



STATE ORGANIZATION  
«TESTING BOARD FOR PROFESSIONAL COMPETENCE ASSESSMENT OF  
HIGHER EDUCATION TRAINEES IN MEDICINE AND PHARMACY AT THE  
MINISTRY OF HEALTH OF UKRAINE»

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Variant 76

TEST ITEMS FOR THE LICENSING  
INTEGRATED EXAM

KROK 2

MEDICINE

1. During analysis of morbidity in the city, it was determined that age structure of population is different in each district. What statistical method allows to exclude this factor, so that it would not skew the morbidity data?

- A. Wilcoxon signed-rank test
- B. Dynamic time series analysis
- C. Analysis of average values
- D. Correlation-regression analysis
- E. Standardization

2. During medical examination a cadet in the naval college was detected to have a painless dense ulcer 1.5x0.5 in size in his perianal area at the 2 o'clock position. The ulcer floor resembles «old fat». What is the provisional diagnosis?

- A. Hard syphilitic chancre of the rectum
- B. Anal crypt suppuration
- C. Rectal fistula
- D. Anal cancer
- E. Rectal fissure

3. A 65-year-old man has an over 17-year-long history of chronic obstructive bronchitis. He complains of dyspnea with difficult inspiration, heaviness in his right subcostal region, and edema of feet and shins. Auscultation detects rough respiration and dry crackles over the lungs and an accentuated split second heart sound in the second intercostal region. What changes can be expected on the ECG?

- A. Left atrial hypertrophy
- B. Ciliary arrhythmia
- C. Deviation of the electrical axis of the heart to the left
- D. Extrasystole
- E. Right ventricular myocardial hypertrophy

4. A 24-year-old man has fallen on his feet from a fourth floor balcony. He felt a sharp pain in his back, because of which he was unable to stand up unassisted. Examination shows smoothed out lumbar lordosis. The spine axial load is positive. Palpation of the spinous processes, especially of Th12, is painful. Sensitivity and mobility of the legs are not disturbed. Make the diagnosis:

- A. Th12 fracture with dysfunction of the spinal cord
- B. Pelvic fracture with dysfunction of the pelvic organs
- C. Lumbar spine contusion
- D. Th12 compression fracture without dysfunction of the spinal cord
- E. Fracture of the lumbar spine spinous processes

5. A 56-year-old woman has been working as a disinfectant for 19 years. She complains of general weakness, nausea, bitter taste in her mouth, heavy sensation in her right subcostal area, and rapid fatigability. Objectively, her body temperature is 37.1°C, the sclerae are icteric, and the liver is enlarged. Total bilirubin is 40 mcmol/L. What is the likely diagnosis?

- A. Chronic pancreatitis
- B. Occupational toxic hepatitis
- C. Acute cholecystitis
- D. Biliary dyskinesia
- E. Chronic cholecystitis

6. A 19-year-old young man after a treatment for bilateral pneumonia developed thirst, high appetite, weight loss, and dry mouth. The signs continue to intensify. Examination shows fasting glycemia of 19.7 mmol/L, glucosuria of 2.8 g/L, and signs of acetonuria. What treatment should he be prescribed?

- A. Physiological saline
- B. Insulin
- C. Biguanides
- D. Glucose solution
- E. Metformin

7. A pregnant woman at the term of 11–12 weeks was hospitalized into the gynecological department with uterine bleeding and cramping pain in her lower abdomen. Vaginal examination shows that her vagina is filled with blood clots and her cervical opening is 2 cm. A tense amniotic sac can be detected in the birth canal. The uterus is tense and enlarged to the size that corresponds to the period of 11–12 weeks of pregnancy. The discharge is profuse and bloody. What must the doctor do in this case?

- A. Perform uterine curettage
- B. Conduct blood transfusion
- C. Conduct tocolytic therapy
- D. Prescribe progesterone
- E. Perform conservative monitoring

8. A 56-year-old woman was diagnosed with stage 2 hypertension of the 2nd degree. She belongs to the group of

moderate risk and has bronchial asthma. What group of drugs is contraindicated to this patient?

- A. Diuretics
- B.  $\beta$ -blockers
- C. Imidazoline receptor antagonists
- D. Calcium antagonists
- E. Angiotensin-converting enzyme inhibitors

9. It is the 11th day after a woman has given birth and for the last 5 days she has been ill. She complains of chills. Her body temperature fluctuates between 35.8°C and 39.9°C. She cannot pump milk from her left breast. Objectively, her skin and mucosa are pale, her left mammary gland is significantly larger than the right one, the skin there is hyperemic, the upper and lower quadrants are dense, palpation detects a fluctuation and provokes sharp pain. The nipple is edematous and has a fissure with a purulent crust. The right mammary gland is normal. Make the provisional diagnosis:

- A. Postpartum period. Right breast abscess
- B. Postpartum period. Serous mastitis of the right breast
- C. Postpartum period. Right breast cancer
- D. Postpartum period. Physiological course
- E. Postpartum period. Sepsis

10. A 7-year-old child complains of stomachache episodes that occur after mental stress, cold drinks, or ice-cream. After clinical and instrumental examination the boy was diagnosed with hypertensive biliary dyskinesia. What medicines should be prescribed first for the treatment in this case?

- A. Antibiotics
- B. Antispasmodics and cholagogues
- C. Antioxidants
- D. Cholagogues and choleretics
- E. Sedatives and choleretics

11. A regional cardiologist is given a task to develop a plan for preventive measures aimed at decreasing cardiovascular mortality rates. What measures should be planned for secondary prevention?

- A. Referring patients for sanatorium-and-spa treatment
- B. Referring patients for inpatient treatment
- C. Prevention of diseases
- D. Optimization of lifestyle and living conditions
- E. Prevention of recurrences and complications

12. A 38-year-old woman came to a dermatologist complaining of dry and peeling skin. Examination reveals a papular rash and fine peeling on the extensor surfaces of her knee and elbow joints; in the area of hair follicles there are wax-colored nodules that rise from the skin. These clinical signs are likely caused by insufficient dietary intake of the following substance:

- A. Ascorbic acid
- B. Pyridoxine
- C. Retinol
- D. Riboflavin
- E. Thiamine

13. On the 10th day after giving birth a woman came to a doctor complaining of high temperature of 38°C and sudden pain, hyperemia, and an induration in her left breast. Objectively, the skin of her left mammary gland has local hyperemia in its upper outer quadrant. During its palpation the pain intensifies. What is the most likely diagnosis in this case?

- A. Left breast cancer
- B. Lactational mastitis
- C. Breast hemangioma
- D. Cyst of the left breast with suppuration
- E. Fibroadenoma of the left breast

14. A 3-month-old child has been formula-fed since the age of 2.5 months, because the child's mother has no milk. The mother notes that despite her taking a good care of her child, the baby developed persistent redness in the skin folds. Three-four days later, the child developed itching and hyperemic skin patches on the cheeks and chin. The patches are filled with serous exudate that forms yellowish scabs, when dried out. Seborrheic scales are observed on the child's scalp. What is the most likely diagnosis in this case?

- A. Exudative-catarrhal diathesis
- B. Neuro-arthritis diathesis
- C. Allergic (atopic) diathesis
- D. Staphylococcal diathesis
- E. Lymphatic-hypoplastic diathesis

15. A man, who one day ago returned from a trip to Africa, presents with a sharply painful cluster of lymph nodes in his armpit. The skin over the lymph node cluster is hyperemic. Bubonic plague is suspected. What must the contact persons use for urgent prevention of this disease?

- A. Praziquantel
- B. Fluconazole
- C. Doxycycline
- D. Homologous immunoglobulin
- E. Heterologous serum

16. A 23-year-old woman, para 2, full term, is in labor. Her waters were clear and broke three hours ago. The labor activity is regular. The contractions last 25–30 seconds, with intervals of 4–5 minutes. The baby is in the longitudinal lie, cephalic presentation. The head is pressed to the entrance into the lesser pelvis. Fetal heart rate is 136/min. Internal examination shows that the cervix is smoothed out, the opening of the external orifice of uterus is 3 cm, no amniotic sac, the lower pole of the fetal head is at the level of *l. terminalis*. What stage of labor is it?

- A. Preliminary stage
- B. Stage I of labor
- C. Stage II of labor
- D. Stage III of labor
- E. Labor precursors

17. A 52-year-old man had an acute onset of the disease after an overexposure to cold that occurred 3 weeks ago. He complains of cough, high body temperature of 39.5°C, chest pain on the right, and marked dyspnea. His pulse is 120/min., blood pressure – 90/60 mm Hg, respiration rate – 48/min. Acrocyanosis is observed. Objectively, the right side of his chest lags behind during breathing. Percussion detects a pulmonary dullness on the right. Auscultation detects no breathing over the right lung. X-ray shows on the right a shadow with fuzzy upper margin to the level of rib II. Exudate contains 90% of neutrophils. What is the most likely diagnosis in this case?

- A. Exudative tuberculous pleurisy
- B. Infiltrative tuberculosis of the right lung
- C. Lung cancer
- D. Croupous pneumonia
- E. Pleural empyema

18. A 45-year-old man complains of painless nodules that appeared on the skin of his limbs and on the small of his back. The nodules have a tendency to grow peripherally and merge together. The disease onset was 2 years ago. Exacerbations occur mostly in spring. His family history states that his father had a similar skin condition. Objectively, the pathologic elements manifest as drop-shaped and coin-shaped nodules and plaques, covered in white scales. Make the provisional diagnosis:

- A. Psoriasis
- B. Pityriasis rosea
- C. Atopic dermatitis
- D. Lichen ruber planus
- E. Seborrheic eczema

19. A 3-year-old child, while playing, suddenly developed cough attacks and problems with breathing. Objectively, the child has a dry cough and mixed type dyspnea. Auscultation detects a small amount of dry crackles in the lungs. Respiration is weakened on the right. The child does not attend kindergarden and has all necessary immunizations for that age. What pathology can be suspected?

