

**MINISTRY OF PUBLIC HEALTH OF UKRAINE**

**Department of human resources policy, education and science**

**Testing Board**

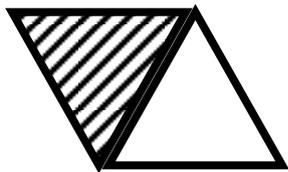
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# Test items for licensing examination

## Krok 2 MEDICINE



## General Instruction

Every one of these numbered questions or unfinished statements in this chapter corresponds to answers or statements endings. Choose the answer (finished statements) that fits best and fill in the circle with the corresponding Latin letter on the answer sheet.

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The book includes test items for use at licensing integrated examination "Krok 2. Medicine" and further use in teaching.

The book has been developed for students of medical, pediatric and medical-and-prophylactic faculties and academic staff of higher medical educational establishments.

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1. You are a doctor on duty. A patient after a successful resuscitation (drowning) was delivered to an admission room. BP is 90/60 mm Hg, heart rate is 120/min., respiration rate is 26/min. The patient is unconscious, pupils are moderately dilated, general clonic and tonic convulsions are observed. Make the diagnosis:

- A. Postresuscitation disease
- B. Apparent death
- C. Coma of unknown origin
- D. Unconsciousness
- E. Vegetative state

2. A 32-year-old welder complains of weakness and fever. His illness initially presented as tonsillitis one month earlier. On examination: BT- 38,9°C, RR- 24/min., HR- 100/min., BP- 100/70 mm Hg, hemorrhages on the legs, enlargement of the lymph nodes. CBC shows Hb- 70 g/l, RBC-  $2,2 \cdot 10^{12}/l$ , WBC-  $3,0 \cdot 10^9/l$  with 32% of blasts, 1% of eosinophiles, 3% of bands, 36% of segments, 20% of lymphocytes, and 8% of monocytes, ESR- 47 mm/hour. What is the cause of anemia?

- A. Acute leukemia
- B. Chronic lympholeukemia
- C. Aplastic anemia
- D. B<sub>12</sub>-deficient anemia
- E. Chronic hemolytic anemia

3. A regional cardiologist is tasked with the development of a plan for medioprophyllactic measures aimed at decrease of cardiovascular mortality. What measures should be planned for secondary prevention?

- A. Prevention of recurrences and complications
- B. Referring patients for sanatorium-and-spa treatment
- C. Prevention of diseases
- D. Referring patients for in-patient treatment
- E. Optimization of life style and living conditions

4. An 8-year-old boy developed a temperature of 37,5°C two days after his recovery from the case of URTI. He complains of suffocation, heart pain. Objectively: the skin is pale, tachycardia, the I heart sound is weakened, short systolic murmur in the 4th intercostal area near the left edge of the breastbone. What heart disorder such clinical presentation is characteristic of?

- A. Nonrheumatic myocarditis
- B. Primary rheumatic carditis
- C. Myocardiodystrophy
- D. Fallot's tetrad
- E. Cardiomyopathy

5. A woman complains of muscle weakness and general fatigue, dyspnea, vertigo, brittleness of her hair and nails, an urge to eat chalk. Anamnesis states uterine fibroid.

Common blood analysis: erythrocytes - 2,8 T/l, Hb- 80 g/l, color index - 0,78, anisocytosis, poikilocythemia, serum iron - 10 mcmmol/l. What diagnosis is most likely?

- A. Iron-deficiency anemia
- B. B<sub>12</sub>-deficient anemia
- C. Autoimmune hemolytic anemia
- D. Aplastic anemia
- E. Hypoplastic anemia

6. A 24-year-old patient visited a doctor complaining of enlargement of his submaxillary lymph nodes. Objectively: submaxillary, axillary and inguinal lymph nodes are enlarged. Chest X-ray shows: enlarged lymph nodes of mediastinum. Blood test: erythrocytes -  $3,4 \cdot 10^{12}/l$ , Hb- 100 g/l, blood colour index - 0,88, platelets -  $190 \cdot 10^9/l$ , leucocytes -  $7,5 \cdot 10^9/l$ , eosinophiles - 8%, band neutrophils - 2%, segmented neutrophils - 67%, lymphocytes - 23%, ESR- 22 mm/hour. What test must be prescribed to verify the cause of lymphadenopathy?

- A. Open biopsy of lymph nodes
- B. Ultrasonography of abdominal cavity
- C. Mediastinum tomography
- D. Puncture biopsy of lymph nodes
- E. Sternal puncture

7. A 32 year old patient complains of cardiac irregularities, dizziness, dyspnea at physical exertion. He has never suffered from such condition before. Objectively: Ps- 74/min., rhythmic. BP- 130/80 mm Hg. Auscultation revealed systolic murmur above aorta, the first heart sound was normal. ECG showed hypertrophy of the left ventricle, signs of repolarization disturbance in the I, V<sub>5</sub> and V<sub>6</sub> leads. Echocardiogram revealed that interventricular septum was 2 cm. What is the most probable diagnosis?

- A. Hypertrophic cardiomyopathy
- B. Aortic stenosis
- C. Essential hypertension
- D. Myocardium infarction
- E. Coarctation of aorta

8. A 35-year-old patient's wound with suppurative focus was surgically cleaned. On the 8th day after the surgery the wound cleared from its purulo-necrotic content and granulations appeared. However, against the background of antibacterial therapy the body temperature keeps at 38,5-39,5°C. There are chills, excessive sweating, euphoria, heart rate is 120/min. What complication of local pyoinflammatory process can it be?

- A. Sepsis
- B. Purulent absorption fever
- C. Trombophlebitis
- D. Meningitis
- E. Pneumonia

9. A 60-year-old woman has been sufferi-

ng from arterial hypertension for 15 years. After recurrent stroke she started complaining of unmotivated bad mood, problems with attention concentration; she forgets to close the entrance door, cannot recall events of the past day. Computer tomography shows areas of postinfarction changes in the cortical postfrontal areas. What is the most probable diagnosis?

- A. Vascular dementia
- B. Alzheimer's disease
- C. Huntington's disease
- D. Pick's disease
- E. Dissociative amnesia

10. Clinic of a research institute for occupational diseases examined a worker who works at a concentration plant and diagnosed him with chronic dust bronchitis. The case is investigated by a commission including the representatives of: the plant, clinic, local SES, department of Social Insurance Fund, trade union. According to the "regulation on investigation of. . ."; the commission should be headed by the representative of the following authority:

- A. Local SES
- B. Plant
- C. Social Insurance Fund
- D. Trade union
- E. Clinic

11. A 37-year-old woman complains of headaches, nausea, vomiting, spasms. The onset of the disease occurred the day before due to her overexposure to cold. Objectively: fever up to 40°C; somnolence; rigid neck; Kernig's symptom is positive on the both sides; general hyperesthesia. Blood test: leucocytosis, increased ESR. Cerebrospinal fluid is turbid, yellow-tinted. What changes of the cerebrospinal fluid are most likely?

- A. Neutrophilic pleocytosis
- B. Lymphocytic pleocytosis
- C. Blood in the cerebrospinal fluid
- D. Xanthochromia in the cerebrospinal fluid
- E. Albuminocytological dissociation

12. A 48-year-old woman complains of pain in the thoracic spine, sensitivity disorder in the lower body, disrupted motor function of the lower limbs, body temperature rise up to 37,5°C. She has been suffering from this condition for 3 years. Treatment by various specialists was ineffective. X-ray reveals destruction of adjacent surfaces of the VIII and IX vertebral bodies. In the right paravertebral area at the level of lesion there is an additional soft tissue shadow. What diagnosis is most likely?

- A. Tuberculous spondylitis of the thoracic spine
- B. Spinal tumor
- C. Multiple sclerosis
- D. Metastases into the spine
- E. Osteochondrosis

13. A pregnant woman is 28 years old. Anamnesis: accelerated labor complicated by the II degree cervical rupture. The following two pregnancies resulted in spontaneous abortions at the terms of 12 and 14 weeks. On mirror examination: the uterine cervix is scarred from previous ruptures at 9 and 3 hours, the cervical canal is gaping. On vaginal examination: the cervix is 2 cm long, the external orifice is open 1 cm wide, the internal orifice is half-open; the uterus is enlarged to the 12th week of pregnancy, soft, mobile, painless, the appendages are without changes. What diagnosis would you make?

- A. Isthmico-cervical insufficiency, habitual noncarrying of pregnancy
- B. Threatened spontaneous abortion
- C. Incipient abortion, habitual noncarrying of pregnancy
- D. Cervical hysteromyoma, habitual noncarrying of pregnancy
- E. Cervical pregnancy, 12 weeks

14. A 56-year-old patient complains of pain in the epigastrium after eating, eructation, loss of appetite, slight loss of weight, fatigability. The patient smokes; no excessive alcohol consumption. Objectively: pale mucosa, BP-110/70 mm Hg. The tongue is "lacquered". The abdomen is soft, sensitive in the epigastric area. Blood test: erythrocytes - 3,0 T/l, Hb- 110 g/l, color index - 1,1; macrocytosis; leukocytes - 5,5 g/l, ESR- 13 mm/hour. On fibrogastroduodenoscopy: atrophy of fundic mucosa. What pathogenesis does this disorder have?

- A. Producing antibodies to parietal cells
- B. *H.pylori* persistence
- C. Alimentary factor
- D. Chemical factor
- E. Gastropathic effect

15. A 26-year-old secundipara at 40 weeks of gestation arrived at a maternity ward after the beginning of labor activity. The bursting of waters occurred 2 hours prior. The fetus was in a longitudinal lie with cephalic presentation. Abdominal circumference was 100 cm, fundal height - 42 cm. Contractions occurred every 4-5 minutes and lasted 25 seconds each. Internal obstetric examination revealed cervical effacement, opening by 4 cm. Fetal bladder was absent. Fetal head was pressed against the pelvic inlet. What complication arose in the childbirth?

- A. Early amniorrhea
- B. Primary uterine inertia
- C. Secondary uterine inertia
- D. Discoordinated labor
- E. Clinically narrow pelvis

16. Bacterial analysis of air in a living space in winter period by means of Krotov's apparatus revealed that total number of microorganisms in 1 m<sup>3</sup> of air was 7200. What is the allowed number of microorganisms for the air to be characterized as "pure"?

- A. Up to 4500
- B. Up to 2500
- C. Up to 3500
- D. Up to 5500
- E. Up to 7500

17. A 24-year-old patient received a puncture injury below the Poupart's ligament accompanied by intense arterial bleeding. The best method to temporarily stop the bleeding in the patient would be:

- A. Compression band
- B. Esmarch's tourniquet
- C. Maximum limb bending
- D. Compressing a blood vessel with a clamp
- E. Wound suturing

18. A 42-year-old woman has been hospitalized with complaints of intense pain attacks in the lumbar and right iliac areas, which irradiate to the vulvar lips, frequent urination, nausea. The pain onset was acute. Objectively: the abdomen is soft, moderately painful in the right subcostal area, costovertebral angle tenderness on the right. Common urine analysis: specific gravity - 1016, traces of protein, leukocytes - 6-8 in the vision field, erythrocytes - 12-16 in the vision field, fresh. What diagnosis can be made?

- A. Right-sided renal colic
- B. Acute right-sided pyelonephritis
- C. Acute right-sided adnexitis
- D. Acute cholecystitis
- E. Acute appendicitis

19. A 29-year-old patient works as a motor mechanic. Anamnesis shows frequent exposure to cold, exacerbation of chronic bronchitis attended by cough with relatively small amount of mucopurulent sputum, subfebrility, sometimes joined by hemoptysis and pain in the right side of chest. Breathing is vesicular. X-ray shows shadows and sharp decrease in size of the lower lobe distinctly visible on the X-ray image as a streak 2-3 cm wide situated at the angle from lung root to the frontal costodiaphragmatic recess. The most likely diagnosis is:

- A. Peripheral lung cancer
- B. Bronchiectasis
- C. Pneumonia
- D. Middle lobe syndrome
- E. Interlobular pleurisy

20. A 62-year-old patient has been hospitalized with complaints of pain in the thorax on the right during breathing, dyspnea, dry cough. Ten days ago he slipped and fell hitting his right side. On examination: the patient lies on the left side. The right side of the thorax lags during breathing. On the right there are crepitation and pain in the III-IV ribs. Dullness of percussion sound and sharply diminished breath sounds can be observed. On X-ray: signs of exudate, fracture of the III-IV ribs. On pleurocentesis: blood is detected. Choose the further tactics:

- A. Transfer to a thoracic surgery department
- B. Prescribe conservative therapy
- C. Recurrent pleurocentesis
- D. Fixed bandage of the rib cage
- E. Refer to a traumatologist

21. A 29-year-old female patient complains of dyspnea, heaviness and chest pain on the right, body temperature rise up to 37, 2°C. The disease is associated with a chest trauma received 4 days ago. Objectively: skin is pale and moist. Ps- 90/min., regular. Palpation reveals a dull sound on the right, auscultation reveals significantly weakened vesicular breathing. In blood: RBCs-  $2,8 \cdot 10^{12}/l$ , colour index - 0,9, Hb- 100 g/l, WBCs-  $8,0 \cdot 10^9/l$ , ESR- 17 mm/hour. What results of diagnostic puncture of the pleural cavity can be expected?

- A. Haemorrhagic punctate
- B. Chylous liquid
- C. Exudate
- D. Transudate
- E. Purulent punctate

22. Caries morbidity rate is 89% among residents of a community. It is determined that fluorine content in water is 0,1 mg/l. What preventive measures should be taken?

