1. A 47-year-old woman complains of paroxysmal headaches that have been occurring for the past 5 years. The pain is unilateral, intense, and localized in the frontal area. It is accompanied by nausea and abdominal discomfort and begins suddenly. The headaches are preceded by blurred vision. The woman has a history of hypertension episodes, but currently takes no medicines. Between the headaches, her condition is satisfactory. Objectively: she is overeating (body mass index is 29), her blood pressure is 170/95 mm Hg. Her neurological status is normal. Make the diagnosis:

**A.** Migraine

B. Chronic subdural hematoma

**C.** Epilepsy

- **D.** Benign intracranial hypertension
- **E.** Hypertensive encephalopathy
- **2.** A 7-year-old boy suddenly developed pain and edema in his right knee. The day before, at school, he took part in crosscountry skiing. There is no family history of hemophilia or susceptibility to bleeding. Objectively, his body temperature is 37.5°C. The knee is painful on palpation, hot to the touch, and has edema with local tissue tension above it. In the blood: Hb – 123 g/L, leukocytes –  $5.6 \cdot 10^9$ /L, platelets –  $354 \cdot 10^9$ /L, prothrombin time – 12 seconds (normal range is 10-15 seconds), activated partial thromboplastin time – 72 seconds (normal range is 35-45 seconds). Bleeding time is normal, the factor VIII levels constitute 5% of normal value. Make the diagnosis:

A. Hemophilia A

B. Hemophilia BC. Henoch-Schoenlein purpura

**D.** Vitamin K deficiency

E. Thrombocytopenia

**3.** A 54-year-old man was brought to a hospital with complaints of a sudden sharp pain in his chest that appeared when he was lifting a heavy object. The pain is localized in the center of his chest. It does not irradiate to other areas, nor does it intensify with changes in the position of the body. The pain is accompanied by nausea without vomiting. No respiratory symptoms are observed. The man has a history of essential hypertension and takes angiotensin-converting-enzyme inhibitors. Objectively, his skin is pale and moist. His pulse is 115/min., respiratory rate – 20/min. ECG shows sinus tachycardia. Chest X-ray shows a darkening in the upper left and lower right segments. His cardiac enzyme levels are normal. Make the diagnosis:

A. Dissecting aortic aneurysm

**B.** Myocarditis

**C.** Acute pericarditis

**D.** Strangulated hiatal hernia

E. Acute myocardial infarction

- **4.** A 55-year-old man on the 3rd day after an acute anterior myocardial infarction complains of shortness of breath and a dull pain behind the sternum that decreases when he leans forward. Objectively, his blood pressure is 140/80 mm Hg and his heart sounds are muffled. ECG shows atrial fibrillation with the ventricular rate of 110/min., pathological Q wave, and ST segment elevation in the right-sided chest leads. Make the diagnosis:
- **A.** Acute pericarditis
- **B.** Pulmonary embolism

**C.** Tietze syndrome

**D.** Dissecting aortic aneurysm

**E.** Dressler syndrome

- **5.** A 54-year-old man was hospitalized with complaints of a sudden severe headache in the back of his head and vomiting. He has a history of moderate hypertension and takes hypothiazide. Three days ago he came to a therapist, complaining of an intense headache, which was relieved with an analgesic. Objectively, his consciousness is clouded and his left pupil is dilated. He presents with marked photophobia, tense neck muscles, and left-sided hemiparesis with increased muscle tone and reflexes. His temperature is low. No rash is observed in the patient. His blood pressure is 230/130 mm Hg, pulse – 50/min., respiratory rate – 12/min. Make the diagnosis:
- A. Acute subdural hematoma

**B.** Myasthenia

**C.** Multiple sclerosis

**D.** Migraine

**E.** Acute bacterial meningitis

**6.** A 78-year-old woman complains of lumbar pain. The pain increases during movements, decreases at rest, and does not irradiate to other areas. Her temperature is normal, the body weight remains unchanged. Objectively, her peripheral joints are normal, she has moderate obesity, the mobility of the lumbar spine is limited. A local tension is observed in the soft tissues over the L2 vertebra. In the blood: Hb – 147 g/L, leukocytes –  $8.8 \cdot 10^9$ /L, platelets –  $222 \cdot 10^9$ /L, ESR – 5 mm/hour,  $Na^+$  – 140 mmol/L,  $K^+$  – 4.2 mmol/L,  $Ca^{2+}$  – 2.35 mmol/L. Make the diagnosis:

- **A.** Osteoporosis with a pathological fracture
- **B.** Amyloidosis
- **C.** Secondary hyperparathyroidism
- **D.** Multiple myeloma
- E. Sciatica
- 7. A 58-year-old man, a heavy drinker and smoker, came to a hospital with complaints of constant coughing and shortness of breath. Lately, he has been losing weight. Objectively, his cervical lymph nodes are enlarged and dense, the tissues above them exhibit no tension. Chest X-ray shows fibrosis of an upper pulmonary lobe and left-sided pleurisy. The pleural fluid is straw-colored, with protein levels of 52 g/L and a high lymphocyte count. Malignant cells were not detected. Inoculation of the pleural fluid produced no microbial growth one week later. Make the diagnosis:
- **A.** Pulmonary tuberculosis
- **B.** Atypical pneumonia
- C. Systemic lupus erythematosus
- **D.** Bronchiectasis
- E. Sarcoidosis
- **8.** A 35-year-old man complains of a chest pain that persists for several months already and an occasionally observed bitter taste in his mouth. The pain is localized behind the sternum, occurs at rest, and sometimes irradiates into the neck. It does not intensify during physical exertion, but may intensify after drinking alcohol or eating a large meal. At night, this condition becomes worse. Swallowing is not disturbed. The body weight is increased. Examination detected no changes. Make the diagnosis:
- **A.** Gastroesophageal reflux disease
- **B.** Esophageal achalasia
- C. Esophageal tumor
- **D.** Diaphragmatic hernia
- **E.** Globus hystericus
- 9. A 76-year-old man complains of epigastric pain and periodical vomiting throughout the past 2 months. He has no dysphagia or «coffee grounds» vomiting. During this period, he has lost 5 kg, his appetite is low. He does not smoke and is not a heavy drinker. Previously, due to gastric dyspepsia he was taking antacids and proton pump inhibitors, but recently these drugs have stopped bringing him relief. Objectively, he is undereating, a lymph node can be palpated in his left supraclavicular fossa. The liver is not enlarged. Make the diagnosis:

A. Gastric carcinoma

**B.** Gastric ulcer

C. Esophageal tumor

**D.** Pylorostenosis

E. Diaphragmatic hernia

- **10.** A 76-year-old woman complains of a progressive swallowing disorder, predominantly when she eats solid foods. This sign is observed over the past 6 weeks. Sometimes she notes episodes of vomiting with solid vomitus. Swallowing is painless. She has lost 6 kg. Ten years ago she had a myocardial infarction. She permanently takes aspirin and long-acting nitrates, drinks alcohol in moderation, and smokes. Objectively, her skin is icteric, her neck is normal, the lymph nodes are not enlarged. The chest is normal. The cardiovascular system shows no marked changes. The liver is +3 cm. Make the diagnosis:
- **A.** Esophageal cancer

**B.** Diaphragmatic hernia

C. Diffuse esophageal narrowing

**D.** Myasthenia

**E.** Esophageal achalasia

- 11. A 38-year-old man complains of periodical problematic swallowing of both solid and liquid foods that is observed for many months. Sometimes he develops an intense retrosternal pain, especially after hot beverages. Asphyxia attacks are observed at night. He has no weight loss. Objectively, his general condition is satisfactory, the skin is of normal color. Examination detects no changes in the gastrointestinal tract. Chest X-ray shows dilation of the esophagus with air-fluid levels in it. Make the diagnosis:
- **A.** Esophageal achalasia
- **B.** Myasthenia
- C. Esophageal cancer
- **D.** Esophageal candidiasis
- E. Gastroesophageal reflux disease
- **12.** A 46-year-old woman was awakened at 3 a.m. by a sharp pain in her right subcostal region that irradiated into her right shoulder. The woman is anxious, had two episodes of vomiting, notes fever and excessive sweating. Her temperature is 39.0°C. Objectively, her abdominal muscles are tense in the right subcostal region. Make the diagnosis:
- **A.** Acute cholecystitis
- **B.** Peptic ulcer disease
- **C.** Unstable angina pectoris
- **D.** Cholelithiasis
- **E.** Benign stricture of the common bile duct
- 13. A 58-year-old man complains of an

inguinal tumor that increases during straining and coughing. Objectively, there is a pulsating tumor-like formation located below and laterally to the Poupart's ligament. The formation does not diminish during palpation. Make the diagnosis:

- A. Femoral aneurysm
- **B.** Femoral hernia
- C. Ectopic testicle
- **D.** Inguinal hernia
- E. Neurinoma of the femoral nerve
- 14. A 60-year-old man complains of a heavy sensation in his scrotum. Objectively, there is a scrotal edema on the left. The testicle is of normal size, but above it a soft edema is palpable. The edema is limited to the scrotum, can be compressed, and disappears when the patient lies down. Make the diagnosis:
- A. Varicocele
- **B.** Inguinal lymphadenopathy
- C. Ectopic testicle
- **D.** Inguinal hernia
- **E.** Subcutaneous varicose veins
- 15. In the morning, an 8-year-old girl started complaining of general weakness and pain during swallowing. At midday, her parents called for a doctor, because the girl's weakness was progressing and she developed a bilateral swelling slightly below and in front of her ears. Make the diagnosis:
- **A.** Mumps
- **B.** Lymphadenopathy
- C. Dermoid cysts
- **D.** Tumor of the salivary glands
- **E.** Tumor of the carotid body
- 16. A 35-year-old woman complains of pain in her left arm that progresses over the last 4 months and intensifies after physical exertion of the affected limb. Additionally, she notes a cold and «tingling» sensation in her arm. The pain decreases slightly at night, when the arm hangs down from the bed. Moreover, the woman notes deteriorating vision and the weight loss of 4 kg. She does not smoke. Objectively, she is undereating, the pulse on the left arm cannot be found. There is no pulsation over the left carotid artery, a murmur is heard above the right carotid artery. Make the diagnosis:
- **A.** Obliterating aortoarteritis
- **B.** Dermatomyositis
- **C.** Systemic lupus erythematosus
- **D.** Neurological amyotrophy
- E. Arterial thrombosis of the left arm

17. A 25-year-old man complains of weakness, progressive shortness of breath, and leg edemas. Previously, he was healthy, but recently he has been taking ibuprofen for his sprained ankle ligaments. Objectively, his pulse is 90/min., blood pressure is 180/100 mm Hg. The heart sounds are sonorous. In the lungs, the percussion sound is dull in the lower right segment. The liver is +3 cm. In the blood: Hb -103g/L, leukocytes –  $6.7 \cdot 10^9$ /L, platelets –  $236 \cdot 10^9$ /L, urea – 24.6 mmol/L, creatinine – 0.254 mcmol/L,  $Na^+$  – 135 mmol/L,  $K^+$  – 5.6 mmol/L, albumin – 27 g/L. Chest X-ray shows right-sided pleurisy, the heart is normal. What pathological condition is observed in the patient?