- A. Pertussis
- B. Airway foreign body
- C. Bronchial asthma
- D. Pneumonia
- E. Acute respiratory viral infection

20. A 36-year-old woman complains of a headache, paresthesia, muscle weakness, spasms, thirst, and polyuria. Objectively, her temperature is 36.6°C, respiration rate – 18/min., pulse – 92/min., blood pressure – 180/110 mm Hg. Her ECG shows ST depression. Her potassium levels in blood plasma are low, sodium levels are high, plasma renin activity is significantly decreased, aldosterone concentration is high. 24-hour urine specific gravity does not exceed 1.008–1.011, alkaline reaction is observed. Spironolactone test is positive. CT scan shows enlarged right adrenal gland. What is the most likely diagnosis in this case?

- A. Androsteroma
- B. Conn's syndrome
- C. Diabetes insipidus
- D. Cushing's syndrome
- E. Pheochromocytoma

21. A 51-year-old man after an overexposure to cold has developed an acute pain in his lower abdomen and a burning pain that occurs at the end of urination. Urination occurs up to 15 times per 24 hours. The urine is turbid and contains blood. Clinical urinalysis shows leukocytes in the whole vision field and isolated erythrocytes. What provisional diagnosis can be made?

- A. Acute urethritis
- B. Acute cystitis
- C. Acute pyelonephritis
- D. Urolithiasis
- E. Acute glomerulonephritis

**22.** In a city, the levels of manganese are elevated in the atmospheric air, water, and agricultural foods. What type of effect do these factors have on the health of the population?

- A. Combined
- B. Joint
- C. Separate
- D. Synergistic
- E. Complex

**23.** A 65-year-old man complains of cough attacks that occur when he eats liquid foods. Three months ago he was diagnosed with a carcinoma in the upper third of the esophagus. He underwent radiation therapy. What complication developed in this man?

- A. Tracheal stenosis
- B. Lung abscess rupture into the pleural cavity
- C. Spontaneous pneumothorax
- D. Tracheoesophageal fistula
- E. Perforation of a gastric cardia ulcer

**24.** When examining blood coagulation system of a man before a surgery, he was found to have a deficiency of factor VIII – antihemophilic globulin A. What disease is it?

- A. Hemorrhagic vasculitis
- B. Hemorrhagic angiomatosis
- C. Hemophilia B
- D. Hemophilia C
- E. Hemophilia A

**25.** A man, who was diagnosed with scabies and underwent a specific treatment, has made a follow-up appointment with a doctor. What measures must he take to prevent a recurrence of scabies?

- A. Correction of the immune status
- B. Correction of the gastrointestinal tract function
- C. Laundry disinfection
- D. Elimination of food allergens
- E. Footwear disinfection

**26.** A newborn boy, born at 38 weeks of gestation with weight of 2200 g, presents with a ventricular septal defect, cataracts in both eyes, and sensorineural deafness. At the term of 12 weeks, the mother of the boy had a case of an influenza-like disease accompanied by a rash. In this case, the newborn will most likely be diagnosed with:

- A. Cytomegalovirus infection
- B. Toxoplasmosis
- C. Congenital rubella syndrome
- D. Congenital listeriosis
- E. Congenital varicella syndrome

**27.** A 17-year-old girl has made an appointment with the doctor. She plans to begin her sex life. No signs of gynecological pathology were detected. In the family history there was a case of cervical cancer that occurred to the patient's grandmother. The patient was consulted about the maintenance of her reproductive health. What recommendation will be the most helpful for prevention of invasive cervical cancer?

- A. Immunomodulators
- B. Vitamins, calcium, omega-3
- C. Vaccination against human papillomavirus (HPV)
- D. Timely treatment of sexually transmitted diseases
- E. Antiviral and antibacterial drugs

**28.** During a regular examination, an 8-year-old girl with type I diabetes mellitus presents with a swelling on the anterior surface of her hip. The swelling is 3 cm in diameter, dense, painless on palpation. The skin over this formation has normal color and temperature. Localization of the swelling matches the place where the girl usually receives her insulin injections. What is the most likely cause of this clinical presentation?

- A. Formation of a post-injection infiltration
- B. Formation of a post-injection abscess
- C. Development of hypertrophic lipodystrophy
- D. Development of atrophic lipodystrophy
- E. Allergic response

**29.** For the last 2 years, a 32-year-old woman has been observing periodical pain attacks in her right subcostal area that could be removed with no-spa (drotaverine). The pain is not always associated with meals, sometimes it is caused by anxiety and accompanied by cardiac pain and palpitations. Objectively, the woman is emotionally labile. Abdominal palpation detects a slight pain in the area of the gallbladder. What pathology is the most likely to cause such clinical presentation?

- A. Chronic pancreatitis
- B. Chronic cholecystitis
- C. Biliary dyskinesia
- D. Chronic cholangitis
- E. Duodenitis

30. A patient was brought into the pulmonology department with complaints of inspiratory dyspnea and dry cough at the highest point of inhalation. On examination the following is observed: pale skin, cyanotic lips, «Hippocratic fingers». Auscultation detects Velcro-type crackles (like opening a Velcro fastener). X-ray shows a «ground glass opacity» pattern. What is the most likely diagnosis?

- A. Pulmonary histiocytosis X
- B. Idiopathic pulmonary fibrosis
- C. Hand-Schuller-Christian disease
- D. Exogenous allergic alveolitis
- E. Idiopathic pulmonary hemosiderosis

31. A child is 4 months old. The disease onset was acute and manifested as a temperature of 37.8°C and a slight cough. On the third day after the onset, the cough intensified and became accompanied by dyspnea. Percussion detects a tympanic sound over the lungs, while auscultation reveals numerous wet fine bubbling and sibilant wheezes during the exhalation. Make the provisional diagnosis:

- A. Obstructive bronchitis
- B. Bronchopneumonia
- C. Acute bronchiolitis
- D. Acute bronchitis
- E. Focal pneumonia

32. A woman with blood group B(III) Rh(+) gave birth to a full-term healthy boy. Examination on the 3rd day of the infant's life shows him to have icteric tint to his skin. The child has no problems with suckling, sleep is nondisturbed. The abdomen is soft, the liver protrudes by 2 cm from under the costal margin. Complete blood count: hemoglobin – 200 g/L, erythrocytes –  $5.5 \cdot 10^{12}/L$ , total bilirubin – 62  $\mu\text{mol}/L$ , indirect bilirubin – 52  $\mu\text{mol}/L$ . What condition can be suspected?

- A. Biliary atresia
- B. Physiological jaundice
- C. Congenital hepatitis
- D. Hemolytic disease of the newborn due to Rh incompatibility
- E. Hemolytic disease of the newborn due to ABO incompatibility

33. A 43-year-old woman complains of persistent stomachache with recurrent

pain attacks, nausea, repeated vomiting with stagnant bowel content, abdominal distension, and flatulence. She has been presenting with these signs for 7 hours. Pulse is 116/min. The tongue is dry and brown. The abdomen is symmetrically distended, soft, painful. Percussion reveals tympanitis. On auscultation there are bowel sounds with metallic overtone, splashing, and dripping. Make the diagnosis:

- A. Acute nonspecific colitis
- B. Acute necrotizing pancreatitis
- C. Acute intestinal obstruction
- D. Acute erosive gastritis
- E. Acute destructive cholecystitis

34. A 9-year-old boy is in a severe condition. His body temperature is 38–39°C, he has nosebleeds and complains of pain in his bones. Objectively, the boy presents with acute pallor, hemorrhagic rash, and ulcerative necrotizing stomatitis. All the groups of lymph nodes are enlarged. The liver is +5 cm. The spleen is +4 cm. What test will be decisive for diagnosis-making in this case?

- A. Complete blood count
- B. Immune complex testing
- C. X-ray of the mediastinum
- D. Abdominal ultrasound
- E. Myelogram

35. The body of a 35-year-old man was found in a forest, hanging from a noose tied to a tree branch. Face and neck tissues of the deceased are cyanotic, while the legs are normally colored. The ligature mark is closed and clearly defined. What are the cause and manner of death in this case?

- A. Mechanical asphyxia as the result of airway obstruction, the manner of death – homicide
- B. Mechanical asphyxia as the result of hanging, the manner of death – non-homicide
- C. Mechanical asphyxia as the result of strangulation by a noose, the manner of death – non-homicide
- D. Mechanical asphyxia as the result of chest and abdomen compression, the manner of death – homicide
- E. Mechanical asphyxia as the result of strangulation by a noose, the manner of death – homicide

36. A 45-year-old woman complains of general weakness, dyspnea, and dizziness. Within one year her hair became gray, her nails started peeling, and she developed gustatory disorders. For the last 5 years

she has been registered for regular check-ups with a gynecologist for uterine fibromyoma. Her blood test shows the following: erythrocytes –  $3.0 \cdot 10^{12}/L$ , Hb – 76 g/L, color index – 0.7, reticulocytes – 0.7%, platelets –  $160 \cdot 10^9/L$ , leukocytes –  $5.0 \cdot 10^9/L$ , eosinophils – 2%, band neutrophils – 3%, segmented neutrophils – 63%, lymphocytes – 28%, monocytes – 4%, aniso- and microcytosis, ESR – 30 mm/hour. What type of anemia can be suspected in this case?

- A. Hypoplastic anemia
- B. B<sub>12</sub>-deficiency anemia
- C. Autoimmune hemolytic anemia
- D. Iron-deficiency anemia
- E. Minkowski-Chauffard syndrome

37. A 57-year-old man complains of cough with profuse mucopurulent sputum (up to 150 mL per 24 hours). Objectively, he has drumstick fingers with watch-glass nails. Percussion produces a shortened sound over the lungs. Auscultation detects moderate and large bubbling crackles. Complete blood count shows leukocytosis and a left shift in the leukogram. Chest X-ray shows intensified pulmonary pattern and ring-like shadows. Bronchography detects multiple cylindrical thickenings of the bronchi with clear margins. Make the provisional diagnosis:

- A. Bronchiectasis
- B. Chronic pleural empyema
- C. Pulmonary echinococcosis
- D. Pulmonary cyst
- E. Pulmonary gangrene

38. A man complains of a heaviness behind his sternum, periodical sensation of food retention, and dysphagia. During X-ray the barium contrast reveals a single pouch-like protrusion in the right anterior wall of the esophagus. The protrusion has clear margins and a clearly defined neck. What is the most likely diagnosis in this case?

