
- b. Itch mite
- c. Chemical
- d. Epidermal**
- e. Pollen

341. The patient with acquired heart failure has diastolic pressure of 0 mm Hg. What heart failure does the child have?

- a. Aortic insufficiency**
- b. Aortic stenosis
- c. Rheumatism
- d. Mitral insufficiency
- e. Mitral stenosis

342. A nine year old child is at a hospital with acute glomerulonephritis. Clinical and laboratory examinations show acute condition. What nutrients must not be limited during the acute period of glomerulonephritis?

- a. Fats
- b. Carbohydrates**
- c. Liquid
- d. Salt
- e. Proteins

343. An 18-month-old child was taken to a hospital on the 4-th day of the disease. The disease began acutely with temperature 39, weakness, cough, breathlessness. He is pale, cyanotic, has had febrile temperature for over 3 days. There are crepitant fine bubbling rales on auscultation. Percussion sound is shortened in the right infrascapular region. X-ray picture shows non-homogeneous segment infiltration 8-10 mm on the right, the intensification of lung pattern. Your diagnosis:

- a. Grippe
- b. Bronchiolitis
- c. Interstitial pneumonia
- d. Segmentary pneumonia**
- e. Bronchitis

344. A 9-year-old girl has attacks of abdominal pain after fried food. No fever. She has pain in Cera point. The liver is not enlarged. Portion B [duodenal probe] - 50 ml. What is your diagnosis?

- a. Acute colitis
- b. Hepatocirrhosis
- c. Biliary tracts dyskinesia, hypotonic type**

- d. Chronic duodenum
- e. Peptic ulcer

345. A baby was born at 36 weeks of gestation. Delivery was normal, by natural way. The baby has a large cephalohematoma. The results of blood count are: Hb- 120g/l, Er- $3,5 \times 10^{12}/l$, total serum bilirubin - 123 mmol/l, direct bilirubin - 11 mmol/l, indirect - 112 mmol/l. What are causes of hyperbilirubinemia in this case?

- a. Mechanical obstruction of the bile outflow
- b. Erythrocyte hemolysis**
- c. Disturbance of the conjugative function of liver
- d. Intravascular hemolysis
- e. Bile condensing

346. A 4-month-old girl with blond hair and blue eyes has "mousy" odor of sweat and urine, delayed psychomotoric development. The most typical laboratory data for this disorder is:

- a. High concentration of chlorides in sweat
- b. Low level of thyroid gland hormones in blood
- c. High level of oxyproline in urine
- d. High level of glycosaminoglycanes in urine
- e. Positive urine ferric chloride test**

347. Full term newborn has developed jaundice at 10 hours of age. Hemolytic disease of newborn due to Rh-incompatibility was diagnosed. 2 hours later the infant has indirect serum bilirubin level increasing up to 14 mmol/L. What is most appropriate for treatment of hyperbilirubinemia in this infant?

- a. Phototherapy
- b. Intestinal sorbents
- c. Infusion therapy
- d. Exchange blood transfusion**
- e. Phenobarbital

348. A 4 year old girl was playing with her toys and suddenly she got an attack of cough, dyspnea. Objectively: respiration rate - 45/min, heart rate - 130/min. Percussion revealed dullness of percutory sound on the right in the lower parts. Auscultation revealed diminished breath sounds with bronchial resonance on the right. X-ray picture showed shadowing of the lower part of lungs on the right. Blood analysis revealed no signs of inflammation. The child was diagnosed with foreign body in the right bronchus. What complication caused such clinical presentations?

- a. Bronchitis
- b. Pneumonia
- c. Emphysema
- d. Pneumothorax
- e. Atelectasis**

349. A man, 42 years old, died in a road accident after the hemorrhage on the spot, because of acute hemorrhagic anemia. What minimum percent of the whole blood volume could result in death by acute hemorrhage?

- a. 10-14%
- b. 6-9%
- c. 25-30%**
- d. 15-20%
- e. 35-50%

350. A 6 week old child is admitted because of tachypnea. Birth had been uneventful, although conjunctivitis developed on the third day of life and lasted for about 2 weeks. Physical examination reveals tachypnea, bilateral inspiratory crackles and single expiratory wheezing. Bilateral pneumonia is evident on chest X-ray. The child is afebrile and has no history of fever. White blood cell count is $15 \times 10^9/L$, with 28% of eosinophils. The most likely cause of this child's symptoms is:

- a. Visceral larva migrans
- b. Varicella
- c. Pneumocystis carinii
- d. Mycoplasma pneumoniae
- e. Chlamydia trachomatis**

351. A full term infant was born after a normal pregnancy, delivery, however, was complicated by marginal placental detachment. At 12 hours of age the child, although appearing to be in good health, passes a bloody meconium stool. For determining the cause of the bleeding, which of the following diagnostic procedures should be performed first?

- a. Platelet count, prothrombin time, and partial thromboplastin time
- b. Barium enema**
- c. Gastric lavage with normal saline
- d. An Apt test
- e. An upper gastrointestinal series

352. In the 43rd week of gestation a long, thin infant was delivered. He is apneic, limp, pale, and covered with "pea soup" amniotic fluid. The first step in the resuscitation of this infant at delivery should be:

- a. Suction of the trachea under direct vision**
- b. Artificial ventilation with endotracheal tube
- c. Catheterization of the umbilical vein
- d. Administration of 100% oxygen by mask
- e. Artificial ventilation with bag and mask

353. A 7 y.o. boy has crampy abdominal pain and a rash on the back of his legs and buttocks as well as on the extensor surfaces of his forearms. Laboratory analysis reveals proteinuria and microhematuria. He is most likely to be affected by:

- a. Dermatomyositis
- b. Anaphylactoid purpura**
- c. Poststreptococcal glomerulonephritis
- d. Systemic lupus erythematosus
- e. Polyarteritis nodosa

354. A girl is 12-year-old. Yesterday she was overcooled. Now she is complaining on pain in suprapubic area, frequent painful urination by small portions, temperature is $37.8^{\circ}C$. Pasternatsky symptom is negative. Urine analysis: protein - 0.033 g/L, WBC- 20-25 in f/vis, RBC- 1-2 in f/vis. What diagnosis is the most probable?

- a. Acute pyelonephritis
- b. Urolithiasis
- c. Dysmetabolic nephropathy
- d. Acute glomerulonephritis
- e. Acute cystitis**

355. The girl of 11 y.o. She is ill for 1 month. She has "butterfly"-type rash on face (spots and papules), pain and swelling of small joints on arms and legs, signs of stomatitis (small-sized ulcers in mouth). CBC:

Hb– 80 g/L, RBC– 2,91012/L, WBC– 15109/L, ESR- 40 mm/hour. Urinalysis: protein– 0,33 g/L. What is the most probable diagnosis?

a. Systemic lupus erythematosus

b. Periarteriitis nodosa

c. Dermatomyositis

d. Acute rheumatic fever

e. Juvenile rheumatoid arthritis, systemic type

356. An infant aged 1 year on the third day of common cold at night developed inspiratory stridor, hoarse voice and barking cough. Physical examination revealed suprasternal and intercostal chest retractions. There is a bluish skin discoloration mostly seen over the upper lip. The respiratory rate is 52 per min and pulse- 122 bpm. The body temperature is 37,50C. What disease does the infant have?

a. Acute infectious croup due to viral laryngotracheitis

b. Bronchopneumonia without complications

c. Acute epiglottitis

d. Acute bronchiolitis with respiratory distress

e. Acute laryngitis

357. A newborn aged 3 days with hyperbilirubinemia (428 mkmol/L) developed following disorders. From beginning there were severe jaundice with poor suckling, hypotonia and hypodynamia. Little bit later periodical excitation, neonatal convulsions and neonatal primitive reflexes loss are noted. Now physical examination reveals convergent squint, rotatory nystagmus and setting sun eye sign. How to explain this condition?

a. Skull injury

b. Hydrocephalus

c. Spastic cerebral palsy

d. Encephalopathy due to hyperbilirubinemia

e. Brain tumour

358. A child is 2 years old. The child complains of hoarse voice, dyspnea with obstructed inspiration. The disease started 3 days ago from dry cough and nose stuffiness. Objectively: general condition is unbalanced, stridor is present. The child's skin is pale. Body temperature is 37,7°C. The palatine arches are hyperemic. There is no deposit. Heart sounds are rhythmic. Auscultation of lungs reveals rough breathing sounds, crepitation is absent. Parainfluenza virus has been detected in nasopharynx lavage. What is the most likely diagnosis?

a. Laryngospasm

b. Acute laryngotracheitis

c. Foreign body

d. Epiglottitis

e. Diphtheria

359. A 3-year-old child has been admitted to a hospital because of ostealgia and body temperature rise up to 39°C. Objectively: the patient is in grave condition, unable to stand for ostealgia, there is apparent intoxication, lymph nodes are enlarged up to 1,5 cm. Liver can be palpated 3 cm below the costal margin, spleen - 2 cm below the costal margin. In blood: RBCs - $3,0 \times 10^{12}/L$, Hb- 87 g/L, colour index - 0,9, thrombocytes - $190 \times 10^9/L$, WBCs - $3,2 \times 10^9/L$, eosinophils - 1, stab neutrophils - 1, segmented neutrophils - 0, lymphocytes - 87, monocytes - 2, ESR - 36 mm/h. What examination should be conducted in order to specify the diagnosis?

a. Lymph node puncture

b. Ultrasound

c. Sternal puncture

- d. Lymph node biopsy
- e. Computer tomography

360. Apgar test done on a newborn girl at 1st and 5th minute after birth gave the result of 7-8 scores. During the delivery there was a short-term difficulty with extraction of shoulder girdle. After birth the child had the proximal extremity dysfunction and the arm couldnt be raised from the side. The shoulder was turned inwards, the elbow was flexed, there was also forearm pronation, obstetric palsy of brachial plexus. What is the clinical diagnosis?

- a. Trauma of right hand soft tissues

b. Duchenne-Erb palsy

- c. Right hand osteomyelitis
- d. Trauma of thoracic spine
- e. Intracranial haemorrhage

361. Examination of a 9-month-old girl revealed skin pallor, cyanosis during excitement. Percussion revealed transverse dilatation of cardiac borders. Auscultation revealed continuous systolic murmur to the left of the breastbone in the 3-4 intercostal space. This murmur is conducted above the whole cardiac region to the back. What congenital cardiac pathology can be suspected?

a. Defect of interventricular septum

- b. Coarctation of aorta
- c. Pulmonary artery stenosis
- d. Fallots tetrad
- e. Defect of interatrial septum

362. A worker was temporarily off work because of illness for 16 days, was under out-patient treatment. The doctor in charge issued a sick-list first for 5 days, then prolonged it for 10 days. Who can further prolong the sick-list of this patient?

- a. The head of department

b. The doctor in charge of the case together with the head of department

- c. The doctor in charge of the case with the permission of the head of department
- d. Working ability expertise committee
- e. Deputy head physician on the working ability expertise

363. A 13 y.o. patient was treated in dermatological hospital for atopic dermatitis exacerbation. He was discharged in the condition of clinical remission. What recommendations should the doctor give to prevent exacerbations?

- a. Systematic use of local corticosteroids
- b. Frequent skin washing with detergents

c. Use of neutral creams to protect skin

- d. Systematic skin disinfection
- e. Avoidance of skin insolation

364. On the 21 day after appearance of vesiculous chickenpox rash a 7-year-old child developed ataxia, nystagmus, intention tremor, muscle hypotonia. Liquor analysis shows a low-grade lymphocytic pleocytosis, slightly increased protein rate. What complication is it?

- a. Postherpetic neuralgia

b. Encephalitis

- c. Pneumonitis
- d. Purulent meningitis

e. Acute nephritis

365. An 8-year-old boy suffering from haemophilia was undergoing transfusion of packed red cells. Suddenly he felt pain behind the breastbone and in the lumbar area, dyspnea, cold sweat. Objectively: pale skin, heart rate - 100/min, AP - 60/40 mm Hg; oliguria, brown urine. For the treatment of this complication the following drug should be administered:

- a. Aminophylline
- b. Analgin
- c. Lasix
- d. Adrenaline
- e. Prednisolone**

366. A 3-year-old child has been diagnosed with type I diabetes mellitus, hyperosmolar coma. The laboratory confirmed the diagnosis. Which laboratory findings are characteristic for such condition?

- a. Hyperglycemia and ketonuria
- b. Hyperglycemia and high indicators of acid-base balance
- c. Hyperglycemia and ketonemia
- d. Hyperglycemia and glucosuria
- e. High hyperglycemia without ketonemia**

367. After objective clinical examination a 12 year old child was diagnosed with mitral valve prolapse. What complementary instrumental method of examination should be applied for the diagnosis confirmation?

- a. Echocardiography**
- b. Phonocardiography
- c. Vелоergometry
- d. ECG
- e. Roentgenography of chest

368. A full-term child survived antenatal and intranatal hypoxia, it was born in asphyxia (2-5 points on Apgar score). After birth the child has progressing excitability, there are also vomiting, nystagmus, spasms, strabismus, spontaneous Moros and Babinskys reflexes. What localization of intracranial hemorrhage is the most probable?