- A. Water fluorination
- B. Tooth brushing
- C. Fluorine inhalations
- D. Sealant application
- E. Introduce more vegetables to the diet

23. Examination of a group of persons living on the same territory revealed the following common symptoms: dark-yellow pigmentation of the tooth enamel, diffuse osteoporosis of bone apparatus, ossification of ligaments and joints, functional disorders of the central nervous system. This condition may be caused by the excessive concentration of the following microelement in food or drinking water:

- A. Fluorine
- B. Copper
- C. Nickel
- D. Iodine
- E. Cesium

24. In a pre-school educational establishment the menu consists of the following dishes: milk porridge from buckwheat, pasta with minced meat, cucumber salad, kissel (thin berry jelly), rye bread. What dish should be excluded from the menu?

- A. Pasta with minced meat
- B. Milk porridge from buckwheat
- C. Kissel (thin berry jelly)
- D. Rye bread
- E. Cucumber salad

25. An infant has been born at the 41st week of gestation. The pregnancy was complicated with severe gestosis of the second semester. The weight of the baby is 2400 g, the height is 50 cm. Objectively: the skin is flabby, the layer of subcutaneous fat is thin, hypomyotonia, neonatal reflexes are weak. The internal organs are without pathologic changes. This newborn can be estimated as a:

- A. Full-term infant with prenatal growth retardation
- B. Premature infant
- C. Immature infant
- D. Postmature infant
- E. Full-term infant with normal body weight

26. A patient suffering from infiltrative pulmonary tuberculosis was prescribed streptomycin, rifampicin, isoniazid, pyrazinamide, vitamin C. One month after the beginning of the treatment the patient started complaining of reduced hearing and tinnitus. What drug has such a side effect?

- A. Streptomycin
- B. Isoniazid
- C. Rifampicin
- D. Pyrazinamide
- E. Vitamin C

27. A woman has developed sudden thoracic pain on the right with expectoration of pink sputum and body temperature rise up to  $37,7^{\circ}\text{C}$  on the 4th day after the surgery for cystoma of the right ovary. On lung examination: dullness of the lung sound on the lower right is observed. Isolated moist crackles can be auscultated in the same area. What complication is the most likely?

- A. Pulmonary infarction
- B. Pneumonia
- C. Pulmonary abscess
- D. Exudative pleurisy
- E. Pneumothorax

28. A 58-year-old patient was delivered to an admission room with complaints of pain in the thorax on the left. On clinical examination:

aside from tachycardia (102/min.) no other changes. On ECG: pathologic wave Q in I, aVL, QS in V1, V2, V3 leads and 'domed' ST elevation with negative T. What diagnosis is most likely?

- A. Acute left ventricular anterior myocardial infarction
- B. Variant angina pectoris
- C. Aortic dissection
- D. Acute left ventricular posterior myocardial infarction
- E. Exudative pericarditis

29. A 48-year-old woman has thermal burns of both hands. The epidermis of the palms and backs of her hands is exfoliating, and blisters filled with serous liquid are forming. The forearms are intact. What diagnosis is most likely?

- A. 2-3A degree thermal burn
- B. 4 degree thermal burn
- C. 1 degree thermal burn
- D. 3B degree thermal burn
- E. 1-2 degree thermal burn

30. A 39-year-old patient complains of morning headache, appetite loss, nausea, morning vomiting, periodic nasal haemorrhages. The patient had a case of acute glomerulonephritis at the age of 15. Examination revealed rise of arterial pressure up to 220/130 mm Hg, skin haemorrhages on his arms and legs, pallor of skin and mucous membranes. What biochemical parameter is most important for making diagnosis in this case?

- A. Blood creatinine
- B. Blood bilirubin
- C. Blood sodium
- D. Uric acid
- E. Fibrinogen

31. A 30-year-old patient, who has been suffering from headaches, suddenly developed extreme headache after lifting a heavy load, as if he had been hit over the head. Nausea, vomiting, and slight dizziness are observed. In a day he developed pronounced meningeal syndrome and body temperature up to  $37,6^{\circ}\text{C}$ . A doctor suspects subarachnoid hemorrhage. What additional examination is necessary to confirm this diagnosis?

- A. Lumbar puncture with investigation of the spinal fluid
- B. Skull X-ray
- C. Computed tomography of the brain
- D. Rheoencephalography
- E. Angiography of the brain vessels

32. A worker of a blowing shop complains of headache, irritability, sight impairment - he sees everything as if through a "net". Objectively: hyperemic sclera, thickened cornea, decreased opacity of pupils, visual acuity is

0,8 in the left eye, 0,7 in the right eye. The worker uses no means of personal protection. What diagnosis is most likely?

- A. Cataract
- B. Conjunctivitis
- C. Keratitis
- D. Blepharospasm
- E. Progressive myopia

33. A 45-year-old woman is undergoing treatment for active rheumatism, combined mitral valve failure. During her morning procedures she suddenly sensed pain in the left hand, which was followed by numbness. Pain and numbness continued to aggravate. Objectively: the skin of the left hand is pale and comparatively cold. Pulse in the hand arteries is absent along the whole length. What treatment tactics is most efficient?

- A. Urgent embolectomy
- B. Prescription of fibrinolytics and anticoagulants
- C. Prescription of antibiotics and anti-inflammatory agents
- D. Cardiac catheterization
- E. Urgent thrombintimectomy

34. A 10-year-old boy had a case of viral hepatitis type B four years ago. Currently the assumption was made about the formation of hepatic cirrhosis in the patient. What additional investigation can clarify the diagnosis?

- A. Renal needle biopsy
- B. Proteinogram
- C. Echocholangiography
- D. Markers of viral hepatitis type B
- E. Transaminase level measurement

35. A 40-year-old patient has acute onset of disease caused by overexposure to cold. Temperature has increased up to  $39^{\circ}\text{C}$ . Foul-smelling sputum is expectorated during coughing. Various moist crackles can be auscultated above the 3rd segment on the right. Blood test: leukocytes -  $15,0 \cdot 10^9/\text{l}$ , stab neutrophils - 12%, ESR- 52 mm/hour. On X-ray: in the 3rd segment on the right there is a focus of shadow 3 cm in diameter, low density, with fuzzy smooth margins and a clearing in its center. What disease is most likely in the given case?

- A. Pneumonia complicated by an abscess
- B. Infiltrative tuberculosis
- C. Peripheral pulmonary cancer
- D. Cystic echinococcosis
- E. Pulmonary cyst

36. An electro-gas welding operator working at a machine workshop performs welding and cutting of metal, which is accompanied by intense UV-radiation. His welding station is equipped with efficient mechanical ventilation. What occupational disease is most likely to develop in an electro-gas welding

operator?

- A. Photoelectric ophthalmia
- B. Heatstroke
- C. Vegetative-vascular dystonia
- D. Chronic overheating
- E. Pneumoconiosis

37. A 48-year-old patient was found to have diffuse enlargement of the thyroid gland, exophthalmia, weight loss of 4 kg in 2 months, sweating. Objectively: HR- 105/min., BP- 140/70 mm Hg. Defecation act is normal. What kind of therapy is recommended in this case?

- A. Mercazolil
- B. Radioiodine
- C. Propranolol
- D. Lugol's solution
- E. Thyroxine

38. A woman addressed a doctor with complaints of increased body temperature up to  $37,8^{\circ}\text{C}$  and moderately sore throat for the last 3 days. Objectively: mandibular lymph nodes are enlarged up to 3 cm. Palatine tonsils are hypertrophied, covered with grey coating that spreads to the uvula and anterior pillars of the fauces. What diagnosis is most likely?

- A. Oropharyngeal diphtheria
- B. Infectious mononucleosis
- C. Pseudomembranous (Vincent's) tonsillitis
- D. Agranulocytosis
- E. Oropharyngeal candidiasis

39. A 48-year-old man complains of constant pain in the upper abdomen, predominantly on the left, which aggravates after eating, diarrhea, loss of weight. The patient has alcohol use disorder. Two years ago he had a case of acute pancreatitis. Blood amylase is 4 g/hour·l. Feces analysis: steatorrhea, creatorrhea. Blood sugar is 6,0 mmol/l. What treatment should be prescribed?

- A. Panzinorm forte (Pancreatin)
- B. Insulin
- C. Gastrozepin (Pirenzepine)
- D. Contrykal (Aprotinin)
- E. No-Spa (Drotaverine)

40. In 10 hours after eating canned mushrooms a 27-year-old patient has developed diplopia, bilateral ptosis, disrupted swallowing, shallow breathing with respiratory rate 40/min., muscle weakness, enteroparesis. What measure should be taken first?

- A. Intubation of the trachea for artificial respiration
- B. Gastrointestinal lavage
- C. Introduction of antitubulinic serum
- D. Introduction of glucocorticosteroids
- E. Intravenous detoxication therapy

41. A 32-year-old patient complains of

reddening, burning, and sensation of a foreign body in the right eye. The disease is acute. On examination: visual acuity of the both eyes is 1,0. In the right eye there are hyperemia and swelling of the conjunctiva, superficial injection. There is purulent discharge in the conjunctival sac. The cornea is clear. The color and pattern of the iris are unchanged, the pupil is mobile. What diagnosis is most likely?

- A. Acute conjunctivitis
- B. Acute iridocyclitis
- C. Acute attack of glaucoma
- D. Foreign body of the cornea
- E. Acute dacryocystitis

42. A patient is on the sick leave for 4 months continuously from the date of injury. The treatment is going to last for another 1-2 months. Who has the right to extend the duration of medical certificate for this patient?

- A. Medical advisory commission after medico-social expert commission examination
- B. Medical superintendent
- C. Medical advisory commission after inpatient treatment
- D. District doctor upon agreement with a department chief
- E. Medico-social expert commission

43. Monthly dysentery morbidity in the region given in absolute figures is as follows: January - 6; February - 9; March - 11; April - 10; May - 16; June - 23; July - 19; August - 33; September - 58; October - 19; November - 11; December - 5. Annual total is 220 cases. What graphic presentation would provide the best visual for monthly deviations of dysentery morbidity from the average?

- A. Radar chart
- B. Map
- C. Cartogram
- D. Pie chart
- E. Bar chart

44. A 30-year-old woman complains of pain in the heart area ("aching, piercing pain") that arises primarily in the morning hours in autumn and spring. Pain irradiates into the neck, back, abdomen and is attended by rapid heart rate and low vital tonus. This condition occurs independently from physical exertion. In the evening her condition improves. Somatic and neurologic state and ECG have no pathologies. What pathology is likely to result in such clinical presentation?

- A. Somatized depression
- B. Rest angina pectoris
- C. Pseudoneurotic schizophrenia
- D. Somatoform autonomic dysfunction
- E. Hypochondriacal depression

45. A full term baby born from the 1st noncomplicated pregnancy with complicated

labor was diagnosed with cephalohematoma. On the 2nd day of life the child developed jaundice; on the 3rd day of life there appeared neurological changes: nystagmus, Graefe syndrome. Urine is yellow, feces are golden-yellow. The mother's blood group is A (II)  $Rh^-$ , the child's - A (II)  $Rh^+$ . On the 3rd day the results of the child's blood test are as follows: Hb- 200 g/l, erythrocytes -  $6,1 \cdot 10^{12}/l$ , blood bilirubin - 58  $\mu\text{mol}/l$  due to the presence of its unconjugated fraction, Ht- 0,57. In this case the jaundice is caused by:

- A. Craniocerebral birth injury
- B. Physiologic jaundice
- C. Hemolytic disease of newborn
- D. Atresia of bile passages
- E. Fetal hepatitis

46. On the 4th day after recovering from a cold a patient was hospitalized with complaints of solitary spittings of mucoid sputum. On the 2nd day there was a single discharge of about 250 ml of purulent blood-streaked sputum. Objectively: the patient's condition is moderately severe. Respiratory rate - 28-30/min., Ps- 96/min., BP- 110/70 mm Hg. Respiration above the left lung is vesicular, weak above the right lung. There are various moist crackles above the lower lobe and amphoric breath near the angle of scapula. What is the most likely diagnosis?

- A. Acute pulmonary abscess
- B. Exudative pleuritis
- C. Acute focal pneumonia
- D. Pleural empyema
- E. Pyopneumothorax

47. A 46-year-old patient with temporarily undetermined diagnosis was prescribed pleurocentesis based on the results of the X-ray. The puncture yielded 1000 ml of a liquid with the following properties: clear, specific gravity - 1,010, protein content - 1%, Rivalta's test is negative, erythrocytes - 2-3 in the field of vision. What disorder are these pathologic changes characteristic of?

- A. Cardiac failure
- B. Pleuropneumonia
- C. Pleural mesothelioma
- D. Pulmonary tuberculosis
- E. Pulmonary cancer

48. 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 did not undergo any treatment. The girl's irritability gradually gave place to a complete apathy. The girl developed puffy face, soft tissues pastosity, bradycardia, constipations. Skin pallor and gland density progressed, the skin developed a waxen hue. What disease can be suspected?

- A. Autoimmune thyroiditis
- B. Diffuse toxic goiter
- C. Thyroid carcinoma
- D. Subacute thyroiditis
- E. Juvenile basophilism

49. In a maternity hospital a newborn had been presenting with cough attacks after eating. The child was discharged from the hospital on the 18th day due to a case of pneumonia. During the further 1,5 months the child had 2 cases of pneumonia. Periodically there are cough attacks after eating, especially if the child lies on the left side. Objectively: the II degree hypotrophy, isolated moist crackles, dyspnea. Stool and diuresis are not disrupted. What diagnosis is most likely?

