FEDERAL STATE BUDGET EDUCATIONAL INSTITUTION OF HIGHER EDUCATION
"ROSTOV STATE MEDICAL UNIVERSITY" OF THE MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION

FACULTY OF TREATMENT AND PREVENTION

Evaluation materials

in the discipline "General Surgery"

Specialty 05/31/01 “General Medicine”

2023

1. **List of competencies formed by the discipline (in full orpartially)***

general professional (OPK):

Code and name of general professional competence	Indicator(s) of achieving general professional competence
OPK-4: Able to use medical devices provided for in the procedure for providing medical care, as well as conduct examinations of the patient in order to establish a diagnosis	ID1 OPK-4 Able to use medical devices during diagnostic studies provided for in the procedures for providing medical care ID2 OPK-4 Able to apply diagnostic methods, including the use of instrumental methods, when conducting examination of the patient to establish a diagnosis
OPK-7 Able to prescribe treatment and monitor its effectiveness and safety	ID 1 GPC-7 Knows modern drug and combination treatment regimens in accordance with the standards of medical care ID 2 OPK-7 Able to recognize signs of typical complications during pharmacotherapy with the aim of its timely correction ID 3 OPK-7 knows prescribing schemes for safe combinations of drugs drugs in accordance with clinical recommendations

professional (PC)

Code and name of professionalcompetencies	Indicator(s) of professional achievementcompetencies
PC-3: Prescribing treatment and monitoring its effectiveness and safety	ID PK3 Labor actions Development of a treatment plan for a disease or condition, taking into account the diagnosis, age and clinical picture in accordance with the current procedures for the provision of medical care, clinical recommendations (treatment protocols) for the provision of medical care, taking into account the standards of medical care. Prescribing medications, medical devices and nutritional therapy, taking into account the diagnosis, age and clinical picture of the disease and in accordance with the current procedures for the provision of medical care, clinical recommendations (treatment protocols) on the provision of medical care, taking into account the standards of medical care Prescription of non-drug treatment taking into account diagnosis, age and clinical

	pictures of the disease in accordance Withcurrent procedures for providing medical care, clinical recommendations (treatment protocols) on the provision of medical care, taking into account the standards of medical carePerformance assessment securityuse of medications, medical products, medical nutrition and other treatment methods **Required skills**Draw up a treatment plan for the disease and the patient's condition, taking into account the diagnosis, age of the patient, clinical picture of the disease in accordance with current proceduresproviding medical help,clinical recommendations (treatment protocols) on the provision of medical care, taking into account the standards of medical care Prescribe medications medical products and nutritional therapy, taking into account diagnosis, age and clinicalpictures of the disease in accordance Withcurrent procedures for providing medical assistance, clinical recommendations (treatment protocols) on the provision of medical care, taking into account the standards of medical carePrescribe non-drug treatment with taking into account diagnosis, age and clinicalpictures of the disease in accordance Withcurrent procedures for providing medical assistance, clinical recommendations (treatment protocols) on the provision of medical care, taking into account the standards of medical careEvaluate effectiveness safetyuse of medications, medical products and medical nutrition Necessary**knowledge** Modernmethods of using medicinal drugs, medical products Andtherapeutic nutrition for diseases and conditions of the patient in accordance with the current procedures for the provision of medical care, clinical recommendations (treatment protocols) on the provision of medical care, taking into account the standards of medical care Mechanism of action of drugs drugs, medical devices and

	therapeutic nutrition, medical indications andany contraindications application;complications caused by their useModern methods of non-drug treatment of diseases and conditions in a patientAccording to current procedures providing medical help,clinical recommendations (treatment protocols) on the provision of medical care, taking into account the standards of medical care Mechanism of action of non-drug treatment; medical indications and contraindications for its use; side effects, complications caused by its use

2. Types of assessment materials in accordance with formedcompetencies

Name of competency	Types of assessment materials	number of tasks **for 1 competency**
OPK-4	Closed tasks	25 with sample answers
	QuestsOpen type:Situational tasks Interview Questions	72 with standard answers 3 with standard answers
OPK-7	Closed tasks	25 with sample answers
	QuestsOpen type:Situational tasks Interview Questions	55 with standard answers 20 with standard answers
PK-3	Closed tasks	25 with sample answers
	QuestsOpen type:Situational tasks Interview questions	55 with standard answers 20 with standard answers

OPK-4:

Closed tasks

TASK 1. Instructions: Choose one correct answer.
Specify the most characteristic signs of bleeding from the esophagus:
1. Vomit the color of coffee grounds
2. Vomiting of unchanged blood with clots
3. Tarry stool
4. Dark cherry chair
5. Discharge of scarlet blood from the anus

*Sample answer:*2. Vomiting of unchanged blood with clots

TASK 2. Instructions: Choose one correct answer.
Specify the most characteristic signs of bleeding from the duodenum:
1. Vomit the color of coffee grounds
2. Vomiting of unchanged blood with clots

3. Tarry stool
4. Dark cherry chair
5. Discharge of scarlet blood from the anus

*Sample answer:*3. Tarry stools

TASK 3. Instructions: Choose one correct answer.
If the blood obtained during puncture of the pleural cavity does not clot, this indicates:
1. Stop bleeding
2. Continued bleeding
3. Lung damage
4. Open pneumothorax

*Sample answer:*1. Stop bleeding

TASK 4. Instructions: Choose one correct answer.
Which method of determining blood loss is the most informative?
1. Determination of the Algover shock index
2. Determination of hematocrit
3. Definition of BCC
4. Determination of the number of red blood cells
5. Van Slyke-Phillips method
6. Determination of blood pressure.

*Sample answer:*3. Definition of BCC

TASK 5. Instructions: Choose one correct answer.
The Algover shock index is:
1. Ratio of pulse to systolic blood pressure
2. Ratio of systolic blood pressure to pulse
3. Ratio of pulse to diastal blood pressure
4. Diastal blood pressure to pulse ratio

*Sample answer:*1. Ratio of pulse to systolic blood pressure

TASK 6. Instructions: Choose one correct answer.
A test for individual blood compatibility is carried out between:
1. Donor serum and recipient serum.
2. Recipient serum and donor blood.
3. Donor's blood and recipient's blood.
4. Donor serum and recipient red blood cells.

*Sample answer:*2. Recipient serum and donor blood

TASK 7. Instructions: Choose one correct answer.
How is a biological compatibility test performed during blood transfusion?
1. 3-fold jet injection of 15-20 ml of blood with an interval of 3-5 minutes.
2. 3-fold injection of 10 ml of blood with an interval of 10 minutes.
3. 2-fold injection of 15 drops of blood with an interval of 5 minutes.
4. 2-fold jet injection of 15-20 ml of blood with an interval of 3-5 minutes.

*Sample answer:*1. 3-fold jet injection of 15-20 ml of blood with an interval of 3-5 minutes

TASK 8. Instructions: Choose one correct answer.
How is a test for individual group compatibility performed during blood transfusion?
1. On a Petri dish, a drop of donor blood and a drop of recipient blood are mixed in

ratio 1:10, the reaction takes place in a water bath for 10 minutes
2. On a Petri dish, a drop of the recipient's blood serum is mixed with a drop of the donor's blood serum in a ratio of 1:20, the reaction proceeds at room temperature for 5 minutes.
3. On a Petri dish, a drop of the recipient's blood serum is mixed with a drop of donor blood in a ratio of 1:10, the reaction proceeds at room temperature for 5 minutes.
*Sample answer:*3. On a Petri dish, a drop of the recipient's blood serum is mixed with a drop of donor blood in a ratio of 1:10, the reaction proceeds at room temperature for 5 minutes.

TASK 9. Instructions: Choose one correct answer.
How is the Rh compatibility test carried out with 33% polyglucin?
1. 2 drops of recipient blood serum, 1 drop of donor blood and 1 drop of 33% polyglucin are mixed in a test tube, shaken for 5 minutes, 3-5 ml of saline is added, the reaction is assessed
2. 1 ml of recipient blood serum, 1 ml of donor blood and 1 ml of 33% polyglucin are mixed in a test tube, shaken for 15 minutes, 10 ml of saline is added, the reaction is assessed
3. 1 drop of recipient blood serum, 1 drop of donor blood and 1 drop of 33% polyglucin are mixed on a Petri dish, the reaction is assessed
*Sample answer:*1. Mix 2 drops of recipient blood serum, 1 drop of donor blood and 1 drop of 33% polyglucin in a test tube, shake for 5 minutes, add 3-5 ml of saline, evaluate the reaction

TASK 10. Instructions: Choose one correct answer.
The biological test for transfusion of blood substitutes includes:
1. 3-fold injection of 15 ml of solution with an interval of 5 minutes
2. 2-fold injection of 10 ml of solution with an interval of 10 minutes
3. 2-fold injection of 10 and 30 drops of solution with an interval of 2-3 minutes
*Sample answer:*3. 2-fold injection of 10 and 30 drops of solution with an interval of 2-3 minutes

TASK 11 Instructions: Choose one correct answer.
Is it necessary to perform an X-ray of a joint before reducing a dislocation in it if the clinical picture is absolutely clear?
1. Yes
2. No
3. Not necessary
*Sample answer:*1. Yes

TASK 12 Instructions: Choose one correct answer.
Symptoms of a brain contusion appear:
1. Immediately after injury
2. Some time after the injury
3. After regaining consciousness
*Sample answer:*1. Immediately after injury

TASK 13 Instructions: Choose one correct answer.
Manifestation of localsymptoms during compression of the brain by a growing hematoma begins:
1. Immediately after injury
2. After a certain "bright" period of time
*Sample answer:*2. After a certain “bright” period of time TASK 14.

Instructions: Choose one correct answer.

Additional Methodsdiagnostics used for uncomplicated rib fractures:
1. Chest X-ray in 2 projections
2. Thoracotomy
3. Thoracentesis
4. Lumbar puncture
5. Angiography

*Sample answer:*1. Chest X-ray in 2 projections

TASK 15. Instructions: Choose one correct answer.
Radiologically, a large hemothorax is:
1. Accumulation of blood in the costophrenic sinus
2. The blood level in the pleural cavity reaches the lower angle of the scapula
3. All or almost all of the pleural cavity is filled with blood

*Sample answer:*3. All or almost all of the pleural cavity is filled with blood

TASK 16. Instructions: Choose one correct answer.
On a retrograde x-ray cystogram with extraperitoneal rupture of the bladder, the following can be determined:
1. Leakage of contrast material into the abdominal cavity
2. Contrast agent leakage into the peri-vesical tissue
3. The bladder is of a normal shape with clear contours

*Sample answer:*2. Contrast agent leakage into the peri-vesical tissue

TASK 17. Instructions: Choose one correct answer.
In case of closed abdominal injury with bladder rupture, the most informative research method is:
1. Plain radiography of the abdominal cavity
2. Laparoscopy
3. Contrast cystography
4. Irrigoscopy
5. General urine analysis

*Sample answer:*3. Contrast cystography

TASK 18. Instructions: Choose one correct answer.
What indicators are used to calculate the Franc index?
1. Double surface burn area in %
2. Triple the area of deep burn in % and the area of superficial burn in %
3. Patient's age

*Sample answer:*2. Triple the area of deep burn in % and the area of superficial burn in %

TASK 19. Instructions: Choose one correct answer.
How to calculate the prognosis for the course of a burn disease using the rule of “hundreds”?
1. The area of deep and superficial burns is summed up
2. The total area of the burn and the patient’s age are summed up
3. The area of a superficial burn and triple the area of a deep burn are summed up

*Sample answer:*2. The total area of the burn and the patient’s age are summed up

TASK 20. Instructions: Choose one correct answer.
Indicate which disease should be differentiated from carbuncle first:
1. Hidradenitis

2. Necrotic form of erysipelas
3. Anthrax carbuncle
4. Erysipeloid

*Sample answer:*3. Anthrax carbuncle

TASK 21. Instructions: Choose one correct answer.
Persistent symptoms for sepsis are:
1. Bradycardia
2. Hypertension, tachycardia
3. Anuria
4. Hyperthermia, chills
5. Lymphocytosis

*Sample answer:*4. Hyperthermia, chills

TASK 22. Instructions: Choose one correct answer.
In difficult timesIn diagnostic cases, the most informative method of instrumental diagnosis of peritonitis is:
1. X-ray of the abdominal cavity
2. Ultrasound examination of the abdominal cavity
3. Laparoscopy

*Sample answer:*3. Laparoscopy

TASK 23. Instructions: Choose one correct answer.
Specify the characteristic radiological signs of pyopneumothorax:
1. Homogeneous darkening and horizontal liquid level with air
2. Homogeneous darkening and slanting liquid level

*Sample answer:*1. Homogeneous darkening and horizontal liquid level with air

TASK 24. Instructions: Choose one correct answer.
Which additional research method is crucial for the urgent diagnosis of anaerobic clostridial infection?
1. Bacteriological examination of wound discharge
2. Bacterioscopy of fingerprint smears from a wound
3. General blood analysis
4. General urine analysis

*Sample answer:*2. Bacterioscopy of fingerprint smears from a wound

TASK 25. Instructions: Choose one correct answer.
The most informative instrumental method for diagnosing fistulas is:
1. Ultrasonography
2. CT scan
3. Laparoscopy
4. Fistulography

*Sample answer:*4. Fistulography

Open type tasks

EXERCISE 1
While bandaging a purulent wound, the bandage was found to be blue-green and had an unpleasant odor. Surgical treatment of the brine was performed using mixed antiseptics.
What pathogen should you think about?

What needs to be done to find out the nature of the microflora?
*Sample answer:*About a stick of blue-green pus. Send discharge from the wound to a bacteriological laboratory to identify the pathogen and determine its sensitivity to antibiotics.

TASK 2
The seamstress turned to the clinic surgeon with complaints of pain in the nail phalanx of the second finger of the right hand. I didn't sleep at night. From the medical history it is known that the day before, while working, she was pricked with a long needle in the area of the "pad" of the nail phalanx of the second finger of the right hand. On examination: on the palmar surface of the distal phalanx there is pronounced tension and tenderness of the soft tissues, local hyperthermia and hyperemia, at the injection site there is a detachment of the epidermis up to 0.3 cm in diameter with an accumulation of pus underneath.
What is your diagnosis?
*Sample answer:*Subcutaneous panaritium of the distal phalanx of the second finger of the right hand.