- **A.** Nephrotic syndrome
- **B.** Acute renal failure
- C. Renal tuberculosis
- **D.** Acute pyelonephritis
- **E.** Nephritic syndrome
- **18.** A laboratory has received a milk sample for analysis. The findings are as follows: color whitish, smell normal, taste normal for milk, specific gravity 1,038, acidity 35°T (degrees Turner), fats 3.2%. What is the milk quality?
- **A.** The milk is of poor quality
- **B.** The milk is of good quality
- **C.** The milk is of reduced quality
- **D.** The milk is a counterfeit product
- **E.** The milk is conditionally fit for use
- 19. A 74-year-old man has been suffering from benign prostate hyperplasia for the last 5 years. 4 days ago, after drinking alcohol, an acute urinary retention occurred in this man. At the prehospital stage, his bladder was catheterized with a metallic catheter twice a day. Examination shows enlarged, dense, and painful epididymis of the right testicle. There is purulent discharge from the urethra. What kind of emergency aid should be provided in this case?
- **A.** Trocar or open epicystostomy
- **B.** Transurethral resection or prostatectomy
- **C.** Installation of a permanent urethral catheter
- **D.** Transurethral microwave thermotherapy of the prostate
- **E.** Installation of an intraprostatic stent
- **20.** A 28-year-old man had an acute onset of the disease. He started feeling too hot and developed chills, fever of 38.5°C, tenesmus, paroxysmal pain in his left iliac region, and frequent liquid stools with blood and mucus. Abdominal palpation is painful on

the left, the sigmoid colon is spastic. Make the diagnosis:

- A. Dysentery
- **B.** Amoebiasis
- C. Escherichia coli infection
- **D.** Nonspecific ulcerative colitis
- **E.** Malignant tumors of the large intestine
- 21. A 30-year-old man complains of intense pain, skin redness, swollen ankle, and fever of 39°C. The onset of the disease was sudden. In the past, he had similar episodes that lasted 5–6 days without changes in the joint. The skin over the ankle joint is hyperemic, without clear margins or an infiltrative bank on the periphery. Make the diagnosis:
- A. Gout
- **B.** Infectious arthritis
- C. Rheumatoid arthritis
- **D.** Erysipelas
- E. Osteoarthrosis
- **22.** Throughout the last year a 27-year-old man notes fatigue, excessive sweating, and heaviness in his left subcostal region, especially after eating. Objectively, his spleen and liver are enlarged. Blood test: erythrocytes  $3.2 \cdot 10^{12}/L$ , Hb 100 g/L, color index 0.87, leukocytes  $100 \cdot 10^9/L$ , basophils 7%, eosinophils 5%, monocytes 15%, juvenile 16%, band neutrophils 10%, segmented neutrophils 45%, lymphocytes 2%, monocytes 0.3%, platelets  $400 \cdot 10^9/L$ , ESR 25 mm/hour. Make the diagnosis:
- **A.** Chronic myelogenous leukemia
- **B.** Chronic lymphocytic leukemia
- C. Acute leukemia
- **D.** Erythremia (polycythemia vera)
- **E.** Hepatic cirrhosis
- 23. A surgical department has received a boy on the first day of his life. He produces a foaming discharge from his nose and mouth and has cyanosis attacks. X-ray shows the esophagus that ends in a blind-ended pouch at the level of the Th2 vertebra and the gastric air bubble that is located under the left dome of the diaphragm. Make the diagnosis:
- A. Esophageal atresia, tracheoesophageal fistula
- **B.** Total esophageal atresia
- **C.** Paraesophageal hernia of the esophageal hiatus of the diaphragm
- **D.** Esophageal atresia without fistula
- E. Bronchoesophageal fistula
- **24.** During the study of pulmonary tuberculosis morbidity, the data on socio-

economic living conditions and harmful habits of the patients were obtained. What method allows the assessment of the extent to which these factors influence the tuberculosis morbidity?

- **A.** Calculation of the correlation coefficient
- **B.** Calculation of the agreement coefficient
- C. Calculation of the regression coefficient
- **D.** Calculation of standardized indicators
- E. Calculation of the confidence coefficient
- 25. For 2 hours after giving birth, the condition of the mother remains stable. Her uterus is dense and spherical, its floor is at the level of the navel, there is no bleeding. The clamp applied to the umbilical cord remains at the same level. When the woman takes a deep breath and the edge of the palm is pressed over her symphysis, the umbilical cord retracts into the vagina. There is no bloody discharge from the genital tracts. What will be the doctor's next tactics?
- **A.** Remove the placenta manually
- **B.** Apply the Abuladze technique
- C. Perform the Crede-Lazarevich maneuver
- **D.** Perform the uterine curettage
- **E.** Administer oxytocin intravenously
- **26.** A 34-year-old man has been suffering from pulmonary tuberculosis for the last 7 years. He complains of muscle weakness, weight loss, diarrhea, and frequent urination. Objectively, his skin, gums, and buccal mucosa are hyperpigmented. His blood pressure is 90/58 mm Hg. In the blood: erythrocytes  $3.1 \cdot 10^{12}$ /L, Hb 95 g/L, color index 0.92; leukocytes  $9.4 \cdot 10^{9}$ /L, eosinophils 7%, segmented neutrophils 45%, band neutrophils 1%, lymphocytes 40%, monocytes 7%,  $Na^+$  115 mmol/L,  $K^+$  73 mmol/L. Make the diagnosis:
- **A.** Primary insufficiency of the adrenal cortex
- **B.** Pheochromocytoma
- **C.** Primary hyperaldosteronism
- **D.** Congenital hyperplasia of the adrenal cortex
- E. Diabetes insipidus
- 27. A 16-year-old young man throughout the last year presents with gradual changes in his behavior. He started preferring solitude and has lost interest in his friends and studies, became indifferent to his family and rude without provocation, started speaking and laughing with himself. All the questions he answers laconically. He considers himself to be healthy, but tired, says that he thinks about writing a book titled «Projection of mankind onto the

plane of the universe», and carries around a notebook with pages that are filled with numerous identical crosses. Make the diagnosis:

A. Schizophrenia

**B.** Major depressive disorder

C. Schizoid personality disorder

**D.** Autism spectrum disorder

E. Pick's disease

**28.** In a 37-year-old primigravida the labor lasts for 10 hours already. Contractions last 20–25 seconds and occur every 6–7 minutes. The fetus is in a longitudinal lie with cephalic presentation, the head is pressed against the entrance to the lesser pelvis. Vaginal examination shows that the uterine cervix is up to 1 cm long and allows 2 finger-widths. The amniotic sac is absent. Make the diagnosis:

A. Primary weakness of labor activity

**B.** Secondary weakness of labor activity

C. Normal labor activity

**D.** Discoordinated labor activity

E. Pathological preliminary period

29. Preventive examination of a 75-yearold woman with a moderately active lifestyle shows total serum cholesterol of 5.1 mmol/L (208 mg/dL) and high-density lipoprotein levels of 70 mg/dL. Her ECG is normal. What advise about her diet should be given to this woman?

**A.** No changes in the diet

**B.** Reduce the cholesterol intake

**C.** Reduce the intake of saturated fats

**D.** Reduce the intake of simple carbohydrates

**E.** Increase the fiber intake

**30.** A 66-year-old man complains of marked weakness. The onset of the disease was acute: he developed fever and pain in the joints and along the muscles of his legs. Objectively, he has a violet-cyanotic erythema around his eyes and over the knee joints. His heart rate is 120/min., heart sounds are weakened. Blood test: leukocytes –  $12 \cdot 10^9/\text{L}$ , ESR – 40 mm/hour. Make the diagnosis:

**A.** Dermatomyositis

**B.** Systemic lupus erythematosus

**C.** Rheumatoid arthritis

**D.** Atopic dermatitis

**E.** Reactive polyarthritis

**31.** A district doctor has been tasked with preparation of a plan for a complex of treatment and prevention measures among the population in his district. What measures for secondary disease prevention

should be included in this plan?

**A.** Prevention of disease complications

**B.** Disease prevention

**C.** Elimination of the causes of diseases

**D.** Improving the living conditions of the population

**E.** Rehabilitation measures

**32.** A 20-year-old man was brought to a clinic on the 7th day of illness with complaints of icteric skin and sclerae, dark urine, one episode of vomiting, low appetite, and fever of  $38^{\circ}$ C throughout the last 2 days. Three weeks ago he went fishing with friends, during which they all shared the same tableware. Objectively, he is inert,  $t^{\circ}$  –  $36.8^{\circ}$ C, his skin and sclerae are icteric, the liver protrudes from under the edge of the costal arch by 3 cm and is tender on palpation; the spleen cannot be palpated. Patient's urine is dark, his feces are partially acholic. Make the diagnosis:

**A.** Viral hepatitis A

**B.** Leptospirosis

C. Infectious mononucleosis

**D.** Hemolytic anemia

**E.** Intestinal yersiniosis

**33.** A 7-year-old boy fell ill 2 weeks ago, when he developed a runny nose. An otolaryngologist was consulted about sanguinopurulent discharge from the child's nose and maceration of his wings of the nose and upper lip. Rhinoscopy detects whitish-gray foci on the nasal septum. The oropharyngeal mucosa is without changes. Make the diagnosis:

**A.** Nasal diphtheria

**B.** Adenovirus infection

C. Rhinovirus infection

**D.** Allergic rhinitis

**E.** Maxillary sinusitis

**34.** A 55-year-old man complains of general weakness, decreased fluid excretion, and an aching pain in his heart. For the last 15 years he has been suffering from chronic pyelonephritis and undergoing an inpatient treatment. Objectively, his skin is dry and has a yellowish tinge. His pulse is 80/min., rhythmic, blood pressure – 100/70 mm Hg. Cardiac auscultation detects muffled heart sounds and a friction rub in the pericardium. Laboratory tests: creatinine – 1.1 mmol/L, glomerular filtration – 5 mL/min. What treatment is indicated for this patient?