- a. Small cerebral tissue hemorrhages
- b. Periventricular hemorrhages
- c. Hemorrhages into the brain ventricles
- d. Subarachnoid hemorrhage**
- e. Subdural hemorrhage

369. A 15 y.o. boy was twice attacked by bees, as a result he had severe anaphylactic shock. What is the most effective prophylaxis method?

- a. Limitation of outside staying during summer months
- b. Protective clothing
- c. Prescription of corticosteroids for summer
- d. Long-term prophylactic treatment with antihistamines
- e. Desensibilisation by means of bee venom extract**

370. A 10 y.o. boy with hemophilia has signs of acute respiratory viral infection with fever. What of the mentioned antifebrile medications are contraindicated to this patient?

- a. Pipolphen

b. Analgin

c. Acetylsalicylic acid

d. Paracetamol

e. Panadol extra

371. A 7-year-old child is sick for 2 weeks with running nose, was taking nasal drops. The boy suffers with alimentary allergy. He applied to doctor due to suppurative and bloody discharges from nose, maceration of ala nasi and upper lip. Rhinoscopy results: there are whitish-greyish areas at nasal septum. Mucous membrane of oropharynx is not changed. What is the most probable disease?

a. Sinusitis (maxillar sinus))

b. Diphtheria of the nose

c. Rhinovirus

d. Adenovirus

e. Allergic rhinitis

372. A 10-year-old boy underwent treatment in cardiological department for rheumatism, I acute attack of rheumatic fever, active phase, II degree. The patient was discharged in satisfactory condition. Which drug should be chosen for prevention of rheumatism recurrence?

a. Bicillinum-5

b. Erythromycin

c. Oxacillin

d. Ampicillin

e. Bicillinum-1

373. A child is 4 years old, has been ill for 5 days. There are complaints of cough, skin rash, to- 38,2°C, face puffiness, photophobia, conjunctivitis. Objectively: there is bright, maculo-papulous, in some areas confluent rash on the face, neck, upper chest. The pharynx is hyperemic. There are seropurulent discharges from the nose. Auscultation revealed dry rales in lungs. What is the most likely diagnosis?

a. Measles

b. Scarlet fever

c. Enterovirus exanthema

d. Rubella

e. Adenoviral infection

374. A 10 month old boy has been ill for 5 days after consumption of unboiled milk. Body temperature is 38-39°C, there is vomiting, liquid stool. The child is pale and inert. His tongue is covered with white deposition. Heart sounds are muffled. Abdomen is swollen, there is borborygmus in the region of umbilicus, liver is enlarged by 3 cm. Stool is liquid, dark-green, with admixtures of mucus, 5 times a day. What is the most probable diagnosis?

a. Salmonellosis

b. Escherichiosis

c. Rotaviral infection

d. Acute shigellosis

e. Staphylococcal enteric infection

375. A 12 y.o. child with acute glomerulonephritis presented with hypertensive syndrom during first days of the disease. What is the role of angiotensin II in the pathogenesis?

a. Increases heart output

b. Increases erythropoietin production

c. Increases renine level

d. Intensifies production and secretion of aldosterone

e. Inhibits depressive action of prostaglandins

376. A full-term infant is 3 days old. On the different parts of skin there are erythemas, erosive spots, cracks, areas of epidermis peeling. The infant has scalded skin syndrome. Nikolsky's symptom is positive. General condition of the infant is grave. Anxiety, hyperesthesia, febrile temperature are evident. What is the most probable diagnosis?

a. Fingers pseudofurunculosis

b. Phlegmon of newborn

c. Exfoliative dermatitis

d. Impetigo neonatorum

e. Mycotic erythema

377. District pediatrician examines a healthy carried 1-month-old child. The child is breast-fed. Prophylaxis of what disease will the doctor recommend to do first?

a. Anemia

b. Spasmophilia

c. Parathyropathy

d. Rachitis

e. Hypotrophy

378. A 7-year-old boy has been managed for a month. Immediately after hospitalization there were apparent edemata, proteinuria - 7,1 g/l, daily urine protein - 4,2 g. Biochemical blood test shows persistent hypoproteinemia (43,2 g/l), hypercholesterolemia (9,2 millimole/l). The patient is most likely have the following type of glomerulonephritis:

a. Nephrotic

b. Isolated urinary

c. Combined

d. Hematuric

e. Nephritic

379. A 3 y.o. girl has had a temperature rise up to 38°C, rhinitis, dry superficial cough, flabbiness, appetite loss. Palpation didn't reveal any changes over her lungs. Percussion sound has a wooden resonance, auscultation revealed puerile breathing, no rales. In blood: leukopenia, lymphocytosis, increased ESR. What is the most probable diagnosis?

a. Acute simple bronchitis

b. Bilateral microfocal pneumonia

c. Acute obstructive bronchitis

d. Recurrent bronchitis, acute condition

e. Acute simple tracheitis

380. A 5-year-old girl with the transitory immunodeficiency according to T-system has a clinical picture of a right-sided pneumonia during 2 months. How pneumonia progress can be described?

a. Recidivating

b. Wavelike

c. Acute

d. Delaying

e. Chronic

381. A 12 y.o. girl took 2 pills of aspirine and 4 hours later her body temperature raised up to 39-40°C.

She complains of general indisposition, dizziness, sudden rash in form of red spots and blisters. Objectively: skin lesions resemble of second-degree burns, here and there with erosive surface or epidermis peeling. Nikolskys symptom is positive. What is the most probable diagnosis?

a. Acute epidermal necrosis

b. Polymorphous exudative erythema

c. Duhrings disease

d. Bullous dermatitis

e. Pemphigus vulgaris

382. A 5-year-old child had an attack of palpitation with nausea, dizziness, generalized fatigue. On ECG: tachycardia with heartbeat rate of 220/min. Ventricle complexes are deformed and widened. P wave is absent. What medication is to be prescribed to provide first aid?

a. Novocainamides

b. Strophantin

c. Isoptin

d. Seduxen

e. Lydocain

383. A boy, aged 9, was examined: height - 127 cm (-0,36), weight - 28,2 kg (+0,96), chest circumference - 64,9 cm (+0,66), lung vital capacity - 1520 ml (-0,16). What is the complex assessment of the child's physical development?

a. Disharmonious

b. Excessive

c. Below the average

d. Harmonious

e. Apparently disharmonious

384. A child is 7 months old. Birth weight was 3450, the child is breastfed. Supplemental feeding was introduced on time. Determine the daily protein requirements for the child:

a. 2,5 g/kg

b. 2,0 g/kg

c. 3,0 g/kg

d. 3,5 g/kg

e. 4,0 g/kg

385. 2 weeks after recovering from angina an 8-year-old boy developed edemata of face and lower limbs. Objectively: the patient is in grave condition, AP- 120/80 mm Hg. Urine is of dark brown colour. Oliguria is present. On urine analysis: relative density - 1,015, protein - 1,2 g/l, RBCs are leached and cover the whole vision field, granular casts - 1-2 in the vision field, salts are represented by urates (big number). What is the most likely diagnosis?

a. Acute glomerulonephritis with nephritic syndrome

b. Acute glomerulonephritis with nephrotic syndrome, hematuria and hypertension

c. Nephrolithiasis

d. Acute glomerulonephritis with isolated urinary syndrome

e. Acute glomerulonephritis with nephrotic syndrome

386. A child is 9 months old. The patient's body temperature is 36,7°C, the skin is pale, humid, there is pain in leg muscles. There is no extremities mobility, sensitivity is present. The child has been diagnosed with poliomyelitis. The causative agent of this disease relates to the following family:

a. Adenovirus

- b. Rotavirus
- c. Paramyxovirus
- d. Toxovirus

e. Picornavirus

387. A 4 month old child fell seriously ill: body temperature rose up to 38,5°C, the child became inert and had a single vomiting. 10 hours later there appeared rash over the buttocks and lower limbs in form of petechiae, spots and papules. Some haemorrhagic elements have necrosis in the centre. What is the most probable disease?

a. Scarlet fever

b. Meningococemia

c. Influenza

d. Rubella

e. Haemorrhagic vasculitis

388. A 5-year-old child had strong headache, vomiting, ataxy, dormancy, discoordination of movements, tremor of the extremities on the 8th day of the disease. It was followed by rise in body temperature, vesicular rash mainly on the skin of the body and the hairy part of the head. At the second wave of the fever a diagnosis of encephalitis was given. What disease complicated encephalitis in this case?

a. Herpetic infection

b. Chicken pox

c. German measles

d. Measles

e. Enterovirus infection

389. A 12 year old girl complains about abrupt weakness, nausea, dizziness, vision impairment. The day before she ate home-made stockfish, beef. Examination revealed skin pallor, a scratch on the left knee, dryness of mucous membranes of oral pharynx, bilateral ptosis, mydriatic pupils. The girl is unable to read a simple text (mist over the eyes). What therapy would be the most adequate in this case?

a. Parenteral introduction of antibiotics

b. Parenteral disintoxication

c. Parenteral introduction of polyvalent antitoxin serum

d. Gastric lavage

e. Parenteral introduction of antitetanus serum

390. A child from the first non-complicated pregnancy but complicated labor had cephalhematoma. On the second day there developed jaundice. On the 3th day appeared changes of neurologic status: nystagmus, Graefes sign. Urine is yellow, feces- golden-yellow. Mothers blood group is A(II)Rh-, child- A(II)Rh+. On the third day child's Hb- 200 g/L, RBC- $6,1 \times 10^{12}/L$, bilirubin in blood - 58 $\mu\text{mol}/L$ due to unconjugated bilirubin, Ht- 0,57. What is the child's jaundice explanation?

a. Fetal hepatitis

b. Brain delivery trauma

c. Hemolytic disease of newborn

d. Physiologic jaundice

e. Bile ducts atresia

391. A full-term baby (the 1st uncomplicated pregnancy, difficult labour) had a cephalohematoma. On the 2nd day there was jaundice, on the third the following changes in neurological status appeared: nystagmus, Graefes syndrome. Urine was yellow, feces were of golden-yellow colour. Mothers blood group is A (II) Rh-, the baby's one - A (II) Rh+. On the third day the child's Hb was 200g/L, RBCs - $6,1 \times 10^{12}/L$,

blood bilirubin - 58 micromole/l at the expense of unbound fraction. What caused the jaundice in the child?

- a. Physiological jaundice
- b. Biliary atresia
- c. Fetal hepatitis
- d. Craniocerebral birth trauma**
- e. Neonatal anaemia

392. After birth a child was pale and had arrhythmical breathing. Oxygen therapy didn't have any effect. Pulse was weak and rapid. It was difficult to measure arterial pressure accurately. There were no edemata. What is the most likely reason for these symptoms?

- a. Asphyxia**
- b. Intracranial haematoma
- c. Congenital pneumonia
- d. Intrauterine sepsis
- e. Congestive heart failure

393. A child was delivered severely premature. After the birth the child has RI symptoms, anasarca, fine bubbling moist rales over the lower lobe of the right lung. Multiple skin extravasations, bloody foam from the mouth have occurred after the 2 day. On chest X-ray: atelectasis of the lower lobe of the right lung. In blood: Hb-100 g/L, Ht- 0,45. What is the most probable diagnosis?

- a. Pulmonary edema
- b. Disseminated intravascular clotting syndrome
- c. Edematous-hemorrhagic syndrome**
- d. Hyaline membrane disease
- e. Congenital pneumonia

394. An infant is 2 d.o. It was full-term born with signs of intrauterine infection, that's why it was prescribed antibiotics. Specify, why the gap between antibiotic introductions to the new-born children is longer and dosage is smaller compared to the older children and adults?

- a. The newborns have bigger hematocrit
- b. The newborns have a lower level of glomerular filtration**
- c. The newborns have reduced activity of glucuronil transferase
- d. The newborns have lower concentration of protein and albumins in blood
- e. The newborns have diminished blood pH

395. A 10-year-old child is sick with chronic viral hepatitis B with marked activity of the process. Total bilirubin - 70 μmol/L, direct - 26 μmol/L, indirect - 44 μmol/L. AST - 6,2 mmol/L, ALT - 4,8 mmol/L. What mechanism underlies the transaminase level increase of this patient?

- a. Failure of bilirubin conjugation
- b. Cytolysis of hepatocytes**
- c. Hypersplenism
- d. Failure of the synthetic function of the liver
- e. Intrahepatic cholestasis

396. A 12-year-old girl applied to doctor with complaints of swelling on the front part of the neck. The doctor diagnosed hyperplasia of the thyroid gland of the second degree, euthyroidism. Ultrasound suspected autoimmune thyroiditis. Blood was taken for titre of antibodies to thyroglobulin. What titre of antibodies will be diagnostically important?

- a. 1:200**

- b. 1:250
- c. 1:50
- d. 1:150
- e. 1:100**

397. On the 3rd day of life a baby presented with haemorrhagic rash, bloody vomit, black stool. Examination revealed anaemia, extended coagulation time, hypoprothrombinemia, normal thrombocyte rate. What is the optimal therapeutic tactics?

- a. Calcium gluconate
- b. Vitamin K**
- c. Epsilon-aminocaproic acid
- d. Sodium ethamsylate
- e. Fibrinogen

398. A 2 m.o. breast-fed child suffers from cheek skin hyperemia, sporadic papulous elements on the skin of the chest and back following the apple juice introduction. The child is restless. What is the initial pediatrician's tactics?