- A. Varicose veins of the esophagus
- B. Hiatal hernia
- C. Esophageal carcinoma
- D. Esophageal diverticulum
- E. Esophageal polyp

39. A 38-year-old woman complains of a tensive pain in her lower abdomen and the small of her back that is observed within the last month and intensifies on the day before menstruation. Premenstrual dark bloody discharge was observed. She has a history of four medical abortions and one birth.

Ultrasound shows isolated foci of increased echogenicity in the myometrium, increased anteroposterior size of the uterus, and round hypoechogenic inclusions 2 mm in diameter. What is the most likely diagnosis in this case?

- A. Retrocervical endometriosis
- B. Adenomyosis
- C. Hormone-producing ovarian tumor
- D. Ovarian endometriosis
- E. Chorionepithelioma

40. A 38-year-old woman complains of weakness, sleepiness, pain in the joints, weight gain despite low appetite, and constipations. She presents with dry and thickened skin, puffy and amimic face, narrowed palpebral fissures, thick tongue, and deep hoarse voice. Her heart sounds are weak, pulse is 56/min. Low levels of free T4 are observed. This patient needs to take the following on a regular basis:

- A. Thyroxine
- B. Furosemide
- C. Lithium carbonate
- D. Calcium gluconate
- E. Mercazolil (Thiamazole)

41. A 20-year-old man was hospitalized on the 9th day of the disease. He attributes his disease to eating of insufficiently thermally processed pork. At its onset this condition manifested in periorbital edemas and fever. Objectively, his body temperature is 38.5°C. The face is puffy and the eyelids are markedly swollen. Palpation of gastrocnemius muscles is sharply painful. Blood test shows hyper eosinophilia. What is the etiology of this disease?

- A. Trichinella
- B. Echinococci
- C. Ascarididae
- D. Leptospira
- E. Trichuris

42. A 59-year-old man for a month has been presenting with short-term periodical loss of strength in his limbs on the left. Later he developed a persistent morning weakness in the affected limbs after wakening. Objectively, he is conscious and has central paresis of the VII and XII pairs of his cranial nerves on the left. Central hemiparesis and hemihypersthesia are observed on the left side. What are the drugs of choice for treatment of this man?

- A. Diuretics
- B. Anticoagulants
- C. Corticosteroids
- D. Hypotensive agents
- E. Hemostatics

43. External obstetric examination shows the the mother's belly is ovoid; the fetal back can be palpated in the left lateral portion of the uterus, in the right portion there are fetal small parts, and at the uterine fundus there is a firm balloting part. Fetal heartbeat can be heard on the left, above the navel. What are the lie, position, and presentation of the fetus?

- A. Longitudinal lie, position I, breech presentation
- B. Longitudinal lie, position I, cephalic presentation
- C. Transversal lie, position I, no presenting part
- D. Longitudinal lie, position II, cephalic presentation
- E. Longitudinal lie, position II, breech presentation

44. A 30-year-old man, a cable presser, complains of inertness, memory problems, and pain in his limbs. Objectively, he presents with skin pallor, anemia, reticulocytosis, basophilic stippling of erythrocytes, and high levels of porphyrin in urine. This man has the signs of the following disease:

- A. Siderosis
- B. Saturnism
- C. Berylliosis
- D. Mercurialism
- E. Asbestosis

45. A 2-year-old boy against the background of lacunar tonsillitis developed problematic breathing through the nose and mouth. Mesopharyngoscopy shows hyperemic palatine tonsils and posterior pharyngeal wall, yellow films in the openings of the tonsillar crypts, and a protrusion on the posterior wall of the oropharynx that fluctuates during palpation. What complication must be avoided during the surgical treatment of this condition?

- A. Esophagitis
- B. Major vessel injury
- C. Pus aspiration
- D. Mediastinitis
- E. Disturbed lymphatic efflux

46. A man suddenly developed a sharp pain in the right side of his chest. Dyspnea has rapidly progressed. Objectively, the

patient has marked acrocyanosis and is in a severe condition. Subcutaneous emphysema is observed in the area of the patient's neck and upper chest. Over the right lung a bandbox resonance can be heard, respiration is absent there. The heart borders are displaced to the left. The patient's heart rate is 110/min., blood pressure – 100/60 mm Hg. What is the most likely disease in this case?

- A. Community-acquired pneumonia
- B. Exudative pleurisy
- C. Myocardial infarction
- D. Lung infarction
- E. Spontaneous pneumothorax

47. A 75-year-old man in a severe condition suffers from dyspnea at rest, marked weakness, and arrhythmia. Abdominal aortic pulsation is observed, further on there is a systolic murmur detected. Palpation reveals a volumetric formation in the mesogastrium. Blood pressure is 70/40 mm Hg. There is no pulsation over the femoral arteries. Oliguria is detected. Which diagnosis is the correct one?

- A. Acute pericarditis
- B. Pancreatic cyst
- C. Dissecting aortic aneurysm
- D. Cardiosclerotic aneurysm
- E. Acute cardiac aneurysm

48. A pregnant woman at 32 weeks of gestation with the risk of preterm labor undergoes a treatment to prevent fetal respiratory distress syndrome. What medicine was she prescribed?

- A. Gynipral (hexoprenaline)
- B. Misoprostol
- C. Oxytocin
- D. Dexamethasone
- E. Progesterone

49. A 32-year-old woman presents with obesity (mostly her shoulders and torso are affected), hirsutism, and menstrual irregularities. She has purple-cyanotic striae and stretch marks on her shoulders, chest, abdomen, and thighs. What is the cause of striae development in this case?

- A. Insulin resistance
- B. Catabolic effect of corticosteroid excess
- C. Hypergonadotropinemia
- D. Overproduction of androgens
- E. Hypoestrogenemia

50. An industrial area has high levels of noise pollution and the air of the working area is highly polluted with sulfur anhydride. What type of harmful effect



can these factors have on the body in such conditions?

- A. Joint
- B. Combined
- C. Separate
- D. Specific
- E. Complex

51. A 73-year-old man against the background of acute transmural anterior myocardial infarction has developed a decrease in systolic pressure (70 mm Hg) and diuresis (100 mL per 24 hours) and an increase in blood creatinine (480  $\mu\text{mol/L}$ ). Proteinuria is observed in the urine (0.066 g per 24 hours). What is the cause of decreased diuresis?

- A. Acute tubulointerstitial nephritis
- B. Acute renal failure
- C. Rapidly progressive glomerulonephritis
- D. Congested kidney
- E. Prerenal acute kidney injury

52. A 7-year-old boy after playing with a cat suddenly developed problems with breathing. Objectively, the boy is pale, frightened, and sits, leaning onto his arms. His body temperature is  $36.6^{\circ}\text{C}$ , heart rate – 120/min., respiration rate – 42/min., speaks in syllables. The exhale is long and accompanied by wheezing. Percussion detects a bandbox resonance over the lungs. An inhalation of ventolin (salbutamol) solution was started via a nebulizer. What can help assess the child's need for oxygen therapy in this case?

- A. Chest X-ray
- B. Spirometry
- C. Pneumotachometry
- D. Assessment of accessory respiratory muscles involvement
- E. Pulse oximetry

53. One year ago a 46-year-old woman underwent a partial thyroidectomy due to multinodular goiter. Now she complains of general weakness, drowsiness, constant fatigue, low working ability, constipations, edema of her face and limbs. Objectively, her body temperature is  $36^{\circ}\text{C}$ . Her skin is dry and wrinkled. She started losing her hair and developed amenorrhea. What condition is it?

- A. Thyrotoxicosis
- B. Chronic thyroiditis
- C. Hypoparathyroidism
- D. Subclinical hypothyroidism
- E. Primary hypothyroidism

54. A 32-year-old woman complained

of a sudden piercing headache and fell down unconscious. In an ambulance, an emergency physician noted her severe condition, sopor, and meningeal syndrome. After her hospitalization, the lumbar puncture yielded bloody cerebrospinal fluid. Her cerebrospinal fluid pressure is 260 mm  $\text{H}_2\text{O}$ . Make the provisional diagnosis:

- A. Aneurysm rupture, subarachnoid hemorrhage
- B. Meningoencephalitis
- C. Meningioma
- D. Traumatic brain injury
- E. Ischemic stroke

55. When helping a man with a bleeding, the emergency physician has pricked his own finger. The patient is an injecting drug user, who underwent a test for HIV, but the results of the test are unknown. What measures must the doctor take in this case?

- A. Process the contaminated skin area, examine the patient for TORCH infections, start antibiotic treatment
- B. Process the contaminated skin area, start antiviral and antibiotic treatment
- C. Nothing needs to be done
- D. Process the contaminated skin area, test the patient for HIV, start chemoprophylaxis
- E. Process the contaminated skin area, administer donor immunoglobulin

56. A parturient woman has been in labor for 8 hours. The labor activity is weak, contractions last for 25 seconds and occur twice per 10 minutes. Vaginal examination shows cervical opening of 4 cm, the baby is in the cephalic presentation. During examination the woman's waters broke. The waters contained meconium. Fetal heart rate is 90/min., dull. What tactics of labor management must be chosen in this case?

- A. Observation and treatment of fetal distress
- B. Apply obstetric forceps
- C. Continue the conservative management of labor with continuous monitoring of the fetus
- D. Prescribe labor stimulation with oxytocin solution
- E. Urgent delivery by means of a cesarean section

57. A 74-year-old woman came to a doctor complaining of a pain in her right inguinal region. The signs appeared suddenly, approximately 2 hours ago. The woman notes that she already had these signs 3 weeks ago, but back then they

disappeared on their own after she lay down. Objectively, palpation detects below the Poupart's ligament a sharply painful, dense, and tense formation 3.5 cm in diameter. The Dejerine sign (aggravation on coughing) is negative. What is the most likely diagnosis in this case?