- A. Hemodialysis
- **B.** Xylit, Sorbitol
- **C.** Rheopolyglucin (Dextran)
- **D.** Antibiotics
- E. Diuretics
- **35.** For the past 6 years a 37-year-old woman has been experiencing frequent nosebleeds, severe metrorrhagias, and periodic bruising on her skin. 10 days ago, after a severe nosebleed, her weakness intensified, she developed dizziness and palpitations. Objectively, her skin is pale, there are multiple petechiae and isolated ecchymoses on the anterior surface of her torso, legs, and arms. In the blood: Hb -80 g/L, erythrocytes –  $4.0 \cdot 10^{12}$ /L, color index – 0.7; leukocytes –  $5.3 \cdot 10^9$ /L; band neutrophils - 2%, segmented neutrophils – 65%, eosinophils – 2%, lymphocytes – 24%, monocytes – 5%, platelets –  $10 \cdot 10^9$ /L, ESR – 15 mm/hour. Make the diagnosis:
- A. Idiopathic thrombocytopenic purpura
- B. Hemophilia
- C. Hemorrhagic vasculitis
- **D.** Iron deficiency anemia
- E. Aplastic anemia
- **36.** A 7-year-old boy has been receiving treatment for a month. At the time of hospitalization, he had marked edemas, proteinuria of 7.1 g/L, and daily urine protein of 4.2 g. Biochemical blood test shows persistent hypoproteinemia (43.2 g/L) and hypercholesterolemia (9.2 mmol/L). What leading glomerulonephritis syndrome is most likely in this patient?
- A. Nephrotic
- **B.** Nephritic
- **C.** Isolated urinary
- **D.** Hematuric
- E. Mixed
- **37.** A 58-year-old woman has undergone an urgent cholecystectomy and drainage of the abdominal cavity. In the postoperative period, she was prescribed heparin and developed hemorrhagic syndrome. What medicine should be used to eliminate the side effects of heparin in this case?
- **A.** 1% solution of protamine sulfate
- **B.** 10% solution of calcium chloride
- **C.** 1% solution of calcium chloride
- **D.** 1% solution of vicasol (menadione)
- E. 5% solution of aminocaproic acid
- **38.** For the last 2 days a 3-year-old girl has been presenting with fever of 38.0°C, runny nose, dry cough, inertness, and appetite loss. Percussion sound has a bandbox resonance. Auscultation detects puerile

breathing without wheezing. In the blood there are leukopenia, lymphocytosis, and accelerated ESR. Make the diagnosis:

- **A.** Acute tracheitis
- **B.** Acute obstructive bronchitis
- **C.** Recurrent bronchitis, exacerbation phase
- **D.** Acute bronchitis
- E. Bilateral microfocal pneumonia
- **39.** A 12-year-old girl took two aspirin tablets. 4 hours later her body temperature increased to 39–40°C. She complains of general indisposition, dizziness, and spontaneous development of red spots and blisters on her skin. Objectively, the skin lesions resemble burns of the second degree, in some places there are erosions or exfoliation of the epidermis. The Nikolsky sign is positive. Make the diagnosis:
- A. Acute epidermal necrolysis
- **B.** Pemphigus vulgaris
- **C.** Erythema multiforme exudativum
- **D.** Bullous dermatitis
- **E.** Duhring dermatitis herpetiformis
- **40.** A lumbar puncture was performed for a newborn with a suspected intracranial birth injury. Bloody cerebrospinal fluid was obtained. What type of hemorrhage is observed in this case?
- A. Subarachnoid hemorrhage
- **B.** Cephalohematoma
- C. Epidural hemorrhage
- **D.** Supratentorial hemorrhage
- **E.** Subtentorial hemorrhage
- **41.** A 54-year-old woman has been suffering from femoral osteomyelitis for over 20 years. In the last month she developed gradually progressing leg edemas. In the urine: proteinuria 6.6 g/L. In the blood: dysproteinemia in the form of hypoalbuminemia, increased  $\alpha_2$  and  $\gamma$ -globulin levels, ESR 50 mm/hour. Make the diagnosis:
- A. Secondary renal amyloidosis
- **B.** Acute glomerulonephritis
- **C.** Multiple myeloma
- **D.** Chronic glomerulonephritis
- **E.** Systemic lupus erythematosus
- **42.** A well is dug on a rural landplot. It is located at the distance of 20 meters from the house, 10 meters from the toilet, and 15 meters from the neighbor's house. What is the minimum permissible distance between the well and the source of possible water pollution, according to the sanitary norms?

- A. 30 meters
- **B.** 25 meters
- C. 20 meters
- **D.** 15 meters
- E. 10 meters

**43.** On the 4th day after a surgery for a cystoma in the right ovary, a woman suddenly developed a fever of 37.7°C and a chest pain on the right with expectoration of pink sputum. Examination of the lungs reveals a dull pulmonary sound and isolated wet crackles in the lower right segments. What complication has most likely developed in this patient?

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

**44.** Palpation of the thyroid gland of a 40-year-old woman detects a dense and moderately painful nodule in the left lobe. Ultrasound shows the nodule to have high density, while scintigraphy with  $^{131}I$  shows it to be a «cold» nodule. What study would be the most useful for clarification of the diagnosis in this case?

**A.** Fine needle aspiration biopsy

**B.** Thyroid-stimulating hormone levels in the blood

**C.** Reflexometry

- **D.** Urinary iodine excretion
- E. Thermography
- **45.** A 14-year-old child developed a sympatho-adrenal crisis. What medicine is indicated for crisis relief in this case?
- A. Propranolol
- **B.** Drotaverine
- **C.** Thiopental sodium
- **D.** Euphyllin (Aminophylline)
- E. Digoxin

**46.** A 16-year-old teenager complains of weakness, dizziness, and heaviness in the left subcostal region. Objectively, the skin and visible mucosa are icteric. The tower skull syndrome is observed. The liver is +2 cm. The lower edge of the spleen is at the level of the navel. In the blood: erythrocytes  $-2.7 \cdot 10^{12}$ /L, Hb -88 g/L, leukocytes  $-5.6 \cdot 10^9$ /L, ESR -15 mm/hour. What is the most likely change in the bilirubin levels in this patient?

**A.** Increase in unconjugated bilirubin levels

**B.** Increase in conjugated bilirubin levels

C. Increase in unconjugated and conjugated bilirubin levels

- **D.** Decrease in conjugated bilirubin levels
- **E.** Decrease in unconjugated bilirubin levels
- **47.** A 28-year-old woman came to a doctor with complaints of facial edema, moderate leg edemas, and urine that periodically assumes the color of «meat slops». As a teenager, she had frequent tonsillitis. Objectively, her skin is pale,  $t^o 36.8^{\circ}$ C, pulse 68/min., rhythmic, blood pressure 170/110 mm Hg. What changes in the patient's urine are the most likely in this case?
- **A.** Proteinuria, hematuria, cylindruria
- **B.** Increased specific gravity, hematuria, bacteriuria
- **C.** Decreased specific gravity, proteinuria, a small amount of urine sediment
- **D.** Erythrocyturia and uricosuria
- **E.** Decreased specific gravity, proteinuria, myoglobinuria
- **48.** A 58-year-old woman developed profuse bleeding from a ruptured varicose node on her left calf. What first aid would you provide in this case?
- **A.** Elevated position of the limb, a sterile compression bandage
- **B.** Tourniquet distal to the source of bleeding
- **C.** Tourniquet proximal to the source of bleeding
- **D.** Troyanov-Trendelenburg operation
- **E.** Z-shaped suture, applied to the ruptured varicose node
- 49. A 39-year-old man undergoes treatment in the surgical department for acute cholecystitis. He was transferred to the therapy department due to an increase in blood pressure to 180/120 mm Hg, protein excretion with urine, and persistent fever. This persistent subfebrile body temperature was resistant to antibiotic therapy. 10 days after the treatment, the patient had an asphyxia attack with difficult expiration. Later, he developed arthralgias and erythematous skin lesions. Eosinophil levels in the blood are 18%. What disease can be suspected in this patient?
- **A.** Polyarteritis nodosa
- **B.** Nonspecific aortoarteritis
- **C.** Acute glomerulonephritis
- **D.** Systemic lupus erythematosus
- E. Hemorrhagic vasculitis

(Henoch-Schoenlein purpura)

**50.** A 27-year-old electrician received an electrical injury, when he touched an

exposed electrical wire with his hand, after which he developed circulatory and respiratory arrest. Resuscitation measures restored his cardiac activity after 5 minutes. What complication is possible in a few hours or even days after the electrical injury?

- **A.** Circulatory arrest
- **B.** Respiratory arrest
- C. Acute liver failure
- D. Acute renal failure
- E. Pulmonary edema
- **51.** It was determined that within a group of 100 births, given women with risk factors, there were 30 premature births, while among the 100 births, given by women without risk factors, there were 5 premature births. What method of statistical data processing is optimal, if a physician needs to assess the validity of such differences in the compared groups?
- A. Student's t-test
- **B.** Calculation of average values
- **C.** Calculation of relative values
- D. Standardization
- **E.** Correlation analysis
- **52.** A woman was hospitalized with complaints of periodical pain in her lower abdomen that intensifies during menstruation, as well as weakness, indisposition, nervousness, and smearing discharge of dark blood from the vagina before and after menstruation. Bimanual research shows enlarged uterine body, the uterine appendages cannot be detected, the surface of the posteror fornix is tuberous. Laparoscopy detects cyanotic inclusions on the ovaries, in the recto-uterine pouch of the peritoneal cavity, and on the paraproctium. Make the diagnosis:
- A. Disseminated endometriosis
- **B.** Polycystic ovaries
- **C.** Chronic salpingitis
- **D.** Genital tuberculosis
- **E.** Ovarian cystoma
- **53.** An 18-year-old young man complains of pain in his knee and ankle joints and a fever of 39.5°C. A week and a half before, he had a case of respiratory disease. Objectively, his body temperature is 38.5°C, his knee and ankle joints are swollen. His pulse is 106/min., rhythmic. His blood pressure is 90/60 mm Hg. The heart borders are normal, the heart sounds are weakened, and there is a soft systolic murmur at the apex. What parameter is most closely associated with the possible etiology of this process?