- A. Tracheoesophageal fistula
- B. Mucoviscidosis
- C. Posthypoxic encephalopathy
- D. Hernia of the esophageal opening
- E. Tracheobronchomalacia

50. A 26-year-old woman, who gave birth 7 months ago, has been suffering from nausea, morning sickness, somnolence for the last 2 weeks. The patient breastfeeds; no menstruation. She has been using no means of contraception. What method would be most efficient in clarification of the diagnosis?

- A. Ultrasound
- B. Small pelvis radiography
- C. Palpation of mammary glands and squeezing out colostrum
- D. Bimanual abdominovaginal examination
- E. Mirror examination

51. A 2-year-old girl has a medical history of recurrent obstructive pneumonia. In the lungs various moist and dry crackles can be auscultated, breath sounds are diminished. Sputum is thick, viscous and difficult to expectorate. Drumstick fingers and physical developmental retardation are observed. What preliminary diagnosis can be made?

- A. Pulmonary mucoviscidosis
- B. Recurrent bronchitis
- C. Bronchial asthma
- D. Congenital polycystic lungs
- E. Pulmonary tuberculosis

52. After a case of purulent otitis a 1-year-old boy has developed pains in the upper third of the left thigh, body temperature up to 39°C. Objectively: swelling of the thigh in its upper third and smoothed out inguinal fold. The limb is in semiflexed position. Active and passive movements are impossible due to severe pain. What diagnosis is most likely?

- A. Acute hematogenous osteomyelitis
- B. Acute coxitis
- C. Intermuscular phlegmon
- D. Osteosarcoma
- E. Brodie's abscess

53. A 56-year-old patient with diffuse toxic goiter has ciliary arrhythmia, heart rate is 110-120/min., arterial hypertension, BP is 165/90 mm Hg. What drug besides Mercazolil (Thiarnazole) should be prescribed in this case?

- A. Propranolol
- B. Radioactive iodine
- C. Novocainamide (procainamide)
- D. Verapamil
- E. Corinfar

54. A patient has been provisionally diagnosed with pheochromocytoma at the stage of intermission. BP is within norm, there is a tendency towards tachycardia. No urine pathologies. The decision has been made to perform a provocative test with histamine. What drug should be kept close at hand for emergency aid in case of positive test result?

- A. Phentolamine
- B. Pipolphen
- C. Nifedipine
- D. Mesaton (Phenylephrine)
- E. Prednisolone

55. A 54-year-old patient complains of weakness, weight loss despite the unchanged appetite, frequent urination, skin itch for six months. Some time ago the patient underwent treatment for furunculosis. She has not been examined recently. Objectively: malnutrition, dry skin with scratch marks. Small lymph nodes can be palpated in the axillary regions. Changes in the internal organs are absent. What test must be performed in the first place?

- A. Fasting blood sugar
- B. Complete blood count
- C. Endoscopy of stomach
- D. Lymph node biopsy
- E. Blood sterility testing

56. A child is 1 month 10 days old. "Gushing" vomiting has been observed since the age of 3 weeks. The vomit volume exceeds the volume of the previous feeding. Objectively: the child is inert. Skin elasticity and tissue turgor are decreased. Hour-glass deformity sign is positive. The preliminary diagnosis is pyloric stenosis. What treatment tactics should be chosen?

- A. Surgery
- B. Prescription of Cerucal (Metoclopramide)
- C. Atropinization
- D. Internal administration of Novocaine
- E. Prescription of Pipolphen

57. A 46-year-old woman complains of pain attacks in the right lumbar area, which irradiate to the lower abdomen, and nausea. This kind of pain attacks has never been detected in the patient before. Survey X-ray of the abdominal cavity reveals no pathologic shadows. Ultrasonic scan detects

a hyperechogenic growth 1,5 cm in diameter, which reflects sound wave, in the enlarged right renal pelvis. What diagnosis is most likely?

- A. Renal calculus
- B. Benign renal tumor
- C. Renal cyst
- D. Renal tuberculosis
- E. Malignant renal tumor

58. Several hours before, a 28-year-old patient suddenly developed acute headache and repeated vomiting, then lost consciousness. Objectively: focal neurological symptoms were not found. Pronounced meningeal symptoms were revealed. BP- 120/80 mm Hg. According to clinical and liquorological findings the patient was diagnosed with subarachnoid haemorrhage. After administration of dehydrants the patient's condition somewhat improved. What is the main component of further emergency care?

- A. Coagulants
- B. Anticoagulants
- C. Antiaggregants
- D. Fibrinolytics
- E. Corticosteroids

59. A 24-year-old man has developed increasing headaches, vertigo, diplopia, paresis of the facial muscles on the right, choking during swallowing. The signs appeared on the 5th day of respiratory disorder. He was diagnosed with acute viral encephalitis. Determine the main direction of emergency therapy:

- A. Zovirax (Aciclovir)
- B. Glucocorticoids
- C. Ceftriaxone
- D. Lasix (Furosemide)
- E. Neohaemodes

60. A 23-year-old woman, who works as a milk and dairy inspector, after the miscarriage suffers from high fever up to 38,6°C, recurring chills, excessive sweating. Objectively: polyadenitis, pain in the lumbosacral spine, swollen left knee joint, enlarged liver and spleen. What diagnosis is most likely?

- A. Brucellosis
- B. Sepsis
- C. Toxoplasmosis
- D. Polyarticular rheumatoid arthritis
- E. Yersiniosis

61. A 16-year-old adolescent has been hospitalized with complaints of unceasing nasal hemorrhage and unbearable pain in his right elbow joint. Objectively: the large joint is enlarged and defigured, the skin over the joint is hyperemic. Arthropathy signs can be observed in the other joints. Ps- 90/min. Blood test: erythrocytes -  $3,9 \cdot 10^{12}/l$ , Hb- 130 g/l, color index - 1,0, leukocytes -  $5,6 \cdot 10^9/l$ , platelets -  $220 \cdot 10^9/l$ , ESR- 6 mm/hour. Lee-White coagulation time: start- 24', end-

27'10". What drug would be most efficient in the treatment of this patient?

- A. Cryoprecipitate
- B. Calcium chloride
- C. Concentrated red cells
- D. Aminocapronic acid
- E. Vicasol (Menadione)

62. A 67-year-old man complains of dyspnea on exertion, attacks of retrosternal pain, dizziness. He has no history of rheumatism. Objectively: pale skin, acrocyanosis. There are crackles in the lower lungs. There is systolic thrill in the II intercostal space on the right, coarse systolic murmur conducted to the vessels of neck. BP- 130/90 mm Hg, heart rate - 90/min., regular rhythm. The liver extends 5 cm from under the edge of costal arch, shin edemas are present. Specify the suspected valvular defect:

- A. Aortic stenosis
- B. Pulmonary artery stenosis
- C. Mitral insufficiency
- D. Ventricular septal defect
- E. Tricuspid regurgitation

63. A 24-year-old female teacher complains of dizziness and heart pain irradiating to the left nipple. Pain is not associated with physical activity and cannot be relieved by nitroglycerin, it abates after taking Valocordin and lasts an hour or more. The patient has a nearly 2-year history of this disease. Objectively: Ps- 76/min., BP- 110/70 mm Hg. Heart borders are normal, heart sounds are clear. The ECG shows respiratory arrhythmia. Radiograph of the cervicothoracic spine reveals no pathology. Lungs, abdomen are unremarkable. What changes in blood formula can be expected?

- A. No changes
- B. Leukocytosis
- C. Thrombocytopenia
- D. Leukemic hiatus
- E. Increased ESR

64. A 51-year-old female patient complains of frequent defecation and liquid blood-streaked stools with mucus admixtures, diffuse pain in the inferolateral abdomen, 6 kg weight loss within the previous month. Objectively: body temperature - 37,4°C, malnutrition, skin is pale and dry. Abdomen is soft, sigmoid is painful and spasmodic, makes a rumbling sound. Liver is dense, painful, extends 3 cm below the costal margin. What is the most likely diagnosis?

- A. Non-specific ulcerative colitis
- B. Bacillary dysentery
- C. Sprue
- D. Intestinal enzymopathy
- E. Helminthic invasion

65. Chief physician of a polyclinic charged a

district doctor with a task to determine the pathological prevalence of disease N in his district. What document allows to estimate the disease prevalence in the population of a medical district?

- A. Prophylactic examinations register
- B. Statistic coupons (+)
- C. Statistic coupons (-)
- D. Statistic coupons (+) and (-)
- E. Vouchers for medical appointments

66. A 32-year-old woman complains of dizziness, headache, palpitation, tremor. For the last several months she has been under outpatient observation for increased arterial pressure. Since recently such attacks have become more frequent and severe. Objectively: the skin is covered with clammy sweat, tremor of the extremities is present. HR-110/min., BP- 220/140 mm Hg. Heart sounds are muffled. Blood test results: WBCs-  $9,8 \cdot 10^9/l$ , ESR- 22 mm/hour. Blood glucose - 9,8 millimole/l. What disease is the most likely cause of this crisis?

- A. Pheochromocytoma
- B. Essential hypertension
- C. Preeclampsia
- D. Primary hyperaldosteronism
- E. Diabetic glomerulosclerosis

67. A 45-year-old patient complains of pain in the epigastric region, left subcostal area, abdominal distension, diarrhea, loss of weight. He has been suffering from this condition for 5 years. Objectively: tongue is moist with white coating near the root; deep palpation of abdomen reveals slight pain in the epigastric region and Mayo-Robson's point. Liver is painless and protrudes 1 cm from the costal arch. Spleen cannot be palpated. What disease can be primarily suspected?

- A. Chronic pancreatitis
- B. Atrophic gastritis
- C. Peptic stomach ulcer
- D. Chronic cholecystitis
- E. Chronic enteritis

68. A 58-year-old woman complains of spontaneous bruises, weakness, bleeding gums, dizziness. Objectively: the mucous membranes and skin are pale with numerous hemorrhages of various time of origin. Lymph nodes are not enlarged. Heart rate - 100/min., BP- 110/70 mm Hg. There are no changes of internal organs. Blood test results: RBC-  $3,0 \cdot 10^{12}/l$ , Hb- 92 g/l, colour index - 0,9, anisocytosis, poikilocytosis, WBC -  $10 \cdot 10^9/l$ , eosinophiles - 2%, stab neutrophiles - 12%, segmented neutrophiles - 68%, lymphocytes - 11%, monocytes - 7%, ESR- 12 mm/hour. What index should be determined additionally by a laboratory to make a diagnosis?

- A. Platelets
- B. Reticulocytes
- C. Clotting time
- D. Osmotic resistance of erythrocytes
- E. Fibrinogen

69. A 49-year-old patient complains of swallowing disorder that intensifies during eating solid food, hiccups, hoarse voice, nausea, regurgitation, significant weight loss (15 kg within 2,5 months). Objectively: body weight is reduced; the skin is pale and dry; vesicular respiration; heart sounds are sufficiently sonorous; heart rate is rhythmic. The abdomen is soft, no pain on palpation. The liver is not enlarged. What investigation is most necessary for making the diagnosis in this case?

- A. Esophagoduodenoscopy with biopsy
- B. Clinical blood analysis
- C. X-ray of the gastrointestinal tract
- D. X-ray in the Trendelenburg position
- E. Investigation of gastric secretion

70. A 9-month-old child presents with fever, cough, dyspnea. The symptoms appeared 5 days ago after a contact with a person suffering from URTI. Objectively: the child is in grave condition. Temperature of  $38^{\circ}C$ , cyanosis of nasolabial triangle is present. Respiration rate - 54/min., nasal flaring during 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 crackles predominating on the right. What is the most likely diagnosis?

- A. Acute pneumonia
- B. URTI
- C. Acute laryngotracheitis
- D. Acute bronchitis
- E. Acute bronchiolitis

71. A 50-year-old man, who works as a polisher at a combine-building factory, addressed the factory's sectorial doctor with complaints of general fatigue, sensations of numbness and pain in his fingers. Objectively: the skin of his fingers is pale. Reaction to pain, tactile and thermal stimuli was revealed to be slightly disrupted. No disruptions can be observed within the other organs and systems. What disorder is most likely?

- A. Pneumatic hammer disease
- B. Multiple neuritis
- C. Raynaud's disease
- D. Syringomyelia
- E. Deforming arthrosis

72. A 27-year-old woman complains of bleeding gums, nasal hemorrhages, multiple hematomas on the skin of her limbs and on the front of her torso, extreme general fatigue. Blood test: Hb- 64 g/l, erythrocytes -  $2,5 \cdot 10^{12}/l$ , reticulocytes - 16%, platelets -

$30 \cdot 10^9/l$ , ESR- 22 mm/hour. What approach would be most efficient for treatment of this pathology?

- A. Splenectomy
- B. Dicynone (Etamsylate)
- C. Platelet concentrate transfusion
- D. Cytostatics
- E. Group B vitamins

**73.** A 23-year-old patient had taken 1 g of aspirin to treat acute respiratory infection. After that he developed an asthmatic fit with labored expiration that was arrested by introduction of aminophylline. The patient's medical history is not burdened with allergies. The patient has undergone two surgeries for nasal polyposis in the past. What diagnosis is most likely?