- a. Clarify mother's diet and exclude obligate allergens**
- b. Administer general ultraviolet irradiation
- c. Apply ointment with corticosteroids to affected skin areas
- d. Treat with claritine
- e. Refer to prescribe dermatologist

399. A 5 month old boy was born prematurely, he didn't suffer from any disease at the infant age and later on. Examination at an outpatient's hospital revealed paleness of skin, sleepiness. Blood count: Hb - 95 g/l, erythrocytes - $3,5 \times 10^{12}/l$, reticulocytes - 90/100, colour index - 0,7, osmotic stability of erythrocytes - 0,44-0,33%, serum iron - 4,9 micromole/l. What is the most probable cause of anemia?

- a. Erythrocyte hemolysis
- b. B12 deficit
- c. Hemopoiesis immaturity
- d. Infectious process
- e. Iron deficit**

400. A 7 y.o. child had elevation of temperature to 40°C in anamnesis. For the last 3 months he presents fusiform swelling of fingers, ankle joints and knee joint, pain in the upper part of the sternum and cervical part of the spinal column. What is the most probable diagnosis?

- a. Juvenile rheumatic arthritis**
- b. Toxic synovitis
- c. Osteoarthritis
- d. Septic arthritis
- e. Rheumatism

401. An 8 year old girl complains about joint pain, temperature rise up to 38°C, dyspnea. Objectively: the left cardiac border is deviated by 2,5 cm to the left, tachycardia, systolic murmur on the apex and in the V point are present. Blood count: leukocytes - $20,0 \cdot 10^9/l$, ESR - 18 mm/h. What sign gives the most substantial proof for rheumatism diagnosis?

- a. Carditis**
- b. Leukocytosis
- c. Accelerated ESR
- d. Fever

e. Arthralgia

402. A 3-year-old child has been delivered to a hospital in soporose state with considerable amyotonia, inhibition of tendon and periosteal reflexes. Miosis and asthenocoria are also present. Corneal reflexes are preserved. Pulse is rapid and weak. AP- 80/50 mm Hg. The parents suspect the child of accidental taking some tablets. Such clinical presentations are typical for intoxication with the following tableted drugs:

- a. Barbiturates
- b. Beta-2-adrenoceptor agonists
- c. Antropine drugs
- d. Antihypertensive drugs

e. Tranquilizers

403. A 2 m.o. child with birth weight 5100 g has jaundice, hoarse cry, umbilical hernia, physical development lag. Liver is +2 cm enlarged, spleen is not enlarged. In anamnesis: delayed falling-away of umbilical cord rest. In blood: Hb- 120 g/L, erythrocytes - $4,5 \times 10^{12}/L$, ESR- 3 mm/h. Whole serum bilirubin is 28 mcmmole/L, indirect - 20 mcmmole/L, direct - 8 mcmmole/L. What is the most probable diagnosis?

a. Congenital hypothyreosis

- b. Hemolytic anemia
- c. Cytomegalovirus infection
- d. Conjugated jaundice
- e. Congenital hepatitis

404. A 5-year-old child developed an acute disease starting from body temperature rise up to $38,5^{\circ}C$, running nose, cough and conjunctivitis. On the 4th day the child presented with maculo-papular rash on face. Body temperature rose again up to $39,2^{\circ}C$. Over the next few days the rash spread over the whole body and extremities. Mucous membrane of palate was hyperemic, there was whitish deposition on cheek mucous membrane next to molars. What is your provisional diagnosis?

- a. Yersinia
- b. Acute viral respiratory infection

c. Measles

- d. Enterovirus diseases
- e. Rubella

405. A 3 year old child fell acutely ill, body temperature rose up to $39,5^{\circ}C$, the child became inert, there appeared recurrent vomiting, headache. Examination revealed positive meningeal symptoms, after this lumbal puncture was performed. Spinal fluid is turbid, runs out under pressure, protein concentration is 1,8 g/l; Pandy reaction is +++, sugar concentration is 2,2 millimole/l, chloride concentration - 123 millimole/l, cytois is $2,35 \cdot 10^9$ (80% of neutrophils, 20% of lymphocytes). What is the most probable diagnosis?

- a. Serous viral meningitis
- b. Subarachnoid haemorrhage
- c. Brain tumour

d. Purulent meningitis

- e. Serous tuberculous meningitis

406. A 13 y.o. girl complains of having temperature rises up to febrile figures for a month, joint ache, periodical skin rash. Examination revealed steady enhancing of ESR, LE-cells. What is the most probable diagnosis?

- a. Acute lymphoblast leukosis

- b. Rheumatics
- c. Juvenile rheumatoid arthritis
- d. Systematic scleroderma

e. Systematic lupus erythematosus

407. A 9-month-old child presents with fever, cough, dyspnea. The symptoms appeared 5 days ago after a contact with a person having ARVI. Objectively: the child is in grave condition. Temperature of 38°C, cyanosis of nasolabial triangle is present. RR- 54/min, nasal flaring while breathing. There was percussion dullness on the right below the scapula angle, and tympanic sound over the rest of lungs. Auscultation revealed bilateral fine moist rales predominating on the right. What is the most likely diagnosis?

- a. Acute laryngotracheitis
- b. ARVI

c. Acute pneumonia

- d. Acute bronchitis
- e. Acute bronchiolitis

408. An 8 y.o. boy complains of constant cough along with discharge of greenish sputum, dyspnea during physical activities. At the age of 1 year and 8 months he fell ill for the first time with bilateral pneumonia that had protracted course. Later on there were recurrences of the disease 5-6 times a year, during the remission periods there was constant productive cough. What examination results will be the most important for making a final diagnosis?

- a. Roentgenography of thorax organs
- b. Bronchoscopy
- c. Spirography

d. Bronchography

- e. Bacterial inoculation of sputum

409. A mother of a 5 y.o. girl consulted a doctor about daughters involuntary urination at night, nightmares, sleep disorders, slow gaining of body weight. Objectively: malnutrition, intellectual development is good, the girl can read and explains common situations quite adultly. Her skin is very pale, liver is enlarged in size. Her mother suffers from cholelithiasis. What type of diathesis is the most probable in the child's case?

- a. Allergic diathesis
- b. Lymphohypoplastic diathesis
- c. Urine acid diathesis
- d. Exudative diathesis

e. Gouty diathesis

410. A 10 year old girl complains about abdominal pain that is arising and getting worse after eating rough or spicy food. She complains also about sour eructation, heartburn, frequent constipations, headache, irritability. She has been suffering from this for 12 months. Objectively: the girl's diet is adequate. Tongue is moist with white deposit at the root. Abdomen is soft, painful in its epigastric part. What study method will help to make a diagnosis?

- a. Contrast roentgenoscopy
- b. Biochemical blood analysis
- c. Intragastral pH-metry
- d. Fractional examination of gastric juice

e. Esophagogastroduodenoscopy

411. A 40 h.o. child age has hyperosthesia, CNS depression, dyspepsia. Sepsis is suspected. What should the differential diagnosis be made with?

- a. Hypocalcemia
- b. Hyperkaliemia
- c. Hypomagnesemia
- d. Hypoglycemia**
- e. Hyperbilirubinemia

412. A 1,5 y.o. child fell seriously ill: chill, body temperature rise up to 40,1°C, then rapid dropping to 36,2°C, skin is covered with voluminous hemorrhagic rash and purple cyanotic spots. Extremities are cold, face features are sharpened. Diagnosis: meningococcosis, fulminant form, infection-toxic shock. What antibiotic must be used at the pre-admission stage?

- a. Penicillin
- b. Gentamycin
- c. Sulfamonometoxin
- d. Soluble Levomycetine succinate**
- e. Lincomycin

413. A 10 year old boy suffers from chronic viral hepatitis type B with maximal activity. What laboratory test can give the most precise characteristic of cytolysis degree?

- a. Transaminase test**
- b. Takata-Ara test
- c. Test for whole protein
- d. Prothrombin test
- e. Weltmans coagulation test

414. A 6 y.o child complains of thirst, polyuria, increased appetite for 2 months with weight loss for 3 kg. There has been nocturnal enuresis during last week. On examination: hyperglycemia 14 mol/L. The diagnosis is diabetes mellitus I type. What is the genesis of this disease?

- a. Virus-bacterial
- b. Autoimmune**
- c. Bacterial
- d. Viral
- e. Neurogenic

415. A 10 y.o. child who is at oligoanuretic stage of acute renal insufficiency has got sensations of pricking in the mucous membrane of oral cavity and tongue, extremities numbness, reduced reflexes, respiratory disturbance, arrhythmia. What are these symptoms caused by?

- a. Hyperkaliemia**
- b. Hyperazotemia
- c. Alkalosis
- d. Acidosis
- e. Hyponatremia

416. Examination of a 12 year old child revealed diffuse thyroid enlargement of the II degree. Heart auscultation revealed dullness of heart sounds, heart rate was 64/min. The child has frequent constipations, anemia. Concentration of thyreoglobulin antibodies is increased. What disease might have caused such symptoms?

- a. Autoimmune thyroiditis**
- b. Thyroid carcinoma

- c. Endemic goiter
- d. Thyroid hyperplasia
- e. Diffuse toxic goiter

417. An 8-year-old girl has been admitted to the cardiology department. Objectively: there is a skin lesion over the extensor surfaces of joints with atrophic cicatrices, depigmentation, symmetrical affection of skeletal muscles (weakness, edema, hypotrophy). What disease are these changes most typical for?

- a. Reiters disease
- b. Dermatomyositis**
- c. Nodular periarteritis
- d. Systemic scleroderma
- e. Systemic lupus erythematosus

418. A 13 y.o. teenager who suffers from hemophilia A was taken to the hospital after a fight at school. His diagnosis is right-sided hemarthrosis of knee joint, retroperitoneal hematoma. What should be primarily prescribed?

- a. Placental albumin
- b. Dry plasma
- c. Aminocaproic acid
- d. Washed thrombocytes
- e. Fresh frozen plasma**

419. A 3 m.o. child fell seriously ill, body temperature rose up to 37,8°C, there is semicough. On the 3-rd day the cough grew worse, dyspnea appeared. On percussion: tympanic sound above lungs, on auscultation: a lot of fine moist and wheezing rales during expiration. What is the most probable diagnosis?

- a. Acute respiratory viral infection, bronchopneumonia
- b. Acute respiratory viral infection, bronchitis with asthmatic component
- c. Acute respiratory viral infection, focal pneumonia
- d. Acute respiratory viral infection, bronchiolitis**
- e. Acute respiratory viral infection, bronchitis

420. On the 1st day of life a full-term girl (2nd labour) weighing 3500g, with Apgar score of 8 points, presented with jaundice. Indirect bilirubin of blood - was 80 micromole/l, 6 hours later - 160 micromole/l. What is the optimal method of treatment?

- a. Infusion therapy
- b. Phototherapy
- c. Exchange blood transfusion**
- d. Phenobarbital treatment
- e. Enterosorbents

421. A child was born at a gestational age of 34 weeks in grave condition. The leading symptoms were respiratory distress symptoms, namely sonorous and prolonged expiration, involving additional muscles into respiratory process. The Silverman score at birth was 0 points, in 3 hours it was 3 points with clinical findings. Which diagnostic study will allow to diagnose the form of pneumopathy?

- a. Clinical blood test
- b. Proteinogram
- c. Immunoassay
- d. X-ray of chest**
- e. Determination of blood gas composition

422. A 10-year-old girl consulted a doctor about thirst, frequent urination, weight loss. She has been observing these symptoms for about a month. Objectively: no pathology of internal organs was revealed. What laboratory analysis should be carried out in the first place?

- a. Glucosuric profile
- b. Blood glucose analysis on an empty stomach**
- c. Acetone in urine test
- d. Glucose in urine test on the base of daily diuresis
- e. Glucose tolerance test

423. A 6-year-old child complains of frequent liquid stool and vomiting. On the 2nd day of disease the child presented with inertness, temperature rise up to 38,2°C, Ps- 150 bpm, scaphoid abdomen, palpatory painful sigmoid colon, defecation 10 times a day with liquid, scarce stool with mucus and streaks of green. What is a provisional diagnosis?

- a. Salmonellosis
- b. Intestinal amebiasis
- c. Yersiniosis
- d. Shigellosis**
- e. Escherichiosis

424. After a 10-year-old child had been bitten by a bee, he was delivered to a hospital. There were lip, face and neck edemata. The patient felt hot and short of breath. Objectively: breathing was laboured and noisy. There were foamy discharges from the mouth, cough. The skin was pale and cold. There was bradypnoea. Heart sounds were muffled and arrhythmic. Thready pulse was present. What diagnosis was made by the expert in resuscitation?

- a. Quinckes edema
- b. Acute cardiovascular collapse
- c. Cerebral coma
- d. Anaphylactic shock**
- e. Bronchial asthma

425. A 13-year-old girl complains of fever up to 37,4°C during the last 2 months after recovering from ARVI. Objectively: malnutrition, diffuse grade II enlargement of the thyroid gland feeling dense on palpation, exophthalmos, tachycardia. What kind of pathological syndrome is it?