TASK 3
In patient A., 34 years old, the disease began with the appearance of a boil in the middle third of the right forearm. After 5 days, the pain in the forearm intensified, swelling, diffuse hyperemia, dysfunction of the limb appeared, and fluctuation appeared in the center of inflammation. Body temperature 390 C. Blood test: leukocytes -12.6x109/l.
What happened?
What complications can there be?
*Sample answer:*Abscessation of the boil. Development of phlegmon of the forearm.

TASK 4
A 50-year-old patient was brought to the emergency room of the surgical department with complaints of severe pain on the outer surface of the left shin, which was of a burning nature. The patient notes chills, headache, nausea, vomiting, fever up to
400 C. From the anamnesis: 7 days ago I injured my lower leg on a metal grill. Objectively: the skin on the outer surface of the leg is bright red with clear jagged edges at the border with healthy skin. In some areas in the zone of hyperemia there are epidermal blisters filled with transparent exudate.
What disease does the patient
have? Its shape?
*Sample answer:*Erysipelas of the leg. Bullous form.

TASK 5
A 55-year-old patient was admitted to the surgical department with a carbuncle on the back of the neck. A general blood and urine test was taken from the patient.
What further research would you recommend?
*Sample answer:*Study of blood serum glucose levels.

TASK 6
A nursing mother came to the antenatal clinic with complaints of pain in the left mammary gland, increased body temperature up to 380 C, chills, and headache. In the upper outer quadrant of the mammary gland, a sharply painful lump with unclear boundaries is determined. The skin over the seal is hyperemic. There is no fluctuation.
What disease does the patient have?
What research and manipulation needs to be performed to search for a purulent cavity? Sample answer: Acute purulent lactation mastitis. Ultrasound of the breast and search puncture of the infiltrate.

TASK 7
When examining the 2nd finger of the patient's left hand, it was revealed that it was sharply increased in volume, swollen, had an irregular shape, and there was no movement in it. There are multiple fistulas through which pus is released, bone sequesters, pieces of dead tendon, and the skin is necrotic.
What disease does the patient have?
*Sample answer:*Pandactylitis of the 2nd finger of the left hand.

TASK 8
A housewife came to the clinic with complaints of swelling, hyperemia and pain in the periungual fold, and the presence of fluctuations. The disease developed the next day after the manicure.
What disease did the patient develop?
*Sample answer:*Paronychia.

TASK 9
A 62-year-old patient, after hypothermia, developed a painful infiltrate measuring 4x6 cm on the back of the neck. The skin over it was hyperemic and tense. In the center there are several purulent-necrotic rods, with the discharge of pus.
What disease does the patient have?
*Sample answer:*Carbuncle on the back of the neck.

TASK 10
A cannery worker consulted a doctor with complaints of severe itching, redness, burning, a feeling of tension and swelling on the dorsum of the ring finger of his right hand. According to him, 2 days ago he injured his finger while cutting pork. On examination: the edges of the swelling are sharply outlined from unchanged skin, uneven. Body temperature is normal. There are no changes in the blood test.
What disease does the patient have?
*Sample answer:*Eryzepiloid

TASK 11
A young man has severe swelling of the upper lip extending to the right cheek. The skin of the lip is more hyperemic on the right. There is also a painful infiltrate with a necrotic core in the center. Body temperature 380 C.
What disease does the patient have?
Why is this localization of the process dangerous?
*Sample answer:*Furuncle of the upper lip. Development of purulent meningitis.

TASK 12
A 30-year-old woman was brought to the emergency room of the surgical department with complaints of pain in the left axillary region and an increase in body temperature to 380C. From the anamnesis: the symptoms appeared after shaving the hair in the axillary area on the third or fourth day. Objectively: a painful lump of 3x3 cm is palpated in the left axillary region, the skin over the lump is hyperemic. There is no fluctuation.
What disease does the patient have?
*Sample answer:*Acute suppurative axillary hidradenitis.

TASK 13
A 40-year-old woman was brought to the emergency room of the surgical department with complaints of pain in the left axillary region, temperature up to 380 C. From the anamnesis it was found out: the patient was treated for 10 days in a clinic for subcutaneous panaritium

index finger of the left cyst. At the moment, the wound on the finger is healing by secondary intention. Objectively: enlarged, painful lymph nodes tightly connected to the surrounding tissue are palpated in the left axillary region. The skin over them is hyperemic.
What disease does the patient have?
What was the cause of the disease?
*Sample answer:*Acute purulent axillarylymphadenitis. Lymphogenic dissemination of infection from a lesion on a finger of this hand.

TASK 14
A 47-year-old woman, working in her garden, injured her leg in the area of the back of her right foot with a shovel. She did not go to the doctor, but independently washed the wound with a solution of hydrogen peroxide and applied an aseptic bandage. After 2 days, she noted a significant deterioration in her general condition and called a doctor. Upon admission to the hospital, the patient's condition was of moderate severity. Complaints of severe pain in the area of the right lower limb. Temperature up to 390C, shortness of breath, tachycardia. Blood pressure tends to decrease. Locally: the injured limb is sharply swollen to the level of the knee joint. The skin is bluish, sometimes purple. The wound on the back of the foot measures 3 x 7 cm, the tissue in the bottom is gray, does not bleed. The exudate is cloudy. When palpating the lower leg, the symptom of crepitus is determined. An overview R-gram of the lower leg reveals intermuscular air accumulations.
What wound complication is most likely being discussed? How to confirm the diagnosis?
*Sample answer:*Anaerobic clostridial myonecrosis (gas gangrene). Emergency bacterioscopy of fingerprint smears from a wound.

TASK 15
In wounded N., 25 years old, during surgical treatment of a gunshot wound of the anterior abdominal wall, the pressure dropped. The surgeon stopped further revision of the wound and applied sparse stitches. The patient's condition improved. However, two days later he developed bursting pain in the area of the surgical wound, crepitus around it, and a pulse of 120 beats. in a minute. Body temperature 37.80 C.
What complication are we talking about? How to confirm the diagnosis?
*Sample answer:*Anaerobic clostridial infection. Emergency bacterioscopy of fingerprint smears from a wound.

TASK 16
A 43-year-old man, while digging in the garden, slightly injured his left shin with a shovel. After 3-4 days, the superficial wound was covered with a brownish scab and practically did not bother the patient. However, 10 days after the injury, he developed severe headaches, weakness, profuse sweating, minor pain in the area of the wound, and some tension and twitching of the muscles around it. Soon the patient noted the appearance of fatigue in the masticatory muscles and their persistent tension when eating, which made it difficult to open the mouth. The local doctor, to whom the patient approached with these complaints, referred him to a dentist.
Did the local doctor do the right thing? What
disease does the patient have?
*Sample answer:*The doctor did the wrong thing. The patient has tetanus.

TASK 17
A 12-year-old child was admitted to the intensive care unit in critical condition. According to his parents, about a week ago, while running barefoot on the ground, he pricked the sole of his foot with a thorn. Upon admission, the patient had an increase in body temperature to 420 C,

increased heart rate to 130 per minute and increased respiratory rate to 32 per minute. Against this background, the child experienced convulsive contraction of the facial muscles with the formation of deep wrinkles on the forehead and cheeks. Periodically, attacks of convulsions spread to the muscles of the neck, back, and limbs, which was accompanied by spastic contraction of these muscles and a sharp hyperextension of the torso and limbs.
What diagnosis should be made?
*Sample answer:*Tetanus.

TASK 18
A young woman, 29 years old, a livestock farm worker, turned to the surgeon of the district hospital due to the presence of a small necrotic ulcer on her right forearm with abundant serous discharge and a depressed dark center, surrounded by an inflammatory rim and a rim of vesicles located on a compacted base, with the presence of quite pronounced swelling of the surrounding tissues. The patient's body temperature is 37.40 C, pain syndrome, despite the pronounced swelling of the forearm, is practically absent. After examining the patient, the surgeon diagnosed a carbuncle of the right forearm, after which, under local anesthesia, he dissected the infiltrate, however, he did not receive pus. After the operation, the surgeon sent the patient home, ordering her to come to the hospital for dressing in 2-3 days.
Was the diagnosis correct?
*Sample answer:*The diagnosis was made incorrectly. The patient has anthrax carbuncle.

TASK 19
In a 7-year-old child, against the background of severe general intoxication, the pediatrician discovered a small wound on the right thigh, covered with fibrinous films of gray-yellow color, tightly fused to the underlying tissues. When trying to remove the film, a bleeding wound with necrotic tissue formed. The edges of the wound are bright red, the surrounding tissues are infiltrated, the inguinal nodes on the right are sharply enlarged. When collecting an anamnesis of the disease, the doctor discovered that the child’s older sister had had a sore throat and fever for several days.
What diagnosis can be assumed in this case? How to
confirm this diagnosis?
*Sample answer:*Diphtheria wounds. Perform a bacteriological examination (smear culture).

TASK 20
A patient was admitted to the surgical department with suspected intra-abdominal bleeding.
What laboratory and instrumental studies will you prescribe to clarify the diagnosis?
Which of the proposed methods is the most reliable?
*Sample answer:*General blood test, ultrasound of the abdominal organs, diagnostic laparoscopy.
Laparoscopy.

TASK 21
Two patients were admitted to the hospital with complaints of general weakness and dizziness. Objectively: the skin is pale, the pulse is weak and frequent, blood pressure is low. Blood tests show a decrease in hemoglobin content. One patient has tarry stools, while another has fresh blood during defecation.
What is the expected location of the source of bleeding in each patient? How do you
know if bleeding is continuing in each case?

*Sample answer:*In the first case - the duodenum, in the second case - the rectum. In the first case, it is necessary to perform fibroesophagogastroduodenoscopy, in the second case, fibrocolonoscopy.

TASK 22

A patient with peptic ulcer was admitted to the hospitalstomach, complicated by bleeding. The pulse is frequent, weak filling. Blood pressure 100/60 mm Hg. The patient's skin is pale and his stools are tarry.

What test needs to be done to find out if the bleeding is continuing?

What gives stool a tarry color?

*Sample answer:*Fibroesophagogastroduodenoscopy. Hydrochloric acid hematin.

TASK 23

An elderly man, 77 years old, consulted a surgeon with complaints of an ulcer of his right leg that had not healed for the last 10 years. He associates the formation of this ulcer with a previous injury to the right lower limb. Upon examination of the patient, it was revealed that on the anterior surface of the middle third of the right leg there was a deep ulcer of irregular shape, measuring 5.5x8 cm with uneven, dense calloused edges. The bottom of the ulcer is covered with necrotic tissue and flaccid pale pink granulations with fibrinous plaque.

What diagnosis should be given to the patient?

What study needs to be performed on the patient to clarify the diagnosis?

*Sample answer:*Trophic ulcer of the leg. Bacteriological study to determine the nature of the microflora and its sensitivity to antibiotics. Biopsy of the edge and bottom of the ulcer to exclude malignancy.

TASK 24

The patient was asked about acute intestinal obstruction

imposedunnatural anus to the sigmoid colon.

What type of fistula does this stoma belong to?

*Sample answer:*Artificial therapeutic complete external colonic fistula.

TASK 25

A young man, 25 years old, contacted a surgeon with a complaint about the presence of long-term non-closing pinholes with purulent discharge in the area of a postoperative scar in the right iliac region. From the anamnesis it was established that the patient was operated on for gangrenous appendicitis 3 months ago. In the early postoperative period, extensive suppuration of the wound was noted, which subsequently healed by secondary intention. Upon examination of the patient, it was found that in the area of the postoperative scar in the right iliac region there were two pinholes, measuring 1x2 mm, with scanty purulent discharge. The edges of these holes, due to excess hypergranulation, rise somewhat above the scar tissue. The inflammatory process in the area of surrounding tissues near these holes is not pronounced. When inspecting these holes with a button probe, the latter goes 4.5 cm through a narrow canal into the thickness of the anterior abdominal wall.

What diagnosis should be given to the patient?

What, in your opinion, is the most likely reason for the development of this postoperative complication in the patient?

What instrumental examination needs to be performed on the patient to clarify the diagnosis?

*Sample answer:*Ligature fistulas of a postoperative scar. Infection of ligatures on the aponeurosis. Fistulography.

TASK 26

A young man, 32 years old, consulted a surgeon with complaints of fatigue, severe pain in the calf muscles of the left leg, which appeared when walking quickly and disappeared when stopping, a feeling of numbness, and freezing of the toes of the left foot. The patient has a history of neuropsychic stress, smoking abuse, and frequent hypothermia of the legs. An objective examination of the patient revealed atrophy of the muscles of the left leg, deformation, fragility of the nail plates of the fingers and hyperkeratosis of the left foot. The skin of the left foot is pale and cold to the touch. On the left, pulsation on the femoral artery was satisfactory, on the popliteal and dorsal artery of the foot it was weakened, on the posterotibial artery it was not detected. Positive tests of Oppel, Samuels, Moshkovich on the left were determined.

What diagnosis should be given to the patient?

What instrumental research methods should the patient perform to clarify the diagnosis?

*Sample answer:*Obliterating endarteritis. Angiography.

TASK 27

A young woman, 30 years old, suffering from rheumatoid endocarditis, suddenly felt a sharp pain in her left upper limb, a feeling of numbness and freezing of her left hand. The pain syndrome sharply intensified when trying to move the joints and touch the skin of the left upper limb. When examining the patient 8 hours after the onset of pain, the doctor on duty discovered pallor with a marble tint and significant coldness of the skin of the left forearm and left hand. There was a slight decrease in tactile and pain sensitivity and limited mobility in the joints of the left upper limb. Pulsation in the brachial and radial arteries of the left limb was not detected.

What diagnosis should the patient be given?

What instrumental studies need to be performed to confirm this diagnosis?

*Sample answer:*Thromboembolism of the brachial artery. Angiography.

TASK 28

A 22-year-old patient was taken to the surgical department after an injury to the abdomen and lumbar region on the left. The patient notes pain in the left half of the abdomen, radiating to the left collarbone and shoulder, and general weakness. An ultrasound examination reveals heterogeneity of the spleen and free fluid in the abdominal cavity.

Please indicate your diagnosis.

What should be done to confirm it?

*Sample answer:*Closed abdominal injury, splenic rupture, intra-abdominal bleeding. Laparoscopy.

TASK 29

The victim has a closed chest injury on the left. There is pain in the left half of the chest when inhaling. Auscultation on the left - weakening of breathing, percussion - dullness of sound. A general blood test shows anemia.