- A. Aspirin-induced asthma
- B. Atopic bronchial asthma
- C. Infectious allergic bronchial asthma
- D. Exercise-induced asthma
- E. Symptomatic bronchospasm

**74.** A 58-year-old woman undergoing chemotherapy for her oncologic disorder has developed sore throat. Examination revealed necrotic areas on the mucosa of the pharynx and tonsils. Many of her teeth are afflicted with caries. In blood: neutrophilic granulocytes are practically absent against the background of leukopenia. Leukocytes are represented mainly by lymphocytes and monocytes. What disease can be suspected in the given case?

- A. Agranulocytar tonsillitis
- B. Lacunar tonsillitis
- C. Pseudomembranous (Vincent's) tonsillitis
- D. Syphilitic tonsillitis
- E. Diphtheria

**75.** A patient complains of constant dull pain in the perineum and suprapubic area, weak flow of urine, frequent difficult painful urination, nocturia. The patient has been suffering from this condition for several months, during which urination was becoming increasingly difficult, and pain in the perineum has developed. On rectal examination: the prostate is enlarged (mainly its right lobe), dense, asymmetrical, central fissure is smoothed out, the right lobe is of stony density, painless, tuberos. What disease is it?

- A. Prostate cancer
- B. Prostate sclerosis
- C. Urolithiasis, prostatolith of the right lobe
- D. Prostate tuberculosis
- E. Chronic congestion prostatitis

**76.** A child is 10 years old. The weight is 46 kg. Since birth the child has been gaining excessive weight. The parents are full-bodied. The child has undergone the following tests: carbohydrate tolerance, level of 17-ketosteroids, blood electrolytes, US of

adrenal glands, cranium X-ray. The tests revealed no pathologies. The diagnosis of exogenic constitutive obesity has been made. What direction of therapy should be prioritized?

- A. Reducing diet and exercise
- B. Sanatorium-and-spa treatment
- C. Anorectic drugs
- D. Dehydration therapy
- E. "Fat-burning" methods

**77.** 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. 0,1-0,2 U/kg of body weight per hour
- B. 0,05 U/kg of body weight per hour
- C. 0,2-0,3 U/kg of body weight per hour
- D. 0,3-0,4 U/kg of body weight per hour
- E. 0,4-0,5 U/kg of body weight per hour

**78.** A worker, who was involved in fire fighting inside the building that stored 2 kg of mercury, has been delivered to a hospital with complaints of emotional expansiveness, palpitations, excessive sweating, body tremor, heart pain. Within one day his condition aggravated. Objectively: the skin is pale and moist. The patient is depressed. Permanent red dermographism, erethism, unstable BP are observed. What drug is the serum in this case?

- A. Unithiol
- B. Atropine sulfate
- C. Calcium tetacine
- D. Amyl nitrite
- E. Dipyroxime

**79.** During meat testing *Trichinella* was detected in diaphragm crura in one of the two muscular tissue samples. What tactics should a doctor choose regarding this meat?

- A. Technological disposal
- B. Incineration
- C. Boiling under 1,5 atmosphere
- D. Preservation in 10% salt solution
- E. Freezing under  $-12^{\circ}C$

**80.** A 40-year-old patient was bitten by a stray dog an hour ago. On the left shin there is a bite mark - the wound is  $4 \times 2 \times 0,5$  cm in size. What surgical aid would be most efficient in this case?

- A. Lavage with soapy water, retention sutures
- B. Aseptic dressing
- C. Salve dressing
- D. Blind suture
- E. Retention sutures

**81.** A 30-year-old patient has been hospitalized with diagnosis of intestinal obstruction. The surgery revealed the obstruction of the small intestine to be caused by a helminth ball. What kind of helminth is it?

- A. Ascaris
- B. Guinea worm
- C. Filariidae
- D. Cysticercus
- E. Pinworm

**82.** Mother of a newborn suffers from chronic pyelonephritis; she had a case of URTI before the delivery. The delivery is at term, for a long period waters were not breaking. On the 2nd day of life the child developed an erythematous rash, later the rash developed into blisters approximately 1 cm in diameter filled with serous purulent substance. Nikolsky's symptom is positive. After the blisters had been lanced, erosions developed in their place. The child is inert. The child's body temperature is subfebrile. What diagnosis is most likely?

- A. Impetigo neonatorum
- B. Vesiculopustulosis
- C. Pseudofurunculosis
- D. Sepsis
- E. Ritter's disease

**83.** Three weeks after a case of acute tonsillitis the patient is still weak, inert, subfebrile, his retromaxillary lymph nodes are enlarged. Tonsils are flabby, stick together with arches, there are purulent plugs in lacunae. What is the most probable diagnosis?

- A. Chronic tonsillitis
- B. Chronic pharyngitis
- C. Acute lacunar tonsillitis
- D. Paratonsillitis
- E. Tonsillar tumour

**84.** The following indicators were calculated to analyse population health and treatment quality in a cardiological hospital: primary cardiovascular morbidity - 62%; total cardiovascular morbidity - 483,55%; cardiovascular mortality - 10,9%; proportion of cardiovascular mortality within total mortality - 67,0%; primary disablement caused by cardiovascular diseases - 16,2 per 10.000 population. What indicator is an extensive value?

- A. Proportion of cardiovascular mortality within total mortality
- B. Primary cardiovascular morbidity
- C. Total cardiovascular morbidity
- D. Primary disablement caused by cardiovascular diseases
- E. Cardiovascular mortality

**85.** 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/min., scaphoid abdomen, palpatory painful sigmoid colon, defecation 10 times a day with liquid, scarce stool with mucus and streaks of green. What is the provisional diagnosis?

- A. Shigellosis
- B. Salmonellosis
- C. Escherichiosis
- D. Intestinal amebiasis
- E. Yersiniosis

**86.** The institutions that take part in medical examinations include prevention and treatment facilities, medical board of Ministry of Defense, medical board of Ministry of Home Affairs, medico-social expert commissions, forensic medical boards etc. What institutions are responsible for temporary disability examination?

- A. Prevention and treatment facilities
- B. Sanitary-and-prophylactic institutions
- C. Medico-social expert commissions
- D. Medical boards of Ministry of Defense
- E. Medical boards of Ministry of Home Affairs

**87.** After a lengthy march an army regiment has set camp for 3 days near a settlement. Sanitary-hygienic investigation detected several water sources. Choose the source that would satisfy the demands for potable water the most under the given field conditions:

- A. Artesian well
- B. Brook
- C. River
- D. Rain water
- E. Melt water

**88.** Clinical statistical investigation was performed to determine efficiency of a new pharmacological preparation for patients with ischemic heart disease. What parametric test (coefficient) can be used to estimate reliability of the results?

- A. Student's t-distribution
- B. Sign test
- C. Matching factor
- D. Wilcoxon signed-rank test
- E. Kolmogorov-Smirnov test

**89.** A 30-year-old parturient woman was delivered to a maternity hospital with full-term pregnancy. She complains of severe lancinating pain in the uterus that started 1 hour ago, nausea, vomiting, cold sweat. Anamnesis states cesarean section 2 years ago. Uterine contractions stopped. Skin and mucous membranes are pale. Heart rate is 100/min., BP is 90/60 mm Hg. Uterus has no clear margins, is sharply painful. No heartbeat can be auscultated in the fetus. Moderate bloody discharge from the uterus can be observed. Uterus cervix is 4 cm open. Presenting part is not visible. The most likely diagnosis is:

- A. Uterine rupture
- B. Initial uterine rupture
- C. Threatened uterine rupture
- D. Premature detachment of normally positioned placenta
- E. Compression of inferior pudendal vein

90. A parturient woman is 23 years old. Internal obstetric examination shows the uterine cervix to be completely open. Fetal bladder is absent. Cephalic presentation is observed in the plane of the small pelvic outlet. Sagittal suture is at the longitudinal section of the small pelvic outlet, small fontanel is situated closer to the uterus. What cephalic position will the newborn have during birth in this case?

- A. Minor oblique lie
- B. Longitudinal lie
- C. Transverse lie
- D. Medium oblique lie
- E. Major oblique lie

91. During the dynamic observation of a parturient woman in the second stage of labor it was registered that the fetal heart rate decreased to 90-100/min. and did not normalize after contractions. Vaginal examination revealed the complete cervical dilatation, the fetal head filling the entire posterior surface of the pubic symphysis and sacral hollow; the sagittal suture was in the anteroposterior diameter of the pelvic outlet, the posterior fontanelle was in front under the pubic arch. What plan for further labour management should be recommended?

- A. Application of forceps minor
- B. Caesarean section
- C. Episiotomy
- D. Application of cavity forceps
- E. Stimulation of labour activity through intravenous injection of oxytocin

92. An 8-year-old girl periodically has sudden short-term heart pains, sensation of chest compression, epigastric pain, dizziness, vomiting. Objectively: the patient is pale, respiratory rate - 40/min., jugular pulse is present. Ps- 185/min., of poor volume. BP- 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. Paroxysmal atrial tachycardia
- B. Sinus tachycardia
- C. Paroxysmal ventricular tachycardia
- D. Complete AV-block
- E. Atrial fibrillation

93. A 16-year-old girl has primary amenorrhea, no pubic hair growth, normally developed mammary glands; her genotype is 46 XY; uterus and vagina are absent. What is your diagnosis?

- A. Testicular feminization syndrome
- B. Mayer-Rokitansky-Kuster-Hauser syndrome
- C. Cushing's syndrome
- D. Sheehan syndrome
- E. Cushing's disease

94. A planner designs a heating system for a pre-school educational establishment. The highest air temperature should be in the following room:

- A. Game room of a nursery group
- B. Common room of a preschool group
- C. Bedroom of a nursery group
- D. Bedroom of a preschool group
- E. Gymnasium

95. A 27-year-old sexually active woman complains of numerous vesicles on the right sex lip, itch and burning. Eruptions regularly appear before menstruation and disappear 8-10 days later. What is the most likely diagnosis?

- A. Herpes simplex virus
- B. Bartholinitis
- C. Primary syphilis
- D. Cytomegalovirus infection
- E. Genital condylomata

96. A 35-year-old woman addressed a gynecological in-patient department with complaints of regular pains in her lower abdomen, which increase during menstruation, and dark-brown sticky discharge from the genital tracts. On bimanual examination: the uterine body is slightly enlarged, the appendages are not palpated. Mirror examination of the uterine cervix reveals bluish spots. What diagnosis is most likely?

- A. Cervical endometriosis
- B. Cervical erosion
- C. Cervical polyp
- D. Cervical cancer
- E. Cervical fibroid

97. A 10-year-old patient has a history of mild bronchial asthma. During a regular check-up the patient should be recommended:

- A. To avoid allergenic food
- B. To avoid body tempering procedures
- C. To avoid sports
- D. To avoid spa treatment
- E. To avoid going to the seaside

98. A baby was born by a young smoker. The labour was complicated by uterine inertia, difficult delivery of the baby's head and shoulders. The baby's Apgar score was 4. Which of the following is a risk factor for a spinal cord injury?

- A. Difficult delivery of the head and shoulders
- B. Young age of the mother
- C. Pernicious habits
- D. Uterine inertia
- E. Chronic hypoxia

99. An emergency situation at a chemical plant caused acute occupational intoxication. A doctor who revealed the case of "acute occupational disease (intoxication)" must notify the following authority:

- A. Sanitary and epidemiological station
- B. Plant administration
- C. Trade union committee of the plant
- D. Medical unit of the plant
- E. Ministry of Public Health of Ukraine

100. A 27-year-old woman has been treated in a surgical department for pleural empyema for 6 months. Multiple paracenteses of the pleural cavity were performed along with antibacterial treatment. The patient's condition is slowly aggravating; attempts to fully stretch the lung were unsuccessful. Choose the tactics:

- A. Decortication of the lung
- B. Change antibiotics
- C. Set constant active suction drain
- D. Pneumonectomy
- E. Include hyperbaric oxygenation in the treatment

101. A prematurely born girl is now 8 months old. She has dyspnea, tachycardia, hepatosplenomegaly, physical developmental lag, limb cyanosis. There is parasternal cardiac hump, auscultation revealed systolodiastolic murmur in the II intercostal space on the left. BP is 90/0 mm Hg. What disease can be suspected?

- A. Patent ductus arteriosus
- B. Coarctation of aorta
- C. Stenosis of aortal valve
- D. Stenosis of pulmonary artery
- E. Nonclosure of interventricular septum

102. Three days ago a boy underwent removal of a foreign body from under a nail plate. 2 days later he developed acute pulsating pain at the end of the nail bone which aggravated at pressing. Nail fold became hyperemic, body temperature rose up to  $37,5^{\circ}C$ , there was a change in nail plate colour. What is the most likely diagnosis?

- A. Subungual paronychia
- B. Erysipelas
- C. Paronychia
- D. Erysipeloid
- E. Abscess

103. A 25-year-old woman complains of menstruation retention lasting for 3 years. The patient explains it by a difficult childbirth complicated with profuse hemorrhage, weight loss, brittleness and loss of hair, loss of appeti-

te, depression. Objective examination reveals no pathologic changes of uterus and uterine appendages. What pathogenesis is characteristic of this disorder?

- A. Decreased production of gonadotropin
- B. Hyperproduction of estrogen
- C. Hyperproduction of androgen
- D. Decreased production of progesterone
- E. Hyperproduction of prolactin

104. A patient in a clinical death condition is being resuscitated through mouth-to-mouth artificial pulmonary ventilation and external cardiac massage. A doctor noticed that air does not flow into the patient's airways and his head and torso are positioned at the same level. Why is artificial respiration not effective in the given case?

- A. Tongue retraction
- B. Low breathing volume
- C. External cardiac massage
- D. Probe is absent from stomach
- E. The patient's mouth is too small

105. A 45-year-old patient with urolithiasis had an attack of renal colic. What is the mechanism of the attack development?