- a. Thymomegaly
- b. Thyrotoxicosis**
- c. Hypoparathyroidism
- d. Hypothyroidism
- e. Hyperparathyroidism

426. A 3-year-old girl presents with pertussis-like cough with thick sputum. There have been persistent changes in lungs since the age of 6 months when she was first diagnosed with acute pneumonia. Chloride concentration in the perspiration is 112 mEq/l. The child has been diagnosed with mucoviscidosis. What is the basis for autosomal recessive disease - mucoviscidosis?

- a. Pulmonary artery hypoplasia
- b. Inadequate transport of sodium and chloride ions**
- c. Deposition of calcium triphosphates and carbates in the alveoles
- d. alpha₁-antitrypsin deficiency
- e. Pulmonary cysts

427. From urine of a 14-year-old boy with the exacerbation of secondary obstructive pyelonephritis

Pseudomonas aeruginosa was isolated with a titer of 1000000 microbes per 1 ml. Which antibiotic is most advisable to be administered in this case?

- a. Cefazolinum
- b. Ampicillin
- c. Ciprofloxacin
- d. Azithromycin
- e. Chloramphenicol

428. A 14-year-old boy with a history of chronic tonsillitis and sinusitis has developed a feeling of heart irregularities and additional pulse. HR- 83/min. ECG results: regular impulses with no visible P wave that occur every two sinus contractions, QRS complex is dramatically deformed and prolonged to over 0,11 s, T wave is discordant followed by a complete compensatory pause. Specify the arrhythmia type:

- a. Bigeminal extrasystole
- b. Complete AV-block
- c. Left bundle branch block
- d. Trigeminal extrasystole
- e. Partial AV-blockade

429. An 8-year-old girl periodically has sudden short-term heart pain, sensation of chest compression, epigastric pain, dizziness, vomiting. Objectively: the patient is pale, respiratory rate - 40/min, jugular pulse is present. Ps- 185 bpm, of poor volume. AP- 75/40 mm Hg. ECG taken during an attack shows ectopic P waves, QRS wave is not deformed. At the end of an attack a compensatory pause is observed. The most likely cause of the attack is:

- a. Sinus tachycardia
- b. Complete AV-block
- c. Atrial fibrillation
- d. Paroxysmal atrial tachycardia
- e. Paroxysmal ventricular tachycardia

430. A 1-month-old child became restless and presented with an increase in head sweating. Its known from the history that the child has been fed with cows milk since birth (September 5). Examination revealed craniotabes. A doctor administered a course of UV radiation. Decide, if the child needs ergocalciferol:

- a. Immediately after the UVR withdrawal
- b. A month after the UVR withdrawal
- c. Does not need
- d. In combination with UVR
- e. 2-2,5 months after the UVR withdrawal

431. A baby is 3 months old. The mother consulted a pediatrician about lack of breast milk. After several test weighings it was found that the child had to receive supplementary feeding. What is the optimal milk formula for this child?

- a. Malutka
- b. Malysh
- c. Milk formula № 3
- d. Milk formula № 2
- e. Whole cows milk

432. Examination of a newborn revealed skin redness that appeared immediately after birth and reached the maximum intensity on the second day of life. What is your provisional diagnosis?

a. Simple erythema

b. Transient erythema

c. Annular erythema

d. Erythema nodosum

e. Toxic erythema

433. A child is 2 days old. He was born with a weight of 2900 kg, body length of 50 cm. On examination the skin is intensely red, elastic, with preserved turgor. Puerile respiration is present. Respiration rate - 40/min, cardiac sounds are rhythmic, sonorous. HR- 138/min. The abdomen is soft. The liver extends 2 cm below the costal margin. Diuresis is sufficient. Stool is in form of meconium. What is the most likely diagnosis?

a. Neonatal phlegmon

b. Toxic erythema of the newborn

c. Physiological erythema of the newborn

d. Erysipelas

e. Exfoliative Ritters dermatitis

434. A full-term baby was born with body weight of 3200 g, body length of 50 cm, Apgar score - 8-10 points. What is the optimum time for the first breast-feeding?

a. After 48 hours

b. First 30 minutes

c. First 24 hours

d. First 6 hours

e. First 48 hours

435. A 3-year-old child has been taken to a pediatrician. He has no recent history of any diseases. Objective examination revealed no pathology of the internal organs. The child needs the routine immunization against the following disease:

a. Diphtheria and tetanus

b. Pertussis

c. Type B hepatitis

d. Poliomyelitis

e. Measles, rubella, parotitis

436. A 6-year-old child has duodenal ulcer. What antibacterial drug should be co-administered together with metronidazole and De-Nol in order to eradicate *Helicobacter pylori* infection?

a. Sulfadimethoxinum

b. Amoxicillin

c. Oleandomycin

d. Tetracycline

e. Biseptol

437. A baby born after fast labour has palsy of hand muscles. Grasp reflex is absent, as well as hand-to-mouth reflex. Hand sensitivity is absent. What is the most likely diagnosis?

a. Duchenne-Erbs palsy

b. Muscle paresis

c. Bernard-Horner syndrome

d. Dejerine-Klumpke palsy

e. Total lesion of the brachial plexus

438. A child is 12 years old. He complains of a dull aching pain in the epigastrium and right hypochondrium, that is getting worse after taking fatty or fried food, headache, weakness, nausea, low-grade fever. Abdominal palpation reveals a marked resistance of muscles in the right hypochondrium, positive Kerrs, Ortner's, Murphys symptoms. What is the most likely diagnosis?

- a. Acute pancreatitis
- b. Chronic cholecystitis**
- c. Viral hepatitis
- d. Acute appendicitis
- e. Acute gastritis

439. A 3-month-old girl presents with rhinitis, dyspnea, dry cough. These manifestations have been observed for two days. Objectively: the child has pale skin, acrocyanosis, shallow respiration at the rate of 80/min. Percussion reveals hand-drum resonance over the whole surface of lungs, massive fine rales. What is the most likely diagnosis?

- a. Acute bronchiolitis**
- b. Mucoviscidosis
- c. Acute bronchitis
- d. Foreign body of the airway
- e. Pneumonia

440. A newborn (mother's 1 pregnancy) weighing 3500 g presents with jaundice, lethargy, reduced reflexes. Objectively: second grade jaundice of skin with saffron tint, liver - +2cm, spleen - +1 cm. Urine and feces are yellow. Blood count: Hb - 100 g/l, RBCs - $3,2 \times 10^{12}/l$, WBCs - $18,7 \times 10^9/l$, mother's blood type - O(I) Rh(+), baby's blood type - A(II) Rh(-), bilirubin - 170 mmol/l, indirect fraction. ALT, AST rates are normal. What disease is the child most likely to have?

- a. Hemolytic disease of newborn, ABO-conflict**
- b. Hemolytic disease of newborn, Rh-conflict
- c. Physiologic jaundice
- d. Biliary atresia
- e. Perinatal hepatitis

441. A 10-year-old girl was admitted to a hospital with carditis presentations. It is known from the anamnesis that two weeks ago she had exacerbation of chronic tonsillitis. What is the most likely etiological factor in this case?

- a. Streptococcus**
- b. Pneumococcus
- c. Proteus
- d. Klebsiella
- e. Staphylococcus

442. All the joints on the left elbow of a newborn are extended, the whole arm hangs vertically along the trunk with the forearm pronated. Active movements in the elbow joint are absent but present in the shoulder joint. The hand is flattened, atrophied, cold to the touch, hangs passively. Grasp reflex and hand-mouth reflex on the affected side are missing. Haemogram values are normal. What is the most likely diagnosis?

- a. Complete obstetrical paralysis
- b. Hypoxic-ischemic encephalopathy
- c. Osteomyelitis
- d. Proximal obstetrical paralysis
- e. Inferior distal obstetrical paralysis**

443. Head circumference of a 1-month-old boy with signs of excitement is 37 cm, prefontanel is 2x2 cm large. After feeding the child regurgitates small portions of milk; stool is normal in respect of its volume and composition. Muscle tonus is within norm. What is the most likely diagnosis?

- a. Craniostenosis
- b. Pylorospasm**
- c. Pylorostenosis
- d. Meningitis
- e. Microcephaly

444. A patient is 14 years old. Cytochemical study of punctate revealed 40% of blasts, there was negative reaction to peroxidase and with Sudan black, positive reaction to glycogen. Specify the form of acute leukemia:

- a. Monoblastic
- b. Myeloblastic
- c. Lymphoblastic**
- d. Promyelocytic
- e. Undifferentiated

445. Six months ago, a 5-year-old child was operated for CHD. For the last 3 weeks he has complained of fever, heart pain, aching muscles and bones. Examination results: "white-coffee" skin colour, auscultation revealed systolic murmur in the region of heart along with a noise in the III-IV intercostal space. Examination of fingertips revealed Janeway lesions. What is your provisional diagnosis?

- a. Acute rheumatic fever
- b. Typhoid fever
- c. Sepsis
- d. Nonrheumatic carditis
- e. Infectious endocarditis**

446. The condition of a 3-year-old child with acute non-rheumatic myocarditis has suddenly deteriorated: he presents with anxiety, acrocyanosis, peripheral edemata, dyspnea. Auscultation of lungs reveals fine moist rales on both sides mainly in the lower parts. AP- 65/40 mm Hg. HR- 150/min, heart sounds are muffled, arrhythmic (extrasystole). Liver is +4 cm. Oliguria is present. The child has been diagnosed with acute heart failure. Which method of examination is most informative for assessing the child's status dynamics?

- a. 24-hour monitoring of heart rhythm
- b. Echocardiography**
- c. Diuresis monitoring
- d. ECG
- e. Monitoring of K⁺, Na⁺ concentration in blood

447. A hospital admitted an 11-year-old boy diagnosed with medium-severe asthma, exacerbation period. In order to arrest the attacks the boy was administered broncholytic nebulizer therapy. During the day the child's condition stabilized. What is the most appropriate method for further monitoring of respiratory function in this patient?

- a. Bronchodilatation tests
- b. Voloergometry
- c. Spirometry
- d. Pneumotachometry
- e. Peak flowmetry**

448. A full-term newborn was born with body weight of 4000 g, body length of 57 cm. Reaction to the postnatal check was absent. There was diffuse cyanosis, heart rate of 80/min. What resuscitation measures should be taken?

- a. Start tactile stimulation
- b. Give an injection of naloxone
- c. Give 100% oxygen
- d. Intubate the child and start ALV
- e. Start ALV with a mask**

449. A 2-year-old child in a satisfactory condition periodically presents with moderate proteinuria, microhematuria. USI results: the left kidney is undetectable, the right one is enlarged, there are signs of double pyelocaliceal system. What study is required to specify the diagnosis?

- a. Micturating cystography
- b. Doppler study of renal vessels
- c. Radioisotope renal scan
- d. Excretory urography**
- e. Retrograde urography

450. An 8-year-old boy has a 2-year history of blotchy itchy rash appearing after eating citrus fruit. The first eruption occurred at the age of 6 months after the introduction of juices to the babys diet. Father has a history of bronchial asthma, mother - that of allergic rhinitis. What is the most likely diagnosis?

- a. Atopic dermatitis**
- b. Pityriasis Rosea
- c. Quinckes edema
- d. Urticaria
- e. Psoriasis

451. A 3-year-old child with ARVI had been administered biseptol, paracetamol, nazoferon. On the third day of treatment the babys condition deteriorated: he developed sore throat, stomatitis, conjunctivitis, hypersalivation, painful dark red spots on the neck, face, chest and legs, then the spots were replaced with vesicles. Examination revealed lesions of mucous membranes around the mouth and anus. What is your provisional diagnosis?

- a. Chickenpox
- b. Atopic dermatitis
- c. Stevens-Johnson syndrome**
- d. Serum sickness
- e. Bullous dermatitis

452. A 12-year-old child had three attacks of acute rheumatic fever accompanied by carditis. Examination revealed the symptoms of chronic tonsillitis, mitral insufficiency, carious teeth. What is the optimal method of secondary prophylaxis?

- a. Year-round bicillin prophylaxis till the age of 25**
- b. Year-round bicillin prophylaxis for 3 years
- c. Oral cavity sanitation
- d. Tonsillectomy
- e. Course of cardiotrophic drugs twice a year

453. A 7-year-old female child has developed an acute condition. She complains of a headache, two onsets of vomiting. Objectively: deferred reactions, body temperature - 39,3°C, pronounced hyperesthesia, nuchal rigidity, positive superior and inferior Brudzinskis signs, symmetric Kernigs sign.

What is the provisional diagnosis?