**A.** Antistreptolysin 0

**B.**  $\alpha_1$ -antitrypsin

**C.** Creatine kinase

**D.** Rheumatoid factor

- E. Seromucoid
- **54.** A 26-year-old woman was brought to the admission room with complaints of a sudden pain in her lower abdomen, weakness, and loss of consciousness. Her last menstruation was 6 weeks ago. Objectively, her pulse is 120/min., blood pressure 80/50 mm Hg. There are pain and signs of peritoneal irritation low on the right side. In the blood: Hb 106 g/L. Make the diagnosis:
- **A.** Interrupted tubal pregnancy
- **B.** Acute appendicitis
- C. Acute right-sided adnexitis
- **D.** Ovarian torsion
- **E.** Ovarian apoplexy
- **55.** A 45-year-old man with a normal body weight was diagnosed with diabetes mellitus for the first time. Attempts to correct his blood glucose levels by means of a diet were unsuccessful. His 24-hour glycemia varies between 10 and 15 mmol/L. Which medicine would be optimal in this case?
- **A.** Sulfanilamide hypoglycemic drugs
- **B.** Insulin
- **C.** Biguanides
- **D.** Biguanides combined with sulfanilamide hypoglycemic drugs
- **E.** Insulin combined with sulfanilamide hypoglycemic drugs
- **56.** A 28-year-old man complains of chills in his feet and fingers and pain in his legs during walking. The disease onset was one year ago. Objectively, the skin of his legs is pale and cold; low turgor and hypotrichosis are observed. Pulsation over the femoral and popliteal arteries is weakened, on the pedal arteries it is palpable after a nitroglycerin test. Rheographic index is <1. Make the diagnosis:
- **A.** Obliterating endarteritis
- **B.** Chronic thrombophlebitis
- C. Arteriosclerosis obliterans
- **D.** Raynaud syndrome
- **E.** Wegener vasculitis
- **57.** Medical examination of the population revealed and registered chronic diseases, various pathological conditions, and abmormalities. What type of morbidity was studied in this case?

- **A.** Pathological morbidity
- **B.** Prevalence of the disease
- C. General morbidity
- **D.** Primary morbidity
- E. Morbidity with temporary disability
- **58.** A 2-month-old girl is being transferred to formula feeding. She was born with the body weight of 3500 g. Currently, her body weight is 3900 g. What is the normal daily volume of feeding for this baby?
- **A.** 650 mL
- **B.** 600 mL
- **C.** 690 mL
- **D.** 730 mL
- E. 750 mL
- 59. In April, during medical examination of the population, 27% of the examined people complained of their decreased working ability and high fatigability. Examination revealed swollen loose gums that markedly bleed when pressed. On the skin, follicular hyperkeratosis is observed against the background of normal skin moisture. What pathology is the most likely cause of this condition?
- **A.** Hypovitaminosis C
- **B.** Periodontosis
- C. Hypovitaminosis A
- **D.** Hypovitaminosis  $B_1$
- **E.** Polyhypovitaminosis
- **60.** A full-term delivery has resulted in the birth of a live full-term girl without asphyxia. Objectively, the baby is inert, her skin is pale with an icteric tinge, she has no edemas. The abdomen is soft, the liver and spleen are enlarged. Blood tests show that the mother's blood type is A(II) Rh(-), while the child's blood type is A(II) Rh(+). Make the diagnosis:
- **A.** Hemolytic disease of the newborn
- **B.** Disturbed cerebral circulation
- **C.** Maldevelopment of parenchymal organs
- **D.** Physiological jaundice
- E. Intracranial birth injury
- **61.** A postparturient woman came to a doctor on the 14th day after giving birth. She complains of a sudden pain, hyperemia, and induration in her left breast, fever of 39°C, headache, and indisposition. Objectively, there is a fissure in the nipple, the left breast is enlarged, during its palpation the pain intensifies. What pathology can be suspected in this case?

A. Lactational mastitis

- **B.** Suppurated cyst of the left breast
- **C.** Fibroadenoma of the left breast
- **D.** Breast cancer
- **E.** Phlegmon of the breast
- **62.** A medical committee consisting of a therapist, dermatologist, traumatologist, ophthalmologist, neurologist, immunologist, surgeon, otolaryngologist, and hematologist was called in for the regular medical examination of the workers at a chemical factory that produces chromium- and nickel-containing mineral compounds. Name the minimum composition of such a committee, taking into account the characteristics of the products manufactured by the factory:
- **A.** Otolaryngologist, therapist, dermatologist
- **B.** Therapist, dermatologist, traumatologist
- C. Therapist, ophthalmologist, neurologist
- **D.** Therapist, immunologist, surgeon
- **E.** Therapist, hematologist, ophthalmologist
- **63.** A 37-year-old woman complains of shortness of breath and constricting retrosternal pain. One week ago she had a flu. Objectively, she has acrocyanosis, her heart rate is 98/min., blood pressure 90/75 mm Hg, respiratory rate 26/min. The cardiac borders are expanded to the left and right by 3 cm. The heart sounds are muffled, above the cardiac apex there are a protodiastolic gallop rhythm and a systolic murmur. Hb 100 g/L, ESR 25 mm/hour. Make the diagnosis:
- **A.** Infectious-allergic myocarditis
- **B.** Dilated cardiomyopathy
- C. Exudative pericarditis
- **D.** Myocardial dystrophy
- E. Ischemic heart disease, angina pectoris
- **64.** A 36-year-old woman complains of epigastric pain that occurs after eating, nausea, belching, and loose stools. The disease gradually progresses over the course of the last 2 years. Objectively, her skin is pale and dry, her tongue is coated, moist, and has teeth imprints on its edges. Abdominal palpation detects diffuse epigastric pain. What study would be the most informative in this case?
- **A.** Fibrogastroscopy with biopsy of the gastric mucosa
- **B.** Comprehensive clinical blood test
- C. X-ray of the stomach and intestine
- **D.** Fractional study of gastric secretion
- **E.** Computed tomography of the abdominal cavity

- 65. A 63-year-old woman underwent a surgery for a large multinodular euthyroid goiter. Subtotal resection of the both lobes of the thyroid gland had to be performed, which was done with technical difficulties. On the 4th day after the surgery, the woman developed abdominal pain and muscle spasms in her face and arms. The Chvostek and Trousseau signs are positive. What is the most likely cause of the patient's condition?
- **A.** Hypoparathyroidism
- **B.** Postoperative hypothyroidism
- **C.** Thyrotoxic crisis
- **D.** Damage to the recurrent nerve
- E. Tracheomalacia
- **66.** A 31-year-old woman complains of pain and swelling in her radiocarpal and metacarpophalangeal joints and morning stiffness for up to 1.5 hours. These signs are observed for the last 3 years. Two weeks ago she developed pain, swelling, and redness in her knee joints and fever of 37.5°C. Examination of her internal organs shows no pathological changes. She was diagnosed with rheumatoid arthritis. What changes will most likely be visible on the X-ray scan of her joints?
- **A.** Narrowing of the joint space, usuras (bone lesions)
- **B.** Narrowing of the joint space, subchondral osteosclerosis
- **C.** Cysts in the subchondral bone
- **D.** Multiple marginal osteophytes
- **E.** Osteolysis of the epiphyses
- 67. For the last 2 years, a 51-year-old woman has been experiencing a dull pain with periodical exacerbations in her right subcostal region. The pain is associated with eating fatty foods. The woman complains of bitterness in her mouth in the morning, constipations, and flatulence. Objectively, she is overeating,  $t^o 36.9^{\circ}$ C, the tongue is coated near its root, the abdomen is moderately distended and painful at the point of gallbladder projection. What study would be the most useful for making a diagnosis?
- **A.** Abdominal ultrasound
- **B.** Duodenal sounding
- **C.** Cholecystography
- D. Duodenoscopy
- E. Liver scan
- **68.** A person was hospitalized with a closed craniocerebral trauma 8 hours after a car accident. The patient is unconscious. Objectively, there are anisocoria, a wound in the parietal area 3.0x1.0 cm in size, and neck muscles rigidity. The pulse is 58/min.,

hard. Convulsive syndrome is observed. What is the most important indication for immediate surgery in this case?

- **A.** Intracranial hemorrhage
- **B.** Anisocoria
- C. Unconsciousness
- **D.** Wounds
- **E.** Intensifying seizures
- **69.** In the demographic structure of a region, the persons aged from 0 to 14 make up 31% of the population, while the 50+ age group makes up 20% of the population. What population structure characterizes this demographic situation most accurately?
- **A.** Expansive population
- **B.** Constrictive population
- C. Stationary population
- **D.** Migration of the population
- E. Emigration of the population
- **70.** A 13-year-old girl came to a school doctor. Two days ago she first developed moderate bloody discharge from her genital tracts. Her secondary sexual characteristics are developed. What is the most likely cause of the bloody discharge in this case?
- A. Menarche
- **B.** Juvenile bleeding
- C. Hemophilia
- **D.** Endometrial cancer
- **E.** Werlhof's disease
- **71.** A pregnant woman was registered with a maternity consultancy at the term of 11 weeks and was monitored throughout the whole normal course of her pregnancy. What document must be given by the doctor to this woman for hospitalization to a maternity clinic?
- **A.** Exchange medical record
- **B.** Hospitalization referral
- **C.** Personal medical record of the pregnant woman
- **D.** Temporary disability certificate
- **E.** Medical sertificate issued by a sanitary and
- epidemiological station
- **72.** A victim of a car accident has received multiple fractures of the limbs and pelvic bones. He has a history of hemophilia A. Objectively, hematomas form at the sites of injury. The patient's condition deteriorates. His blood pressure is 90/50 mm Hg. What is the optimal combination of infusion agents that should be given to the patient for treatment after polyglucin (dextran) and saline solutions are administered?