- A. Acquired incarcerated femoral hernia
- B. Inguinal lymphadenitis
- C. Acquired strangulated inguinal hernia
- D. Acquired strangulated femoral hernia
- E. Acquired incarcerated inguinal hernia

58. Daily diet of a 10-year-old girl contains the following: vitamin B<sub>1</sub> – 1.2 mg, vitamin B<sub>2</sub> – 0.6 mg, vitamin B<sub>6</sub> – 1.4 mg, vitamin PP – 15 mg, vitamin C – 65 mg. Assessment of the girl's nutrition status reveals that she has cheilosis, glossitis, angular cheilitis, and conjunctivitis. The girl is likely to have:

- A. Vitamin B<sub>2</sub> hypovitaminosis
- B. Vitamin C hypovitaminosis
- C. Vitamin B<sub>1</sub> hypovitaminosis
- D. Vitamin B<sub>6</sub> hypovitaminosis
- E. Vitamin PP hypovitaminosis

59. A 47-year-old man has been ill for 3 days already. Palpation detects a painful inflamed infiltration in his right subcostal region. His body temperature is 38.9°C. Sonography allowed diagnosing him with calculous destructive cholecystitis. Clinical and laboratory data are not indicative of choledocholithiasis. What tactics should be chosen for the treatment of this man?

- A. Monitoring, cholecystectomy if peritonitis starts developing
- B. Complex anti-inflammatory therapy
- C. Laparocentesis, abdominal drainage
- D. Surgical treatment – cholecystectomy
- E. Cholagogics, hepatoprotectors, corticosteroids

60. An 8-year-old girl with complaints of painful urination, frequent low-volume urination, and leukocyturia was diagnosed with acute cystitis. 10 days before the disease onset she was treated by the gynecologist for acute vulvitis. 5 days ago she presented with mild catarrhal symptoms. Her mother ascribes the child's disease to her overexposure to cold. Specify the most likely infection route:

- A. Descending
- B. Contact
- C. Lymphogenic
- D. Ascending
- E. Hematogenic

61. A 37-year-old man complains of a

pain in his lumbar and thoracic spine and limited spinal mobility for the last 5 years. After examination he was diagnosed with central ankylosing spondylitis. This man is likely to be a carrier of the following HLA antigen:

- A. HLA-DR20
- B. HLA-B27
- C. HLA-DR4
- D. HLA-B5
- E. HLA-DR8

62. An 18-year-old girl complains of sneezing attacks that occur mostly in the morning 15–20 times in a row, an itch in her nose and throat, profuse watery discharge from her nose, rhinitis, and pain in her eyes. What test will be the most informative for diagnosis-making in this case?

- A. Intradermal test
- B. Skin prick test
- C. Droplet test
- D. Total IgE levels
- E. Provocation test

63. A 32-year-old man has a closed cerebrocranial trauma, a closed chest trauma, and a closed right femoral fracture. His blood pressure was 100/60 mm Hg, pulse – 124/min., respiration rate – 28/min. Two hours after the skeletal traction was performed under topical lidocaine anesthesia, the patient's condition suddenly became worse. His face and neck became cyanotic, blood pressure – 60/40 mm Hg, heart rate – 160/min., respiration rate – 44/min. What complication has likely developed in this case?

- A. Pulmonary embolism
- B. Acute posthemorrhagic anemia
- C. Pain shock
- D. Fat pulmonary embolism
- E. Myocardial infarction, cardiogenic shock

64. A 12-year-old boy with hypertrophic cardiomyopathy complains of dyspnea caused by the slightest physical exertion. Echocardiography detected asymmetrical left ventricular hypertrophy, signs of pulmonary hypertension, and left ventricular dilatation, its ejection fraction is 59%. These developments are indicative of:

- A. Heart failure with preserved ejection fraction
- B. Symptomatic arterial hypertension
- C. Primary pulmonary hypertension
- D. Primary arterial hypertension
- E. Heart failure with reduced ejection fraction

65. When her car collided with a tree, a 37-year-old woman felt a sharp pain in her left hip joint. She was unable to get out of the car. Her position is forced, the hip is pressed to the abdomen, fixed, and rotated inwards; the limb is flexed in the knee, any attempt to change the position results in sharp pain. Make the diagnosis:

- A. Closed cervical fracture of the left hip
- B. Closed dislocation of the left hip
- C. Contusion of the left hip joint
- D. Arthritis of the left hip joint
- E. Hemarthrosis of the left hip joint

66. A 27-year-old man complains of dry cough, dyspnea during the slightest exertion, chest pain, and high temperature of 37.3°C that persists for the last 3 weeks. He has a past history of drug abuse. His respiration is rough, without crackles. He has tachycardia of 120/min. X-ray shows interstitial changes on the both sides of his lungs. Bronchoscopy detects *Pneumocista carinii* in the lavage fluid. What medicine will be the most effective for the treatment of this patient?

- A. Biseptol (co-trimoxazole), clindamycin
- B. Cefamezin (cefazolin), nitroxoline
- C. Ampicillin, nizoral (ketoconazole)
- D. Erythromycin, rifampicin
- E. Interferon, rimantadine

67. A quarry produces granite, which is then broken into pieces with explosives and manual pneumatic hammers. When breaking granite rocks and drilling blast holes for the explosives, the workers are exposed to local vibration of medium and high frequency. Vibration measurement revealed that it exceeds the maximum permissible level. What specific changes can develop in the workers as the result of prolonged exposure to such working conditions?

- A. Hand dermatitis
- B. Sensory polyneuropathy with angiospastic syndrome
- C. Psychasthenia
- D. Sensorineural hearing loss
- E. Somatoform autonomic dysfunction

68. During regular examination of a 2-year-old boy, he presents with enlarged left

kidney, painless on palpation. The right kidney was undetectable on palpation. Excretory urography shows no contrast on the right. Cystoscopy detected hemiatrophy of the urinary bladder trigone, the right ureteral orifice is not detected. What pathology is it?

- A. Ectopic right ureteral orifice
- B. Dystopia of the right kidney
- C. Agenesis of the right ureter
- D. Agenesis of the right kidney
- E. Hypoplasia of the right kidney

69. A 62-year-old man complains of a moderate pain in his left foot in the area of his metatarsophalangeal joint. The pain intensifies on movement. The disease onset was 12 years ago, when he first had «an acute pain attack». Two years ago, a yellow-white nodule appeared under the skin that covers the joint. Examination shows that the joint is deformed and cyanotic. X-ray of the affected joint shows narrowing of the joint space and well-defined bone tissue defects in the epiphysis («punched-out erosions»). What is the most likely diagnosis in this case?

- A. Reiter's syndrome
- B. Rheumatoid arthritis
- C. Gouty arthritis
- D. Osteoarthritis
- E. Reactive arthritis

70. A 45-year-old man, provisionally diagnosed with a transient ischemic attack, was brought by an ambulance from an aniline-producing factory. Objectively, his skin and mucosa are cyanotic. His speech is dysarthric. The man is disoriented in space. His blood test shows the following: erythrocytes –  $4.6 \cdot 10^{12}/L$ , Hb – 143 g/L, color index – 0.9, leukocytes –  $5.6 \cdot 10^9/L$ , Heinz bodies – 14%, reticulocytes – 18%, methemoglobin – 36%, ESR – 5 mm/hour. The patient was diagnosed with a moderately severe acute aniline intoxication. What antidote agent will be the most effective in this case?

- A. Sodium thiosulfate
- B. Methylene blue
- C. Pentacin (Calcium trisodium pentetate)
- D. Succimer
- E. Desferal (Deferoxamine)

71. On examination a man presents with the following signs: progressing weakness, loss of working ability, rapid physical and mental fatigability, sensations of cold and hunger, and weight loss. What type of alimentary disorder is it?

- A. Protein-energy undernutrition
- B. Vitamin deficiency
- C. Dietary fiber deficiency
- D. Polyunsaturated fatty acid deficiency
- E. Mineral deficiency

72. Employees work in conditions of high dust concentration. Certain chemical (silicon dioxide content) and physical properties of dust aerosols contribute to the development of occupational dust-induced diseases. What is the main physical property of dust aerosols?

- A. Solubility
- B. Ionization
- C. Magnetization
- D. Electric charge
- E. Dispersion

73. A 40-year-old man was brought into a hospital with a closed chest trauma. Examination shows that the right side of his chest lags behind during breathing. Palpation detects a sharp pain in the projection of ribs V, VI, and VII on the anterior axillary line and subcutaneous emphysema on the right side of the torso. Percussion reveals tympanitis over the right-sided segments of the chest. Auscultation detects no breathing on the right and vesicular breathing on the left. What surgical procedure is necessary for this patient?

- A. Splint stabilization of the rib fracture
- B. Immediate thoracotomy
- C. Drainage of the right pleural cavity
- D. Tight bandaging of the chest
- E. Drainage of subcutaneous emphysema

74. A 17-year-old young man demands a plastic surgery. He thinks that it's impossible to live with such an ugly nose as his. He claims that wherever he is, everyone is laughing at him and mocking him behind his back. He walks with a cap pulled low over his face, turns his face downwards, and pulls up his scarf up to his eyes. Objectively, there are no indications for rhinoplasty – the young man has a nearly classical shape of the nose. What psychopathological condition is it?

- A. Body schema disorder
- B. Capgras syndrome
- C. Intrusive thoughts
- D. Dysmorphomania
- E. Hypochondriacal neurosis

75. A 28-year-old woman came to a gynecologist with complaints of infertility for the last 3 years. Her menstrual function

is normal. She has a history of one artificial abortion and chronic salpingo-oophoritis. She uses no contraception. The spermogram of her husband is normal. What method should be used first to determine the cause of this woman's infertility?

- A. Hysteroscopy
- B. Hysterosalpingography
- C. Hormone testing
- D. Laparoscopy
- E. Diagnostic uterine curettage

76. A 62-year-old woman was brought into the admission room with complaints of severe burning retrosternal pain and asphyxia. She has a 10-year-long history of essential hypertension. Objectively her condition is moderately severe. She presents with skin pallor, cyanotic lips, and vesicular respiration over her lungs. The II heart sound is accentuated over the aorta. Blood pressure – 210/120 mm Hg, heart rate (pulse) – 76/min. ECG shows elevation of ST segment in the leads I, AVL, and V5-V6. What is the most likely diagnosis?