- A. Disturbed urine outflow from the kidney
- B. Increase in urine specific gravity
- C. Ureteric twists
- D. Destruction of glomerules
- E. Renal artery spasm

106. A 26-year-old woman has attended maternity center complaining of her inability to become pregnant despite 3 years of regular sex life. Examination revealed the following: increased body weight; male-type pubic hair; excessive pilosis of thighs; ovaries are dense and enlarged; basal body temperature is monophasic. The most likely diagnosis is:

- A. Ovaries sclerocystosis
- B. Inflammation of uterine appendages
- C. Adrenogenital syndrome
- D. Premenstrual syndrome
- E. Gonadal dysgenesis

107. The process of open-cut mining requires drilling and blasting operations, rock and ore excavation, transportation of ore to fragmentation and sorting factories and transportation of barren rock to slag-heaps, road building and maintenance, repair works. What factor of production is most important for miner's health?

- A. High content of dust in the air
- B. High content of explosion gas
- C. Vibration
- D. Noise
- E. Adverse microclimate

108. A woman addressed a gynecologist on the 20th day of puerperal period with complaints of pain in the left mammary gland,

purulent discharge from the nipple. Objectively: Ps- 120/min., body temperature is  $39^{\circ}\text{C}$ . The left mammary gland is painful, larger than the right one, the skin there is hyperemic; in the upper quadrant there is an infiltrate 10x15 cm in size with soft center. Blood test: ESR- 50 mm/hour, leukocytes -  $15,0 \cdot 10^9/\text{l}$ . What would be the treatment tactics?

- A. Transfer to a surgical department for surgical treatment
- B. Refer to a gynecology department
- C. Refer to a postnatal department
- D. Refer to a surgeon for conservative treatment
- E. Lance the mammary gland abscess in a maternity department

**109.** The correlation between the service record and eosinophil concentration in blood was studied in workers at dyeing shops of textile factories. What index will be most informative for the analysis of this data?

- A. Correlation factor
- B. Student's criterion
- C. Standardized index
- D. Fitting criterion
- E. Sign index

**110.** A 3-month-old girl has rhinitis, dyspnea, dry cough. She has been sick for 2 days. Objectively: pale skin, acrocyanosis, hypopnoe; breathing rate is 80/min.; over the whole pulmonary surface there is vesiculotympanic (bandbox) resonance observed with numerous bubbling crackles. The most likely diagnosis is:

- A. Acute bronchiolitis
- B. Pneumonia
- C. Mucoviscidosis
- D. Foreign body in airways
- E. Acute bronchitis

**111.** A 24-year-old patient complains of gaining body mass and increased appetite. Objectively: built of hypersthenic type, body mass index is  $33,2 \text{ kg/m}^2$ , waist circumference is 100 cm. Waist to hips circumference ratio is 0,95. What is the provisional diagnosis?

- A. Alimentary constitutive obesity, I stage, android type
- B. Itsenko-Cushing hypothalamic obesity, II stage, gynoid type
- C. Alimentary constitutive obesity, III stage, gynoid type
- D. Alimentary constitutive obesity, II stage, android type
- E. Itsenko-Cushing hypothalamic obesity, I stage, android type

**112.** A 36 year old female patient complains of general weakness, edemas of her face and hands, rapid fatigability during walking, difficult deglutition, cardiac irregularities. These symptoms developed 11 days after holiday

at the seaside. Objectively: face erythema, edema of shin muscles. Heart sounds are muffled, BP is 100/70 mm Hg. In blood: ASAT activity is 0,95 millimole/h-l, ALAT- 1,3 micromole/h-l, aldolase - 9,2 IU/l, creatine phosphokinase - 2,5 micromole P/g-l. What method of study would be most specific?

- A. Muscle biopsy
- B. ECG
- C. Echocardiogram
- D. Electromyography
- E. Determination of cortisol concentration in blood and urine

**113.** A 14-year-old girl has fainted during a meeting. The day before she complained of a headache. The skin is pale, the limbs are cold, shallow breathing, heart sounds are muffled; heart rate is 51/min.; BP is 90/50 mm Hg. The abdomen is soft. Meningeal symptoms are negative. Make the provisional diagnosis:

- A. Collapse
- B. Unconsciousness
- C. Acute left ventricular failure
- D. Acute right ventricular failure
- E. Respiratory failure

**114.** For the last 15 years a 48-year-old patient has been working at the factory producing synthetic resins. Lately he has been complaining of significant general fatigue, headaches, frequent urination (predominantly during the day), red color of urine. What complication of benzene nitrocompounds poisoning can be suspected?

- A. Malignant tumor of the urinary bladder
- B. Chronic cystitis
- C. Chronic prostatitis
- D. Acute glomerulonephritis
- E. Chronic pyelonephritis

**115.** A 60-year-old woman developed weakness, vertigo, rapid fatigability during the last year. Recently there have been dyspnea and paresthesia observed. Objectively: skin and mucous membranes are pale and icteric. Lingual papillae are smoothed out. Liver and spleen are situated at the edge of costal arch. Blood test: Hb- 70 g/l, erythrocytes -  $1,7 \cdot 10^{12}/\text{l}$ , blood color index - 1,2, macrocytes. What drug can be prescribed on pathogenetic grounds?

- A. Vitamin  $B_{12}$
- B. Vitamin  $B_6$
- C. Ascorbic acid
- D. Iron preparations
- E. Vitamin  $B_1$

**116.** In the morning upon waking a 65-year-old patient developed weakness in the right-side limbs, speech disorder, decreased sensitivity of the left side of the body. On examination: conscious, BP- 100/60 mm Hg, motor aphasia, right-sided central hemiparesis and

hemihypalgesia. Make the preliminary diagnosis:

- A. Ischemic stroke
- B. Hemorrhagic stroke
- C. Encephalitis
- D. Brain tumor
- E. Subarachnoid hemorrhage

**117.** The objective of a statistical study was to find out the extent of seeking medical care by the population. For this purpose 300 residents of the area were interviewed. Information was collected by means of a special questionnaire. What method of collecting information was used by researchers?

- A. Anamnestic
- B. Immediate registration
- C. Immediate examination
- D. Doing extracts
- E. -

**118.** A 57-year-old woman complains of having a sensation of esophageal compression, palpitation, difficult breathing during eating solid food, occasional vomiting with a full mouth, "wet pillow" sign at night for the last 6 months. Objectively: body temperature -  $39^{\circ}\text{C}$ , height - 168 cm, weight - 72 kg, Ps-76/min., BP- 120/80 mm Hg. X-ray revealed a considerable dilation of the esophagus and its constriction in the cardial part. What pathology is most likely to have caused dysphagia in this patient?

- A. Achalasia cardiae
- B. Primary esophagism
- C. Hiatal hernia
- D. Esophageal carcinoma
- E. Reflux esophagitis

**119.** A 25-year-old man complains of pain in the lower third of his left thigh, which occurs both with and without physical exertion. Possibility of trauma is denied by the patient. Objectively: skin colour is normal; pastosity and pain can be detected with deep palpation; knee joint mobility is reduced. X-ray of distal femoral metaphysis shows an area of destruction and spicule. Blood test: immature cells, no signs of inflammation. The most likely diagnosis is:

- A. Osteogenic sarcoma
- B. Osteitis fibrosa cystica
- C. Chronic osteomyelitis
- D. Multiple myeloma
- E. Marble-bone disease

**120.** A 30-year-old woman suffers from polycystic renal disease. She has been admitted with signs of fatigue, thirst and nocturia. Diuresis is up to 1800 ml per day. BP is 200/100 mm Hg. Blood test: erythrocytes -  $1,8 \cdot 10^9/l$ , Hb- 68 g/l. Urine analysis: specific gravity - 1005, leukocytes - 50-60, erythrocytes - 3-5 in the vision field, creatinine - 0,82

mmol/l, potassium - 6,5 mmol/l, glomerular filtration rate - 10 ml/min. What tactics would be leading in the patient's treatment?

- A. Hemodialysis
- B. Antibacterial therapy
- C. Sorbent agents
- D. Blood transfusion
- E. Hypotensive therapy

**121.** In a rural health care area there is a case of child dying during the first month of life. To analyse this situation, among other measures, an expert assessment of medical records is performed. What medical document should be considered first?

- A. Child development history
- B. Infant development history
- C. Vaccination card
- D. Outpatient medical record
- E. Child's medical record

**122.** A region attended by a central regional hospital demonstrates increased hemorrhagic stroke morbidity. Essential hypertension morbidity, however, remains at the same level and is below the average level registered within the larger area. What managerial decision should be made in this case?

- A. To design and implement measures for early diagnostics of arterial hypertension
- B. To design and implement measures for primary prevention of essential hypertension
- C. To design and implement measures for secondary prevention of hypertension complications
- D. To design and implement measures for professional development of medical workers
- E. To design and implement improved dispensary system for hypertensive patients

**123.** A 42-year-old man was delivered to a surgical in-patient department with complaints of icteric skin, pain in the right subcostal area. Biochemical blood analysis: total bilirubin - 140  $\mu\text{mol/l}$ , direct bilirubin - 112  $\mu\text{mol/l}$ . On US: choledoch duct - 1,4 cm, a concrement is detected in the distal area. Gallbladder is 40 cm, no concrements. What treatment tactics should be chosen?

- A. Endoscopic papillosphincterotomy
- B. Laparoscopic cholecystectomy
- C. Laparotomy with choledoch duct drain
- D. Laparotomy with cholecystectomy
- E. Treatment in an infectious diseases hospital

**124.** 4 weeks after myocardial infarction a 56-year-old patient developed acute heart pain, pronounced dyspnea. Objectively: the patient's condition is extremely grave, there is marked cyanosis of the face, swelling and throbbing of the neck veins, peripheral pulse is absent, carotid artery pulse is rhythmic, 130/min., BP is 60/20 mm Hg. Auscultation of

the heart reveals extremely muffled sounds, percussion reveals heart border extension in both directions. What is the optimal treatment tactic for this patient?

- A. Pericardiocentesis and immediate thoracotomy
- B. Oxygen inhalation
- C. Puncture of the pleural cavity on the left
- D. Conservative treatment, infusion of adrenomimetics
- E. Pleural cavity drainage

**125.** A 45-year-old man was delivered to a hospital with complaints of vomiting with streaks of blood, loss of weight. On esophagofiberscopy a cauliflower-shaped mucosal growth was detected in the abdominal esophagus. The mucosa there bleeds on contact. What preliminary diagnosis can be made?

- A. Esophageal tumor
- B. Barrett esophagus
- C. Abdominal esophagitis
- D. Esophageal diverticulum
- E. Esophageal achalasia

**126.** A 35-year-old man complains of intense lumbar pain irradiating to the inguinal area, external genitalia, thigh; frequent urination, chill, nausea, vomiting. Objectively: positive Pasternatsky's symptom (costovertebral angle tenderness). Urine analysis revealed that RBCs and WBCs covered the total field of microscope; the urine exhibited high protein concentration. These clinical presentations were most likely caused by the following pathology:

- A. Urolithiasis, renal colic
- B. Cholelithiasis, biliary colic
- C. Renal infarct
- D. Intestinal obstruction
- E. Osteochondrosis, acute radicular syndrome

**127.** A 20-year-old patient complains of pain in the left lumbar region, arterial pressure rise up to 160/110 mm Hg. US revealed that the structure and size of the right kidney were within age norms, there were signs of 3 degree hydronephrotic transformation of the left kidney. Doppler examination revealed an additional artery running to the lower pole of the kidney. Excretory urogram shows a narrowing in the region of ureteropelvic junction. Specify the treatment tactics:

- A. Surgical intervention
- B. Administration of spasmolytics
- C. Administration of ACE inhibitors
- D. Kidney catheterization
- E. Administration of  $\beta$ -blockers

**128.** As a result of load lifting a 68-year-old woman developed acute pain in the lumbar region, in a buttock, posterolateral surface of her right thigh, external surface of the ri-

ght shin and dorsal surface of foot. Objectively: weakness of the anterior tibial muscle, long extensor muscle of the right toes, short extensor muscle of the right toes. Low Achilles reflex on the right. Positive Lasegue's sign. What examination method would be most effective for specification of the diagnosis of  $L_5$  root discogenic compression?

- A. Magnetic resonance scan
- B. Spinal column X-ray
- C. Electromyography
- D. Angiography
- E. Lumbar puncture

**129.** A 23-year-old female patient has been suffering from mental disorder since the age of 18, the course of disorder has no remission periods. At hospital the patient mostly presents with non-purposeful foolish excitation: she makes stereotypic grimaces, exposes herself, publically masturbating, loudly laughs, repeating stereotypical obscene shouts. The patient should be prescribed:

- A. Neuroleptics
- B. Antidepressants
- C. Tranquilizers
- D. Nootropics
- E. Mood stabilizers

**130.** During preventive ultrasound scan of abdomen performed during regular check-up in a school the following was revealed in an 11-year-old student of the 5th grade: the left kidney is 3 cm below the normal position, its shape, size and structure are within the norm, the contralateral kidney cannot be observed at its proper place. The preliminary diagnosis is as follows: congenital anomaly of renal development, dystopic left kidney, right kidney is absent or pelvic dystopic. What X-ray method would be required for making the final diagnosis and determining the functional capacity of both kidneys?