- A. Cryoprecipitate, packed erythrocytes
- **B.** Fresh frozen plasma, albumin
- C. Packed erythrocytes, fresh frozen plasma
- **D.** Cryoprecipitate, glucose
- **E.** Packed erythrocytes
- 73. When playing football, a 20-year-old man squatted sharply on his right leg with a simultaneous turn to the left. This movement resulted in a sharp pain in his right knee, after which he was brought to a first-aid station. Objectively, the range of movements in the right knee joint is 100–150°, there is no lateral mobility in the knee. Make the diagnosis:
- **A.** Damage to the internal meniscus
- **B.** Damage to the anterior cruciate ligament
- C. Subluxation of the patella, possibly habitual
- **D.** Damage to the medial collateral ligament
- **E.** Tense hemarthrosis of the knee joint
- **74.** Blood pressure and age were studied in 200 patients with essential hypertension. What statistical value should be used to measure the strength of the relationship between these characteristics?
- A. Correlation coefficient
- **B.** Student's t-test
- **C.** Variation coefficient
- **D.** Representation error
- **E.** Sigma deviation
- 75. A woman with rheumatism presents with diastolic tremor of the chest wall («cat's purr»), heart sound I that is amplified at the apex, diastolic murmur with presystolic amplification, a mitral opening sound, and an accent of the II heart sound over the pulmonary artery. What heart defect is observed in this woman?
- **A.** Stenosis of the left atrioventricular orifice
- **B.** Aortic valve insufficiency
- **C.** Pulmonary artery stenosis
- **D.** Mitral valve insufficiency
- E. Patent ductus arteriosus
- **76.** A 3-year-old child has developed a cough and runny nose. Two other family members have the same signs. On the third day after the onset of the disease, the cough intensified and became dry and persistent. The temperature increased to 37.8°C. Objectively, the act of breathing involves the auxiliary muscles. Percussion produces a banbox resonance bilaterally in the lungs. Breathing is harsh, expiration is prolonged, there are moderate and large bubbling wheezes. The wheezes are diffuse

and mostly wet, though in some places they are dry. Make the diagnosis:

- **A.** Acute obstructive bronchitis
- **B.** Acute bronchiolitis
- C. Stenosing laryngotracheitis
- **D.** Bronchial asthma
- **E.** Bilateral bronchopneumonia
- 77. A 13-year-old boy complains of a dry cough and shortness of breath. The onset of the disease was one year ago. He has brief asphyxia attacks that occur 1–2 times per month. Objectively, the child is anxious and has expiratory dyspnea, his skin is pale, his nasolabial triangle is cyanotic. His respiratory rate is 48/min. Percussion produces a banbox resonance over the lungs; auscultation detects weakened breathing with bilateral dry wheezing. Forced expiratory volume is 80% of the normal. What medicine should be prescribed to this boy?
- A. Salbutamol
- **B.** Prednisolone
- **C.** Euphyllin (Aminophylline)
- **D.** Suprastin (Chloropyramine)
- E. Indomethacin
- **78.** A 31-year-old woman has been suffering from systemic scleroderma for 14 years. She underwent multiple inpatient treatment courses. She complains of intermittent dull pain in the area of her heart, palpitations, shortness of breath, headache, swollen eyelids, weight loss, and painful and deformed joints in her limbs. The prognosis of her condition will be worse if the following organ is affected:
- **A.** Kidneys
- **B.** Heart
- C. Lungs
- **D.** Gastrointestinal tract
- E. Skin and joints
- **79.** A 2-month-old baby was born with body weight of 5100 g. The baby has jaundice, hoarse cry, umbilical hernia, and a delay in physical development. The liver is +2 cm, the spleen is not enlarged. The umbilical cord separation was delayed in the baby. In the blood: Hb 120 g/L, erythrocytes  $4.5 \cdot 10^{12}$ /L, ESR 3 mm/hour. Total serum bilirubin 28 mcmol/L, indirect bilirubin 20 mcmol/L, direct bilirubin 8 mcmol/L. What disease can be suspected first?
- **A.** Congenital hypothyroidism
- **B.** Congenital hepatitis
- **C.** Hemolytic anemia
- **D.** Conjugated jaundice
- **E.** Cytomegalovirus infection

- 80. A 40-year-old woman, gravida 6, para 3, at the 40 weeks of her pathological pregnancy (threatened miscarriage, type I gestosis of the second half of her pregnancy), gave birth to a boy with asphyxia. The baby's condition is severe, the weight is 2 kg, there are signs of immaturity and hydrocephalus. The baby's skin is pale, icteric, and has acrocyanosis. The heart sounds are muffled, there is a harsh systolic murmur at all points of auscultation. The abdomen is enlarged, the liver is +3 cm. The urine is saturated, the stool is light-colored. An ophthalmologist has detected chorioretinitis in the baby. Make the diagnosis:
- **A.** Congenital toxoplasmosis
- **B.** Hemolytic disease of the newborn
- C. Sepsis
- **D.** Congenital heart defect
- E. Congenital hepatitis
- **81.** A 13-year-old girl complains of a febrile body temperature that is observed within the last month, pain in the joints, and periodical skin rash. Examination detects LEcells and a persitent increase in ESR in the child's blood. Make the diagnosis:
- **A.** Systemic lupus erythematosus
- **B.** Juvenile rheumatoid arthritis
- **C.** Systemic scleroderma
- **D.** Acute lymphoblastic leukemia
- E. Rheumatism
- **82.** For a month a 60-year-old man had short-term episodes of decreased strength in his limbs on the left. Later, after waking up in the morning, he developed a persistent weakness in his extremities. Objectively, his blood pressure is 140/90 mm Hg. He is conscious and has central paresis of VII and XII pairs of cranial nerves on the left. On the same side, he presents with central hemiparesis and hemihyperesthesia. What group of drugs should be chosen for the differentiated treatment of this patient?
- A. Anticoagulants
- **B.** Hemostatics
- **C.** Hypotensive agents
- **D.** Diuretics
- **E.** Corticosteroids
- **83.** A 70-year-old man complains of weakness, dizziness, brief episodes of nuconsciousneus, and pain in the cardiac region. Objectively, his heart rate is 40/min., heart sounds are rhythmic, the first heart sound is muffled and significantly intensifies from time to time. Blood pressure is 180/90 mm Hg. What is the most likely cause of these hemodynamic disorders?

**A.** Third-degree AV block

**B.** First-degree AV block

C. Bradysystolic form of ciliary arrhythmia

**D.** Sinus bradycardia

**E.** Complete block of the His left bundle branch

- **84.** A 65-year-old man complains of asphyxia, cough with pink foaming sputum, sensation of lack of air, and fear of death. Objectively, he has orthopnea, pale skin, and acrocyanosis and is covered in cold sticky sweat. His respiration is harsh, in the lower posterior segments there are wet finely vesicular and moderately vesicular crackles on the both sides. His respiratory rate is 40/min. The heart sounds are markedly muffled. At the cardiac apex, the gallop rhythm is observed. Make the diagnosis:
- **A.** Pulmonary edema
- **B.** Status asthmaticus
- C. Croupous pneumonia
- **D.** Infarction pneumonia
- **E.** Pulmonary embolism
- **85.** A 32-year-old man was treated in an inpatient department for an abscess of the right lung. After coughing, he suddenly developed labored breathing, cyanosis, and chest pain on the right. What complication is most likely in this case?
- **A.** Pyopneumothorax
- **B.** Infarction pneumonia
- **C.** Myocardial infarction
- **D.** Esophageal perforation
- **E.** Exudative pleurisy
- **86.** Fluorography of a 45-year-old man detects a few foci of low intensity with blurred margins on the apex of his right lung. This sign is observed for the first time. The patient's condition causes him no discomfort. He has a many-year history of smoking. Objectively, percussion produces a pulmonary sound above the lungs, the respiration is vesicular, auscultation detects no wheezing. Blood test findings are normal. Make the diagnosis:
- **A.** Focal pulmonary tuberculosis
- **B.** Peripheral lung cancer
- **C.** Eosinophilic pneumonia
- **D.** Bronchopneumonia
- **E.** Disseminated pulmonary tuberculosis
- **87.** An 18-year-old young man was brought into to the hematology department with complaints of headache, general weakness, loss of appetite, fever of 39°C, and a swelling on his neck. Objectively, t° 38°C, the skin and mucosa are markedly pale, the

cervical lymph nodes on both sides are up to 1 cm in size and painless. The liver is +1 cm and painless, the spleen is +0.5 cm. In the blood: Hb -98 g/L, erythrocytes  $-2.9\cdot 10^{12}$ /L, leukocytes  $-32\cdot 10^{9}$ /L, blast neutrophils -0%, segmented neutrophils -28%, monocytes -2%, lymphocytes -39%, blasts -31%, reticulocytes -31%, platelets  $-120\cdot 10^{9}$ /L , ESR -36 mm/hour. Specify the form of the patient's leukemia:

- A. Acute lymphoblastic leukemia
- **B.** Acute myeloblastic leukemia
- C. Chronic lymphocytic leukemia
- **D.** Chronic myelogenous leukemia
- E. Undifferentiated leukemia
- **88.** The mother of a 5-year-old girl complains of nocturnal incontinence in her child, night terrors, disturbed sleep, and low weight gain. Objectively, the girl is undereating, intellectually well developed, can read, explains life situations as an adult. Her skin is pale, the liver is enlarged. The mother suffers from cholelithiasis. What type of diathesis is most likely in this child?
- **A.** Neuroarthritic diathesis
- **B.** Uric acid diathesis
- C. Exudative-catarrhal diathesis
- **D.** Allergic diathesis
- **E.** Lymphatic-hypoplastic diathesis
- **89.** After manual repositioning of bone fragments and application of a plaster splint, a patient with forearm fractures developed edema, pain, and disturbed sensitivity in his hand and fingers. What tactics should the doctor choose?
- **A.** Cut the bandage that secures the splint
- **B.** Prescribe analgesics and diuretics
- **C.** Remove the splint
- **D.** Expectant management, because this is a natural phenomenon the edema will decrease on its own in 24 hours
- **E.** Repeat the repositioning
- 90. A 35-year-old man for the last 3 years is on hemodialysis due to chronic glomerulonephritis. He developed cardiac irregularities, hypotension, progressing weakness, and dyspnea. ECG shows bradycardia, first-degree atrioventricular block, and tall and sharp T waves. The day before, he had a gross violation of drinking and dietary regimes. What biochemical changes are the most likely cause of the described clinical presentation?