What is the reason for the changes revealed during the examination of the patient? What studies need to be performed to clarify the diagnosis?

*Sample answer:*Hemothorax. X-ray of the chest organs, ultrasound of the chest organs, pleural puncture.

TASK 30
The victim was brought to the emergency department. From the anamnesis it was revealed that 2 hours ago he was beaten by unknown persons. Complains of weakness, dizziness, pain in the left half of the abdomen. During examination: pulse 122 beats per minute, blood pressure 90/60 mm Hg. The abdomen is soft, painful in the left half, where there is a small hematoma on the anterior abdominal wall. In sloping areas, dullness of percussion sound is noted. Blood test: Hb 90 g/l, red blood cells 3.0x1012/l.
What diagnosis should be given to the patient?
What instrumental studies need to be performed to confirm this diagnosis?
*Sample answer:*Closed abdominal injury with damage to internal organs, intra-abdominal bleeding. Ultrasound of the abdominal organs, laparoscopy.

TASK 31
An unconscious patient was taken to the hospital. Upon examination, no bone damage was found. Blood pressure 120/80 mm Hg. Pulse 56 beats per minute. Tendon reflexes in the right leg and arm are not detected. The employee accompanying the patient reported that the victim fell from a height of 1.5 m, hitting his head.
What causes the patient's condition?
What additional studies will you order to confirm the diagnosis?
*Sample answer:*Brain contusion. X-ray of the skull bones in 2 projections, computed tomography of the skull.

TASK 32
A patient was brought to the emergency department from the scene of the disaster. From the anamnesis it was found that during a car collision, the victim hit his head, losing consciousness for several minutes. Currently, I am worried about dizziness, weakness, and mild nausea. Pulse 66 beats. per minute Blood pressure 120/70 mm Hg. There are no bone lesions on plain radiographs of the skull.
What causes the patient's condition?
Which specialist should the patient be examined by?
*Sample answer:*Concussion. Neurologist and neurosurgeon.

TASK 33
Patient M., 42 years old, was admitted to a surgical hospital after an accident (hit by a car). The patient's condition is moderate. Pulse 88 beats per minute, blood pressure 130/60 mmHg. He complains of intense pain in the right half of the chest, where upon examination crepitus is detected in the projection of the 5th rib and pain. An x-ray revealed a displaced fracture of the fifth rib. The fluid level in the right pleural sinus is determined.
Diagnose the patient?
What manipulation should be performed for diagnostic purposes?
*Sample answer:*Closed chest injury, fracture of the 5th rib, hemothorax. Ultrasound of the chest organs, pleural puncture with the Rivilois-Gregoire test.

TASK 34
Patient K., 49 years old, was taken to the emergency hospital in serious condition. According to relatives, he suffered from chronic pyelonephritis for a long time. An exacerbation of the disease occurred
2 weeks ago. He did not seek medical help and treated himself. The condition worsened about 6 hours ago, when the body temperature increased to 390C, pain appeared in the right lumbar region, and frequent painful urination. At

Upon examination, the patient's condition is serious, severely inhibited. Respiratory rate – 28 per minute, PS – 130 beats. per minute, blood pressure – 70/40 mm Hg. Art. There is palpation pain in the right lumbar region, a positive symptom of effleurage on the right. Ultrasound of the kidneys revealed an abscess of the right kidney.
What type of sepsis does this patient have? Please
provide a complete diagnosis.
*Sample answer:*Urosepsis. Acute pyelonephritis, kidney carbuncle, septic shock.

TASK 35
Patient I., 53 years old, was operated on for acute gangrenous-perforated appendicitis and widespread purulent peritonitis. 18 days have passed since the operation, but the patient still has body hyperthermia up to 39.50C with a difference in evening and morning temperatures of 2-30. An increase in body temperature is accompanied by chills, and a decrease
- torrential sweat. The patient experiences weight loss, yellowness of the skin, decreased skin turgor and the presence of pustular rashes on the skin, weakness, and apathy. The postoperative wound is covered with gray fibrinous deposits, the granulations are scanty, flaccid, and there is purulent discharge from the wound.
What is the reason for this patient's condition?
What laboratory tests are needed to confirm the diagnosis?
*Sample answer:*Postoperative wound sepsis. Bacteriological examination of blood for sterility.

TASK 36
Patient P., 36 years old, has been experiencing increased temperature and weakness for a long time. Over the past 8 months, the patient has undergone 3 operations for ulcers of various locations. This condition developed against the background of an abscess of the right lung.
What are the causes of this patient's condition?
*Sample answer:*Sepsis.

TASK 37
A patient was brought to the hospital with complaints of severe swelling of the right hand, numbness, and the presence of conflicts. From the anamnesis it was established that, being in a state of alcoholic intoxication, he slept through the night sitting, leaning his hand on the back of a chair. On examination, the right hand is swollen, mainly in the forearm area, there are phlycts on the skin, there is no superficial sensitivity, and deep sensitivity is sharply reduced.
What condition has developed in the patient?
What group of diseases does it belong to?
What laboratory test needs to be performed to confirm the diagnosis? Sample answer: Positional compression syndrome. Secondary post-traumatic myoglobinemia, myoglobinuria. Determination of serum myoglobin level.

TASK 38
A patient undergoing treatment in the surgical department for an extensive scalped wound of the left thigh, after surgical debridement and local treatment, has a skin defect measuring 13x20 cm on the anterior outer surface of the thigh. The bottom of the wound is represented by bright, fine-grained granulation tissue, the discharge is scanty, serous, perifocal there is no inflammation.
What phase of the wound process are we talking about?
*Sample answer:*Regeneration phase (formation and maturation of granulations).

TASK 39

During dressing, a superficial wound of the anterior abdominal wall, covered with purulent-necrotic tissue, was discovered in the patient.
Indicate the phase of the wound process.
*Sample answer:*The inflammation phase, the period of cleansing the wound from necrosis.

TASK 40
A 22-year-old patient has a severe headache, high body temperature, heavy sweats, and tremendous chills. On examination: impaired consciousness, pallor of the skin, sharp tachycardia 140 beats. per minute, blood pressure 90/60 mm Hg.
What condition developed in this case if it became known that the patient had squeezed out a boil on her upper lip several hours earlier?
*Sample answer:*Furuncle of the upper lip, acute purulent meningitis, cavernous sinus thrombosis, septic shock.

TASK 41
A patient was admitted to the surgical department with complaints of pain throughout the abdomen, nausea, vomiting of foul-smelling contents, and an increase in temperature to 38.50 C. Upon examination, it was determined that he had been ill for 2-3 days. At the beginning of the disease, the pain was localized in the right iliac region, and subsequently spread throughout the abdomen. Upon objective examination, the patient's condition is serious. The skin is gray-earthy in color, the features are pointed, the tongue is dry, covered with brown crusts, the abdomen is evenly swollen. Palpation of the abdomen is sharply painful in all parts, peristalsis cannot be heard, a positive Shchetkin-Blumberg sign is determined in all parts. A plain X-ray of the abdominal cavity reveals distended intestinal loops without horizontal fluid levels, and an ultrasound examination reveals free fluid in the abdominal cavity. When inserting a nasogastric tube, a large amount of stagnant gastric contents was released.
What disease are we talking about?
Indicate the stage of the clinical course of this disease?
*Sample answer:*Acute destructive appendicitis, widespread peritonitis. Phase of acute enteral failure.

TASK 42
Patient N., 46 years old, has been treated in the therapeutic department for 10 days with a diagnosis of right lower lobe pneumonia. Against the background of ongoing antibacterial and detoxification therapy, a high temperature of up to 390 C, chills, and malaise persist. Suddenly the patient's condition worsened, shortness of breath, cyanosis, pain in the right half of the chest appeared, and signs of intoxication began to increase. A chest x-ray on the right shows a horizontal level of fluid and a shadow of a collapsed lung. In the general blood test - leukocytosis 15.0x109/l with a shift of the formula to the left to juvenile forms.
What complication developed in the
patient? What is the cause of this condition?
*Sample answer:*Pyopneumothorax. Breakthrough of a formed lung abscess into the pleural cavity.

TASK 43
A 30-year-old man was brought to the emergency room of the surgical department with complaints of severe abdominal pain. From the anamnesis it was revealed that he had been suffering from gastric ulcer for 10 years. The pain appeared suddenly and was dagger-like in nature. Objectively: the tongue is dry, tachycardia, the abdomen is board-like tense, sharply painful on palpation, a positive Shchetkin-Blumberg sign is detected in all parts of the abdomen. At

An endoscopic examination revealed an ulcer of the antrum of the stomach. X-ray examination shows free gas under the right dome of the diaphragm. The surgeon on duty diagnosed him with a perforated gastric ulcer.
What did the surgeon on duty not indicate in the diagnosis?
Sample answer: prevalence and phase of peritonitis.

TASK 44
A 38-year-old woman came to the emergency room because she twisted her left leg in the icy conditions, after which sharp pain and swelling immediately appeared in the ankle joint. Upon examination, it was revealed that the contours of the joint were smoothed, its tissues were swollen, and on palpation there was moderate pain. Active and passive movements are sharply limited due to severe pain, there is no crepitus. There are no bone lesions on the x-ray.
What causes the patient's condition?
Sample answer: Ankle sprain.

TASK 45
During a football competition, the athlete suffered an injury to his right knee joint. Upon examination and palpation, the contours of the joint are smoothed, it is increased in volume, sharp pain is detected during movements and palpation, a symptom of patella balloting. During puncture of the joint, blood was obtained.
What is this joint condition called?
Sample answer: Hemarthrosis.

TASK 46
You have been called by ambulance to a construction site. You find out that the patient fell from a height of 4 meters to his feet. He complains of pain in the lower back, the functions of the limbs are not impaired. When bending the torso forward and to the side, pain in the lower back increases.
What damage do you suspect? How to
confirm the diagnosis?
Sample answer: compression fracture of the lumbar spine.
X-ray of the spine in 2 projections, computed tomography of the spine.

TASK 47
After falling on his right arm, the patient felt a sharp pain in the right shoulder joint. During the examination, the traumatologist discovered a gross deformity of the right shoulder joint, impaired mobility in the joint, and severe pain during passive and active movements of the right arm.
What type of damage can be suspected in the patient?
What examination method should be used to clarify the diagnosis?
Sample answer: Shoulder dislocation. X-ray of the shoulder joint in 2 projections.

TASK 48
A patient transported by ambulance to the emergency department of a local hospital reported a stab wound to the left thigh 1 hour earlier. On examination: the patient's condition is satisfactory. The skin is of normal color. Hemodynamics are stable. Locally: on the anterior-inner surface in the upper third of the left thigh there is a stab wound measuring 2.5x0.5 cm with intense (after removal of the bandage) capillary bleeding. Along with this, next to the wound a round-shaped tumor-like formation measuring 5x4x7 cm is detected. The skin over it is somewhat

tense, imbibed with blood. Palpation reveals tissue tension and pulsation of the formation, synchronous with the heart rhythm.
What complication of a stab wound are we talking about? What diagnostic measures need to be performed?
*Sample answer:*Hematoma due to damage to the femoral artery. Ultrasound of limb vessels.

TASK 49
A patient who received a thermal burn of the left upper limb, face, and torso was admitted to the emergency room. The patient is sharply agitated and makes almost no contact. The pulse is frequent, weak filling. On the burn surface there are areas of coagulative necrosis, as well as burst blisters with remnants of the epidermis.
What stage (phase) of burn disease? What
is the degree of burn?
*Sample answer:*Burn shock. IIIb-IV degree of burn.

TASK 50
A patient with an extensive granulating wound of the left thigh, which occurred after a thermal burn, was brought to the dressing room.
What degree of burn did the patient have?
*Sample answer:*IIIb degree of burn.

TASK 51
A patient who received a burn to his right thigh and lower leg with boiling water was brought to the surgical department. When examined in the affected area, there is pronounced hyperemia of the skin, ruptured and intact blisters with serous discharge.
What degree of burn does the patient
have? What is the area of the burn
surface? Sample answer: IIIa. 18%.

TASK 52
After a long stay in the cold (-200 C), a patient suffered from frostbite of the ears. After warming up, both ears are bluish, with the presence of epidermal blisters with serous-hemorrhagic contents.
What is the period of frostbite for the
patient? What is the degree of frostbite in
the patient?
*Sample answer:*Reactive period. III degree.

TASK 53
There is a patient in the burn department with extensive IIIa degree burns to the torso (more than 20%). After 2 weeks, the patient developed signs of gastrointestinal bleeding (vomiting “coffee grounds”, melena, a decrease in blood pressure to 90/40 mmHg, a decrease in the number of red blood cells and hemoglobin).
What complication developed in the patient?
Indicate the possible location of the source of bleeding?
*Sample answer:*Acute gastroduodenal bleeding from an acute “burn” Curling ulcer. Lesser curvature of the stomach.

TASK 54
A 50-year-old victim was brought to the emergency department with a thermal burn to the torso, face and upper extremities. He received a burn as a result of a gasoline fire during repairs.

car. The total area of the superficial burn was 15% of the body surface, deep - 20%.
Calculate the Frank index.
Can it be used to determine the prognosis of burns in children? Determine
the prognosis for the course of burn disease.
*Sample answer:*15+3*20=75 points. In contrast to the rule of one hundred, the Frank index is used to predict the outcome of burn shock in children. The prognosis is doubtful.

TASK 55
The patient, 74 years old, was operated on for a malignant tumor of the stomach. During the operation, during revision of the abdominal cavity, the surgeon revealed the presence of a saucer-shaped cancer of the lesser curvature of the stomach with tumor metastasis to the liver and left ovary.
What stage of cancer does this patient have? What is the metastasis of
stomach cancer to the ovary called?
*Sample answer:*Stage IV gastric cancer, since there are distant metastases. Metastasis of stomach cancer to the ovary is called Krukenberg metastasis.

TASK 56
The patient, 68 years old, was operated on for cancer of the sigmoid colon. During the operation, the surgeon found that the tumor occupied half the circumference of the intestine, without narrowing its lumen and without extending beyond the organ. In this case, there were single tumor metastases to regional lymph nodes. The surgeon performed a resection of the intestine with a tumor in accordance with the requirements of ablastics, removal of regional lymph nodes, and the imposition of an end-to-end interintestinal anastomosis.
What stage of malignant neoplasm did the patient have?
What category of surgical interventions (palliative or radical) does the operation performed on the patient belong to?
*Sample answer:*Stage IIIb colon cancer. Radical surgery.