- A. Renal dynamic scintigraphy
- B. Radioimmunoassay
- C. Radionuclide renography
- D. Thermography
- E. Excretory urography

**131.** A young woman suffering from seborrhea oleosa has numerous light-brown and white spots on the skin of her torso and shoulders. The spots have clear margins, branny desquamation, no itching. What provisional diagnosis can be made?

- A. Pityriasis versicolor
- B. Torso dermatophytosis
- C. Seborrheic dermatitis
- D. Pityriasis rosea
- E. Vitiligo

**132.** In a traffic accident two persons died. An appointed forensic medical expert was

called on duty to another accident location; therefore, according to the criminal law in force in Ukraine, an investigator called in the following specialist for examination of the location and bodies:

- A.** Nearest available medical doctor
- B.** Medical assistant
- C.** Surgical nurse
- D.** Nearest available dispensing chemist
- E.** Nearest available dental mechanic

**133.** A patient is 28 years old. He has been suffering from mental disorder since he was 22. His current condition has changed acutely: for 3 days the patient has been refusing to leave his home. He claims that there is a "telepathy" occurring between him and other people, through which he receives "thoughts of strangers" and transmits his own thoughts for everyone to hear. He thinks his thoughts and actions are manipulated through this "telepathy". Make the preliminary diagnosis:

- A.** Paranoid schizophrenia
- B.** Depressive episode
- C.** Manic episode
- D.** Organic delirium
- E.** Acute reaction to stress

**134.** A 40-year-old patient is registered in a narcological dispensary. Somatically: skin is dramatically hyperemic, sclera are injected, hyperhidrosis is present. BP- 140/100 mm Hg, heart rate - 100/min. Mental state: autopsychic orientation is intact, allopsychic orientation is distorted. The patient presents with motor anxiety. There is an expression of fear on his face. He refuses to talk about his problems and asks to release him immediately, because he "may be killed". This state developed in a day after one of his regular drinking bouts. What is your provisional diagnosis?

- A.** Delirium tremens
- B.** Organic delirium
- C.** Paranoia
- D.** Alcoholic hallucinosis
- E.** Alcoholic paranoid

**135.** A 35-year-old female patient has gained 20 kg weight within a year with the normal diet. She complains of chill, sleepiness, dyspnea. The patient's mother and sister are corpulent. Objectively: height - 160 cm, weight - 92 kg, BMI- 35,9. Obesity is uniform, there are no striae. The face is amimic. The skin is dry. The tongue is thickened. Heart sounds are muffled. Heart rate - 56/min., BP- 140/100 mm Hg. The patient has constipations, amenorrhea for 5 months. TSH- 28 mkME/l (normal rate - 0,32-5). Craniogram shows no pathology. What is the etiology of obesity in this case?

- A.** Hypothyroid
- B.** Hypo-ovarian
- C.** Hypothalamic-pituitary
- D.** Alimentary and constitutive
- E.** Hypercorticoid

**136.** A 10 week pregnant woman was admitted to a hospital for recurrent pain in the lower abdomen, bloody discharges from the genital tracts. The problems developed after a case of URTI. The woman was registered for antenatal care. Speculum examination revealed cyanosis of vaginal mucosa, clean cervix, open cervical canal discharging blood and blood clots; the lower pole of the gestational sac was visible. What tactics should be chosen?

- A.** Curettage of the uterus
- B.** Pregnancy maintenance therapy
- C.** Expectant management, surveillance
- D.** Hysterectomy
- E.** Antiviral therapy

**137.** A patient with fibromyoma of uterus sized up to 8-9 weeks of pregnancy consulted a gynaecologist about acute pain in the lower abdomen. Examination revealed pronounced positive symptoms of peritoneal irritation, high leukocytosis. Vaginal examination revealed that the uterus was enlarged corresponding to 9 weeks of pregnancy due to the fibromatous nodes, one of which was mobile and extremely painful. Appendages were not palpable. There were moderate mucous discharges. What is the optimal treatment tactics?

- A.** Urgent surgery (laparotomy)
- B.** Surveillance and spasmolytic therapy
- C.** Fractional diagnostic curettage of the uterine cavity
- D.** Surgical laparoscopy
- E.** Surveillance and antibacterial therapy

**138.** A 4-month-old child was admitted to a surgical department 8 hours after the first attack of anxiety. The attacks happen every 10 minutes and last for 2-3 minutes, vomiting occurred once. Objectively: the child's condition is grave. Abdomen is soft, palpation reveals a tumor-like formation in the right iliac area. After rectal examination the doctor's finger was stained with blood. What is the most probable diagnosis?

- A.** Ileocecal invagination
- B.** Gastrointestinal haemorrhage
- C.** Wilm's tumour
- D.** Helminthic invasion
- E.** Pylorostenosis

**139.** A woman has focal encephalitis in the anamnesis. Her spatial orientation is not disrupted. She has a sensation, as if "everything seems surreal: buildings are small, round or distorted; trees are upside down; people are very tall with thin limbs". Determine the

psychopathologic syndrome:

- A. Derealization
- B. Depersonalization
- C. Hallucinatory
- D. Oneiric
- E. Cenestopathic

**140.** A 56-year-old woman complains of itching skin of her torso, constant nausea, constipation, sensation of heaviness and pain in the right subcostal area, extreme general fatigue. The patient suffers from biliary cirrhosis. The skin is pale icteric. The abdomen is soft, the liver protrudes 2,0 cm from under the margin of the right costal arch, sensitive on palpation. Biochemical investigation: total bilirubin - 142,0  $\mu\text{mol/l}$ , conjugated bilirubin - 139,0  $\mu\text{mol/l}$ , alanine aminotransferase - 0,98  $\text{mmol/hour}\cdot\text{l}$ , aspartate aminotransferase - 0,82  $\text{mmol/hour}\cdot\text{l}$ , alkaline phosphatase - 8,7  $\text{mmol/hour}\cdot\text{l}$ . What drug should be prescribed in the first place?

- A. Ursodeoxycholic acid
- B. Sirepar
- C. Allochol
- D. Essentiale forte (Phospholipides)
- E. Livolin forte

**141.** A 40-year-old female patient complains of having a bulge on the anterior surface of neck for 5 years. Objectively: Ps- 72/min., arterial pressure - 110/70 mm Hg, in the right lobe of thyroid gland palpation reveals a mobile node 4x2 cm in size, the left lobe is not palpable, the basal metabolic rate is 6%. What is the most likely diagnosis?

- A. Nodular euthyroid goiter
- B. Nodular hyperthyroid goiter
- C. Riedel's thyroiditis
- D. Mixed euthyroid goiter
- E. Median cervical cyst

**142.** Estimation of community health level involved analysis of a report on diseases registered among the population of district under charge (reporting form 12). What index is calculated based on this report?

- A. Common morbidity rate
- B. Index of pathological affection
- C. Index of morbidity with temporary disability
- D. Index of hospitalized morbidity
- E. Index of basic non-epidemic morbidity

**143.** A 32-year-old woman addressed a dermatologist with complaints of slightly itching rashes in the mouth angles. She has been suffering from this condition for 3 days. Objectively: there are isolated small phlyctenas and superficial erosions covered in honey-yellow scabs against the background of slight hyperemia. Make the diagnosis:

- A. Streptoderma
- B. Herpes
- C. Atopic cheilitis
- D. Dermatitis
- E. Eczema

**144.** After a contact with chemicals a plant worker has suddenly developed stridor, voice hoarseness, barking cough, progressing dyspnea. Objective examination reveals acrocyanosis. What is your provisional diagnosis?

- A. Laryngeal edema
- B. Laryngeal carcinoma
- C. PATE
- D. Pulmonary atelectasis
- E. Pneumothorax

**145.** An 18-year-old woman complains of pains in her lower abdomen, purulent discharge from the vagina, temperature rise up to 37,8°C. Anamnesis states that she had random sexual contact the day before the signs appeared. She was diagnosed with acute bilateral adnexitis. On additional examination: leukocytes in the all field of vision, bacteria, diplococci with intracellular and extracellular position. What agent is most likely in the given case?

- A. Gonococcus
- B. Colibacillus
- C. Chlamydia
- D. Trichomonad
- E. Staphylococcus

**146.** A 45-year-old man has been suffering from duodenal ulcer disease for 5 years. He complains of weakness, dizziness, dryness of the skin. Objectively: the skin and visible mucosa are pale, chapped lips; heart rate is 100/min., BP- 100/70 mm Hg, systolic murmur at all points on heart auscultation. All other internal organs are unchanged. Fecal occult blood test is positive. Blood test: erythrocytes -  $3,1 \cdot 10^{12}/\text{l}$ , Hb- 88 g/l, color index - 0,7, leukocytes -  $4,6 \cdot 10^9/\text{l}$ , platelets -  $350 \cdot 10^9/\text{l}$ , ESR- 21 mm/hour, anisocytosis, poikilocythemia, serum iron - 9,5  $\mu\text{mol/l}$ . What treatment tactics would you choose?

- A. Iron preparations, balanced diet
- B. Concentrated red cells transfusion
- C. Intramuscular introduction of 500 mkg of cyanocobalamin
- D. Corticosteroids, cytostatics
- E. Ascorbic acid, calcium chloride

**147.** A 58-year-old patient complains of a headache in the occipital region, nausea, choking, opplotentes. The presentations appeared after a physical exertion. Objectively: the patient is excited. Face is hyperemic. Skin is pale. Heart sounds are regular, the 2nd aortic sound is accentuated. BP- 240/120 mm Hg, HR- 92/min. Auscultation reveals some fine moist crackles in the lower lungs.

Liver is not enlarged. ECG shows signs of hypertrophy and left ventricular overload. What is the most likely diagnosis?

- A. Complicated hypertensive crisis
- B. Acute myocardial infarction, pulmonary edema
- C. Bronchial asthma exacerbation
- D. Uncomplicated hypertensive crisis
- E. Community-acquired pneumonia

**148.** A 45-year-old patient (14-year-long work record as a house painter) upon the contact with synthetic paint develops skin reddening, edema, severe itching and oozing lesions on her face. Symptoms disappear after the contact with this chemical substance stops but even the smell of paint alone is enough to make them reappear each time. Each recurrence is characterised by increased severity of symptoms. What provisional diagnosis can be made?

- A. Professional eczema
- B. Simple contact dermatitis
- C. Allergic contact dermatitis
- D. Urticaria
- E. Toxicodermia

**149.** A 32-year-old woman addressed a maternity clinic with complaints of infertility that has been lasting for 7 years. Her menstrual cycle occurs in two phases. Hysterosalpingography reveals obstruction of the uterine tubes in the ampullar areas, an adhesive process in the small pelvis can be observed. What treatment is most advisable in this case?

- A. Laparoscopy
- B. Laparotomy
- C. Tubectomy
- D. Adnexectomy
- E. Hydrotubation

**150.** Survey radiograph of a 52-year-old worker of an agglomeration plant (28 years of experience, the concentration of metal dust is 22-37 mg/m<sup>3</sup>) shows mildly pronounced interstitial fibrosis with diffused contrast well-defined small nodular shadows. The patient has no complaints. Pulmonary function is not compromised. What is the provisional diagnosis?

- A. Siderosis
- B. Silicosis
- C. Anthraco-silicatosi
- D. Silicatosi
- E. Anthracosis

**151.** A week ago a 65-year-old patient suffered an acute myocardial infarction, his general condition deteriorated: he complains of dyspnea at rest, pronounced weakness. Objectively: edema of the lower extremities, ascites is present. Heart borders are extended, paradoxical pulse is observed 2 cm from the

apex beat to the left. What is the most likely diagnosis?

- A. Acute cardiac aneurysm
- B. Recurrent myocardial infarction
- C. Acute pericarditis
- D. Cardiosclerotic aneurysm
- E. Pulmonary embolism

**152.** A 60-year-old patient complains of nearly permanent sensation of heaviness and fullness in the epigastrium, which increases after eating, foul-smelling eructation, occasional vomiting with food consumed 1-2 days ago, weight loss. 12 years ago he was first found to have an ulcer of pyloric channel. The patient has taken ranitidine for periodic hunger pains. The patient's condition has been deteriorating over the last 3 months. Objectively: splashing sound in the epigastrium is present. What kind of complication is it?

- A. Pyloric stenosis
- B. Penetration of gastric ulcer
- C. Functional pyloric spasm
- D. Foreign body in the stomach (bezoar)
- E. Malignization of gastric ulcer

**153.** A 5-year-old child has body temperature increased up to febrile numbers, suffers from inertness, weakness. Examination revealed hemorrhage on the skin of limbs and torso. Enlargement of cervical and axillary lymph nodes can be detected. The liver is 4 cm below the costal arch; the spleen is 6 cm below the costal arch. Blood test: erythrocytes -  $2,3 \cdot 10^{12}/l$ , Hb- 60 g/l, platelets -  $40 \cdot 10^9/l$ , leukocytes -  $32,8 \cdot 10^9/l$ , eosinophiles - 1%, band neutrophiles - 1%, segmented neutrophiles - 12%, lymphocytes - 46%, monocytes - 1%, blasts - 40%, Duke's bleeding time is 9 min. What examination is necessary to make the diagnosis?

- A. Myelogram
- B. Lymph nodes biopsy
- C. US of abdominal cavity
- D. Detection of hepatitis markers
- E. Investigation of platelets dynamic functions

**154.** A child from primipregnancy was born in a term labor and has body weight of 4000 g and body length of 57 cm. When born, he was nonresponsive to examination. Diagnosis is diffuse. Heart rate is 80/min. What resuscitation measures should be taken?