**A.** Hyperkalemia

- **B.** Hyperhydration
- **C.** Hypokalemia
- **D.** Hypernatremia
- **E.** Hypocalcemia
- 91. A 60-year-old woman complains of pain in the interphalangeal joints of her hands that exacerbates during work. Objectively, the distal and proximal joints of her fingers II-IV are defigured, painful, have Heberden and Bouchard nodes, and their mobility is limited. X-ray of the joints shows narrowed joint spaces, marginal osteophytes, and subchondral sclerosis. Make the diagnosis:
- **A.** Osteoarthrosis deformans, nodular form
- **B.** Reiter disease (reactive arthritis)
- **C.** Bekhterev disease (ankylosing spondylitis)
- **D.** Rheumátic arthritis
- **E.** Psoriatic arthritis
- **92.** A 42-year-old man, who has been suffering from a duodenal ulcer for 20 years, has developed a constant feeling of heaviness in his stomach after eating. His eructation carries the smell of decay and vomiting occurs with the food eaten the day before. He has lost weight. Objectively, his condition is relatively satisfactory, tissue turgor is reduced. The abdomen is soft on palpation, there are no signs of peritoneal irritation, and a «sloshing sound» can be heard in the epigastrium. Defecation occurs once every 3 days. What complication most likely corresponds with the patient's condition and the described clinical presentation?
- **A.** Ulcerative stenosis of the pylorus
- **B.** Covered perforation of an ulcer
- C. Stomach cancer
- **D.** Ulcer penetration
- **E.** Chronic pancreatitis
- 93. A 32-year-old man lives in an area that is endemic for echinococcosis. For the last 6 months he has been suffering from pain in his right subcostal region and fever. Echinococcal liver damage is suspected. What study will be the most informative in this case?
- **A.** Ultrasound examination
- **B.** Survey X-ray-of the abdominal cavity
- **C.** Biochemical testing
- **D.** Angiography
- E. Liver scan
- **94.** A 28-year-old man was hospitalized on the 9th day of illness with complaints of fever of 39°C, headache, general weakness, constipation, and disturbed sleep. Objectively, on the skin of his abdomen there are

isolated roseolas, his pulse is 78/min., the liver is enlarged by 2 cm. Make the diagnosis:

- A. Typhoid fever
- **B.** Epidemic typhus
- C. Sepsis
- **D.** Brucellosis
- **E.** Leptospirosis
- 95. A 50-year-old man was hospitalized with complaints of blood in the urine. There are no pain or urination disorders. Hematuria is observed for the last 3 days. Objectively, the kidneys are not palpable, the suprapubic area is normal, the external genitalia have no pathology. Rectal examination detects no prostatic enlargement. Cystoscopy detects no changes. What disease can be suspected first?
- **A.** Kidney cancer
- **B.** Tuberculosis of the urinary bladder
- C. Varicocele
- **D.** Renal dystopia
- **E.** Necrotizing papillitis
- **96.** A 48-year-old man, whose blood test has resulted in positive Wasseman and sedimentation reactions thrice, came to a doctor. His treponema pallidum immobilization test was positive as well. Examination shows no clinical manifestations of syphilis in the patient's skin, internal organs or nervous system. Make the diagnosis:
- **A.** Early latent syphilis
- **B.** Seropositive primary syphilis
- **C.** Recurrent secondary syphilis
- **D.** Tertiary syphilis
- **E.** Latent recurrent syphilis
- **97.** A 35-year-old woman developed red swollen areas on the dorsal surface of her hands after a severe nervous strain, which was followed by formation of small inflammed nodules, vesicles, and later erosions with significant discharge of a serous fluid. This process is accompanied by severe itching. Make the diagnosis:
- **A.** True eczema
- **B.** Allergic dermatitis
- C. Microbial eczema
- **D.** Simple contact dermatitis
- E. Toxicoderma
- **98.** A man complains of pain and skin redness in his right calf. Objectively, he has a fever of 38.5°C and enlarged and painful inguinal lymph nodes on the right. The skin of the affected limb is edematous, hyperemic, and has rash elements in the form of vesicles filled with a dark liquid. Its palpation is painful. There is a clear margin between the red area and healthy

skin. Make the diagnosis:

- **A.** Erysipelas, hemorrhagic form
- **B.** Anthrax, cutaneous form
- **C.** Herpes infection
- **D.** Chickenpox
- **E.** Phlegmon of the calf
- 99. A woman, who works at a pig farm, against the background of complete health developed sudden chills, fever of 39.9°C, intense headache, and nausea. The next day, she noted a pain in her leg muscles and nosebleeds. Objectively, on the 3rd day after the onset of the disease the woman's condition is severe, her face is hyperemic, she has scleritis and subicteric sclerae. The liver is +3 cm. 24-hour urine output is 700 mL. Make the diagnosis:
- **A.** Leptospirosis
- **B.** Viral hepatitis
- **C.** Yersiniosis
- **D.** Influenza
- E. Hemorrhagic fever with renal syndrome
- 100. After lifting a heavy object, a 41-yearold man felt a sharp pain in his chest on the right and developed progressing shortness of breath. The patient's condition is severe. His lips and mucosa are cyanotic, respiratory rate – 28/min., pulse – 122/min. Over the right half of the chest, percussion shows tympanitis, while auscultation detects sharply weakened breathing. The II heart sound is accentuated over the pulmonary artery. Blood pressure is 80/40 mm Hg. What primary emergency measure must be taken at the prehospital stage in this case?
- **A.** Aspiration of air from the pleural cavity
- **B.** Administration of adrenaline
- **C.** Administration of euphyllin (aminophylline)
- **D.** Call for a cardiology team
- **E.** Oxygen inhalation
- 101. A 38-year-old woman has episodes of paroxysmal hypertension that reaches 240/120 mm Hg and is accompanied by nausea, vomiting, tachycardia, and excessive sweating. Hyperglycemia is observed in the blood during such episodes. After the episode, profuse urination occurs. Renal sonography shows a new formation adjacent to the upper pole of the right kidney that might belong to the adrenal gland. What laboratory test will help clarify the diagnosis?

- **A.** Urinary excretion of catecholamines and vanillylmandelic acid
- **B.** Blood levels of insulin and C-peptide
- **C.** Glomerular filtration rate, measured using the endogenous creatinine clearance rate
- **D.** Blood levels of thyroxine and thyroid-stimulating hormone
- **E.** Blood renin levels
- **102.** A 28-year-old man is undergoing a treatment for pulmonary tuberculosis. He complains of shortness of breath and a sharp chest pain on the right that appeared suddenly. Percussion detects a bandbox resonance over the right lung, auscultation detects no breathing there. X-ray shows that the right lung is collapsed to its root by 1/2 of its volume, the heart and mediastinal organs are shifted to the left. What complication has developed in this patient?
- A. Spontaneous pneumothorax
- **B.** Dry pleurisy
- **C.** Pleural empyema
- **D.** Pulmonary infarction
- **E.** Exudative pleurisy
- 103. A 48-year-old farmer was hospitalized with complaints of headache, nausea, wet cough, problematic breathing, impaired vision, excessive sweating, and salivation. He worked in a team that treated gardens with organophosphorus pesticides. In the blood: erythrocytes  $4.1 \cdot 10^{12}$ /L, Hb 136 g/L, color index 0.9, leukocytes  $13.0 \cdot 10^9$ /L, ESR 17 mm/hour. He was diagnosed with acute intoxication caused by organophosphorus pesticides. What is the most important diagnostic criterion of this pathology?
- **A.** Decreased cholinesterase levels
- **B.** Reticulocytosis
- **C.** Leukocytosis
- **D.** Anemia
- **E.** Thrombocytopenia
- **104.** A 74-year-old woman complains of painful and distended abdomen and nausea. She suffers from postinfarction and atherosclerotic cardiosclerosis and ischemic heart disease. Objectively, she is in a severe condition, her abdomen is distended, the abdominal wall is barely involved in the act of breathing. Laparoscopy detects a small amount of turbid exudate in the abdominal cavity, one of the small intestine loops is dark blue. Make the diagnosis:

**A.** Mesenteric thrombosis

**B.** Volvulus

C. Acute intestinal obstruction

**D.** Ischemic abdominal syndrome

**E.** Erysipelas

- **105.** At the oligoanuric stage of acute renal failure, a 10-year-old child developed a tingling sensation in the tongue and oral mucosa, numbness of the limbs, decreased reflexes, respiratory disorders, and arrhythmia. What is the cause of these signs?
- **A.** Hyperkalemia
- **B.** Hyponatremia
- **C.** Hyperazotemia
- **D.** Acidosis
- E. Alkalosis
- **106.** A 63-year-old woman complains of weakness without an obvious cause, fatigability, loss of appetite, and a feeling of disgust towards meat products. Two weeks ago she had a gastric bleeding. Objectively,  $t^o 37.5^{\circ}$ C, respiratory rate 20/min., pulse 96/min., blood pressure 110/75 mm Hg. Epigastric palpation detects pain and muscle tension. In the blood: Hb 82 g/L, ESR 35 mm/hour. What study would be the most useful for making a diagnosis?
- **A.** Cytology
- **B.** X-ray
- **C.** Endoscopy
- **D.** Gastric contents analysis
- **E.** Stool test
- **107.** After an overexposure to cold, a 32-year-old man developed general weakness, excessive sweating, fever, and cough. Objectively, his overall condition is moderately severe, his skin is moist, his lips are cyanotic. His chest is symmetrically involved in the act of breathing. Under the shoulder blade on the right, the percussion sound is slightly dull; vesicular respiration there is weakend, with sonorous moist finely-vesicular crackles. Above the rest of the lung surface there is harsh breathing with scattered dry crackles. The heart sounds are intensified, the second heart sound is accentuated over the pulmonary artery. In the blood: leukocytes –  $13.2 \cdot 10^9$ /L, ESR – 21 mm/hour. Make the diagnosis:
- **A.** Right-sided focal pneumonia
- **B.** Exacerbation of chronic non-obstructive bronchitis
- **C.** Acute bronchitis
- **D.** Lung cancer
- E. Tuberculosis
- **108.** A 42-year-old woman suffers from micronodular cryptogenic cirrhosis of the

liver. During the last week, her condition deteriorated: she developed seizures and clouded consciousness, her jaundice intensified. What test can help find the cause of deterioration in this patient's condition?