- A. Uncomplicated hypertensive crisis
- B. Hypertensive crisis complicated with acute left ventricular failure
- C. Hypertensive crisis complicated with instable angina pectoris
- D. Pulmonary embolism
- E. Hypertensive crisis complicated with acute myocardial infarction

77. A 26-year-old man complains of chills, rhinitis, dry cough, and fever up to 38°C. Examination shows him to be in a moderately severe condition; there are small pale pink non-coalescing spots on the skin of his back, abdomen, and extremities. Palpation reveals enlarged occipital and axillary lymph nodes. No information about vaccination history could be obtained. What is the likely etiology of this disease?

- A. Mumps virus
- B. Streptococcus
- C. Epstein-Barr virus
- D. Neisseria meningitidis
- E. Rubella virus

78. A 73-year-old man has a 5-year-long history of benign prostatic hyperplasia. One morning he developed an acute urinary retention. Catheterization of his bladder is impossible. What urgent aid must be provided for this man?

- A. Adrenergic blockers
- B. Suprapubic bladder tap
- C. Antispasmodics and analgesics
- D. Diuretics
- E. Thermal procedures

79. A 35-year-old man was hospitalized with signs of surgical sepsis that has likely been caused by a large carbuncle in his scapular region. Examination detected secondary purulent foci in the liver and right lung. What stage of surgical sepsis is it?

- A. Terminal stage
- B. Septicopyemia
- C. Purulent resorptive fever
- D. Septicemia
- E. Toxemia

80. A 48-year-old woman was arrived to the surgical unit with wounds in her thigh. On examination the wound surface has dirty-gray coating with unpleasant sweet smell. Wound content resembles raspberry jelly. Skin tissues around the wound are glossy and turgid. Palpation reveals moderate crepitation in the tissues. What microflora is the most likely to cause such inflammation?

- A. Blue pus bacillus
- B. Staphylococci
- C. Anaerobic non-clostridial
- D. Streptococci
- E. Anaerobic clostridial

81. A 62-year-old woman has an acute onset of the disease: high temperature of 39.8°C, chills, intense headache, and aching body. She complains of nausea and one episode of vomiting. 18 hours later, her right inguinal lymph nodes became enlarged and sharply painful. After another 6 hours, she developed edema of the right shin and skin hyperemia with irregular-shaped clear margins. What is the most likely diagnosis in this case?

- A. Bubonic plague
- B. Anthrax, edematous form
- C. Erysipelas, erythematous form
- D. Bubonic tularemia
- E. Phlegmon of the right shin

82. A 36-year-old woman complains of nausea, belching, liquid stool, and a pain in the epigastrium after meals. For the last 2 years the disease has been slowly progressing. Objectively, her skin is pale and dry, her tongue is coated, moist, and has imprints of the teeth on its edges. Abdominal palpation detects a diffuse pain in the epigastrium. What test will be the

most informative in this case and should be conducted next?

- A. Fractional analysis of gastric secretion
- B. Comprehensive complete blood count
- C. Fibrogastroscopy with biopsy of the gastric mucosa
- D. Abdominal CT scan
- E. Gastrointestinal X-ray

83. During medical examination of high and middle school students, the doctors were assessing correlation between biological and calendar age of the school students based on the following criteria: height growth rate per year, ossification of the carpal bones, the number of permanent teeth. What additional development criterion should be assessed at this age?

- A. Body mass
- B. Vital capacity of lungs
- C. Chest circumference
- D. Development of secondary sex characteristics
- E. Hand strength

84. A woman has undergone a surgery for diffuse toxic goiter, degree II. Twelve hours after the surgery, she developed complaints of hoarseness and voice loss, problems with breathing, dyspnea, and anxiety. Her post-surgery wound is normal. What complication developed in this woman?

- A. Postoperative bleeding
- B. Hypoparathyroidism
- C. Thyrotoxic crisis
- D. Tracheal injury
- E. Recurrent laryngeal nerve paresis

85. A 39-year-old man came to a doctor complaining of a pain in his left leg. The disease onset was 2 days ago. Objectively, his body temperature is 37.8°C and he has subcutaneous varicose veins on the inner surface of his left thigh and shin. The skin over the varicose veins is hot and red. The Moses and Homans signs are negative. What is the most likely diagnosis in this case?

- A. Varicose saphenous veins in the left leg
- B. Acute deep vein thrombosis in the left leg
- C. Acute ascending thrombophlebitis of the saphenous veins in the left leg
- D. Postthrombotic syndrome of the left leg
- E. Thrombosis of the tibial arteries on the left

86. Analysis of the population morbidity in a village, located near a chemical factory, shows that within the last several years

the number of gout and esophageal cancer cases has significantly increased. What pollutant of the environment is the likely cause of such dynamics?

- A. Nickel
- B. Manganese
- C. Strontium
- D. Molybdenum
- E. Mercury

**87.** A 38-year-old man has been drinking alcohol excessively for the last 3 years. Three days after a drinking bout, he developed anxiety and fear. He started to see spiders and worms around him, hear accusatory voices, and behave aggressively. He is oriented in himself, but disoriented in time and space. What is the most likely diagnosis in this case?

- A. Pathological intoxication
- B. Alcoholic hallucinosis
- C. Alcoholic encephalopathy
- D. Alcoholic paranoid
- E. Delirium tremens

**88.** When investigating a case of mass poisoning, it was determined that the car mechanics, who tested diesel engines in a repair bay with a broken exhaust ventilation, at the end of their working day developed the following signs: headache, nausea, vomiting, tinnitus, labile pulse. Objectively, their skin and mucosa are cherry-red. What toxic factor has caused mass poisoning of the car mechanics?

- A. Carbon disulfide
- B. Nitrogen oxide
- C. Carbon monoxide
- D. Sulfur dioxide
- E. Carbon dioxide

**89.** A 30-year-old man has received second-degree burns that cover 40% of his body. On the fourth day after the injury, his general condition acutely deteriorated. He developed inspiratory dyspnea, frequent cough with frothy sputum, and cyanotic skin. Auscultation detects numerous wet crackles in the lungs. His blood pressure is 110/60 mm Hg, heart rate – 100/min., respiration rate – 32/min., central venous pressure – 100 mm H<sub>2</sub>O, total protein – 50 g/L, Ht – 30%, Hb – 90 g/L. ECG shows sinus tachycardia. What mechanism of pulmonary edema pathogenesis is the main one in this case?

- A. Pulmonary hypoventilation
- B. Surfactant dysfunction
- C. Hypervolemia of the pulmonary circulation
- D. Decreased contractility of the myocardium
- E. Decreased plasma osmotic pressure

**90.** A 25-year-old woman has been suffering from diabetes mellitus since she was 9. She was admitted into the nephrology unit with significant edemas of the face, arms, and legs. Blood pressure – 200/110 mm Hg, Hb – 90 g/L, blood creatinine – 850 μmol/L, the daily amount of urine is decreased – 200 ml, urine proteins – 1.0 g/L, leukocytes – 10–15 in the vision field. Glomerular filtration rate – 10 mL/min. What tactics should the doctor choose?

- A. Transfer into the hemodialysis unit
- B. Transfer into the endocrinology clinic
- C. Dietotherapy
- D. Kidney transplantation
- E. Active conservative therapy for diabetic nephropathy

**91.** Two weeks after an antibacterial therapy for a febrile illness, a 25-year-old woman developed severe watery diarrhea, colicky abdominal pain, and elevated body temperature. Proctosigmoidoscopy detects focal mucosal lesions with a pale yellow coating. What is the most likely diagnosis in this case?

- A. Crohn's disease
- B. Ischemic colitis
- C. Gastroenteritis
- D. Ulcerative colitis
- E. Pseudomembranous colitis

**92.** A 20-year-old student after failing an exam developed complaints of a sensation of a round foreign body in her throat, difficult swallowing. She fixates on her condition, limits her diet, often cries, seeks attention, exhibits demonstrative attitude. She is highly susceptible to psychotherapeutic suggestion. What psychiatric diagnosis can be made in this case?

- A. Obsessive neurosis
- B. Paranoid personality disorder
- C. Hysterical neurosis
- D. Hypochondriacal neurosis
- E. Depressive neurosis

**93.** A 14-year-old boy complains of fatigability, face edema, headache, and urination in small portions. The urine resembles meat slops in color. The

boy is registered for regular check-ups since the age of 8 because of chronic glomerulonephritis. His blood creatinine is 0.350 mmol/L, blood urea – 10.4 mmol/L. What complication is the most likely cause of this clinical presentation?

- A. Chronic glomerulonephritis
- B. Renal tuberculosis
- C. Chronic renal failure
- D. Chronic circulatory failure
- E. Acute renal failure

94. A 35-year-old man complains of rapidly increasing fatigue, palpitations, «visual snow», dizziness. He has a history of peptic ulcer of the stomach. Objectively the skin is pale. Vesicular respiration is observed in the lungs. Systolic murmur is detected over the cardiac apex, heart rate is 100/min., blood pressure is 100/70 mm Hg. The epigastrium is slightly tender on palpation. Blood test: erythrocytes –  $3.2 \cdot 10^{12}/L$ , Hb – 100 g/L, color index – 0.95. What type of anemia is the most likely present in this case?

- A. Chronic iron-deficiency anemia
- B. Sideroblastic anemia
- C. Hemolytic anemia
- D. Posthemorrhagic anemia
- E. Hypoplastic anemia

95. 40% of the workers, who polish the art glass, using an abrasive disk, and have a long record of employment, are diagnosed with ulnar neuritis, 21% – with vegetative polyneuritis, and 12% – with vegetomyofascitis of the upper limbs. These pathologies are associated with the following harmful factor:

- A. Microclimate
- B. Vibration
- C. Dust
- D. Noise
- E. Electromagnetic field

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

- A. Exicosis
- B. Toxic shock syndrome
- C. Acute renal failure
- D. Neurotoxicosis
- E. Encephalic syndrome

97. A 72-year-old man has been brought into a vascular surgery department with complaints of pain and chills in his legs.