TASK 57
In a 43-year-old patient, during fibrogastroscopy, an endoscopist discovered in the area of the lesser curvature of the stomach a rounded formation the size of a large pea, mobile, located on a thin stalk. The gastric mucosa in this area is not visually changed. After a biopsy of this formation, a morphological conclusion was obtained, which indicated that the biopsy sample was represented by cells of normal glandular epithelium of the stomach; no atypical cells were identified.
What diagnosis should be given to the patient?
What category of diseases does this pathology belong to?
*Sample answer:*Adenomatous polyp of the stomach. Obligate precancer.

TASK 58
An athlete consulted a doctor with complaints of pain and swelling in the left knee joint, which appeared after an injury. Upon examination, the contours of the joint are smoothed, fluctuation, local hyperemia of the skin, and an increase in its temperature compared to the surrounding tissues are determined. Body temperature is increased. A test puncture of the joint yielded a yellowish liquid in a volume of 60 ml.
What disease does the patient have?
What should be done with the fluid evacuated from the joint?
*Sample answer:*Acute purulent arthritis, joint empyema. Synovial fluid is sent for bacteriological examination.

TASK 59

Patient M. with chronic osteomyelitis of the right thigh has a fistula that does not close for a long time.
How to find out the reason for the long-term functioning of the fistula?
*Sample answer:*It is necessary to perform x-ray of the hip in 2 projections and fistulography.

TASK 60
Upon examination of patient A., 15 years old, there are 2 fistulas and soft tissue infiltration on the anterior outer surface of the right thigh. X-ray: in the lower third of the femur a cavity is detected, up to 4 cm in diameter, with the presence of a free-lying sequestrum. It is known that 2 years ago a phlegmon was opened in this area.
Formulate a diagnosis.
What additional instrumental studies need to be performed?
*Sample answer:*Hematogenous osteomyelitis of the lower third of the femur, chronic stage, fistula form. Fistulography.

TASK 61
A 35-year-old man was admitted to the surgical department with complaints of pain and swelling of the left leg, and an increase in temperature to 380C. 12 months ago he suffered an open fracture of the bones of his left leg. Treatment was carried out with skeletal traction followed by plaster immobilization. During an objective examination: the left shin is increased in volume compared to the right by 5 cm. There is soft tissue infiltration along the anterior outer surface, bright hyperemia, sharp pain on palpation, fluctuation.
What disease can be suspected in this patient?
What research needs to be performed to clarify the diagnosis?
*Sample answer:*Post-traumatic osteomyelitis of the bones of the left leg, subacute phase, intermuscular paraosseous phlegmon. X-ray of the bones of the leg in 2 projections, ultrasound of the bones and soft tissues of the left leg.

TASK 62
A 5-year-old boy was admitted to the pediatric surgical department with complaints of pain in the right thigh, fever up to 39.50C, malaise, and general weakness. From the anamnesis it was revealed that 10 days before the illness he suffered from a sore throat. Suddenly the child's condition worsened and the above complaints appeared. On examination: the patient's condition is serious. The skin and visible mucous membranes are pale, the right lower limb is in a forced position (half-bent). Active and passive movements in the joints are severely limited due to pain. When tapping the heel bone, a sharp pain in the thigh area is revealed.
What disease are we talking about?
What instrumental studies need to be performed?
*Sample answer:*Hematogenous osteomyelitis of the right femur, acute phase. Ultrasound of the femur. X-ray of the femur in 2 projections.

TASK 63
A young man, 29 years old, a resident of a rural area, consulted a surgeon with complaints of a moderately painful formation in the right hypochondrium, periodic skin itching, accompanied by skin rashes and an increase in body temperature. Upon palpation in the right hypochondrium, the surgeon discovered a tumor-like formation of a round shape with clear boundaries, tight-elastic consistency, dimensions 8.5x10 cm, moderately painful. Ultrasound examination in the right

A round formation with clear contours, filled with liquid, was located in the liver lobe. In the general blood test, eosinophilia was noted, reaching 15%.
What diagnosis should be given to the patient?
What laboratory test should be performed on this patient to confirm the diagnosis?
*Sample answer:*Liver echinococcosis. Latex agglutination reaction (indirect hemagglutination) between the patient's blood serum and echinococcal erythrocyte diagnosticum.

TASK 64
A 10-year-old child from a rural area was admitted to the surgical department with clinical and laboratory signs of obstructive jaundice. According to the child's mother, two years ago he was operated on for acute obstructive intestinal obstruction caused by blockage of the intestinal lumen by a ball of worms. Over the subsequent period, the child periodically experienced severe skin itching, low-grade fever, and short-term icterus of the sclera and skin.
What presumptive diagnosis should be given to the patient?
*Sample answer:*Ascariasis of the bile ducts.

TASK 65
In the maternity hospital, a postpartum woman who had been breastfeeding for 7 days consulted a doctor with complaints of twitching pain in the left mammary gland and an increase in temperature to 390C. Palpation reveals a compaction in the outer quadrant of the gland with areas of softening, hyperemia of the skin over the compaction, and a blood test reveals leukocytosis with a band shift.
What diagnosis can be made for the patient?
What instrumental examination needs to be performed to confirm the diagnosis?
*Sample answer:*Acute purulent lactation mastitis. Ultrasound of the breast.

TASK 66
The patient was brought to the clinic 6 hours after a gunshot wound to the upper third of the right leg, accompanied by extensive damage to its soft tissues. The patient underwent primary surgical treatment of the wound and stitches were applied. After 2 days, the patient complained of bursting pain in the surgical area, became restless, and the temperature rose to 390C. When examining the limb after removing the bandage, it was discovered that the right leg was sharply swollen, the skin had a marble color, and around the wound there were epidermal blisters of varying sizes filled with hemorrhagic fluid. On palpation, crepitus syndrome is determined.
What infection complicated the postoperative period?
What additional research methods need to be performed to clarify the diagnosis?
*Sample answer:*Anaerobic clostridial infection. X-ray of the limb in 2 projections, bacterioscopy of smears from the wound.

TASK 67
The doctor found out that within 12 hours the patient had lost 500 ml of blood, determined the patient's blood type and in the vial with donor blood, Rh affiliation, having carried out tests for group and Rh compatibility, transfused 500 ml of red blood cells. 5 minutes after the transfusion, the patient developed chills, fever, shortness of breath, suffocation, nausea, vomiting, facial swelling, and skin rashes.
Which test was not performed by the doctor?

What's wrong with the patient?
What is the doctor's mistake?
*Sample answer:*Biological test not performed. Allergic reaction. The patient has grade I blood loss - blood transfusion is not indicated.

TASK 68
An hour after the transfusion of red blood cells to a patient with ulcerative bleeding, the temperature rises to 380 C, headache, muscle pain, tremendous chills, increased heart rate and respiration. However, no decrease in blood pressure was observed.
What's wrong with the patient?
What are the causes of this condition?
*Sample answer:*The patient has a pyrogenic reaction of moderate severity, due to the introduction of pyrogens (decomposition products of plasma proteins and leukocytes of donor blood, waste products of microbes) with canned blood or its components into the recipient's bloodstream.

TASK 69
A 50-year-old patient with a flame burn was brought to the surgical department. The skin of both upper extremities is circularly hyperemic throughout, covered with intact and burst blisters with amber-yellow liquid, the bottom of the burst blisters in the form of a waxy scab. On the right thigh, along its entire surface, there is a circular lesion in the form of intact and burst blisters with hemorrhagic exudate, the bottom of the burst blisters is dull gray in color with thrombosed veins.
Formulate a diagnosis: determine the extent and area of the lesion.
Determine the prognosis of burn severity.
*Sample answer:*Thermal burn of the upper extremities of IIIa degree, area 18%, thermal burn of the thigh IIIb degree, area 9%. According to the "hundreds" rule - 77 points, predicted mortality 50%.

TASK 70
In a patient with a burnthe entire back of degree IIIb on the 4th day there is severe intoxication. In the blood test there are 5.8x1012 erythrocytes, leukocytosis up to 12.9x109/l, a shift in the blood count to the left to band forms, the consciousness is confused, euphoric.
What phase of burn disease? Indicate
the approximate area of the burn.
*Sample answer:*Phase of acute burn toxemia. Burn area 18%.

TASK 71
A patient with a circular flame burn to the torso was brought to the burn department. The skin of the body is circularly charred, the victim is unconscious, pale, there is cold sweat on the skin, the pulse is thready. Blood pressure 80/50 mm Hg.
What phase of burn disease? Indicate
the degree and area of the burn.
Determine the prognosis of a burn using the Frank index.
*Sample answer:*Burn shock phase. Thermal burn of the torso, IV degree, area 36%. Frank index 108 points, unfavorable prognosis.

TASK 72
A young woman, 34 years old, consulted a surgeon due to the presence of a painless tumor-like formation in her right thigh. The patient discovered this formation in herself about two years ago, which over time gradually

increased in size, however, without causing any pain. Upon examination of the patient, the surgeon found that in the area of the posterior surface of the lower third of the right thigh there was a tumor-like formation the size of a chicken egg, round in shape, soft elastic consistency, painless on palpation, quite mobile and not fused with the surrounding tissues. The skin over this formation is not changed. The lymph nodes in the right groin area are not enlarged and painless.
What diagnosis should the patient be given?
Which clinical group of cancer patients can the patient be classified as?
*Sample answer:*Lipoma of the thigh. Clinical group 1b – precancerous diseases.

TASK 73. Interview question. Classification of peritonitis by prevalence.
*Sample answer:*Peritonitis is divided into local (not limited - no more than 2 anatomical areas of the abdominal cavity are involved in the inflammatory process, limited – infiltrate, intra-abdominal abscess, occupying no more than 2 anatomical areas of the abdominal cavity) and widespread (diffuse - the inflammatory process involves from 2 to 5 anatomical areas or 2 floors of the abdominal cavity, diffuse – more than 5 anatomical areas of the abdominal cavity are involved in the inflammatory process)

TASK 74. Interview question. Phases of the course of widespread peritonitis.
*Sample answer:*1. Reactive phase (the first 12-24 hours from the onset of the disease). 2. Phase of acute enteral failure (24-72 hours from the onset of the disease). 3. Phase of multiple organ failure (compensated, decompensated - more than 72 hours from the onset of the disease)

TASK 75. Interview question. Phases of the wound process according to M.I. Kuzin.
*Sample answer:*1. Inflammation phase (period of vascular reactions, period of wound cleansing from necrosis). 2. Regeneration phase (formation and maturation of granulations). 3. Phase of scar reorganization and epithelization.

OPK-7:

Closed type tasks:

TASK 1. Instructions: Choose one correct answer.
Specify the group of antibiotics that have pronounced ototoxicity and nephrotoxic effect:
1. Penicillins
2. Aminoglycosides
3. Cephalosporins
4. Macrolides
5. Carbopenems

*Sample answer:*2. Aminoglycosides

TASK 2. Instructions: Choose one correct answer.
Specify the absolute indications for red blood cell transfusion:
1. Detoxification, parenteral nutrition
2. Stimulation of hematopoiesis, immunocorrection, hypoproteinemia

3. Acute blood loss of III-IV degree, hemorrhagic shock, severe traumatic operations
*Sample answer:*3. Acute blood loss of III-IV degree, hemorrhagic shock, severe traumatic operations

TASK 3. Instructions: Choose one correct answer.
Specify diseases requiring emergency surgery:
1. Stomach cancer, inguinal hernia, back lipoma
2. Perforated gastric ulcer, strangulated hernia, acute appendicitis
3. Diabetic angiopathy of the lower limb
*Sample answer:*2. Perforated gastric ulcer, strangulated hernia, acute appendicitis

TASK 4. Instructions: Choose one correct answer
Specify the timing of removal of drainage from wounds during clean operations:
1. In 12 hours
2. For 2-3 days
3. For 5-7 days
4. After 10 days
*Sample answer:*2. For 2-3 days
TASK 5. Instructions: Choose one correct answer
The basic principles of local treatment of purulent wounds in the inflammatory phase include:
1. Adequate drainage, necrectomy (partial, staged), application proteolytic enzymes, washing with antiseptics
2. Application of ointment dressings, application of secondary sutures, autodermoplasty Standard answer: 1. Adequate drainage, necrectomy (partial, staged), use of proteolytic enzymes, rinsing with antiseptics

TASK 6. Instructions: Choose one correct answer
Indicate what does not apply to the basic rules of transport immobilization:
1. Immobilization is carried out at the scene of the incident
2. Administration of painkillers before immobilization
3. Stop bleeding with a tourniquet or pressure bandage
4. Removing dirty clothing before applying a splint
5. Applying a splint directly to clothing
6. Lining with cotton wool, towels, etc. directly on the body
7. Light traction of the limb along the axisbefore the splint position for a closed fracture
*Sample answer:*4. Removing dirty clothing before applying a splint

TASK 7. Instructions: Choose one correct answer
When transporting a patient with a hip fracture, it is necessary to immobilize:
1. Hip and knee joints
2. Hip, knee and ankle joints
3. Knee and ankle joints
*Sample answer:*2. Hip, knee and ankle joints

TASK 8. Instructions: Choose one correct answer
Specify the basic principles of treatment of concussion:
1. Rest, bed rest,dehydration therapy, sedatives, tranquilizers
2. Detoxification therapy, decompression trepanation skulls,antibacterial therapy

*Sample answer:*1. Rest, bed rest, dehydration therapy, sedatives, tranquilizers

TASK 9. Instructions: Choose one correct answer
Principles of treatment of single rib fractures:
1. Alcohol-novocaine blockade of the fracture site, bed rest, expectorants, physiotherapy
2. Application of a plaster corset, thoracotomy, metal osteosynthesis
*Sample answer:*1. Alcohol-novocaine blockade of the fracture site, bed rest, expectorants, physiotherapy

TASK 10. Instructions: Choose one correct answer
Principles of treatment of lung contusion:
1. Antibacterial therapy, oxygen therapy, sanitation of the bronchial tree, vagosympathetic blockade, elimination of respiratory and cardiovascular failure
2. Pleural puncture, emergency forehead or pneumonectomy, drainage of the pleural cavity
*Sample answer:*1. Antibacterial therapy, oxygen therapy, sanitation of the bronchial tree, vagosympathetic blockade, elimination of respiratory and cardiovascular failure