- A. Serum ammonia levels
- **B.** Cholesterol ethers
- **C.**  $\alpha$ -fetoprotein levels
- **D.** ALT and AST levels
- **E.** Alkaline phosphatase levels
- 109. The mother of a newborn child suffers from chronic pyelonephritis and had a case of acute respiratory viral infection before giving birth. The delivery is full-term, the waters did not break for a long time. On the 2nd day of life the baby developed an erythematous rash. Later, blisters of about 1 cm in size appeared. They are filled with seropurulent contents and their lancing results in formation of erosions. The Nikolsky's sign is positive. The baby is inert and has a subfebrile body temperature. Make the diagnosis:
- A. Neonatal pemphigus
- **B.** Vesiculopustulosis
- **C.** Pseudofurunculosis
- D. Sepsis
- **E.** Ritter's disease of the newborn
- **110.** A child has suddenly developed a respiratory arrest, cyanotic skin, and pinpoint pupils; there is no pulse on the great blood vessels. What measures must be taken first in this case?
- **A.** Artificial pulmonary ventilation, closed-chest cardiac massage
- **B.** Intravenous injection of euphyllin (aminophylline)
- C. Gastric lavage
- **D.** Oxygen therapy
- E. Intracardiac injection of adrenaline
- 111. A child was born with the weight of 3250 g and the body length of 52 cm. At the age of 1.5 months, the child's actual body weight is sufficient (4350 g) and the psychophysical development corresponds with the child's age. The child is on breastfeeding. Periodical regurgitation is observed. What causes regurgitation in this child?
- **A.** Aerophagia
- **B.** Pylorostenosis
- **C.** Pylorospasm
- **D.** Acute gastroenteritis
- **E.** Esophageal atresia
- **112.** A 30-year-old woman after an emotional upset developed tonic seizure that

later gave place to clonic seizures. This condition was accompanied by loss of consciousness, foaming at the mouth, and involuntary urination. No focal signs were detected. Blood pressure is 120/60 mm Hg. Make the diagnosis:

- **A.** Epilepsy
- **B.** Neurasthenia
- C. Eclampsia
- **D.** Syncope
- E. Stroke
- 113. A child with chronic carditis, heart failure class IIA, who is being treated with digoxin, developed increasing bradycardia, nausea, vomiting, dizziness, and disturbed sleep. ECG shows an extrasystole, PQ is 0.18. What is the most likely cause of this condition?
- **A.** Overdose or intolerance of cardiac glycosides
- **B.** Pulmonary edema
- C. First-degree atrioventricular block
- **D.** Acute intestinal infection
- **E.** Hypokalemia
- **114.** Examination of the corpse of a man, who died by hanging, reveals that the spots of livor mortis disappear when pressed and reappear 50 seconds later. The rigor mortis is moderate and observed only in the masticatory muscles and muscles of neck and fingers. The body temperature is 31.0°C. What is the time of death in this case?
- **A.** 6–7 hours
- **B.** 1–2 hours
- **C.** 16–24 hours
- **D.** 8–10 hours
- **E.** 10–18 hours
- 115. An ambulance team has brought a man diagnosed with acute respiratory viral infection into the inpatient department. The onset of the disease was acute, with fever of 39.9°C. The patient complains of a headache in his fronto-temporal regions, pain in the eyeballs, aches all over his body, stuffed nose, sore throat, and dry cough. At home, he had two episodes of nosebleeds. What type of acute respiratory viral infection does this patient have?
- **A.** Influenza
- **B.** Adenovirus infection
- C. Parainfluenza
- **D.** Respiratory syncytial infection
- E. Enterovirus infection
- **116.** A 25-year-old multipara was hospitalized at the first period of labor with moderately strong contractions. It is her third pregnancy. She has a history of one

cesarean section due to clinically narrow pelvis and one artificial abortion. Suddenly she developed severe abdominal pain and weakness. Her blood pressure dropped to 90/50 mm Hg. Moderate bloody discharge appeared from the vagina. The fetal heartbeat cannot be auscultated. The labor activity has ceased. Make the diagnosis:

**A.** Uterine rupture

**B.** Placental abruption

C. Amniotic fluid embolism

**D.** Inferior vena cava syndrome

E. Placenta previa

- **117.** Survey X-ray of the patient's abdominal cavity shows several hemispherical areas of lucency, located above well-defined horizontal levels. What is the cause of such an X-ray presentation?
- **A.** Intestinal obstruction
- **B.** Perforated ulcer

C. Meteorism

D. Cancer of the large intestine

E. –

- 118. Two days ago a 28-year-old man injured the distal phalanx of his right index finger with a needle. He complains of a sharp throbbing pain and edema in the area of this phalanx and markedly impaired finger mobility. Objectively, his index finger is slightly bent, its distal phalanx is hyperemic and significantly enlarged. The probe clearly determines the point of maximum pain. The body temperature is 36.9°C. What treatment is necessary in this case?
- **A.** Lancing and drainage of the purulent process in the finger after applying Oberst-Lukashevich anesthesia

**B.** Lancing and drainage of the abscess after applying general anesthesia

**C.** Injections with antibiotics and novocaine (procaine) around the affected area

**D.** Application of semi-alcoholic compresses

**E.** Resection of the distal phalanx of the finger

119. An ambulance has brought in the victim of an accident, who has fallen from a height. This person has clinical signs of multiple fractures in the both legs. Objectively, the patient's condition is severe; the patient is conscious, but mentally sluggish; the skin is pale gray; the forehead is covered in a cold sweat. The patient's breathing is shallow, with respiratory rate of 30/min., blood pressure – 80/60 mm Hg, pulse – 120/min., shallow. What complication has occurred in this person?

A. Traumatic shock, degree 2

**B.** Traumatic shock, degree 1

C. Traumatic shock, degree 3

D. Traumatic shock, degree 4

**E.** Syncope

**120.** During physical exertion, a man with a cerebral artery aneurysm suddenly developed severe headache and vomiting and fainted. Objectively, the patient is agitated and wants to run somewhere. His pulse is 62/min., rhythmic, blood pressure – 140/90 mm Hg, body temperature – 37.5°C. He has nuchal rigidity and positive Kernig's sign. Focal neurological signs are absent. Make the provisional diagnosis:

A. Subarachnoid hemorrhage

**B.** Ischemic stroke

C. Meningitis

**D.** Hypertensive crisis

E. Brain hemorrhage

- **121.** A man has developed acute chills, headache, vomiting, and fever of 38.5°C. In the evening, nuchal rigidity and positive Kernig's sign appeared. Herpetic blisters are visible on the mucosa of his lips and nose. No focal neurological signs were detected. Make the diagnosis:
- **A.** Meningococcal meningitis
- **B.** Subarachnoid hemorrhage

**C.** Herpesviral encephalitis

**D.** Brain abscess

**E.** Brain hemorrhage

- **122.** A 33-year-old man was hospitalized with a recurrent ulcer bleeding that was stopped. During examination he is exhausted and pale. Blood test shows Hb of 77 g/L and Ht that equals 0.25. Due to anemia, there were two attempts to transfuse him with the blood of his group A(II) Rh(+). Both transfusions had to be stopped because of anaphylactic reaction development. What transfusion medium is indicated in this case?
- **A.** Washed erythrocytes
- **B.** Fresh citrated blood
- **C.** Packed erythrocytes (native)

**D.** Erythrocyte mixture

**E.** Leukoreduced and platelet-depleted packed erythrocytes

123. A 19-year-old young man was admitted to the surgical inpatient department with a closed abdominal injury. During the surgery, multiple ruptures of the spleen and small intestine were detected. The patient's blood pressure progressively decreases. Blood transfusion is required. Who can determine the patient's blood type and rhesus factor?

- A. Doctor of any specialty
- **B.** Medical laboratory scientist
- C. Surgeon
- **D.** Traumatologist
- **E.** Anesthesiologist
- **124.** A 20-year-old woman complains of amenorrhea. Objectively, she has hirsutism and obesity with predominant distribution of adipose tissue on the face, neck, and upper torso. On her face she has *acne vulgaris*, on her skin there are stretch marks. Her blood pressure is 170/100 mm Hg. Her mental development and intelligence are not impaired. Gynecological status shows moderate hairiness of the external genitalia and acute hypoplasia of the vagina and uterus. Make the diagnosis:
- **A.** Cushing syndrome
- **B.** Turner syndrome
- C. Stein-Leventhal syndrome
- **D.** Sheehan syndrome
- E. Babinski-Froehlich syndrome
- **125.** A 22-year-old woman at 11–12 weeks of her pregnancy came to a maternity clinic. Examination shows a positive Wasserman reaction. A dermatologist diagnosed her with secondary latent syphilis. What are the tactics of pregnancy management in this case?
- **A.** Artificial termination of the pregnancy after a course of antisyphilitic therapy
- **B.** Artificial termination of the pregnancy after the diagnosis is made
- **C.** Artificial termination of the pregnancy after normalization of the patient's Wasserman reaction
- **D.** Prolongation of the pregnancy after a course of antisyphilitic therapy
- **E.** Three antisyphilitic treatment courses throughout the pregnancy
- **126.** An 18-year-old young man was hospitalized on the 7th day of illness with complaints of headache, general weakness, fever, and sore throat. Objectively, all the groups of lymph nodes are enlarged to 1–3 cm in diameter. Palpation shows dense, elastic, and slightly painless lymph nodes that are not matted together. Enlarged tonsils are covered with purulent plaque. The liver is +3 cm. In the blood: leukocytosis, relative lymphomonocytosis, virocytes 15%. Make the diagnosis:
- **A.** Infectious mononucleosis
- **B.** Adenovirus infection
- **C.** Tonsillitis
- **D.** Diphtheria
- **E.** Acute lymphocytic leukemia

**127.** A variety of lighting fixtures are used to illuminate classrooms. What kind of lighting fixtures creates the most hygienically acceptable lighting?

**A.** Lighting fixtures that provide reflected lighting

**B.** Lighting fixtures that provide direct lighting

**C.** Lighting fixtures that provide semireflected lighting

**D.** Lighting fixtures that provide scattered lighting

**E.** Lighting fixtures that provide combined lighting

- **128.** A 72-year-old woman has been hospitalized with a nosebleed. Within the last 6 years, her blood pressure had spikes up to 180/100 mm Hg. Objectively, her skin is pale, the heart sounds are quite sonorous, the second heart sound is accentuated over the aorta, there is an audible systolic murmur. Blood pressure 150/80 mm Hg. In the blood: Hb 92 g/L, erythrocytes  $2.7 \cdot 10^{12}$ /L. In the urine: specific gravity 1022, leukocytes 3-7 in the vision field, erythrocytes 0-2 in the vision field. What is the most likely cause of hypertension in this case?
- **A.** Aortic atherosclerosis
- **B.** Essential hypertension
- **C.** Chronic pyelonephritis
- **D.** Chronic glomerulonephritis
- E. Coarctation of the aorta
- **129.** At a factory with harmful working conditions, a complex of measures is being taken to reduce the morbidity among the workers. For better effect, the factory doctor separately monitors a group of people, who fall ill frequently and for a long time. What type of morbidity requires distinguishing such a group of people?
- **A.** Morbidity with temporary disability
- **B.** Morbidity associated with major non-communicable diseases
- **C.** General morbidity
- **D.** Morbidity associated with acute infections
- E. Hospitalized morbidity
- **130.** A patient visited the doctor at a rural outpatient clinic twice during the calendar year (in March and in November). In both cases, the patient was diagnosed with acute respiratory viral infection. How to fill in the statistical forms for registration of final (clarified) diagnoses, to account for these morbidity cases?