- a. Craniocerebral trauma
- b. Food toxicoinfection
- c. Meningitis**
- d. Toxic encephalopathy
- e. Encephalitis

454. An 8 year old child has low-grade fever, arthritis, colicky abdominal pain and a purpuric rash localized on the lower extremities. Laboratory studies reveal a guaiac-positive stool, urinalysis with red blood cell (RBC) casts and mild proteinuria, and a normal platelet count. The most likely diagnosis is:

- a. Poststreptococcal glomerulonephritis
- b. Henoch-Schonleins vasculitis**
- c. Rocky Mountain spotted fever
- d. Systemic lupus erythematosus (SLE)
- e. Idiopathic thrombocytopenic purpura

455. A young man has painful indurations in the peripapillary regions of both mammary glands. The most reasonable action will be:

- a. To take an aspirate for bacterial inoculation and cytology
- b. To administer steroids locally
- c. To remove them
- d. To cut and drain them
- e. To leave these indurations untouched**

456. A 9 year old girl with a history of intermittent wheezing for several years is brought to the pediatrician. The child has been taking no medications for some time. Physical examination reveals agitation and perioral cyanosis. Intercostal and suprasternal retractions are present. The breath sounds are quiet, and wheezing is audible bilaterally. The child is admitted to the hospital. Appropriate interventions might include all of the following EXCEPT:

- a. Prescribe nebulized cromolyn sodium**
- b. Administer supplemental oxygen
- c. Prescribe nebulized metaproterenol
- d. Prescribe intravenous corticosteroids
- e. Prescribe intravenous aminophylline

457. Routine examination of a child with a history of bronchial asthma reveals AP of 140/90 mm Hg. The most likely cause of the hypertension is:

- a. Obesity
- b. Renal disease**
- c. Chronic lung disease
- d. Theophylline overdose
- e. Coarctation of the aorta

458. Patient with thyreotoxicosis is in the 2 beds hospital ward of therapeutic department. The area of the ward is 18 m², height 3 m, ventilation rate 2,5/hr. Air temperature - 20°C, relative humidity - 45%, air movement velocity - 0,3 m/s, light coefficient - 1/5, noise level - 30 dB. Do hygienic evaluation of the conditions meet the standards?

- a. Discomfortable microclimate**
- b. Poor lighting
- c. All conditions meet the requirements

- d. High level of noise
- e. Non-effective ventilation

459. A 10-year-old child complains of fever (temperature is 39°C), frequent painful urination [pollakiuria]. Urine test: proteinuria [0,066 g/L], leukocyturia [entirely within eyeshot], bacteriuria [105 colony forming units/mL]. What is the most probable diagnosis?

- a. Acute pyelonephritis
- b. Dysmetabolic nephropathy
- c. Urolithiasis
- d. Acute cystitis
- e. Acute glomerulonephritis

460. A 8-year-old boy has suffered from tonsillitis. In 2 weeks he started complaining of migratory joint pain, edema of joints, restriction of movements, fever. On examination, an acute rheumatic heart disease, activity of the III-rd degree, primary rheumocarditis, polyarthritis; acute course of disease, cardiovascular failure IIA. What medication is to be prescribed?

- a. Prednisone
- b. Delagil
- c. Erythromycin
- d. Diprazinum
- e. Cefazolin

461. The 10 y.o. boy has complains on headache, weakness, fever 40°C, vomiting, expressed dyspnea, pale skin with flush on right cheek, lag of right hemithorax respiratory movement, dullness on percussion over low lobe of right lung, weakness of vesicular respiration in this zone. The abdomen is painless and soft at palpation. Which disease lead to these symptoms and signs?

- a. Intestinal infection
- b. Acute cholecystitis
- c. Flu
- d. Pneumonia croupousa
- e. Acute appendicitis

462. A neonate was born from the 1st gestation on term. The jaundice was revealed on the 2nd day of life, then it became more acute. The adynamia, vomiting and hepatomegaly were observed. Indirect bilirubin level was 275 $\mu\text{mol/L}$, direct bilirubin level – 5 $\mu\text{mol/L}$, Hb- 150 g/l. Mothers blood group - 0(I), Rh+, childs blood group - A(II), Rh+. What is the most probable diagnosis?

- a. Physiological jaundice
- b. Hemolytic disease of the neonate (Rh - incompatibility)
- c. Jaundice due to conjugation disorder
- d. Hepatitis
- e. Hemolytic disease of the neonate (ABO incompatibility), icteric type

463. A 3 year old child has been suffering from fever, cough, coryza, conjunctivitis for 4 days. He has been taking sulfadimethoxine. Today it has fever up to 39°C and maculopapular rash on its face. Except of rash the childs skin has no changes. What is your diagnosis?

- a. Scarlet fever
- b. Pseudotuberculosis
- c. Allergic rash
- d. Rubella
- e. Measles

464. A 2 year old girl has been ill for 3 days. Today she has low grade fever, severe catarrhal presentations, slight maculopapular rash on her buttocks and enlarged occipital lymph nodes. What is your diagnosis?

- a. Scarlet fever
- b. Adenoviral infection
- c. Pseudotuberculosis
- d. Rubella**
- e. Measles

465. An 8-year-old boy fell ill acutely: he presents with fever, weakness, headache, abdominal pain, recurrent vomiting, then diarrhea and tenesmus. Stools occur 12 times daily, are scanty, contain a lot of mucus, pus, streaks of blood. His sigmoid gut is tender and hardened. What is your diagnosis?

- a. Salmonellosis
- b. Staphylococcal gastroenteritis
- c. Escherichiosis
- d. Dysentery**
- e. Cholera

466. The child has complains of the "night" and "hungry" abdominal pains. At fibroscopy in area a bulbous of duodenum the ulcerative defect of 4 mms diameter is found, the floor is obstructed with a fibrin, (H.p +). Administer the optimum schemes of treatment:

- a. Omeprazole - Trichopolum - Claritromycin**
- b. Maalox - Ranitidin
- c. Trichopolum
- d. Vicalinum - Ranitidin
- e. De-nol

467. 6 m.o. infant was born with body's mass 3 kg and length 50 cm. He is given natural feeding. How many times per day the infant should be fed?

- a. 4
- b. 5**
- c. 6
- d. 7
- e. 8

468. An infant was born with body mass 3 kg and body length 50 cm. Now he is 3 years old. His brother is 7 years old, suffers from rheumatic fever. Mother asked the doctor for a cardiac check up of the 3-year-old son. Where is the left relative heart border located?

- a. 1 cm left from the left medioclavicular line**
- b. Along the left medioclavicular line
- c. 1 cm right from the left parasternal line
- d. 1 cm left from the left parasternal line
- e. 1 cm right from the left medioclavicular line

469. A boy of 7 y.o. had an attack of asthma and distant whistling rales after playing with a dog. In the medical history: atopic dermatitis caused by eating eggs, chicken, beef. What group of allergens is the reason of the development of bronchial asthma attacks?

- a. Pollen
- b. Dust
- c. Epidermal**

- d. Itch mite
- e. Chemical

470. A 14-year-old boy has rheumatism. Over the last 2 years he has had 3 rheumatic attacks. What course of rheumatism does the patient have?

- a. Latent
- b. Persistent-reccurent
- c. Acute
- d. Subacute
- e. Prolonged**

471. A 12 year old child has the ulcer disease of stomach. What is the etiology of this disease?

- a. Influenza
- b. Intestinal bacillus**
- c. Salmonella
- d. Helicobacter pylory
- e. Lambliosis

472. An 18-month-old child was taken to a hospital on the 4-th day of the disease. The disease began acutely with temperature 39, weakness, cough, breathlessness. He is pale, cyanotic, has had febrile temperature for over 3 days. There are crepitative fine bubbling rales on auscultation. Percussion sound is shortened in the right infrascapular region. X-ray picture shows non-homogeneous segment infiltration 8-10 mm on the right, the intensification of lung pattern. Your diagnosis:

- a. Bronchitis
- b. Grippe
- c. Segmentary pneumonia**
- d. Bronchiolitis
- e. Interstitial pneumonia

473. A 9-year-old girl has attacks of abdominal pain after fried food. No fever. She has pain in Cera point. The liver is not enlarged. Portion B [duodenal probe] - 50 ml. What is your diagnosis?

- a. Peptic ulcer
- b. Biliary tracts dyskinesia, hypotonic type**
- c. Acute colitis
- d. Hepatocirrhosis
- e. Chronic duodenum

474. A baby was born at 36 weeks of gestation. Delivery was normal, by natural way. The baby has a large cephalohematoma. The results of blood count are: Hb- 120g/l, Er- $3,5 \times 10^{12}/l$, total serum bilirubin - 123 mmol/l, direct bilirubin - 11 mmol/l, indirect - 112 mmol/l. What are causes of hyperbilirubinemia in this case?

- a. Erythrocyte hemolysis**
- b. Disturbance of the conjugative function of liver
- c. Mechanical obstruction of the bile outflow
- d. Bile condensing
- e. Intravascular hemolysis

475. A neonate is 5 days old. What vaccination dose of BCG vaccine (in mg) is necessary for vaccination of this child?

- a. 0,025 mg

- b. 0,1 mg
- c. 0,2 mg
- d. 0,05 mg**
- e. 0,075 mg

476. Full term newborn has developed jaundice at 10 hours of age. Hemolytic disease of newborn due to Rh-incompatibility was diagnosed. 2 hours later the infant has indirect serum bilirubin level increasing up to 14 mmol/L. What is most appropriate for treatment of hyperbilirubinemia in this infant?

- a. Intestinal sorbents
- b. Infusion therapy
- c. Phototherapy
- d. Phenobarbital
- e. Exchange blood transfusion**

477. A 4 year old girl was playing with her toys and suddenly she got an attack of cough, dyspnea. Objectively: respiration rate - 45/min, heart rate - 130/min. Percussion revealed dullness of percutory sound on the right in the lower parts. Auscultation revealed diminished breath sounds with bronchial resonance on the right. X-ray picture showed shadowing of the lower part of lungs on the right. Blood analysis revealed no signs of inflammation. The child was diagnosed with foreign body in the right bronchus. What complication caused such clinical presentations?

- a. Pneumonia
- b. Atelectasis**
- c. Pneumothorax
- d. Emphysema
- e. Bronchitis

478. A 6 week old child is admitted because of tachypnea. Birth had been uneventful, although conjunctivitis developed on the third day of life and lasted for about 2 weeks. Physical examination reveals tachypnea, bilateral inspiratory crackles and single expiratory wheezing. Bilateral pneumonia is evident on chest X-ray. The child is afebrile and has no history of fever. White blood cell count is $15 \times 10^9/l$, with 28% of eosinophils. The most likely cause of this child's symptoms is:

- a. *Mycoplasma pneumoniae*
- b. *Pneumocystis carinii*
- c. *Clamidia trachomatis***
- d. Visceral larva migrans
- e. Varicella

479. A newborn infant has mild cyanosis, diaphoresis, poor peripheral pulse, hepatomegaly and cardiomegaly. Respiratory rate is 60 breaths per minute, and heart rate is 230 beats per minute. The child most likely has congestive heart failure caused by:

- a. Paroxysmal atrial tachycardia**
- b. Atrial flutter and partial atrioventricular block
- c. A large atrial septal defect and valvular pulmonary stenosis
- d. Hypoplastic left heart syndrome
- e. A ventricular septal defect and transposition of the great vessels

480. A 7 d.o. boy is admitted to the hospital for evaluation of vomiting and dehydration. Physical examination is otherwise normal except for minimal hyperpigmentation of the nipples. Serum sodium and potassium concentrations are 120 meq/L and 9 meq/L respectively. The most likely diagnosis is:

- a. Pyloric stenosis

- b. Panhypopituitarism
- c. Hyperaldosteronism
- d. Congenital adrenal hyperplasia**
- e. Secondary hypothyroidism

481. A 7 y.o. boy has crampy abdominal pain and a rash on the back of his legs and buttocks as well as on the extensor surfaces of his forearms. Laboratory analysis reveals proteinuria and microhematuria. He is most likely to be affected by:

- a. Anaphylactoid purpura**
- b. Poststreptococcal glomerulonephritis
- c. Dermatomyositis
- d. Polyarteritis nodosa
- e. Systemic lupus erythematosus

482. A girl is 12-year-old. Yesterday she was overcooled. Now she is complaining on pain in suprapubic area, frequent painful urination by small portions, temperature is 37,8°C. Pasternatsky symptom is negative. Urine analysis: protein - 0,033 g/L, WBC- 20-25 in f/vis, RBC- 1-2 in f/vis. What diagnosis is the most probable?

- a. Dysmetabolic nephropathy
- b. Acute pyelonephritis
- c. Urolithiasis
- d. Acute cystitis**
- e. Acute glomerulonephritis

483. The girl of 11 y.o. She is ill for 1 month. She has "butterfly"-type rash on face (spots and papules), pain and swelling of small joints on arms and legs, signs of stomatitis (small-sized ulcers in mouth). CBC: Hb- 80 g/L, RBC- $2,9 \times 10^{12}/L$, WBC- $15 \times 10^9/L$, ESR- 40 mm/hour. Urinalysis: protein- 0,33 g/L. What is the most probable diagnosis?

- a. Acute rheumatic fever
- b. Dermatomyositis
- c. Juvenile rheumatoid arthritis, systemic type
- d. Periarthritis nodosa
- e. Systemic lupus erythematosus**

484. An infant aged 1 year on the third day of common cold at night developed inspiratory stridor, hoarse voice and barking cough. Physical examination revealed suprasternal and intercostal chest retractions. There is a bluish skin discoloration mostly seen over the upper lip. The respiratory rate is 52 per min and pulse- 122 bpm. The body temperature is 37,5°C. What disease does the infant have?