TASK 11. Instructions: Choose one correct answer
Surgeon's tactics for wounds of the heart, hemopericardium:
1. Pericardial puncture
2. Emergency surgery, suturing the wound with catgut
3. Emergency surgery, insertion of a hemostatic tampon into the wound
4. Emergency surgery, suturing the wound with nylon
5. Observation, surgery - if hemopericardium grows
*Sample answer:*4. Emergency surgery, suturing the wound with nylon

TASK 12. Instructions: Choose one correct answer
The surgeon's tactics when diagnosing a closed abdominal injury with liver damage and intra-abdominal bleeding:
1. Laparotomy, definitive bleeding control, blood reinfusion
2. Bed rest, hemostatic therapy, cold on the abdomen
3. Observation, if signs of hemoperitoneum increase - surgical treatment Standard answer: 1. Laparotomy, final stop of bleeding, blood reinfusion

TASK 13. Instructions: Choose one correct answer
Local cooling for burns must be carried out:1.15-20 min
2.40-60 min
3. 3-4 hours
4. 1-2 days
*Sample answer:*1. 15-20 min

TASK 14. Instructions: Choose one correct answer
First aid for thermal burns does not include:
1. Termination of the thermal agent
2. Local hypothermia

3. Plasma infusion
4. Applying an aseptic dressing
5. Drinking plenty of alkaline drinks
6. Adequate pain relief

*Sample answer:*3. Plasma infusion

TASK 15. Instructions: Choose one correct answer
Indicate which incision is most often used when opening a carbuncle:
1. Linear
2. Oval
3. Arc-shaped
4. Cross-shaped
5. Z-shaped

*Sample answer:*4. Cross-shaped

TASK 16. Instructions: Choose one correct answer
Indicate which antibacterial drugs are most effective in the complex treatment of erysipelas:
1. Tetracyclines
2. Aminoglycosides
3. Semi-synthetic penicillins in combination with extended-release sulfonamides
4. Macrolides

*Sample answer:*3. Semi-synthetic penicillins in combination with extended-release sulfonamides

TASK 17. Instructions: Choose one correct answer
Specify which incision is used when opening an intramammary abscess:
1. Paraareolar incision
2. Semi-oval incision along the lower transitional fold of the gland
3. Semi-oval incision above the upper edge of the gland
4. Radial section

*Sample answer:*4. Radial section

TASK 18. Instructions: Choose one correct answer
Indicate in what cases in the surgical treatment of felon they resort to disarticulation of the finger:
1. With osteoarticular panaritium
2. With advanced purulent tendovaginitis
3. For pandactylitis with loss of flexion-extension function and the threat of generalization of infection

*Sample answer:*3. For pandactylitis with loss of flexion-extension function and the threat of generalization of infection

TASK 19. Instructions: Choose one correct answer
The main treatment method for acute pleural empyema is:
1. puncture
2. Open drainage of the pleural cavity
3. Closed drainage of the pleural cavity

*Sample answer:*3. Closed drainage of the pleural cavity TASK 20.

Instructions: Choose one correct answer

For the serous-purulent form of acute arthritis, use:
1. Puncture method of treatment
2. Arthrotomy with drainage of the joint cavity
3. Resection of articular surfaces
4. Amputation of a limb

*Sample answer:*1. Puncture method of treatment

TASK 21. Instructions: Choose one correct answer
Specify the prophylactic dose of polyvalent anti-gangrenosis serum:1.10 000 IU
2.20 000 ME
3.30 000 ME
4.50 000 ME
5.150 000 IU
*Sample answer:*3. 30,000 IU

TASK 22. Instructions: Choose one correct answer
Emergency specific prevention of tetanus in previously vaccinated patients consists of:
1. Single injection of 0.5 ml tetanus toxoid
2. Single injection of 3000 AE antitetanus serum
3. Single injection of 500 AE antitetanus gamma globulin
4. Administration of 1 ml of tetanus toxoid and 3000 AE of anti-tetanus serum or 450-600 AE of anti-tetanus gamma globulin, followed by revaccination with 0.5 ml of tetanus toxoid after 1 month and after 1 year

*Sample answer:*1. Single injection of 0.5 ml of tetanus toxoid

TASK 23. Instructions: Choose one correct answer
Specify the type of emergency operation for dry gangrene:
1. Emergency
2. Urgent
3. Planned

*Sample answer:*2. Urgent

TASK 24. Instructions: Choose one correct answer
Active immunization for staphylococcal sepsis should be carried out using:
1. Antistaphylococcal bacteriophage
2. Staphylococcal toxoid
3. Antistaphylococcal plasma
4. Antistaphylococcal immunoglobulin

*Sample answer:*2. Staphylococcal toxoid

TASK 25. Instructions: Choose one correct answer
Specify the classic point of puncture of the pleural cavity in acute purulent pleurisy:
1. 1st intercostal space along the scapular line
2. 7th-8th intercostal space along the posterior axillary line
3. 2nd intercostal space along the midclavicular line

*Sample answer:*2. 7-8th intercostal space along the posterior axillary line

Open type tasks

EXERCISE 1
The seamstress turned to the clinic surgeon with complaints of pain in the nail phalanx of the second finger of the right hand. I didn't sleep at night. From the medical history it is known that the day before, while working, she was pricked with a long needle in the area of the “pad” of the nail phalanx of the second finger of the right hand. On examination: on the palmar surface of the distal phalanx there is pronounced tension and tenderness of the soft tissues, local hyperthermia and hyperemia, at the injection site there is a detachment of the epidermis up to 0.3 cm in diameter with an accumulation of pus underneath. The diagnosis was made: subcutaneous panaritium of the distal phalanx of the second finger of the right hand.
Indicate the scope of treatment measures.
*Sample answer:*Opening and draining the panaritium at the site of greatest pain and hyperemia under general anesthesia, systemic antibacterial therapy with broad-spectrum antibiotics, antihistamines, non-steroidal anti-inflammatory drugs, physiotherapeutic procedures (UHF).

TASK 2
In patient A., 34 years old, the disease began with the appearance of a boil in the middle third of the right forearm. After 5 days, the pain in the forearm intensified, swelling, diffuse hyperemia, dysfunction of the limb appeared, and fluctuation appeared in the center of inflammation. Body temperature 390 C. Blood test: leukocytes -12.6x109/l. A diagnosis was made: abscessing boil of the forearm.
Indicate the scope of treatment measures.
*Sample answer:*Opening and drainage of the abscess with removal of the purulent-necrotic core under general anesthesia, systemic antibacterial therapy with broad-spectrum antibiotics, antihistamines, non-steroidal anti-inflammatory drugs, physiotherapeutic procedures (UHF).

TASK 3
A 50-year-old patient was brought to the emergency room of the surgical department with complaints of severe pain on the outer surface of the left shin, which was of a burning nature. The patient notes chills, headache, nausea, vomiting, fever up to
400 C. From the anamnesis: 7 days ago I injured my lower leg on a metal grill. Objectively: the skin on the outer surface of the leg is bright red with clear jagged edges at the border with healthy skin. In some areas in the zone of hyperemia there are epidermal blisters filled with transparent exudate. A diagnosis was made: erysipelas of the lower leg, erythematous-bullous form. Does the patient need surgical intervention? In which department should the patient be treated? Indicate the most effective antibacterial drugs. Sample answer: The patient does not need surgical treatment; phlegmonous and necrotic forms of erysipelas are subject to surgical treatment. Treatment should be carried out in an infectious disease hospital. The most effective drugs are semi-synthetic penicillins.

TASK 4
A 55-year-old patient was admitted to the surgical department with a carbuncle on the back of the neck.
Indicate the scope of treatment measures.
*Sample answer:*Cross-shaped opening of the carbuncle according to the size of the infiltrate, removal of necrotic fatty tissue, sanitation and drainage of a purulent wound under general anesthesia, systemic antibacterial therapy with broad-spectrum antibiotics

actions, antihistamines, non-steroidal anti-inflammatory drugs, physiotherapeutic procedures (UHF).

TASK 5
When examining the 2nd finger of the patient's left hand, it was revealed that it was sharply increased in volume, swollen, had an irregular shape, and there was no movement in it. There are multiple fistulas through which pus is released, bone sequesters, pieces of dead tendon, and the skin is necrotic. A diagnosis was made: pandactylitis of the 2nd finger of the left hand.
Offer treatment.
*Sample answer:*Disarticulation of the 2nd finger of the left hand under general anesthesia, followed by systemic antibacterial therapy with broad-spectrum antibiotics.

TASK 6
A 62-year-old patient, after hypothermia, developed a painful infiltrate measuring 4x6 cm on the back of the neck. The skin over it was hyperemic and tense. In the center there are several purulent-necrotic rods, with the discharge of pus. A diagnosis was made: carbuncle of the back of the neck.
Offer treatment.
*Sample answer:*Cross-shaped opening of the carbuncle according to the size of the infiltrate, removal of necrotic fatty tissue, sanitation and drainage of a purulent wound under general anesthesia, systemic antibacterial therapy with broad-spectrum antibiotics, antihistamines, non-steroidal anti-inflammatory drugs, physiotherapeutic procedures (UHF).

TASK 7
A young man has severe swelling of the upper lip extending to the right cheek. The skin of the lip is more hyperemic on the right. There is also a painful infiltrate with a necrotic core in the center. Body temperature 380 C. Diagnosis: Furuncle of the upper lip.
Indicate the scope of treatment measures.
*Sample answer:*Emergency hospitalization of the patient in the department of maxillofacial surgery, opening and drainage of the boil with a linear incision with removal of the purulent-necrotic rod under general anesthesia, systemic antibacterial therapy with broad-spectrum antibiotics, antihistamines, non-steroidal anti-inflammatory drugs, physiotherapeutic procedures (UHF), rheological solutions and anticoagulants for the prevention of thrombosis of the facial veins, strict bed rest.

TASK 8
A 30-year-old woman was brought to the emergency room of the surgical department with complaints of pain in the left axillary region and an increase in body temperature to 380C. From the anamnesis: the symptoms appeared after shaving the hair in the axillary area on the third or fourth day. Objectively: a painful lump of 3x3 cm is palpated in the left axillary region, the skin over the lump is hyperemic. There is no fluctuation. A diagnosis was made: acute suppurative axillary hidradenitis.
Indicate the scope of treatment measures.
*Sample answer:*openingand drainage of hidradenitis under local or general anesthesia, systemic antibacterial therapy with broad-spectrum antibiotics, antihistamines, non-steroidal anti-inflammatory drugs,

physiotherapeutic procedures (UHF). A ban on the use of antiperspirant deodorants and hair shaving to prevent relapse.

TASK 9

A 40-year-old woman was brought to the emergency room of the surgical department with complaints of pain in the left axillary region with a temperature of up to 380 C. From the anamnesis it was revealed that the patient was treated for 10 days in a clinic for subcutaneous panaritium of the index finger of the left cyst. At the moment, the wound on the finger is healing by secondary intention. Objectively: enlarged, painful lymph nodes tightly connected to the surrounding tissue are palpated in the left axillary region. The skin over them is hyperemic. The diagnosis was made: panaritium of the 2nd finger of the hand, complication – acute purulent axillary lymphadenitis.

Offer treatment.

*Sample answer:*Openingand drainage of abscess lymphadenitis under local or general anesthesia, systemic antibacterial therapy with broad-spectrum antibiotics, antihistamines, non-steroidal anti-inflammatory drugs, physiotherapeutic procedures (UHF).

TASK 10

A 47-year-old woman, working in her garden, injured her leg in the area of the back of her right foot with a shovel. She did not go to the doctor, but independently washed the wound with a solution of hydrogen peroxide and applied an aseptic bandage. After 2 days, she noted a significant deterioration in her general condition and called a doctor. Upon admission to the hospital, the patient's condition was of moderate severity. Complaints of severe pain in the area of the right lower limb. Temperature up to 390C, shortness of breath, tachycardia. Blood pressure tends to decrease. Locally: the injured limb is sharply swollen to the level of the knee joint. The skin is bluish, sometimes purple. The wound on the back of the foot measures 3 x 7 cm, the tissue in the bottom is gray, does not bleed. The exudate is cloudy. When palpating the lower leg, the symptom of crepitus is determined. An overview R-gram of the lower leg reveals intermuscular air accumulations. Microscopy of fingerprint smears revealed spore-forming rods. The diagnosis was made: Anaerobic clostridial myonecrosis (gas gangrene). Offer treatment.

*Sample answer:*After short-term preoperative preparation (infusion detoxification therapy, stimulation of diuresis, broad-spectrum antibiotics, a therapeutic dose of polyvalent anti-gangrenous serum), emergency surgery - high amputation of the limb at the level of the upper third of the thigh in a guillotine manner with the application of bandages with oxidizing solutions to the wound, hyperbaric oxygenation.

TASK 11

In wounded N., 25 years old, during surgical treatment of a gunshot wound of the anterior abdominal wall, the pressure dropped. The surgeon stopped further revision of the wound and applied sparse stitches. The patient's condition improved. However, two days later he developed bursting pain in the area of the surgical wound, crepitus around it, and a pulse of 120 beats. in a minute. Body temperature 37.80 C. Microscopy of fingerprint smears revealed spore-forming rods. The diagnosis was made: Anaerobic clostridial infection, phlegmon of the anterior abdominal wall.

Offer treatment.

*Sample answer:*Emergency surgery - separation of the wound edges, strip incisions of surrounding tissues for oxygenation, infusion detoxification therapy, stimulation of diuresis, broad-spectrum antibiotics, therapeutic dose of polyvalent anti-gangrenous serum

TASK 12
A patient was admitted to the surgical department after an injury with suspected intra-abdominal bleeding. Laparoscopy revealed 1.5 liters of blood in the abdominal cavity, a rupture of the mesentery of the small intestine with transition to the intestinal wall and its rupture.
Offer treatment. Is blood reinfusion possible?
*Sample answer:*Emergency laparotomy, suturing of the defect of the intestine and mesentery (stopping bleeding), sanitation and drainage of the abdominal cavity. The operation is performed against the background of replenishment of blood loss on the operating table (anti-shock blood substitutes, blood transfusion). Reinfusion is not indicated because there is bacterial contamination of the blood if a hollow organ is damaged.