Ultrasound of his leg arteries shows atherosclerotic lesions of the vascular wall. What diagnostic method is necessary to determine the localization and the extent of the pathologic process in this case?

- A. Chest X-ray
- B. Angiography
- C. X-ray of the extremities
- D. ECG
- E. Thermometry

98. A 21-year-old woman came to a surgeon 5 hours after she had scalded her left forearm with boiling water. Objectively, a skin patch 17x10 cm in size had flaccid vesicles; epidermis there was torn and displaced in some areas. The wound bottom was whitish-gray, dry, and its pain sensitivity was reduced. After a treatment with bandages soaked with a solution of furacilin (nitrofuril), levosin, and hiposol, on the 29th day after the burn, the necrotic scab came off, leaving a pink superficial scar in its place. What was the degree of the burn in this case?

- A. I degree burns
- B. IIIA degree burns
- C. IIIB degree burns
- D. IV degree burns
- E. II degree burns

99. The condition of a full-term newborn deteriorated on the first day of life. The baby was born from the third pregnancy, during the second half of which gestosis was observed. The mother's blood group is 0(I) Rh(-). Examination shows that the baby is inert and has icteric skin and mucosa; baby's urine and stool are of normal color. Blood serum bilirubin is 248 mcmmol/L, because of indirect bilirubin levels. What is the most likely cause of this pathologic condition?

- A. Rh incompatibility
- B. Physiological jaundice
- C. Fetal hepatitis
- D. ABO incompatibility
- E. Biliary atresia

100. A 50-year-old man complains of general weakness, dizziness, periodical episodes of unconsciousness, and an intense pain in the small of his back and right subcostal region. These signs appeared after an accident at a paint factory, where he works. His skin is earth-gray and his sclerae are icteric. He has acrocyanosis. His blood pressure is 100/60 mm Hg. His heart sounds are muffled. His liver is +3 cm and has a dense edge. Blood test shows the following: erythrocytes –

$2.0 \cdot 10^{12}/L$ , Hb – 90 g/L, Heinz-Ehrlich bodies, leukocytes –  $5.6 \cdot 10^9/L$ , ESR – 15 mm/hour, methemoglobin – 62%, total bilirubin – 84.0  $\mu\text{mol}/L$ , indirect bilirubin – 71.7  $\mu\text{mol}/L$ . What is the most likely diagnosis in this case?

- A. Acute viral hepatitis
- B. Acute aniline poisoning
- C. Chronic cyanide poisoning
- D. Acute toluene poisoning
- E. Acquired hemolytic anemia

**101.** Anthropometric measurements are widely used to study the physical development of children and teenagers. What measurement is the functional one?

- A. Weight measurement
- B. Determining the shape of the backbone
- C. Determining the shape of the chest
- D. Measuring the vital capacity of the lungs
- E. Height measurement

**102.** A 35-year-old pregnant woman with hypertension, developed edemas and headache at the 33 week of her pregnancy. Objectively her general condition is satisfactory, blood pressure – 160/100 mm Hg, normal uterine tone. Fetal heart rate is 140/min., rhythmic. She was diagnosed with daily proteinuria – 4 g/L, daily diuresis – 1100 mL. Creatinine – 80  $\mu\text{mol}/L$ , urea – 7 mmol/L, platelets –  $100 \cdot 10^9/L$ . What complication of pregnancy occurred?

- A. Hypertensive crisis
- B. Moderate preeclampsia
- C. Severe preeclampsia
- D. Renal failure
- E. Mild preeclampsia

**103.** A 25-year-old woman was hospitalized into the gynecological department with complaints of pain in her lower abdomen and high temperature of 39.7°C. Objectively, her blood pressure is 120/80 mm Hg, pulse – 108/min., of satisfactory strength and volume. The abdomen is moderately distended and sharply painful in its lower segments. The Bloomberg's sign is positive in the hypogastrium. During vaginal examination, the uterus and its appendages cannot be palpated because of anterior abdominal wall rigidity. The posterior vaginal fornix is overhanging and sharply painful. What is the most likely diagnosis in this case?

- A. Pelvioperitonitis
- B. Acute endometritis
- C. Ectopic pregnancy
- D. Acute adnexitis
- E. Ovarian apoplexy

**104.** A 7-year-old boy after a fall from a height presents with rapid and shallow breathing and cyanotic face. The right half of his thorax is distended and takes no part in the respiration. Percussion detects tympanitis in the affected area, while auscultation detects no breathing there. What pathology is the most likely cause of this clinical presentation? What instrumental examination would be the most informative in this case?

- A. Right-sided hemothorax. Survey X-ray of the chest
- B. Tension cyst of the right lung. Tracheobronchoscopy
- C. Airway foreign body. Diagnostic and therapeutic bronchoscopy
- D. Right-sided tension pneumothorax. Chest X-ray
- E. Mediastinitis. Survey X-ray of the chest

**105.** A 13-year-old girl was brought into the gynecological department with complaints of profuse bloody discharge from her genital tracts for the last 10 days. Menarche was at the age of 11, the menstrual cycle is irregular. Rectoabdominal examination detects no pathology. Make the provisional diagnosis:

- A. External genital tract injury
- B. Adenomyosis
- C. Werlhof's disease (immune thrombocytopenic purpura)
- D. Endometrial polyp
- E. Juvenile uterine bleeding

**106.** A 25-year-old parturient woman is hospitalized with contractions that have been occurring for 12 hours already. The contractions last 25 seconds, while the intervals between them last 3–4–7 minutes. The contractions are irregular and sharply painful, with pain spreading upwards from the lower uterine segment. The baby is in the cephalic presentation, the head is pressed to the entrance into the lesser pelvis. Uterine hypertonus is observed. Internal obstetric examination shows that the cervix is smoothed out and the opening of the external orifice of uterus is 3 cm. The amniotic sac is intact. Make the provisional diagnosis:



- A. Primary weakness of the labor activity
- B. Discoordinated labor activity
- C. Cervical dystocia
- D. Secondary weakness of the labor activity
- E. Physiological course of the labor

107. A man suffers from urolithiasis and periodically develops hyperoxaluria. What products should be reduced in his diet?

- A. Canned soup
- B. Dairy products
- C. Meat, fish
- D. Sorrel, spinach, tomatoes
- E. Fatty foods

108. A 12-year-old girl for two weeks presents with periodical body temperature elevations to 39°C, spindle-shaped swelling of the interphalangeal joints, pain in the upper chest and neck, and morning stiffness. What is the most likely diagnosis?

- A. Osteoarthritis
- B. Rheumatism
- C. Toxic synovitis
- D. Juvenile rheumatoid arthritis
- E. Septic arthritis

109. A 20-year-old man suffers from headache, general weakness, and face edema that appears in the morning. 18 days earlier he had a case of tonsillitis. Objectively, his skin is pale, there are edema under his eyes. Heart rate is 60/min., blood pressure is 185/100 mm Hg. The sign of costovertebral angle tenderness (punch sign in the lumbar region) is negative. Urinalysis: color of «meat slops», protein – 4.5 g/L, altered erythrocytes – 40–45 in the vision field, leukocytes – 5–6 in the vision field. 24-hour diuresis is 400 mL. What is the most likely diagnosis?

- A. Renal amyloidosis
- B. Urolithiasis
- C. Acute pyelonephritis
- D. Systemic lupus erythematosus
- E. Acute glomerulonephritis

110. In the factory cafeteria there was an outbreak of food poisoning. Clinical presentation indicates staphylococcal etiology of this disease. 15 people are sick. To confirm the diagnosis of food poisoning, samples need to be sent to the laboratory. What samples should be obtained to find out the etiological factor of this food poisoning?

- A. Vomit masses
- B. Urine
- C. Blood (complete blood count)
- D. Saliva
- E. Blood for hemoculture

111. A 48-year-old woman complains of disturbed menstrual cycle: her periods last for 7–9 days and are excessively profuse throughout the last half-year. She notes occasional hot flashes in her head, insomnia, irritability, and headaches. Her skin is of normal color. Blood pressure – 150/90 mm Hg, pulse – 90/min., rhythmic. The abdomen is soft and painless. Bimanual examination shows no uterine enlargement, the appendages cannot be detected. The vaginal fornices are free. What is the most likely diagnosis?

- A. Adrenogenital syndrome
- B. Premenstrual syndrome
- C. Uterine myoma
- D. Stein-Leventhal syndrome (polycystic ovary syndrome)
- E. Climacteric syndrome

112. A 39-year-old man suffers from chronic rheumatic heart disease. He complains of dyspnea during physical exertion, cough with expectoration, and palpitations. Auscultation detects intensified I heart sound and diastolic murmur; the sound of opening mitral valve can be auscultated at the cardiac apex. The II heart sound is accentuated over the pulmonary artery. The patient is cyanotic. X-ray shows dilated pulmonary root and enlargement of the right ventricle and left atrium. What is the most likely diagnosis?

- A. Pulmonary artery stenosis
- B. Aortic stenosis
- C. Patent ductus arteriosus
- D. Mitral stenosis
- E. Coarctation of the aorta

113. A 30-year-old man complains of itching and a rash on the skin of his feet. The disease onset was 3 years ago. Objectively, on the soles of his feet there are clusters of vesicles that resemble boiled sago beans, as well as erosions with flaps of macerated epidermis on the periphery of the foci. Interdigital folds on both feet have fissures and erosions. What is the most likely pathology in this case?

- A. Dermatitis
- B. Epidermophytosis of the feet
- C. Psoriasis
- D. Rubrophytia of the feet
- E. Secondary syphilis

**114.** An 8-year-old girl after a case of acute respiratory infection has been complaining for the last 2 weeks of a pain in the area of her heart and palpitations. Objectively, her body temperature is febrile, her skin is pale, the heart borders are extended to the left, heart rate is 142/min. The girl presents with paired atrial extrasystoles, dull heart sounds, and a low intensity systolic murmur that reaches its maximum at point 5. Make the provisional diagnosis:

- A. Somatoform vegetative dysfunction
- B. Endocarditis
- C. Myocarditis ✓
- D. Functional changes in the heart
- E. Congenital heart disease

**115.** A man diagnosed with closed-angle glaucoma, grade IIa, of the right eye is registered for regular medical check-ups. In the evening an acute glaucoma attack occurred in his right eye; an ambulance was called. What emergency aid would be optimal in this case?