- a. Acute epiglottitis
- b. Acute infectious croup due to viral laryngotracheitis**
- c. Bronchopneumonia without complications
- d. Acute laryngitis
- e. Acute bronchiolitis with respiratory distress

485. A 3-year-old child has been admitted to a hospital because of ostealgia and body temperature rise up to 39°C. Objectively: the patient is in grave condition, unable to stand for ostealgia, there is apparent intoxication, lymph nodes are enlarged up to 1,5 cm. Liver can be palpated 3 cm below the costal margin, spleen - 2 cm below the costal margin. In blood: RBCs - $3,0 \times 10^{12}/L$, Hb- 87 g/L, colour index - 0,9, thrombocytes - $190 \times 10^9/L$, WBCs - $3,2 \times 10^9/L$, eosinophils - 1, stab neutrophils - 1, segmented neutrophils - 0, lymphocytes - 87, monocytes - 2, ESR - 36 mm/h. What examination should be conducted in order to

specify the diagnosis?

- a. Lymph node puncture
- b. Ultrasound
- c. Sternal puncture**
- d. Lymph node biopsy
- e. Computer tomography

486. Examination of a 9-month-old girl revealed skin pallor, cyanosis during excitement. Percussion revealed transverse dilatation of cardiac borders. Auscultation revealed continuous systolic murmur to the left of the breastbone in the 3-4 intercostal space. This murmur is conducted above the whole cardiac region to the back. What congenital cardiac pathology can be suspected?

- a. Coarctation of aorta
- b. Defect of interatrial septum
- c. Defect of interventricular septum**
- d. Fallots tetrad
- e. Pulmonary artery stenosis

487. A 13 y.o. patient was treated in dermatological hospital for atopic dermatitis exacerbation. He was discharged in the condition of clinical remission. What recommendations should the doctor give to prevent exacerbations?

- a. Avoidance of skin insolation
- b. Use of neutral creams to protect skin**
- c. Systematic use of local corticosteroids
- d. Frequent skin washing with detergents
- e. Systematic skin disinfection

488. On the 21 day after appearance of vesiculous chickenpox rash a 7-year-old child developed ataxia, nystagmus, intention tremor, muscle hypotonia. Liquor analysis shows a low-grade lymphocytic pleocytosis, slightly increased protein rate. What complication is it?

- a. Acute nephritis
- b. Postherpetic neuralgia
- c. Purulent meningitis
- d. Pneumonitis
- e. Encephalitis**

489. A 3-year-old child was playing in a playpen when he suddenly developed paroxysmal cough and shortness of breath. Objectively: dry cough, mixed dyspnea. Lung auscultation revealed some wheezes. Breathing sounds on the right are diminished. The child doesn't mix with other children. Immunization is age-appropriate. What pathological condition can be suspected?

- a. Foreign body in the respiratory tracts**
- b. Acute respiratory viral infection
- c. Bronchial asthma
- d. Pertussis
- e. Pneumonia

490. A 10-year-old child has been followed-up for the dilated cardiomyopathy. The child presents with dyspnea, cardialgia. There are dense, nonmobile edemata on the lower extremities and sacrum. Ps-120/min. The cardiac borders are extended transversely. Heart sounds are muffled, there is blowing systolic murmur at the apex and over the xiphoid process. Liver is 3 cm enlarged, urine output is reduced. The blood total protein - 58.6 g/l. In urine: protein - 0,025 g/l, WBCs - 2-4 in the field of vision, RBCs - 2-3

in the field of vision. What is the main mechanism of edema syndrome development:

- a. Peripheral circulation disorder
- b. Venous congestion of lesser circulation
- c. Venous congestion of greater circulation**
- d. Secondary nephropathy development
- e. Hypoproteinemia

491. After objective clinical examination a 12 year old child was diagnosed with mitral valve prolapse. What complementary instrumental method of examination should be applied for the diagnosis confirmation?

- a. Phonocardiography
- b. Roentgenography of chest
- c. Echocardiography**
- d. ECG
- e. Veloergometry

492. A child with tetralogy of Fallot is most likely to exhibit:

- a. Increased pressure in the right ventricle**
- b. Increased pulse pressure
- c. Normal oxygen tension (PaO₂) in the left ventricle
- d. Normal pressure gradient across the pulmonary valve
- e. Increased pulmonary blood flow

493. A 2-months-old child after preventive vaccination had a prolonged hemorrhage from the vaccination place and due to those an intramuscular hematoma. During examination of the child a considerable rise of prothrombin consumption and a significant prolongation of the activated partial thromboplastic time were found. What is the most probable diagnosis?

- a. Hemophilia**
- b. Henoch-Schoenlein disease
- c. Inborn afibrinogenemia
- d. Hemorrhagic disease of the neonate
- e. Werlhofs disease

494. A 10 y.o. boy with hemophilia has signs of acute respiratory viral infection with fever. What of the mentioned antifebrile medications are contraindicated to this patient?

- a. Acetylsalicylic acid**
- b. Pipolphen
- c. Panadol extra
- d. Paracetamol
- e. Analgin

495. A child is 4 years old, has been ill for 5 days. There are complaints of cough, skin rash, to- 38,2°C, face puffiness, photophobia, conjunctivitis. Objectively: there is bright, maculo-papulous, in some areas confluent rash on the face, neck, upper chest. The pharynx is hyperemic. There are seropurulent discharges from the nose. Auscultation revealed dry rales in lungs. What is the most likely diagnosis?

- a. Enterovirus exanthema
- b. Measles**
- c. Scarlet fever
- d. Adenoviral infection
- e. Rubella

496. A 10 month old boy has been ill for 5 days after consumption of unboiled milk. Body temperature is 38-39°C, there is vomiting, liquid stool. The child is pale and inert. His tongue is covered with white deposition. Heart sounds are muffled. Abdomen is swollen, there is borborygmus in the region of umbilicus, liver is enlarged by 3 cm. Stool is liquid, dark-green, with admixtures of mucus, 5 times a day. What is the most probable diagnosis?

- a. Acute shigellosis
- b. Rotaviral infection
- c. Staphylococcal enteric infection
- d. Escherichiosis
- e. Salmonellosis**

497. A 3 year old child with weight deficiency suffers from permanent moist cough. In history there are some pneumonias with obstruction. On examination: distended chest, dullness on percussion over the lower parts of lungs. On auscultation: a great number of different rales. Level of sweat chloride is 80 millimol/l. What is the most probable diagnosis?

- a. Bronchiectasis
- b. Pulmonary hypoplasia
- c. Bronchial asthma
- d. Recurrent bronchitis
- e. Mucoviscidosis (cystic fibrosis)**

498. A 12 y.o. child with acute glomerulonephritis presented with hypertensive syndrom during first days of the disease. What is the role of angiotensin II in the pathogenesis?

- a. Intensifies production and secretion of aldosterone**
- b. Inhibits depressive action of prostaglandins
- c. Increases renin level
- d. Increases erythropoietin production
- e. Increases heart output

499. District pediatrician examines a healthy carried 1-month-old child. The child is breast-fed. Prophylaxis of what disease will the doctor recommend to do first?

- a. Parathyroid
- b. Rachitis**
- c. Hypotrophy
- d. Anemia
- e. Spasmophilia

500. A 7-year-old boy has been managed for a month. Immediately after hospitalization there were apparent edemata, proteinuria - 7,1 g/l, daily urine protein - 4,2 g. Biochemical blood test shows persistent hypoproteinemia (43,2 g/l), hypercholesterolemia (9,2 millimole/l). The patient is most likely have the following type of glomerulonephritis:

- a. Combined
- b. Nephrotic**
- c. Isolated urinary
- d. Nephritic
- e. Hematuric

501. Mother of a 10-month-old baby reports significant pallor, poor appetite, enlarged abdomen in the baby. As a neonate, the child underwent treatment in the in-patient hospital for jaundice and anemia. Objectively: the skin is pale and jaundiced, teeth are absent, abdomen is enlarged, spleen is palpable.

Blood test results: Hb - 90 g/l, RBC - $3,0 \times 10^{12}/l$, color index - 0,9, microspherocytosis, reticulocytosis up to 20%, serum bilirubin - 37 mmol/l, unconjugated bilirubin - 28 mmol/l. What type of anemia has occurred in the patient?

- a. Protein-deficiency anemia
- b. Iron-deficiency anemia
- c. Hemolytic anemia**
- d. B12-deficiency anemia
- e. Hereditary elliptocytosis

502. Examination of a 4 month old child revealed some lemon-yellow squamae with fatty crusts on the scalp. What is the most probable diagnosis?

- a. Gneiss**
- b. Strophulus
- c. Infantile eczema
- d. Pseudofurunculosis
- e. Milk crust

503. A lumbar puncture was performed for a newborn suspected of having an intracranial birth injury. Bloody cerebrospinal fluid was obtained. What hemorrhage occurred in this case?

- a. Epidural
- b. Cephalohematoma
- c. Subarachnoid**
- d. Supratentorial
- e. Subtentorial

504. A child was taken to a hospital with focal changes in the skin folds. The child was anxious during examination, examination revealed dry skin with solitary papulous elements and ill-defined lichenification zones. Skin eruption was accompanied by strong itch. The child usually feels better in summer, his condition is getting worse in winter. The child has been artificially fed since he was 2 months old. He has a history of exudative diathesis. Grandmother by his mothers side has bronchial asthma. What is the most likely diagnosis?

- a. Urticaria
- b. Atopic dermatitis**
- c. Seborrheal eczema
- d. Contact dermatitis
- e. Strophulus

505. A child is 7 months old. Birth weight was 3450, the child is breastfed. Supplemental feeding was introduced on time. Determine the daily protein requirements for the child:

- a. 2,0 g/kg
- b. 3,5 g/kg
- c. 4,0 g/kg
- d. 3,0 g/kg**
- e. 2,5 g/kg

506. 2 weeks after recovering from angina an 8-year-old boy developed edemata of face and lower limbs. Objectively: the patient is in grave condition, AP- 120/80 mm Hg. Urine is of dark brown colour. Oliguria is present. On urine analysis: relative density - 1,015, protein - 1,2 g/l, RBCs are leached and cover the whole vision field, granular casts - 1-2 in the vision field, salts are represented by urates (big number). What is the most likely diagnosis?

a. Nephrolithiasis

b. Acute glomerulonephritis with nephritic syndrome

c. Acute glomerulonephritis with nephrotic syndrome, hematuria and hypertension

d. Acute glomerulonephritis with nephrotic syndrome

e. Acute glomerulonephritis with isolated urinary syndrome

507. A 4 month old child fell seriously ill: body temperature rose up to 38,5°C, the child became inert and had a single vomiting. 10 hours later there appeared rash over the buttocks and lower limbs in form of petechiae, spots and papules. Some haemorrhagic elements have necrosis in the centre. What is the most probable disease?

a. Meningococemia

b. Influenza

c. Scarlet fever

d. Haemorrhagic vasculitis

e. Rubella

508. A 5-year-old child had strong headache, vomiting, ataxy, dormancy, discoordination of movements, tremor of the extremities on the 8th day of the disease. It was followed by rise in body temperature, vesiculosis rash mainly on the skin of the body and the hairy part of the head. At the second wave of the fever a diagnosis of encephalitis was given. What disease complicated encephalitis in this case?

a. German measles

b. Measles

c. Chicken pox

d. Enterovirus infection

e. Herpetic infection

509. A 13 year old girl was admitted to the cardiological department because of pain in the muscles and joints. Examination of her face revealed an edematous erythema in form of butterfly in the region of nose bridge and cheeks. What is the most probable diagnosis?

a. Rheumatism

b. Rheumatoid arthritis

c. Periarteritis nodosa

d. Systemic lupus erythematosus

e. Dermatomyositis

510. After birth a child was pale and had arrhythmical breathing. Oxygen therapy didn't have any effect. Pulse was weak and rapid. It was difficult to measure arterial pressure accurately. There were no edemata. What is the most likely reason for these symptoms?

a. Intrauterine sepsis

b. Congenital pneumonia

c. Congestive heart failure

d. Intracranial haematoma

e. Asphyxia

511. A child was delivered severely premature. After the birth the child has RI symptoms, anasarca, fine bubbling moist rales over the lower lobe of the right lung. Multiple skin extravasations, bloody foam from the mouth have occurred after the 2 day. On chest X-ray: atelectasis of the lower lobe of the right lung. In blood: Hb-100 g/L, Ht- 0,45. What is the most probable diagnosis?

a. Disseminated intravascular clotting syndrome

b. Hyaline membrane disease

c. Congenital pneumonia

d. Edematous-hemorrhagic syndrome

e. Pulmonary edema

512. An infant is 2 days old. He was born full-term with signs of intrauterine infection, and therefore receives antibiotics. Neonates should be given antibiotics at longer intervals and lower doses compared to older children and adults because:

a. Neonates have a decreased blood pH

b. Neonates have higher hematocrit

c. Neonates have lower concentration of protein and albumin in blood

d. Neonates have a reduced activity of glucuronyl transferase

e. Neonates have lower glomerular filtration

513. A 12-year-old girl applied to doctor with complaints of swelling on the front part of the neck. The doctor diagnosed hyperplasia of the thyroid gland of the second degree, euthyroidism. Ultrasound suspected autoimmune thyroiditis. Blood was taken for titre of antibodies to thyroglobulin. What titre of antibodies will be diagnostically important?

a. 1:150

b. 1:50

c. 1:100

d. 1:200

e. 1:250

514. On the 3rd day of life a baby presented with haemorrhagic rash, bloody vomit, black stool. Examination revealed anaemia, extended coagulation time, hypoprothrombinemia, normal thrombocyte rate. What is the optimal therapeutic tactics?

a. Sodium ethamsylate

b. Fibrinogen

c. Calcium gluconate

d. Vitamin K

e. Epsilon-aminocaproic acid

515. A 2 m.o. breast-fed child suffers from cheek skin hyperemia, sporadic papulous elements on the skin of the chest and back following the apple juice introduction. The child is restless. What is the initial pediatrician's tactics?

a. Treat with claritine

b. Apply ointment with corticosteroids to affected skin areas

c. Refer to prescribe dermatologist

d. Administer general ultraviolet irradiation

e. Clarify mother's diet and exclude obligate allergens

516. A 5 month old boy was born prematurely, he didn't suffer from any disease at the infant age and later on. Examination at an outpatient's hospital revealed paleness of skin, sleepiness. Blood count: Hb - 95 g/l, erythrocytes - $3,5 \times 10^{12}/l$, reticulocytes - 9 o/oo, colour index - 0,7, osmotic stability of erythrocytes - 0,44-0,33%, serum iron - 4,9 micromole/l. What is the most probable cause of anemia?

a. B12 deficit

b. Iron deficit

c. Infectious process

d. Hemopoiesis immaturity

e. Erythrocyte hemolysis

517. An 8 year old girl complains about joint pain, temperature rise up to 38°C, dyspnea. Objectively: the left cardiac border is deviated by 2,5 cm to the left, tachycardia, systolic murmur on the apex and in the V point are present. Blood count: leukocytes – 20×10⁹/l, ESR - 18 mm/h. What sign gives the most substantial proof for rheumatism diagnosis?