- A. Begin ALV with mask
- B. Introduce 100% oxygen
- C. Intubate and begin ALV
- D. Tactile stimulation
- E. Administer naloxone

**155.** A 15-year-old teenager has undergone medical examination in military recruitment center. The following was revealed: interval systolic murmur at the cardiac apex, accent of the II heart sound over the pulmonary

artery, tachycardia. What additional examination method will be most informative for determining a diagnosis?

- A. Echocardiography
- B. Electrocardiography
- C. X-ray
- D. Phonocardiography
- E. Rheography

**156.** A 64-year-old patient has been hospitalised with complaints of progressive jaundice that developed over 3 weeks ago without pain syndrome, along with general weakness, loss of appetite. Objectively: temperature is  $36,8^{\circ}\text{C}$ , heart rate is 78/min., abdomen is soft and painless, peritoneum irritation symptoms are not detected, palpation reveals sharply enlarged tense gallbladder. What disease can be characterised with these symptoms?

- A. Cancer of pancreas head
- B. Duodenal ulcer
- C. Acute cholecystitis
- D. Chronic cholecystitis
- E. Cholecystitis caused by lamblia

**157.** A 6-year-old girl attended a general practitioner with her mother. The child complains of burning pain and itching in her external genitalia. The girl was taking antibiotics the day before due to her suffering from acute bronchitis. On examination: external genitalia are swollen, hyperemic, there is white deposit accumulated in the folds. The most likely diagnosis is:

- A. Candidal vulvovaginitis
- B. Trichomoniasis
- C. Nonspecific vulvitis
- D. Helminthic invasion
- E. Herpes vulvitis

**158.** A patient with otopyosis is in sharply deteriorating condition: he developed headache, vomiting, febrile temperature, general hyperesthesia. Meningeal symptoms and stagnant optic disks are observed. There are no focal symptoms. Liquor is turbid, blood pressure is high, albuminocytological dissociation occurs with neutrophils. What disease can be suspected?

- A. Secondary purulent meningitis
- B. Meningoencephalitis
- C. Serous meningitis
- D. Primary purulent meningitis
- E. Subarachnoid hemorrhage

**159.** A 25-year-old patient is not married and has sexual relations with several partners. During the last 3 months he noticed small amount of mucoserous secretions produced from urethra. Subjectively: periodical itching or burning pain in urethra. Two months ago pain in the knee joint developed. Possibility of trauma or exposure to cold is denied by the patient. During the last week eye discomfort

is noted - lacrimation and itching. What provisional diagnosis can be suggested?

- A. Reactive arthritis
- B. Rheumatoid arthritis
- C. Seasonal pollinosis
- D. Bacterial nonspecific urethral conjunctivitis
- E. URTI with conjunctiva and joints affected

**160.** A 19-year-old patient complains of severe pain in axillary crease. Condition onset was a week ago after her swimming in a cold river and epilation. The next day painful "boil" appeared that was becoming larger every day and became a plum-sized tumor. Upon examination nodular conical growths joined together are detected, the skin covering them is bluish-red in color. Some nodules have fistulous openings producing thick purulent mass. Body temperature is  $38,5^{\circ}\text{C}$ , general malaise. The most likely diagnosis is:

- A. Hydradenitis
- B. Carbuncle
- C. Cutaneous tuberculosis
- D. Necrotizing ulcerative trichophytosis
- E. Pyoderma chancriformis

**161.** Annual report of an in-patient ward presents data about the number of patient days and the number of patients, who have undergone treatment within a year. What work indicator of the in-patient ward can be calculated based on these data?

- A. Average duration of in-patient treatment of a patient
- B. Bed occupancy rate
- C. Hospital bed turnover rate
- D. Mortality
- E. Efficient use of the hospital bed capacity

**162.** ECG revealed the following in a 10-year-old child: sharp acceleration of the heart rate - 240/min., P wave overlaps with T wave and deforms it, moderate lengthening of PQ interval, QRS complex is without changes. What pathology does this child have?

- A. Paroxysmal atrial tachycardia
- B. Atrial hypertrophy
- C. Ventricular hypertrophy
- D. WPW syndrome
- E. Extrasystole

**163.** A 54-year-old patient complains of weakness, jaundice, itching skin. Disease onset was 1,5 months ago: fever up to  $39^{\circ}\text{C}$  appeared at first, with progressive jaundice developed 2 weeks later. On hospitalisation jaundice was severely progressed. Liver cannot be palpated. Gallbladder is enlarged and painless. Blood bilirubin is 190 micromole/l (accounting for direct bilirubin). Stool is acholic. What is the most likely jaundice genesis in this patient?

- A. Mechanical jaundice
- B. Hepatocellular jaundice
- C. Hemolytic jaundice
- D. Caroli syndrome
- E. Gilbert's syndrome

**164.** A 22-year-old patient complains of 8-month delay of menstruation. Anamnesis: menarche since the age of 12,5. Since the age of 18 menstruations are irregular. No pregnancies. Mammary glands have normal development; when the nipples are pressed, milk drops are discharged. On gynecological examination: moderate uterus hypoplasia. On hormonal examination: prolactin level exceeds the norm two times. On computed tomogram of the sellar region: a space-occupying lesion 4 mm in diameter is detected. The most likely diagnosis is:

- A. Pituitary tumor
- B. Lactation amenorrhea
- C. Stein-Leventhal syndrome
- D. Sheehan's syndrome
- E. Cushing's disease

**165.** A 2-year-old child in a satisfactory condition periodically presents with moderate proteinuria, microhematuria. US 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. Micturating cystography
- C. Retrograde urography
- D. Doppler study of renal vessels
- E. Radioisotope renal scan

**166.** A 13-year-old girl complains of fatigability, frequent headaches, cardialgia. Eight years ago she had a case of pyelonephritis. Urine analyses periodically revealed leukocyturia. The child has undergone no further treatment. On examination: increased BP up to 150/100 mm Hg. Ultrasound investigation revealed significant reduction of the right kidney. What process is leading in arterial hypertension pathogenesis in this case?

- A. Hyperactivity of renin-angiotensin system
- B. Disruption of water-electrolytic balance
- C. Disruption of renal circulation
- D. Hypersympathicotonia
- E. Increased cortisol level

**167.** A 26-year-old patient with affective bipolar disorder has developed a condition manifested by mood improvement, behavioural and sexual hyperactivity, verbosity, active body language, reduced need for sleep. Which of the following drugs are most efficient in this case?

- A. Neuroleptics with a sedative effect
- B. Antidepressants with an activating effect
- C. Neuroleptics with an activating effect
- D. Tranquilizers
- E. Antidepressants with a sedative effect

**168.** A 32-year-old man complains of pain in the chest on the left, dyspnea, temperature rise up to 38,0°C, slight cough. The disease onset was 2 weeks ago after overexposure to cold. He had suffered from bronchoadenitis in his childhood. The affected side lags during breathing; percussion reveals dull sound with oblique margin in the lower left lung, where breathing is absent. The right heart border is displaced outwards. Mantoux test with 2 TU resulted in a papule 16 mm in size. What diagnosis is most likely?

- A. Tuberculous pleurisy
- B. Central carcinoma of the left lung
- C. Congestion pneumonia
- D. Thromboembolism of the pulmonary artery branches
- E. Community-acquired pneumonia

**169.** An emergency doctor has diagnosed a 32-year-old woman with generalized convulsive status epilepticus. The deterioration in the patient's condition is caused by a sudden gap in the epilepsy treatment. Specify the doctor's further tactics:

- A. Hospitalization in the intensive care unit
- B. Hospitalization in the department of neurology
- C. Hospitalization in the department of neurosurgery
- D. Outpatient monitoring by a neuropathologist
- E. Outpatient monitoring by a neurosurgeon

**170.** A 19-year-old patient complains of dyspnea during physical exertion. He often has bronchitis and pneumonia. Cardiac murmur has been observed since his childhood. On auscultation: there is splitting of the II heart sound over pulmonary artery, systolic murmur in the third intercostal space near the left sternum margin. ECG test shows right bundle-branch block. What is the provisional diagnosis?

- A. Interatrial septum defect
- B. Open arterial duct
- C. Coarctation of aorta
- D. Aortic stenosis
- E. Mitral valve insufficiency

**171.** A 75-year-old male patient complains of slight pain in the right iliac region. The abdominal pain arose 6 days ago and was accompanied by nausea. Surgical examination revealed moist tongue, Ps- 76/min., BP- 130/80 mm Hg. Abdomen was soft, slightly painful in the right iliac region on deep palpation, the symptoms of the peritoneum irritation were doubtful. In blood: RBCs-  $4,0 \cdot 10^{12}/l$ , Hb- 135

g/l, WBCs-  $9,5 \cdot 10^9/l$ , stab neutrophils - 5%, segmentonuclear - 52%, lymphocytes - 38%, monocytes - 5%, ESR- 20 mm/hour. Specify the doctor's further tactics:

- A. Emergency operation for acute appendicitis
- B. Hospitalization, dynamic surveillance
- C. Send the patient home
- D. Refer the patient to a district therapist
- E. Administration of additional examination: abdominal ultrasound, x-ray contrast study of the gastrointestinal tract

**172.** 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. Atopic dermatitis
- B. Psoriasis
- C. Pityriasis Rosea
- D. Urticaria
- E. Quincke's edema

**173.** A 25-year-old patient has been admitted to the hospital with the following problems: weakness, sweating, itching, weight loss, enlarged submandibular, cervical, axillary, inguinal lymph nodes. Objectively: hepatomegaly. Lymph node biopsy revealed giant Berezovsky-Reed-Sternberg cells, polymorphocellular granuloma composed of lymphocytes, reticular cells, neutrophils, eosinophils, fibrous tissue, plasma cells. What is the most likely diagnosis?

- A. Lymphogranulomatosis
- B. Lymph node tuberculosis
- C. Lymphoreticulosarcoma
- D. Cancer metastases to lymph nodes
- E. Macofollicular reticulosis

**174.** An 8-year-old child was hospitalized for fever up to  $39,8^{\circ}C$ , 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 1 mcl (mainly lymphocytes - 90%), glucose level of 2,6 mmol/l. What causative agent might have caused the disease in the child?

- A. Enterovirus
- B. Meningococcus
- C. Koch's bacillus
- D. Staphylococcus
- E. Pneumococcus

**175.** A 25-year-old patient during self-examination detected a tumor in the upper external quadrant of the right mammary gland. On palpation: painless, dense, mobile growth 2 cm in diameter is detected in the mammary gland; no changes in the peripheral

lymph nodes are observed. On mammary glands US: in the upper external quadrant of the right mammary gland there is a space-occupying lesion of increased echogenicity 21x18 mm in size. The most likely diagnosis is:

- A. Fibrous adenoma
- B. Lacteal cyst
- C. Diffuse mastopathy
- D. Breast cancer
- E. Mastitis

**176.** 2 weeks after labour a parturient woman developed breast pain being observed for 3 days. Examination revealed body temperature at the rate of  $39^{\circ}C$ , chills, weakness, hyperaemia, enlargement, pain and deformity of the mammary gland. On palpation the infiltrate was found to have an area of softening and fluctuation. What is the most likely diagnosis?

- A. Infiltrative-purulent mastitis
- B. Phlegmonous mastitis
- C. Lactostasis
- D. Serous mastitis
- E. Mastopathy

**177.** A 48-year-old woman has been suffering from chronic pancreatitis for the last 7 years. Lately she has been noticing an increase in daily feces with foul smell, abdominal distention, gurgling. The patient complains of diarrhea, weakness, fatigability, loss of appetite, loss of weight. What syndrome can be suspected in this case?

- A. Malabsorption
- B. Irritable colon
- C. Maldigestion
- D. Exudative enteropathy
- E. Endocrine gland failure

**178.** A 37-year-old man suffers from attacks of unconsciousness, dyspnea during physical exertion, periodical sensations of heart rate disorder. Father of the patient died suddenly at the age of 45. Objectively: heart rate is 90/min., BP is 140/90 mm Hg. On heart US: ejection fraction - 49%, significant myocardium thickening of the left ventricle and interventricular septum. What drug should be prescribed for the treatment?

- A. Bisoprolol
- B. Enalapril
- C. Phenyhydinum (Nifedipine)
- D. Hydrochlorothiazide
- E. Furosemide

**179.** During a regular check-up of a 50-year-old woman a tumor was detected in her right mammary gland. The tumor is 5 cm in diameter, dense, without clear margins. The skin over the tumor resembles lemon rind, the nipple is inverted. The lymph node can be palpated in the axillary region. What di-

agnosis is most likely?

- A. Breast cancer
- B. Lacteal cyst
- C. Diffuse mastopathy
- D. Mastitis
- E. Breast lipoma

**180.** A 20-year-old woman complains of sensation of air shortage, lingering dull pain in the heart area, irritability. Objectively: general condition is satisfactory, heart rate lability, BP is 130/60 mm Hg. ECG reveals disruption of repolarization proceses. The patient is diagnosed with somatoform autonomic dysfunction of cardial type. Specify the conditions of the patient treatment:

- A. Out-patient treatment
- B. In-patient treatment in therapeutics department
- C. In-patient treatment in cardiology department
- D. In-patient treatment in cardiac surgery department
- E. In-patient treatment in psychiatric department

**181.** A 38-year-old man's workplace is within the area of effect of ionizing radiation. During regular medical check-up he expresses no complaints. Blood test: erythrocytes -  $4,5 \cdot 10^{12}/l$ , Hb- 80 g/l, leukocytes -  $2,8 \cdot 10^9/l$ , platelets -  $30 \cdot 10^9/l$ . Can this person continue to work with sources of ionizing radiation?