TASK 13
A young man, 25 years old, turned to the surgeon with a complaint about the presence of long-term non-closing pinholes with purulent discharge in the area of a postoperative scar in the right iliac region. From the anamnesis it was established that the patient was operated on for gangrenous appendicitis 3 months ago. In the early postoperative period, extensive suppuration of the wound was noted, which subsequently healed by secondary intention. Upon examination of the patient, it was found that in the area of the postoperative scar in the right iliac region there were two pinholes, measuring 1x2 mm, with scanty purulent discharge. The edges of these holes, due to excess hypergranulation, rise somewhat above the scar tissue. The inflammatory process in the area of surrounding tissues near these holes is not pronounced. When inspecting these holes with a button probe, the latter goes through a narrow channel into the thickness of the anterior abdominal wall by 4.5 cm. The diagnosis was made: Ligature fistulas of the postoperative scar. The diagnosis was confirmed by fistulography.
Offer treatment.
*Sample answer:*Excision of fistulas within healthy tissue, removal of infected ligatures from the aponeurosis, suturing of the aponeurosis defect with monofilament threads, layer-by-layer suturing and drainage of the postoperative wound, broad-spectrum antibiotics, physiotherapeutic treatment (UHF).

TASK 14
A young man, 32 years old, consulted a surgeon with complaints of fatigue, severe pain in the calf muscles of the left leg, which appeared when walking quickly and disappeared when stopping, a feeling of numbness, and freezing of the toes of the left foot. The patient has a history of neuropsychic stress, smoking abuse, and frequent hypothermia of the legs. An objective examination of the patient revealed atrophy of the muscles of the left leg, deformation, fragility of the nail plates of the fingers and hyperkeratosis of the left foot. The skin of the left foot is pale and cold to the touch. On the left, pulsation on the femoral artery was satisfactory, on the popliteal and dorsal artery of the foot it was weakened, on the posterotibial artery it was not detected. Positive tests of Oppel, Samuels, Moshkovich on the left were determined. Angiography reveals an extensive narrowing of the femoral artery in the middle third of the thigh. The diagnosis was made: Obliterating endarteritis of the middle third of the femoral artery.
Offer treatment.
Sample answer:. Removal of a narrowed section of the femoral artery with simultaneous prosthetics.

TASK 15
A young woman, 30 years old, suffering from rheumatoid endocarditis, suddenly felt a sharp pain in her left upper limb, a feeling of numbness and freezing of her left hand. The pain syndrome sharply intensified when trying to move the joints and

touching the skin of the left upper limb. When examining the patient 8 hours after the onset of pain, the doctor on duty discovered pallor with a marble tint and significant coldness of the skin of the left forearm and left hand. There was a slight decrease in tactile and pain sensitivity and limited mobility in the joints of the left upper limb. Pulsation in the brachial and radial arteries of the left limb was not detected. Angiography reveals a block of blood flow at the level of the upper third of the brachial artery. The diagnosis was made: Thromboembolism of the brachial artery.
Offer treatment.
*Sample answer:*Emergency thromboembolectomy followed by the administration of rheological solutions and anticoagulants to prevent recurrent thromboembolic complications. Subsequent treatment by a cardiologist and rheumatologist.

TASK 16
A 22-year-old patient was taken to the surgical department after an injury to the abdomen and lumbar region on the left. The patient notes pain in the left half of the abdomen, radiating to the left collarbone and shoulder, and general weakness. An ultrasound examination reveals heterogeneity of the spleen and free fluid in the abdominal cavity. Laparoscopy revealed a splenic rupture and 1 liter of blood in the abdominal cavity.
Specify the optimal amount of operational benefit.
*Sample answer:*Laparoscopic splenectomy, blood reinfusion, reimplantation of splenic tissue into the greater omentum pocket, drainage of the left subphrenic space.

TASK 17
The victim has a closed chest injury on the left. There is pain in the left half of the chest when inhaling. Auscultation on the left - weakening of breathing, percussion - dullness of sound. A general blood test shows anemia. A plain X-ray of the chest organs showed darkening on the left up to the angle of the scapula; an ultrasound scan of the chest organs revealed 800 ml of fluid in the left pleural cavity; a pleural puncture revealed blood that did not coagulate in a test tube.
Indicate the optimal volume of treatment measures.
*Sample answer:*Thoracentesis in the 7-8 intercostal space along the posterior axillary line, drainage of the pleural cavity according to Bulau, blood transfusion.

TASK 18
The victim was brought to the emergency department. From the anamnesis it was revealed that 2 hours ago he was beaten by unknown persons. Complains of weakness, dizziness, pain in the left half of the abdomen. During examination: pulse 122 beats per minute, blood pressure 90/60 mm Hg. The abdomen is soft, painful in the left half, where there is a small hematoma on the anterior abdominal wall. In sloping areas, dullness of percussion sound is noted. Blood test: Hb 90 g/l, red blood cells 3.0x1012/l. Abdominal ultrasound revealed 800 ml of free fluid in the abdominal cavity. Laparoscopy revealed a rupture of the spleen, a rupture of the splenic angle of the colon, and free blood in the abdominal cavity. The diagnosis was made: closed abdominal injury, rupture of the spleen and large intestine, intra-abdominal bleeding.
Specify the optimal volume of the operation. Is blood reinfusion possible?
*Sample answer:*emergency laparotomy, splenectomy, suturing of colon rupture, sanitation and drainage of the abdominal cavity. Reinfusion of blood and reimplantation of splenic tissue is impossible, since there is bacterial contamination of the blood and abdominal cavity with the contents of the colon.

TASK 19
An unconscious patient was taken to the hospital. Upon examination, no bone damage was found. Blood pressure 120/80 mm Hg. Pulse 56 beats per minute. Tendon reflexes in the right leg and arm are sharply weakened. The employee accompanying the patient reported that the victim fell from a height of 1.5 m, hitting his head. A computed tomography scan of the skull revealed an area of brain matter destruction in the left half of the brain. The diagnosis was made: brain contusion, right-sided paraparesis.
Indicate the optimal volume of treatment measures.
*Sample answer:*Dehydration therapy to reduce cerebral edema. If symptoms of cerebral edema increase (increasing cardiopulmonary dysfunction and neurological disorders), emergency decompression craniotomy above the bruise site, removal of cerebral detritus and stopping bleeding.

TASK 20
A patient was brought to the emergency department from the scene of the disaster. From the anamnesis it was found that during a car collision, the victim hit his head, losing consciousness for several minutes. Currently, I am worried about dizziness, weakness, and mild nausea. Pulse 66 beats. per minute Blood pressure 120/70 mm Hg. Plain radiographs of the skull and computed tomography showed no damage to the bones or brain. A diagnosis was made: concussion.
Offer treatment.
*Sample answer:*Hospitalization in the department of neurosurgery or neurology for 10-14 days, bed rest for 5-7 days, dehydration therapy, sedatives, drugs that improve the bioenergy of the brain.

TASK 21
Patient M., 42 years old, was admitted to a surgical hospital after an accident (hit by a car). The patient's condition is moderate. Pulse 88 beats per minute, blood pressure 130/60 mmHg. He complains of intense pain in the right half of the chest, where upon examination crepitus is detected in the projection of the 5th rib and pain. An x-ray revealed a fracture of the fifth rib without displacement of the fragments, and the fluid level was determined in the right pleural sinus. The diagnosis was made: closed chest injury, fracture of the 5th rib, small hemothorax.
What are your next steps?
*Sample answer:*It is necessary to perform a pleural puncture with the Rivilois-Gregoire test to evacuate blood from the pleural cavity. Perform novocaine blockade of the fracture site. Apply an immobilizing adhesive bandage. Prescribe broad-spectrum antibiotics for the prevention of congestive pneumonia, analgesics, physiotherapy (electrophoresis with novocaine). Continue dynamic monitoring of the patient with a control radiograph and ultrasound of the chest organs.

TASK 22
Patient P., 36 years old, has been experiencing increased temperature and weakness for a long time. Over the past 8 months, the patient has undergone 3 operations for ulcers of various locations. This condition developed against the background of an abscess of the right lung. Clinically diagnosed: Sepsis.
What are your next steps?
*Sample answer:*It is necessary to perform a bacteriological blood test for sterility and determine the sensitivity of microflora to antibiotics. Prescribe empirical starting antibacterial therapy: 2-3 broad-spectrum antibiotics, cumulatively active against all microorganisms. Execute

immunogram and prescribe immunocorrectors. Carry out detoxification therapy. To adjust homeostasis indicators, I focus on biochemical and other laboratory tests. After intensive therapy for 1-2 days and preparing the patient, eliminate the primary septic focus - perform a lobectomy of the affected lobe of the lung with an abscess.

TASK 23
A patient was brought to the hospital with complaints of severe swelling of the right hand, numbness, and the presence of conflicts. From the anamnesis it was established that, being in a state of alcoholic intoxication, he slept through the night sitting, leaning his hand on the back of a chair. On examination, the right hand is swollen, mainly in the forearm area, there are phlycts on the skin, there is no superficial sensitivity, and deep sensitivity is sharply reduced. There is an increase in serum myoglobin levels. A diagnosis was made: Positional compression syndrome.
What are your next steps?
*Sample answer:*Carry out detoxification therapy with forced diuresis and renoprotectors, prescribe antiplatelet agents, rheological solutions, anticoagulants to improve microcirculation. Prescribe broad-spectrum antibiotics to prevent infectious complications, taking into account their nephrotoxicity. Perform a fasciotomy on the forearm to reduce plasmatic edema and improve blood supply to the muscle masses. Immobilize the upper limb.

TASK 24
A patient undergoing treatment in the surgical department for an extensive scalped wound of the left thigh, after surgical debridement and local treatment, has a skin defect measuring 13x20 cm on the anterior outer surface of the thigh. The bottom of the wound is represented by bright, fine-grained granulation tissue, the discharge is scanty, serous, perifocal there is no inflammation.
Your suggestions for further treatment.
*Sample answer:*It is necessary to perform autodermoplasty with a free split perforated skin flap. The donor area can be the anterior surface of the thigh of a healthy limb.

TASK 25
During dressing, the patient was found to have a superficial wound of the anterior abdominal wall, measuring 6x3x3 cm, covered with purulent-necrotic tissue.
Your suggestions for further treatment.
*Sample answer:*Since the wound is in the phase of inflammation (the period of cleansing the wound from necrosis), mixed antiseptics are used to combat pathogenic microflora and quickly cleanse the wound from necrosis (necrectomy, washing the wound with antiseptics, adequate drainage of the wound, quartzing the wound, applying sorption dressings, using proteolytic enzymes).

TASK 26
A patient was admitted to the surgical department with complaints of pain throughout the abdomen, nausea, vomiting of foul-smelling contents, and an increase in temperature to 38.50 C. Upon examination, it was determined that he had been ill for 2-3 days. At the beginning of the disease, the pain was localized in the right iliac region, and subsequently spread throughout the abdomen. Upon objective examination, the patient's condition is serious. The skin is gray-earthy in color, the features are pointed, the tongue is dry, covered with brown crusts, the abdomen is evenly swollen. Palpation of the abdomen is sharply painful in all parts, peristalsis cannot be heard, a positive Shchetkin-Blumberg sign is determined in all parts. A plain radiograph of the abdominal cavity reveals

swollen intestinal loops without horizontal fluid levels; ultrasound reveals free fluid in the abdominal cavity. When inserting a nasogastric tube, a large amount of stagnant gastric contents was released. The diagnosis was made: Acute destructive appendicitis, widespread peritonitis. Phase of acute enteral failure.
What is your treatment strategy before surgery?
*Sample answer:*Short-term preoperative preparation (2 hours), including correction of water and electrolyte disturbances, detoxification therapy, replenishment of blood volume, stimulation of diuresis, cardiotonics, normalization of acid-base status, administration of a loading dose of broad-spectrum antibiotics.

TASK 27
Patient N., 46 years old, has been treated in the therapeutic department for 10 days with a diagnosis of right lower lobe pneumonia. Against the background of ongoing antibacterial and detoxification therapy, a high temperature of up to 390 C, chills, and malaise persist. Suddenly the patient's condition worsened, shortness of breath, cyanosis, pain in the right half of the chest appeared, and signs of intoxication began to increase. A chest x-ray on the right shows a horizontal level of fluid and a shadow of a collapsed lung. In the general blood test - leukocytosis 15.0x109/l with a shift of the formula to the left to juvenile forms. A diagnosis was made: abscessing right-sided lower lobe pneumonia, pyopneuthorax.
What are your immediate actions?
*Sample answer:*It is necessary to perform drainage of the pleural cavity according to Bulau at 2 points: 7-8 intercostal space along the posterior axillary line and 2-3 intercostal space along the midclavicular line with active aspiration of air and purulent exudate from the pleural cavity.

TASK 28
A 30-year-old man was brought to the emergency room of the surgical department 6 hours after the onset of the disease, complaining of severe abdominal pain. From the anamnesis it was revealed that he had been suffering from gastric ulcer for 10 years. The pain appeared suddenly and was dagger-like in nature. Objectively: the tongue is dry, tachycardia, the abdomen is board-like tense, sharply painful on palpation, a positive Shchetkin-Blumberg sign is detected in all parts of the abdomen. An endoscopic examination revealed an ulcer of the antrum of the stomach. X-ray examination shows free gas under the right dome of the diaphragm. The surgeon on duty made a diagnosis: perforated gastric ulcer, widespread peritonitis, reactive phase.
Specify the optimal volume and urgency of the operation.
*Sample answer:*emergency laparoscopy (the operation should begin within 2 hours of hospitalization), laparoscopic suturing of a perforated ulcer, sanitation and drainage of the abdominal cavity.

TASK 29
A 38-year-old woman came to the emergency room because she twisted her left leg in the icy conditions, after which sharp pain and swelling immediately appeared in the ankle joint. Upon examination, it was revealed that the contours of the joint were smoothed, its tissues were swollen, and on palpation there was moderate pain. Active and passive movements are sharply limited due to severe pain, there is no crepitus. There are no bone lesions on the x-ray. A diagnosis was made: ankle sprain.
What are your suggestions for treatment?
*Sample answer:*Apply a fixing 8-shaped bandage to the ankle joint from an elastic bandage, prescribe analgesics and non-steroidal

anti-inflammatory drugs, rest, physiotherapeutic procedures (electrophoresis with novocaine).