- a. Leukocytosis
- b. Arthralgia
- c. Carditis**
- d. Fever
- e. Accelerated ESR

518. A 5 y.o. child with stigmas of dysembryogenesis (small chin, thick lips, opened mouth, hyperthelorum) has systolic murmur in the second intercostal to the right of the sternum. The murmur passes to the neck and along the sternum left edge. The pulse on the left brachial artery is weakened. BP on the right arm is 110/60 mm Hg, on the left - 100/60 mm Hg. ECG results: hypertrophy of the right ventricle. What defect is the most probable?

- a. Defect of interventricular septum
- b. Coarctation of the aorta
- c. Open aortic duct
- d. Aortic stenosis**
- e. Defect of interatrial septum

519. A 1,5-year-old child fell ill acutely with high temperature 38°C, headache, fatigue. The temperature declined on the fifth day, muscular pain in the right leg occurred in the morning, there were no movements and tendon reflexes, sensitivity was reserved. What is the initial diagnosis?

- a. Viral encephalitis
- b. Osteomyelitis
- c. Hip joint arthritis
- d. Polyomyelitis**
- e. Polyarthropathy

520. A 3-year-old child has been delivered to a hospital in soporose state with considerable amyotonia, inhibition of tendon and periosteal reflexes. Miosis and asthenocoria are also present. Corneal reflexes are preserved. Pulse is rapid and weak. AP- 80/50 mm Hg. The parents suspect the child of accidental taking some tablets. Such clinical presentations are typical for intoxication with the following tableted drugs:

- a. Antihypertensive drugs
- b. Antropine drugs
- c. Tranquilizers**
- d. Barbiturates
- e. Beta-2-adrenoceptor agonists

521. A 5-year-old child developed an acute disease starting from body temperature rise up to 38,5°C, running nose, cough and conjunctivitis. On the 4th day the child presented with maculo-papular rash on face. Body temperature rose again up to 39,2°C. Over the next few days the rash spread over the whole body and extremities. Mucous membrane of palate was hyperemic, there was whitish deposition on cheek mucous membrane next to molars. What is your provisional diagnosis?

- a. Rubella
- b. Measles**
- c. Yersinia
- d. Acute viral respiratory infection

e. Enterovirus diseases

522. A 3 year old child fell acutely ill, body temperature rose up to 39,5°C, the child became inert, there appeared recurrent vomiting, headache. Examination revealed positive meningeal symptoms, after this lumbar puncture was performed. Spinal fluid is turbid, runs out under pressure, protein concentration is 1,8 g/l; Pandy reaction is +++, sugar concentration is 2,2 millimole/l, chloride concentration - 123 millimole/l, cytosis is $2,35 \times 10^9$ (80% of neutrophils, 20% of lymphocytes). What is the most probable diagnosis?

- a. Serous tuberculous meningitis
- b. Serous viral meningitis
- c. Purulent meningitis**
- d. Subarachnoid haemorrhage
- e. Brain tumour

523. A 13 y.o. girl complains of having temperature rises up to febrile figures for a month, joint ache, periodical skin rash. Examination revealed steady enhancing of ESR, LE-cells. What is the most probable diagnosis?

- a. Systematic scleroderma
- b. Juvenile rheumatoid arthritis
- c. Systematic lupus erythematosus**
- d. Acute lymphoblast leucosis
- e. Rheumatics

524. A child is 1 year old. After the recent introduction of complementary feeding the child has presented with loss of appetite, diarrhea with large amounts of feces and occasional vomiting, body temperature is normal. Objectively: body weight is 7 kg, the child is very pale, there are edemata of both legs, abdomen is significantly enlarged. Coprogram shows many fatty acids and soaps. The child has been diagnosed with celiac disease and administered the gluten-free diet. What is to be excluded from the ration?

- a. Animal protein
- b. High digestible carbohydrates
- c. Milk and dairy products
- d. Fruit
- e. Cereals - wheat and oats**

525. A 7-year-old child was brought to a doctor for a check. The child has a 4-year history of bronchial asthma, asthma attacks occur mainly in spring and summer. Allergy tests revealed hypersensitivity to poplar seed tufts, field herbs. What recommendation should be given?

- a. Needle reflexotherapy
- b. Specific hyposensitization**
- c. Treatment at a health resort
- d. Physiotherapy
- e. Phytotherapy

526. A 9-month-old child presents with fever, cough, dyspnea. The symptoms appeared 5 days ago after a contact with a person having ARVI. Objectively: the child is in grave condition. Temperature of 38°C, cyanosis of nasolabial triangle is present. RR- 54/min, nasal flaring while breathing. There was percussion dullness on the right below the scapula angle, and tympanic sound over the rest of lungs. Auscultation revealed bilateral fine moist rales predominating on the right. What is the most likely diagnosis?

- a. ARVI**

- b. Acute bronchitis
- c. Acute bronchiolitis
- d. Acute pneumonia**
- e. Acute laryngotracheitis

527. Examination of a full-term 6-day-old infant revealed that different areas of skin had erythemas, flaccid bubbles, eroded surface, cracks, peeling of the epidermis looking like being scalded with boiling water. There was positive Nikolskys symptom. General condition of the child was serious. The child was restless, hypersensitive, febrile. What is the most likely diagnosis in this case?

- a. Ritters exfoliative dermatitis**
- b. Fingers pseudofurunculosis
- c. Epidermolysis
- d. Neonatal pemphigus
- e. Neonatal phlegmon

528. A 1,5 y.o. child fell seriously ill: chill, body temperature rise up to 40,1°C, then rapid dropping to 36,2°C, skin is covered with voluminous hemorrhagic rash and purple cyanotic spots. Extremities are cold, face features are sharpened. Diagnosis: meningococcosis, fulminant form, infection-toxic shock. What antibiotic must be used at the pre-admission stage?

- a. Sulfamonometoxin
- b. Soluble Levomycetine succinate**
- c. Lincomycin
- d. Penicillin
- e. Gentamycin

529. A 10 year old boy suffers from chronic viral hepatitis type B with maximal activity. What laboratory test can give the most precise characteristic of cytolysis degree?

- a. Prothrombin test
- b. Test for whole protein
- c. Weltmans coagulation test
- d. Takata-Ara test
- e. Transaminase test**

530. Examination of a 12 year old child revealed diffuse thyroid enlargement of the II degree. Heart auscultation revealed dullness of heart sounds, heart rate was 64/min. The child has frequent constipations, anemia. Concentration of thyreoglobulin antibodies is increased. What disease might have caused such symptoms?

- a. Diffuse toxic goiter
- b. Thyroid hyperplasia
- c. Endemic goiter
- d. Autoimmune thyroiditis**
- e. Thyroid carcinoma

531. An 8-year-old girl has been admitted to the cardiology department. Objectively: there is a skin lesion over the extensor surfaces of joints with atrophic cicatrices, depigmentation, symmetrical affection of skeletal muscles (weakness, edema, hypotrophy). What disease are these changes most typical for?

- a. Nodular periarteritis
- b. Systemic scleroderma
- c. Dermatomyositis**
- d. Systemic lupus erythematosus

e. Reiter's disease

532. An 8-year-old child with a 3-year history of diabetes was hospitalized in hyperglycemic coma. Specify the initial dose of insulin to be administered:

- a. 0,05 U/kg of body weight per hour
- b. 0,3-0,4 U/kg of body weight per hour
- c. 0,4-0,5 U/kg of body weight per hour
- d. 0,1-0,2 U/kg of body weight per hour**
- e. 0,2-0,3 U/kg of body weight per hour

533. A 12-year-old girl undergoes regular gastroenterological check-ups for duodenal ulcer, biliary dyskinesia. What is the recommended frequency of anti-relapse treatment?

- a. Three times a year
- b. Twice a year**
- c. Every 3 months
- d. Every two months
- e. Once a year

534. A 3 m.o. child fell seriously ill, body temperature rose up to 37,8°C, there is semicough. On the 3-rd day the cough grew worse, dyspnea appeared. On percussion: tympanic sound above lungs, on auscultation: a lot of fine moist and wheezing rales during expiration. What is the most probable diagnosis?

- a. Acute respiratory viral infection, bronchopneumonia
- b. Acute respiratory viral infection, bronchitis with asthmatic component
- c. Acute respiratory viral infection, focal pneumonia
- d. Acute respiratory viral infection, bronchiolitis**
- e. Acute respiratory viral infection, bronchitis

535. A child was born at a gestational age of 34 weeks in grave condition. The leading symptoms were respiratory distress symptoms, namely sonorous and prolonged expiration, involving additional muscles into respiratory process. The Silverman score at birth was 0 points, in 3 hours it was 3 points with clinical findings. Which diagnostic study will allow to diagnose the form of pneumopathy?

- a. Immunoassay
- b. X-ray of chest**
- c. Determination of blood gas composition
- d. Clinical blood test
- e. Proteinogram

536. A 10-year-old girl consulted a doctor about thirst, frequent urination, weight loss. She has been observing these symptoms for about a month. Objectively: no pathology of internal organs was revealed. What laboratory analysis should be carried out in the first place?

- a. Blood glucose analysis on an empty stomach**
- b. Acetone in urine test
- c. Glucosuric profile
- d. Glucose tolerance test
- e. Glucose in urine test on the base of daily diuresis

537. A 6-year-old child complains of frequent liquid stool and vomiting. On the 2nd day of disease the child presented with inertness, temperature rise up to 38,2°C, Ps- 150 bpm, scaphoid abdomen, palpatory painful sigmoid colon, defecation 10 times a day with liquid, scarce stool with mucus and streaks of green.

What is a provisional diagnosis?

- a. Yersiniosis
- b. Shigellosis**
- c. Escherichiosis
- d. Salmonellosis
- e. Intestinal amebiasis

538. A 4-year-old boy had untimely vaccination. He complains of painful swallowing, headache, inertness, fever. Objectively: the child is pale, has enlarged anterior cervical lymph nodes, swollen tonsils with cyanotic hyperemia, tonsils are covered with gray-white pellicles which cannot be easily removed. When the pellicles are forcibly removed, the tonsils bleed. What is the most likely diagnosis?

- a. Follicular tonsillitis
- b. Oropharyngeal diphtheria**
- c. Pseudomembranous tonsillitis
- d. Lacunar tonsillitis
- e. Infectious mononucleosis

539. After a 10-year-old child had been bitten by a bee, he was delivered to a hospital. There were lip, face and neck edemata. The patient felt hot and short of breath. Objectively: breathing was laboured and noisy. There were foamy discharges from the mouth, cough. The skin was pale and cold. There was bradypnoea. Heart sounds were muffled and arrhythmic. Thready pulse was present. What diagnosis was made by the expert in resuscitation?

- a. Anaphylactic shock**
- b. Bronchial asthma
- c. Cerebral coma
- d. Acute cardiovascular collapse
- e. Quinckes edema

540. A 13-year-old girl complains of fever up to 37,4°C during the last 2 months after recovering from ARVI. Objectively: malnutrition, diffuse grade II enlargement of the thyroid gland feeling dense on palpation, exophthalmos, tachycardia. What kind of pathological syndrome is it?

- a. Thyrotoxicosis**
- b. Hypoparathyroidism
- c. Thymomegaly
- d. Hyperparathyroidism
- e. Hypothyroidism

541. A 3-year-old girl presents with pertussis-like cough with thick sputum. There have been persistent changes in lungs since the age of 6 months when she was first diagnosed with acute pneumonia. Chloride concentration in the perspiration is 112 mEq/l. The child has been diagnosed with mucoviscidosis. What is the basis for autosomal recessive disease - mucoviscidosis?