- **A.** For each case separately with the (+) sign
- **B.** For each case separately with the (-) sign **C.** For the first case with the (+) sign, for the second case with the (-) sign
- **D.** For the first case with the (+) sign, for the second case no form is necessary
- **E.** The forms are not filled for either of these cases
- **131.** A 42-year-old man was hospitalized 3 hours after an injury with marked subcutaneous emphysema of the upper torso, dyspnea, and tachycardia of 120/min. X-ray detects no pneumothorax, but shows a significant expansion of the mediastinum in both directions. What emergency aid must be provided in this case?
- **A.** Drainage of the anterior mediastinum
- **B.** Puncture of the pleural cavity
- C. Drainage of the pleural cavity
- **D.** Thoracoscopy
- **E.** Thoracotomy
- **132.** A 54-year-old man, a heavy drinker, who 4 years ago had a case of viral hepatitis B, has been experiencing heartburn and a burning pain retrosternal for the past two months. In the morning, after eating and lifting a heavy object, he had an episode of vomiting with fresh dark blood. Objectively, his skin is pale and moist, pulse 92/min., blood pressure 90/60 mm Hg. His sclerae are icteric. His abdomen is enlarged due to ascites and hepatosplenomegaly. What is the most likely cause of bleeding in this case?
- **A.** Ruptured varicose veins in the esophagus
- **B.** Mallory-Weiss syndrome
- C. Budd-Chiari syndrome
- **D.** Esophageal achalasia
- **E.** Peptic ulcer disease of the duodenum
- 133. One year ago an 8-year-old boy had a case of hepatitis B. For the last two months he has been complaining of fatigability, disturbed sleep, loss of appetite, and nausea, especially in the morning. His skin is not icteric, the liver and spleen are painless and can be palpated 1 cm below the costal margin. His ALT levels are 220 units. How can this condition be interpreted?
- **A.** Development of chronic hepatitis
- **B.** Recurrence of viral hepatitis B
- **C.** Biliary dyskinesia
- **D.** Residual effects of hepatitis B
- **E.** Development of hepatic cirrhosis
- **134.** A 25-year-old woman complains of fever of 37°C, pain in her lower abdomen, and vaginal discharge. Three days ago, at

10 weeks of pregnancy, an artificial abortion was performed. Objectively, the cervix is clean, the uterus is slightly enlarged and painful. The uterine appendages cannot be detected. The fornices are deep and painless. Sanguinopurulent discharge is being produced from the vagina. Make the diagnosis:

- A. Postabortion metroendometritis
- B. Hematometra
- **C.** Pelvioperitonitis
- **D.** Uterine perforation after an abortion
- E. Parametritis
- **135.** The people living in a radiation-contaminated area are recommended to include pectin in their diet for removal of radionuclides from the body. What products are the main source of pectin?
- A. Vegetables and fruits
- **B.** Bread
- C. Milk
- **D.** Meat
- E. Pasta
- **136.** A 25-year-old woman at 34 weeks of pregnancy was hospitalized in a critical condition into the maternity clinic. She complains of headache, vision impairment, and nausea. Objectively, she has edemas, her blood pressure is 170/130 mm Hg. Suddenly, the woman developed fibrillar twitching of her facial muscles, tonic and clonic seizures, and respiratory arrest. One and a half minutes later her breathing resumed and blood-tinged foam appeared from her mouth. Her urinary protein levels are 3.5 g/L. Make the diagnosis:
- **A.** Eclampsia
- **B.** Epilepsy
- **C.** Brain hemorrhage
- D. Brain edema
- E. Gastric ulcer
- 137. The region at the Carpathian foothills is characterized by constant high atmospheric humidity (over 80%). In the cold season, while the air temperature is moderately low, the population of this region feels extreme cold. What type of heat transfer increases in such conditions?
- A. Convection
- **B.** Radiation
- **C.** Evaporation
- **D.** Conduction
- $\mathbf{E}_{\cdot}$  –
- **138.** A 51-year-old woman has a 2.5-monthlong menstruation delay. She complains of profuse bloody discharge from her vagina for the last 15 days, irritability,

and disturbed sleep. She has a history of menstrual dysfunction observed within the last year. Ultrasound shows that her uterus is normal for her age, the uterine appendages are normal, endometrial thickness is 14 mm. What tactics should the doctor choose in this case?

**A.** Diagnostic curettage of the walls of the uterine cavity

**B.** Conservative treatment of the bleeding

**C.** Hysterectomy

**D.** Supravaginal amputation of the uterus without the appendages

E. TORCH panel test

139. A 22-year-old woman complains of an aching pain in her right iliac region throughout the last week, morning sickness, and taste distortions. Her menstruation is delayed for 3 weeks already. Objectively, her blood pressure is 110/70 mm Hg, pulse – 78/min.,  $t^o - 37.0^o\text{C}$ . Bimanual examination shows that her uterus is slightly enlarged, soft, mobile, and painless. Palpation of the uterine appendages detects on the right a painful and moderately mobile dense-elastic formation 3x4 cm in size. Make the diagnosis:

A. Progressing tubal pregnancy

**B.** Interrupted tubal pregnancy

**C.** Cyst of the right ovary

**D.** Uterine pregnancy

**E.** Acute appendicitis

**140.** For the last 2 months, a 29-year-old woman has been complaining of chest pain on the left, cough, shortness of breath, and fever of 39.6°C. Objectively, the left half of her chest lags behind in the act of breathing, her vesicular respiration is weakened, and there is a shortening of the percussion sound on the left. X-ray shows a round shadow in the lower lobe of the left lung. Make the diagnosis:

**A.** Lung abscess

**B.** Purulent pleurisy

**C.** Lung cancer

**D.** Pleural empyema

**E.** Chronic pneumonia

141. On the fifth day after a full-term birth, a postparturient woman developed a fever of 38.8°C, abdominal pain, and general weakness. Objectively, her blood pressure is 120/80 mm Hg, pulse is 100/min. The breasts are moderately distended. The abdomen is soft and participates in the act of breathing. The uterine fundus is located three finger-widths below the navel. Vaginal examination shows that the cervix allows inserting one finger; the uterus is soft, painful, and enlarged to 13 weeks of

pregnancy. There is a seropurulent foulsmelling discharge from the genital tracts. Make the diagnosis:

**A.** Postpartum purulent metroendometritis

**B.** Postpartum endometritis

**C.** Uterine subinvolution

**D.** Lactostasis

**E.** Septic shock

**142.** A 15-year-old patient presents with delayed physical development and periodically develops icteric skin. Objectively, the spleen is 16x12x10 cm, cholecystolithiasis is observed in the patient, there is a skin ulcer on the left calf in its lower third. In the blood: erythrocytes  $-3.0 \cdot 10^{12}$ /L, Hb -90 g/L, color index -1.0, microspherocytosis, reticulocytosis. Total serum bilirubin -56 mcmol/L, indirect bilirubin -38 mcmol/L. What treatment method would be optimal in this case?

A. Splenectomy

**B.** Spleen transplant

C. Portocaval anastomosis

**D.** Omentosplenopexy

**E.** Omentohepatopexy

**143.** A 38-year-old woman, para 3, has a history of 5 artificial abortions. Five minutes after giving birth, she started bleeding from her genital tracts (350 mL). The woman's condition is satisfactory, her pulse is 92/min., blood pressure is 100/60 mm Hg. There are no signs of placental expulsion, its manual removal has to be performed. In some spots the placenta is somewhat difficult to detach. Make the diagnosis:

**A.** Partial placenta adherens

**B.** Trapped placenta

**C.** Placenta accreta

**D.** Total placenta adherens

**E.** Hypotonic bleeding

144. A 17-year-old girl was hospitalized into the gynecological department with complaints of profuse bloody discharge from her genital tracts and a cramping pain in her lower abdomen. The last menstruation was 10 weeks ago. Objectively, her blood pressure is 100/60 mm Hg, pulse is 90/min.. Vaginal examination shows that the external orifice of the uterine cervix allows inserting one finger. The uterus is painless and enlarged to 6 weeks of pregnancy. The uterine appendages cannot be detected, the fornices are free. Make the diagnosis:

- **A.** Incomplete miscarriage
- **B.** Imminent miscarriage
- C. Complete miscarriage
- **D.** Anembryonic pregnancy
- **E.** Threatened miscarriage
- **145.** A man in a state of clinical death receives closed-chest cardiac massage and mouth-to-mouth artificial pulmonary ventilation. The doctor noticed that the air does not enter the patient's airways, and his head and torso are at the same level. Why is artificial pulmonary ventilation ineffective in this case?
- **A.** Swallowed tongue
- **B.** The volume of inhaled air is too low
- C. Closed-chest cardiac massage
- **D.** No gastric tube
- E. The patient's mouth is too small
- **146.** In a city with the population of 400000, per year 5600 deaths are registered, including 3300 deaths caused by diseases of the circulatory system and 730 cases of neoplasm-related mortality. What parameter will allow to characterize the circulatory-related mortality in this city?
- A. Intensity parameter
- **B.** Extensivity parameter
- **C.** Relative intensity parameter
- **D.** Percentage correlation coefficient
- E. Correlation coefficient
- **147.** A woman at 12 weeks of her pregnancy developed a pain in her lower abdomen and mild bloody discharge that occurred with no apparent reason. Vaginal examination shows well-formed cervix with closed external orifice. The body of the uterus is enlarged according to her term of pregnancy. Make the diagnosis:
- A. Threatened miscarriage
- **B.** Imminent miscarriage
- C. Ongoing miscarriage
- **D.** Incomplete miscarriage
- **E.** Anembryonic pregnancy

148. During medical examination, a port crane operator complains of dizziness, nausea, a feeling of pressure in his eardrums, tremor, asphyxia, and cough. He works at a high altitude associated with nervous and emotional strain. Additionally, the workers are exposed to vibration (general and local), noise, infrasound, and a microclimate that heats them in summer and cools them in winter. What factor is the most likely cause of the worker's complaints?

- **A.** Infrasound
- **B.** Noise
- C. Vibration
- D. Strenuous work
- E. Work at a high altitude
- **149.** The inpatient care provided to the population of a certain district is being analyzed. What indicator should be used when deciding, whether to reduce the number of the available hospital beds?
- **A.** Average annual bed occupancy
- **B.** Mortality rate
- C. Average duration of inpatient stay
- **D.** Average duration of treatment
- **E.** Bed turnover
- **150.** A 53-year-old woman complains of an aching pain in her lower abdomen, a significant abdominal distention within the last 5 months, weight loss, and weakness. Objectively, the cervix is clean, the uterus is not enlarged, painless, and immobile. On the both sides, there are dense mildlymobile tumors 10x13 cm in size with an uneven surface. Abdominal percussion detects a fluctuation. Make the diagnosis:
- A. Ovarian cancer
- **B.** Uterine fibromyoma
- **C.** Tubo-ovarian tumor
- **D.** Floating kidney
- E. Endometriosis