TASK 30
During a football competition, the athlete suffered an injury to his right knee joint. Upon examination and palpation, the contours of the joint are smoothed, it is increased in volume, sharp pain is detected during movements and palpation, a symptom of patella balloting. An X-ray of the knee joint did not reveal any damage to the bone structures. During puncture of the joint, blood was obtained. A diagnosis was made: hemarthorsis.
What are your suggestions for treatment?
*Sample answer:*Evacuation of blood and washing of the joint cavity with antiseptics during puncture, plaster immobilization of the joint, non-steroidal anti-inflammatory drugs, rest. If necessary, repeat punctures with sanitation of the joint cavity.

TASK 31
You have been called by ambulance to a construction site. You find out that the patient fell from a height of 4 meters to his feet. He complains of pain in the lower back, the functions of the limbs are not impaired. When bending the torso forward and to the side, pain in the lower back increases. Presumable diagnosis: compression fracture of the lumbar spine.
First aid scope?
*Sample answer:*Transporting the patient to the trauma department on a rigid board with a bolster under the lumbar region, analgesics.

TASK 32
After falling on his right arm, the patient felt a sharp pain in the right shoulder joint. During the examination, the traumatologist discovered a gross deformity of the right shoulder joint, impaired mobility in the joint, and severe pain during passive and active movements of the right arm. X-ray of the shoulder joint in 2 projections revealed a dislocated shoulder.
Your actions?
*Sample answer:*Reduction of shoulder dislocation according to Kocher under general anesthesia, control radiography of the shoulder joint, plaster immobilization of the shoulder joint.

TASK 33
A patient transported by ambulance to the emergency department of a local hospital reported a stab wound to the left thigh 1 hour earlier. On examination: the patient's condition is satisfactory. The skin is of normal color. Hemodynamics are stable. Locally: on the anterior-inner surface in the upper third of the left thigh there is a stab wound measuring 2.5x0.5 cm with intense (after removal of the bandage) capillary bleeding. Along with this, a round-shaped tumor-like formation measuring 8x8x7 cm is identified next to the wound. The skin over it is tense and imbibed with blood. Palpation reveals tissue tension and pulsation of the formation, synchronous with the heart rhythm.
The scope of the operational allowance?
*Sample answer:*Opening the hematoma, its revision, determining the location of damage to the femoral artery, applying a vascular suture to the damaged area.

TASK 34
A patient was admitted to the emergency room who received a thermal burn of the left upper limb and back from a flame. The patient is sharply agitated and makes almost no contact. The pulse is frequent, weak filling. There are areas on the burn surface

coagulation necrosis, as well as burst blisters with remnants of the epidermis. A diagnosis was made: thermal burn of the upper limb and back of IIIb-IV degree, area 27%, burn disease, burn shock phase.
Scope of treatment measures? When can a burn wound be treated?
*Sample answer:*Hospitalization in the intensive care unit, anti-shock therapy (hemodynamic blood substitutes, crystalloid solutions, adequate pain relief, cardiotonics, inhalation of humidified oxygen, gastric secretion blockers, broad-spectrum antibiotics, sedatives, protein drugs) under the control of hemodynamic parameters (pulse, blood pressure, central venous pressure) and hourly diuresis. Treatment of the burn wound is carried out after the patient has recovered from shock.

TASK 35
A patient with an extensive granulating wound of the left thigh, which occurred after a IIIb degree thermal burn, was brought to the dressing room.
What are your suggestions for treatment?
*Sample answer:*It is necessary to perform autodermoplasty with a free split perforated skin flap. The donor area can be the anterior surface of the thigh of a healthy limb.

TASK 36
A patient who received a burn to his right thigh and lower leg with boiling water was brought to the surgical department. When examined in the affected area, there is pronounced hyperemia of the skin, ruptured and intact blisters with serous discharge. A diagnosis was made: thermal burn of the lower extremity of IIIa degree, area 18%.
What will the local treatment consist of?
*Sample answer:*The blisters are opened, the necrotic epidermis is removed, the burn surfaces are treated with antiseptics, and antiseptic sorption dressings are applied. The goal of treatment is to prevent burn wounds from becoming infected. With effective treatment, spontaneous epithelization of burn wounds occurs.

TASK 37
After a long stay in the cold (-200 C), a patient developed frostbite on his fingers. After warming up, the fingers are swollen, hyperemic, with the presence of epidermal blisters with serous contents. The diagnosis was made: Frostbite of the fingers of the second degree, reactive period.
Offer treatment.
*Sample answer:*Local treatment: the blisters are opened, the necrotic epidermis is removed, the wound surfaces are treated with antiseptics, and antiseptic sorption dressings are applied. The goal of treatment is to prevent wound infection. With effective treatment, spontaneous epithelization of wounds occurs. General treatment: therapy aimed at normalizing blood circulation in the microcirculatory system (antispasmodics, rheological solutions, anticoagulants), reducing the inflammatory reaction (non-steroidal anti-inflammatory drugs, antihistamines), preventing wound infections (antibacterial therapy).

TASK 38
There is a patient in the burn department with extensive IIIa degree burns to the torso (more than 20%). After 2 weeks, the patient developed signs of gastrointestinal bleeding (vomiting “coffee grounds”, melena, a decrease in blood pressure to 90/40 mmHg, a decrease in the number of red blood cells and hemoglobin). Gastroscopy revealed acute gastroduodenal bleeding from an acute “burn” Curling ulcer located on the lesser curvature of the stomach.

Specify urgent treatment measures.
*Sample answer:*Perform endoscopic hemostasis, prescribe systemic hemostatic therapy (transfusion of donor fresh frozen plasma, hemostatic drugs), replenishment of blood volume (anti-shock blood substitutes, blood transfusion), antisecretory drugs to prevent recurrent bleeding.

TASK 39
The patient, 64 years old, was operated on for a malignant tumor of the stomach. During the operation, during revision of the abdominal cavity, the surgeon revealed the presence of a saucer-shaped cancer of the lesser curvature of the stomach with tumor metastasis to the liver and left ovary.
A diagnosis was made: stage IV stomach cancer, metastases to the liver and ovary. Which operation in terms of radicality and volume should the patient undergo?
*Sample answer:*Palliative surgery consisting of gastric resection and removal of the left ovary (cytoreductive surgery), followed by systemic chemotherapy.

TASK 40
In a 43-year-old patient, during fibrogastroscopy, an endoscopist discovered in the area of the lesser curvature of the stomach a rounded formation the size of a large pea, mobile, located on a thin stalk. The gastric mucosa in this area is not visually changed. After a biopsy of this formation, a morphological conclusion was obtained, which indicated that the biopsy sample was represented by cells of normal glandular epithelium of the stomach; no atypical cells were identified.
The diagnosis was made: adenomatous polyp of the stomach, clinical group 1b.
What are your suggestions for treatment?
*Sample answer:*Endoscopic polypectomy is necessary, since the gastric polyp is an obligate precancer, followed by annual endoscopic monitoring.

TASK 41
An athlete consulted a doctor with complaints of pain and swelling in the left knee joint, which appeared after an injury. Upon examination, the contours of the joint are smoothed, fluctuation, local hyperemia of the skin, and an increase in its temperature compared to the surrounding tissues are determined. Body temperature is increased. A test puncture of the joint yielded a yellowish liquid in a volume of 60 ml. A diagnosis was made: acute purulent arthritis, joint empyema.
What are your suggestions for treatment?
*Sample answer:*For this form of arthritis, puncture treatment is performed (joint puncture with removal of exudate and control of its volume and nature, washing the joint cavity with antiseptics, immobilization of the limb with a plaster splint, antibacterial therapy with broad-spectrum antibiotics, anti-inflammatory drugs, physiotherapeutic treatment). If treatment is ineffective, arthrotomy, sanitation and drainage of the joint cavity are performed.

TASK 42
Upon examination of patient A., 15 years old, there are 2 fistulas and soft tissue infiltration on the anterior outer surface of the right thigh. X-ray: in the lower third of the femur a cavity is detected, up to 4 cm in diameter, with the presence of a free-lying sequestrum. It is known that 2 years ago a phlegmon was opened in this area. A diagnosis was made: hematogenous osteomyelitis of the lower third of the femur, chronic stage, fistula form.
What kind of surgery is indicated for the patient?
*Sample answer:*Radical sequester necrectomy: excision of fistulous tracts within healthy tissues, opening of the sequestral cavity, removal of sequestration and purulent

exudate, removal of granulations from the sequestral cavity,
reamingbone marrow canal, sanitation, filling and drainage of the residual cavity.

TASK 43

A 5-year-old boy was brought to the pediatric surgical department one day after the onset of the disease with complaints of pain in the right thigh, fever up to 39.50C, malaise, and general weakness. From the anamnesis it was revealed that 10 days before the illness he suffered from a sore throat. Suddenly the child's condition worsened and the above complaints appeared. On examination: the patient's condition is serious. The skin and visible mucous membranes are pale, the right lower limb is in a forced position (half-bent). Active and passive movements in the joints are severely limited due to pain. When tapping the heel bone, a sharp pain in the thigh area is revealed. Ultrasound of the femur reveals an infiltration zone in the medullary canal up to 1.5 cm in diameter; there are no bone changes on the radiograph. A diagnosis was made: hematogenous osteomyelitis of the right femur, acute phase.

Offer treatment.

*Sample answer:*Antibacterial therapy, anti-inflammatory drugs, detoxification therapy, limb immobilization. If therapy is ineffective, surgical treatment is performed within 3-5 days - decompression osteoperforation, drainage of the bone marrow canal.

TASK 44

A patient was brought to the operating room with an incised wound measuring 6x2x3 cm in the soft tissue of the upper limb and bleeding from it. The wound was received 2 hours ago.

What operation should be performed on the patient? What
diseases need to be prevented?

*Sample answer:*It is necessary to perform primary surgical treatment of the wound (excision of the skin edges, walls and bottom of the wound within healthy tissues), revision of the wound, final stop of bleeding, layer-by-layer suturing of the wound with the application of primary sutures, drainage of the wound. Prevention of nonspecific infection is achieved by performing primary surgical treatment of the wound; it is necessary to additionally perform emergency prevention of a specific infection - tetanus.

TASK 45

A cannery worker consulted a doctor with complaints of severe itching, redness, burning, a feeling of tension and swelling on the dorsum of the 2nd finger of his right hand. According to him, 2 days ago he injured his finger while cutting pork. On examination: the edges of the swelling are sharply outlined from unchanged skin, uneven. Body temperature is normal. There are no changes in the blood test. A diagnosis was made: erysepeloid of the 2nd finger of the right hand.

What treatment will you prescribe?

Is surgical treatment used for this disease?

*Sample answer:*Immobilization of the hand, antibacterial therapy, ultraviolet irradiation of the skin, novocaine case blockades with simultaneous administration of antibiotics. Surgical treatment is not used.

TASK 46

In a 7-year-old child, against the background of severe general intoxication, the pediatrician discovered a small wound on the right thigh, covered with fibrinous films of gray-yellow color, tightly fused to the underlying tissues. When trying to remove the film, a bleeding wound with necrotic tissue formed. The edges of the wound are bright red, surrounding tissue

infiltrated, the inguinal nodes on the right are sharply enlarged. When collecting an anamnesis of the disease, the doctor discovered that the child's older sister had had a sore throat and fever for several days. Presumptive diagnosis: wound diphtheria confirmed by bacteriological examination.
What treatment should be prescribed?
*Sample answer:*Isolation of the patient, rest. Administration of anti-diphtheria serum according to Bezredko in the amount of 2000-4000 AE. Applying a bandage with antibiotics and anti-diphtheria serum

TASK 47
A 12-year-old child was admitted to the intensive care unit in critical condition. According to his parents, about a week ago, while running barefoot on the ground, he pricked the sole of his foot with a thorn. Upon admission, the patient had an increase in body temperature to 420 C, an increase in heart rate to 130 per minute and an increase in respiratory rate to 32 per minute. Against this background, the child experienced convulsive contraction of the facial muscles with the formation of deep wrinkles on the forehead and cheeks. Periodically, attacks of convulsions spread to the muscles of the neck, back, and limbs, which was accompanied by spastic contraction of these muscles and a sharp hyperextension of the torso and limbs. A diagnosis was made: tetanus, severe general form.
What is included in specific treatment?
*Sample answer:*Administration of antitetanus serum in a course therapeutic dose of 200-350 thousand AE, administration of antitetanus gamma globulin in a course treatment dose of 20-50 thousand AE, administration of tetanus toxoid 0.5 ml 3-day intervals of 5 days.

TASK 48
You have been called to assist a patient with arterial bleeding from a stab wound in the right buttock. How will you stop the bleeding if you have a medical bag with medicines and dressings? Is it possible to apply a hemostatic tourniquet?
Sample answer: It is necessary to tighten the tampon buttocks.It is impossible to apply a hemostatic tourniquet.

TASK 49
At a railway crossing, you accidentally witnessed the amputation of a man's left leg above the knee joint by the wheels of a locomotive.
What is first aid?
*Sample answer:*It is necessary to stop the bleeding by pressing the femoral artery with your fingers, then with your free hand or calling someone for help, make an improvised tourniquet and apply it above the wound.

TASK 50
A young woman, 34 years old, consulted a surgeon due to the presence of a painless tumor-like formation in her right thigh. The patient discovered this formation about two years ago, which gradually increased in size over time, however, without causing any pain. Upon examination of the patient, the surgeon found that in the area of the posterior surface of the lower third of the right thigh there was a tumor-like formation the size of a chicken egg, round in shape, soft elastic consistency, painless on palpation, quite mobile and not fused with the surrounding tissues. The skin over this formation is not changed. The lymph nodes in the right groin area are not enlarged and painless. The diagnosis was made: hip lipoma, clinical group 1b

Is surgery necessary? If yes, then what is the scope and urgency of implementation? Is antibiotic therapy necessary?
Sample answer: Since benign tumors are precancerous diseases, the patient needs surgery to remove the lipoma, followed by histological examination as planned. Antibacterial therapy is not carried out; antibiotic prophylaxis is sufficient.

TASK 51
An hour after the transfusion of red blood cells to a patient with ulcerative bleeding, the temperature rises to 380 C, headache, muscle pain, tremendous chills, increased heart rate and respiration. However, no decrease in blood pressure was observed. A diagnosis was made: a pyrogenic reaction of moderate severity.
Offer treatment.
*Sample answer:*Warming the patient, antipyretics, antihistamines, administration of calcium chloride.