- a. Pulmonary cysts
- b. Pulmonary artery hypoplasia
- c. ?1-antitrypsin deficiency
- d. Deposition of calcium triphosphates and carbates in the alveoles
- e. Inadequate transport of sodium and chloride ions**

542. A newborn has purulent discharges from the umbilical wound, the skin around the navel is swollen. The baby's skin is pale, with a yellow-gray tint, generalized hemorrhagic rash is present. What is the most likely diagnosis?

- a. Thrombocytopathy
- b. Omphalitis
- c. Hemorrhagic disease of the newborn
- d. Hemolytic disease of the newborn

e. Sepsis

543. A 14-year-old boy with a history of chronic tonsillitis and sinusitis has developed a feeling of heart irregularities and additional pulse. HR- 83/min. ECG results: regular impulses with no visible P wave that occur every two sinus contractions, QRS complex is dramatically deformed and prolonged to over 0,11 s, T wave is discordant followed by a complete compensatory pause. Specify the arrhythmia type:

a. Trigeminal extrasystole

- b. Partial AV-blockade
- c. Left bundle branch block
- d. Complete AV-block
- e. Bigeminal extrasystole

544. A 10-year-old child with a history of nonrheumatic carditis has periodic attacks manifested by heart pain, dyspnea, pallor, high blood pressure, a dramatic increase in heart rate up to 180/min. What drug would be most effective to treat this patient?

- a. Lidocaine
- b. Procainamide

c. Obsidan

- d. Verapamil
- e. Ajmaline

545. A 1-month-old child became restless and presented with an increase in head sweating. Its known from the history that the child has been fed with cows milk since birth (September 5). Examination revealed craniotabes. A doctor administered a course of UV radiation. Decide, if the child needs ergocalciferol:

- a. In combination with UVR
- b. Does not need

c. 2-2,5 months after the UVR withdrawal

- d. Immediately after the UVR withdrawal
- e. A month after the UVR withdrawal

546. 15 minutes after the second vaccination with DTP vaccine a 4-month-old boy exhibited the symptoms of Quinckes edema. What medication should be given for emergency aid?

- a. Heparin
- b. Furosemide
- c. Seduxen

d. Prednisolone

- e. Adrenalin

547. A baby is 3 months old. The mother consulted a pediatrician about lack of breast milk. After several test weighings it was found that the child had to receive supplementary feeding. What is the optimal milk formula for this child?

- a. Milk formula № 3
- b. Milk formula № 2

c. Malysh

- d. Whole cows milk

e. Malutka

548. Examination of a newborn revealed skin redness that appeared immediately after birth and reached the maximum intensity on the second day of life. What is your provisional diagnosis?

- a. Transient erythema
- b. Toxic erythema
- c. Simple erythema**
- d. Erythema nodosum
- e. Annular erythema

549. A child is 2 days old. He was born with a weight of 2900 kg, body length of 50 cm. On examination the skin is intensely red, elastic, with preserved turgor. Puerile respiration is present. Respiration rate - 40/min, cardiac sounds are rhythmic, sonorous. HR- 138/min. The abdomen is soft. The liver extends 2 cm below the costal margin. Diuresis is sufficient. Stool is in form of meconium. What is the most likely diagnosis?

- a. Physiological erythema of the newborn**
- b. Neonatal phlegmon
- c. Exfoliative Ritters dermatitis
- d. Erysipelas
- e. Toxic erythema of the newborn

550. A full-term baby was born with body weight of 3200 g, body length of 50 cm, Apgar score - 8-10 points. What is the optimum time for the first breast-feeding?

- a. First 6 hours
- b. First 48 hours
- c. After 48 hours
- d. First 30 minutes**
- e. First 24 hours

551. An 11-year-old girl has been immunized according to her age and in compliance with the calendar dates. What vaccinations should the children receive at this age?

- a. Pertussis
- b. Diphtheria and tetanus**
- c. Polio
- d. TB
- e. Hepatitis B

552. A baby born after fast labour has palsy of hand muscles. Grasp reflex is absent, as well as hand-to-mouth reflex. Hand sensitivity is absent. What is the most likely diagnosis?

- a. Dejerine-Klumpke palsy**
- b. Total lesion of the brachial plexus
- c. Bernard-Horner syndrome
- d. Muscle paresis
- e. Duchenne-Erbs palsy

553. A child is 12 years old. He complains of a dull aching pain in the epigastrium and right hypochondrium, that is getting worse after taking fatty or fried food, headache, weakness, nausea, low-grade fever. Abdominal palpation reveals a marked resistance of muscles in the right hypochondrium, positive Kerrs, Ortners, Murphys symptoms. What is the most likely diagnosis?

- a. Chronic cholecystitis**

- b. Viral hepatitis
- c. Acute pancreatitis
- d. Acute gastritis
- e. Acute appendicitis

554. A 3-month-old girl presents with rhinitis, dyspnea, dry cough. These manifestations has been observed for two days. Objectively: the child has pale skin, acrocyanosis, shallow respiration at the rate of 80/min. Percussion reveals handbox resonance over the whole surface of lungs, massive fine rales. What is the most likely diagnosis?

- a. Foreign body of the airway
- b. Acute bronchitis
- c. Pneumonia
- d. Mucoviscidosis
- e. Acute bronchiolitis**

555. During the first home visit to a full-term boy after his discharge from the maternity hospital a pediatrician revealed a symmetrical swelling of mammae without skin changes over them, swelling of the scrotum. The body temperature was of 36,5°C. The baby was calm, sucked the mothers breast actively. What condition should you think of?

- a. Neonatal mastitis
- b. Necrotic neonatal phlegmon
- c. Congenital adrenal dysfunction
- d. Hormonal crisis of the newborn**
- e. Sclerema

556. A full-term neonate weighing 4500 g was born asphyxiated with Apgar score of 4-6 points. During the delivery shoulder dystocia occurred. Neurologic assessment revealed non-focal neurologic symptoms, total flaccid paresis of the upper extremities since the arm was atonic and pronated. Grasping, Babkins and Moros reflexes were absent. What segments of spinal cord had been affected?

- a. ThI - ThV
- b. ThVI - ThVII
- c. CI - CII
- d. CIII - CIV
- e. CV - ThI**

557. A newborn (mothers I pregnancy) weighing 3500 g presents with jaundice, lethargy, reduced reflexes. Objectively: second grade jaundice of skin with saffron tint, liver - +2 cm, spleen - +1 cm. Urine and feces are yellow. Blood count: Hb- 100 g/l, RBCs - $3,2 \times 10^{12}/l$, WBCs - $18,7 \times 10^9/l$, mothers blood type - O(I) Rh(+), babys blood type - A(II) Rh(-), bilirubin - 170 mmol/l, indirect fraction. ALT, AST rates are normal. What disease is the child most likely to have?

- a. Hemolytic disease of newborn, Rh-conflict
- b. Perinatal hepatitis
- c. Hemolytic disease of newborn, AB0-conflict**
- d. Biliary atresia
- e. Physiologic jaundice

558. All the joints on the left elbow of a newborn are extended, the whole arm hangs vertically along the trunk with the forearm pronated. Active movements in the elbow joint are absent but present in the shoulder joint. The hand is flattened, atrophied, cold to the touch, hangs passively. Grasp reflex and hand-mouth reflex on the affected side are missing. Haemogram values are normal. What is the most

likely diagnosis?

- a. Osteomyelitis
- b. Complete obstetrical paralysis
- c. Hypoxic-ischemic encephalopathy
- d. Inferior distal obstetrical paralysis**
- e. Proximal obstetrical paralysis

559. Head circumference of a 1-month-old boy with signs of excitement is 37 cm, prefontanel is 2x2 cm large. After feeding the child regurgitates small portions of milk; stool is normal in respect of its volume and composition. Muscle tonus is within norm. What is the most likely diagnosis?

- a. Pylorostenosis
- b. Meningitis
- c. Pylorospasm**
- d. Microcephaly
- e. Craniostenosis

560. 10 days after birth, a newborn developed a sudden fever up to 38,1°C. Objectively: the skin in the region of navel, abdomen and chest is erythematous; there are multiple pea-sized blisters with no infiltration at the base; single bright red moist erosions with epidermal fragments on the periphery. What is your provisional diagnosis?

- a. Epidemic pemphigus of newborn**
- b. Streptococcal impetigo
- c. Atopic dermatitis
- d. Vulgar impetigo
- e. Syphilitic pemphigus

561. On the 6th day of life a child got multiple vesicles filled with seropurulent fluid in the region of occiput, neck and buttocks. General condition of the child is normal. What disease should be suspected?

- a. Impetigo
- b. Epidermolysis bullosa
- c. Impetigo neonatorum
- d. Miliaria
- e. Vesiculopustulosis**

562. A patient is 14 years old. Cytochemical study of punctate revealed 40% of blasts, there was negative reaction to peroxidase and with Sudan black, positive reaction to glycogen. Specify the form of acute leukemia:

- a. Myeloblastic
- b. Promyelocytic
- c. Undifferentiated
- d. Lymphoblastic**
- e. Monoblastic

563. Six months ago, a 5-year-old child was operated for CHD. For the last 3 weeks he has complained of fever, heart pain, aching muscles and bones. Examination results: "white-coffee" skin colour, auscultation revealed systolic murmur in the region of heart along with a noise in the III-IV intercostal space. Examination of fingertips revealed Janeway lesions. What is your provisional diagnosis?

- a. Typhoid fever
- b. Infectious endocarditis**
- c. Nonrheumatic carditis

- d. Sepsis
- e. Acute rheumatic fever

564. The condition of a 3-year-old child with acute non-rheumatic myocarditis has suddenly deteriorated: he presents with anxiety, acrocyanosis, peripheral edemata, dyspnea. Auscultation of lungs reveals fine moist rales on both sides mainly in the lower parts. AP- 65/40 mm Hg. HR- 150/min, heart sounds are muffled, arrhythmic (extrasystole). Liver is +4 cm. Oliguria is present. The child has been diagnosed with acute heart failure. Which method of examination is most informative for assessing the child's status dynamics?

- a. ECG
- b. Monitoring of K⁺, Na⁺ concentration in blood
- c. 24-hour monitoring of heart rhythm
- d. Echocardiography**
- e. Diuresis monitoring

565. A hospital admitted an 11-year-old boy diagnosed with medium-severe asthma, exacerbation period. In order to arrest the attacks the boy was administered broncholytic nebulizer therapy. During the day the child's condition stabilized. What is the most appropriate method for further monitoring of respiratory function in this patient?

- a. Velocimetry
- b. Peak flowmetry**
- c. Pneumotachometry
- d. Spirometry
- e. Bronchodilatation tests

566. A full-term newborn was born with body weight of 4000 g, body length of 57 cm. Reaction to the postnatal check was absent. There was diffuse cyanosis, heart rate of 80/min. What resuscitation measures should be taken?

- a. Give an injection of naloxone
- b. Start ALV with a mask**
- c. Intubate the child and start ALV
- d. Give 100% oxygen
- e. Start tactile stimulation

567. A 2-year-old child in a satisfactory condition periodically presents with moderate proteinuria, microhematuria. USI results: the left kidney is undetectable, the right one is enlarged, there are signs of double pyelocaliceal system. What study is required to specify the diagnosis?

- a. Excretory urography**
- b. Retrograde urography
- c. Radioisotope renal scan
- d. Doppler study of renal vessels
- e. Micturating cystography

568. An 8-year-old boy has a 2-year history of blotchy itchy rash appearing after eating citrus fruit. The first eruption occurred at the age of 6 months after the introduction of juices to the baby's diet. Father has a history of bronchial asthma, mother - that of allergic rhinitis. What is the most likely diagnosis?

- a. Urticaria
- b. Quincke's edema
- c. Psoriasis
- d. Pityriasis Rosea

e. Atopic dermatitis

569. An 8-year-old child was hospitalized for fever up to 39,8°C, inertness, moderate headache, vomiting. Examination revealed meningeal symptoms. Lumbar puncture was performed. The obtained fluid had raised opening pressure, it was transparent, with the cell count of 450 cells per 1mL (mainly lymphocytes - 90%), glucose level of 2,6 mmol/l. What causative agent might have caused the disease in the child?

- a. Meningococcus
- b. Staphylococcus
- c. Pneumococcus

d. Enterovirus

- e. Kochs bacillus

570. A 3-year-old child with ARVI had been administered biseptol, paracetamol, nazoferon. On the third day of treatment the babys condition deteriorated: he developed sore throat, stomatitis, conjunctivitis, hypersalivation, painful dark red spots on the neck, face, chest and legs, then the spots were replaced with vesicles. Examination revealed lesions of mucous membranes around the mouth and anus. What is your provisional diagnosis?

- a. Atopic dermatitis
- b. Serum sickness
- c. Bullous dermatitis

d. Stevens-Johnson syndrome

- e. Chickenpox

571. A 7-year-old female child has developed an acute condition. She complains of a headache, two onsets of vomiting. Objectively: deferred reactions, body temperature - 39,3°C, pronounced hyperesthesia, nuchal rigidity, positive superior and inferior Brudzinskis signs, symmetric Kernigs sign. What is the provisional diagnosis?

- a. Encephalitis

b. Meningitis

- c. Craniocerebral trauma
- d. Food toxicoinfection
- e. Toxic encephalopathy