- A. Sulfacetamide sodium eye drops
- B. Antibiotic eye-drops, broad-spectrum
- C. Dexamethasone eye drops
- D. Atropine eye drops
- E. Pilocarpine, Diacarb (Acetazolamide), lytic mixture

**116.** A 16-year-old teenager has been bitten by a dog. The bites are located in the area of face and fingertips. The dog is a stray and cannot be observed. Primary surgical treatment of the wound was performed without removal of the wound edges. What tactics should be chosen by a doctor for rabies prevention?

- A. Prescribe anti-rabies immunoglobulin and anti-rabies vaccine ✓
- B. Prescribe anti-rabies immunoglobulin and ribavirin
- C. Prescribe anti-rabies vaccine and ribavirin
- D. Prescribe human immunoglobulin and ribavirin
- E. Prescribe anti-rabies vaccine and human immunoglobulin

**117.** A 55-year-old woman complains of a recurrent diarrhea, peeling and pigmentation of the exposed areas of her skin (neck, hands, and feet), irritability, and anxiety. What vitamin deficiency is it?

- A. Thiamine
- B. Riboflavin
- C. Retinol
- D. Pantothenic acid
- E. Nicotinic acid ✓

**118.** A 32-year-old man has been hospitalized with fever episodes that are accompanied by excessive sweating and occur every 48 hours. Twelve years ago he was in military service in Tajikistan, where he had a case of malaria. Objectively, his sclerae are subicteric, his skin is pale, the liver is dense and enlarged by 2 cm, the spleen is enlarged by 5 cm. What test is necessary to clarify and confirm the diagnosis in this case?

- A. Microscopy of the thick drop and blood smear
- B. Biochemical blood test
- C. Serological blood test
- D. Serum bilirubin levels
- E. Serum activity of ALT and AST enzymes

**119.** In the computer lab of the research sector at a polytechnic institute, the workstations of laboratory technicians are located close in front of the screens. Throughout their whole working day, the technicians are exposed to the electromagnetic waves of ultra high frequencies. Exposure to intense electromagnetic waves of such frequency is especially dangerous for the:

- A. Pain sensitivity
- B. Visual analyzer
- C. Sensory sensitivity
- D. Hearing analyzer
- E. Tactile sensitivity

**120.** A baby is 4 days old. The baby's condition after birth is severe (tonic-clonic seizures, no newborn reflexes). The muscle tone is asymmetrical. The large fontanelle exhibits increased pulsation and is 3x3 cm in size. The baby's respiration rate is 32/min., with apnea episodes. The heart sounds are clear and rhythmical, the heart rate is 122/min. Neurosonogram shows enlarged lateral ventricles with echopositive inclusions in the ependyma. What is the most likely cause of the child's condition in this case?

- A. Hydrocephalus
- B. Spinal cord birth injury
- C. Meningitis
- D. Intraventricular hemorrhage
- E. Respiratory distress syndrome

**121.** A 7-day-old girl is markedly inert and suffers from recurrent (sometimes

projectile) vomiting, liquid stools, exicosis, and marked progressing hypotension. She gains no weight. Her skin is earthy gray and her nipples are pigmented. She presents with enlarged clitoris, incomplete union of the vulvar lips, and incomplete separation of the urethra and vagina. She has marked hyperkalemia and hyponatremia, metabolic acidosis, and hypoglycemia. Her blood aldosterone levels are low, while her plasma renin activity is high. Make the provisional diagnosis:

- A. Adrenogenital syndrome, simple-virilizing form
- B. Turner syndrome
- C. Adrenogenital syndrome, hypertensive form
- D. Hermaphroditism
- E. Adrenogenital syndrome, salt-wasting form

122. A 10-year-old girl was hospitalized with signs of carditis. According to her medical history, two weeks ago she had an exacerbation of chronic tonsillitis. What etiological factor is the most likely in this case?

- A. Streptococcus
- B. Proteus
- C. Staphylococcus
- D. Klebsiella
- E. Pneumococcus

123. A 39-year-old woman complains of high body temperature of  $37.8^{\circ}\text{C}$  that persists for two days already, frequent urination, and a dull lumbar pain. These signs appeared for the first time, after an overexposure to cold. During physical examination, palpation of the renal region is painful. Urinalysis shows the following: pH - alkaline, protein - 0.099 g/L, leukocytes cover the whole vision field, erythrocytes - 0 in the vision field, cylinders - 0 in the vision field. Complete blood count shows the following: hemoglobin - 140 g/L, leukocytes -  $9.2 \cdot 10^9/\text{L}$ , ESR - 30 mm/hour. What medicine should be chosen for empiric antibiotic therapy in this case?

- A. Ciprofloxacin
- B. Amikacin
- C. Amoxicillin
- D. Trimethoprim/sulfamethoxazole
- E. Fosfomycin

124. A 3-year-old boy was hospitalized in a severe condition. Objectively, he has somnolence, hyperreflexia, convulsions, hyperesthesia, and intractable vomiting. His body temperature is  $39.9^{\circ}\text{C}$ , heart rate - 160/min., blood pressure - 80/40 mm Hg.

What test must be conducted first in this case?

- A. Echoencephalography
- B. Skull X-ray
- C. Cranial CT scan
- D. Rheoencephalography
- E. Lumbar puncture

125. A 68-year-old man diagnosed with acute myocardial infarction is in an intensive care unit. Suddenly he fell unconscious. Objectively, his pulse and blood pressure cannot be detected. ECG shows frequent irregular waves of varying shape and amplitude. What complication occurred in this patient?

- A. Ventricular fibrillation
- B. Asystole
- C. Pulmonary embolism
- D. Acute heart failure
- E. Paroxysmal ventricular tachycardia

126. A 40-year-old woman after an unsuccessful treatment by a neurologist was referred to a gynecologist. She complains of swollen breasts, depression intermitted with aggression, weakness, tearfulness, numb arms, and meteorism that appear 2-3 days before a menstruation and disappear after the menstruation is over. She considers herself ill for the last 2 years. Gynecological examination detects no pathologic changes in her genitals. She was diagnosed with premenstrual syndrome. What clinical form of premenstrual syndrome is the most likely in this case?

- A. Crisis
- B. Edematous
- C. Neuropsychic
- D. Cephalgic
- E. Mixed

127. A 28-year-old woman complains of weakness, dizziness, nosebleeds, and hemorrhages on her torso. The condition onset was 4 months ago. Objectively, her condition is of moderate severity. There are multicolored painless hemorrhages 1-2 cm in size on her back and abdomen. The peripheral lymph nodes are not enlarged. The liver is (-), the spleen is (+). Blood test shows the following: Hb - 120 g/L, erythrocytes -  $3.4 \cdot 10^{12}/\text{L}$ , color index - 0.9, reticulocytes - 0.9%, serum iron - 15.01  $\mu\text{mol}/\text{L}$ , leukocytes -  $4.2 \cdot 10^9/\text{L}$ , eosinophils - 2%, basophils - 0%, band neutrophils - 7%, segmented neutrophils - 40%, monocytes - 6%, lymphocytes - 45%, platelets -  $47.1 \cdot 10^9/\text{L}$ , ESR - 27 mm/hour.

What is the most likely diagnosis in this case?

- A. Idiopathic thrombocytopenic purpura
- B. Hemolytic anemia
- C. Chronic iron-deficiency anemia
- D. Hypoplastic anemia
- E. Chronic lymphocytic leukemia

**128.** A 46-year-old woman has diarrhea with abdominal distension, loss of body mass, and large amounts of porridge-like foul-smelling stool without blood streaks or tenesmus. Objective examination detects moderate tenderness in the mesogastrium and left abdominal flank. Stool analysis detects steatorrhea with neutral fat and creatorrhea. What prescription would be the most advisable in this case?

- A. Multi-enzyme preparations
- B. Anticholinergic drugs and antibacterial agents
- C. Metronidazole and loperamide
- D. Antacids and antispasmodics
- E. Anticholinergic drugs

**129.** A 35-year-old woman, a polisher, complains of chills, cold bluish fingertips, low mobility of her hand joints, and a contracted sensation in the skin of her face and hands. Examination detects amimia, pouch-like pursing of the mouth, thickened skin of cheeks and hands, pale and cold fingertips. A handbox resonance and isolated fine inspiratory crackles can be heard over the lungs. Blood test shows the following: erythrocytes –  $3.8 \cdot 10^{12}/L$ , leukocytes –  $4.8 \cdot 10^9/L$ , ESR – 45 mm/hour. CRP ++. What is the most likely diagnosis in this case?

- A. Raynaud's disease
- B. Obliterating endarteritis of the extremities
- C. Myxedema
- D. Vibration disease
- E. Systemic scleroderma

**130.** A 58-year-old man complains of weakness and tumor-like formations that appeared on the anterior surface of his neck and in the inguinal region. Palpation detects soft painless mobile cervical and inguinal lymph nodes up to 2 cm in diameter. The liver protrudes by 2 cm from the edge of the costal margin, the lower splenic pole is at the umbilical level. In blood: erythrocytes –  $3.5 \cdot 10^{12}/L$ , Hb – 88 g/L, leukocytes –  $86 \cdot 10^9/L$ , band neutrophils – 1%, segmented neutrophils – 10%, lymphocytes – 85%, eosinophils

– 2%, basocytes – 0%, monocytes – 2%, erythrocyte sedimentation rate – 15 mm/hour, Gumprecht shadows. What is the most likely diagnosis?

- A. Chronic myeloid leukemia
- B. Lymphogranulomatosis
- C. Acute leukemia
- D. Chronic lymphoid leukemia
- E. Lymphocytic leukemoid reaction

**131.** A 17-year-old girl complains of a pain and swelling of her second finger on the right hand. Three days ago she made a manicure. The pain developed on the second day after that. Objectively, her nail fold is swollen, hyperemic, overhangs the nail plate, and is painful on palpation. What is the most likely diagnosis in this case?