- A. Work with radioactive substances and other sources of radiation is contraindicated
- B. Work with radioactive substances is allowed
- C. Only work with low-level radioactive substances is allowed
- D. Work with radioactive substances can be allowed after detailed medical examination
- E. Work with radioactive substances is allowed only for limited periods of time

**182.** A maternity patient breastfeeding for 1,5 weeks has attended a doctor. She considers the onset of her disease to be when proportional breast engorgement occurred. Mammary glands are painful. Body temperature is  $36,6^{\circ}C$ . Expression of breast milk is hindered. The most likely diagnosis is:

- A. Lactostasis
- B. Infiltrative mastitis
- C. Suppurative mastitis
- D. Chronic cystic mastitis
- E. Gangrenous mastitis

**183.** An 11-year-old boy complains of general weakness, fever up to  $38,2^{\circ}C$ , pain and swelling of the knee joints, sensation of irregular heartbeat. 3 weeks ago, the child had a case of tonsillitis. Knee joints are swollen, the overlying skin and skin of the knee region is reddened, local temperature is increased, movements are limited. Heart sounds are

muffled, extrasystole is present, auscultation reveals apical systolic murmur that is not conducted to the left inguinal region. ESR is 38 mm/hour. CRP is 2+, antistreptolysin O titre - 400. What is the most likely diagnosis?

- A. Acute rheumatic fever
- B. Vegetative dysfunction
- C. Non-rheumatic carditis
- D. Juvenile rheumatoid arthritis
- E. Reactive arthritis

**184.** An 18-year-old woman complains of mammary glands swelling, headaches, tearfulness, abdominal distension occurring the day before menstruation. The symptoms disappear with the beginning of menstruation. Menstruations are regular, last for 5-6 days with interval of 28 days in between. Gynecological examination revealed no changes of internal genitals. What is your diagnosis?

- A. Premenstrual syndrome
- B. Sheehan syndrome
- C. Stein-Leventhal syndrome
- D. Asherman's syndrome
- E. Adrenogenital syndrome

**185.** A 24-year-old patient had been delivered to a thoracic department with a chest injury, a fracture of the IV, V, VI ribs on the right. Plan radiography shows the fluid level in the pleural cavity reaching the III rib on the right. Puncture blood contained clots. What is the optimal treatment tactics?

- A. Emergency thoracotomy
- B. Pleural puncture
- C. Thoracentesis and thoracostomy
- D. Hemostatic therapy
- E. Medical thoracoscopy

**186.** A 30-year-old man was delivered to a neurosurgical department with complaints of constant headaches, nausea, vomiting, fever, weakness of the right-side limbs. Anamnesis states that one month ago the patient had a surgery for left-sided suppurative otitis and mastoiditis. He has been undergoing treatment in an ENT department. Approximately 2 weeks ago the temperature increased, and the patient developed headaches. Objectively: heart rate - 98/min., BP- 140/90 mm Hg, temperature -  $38,3^{\circ}C$ . Neurologically pronounced stiff neck: bilateral Kernig's symptom, unsteadiness during the Romberg's maneuver. Computer tomography of the brain revealed a three-dimensional growth with a capsule in the left hemisphere. Make the diagnosis:

- A. Cerebral abscess
- B. Echinococcus
- C. Hemorrhage
- D. Hydrocephalus
- E. Arnold-Chiari malformation

**187.** Examination of a Rh-negative pregnant

woman at 32 weeks of gestation revealed a four-time rise of Rh-antibody titer within 2 weeks, the titer was 1:64. In the first two pregnancies the patient had experienced antenatal fetal death due to hemolytic disease. What is the optimal tactics of pregnancy management?

- A. Early delivery
- B. Delivery at 37 weeks of gestation
- C. Screening for Rh-antibodies 2 weeks later and early delivery in case of further titer rise
- D. Introduction of anti-Rh (D) immunoglobulin
- E. Ultrasound for signs of hemolytic disease of the fetus

**188.** A 74-year-old patient visited a urologist with complaints of pain above the pubis and inability to urinate for 8 hours. At home he had taken antispasmodics and had a warm bath but no improvement occurred. Objectively: the abdomen is soft and painful above the pubis; dullness of percussion sound is observed above the pubis. Murphy's (Pasternatski's) punch sign is negative on the both sides. What condition does the patient have?

- A. Acute urinary retention
- B. Paradoxal ischuria
- C. Chronic urinary retention
- D. Anuria
- E. Oliguria

**189.** A 7-year-old child became ill again 2 weeks after a case of tonsillitis. There are the following complaints: temperature rise up to 38°C, hemorrhagic rash on the extremities, enlargement of the ankle joints. Blood test: hemoglobin is 120 g/l, platelets are  $170 \cdot 10^9/l$ , ESR is 30 mm/hour. Urine test: proteinuria up to 0,7 g/l, cylinders - 5-6 in the field of vision, erythrocytes - 8-10 in the field of vision. What mechanism of hemorrhagic syndrome is present in the given case?

- A. Vessel wall damage caused by immune complexes
- B. Platelet dysfunction
- C. Suppression of hematopoietic stem cells
- D. Decrease of adhesive-aggregative function of platelets
- E. Vessel wall damage caused by bacteria

**190.** A 33-year-old patient has developed dyspnea during physical exertion, palpitations, disruptions of heart rate, swollen legs. In the childhood the patient had a case of acute rheumatic fever that required in-patient treatment. There were no further requests for medical care. Objectively: heart rate is 92/min., rhythmic; BP is 110/70 mm Hg. At the apex the I heart sound is increased, triple rhythm, diastolic murmur. What heart disease is most likely?

- A. Mitral valve stenosis
- B. Mitral valve failure
- C. Aortic outflow stenosis
- D. Aortic valve failure
- E. Tricuspid valve stenosis

**191.** A 64-year-old woman has been suffering from diabetes mellitus for the last 14 years. Approximately 3 days ago the skin on the distal phalanx of the I toe on the left foot became cold and bluish-black in color. Mild pain is observed in the affected area. Pulse on the pedal arteries cannot be detected, pulse on the popliteal artery is retained. Glycemia is 12,4 mmol/l. US scan: stenosis of the shin arteries, collateral compensated blood flow. Ankle-brachial pressure index is 0,7. Foot X-ray: destruction of the distal phalanx of the I toe. Determine the grade of diabetic foot according to Wagner:

- A. IV
- B. I
- C. II
- D. III
- E. V

**192.** A 4-month-old boy has been undergoing in-patient treatment for pneumocystic pneumonia for 4 weeks. The diagnosis has been made based on clinical signs, typical X-ray presentation, presence of severe hypoxemia, positive dynamics caused by intravenous introduction of Biseptol (Co-trimoxazole). Anamnesis states that enzyme-linked immuno sorbent assay (ELISA) detected antibodies to HIV in the umbilical blood. Polymerase chain reaction (PCR) was performed on the child at the ages of 1 month and 3 months, and proviral DNA was detected in the child's blood. Viral load and number of CD4+-lymphocytes was not measured. Make the diagnosis:

- A. HIV/AIDS
- B. Infectious mononucleosis
- C. Pneumonia
- D. Tuberculosis
- E. Adenovirus infection

**193.** A 35-year-old patient undergoing treatment for heart disorder in cardiological department has developed complaints of acute sudden pain in the epigastrium, temperature rise up to 38,3°C. Blumberg's and Razdolsky's (abduction of femur) signs are positive. What necessitates surgical aid in the given case?

- A. Progress as a surgical disease
- B. Extent of congenital and acquired development disorders
- C. Severity of the concomitant pathology
- D. Urgent aid is required to save the patient's life
- E. Activity of the heart disorder

**194.** A 5-year-old girl was hospitalized with

complaints of pain and swelling in the right knee joint, temperature rise up to  $38,4^{\circ}\text{C}$  and a rash diagnosed as erythema annulare centrifugum. The signs developed 3 days after the recovery from a case of acute respiratory disease. Name the etiotropic drug to be prescribed:

- A. Augmentin
- B. Methotrexate
- C. Metypred (Methylprednisolone)
- D. Diclofenac sodium
- E. Captopril

**195.** During medical examination of a group of children under 4 years carried out by a pediatric team in one of the African countries a set of similar pathological signs was detected in some of the children. The signs are as follows: growth inhibition, mental changes, muscle atrophy, swellings, changes in hair and skin pigmentation. These children were diagnosed with kwashiorkor. What food products should be added to the diet to treat this disorder?

- A. Fish, vegetables, cereals
- B. Milk, meat, vegetables
- C. Vegetables, fruit
- D. Cereals, fruit, berries
- E. Poultry, fruit, berries

**196.** An 8-year-old girl was diagnosed with signs of Morgagni-Adams-Stokes disease that developed against the background of the III degree atrioventricular heart block. What drug should be introduced intravenously for emergency aid?

- A. Atropine
- B. Prednisolone
- C. Dobutamine
- D. Digoxin
- E. Potassium chloride

**197.** A 62-year-old man addressed a urologist with complaints of frequent urination at night (5-6 times per night), sensation of incomplete voiding of the urinary bladder, pain in the lower abdomen, slow urination. Anamnesis: the II degree essential hypertension (peak BP is 160/100 mm Hg). Current case: the II degree enlargement of the prostate gland, PSA is 2,2 ng/ml. Select the drug suitable for long-term therapy of the patient's combined pathology:

- A. Doxazosin
- B. Propranolol
- C. Indapamide
- D. Amlodipine
- E. Captopril

**198.** On the 9th day after childbirth the obstetric patient developed high fever up to  $38^{\circ}\text{C}$ . She complains of pain in the right mammary gland. The examination revealed the following: a sharply painful infiltrate can be palpated in the right mammary gland, the skin over the infiltrate is red, subareolar area and nipple are swollen and painful. What is your diagnosis?

- A. Abscess of the right mammary gland
- B. Mastopathy
- C. Cancer of the right mammary gland
- D. Serous mastitis
- E. Fibrous cystic degeneration of the right mammary gland

**199.** A 16-year-old girl addressed a doctor with complaints of fatigability and dizziness. On heart auscultation: systolic murmur in the II intercostal area along the breastbone edge on the left. ECG revealed signs of the right ventricular hypertrophy. X-ray revealed dilatation of the the pulmonary artery trunk, enlargement of the right heart. What heart disorder is it?

- A. Pulmonary artery outflow stenosis
- B. Fallot's tetrad
- C. Defect of the interatrial septum
- D. Coarctation of aorta
- E. Pulmonary artery valve failure

**200.** A 32-year-old patient complains of excessive appetite, excess weight, dyspnea during physical exertion. There are fat deposits in the area of abdomen and shoulder girdle. The skin is pale-pink, adult male pattern of hair distribution is observed on the torso, no stretch marks. Heart rate is 90/min., BP is 120/80 mm Hg, body build index equals 35. Blood sugar is 4,9 mmol/l, cholesterol is 6,2 mmol/l. On ophthalmoscopy: fundus of the eye without changes. What provisional diagnosis can be made?

- A. Primary alimentary constitutive obesity, android type
- B. Primary alimentary constitutive obesity, gynoid type
- C. Secondary hypothalamic obesity
- D. Secondary neuroendocrine obesity
- E. Secondary endocrine hypo-ovarian obesity

## **INSTRUCTIONAL BOOK**

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## List of abbreviations

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ACTH	Adrenocorticotrophic hormone
ADP	Adenosine diphosphate
ALT, ALAT	Alanin aminotransferase
ALV	Artificial lung ventilation
AP	Arterial (blood) pressure
AST, AspAT	Aspartat aminotransferase
ATP	Adenosine triphosphate
BCG	Bacillus Calmette-Guérin
BP	Blood (arterial) pressure
CK	Creatine kinase
CNS	Central nervous system
CoA	Coenzyme A
CRP	C-reactive protein
CT	Computed tomography
COX	Cyclooxygenase
DIC	Disseminated intravascular coagulation
DTP (DPT)	Diphtheria-tetanus-pertussis vaccine
EDTA	Ethylenediamine tetra-acetic acid
ELISA	Enzyme-linked immunosorbent assay
ENT	Ear, nose, and throat (as a department in a hospital)
EPR (ER)	Endoplasmic reticulum
ESR	Erythrocyte sedimentation rate
EV	Enterovirus
FC	Functional class
GABA	Gamma aminobutyric acid
Hct, Ht	Hematocrit
HDL	High-density lipoproteins
HR	Heart rate
IDL	Intermediate-density lipoproteins
IU	International unit
IUPAC	International Union of Pure and Applied Chemistry
LDH	Lactate dehydrogenase
LDL	Low-density lipoproteins
LOX	Lipoxygenase
MAO	Monoamine oxidase
MRI	Magnetic resonance imaging
NSAID	Nonsteroidal anti-inflammatory drug
PE (PATE)	Pulmonary embolism (Pulmonary artery thromboembolism)
PSA	Prostate-specific antigen
RBC	Red blood count
RR	Respiratory rate
SES	Sanitary-and-epidemiologic station
STD	Sexually transmitted disease
STI	Sexually transmitted infection
T/l	Trillion/liter
TABT	Typhoid-paratyphoid A and B plus tetanus toxoid vaccine
TMJ	Temporomandibular joint
TSH	Thyroid-stimulating hormone
TU	Tuberculin unit
URTI	Upper respiratory tract infection
V/f	Vision field
VLDL	Very-low-density lipoproteins
WBC	White blood count
WPW	Wolff-Parkinson-White syndrome