- A. Erysipeloid
- B. Subcutaneous panaritium
- C. Cutaneous panaritium
- D. Subungual panaritium
- E. Paronychia

**132.** Having examined a 52-year-old patient, the doctor diagnosed him with obesity (body mass index –  $34 \text{ kg/m}^2$ , waist circumference – 112 cm) and arterial hypertension (170/105 mm Hg). 2-hour postprandial blood sugar is 10.8 mmol/L. What biochemical blood analysis needs to be conducted to diagnose the patient with metabolic syndrome X?

- A. Calcium and phosphorus
- B. Bilirubin
- C. Creatinine and urea
- D. Lipid profile
- E. Electrolytes

**133.** A 29-year-old woman complains of a general weakness, increased fatigability, weight loss, and infrequent scanty periods. One year ago she had a childbirth, complicated with a massive bleeding. Objectively, the woman is asthenic, her skin is pale and dry, the hair cover is thin on her scalp and absent in her armpits. Her mammary glands and genitals are hypotrophic. Make the provisional diagnosis:

- A. Anorexia nervosa
- B. Sheehan's syndrome
- C. Pituitary tumor
- D. Asthenoneurotic syndrome
- E. Hypoplastic anemia

**134.** A 72-year-old man on the 7th day after a surgical reposition of an intertrochanteric hip fracture has suddenly developed dyspnea and an intense pain in the left

side of his chest. Examination reveals distended cervical veins and cyanosis. His respiration rate is 26/min. Auscultation detects weakened breathing over the left lung. Heart rate – 98/min. Blood pressure – 120/70 mm Hg. CT scan shows significant disappearance of the lung pattern on the left. Echocardiography shows no signs of right ventricle overload. What next step will be the most advisable in this case?

- A. Prescribing low molecular weight heparin
- B. Surgical embolectomy
- C. Prescribing aspirin (acetylsalicylic acid)
- D. Thrombolytic injection into the left pulmonary artery
- E. Installing a vena cava filter

135. You witnessed a car accident. When examining the place of the accident you noticed a man of about 30 years, who was hit by the car. He is unconscious. On his neck on the left there is a profuse hemorrhage with bright-red blood. How to stop this hemorrhage?

- A. Apply a plaster cast
- B. Digital occlusion, Mikulich method ✓
- C. Maximal hyperextension of the neck
- D. Put him in a stable position
- E. Apply a neck brace

136. A one-month-old child regurgitates every time after being put to bed after a breastfeeding. Pediatrician's examination revealed no pathology in the child's condition. The doctor explained the regurgitations as a result of digestive system built, characteristic for this age, and gave advise, how to take care of the child in this case. What advise is it?

- A. Abdominal massage
- B. Give a pacifier immediately after breastfeeding
- C. Upright position of the baby immediately after feeding
- D. Thermal compresses to the stomach
- E. Prone position of the baby after feeding

137. A 35-year-old man after an overexposure to cold developed complaints of frequent painful urination in small portions, elevated body temperature of 38.6°C that persists for 24 hours already, and chills. Digital rectal examination detects enlarged and painful prostate. Blood test shows leukocytosis of  $14.2 \cdot 10^9/L$ , while urinalysis detects leukocyturia of 20–25 in the vision field. What is the most likely diagnosis in this case?

- A. Bladder tumor
- B. Acute cystitis ✓
- C. Acute prostatitis
- D. Prostatic hyperplasia
- E. Gonorrhea

138. A man complains of a headache, problematic breathing through the nose, and purulent discharge from the nose that are observed for the last 3 months. Four months ago he underwent a treatment of his upper right premolar. X-ray shows a shadow over the right maxillary sinus. Its diagnostic puncture yielded a large amount of thick foul-smelling granulated pus. What is the most likely diagnosis in this case?

- A. Chronic purulent odontogenic maxillary sinusitis
- B. Chronic atrophic maxillary sinusitis
- C. Chronic purulent maxillary sinusitis
- D. Acute purulent maxillary sinusitis
- E. Maxillary sinus tumor

139. A 43-year-old man, a coal-face worker with a 15-year-long record of work, complains of cough, thoracic pain, and dyspnea. The cough is mild, usually dry, occurs mostly in the morning. The pain is localized in the interscapular region and aggravates during a deep intake of breath. Dyspnea occurs during physical exertion. Vesicular respiration in the lungs is weakened. Heart sounds are rhythmic, heart rate is 86/min., blood pressure is 135/80 mm Hg. The abdomen is soft and painless. X-ray shows micronodular pulmonary fibrosis. Make the provisional diagnosis:

- A. Siderosis ✓
- B. Berylliosis
- C. Carboconiosis ✓
- D. Byssinosis
- E. Metal pneumoconiosis

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

- A. Acute pulmonary inflammation
- B. Stenosing laryngotracheobronchitis ✓
- C. Bronchial asthma
- D. Acute bronchitis
- E. Acute bronchiolitis

141. An 18-year-old young man during hospitalization complains of general weakness, body temperature of 37.5°C, loss of appetite, nausea, heaviness in the right subcostal region, and discolored stool and

urine. The disease onset was 5 days ago. Objectively, his skin and sclerae are slightly icteric. The liver protrudes by 3 cm and is tender to palpation. Patient's urine is dark brown, while his stool is light-colored. He usually drinks water from a tap. What is the most likely diagnosis in this case?

- A. Viral hepatitis B
- B. Typhoid fever
- C. Malaria
- D. Viral hepatitis A
- E. Leptospirosis

142. A 55-year-old woman complains of pain and popping sounds in her left knee joint, which occur when she climbs the stairs. Occasionally, during movements her joint becomes «stuck». 5 years ago she received a trauma of the left knee. Complete blood count and biochemical blood analysis show normal results. X-ray shows marked osteosclerosis and osteophytes. The joint space is narrowed. Make the provisional diagnosis:

- A. Osteoarthritis
- B. Reactive arthritis
- C. Gouty arthritis
- D. Psoriatic arthritis
- E. Rheumatoid arthritis

143. To fight against the tobacco smoking, Ukraine has ratified the World Health Organization Framework Convention on Tobacco Control and prohibited public smoking. What type of prevention is it?

- A. Public prevention
- B. Individual prevention
- C. Primary prevention
- D. Secondary prevention
- E. Tertiary prevention

144. A 42-year-old man has received a polytrauma in a car accident: closed displaced fractures of his right humerus and the bones of his left forearm and a closed blunt abdominal trauma. He was brought into the admission room 30 minutes after the trauma. His skin is pale. His blood pressure is 90/20 mm Hg, the fracture sites are deformed and painful. The abdomen is rigid and its palpation causes sharp pain. The Bloomberg's sign is positive. What medical procedures must be performed first in this case?

- A. Infusion therapy to stabilize the blood pressure
- B. Additional examination to determine the exact diagnosis
- C. Fracture blockade with a topical anesthetic
- D. Immobilization of the fractures, pain relief
- E. Urgent laparotomy

145. A 22-year-old woman complains of itching and profuse discharge from her genital tracts. The condition developed 10 days ago after a sexual contact. Bacterioscopy of a discharge sample detected trichomonads. What drug should be prescribed for treatment in this case?

- A. Zovirax (Acyclovir)
- B. Ampiox (Ampicillin + Oxacillin)
- C. Erythromycin
- D. Metronidazole
- E. Valtrex (Valaciclovir)

146. After semolina was introduced into the diet, a 1-year-old child for 2 months has been presenting with loss of appetite, irritability, loss of body mass, and loss of previously learned skills. The feces are copious and foul-smelling. The skin is pale and dry, the hair is brittle. The abdomen is distended, while the limbs are thin. Stool test shows high levels of fatty acids. What is the most likely diagnosis?

- A. Celiac disease
- B. Lactase deficiency
- C. Irritable bowel syndrome
- D. Functional diarrhea
- E. Mucoviscidosis (cystic fibrosis)

147. A 38-year-old man has been for many years suffering from epilepsy. Three days ago he had an episode of clouded consciousness that started suddenly and was accompanied by anger. In this state he was speaking nonsense, breaking furniture, and hit his wife. He remained in this state for about an hour, after which he fell asleep. Later he was claiming that he didn't remember any of the events that had happened during the episode. What is the most likely definition of this condition?

- A. Fugue state
- B. Ambulatory automatism
- C. Twilight state
- D. Trance
- E. Amentive state

148. A 28-year-old man after lifting a weight felt an intense lumbar pain that irradiated to the right leg. He made an appointment with a doctor.

After examination, the doctor diagnosed him with acute discogenic lumbosacral radiculitis. What additional examination is necessary to confirm this diagnosis?

- A. Kidney X-ray
- B. Lumbar MRI
- C. Electromyography of the leg muscles.
- D. Lumbar puncture
- E. Urinalysis

149. A 60-year-old man came to a hospital complaining of a bursting sensation behind his sternum that develops during fast walking and physical exertion. The pain lasts for approximately 5 minutes and passes on its own in a resting state. Objectively, his pulse is 75/min., blood pressure - 140/80 mm Hg. The heart borders are normal. Heart sounds are slightly weakened, rhythmic, and clear. ECG shows no changes. Make the provisional diagnosis:

- A. Intercostal neuralgia
- B. Myositis
- C. Exertional angina pectoris
- D. Somatoform autonomic dysfunction
- E. Variant angina pectoris

150. On the 5th day after giving birth a postparturient woman complains of a pain in her left mammary gland and body temperature up to 38.1°C. Examination shows that her mammary gland is enlarged and painful on palpation, the nipple is edematous and has fissures, the upper external quadrant of the gland is hyperemic. Name the measures that would have prevented the development of this complication in the patient:

- A. Feeding on schedule
- B. Feeding on demand, expression of breast milk, prevention of nipple fissures
- C. Feeding no longer that 10 minutes through an overlay
- D. Constant expression of breast milk
- E. Stop breastfeeding when fissures appear