TASK 52
In the maternity hospital, a postpartum woman who had been breastfeeding for 7 days consulted a doctor with complaints of twitching pain in the left mammary gland and an increase in temperature to 390C. Palpation reveals a compaction in the outer quadrant of the gland with areas of softening, hyperemia of the skin over the compaction, and a blood test reveals leukocytosis with a band shift. An ultrasound of the mammary gland locates a cavity with heterogeneous contents in the outer quadrant of the mammary gland. A diagnosis was made: acute purulent lactation mastitis.
What volume of operation needs to be performed? What cut is used in this situation?
*Sample answer:*Opening the abscess, removing necrotic tissue and pus, sanitizing the purulent cavity with antiseptic solutions, draining the purulent cavity. A radial incision is used.

TASK 53
When examining the patient at the scene of the incident, the emergency doctor identified the presence of a closed fracture of the right femur, applied a transport splint and took the patient to the trauma department.
Has the assistance been fully provided?
*Sample answer:*The assistance provided was not complete. In addition to immobilizing the limb, it was necessary to administer analgesics and begin an infusion of anti-shock blood substitutes in the ambulance. A hip fracture, as a rule, is accompanied by the development of traumatic and hemorrhagic shock, since with a fracture of the femur, blood loss can be 1 liter or more.

TASK 54
A patient was brought to the trauma department from the scene of a traffic accident. On examination: the condition is serious, blood pressure is 70/40 mm Hg. Art. Pulse 142, weak filling. There is extensive hemorrhage on the anterior surface of the right thigh. A sharp curvature of the limb axis was noted. The diagnosis was made: closed fracture of the right femur, traumatic shock.
What treatment method should be used for a fracture of the right femur?
*Sample answer:*It is necessary to apply skeletal traction - a minimally traumatic method of immobilization. After removing the patient from shock, decide on the advisability of open reduction with metal osteosynthesis.

TASK 55
The patient was taken to the surgical department with an extensive bruised and lacerated wound in the middle third of the left thigh. The edges of the wound are sharply swollen and hyperemic. There is copious serous-purulent discharge from the wound cavity. The bottom and edges of the wound are covered in patches with fibrinous-purulent plaque.
Can primary surgical treatment of the wound be performed? What local
treatment should be given to the patient?
*Sample answer:*Primary surgical treatment is performed for bacterially contaminated wounds in the first 24 hours from the moment of its receipt. In this case, the wound is purulent; primary surgical treatment cannot be performed. Local treatment of this wound will involve the use of mixed antiseptics (necrectomy, washing the wound with antiseptic solutions, adequate drainage of the wound, administration of proteolytic enzymes, ultraviolet irradiation of the wound, physiotherapy).

TASK 56. Interview question
Name the methods for finally stopping bleeding in case of damage to the great vessels.
*Sample answer:*In case of damage to the great vessels, to finally stop the bleeding, a vascular suture is used and the vessel is replaced with a synthetic prosthesis or an autovenous vein.

TASK 57. Interview question
What methods are used for surgical closure of wounds that heal by secondary intention in the regeneration phase of the formation and maturation of granulations?
*Sample answer:*Application of early or late secondary sutures, autodermoplasty.

TASK 58. Interview question
First aid for frostbite in the pre-reactive period at home.
Sample answer:

1. Remove frozen shoes and clothes
2. Place the patient's limb in a bath with a water temperature of 180 C. Gradually increase the temperature to 360 C over 1 hour while performing a massage.
3. Apply a heat-insulating bandage.
4. Give a hot drink and put her in a warm bed.

TASK 59. Interview question Treatment of
general cooling.
*Sample answer:*Quick warming in a bath with a water temperature of 280 C and bringing the water temperature to 40-430 C degrees in 10-15 minutes. Warming is carried out until the rectal temperature rises to 340 C. Against this background, concentrated solutions of glucose are administered (depletion of glycogen during cooling), means that improve microcirculation. Subsequently, complications are treated - cerebral edema, pulmonary edema, collapse, etc. in the intensive care unit.

TASK 60. Interview question
List the main components of conservative treatment of acute thrombophlebitis of the superficial veins of the lower extremities.
Sample answer:

1. Rest with the lower limb elevated
2. Nonsteroidal anti-inflammatory drugs
3. Systemic and local anticoagulant and antiplatelet therapy

4. Paravasal novocaine blockades with heparin, hydrocortisone, antibiotic
5. Physiotherapy

TASK 61. Interview question
List the therapeutic measures used in the treatment of purulent-inflammatory diseases in the stage of purulent melting.
Sample answer:
1. Surgical treatment (opening, adequate drainage of the abscess)
2. Sanitation of the abscess using all antiseptic methods
3. Antibacterial therapy
4. Detoxification therapy
5. Corrective therapy (correction of homeostasis disorders)
6. Replacement therapy (transfusion of blood components, mixtures of amino acids, etc.)
7. Immunotherapy
8. Symptomatic therapy

TASK 62. Interview question.
What can cause massive blood transfusion syndrome?
Sample answer: With simultaneous blood transfusions exceeding 50% of the patient's initial bcc, massive blood transfusion syndrome may develop due to citrate intoxication, potassium intoxication, acute dilatation of the heart during rapid blood transfusion

TASK 63. Interview question.
What does the treatment of pyrogenic reactions during blood transfusion include?
Sample answer:
1. Warming the patient
2. Antipyretics
3. Intravenous administration of calcium chloride, antihistamines drugs,corticosteroids

TASK 64. Interview question. Name the
dangers of applying a tourniquet.
Sample answer:
1. Tissue necrosis below the tourniquet site
2. Neurological disorders due to compression of large nerve trunks
3. Development of anaerobic infection in the wound

TASK 65. Interview question. State the rules for
applying an arterial tourniquet. Sample answer:
4. A tourniquet is applied above the bleeding site
5. A tourniquet is applied to limb segments that have one bone
6. The tourniquet is applied to the tissue-protected skin
7. A note is placed under the tourniquet indicating the time of application.
8. Every 30 minutes the tourniquet is loosened for 10-15 minutes

TASK 66. Interview question.
Name the criteria for correct application of an arterial tourniquet.
Sample answer:
9. Disappearance of peripheral arterial pulsation
10. Stopping bleeding

11. Slight waxy pallor of the skin of the limb

TASK 67. Interview question.
List temporary ways to stop bleeding.
Sample answer:
1. Applying a pressure bandage
2. Maximum flexion of the limb at the joint
3. Application of a hemostatic tourniquet
4. Finger pressure on the artery throughout
5. Tight wound tamponade
6. Elevated limb position
7. Temporary vessel bypass
8. Applying a hemostatic clamp

TASK 68. Interview question. The main stages
of treatment of bone fractures.
*Sample answer:*1. Reposition of bone fragments when they are displaced
2. Immobilization of the fracture zone
3. Creating conditions to accelerate regeneration processes and restore function

TASK 69. Interview question. Basic principles of
treatment of burn shock.
*Sample answer:*1. Combating afferent impulses (analgesics, sedatives)
2. Stabilization of hemodynamics (replenishment of bcc with colloid, crystalloid solutions, donor plasma, albumin)
3. Correction of disturbances in water-salt balance, acid-base balance and renal excretory function.
4. Correction of energy metabolism disorders.
5. Oxygen therapy.

TASK 70. Interview question.
Principles of treatment of long-term crush syndrome at the prehospital stage: Standard answer: 1. Extraction of victims from under the rubble and release of compressed areas of the body from compression (carried out by rescue services).
2. Preventing the rapid entry of toxins from damaged tissues into the bloodstream. To do this, you need to apply a tourniquet to the visible part of the limb, and immediately after releasing the limb from compression, apply an elastic bandage to the limb and remove the tourniquet.
3. Immobilization of the injured limb.
4. Antishock infusion therapy (crystalloid solutions, antishock blood substitutes, adequate pain relief with narcotic analgesics), infusion of alkalizing solutions.

TASK 71. Interview question. Treatment of
open pneumothorax.
*Sample answer:*At the pre-hospital stage, an occlusive dressing is applied. In the hospital - primary surgical treatment of the wound with hermetically sealed suturing of the chest and drainage of the pleural cavity according to Bulau.

TASK 72. Interview question. Treatment of a
patient with valvular pneumothorax.

*Sample answer:*At the pre-hospital stage - puncture of the pleural cavity with a thick Dufault needle in the 2nd intercostal space to convert a tension pneumothorax into an open one. In the hospital, thoracentesis is performed in the 2-3rd intercostal space along the midclavicular line and drainage of the pleural cavity with a drainage tube (active or passive) or video thoracoscopy, which allows to determine and eliminate the cause of pneumothorax.

TASK 73. Interview question.
The main purpose of transport immobilization for fractures
*Sample answer:*Preventing displacement of bone fragments to avoid damage to great vessels and large nerve trunks.

TASK 74. Interview question. Basic principles of
treatment of patients with peritonitis
*Sample answer:*1. Elimination or isolation of the source of peritonitis surgically.
2. Directed rational antibacterial therapy.
3. Detoxification therapy
4. Immunocorrection
5. Correction of homeostasis indicators and impaired functions of organs and systems

TASK 75. Interview question.
Basic principles of treatment of patients with surgical sepsis
*Sample answer:*1. Elimination of the entrance gate of infection or primary septic focus.
2. Directed rational antibacterial therapy.
3. Detoxification therapy
4. Immunocorrection
5. Correction of homeostasis indicators and impaired functions of organs and systems

PC-4:

Closed tasks

TASK 1. Instructions: Choose one correct answer.
Specify the basic principles of using antibacterial therapy for surgical infection:
1. Antibacterial therapyshould complement surgical treatment, but not replace it
2. Determination of strict indications for antibacterial therapy
3. Creation of an optimal concentration of an antibacterial drug at the site of inflammation or destruction
4. Prescribing broad-spectrum antibiotics as initial (starting) therapy until the results of bacterial testing are obtained
5. The choice of an antibacterial drug must be made taking into account the sensitivity of the infectious agent to this drug
6. If long-term treatment is necessary, a timely change of antibacterial drugs to drugs of a different group is necessary (on average every 5-7 days)
7. Use of combination antibacterial therapy (use of two or more drugs)
8. Antibacterial therapy should be carried out taking into account potential adverse and toxic reactions of the drug
9. All answers are correct.
*Sample answer:*9. All answers are correct.

TASK 2. Instructions: Choose one correct answer.
Treatment of acute blood loss at the initial stage begins with transfusion:
1. Donor blood
2. Red blood cell mass
3. Crystalloid solutions
4. Colloidal solutions.
*Sample answer:*4. Colloidal solutions

TASK 3. Instructions: Choose one correct answer.
Specify diseases that require routine surgery:
1. Umbilical hernia, keloid scars of the face
2. Breast cancer, destructive cholecystitis
3. Lactation mastitis, phlegmon
*Sample answer:*1. Umbilical hernia, keloid scars of the face

TASK 4. Instructions: Choose one correct answer
Indicate the time frame for primary surgical treatment of the wound to be most effective:
1.Up to 8 h
2.8-12 h
3.12-24 h
*Sample answer:*1. Up to 8 hours

TASK 5. Instructions: Choose one correct answer
Specify the basic principles of local treatment of wounds in the phase of regeneration, formation and maturation of granulations:
1. Wound drainage, use of antiseptic solutions, necrectomy
2. Dressings with ointments that stimulate regeneration processes, surgical closure of the wound
*Sample answer:*2. Bandages with ointments that stimulate regeneration processes, surgical closure of the wound

TASK 6. Instructions: Choose one correct answer
When transporting a patient with a fractured leg bone, it is necessary to immobilize:
1. Two nearby joints (knee and ankle)
2. Knee-joint
3. Hip, knee and ankle joints
*Sample answer:*1. Two nearby joints (knee and ankle)

TASK 7. Instructions: Choose one correct answer
Specify the functionally advantageous position of the limb for the elbow joint when applying a plaster cast:
1. Flexion and abduction 60-70 degrees
2. Bend at right angles
3. Bend at an angle of 120 degrees.
*Sample answer:*2. Bend at right angles

TASK 8. Instructions: Choose one correct answer
Principles of treatment of brain contusion:
1. Detoxification therapy, anticoagulants, always-decompressioncraniotomy

2. Strict bed rest for 2-4 weeks, dehydration therapy, sedatives, tranquilizers, antibacterial therapy, repeated lumbar punctures, with increasing symptoms of brain compression - decompressive craniotomy
*Sample answer:*2. Strict bed rest for 2-4 weeks, dehydration therapy, sedatives, tranquilizers, antibacterial therapy, repeated lumbar punctures, with increasing symptoms of brain compression - decompressive craniotomy

TASK 9. Instructions: Choose one correct answer
Principles of treatment of sternal fracture:
1. Novocaine blockadefracture site, placing the patient on a backboard with a bolster between the shoulder blades, if the reduction of fragments is unsuccessful - surgical treatment (fixation of fragments with tantalum staples or Kirschner wires)
2. Simultaneous closed reposition of bone fragments and application of a plaster corset
*Sample answer:*1. Novocaine blockade of the fracture site, placing the patient on a backboard with a bolster between the shoulder blades, if the reduction of fragments is unsuccessful - surgical treatment (fixation of fragments with tantalum staples or Kirschner wires)

TASK 10. Instructions: Choose one correct answer
Principles of local treatment of hemothorax:
1. Pleural punctures with evacuation of escaping blood and intrapleural administration of antibiotics, thoracotomy, bleeding control - if bleeding continues
2. Thoracotomy, bleeding control - in all cases of hemothorax
*Sample answer:*1. Pleural puncture with evacuation of escaping blood and intrapleural administration of antibiotics, thoracotomy, stopping bleeding - if bleeding continues

TASK 11. Instructions: Choose one correct answer
Surgeon's tactics for lung injury, hemopneumothorax:
1. Puncture of the pleural cavity
2. Primary surgical treatment of a wound, suturing a lung wound, drainage of the pleural cavity
3. Observation, surgery - if hemopneumothorax increases
*Sample answer:*2. Primary surgical treatment of the wound, suturing the lung wound, drainage of the pleural cavity

TASK 12. Instructions: Choose one correct answer
In case of deep traumatic rupture of the spleen, the following is performed:
1. Suturing a splenic rupture
2. Splenectomy
3. Splenectomy with reimplantation of spleen tissue
4. Splenectomy with injection of a suspension of splenic tissue into the bloodstream
*Sample answer:*3. Splenectomy with reimplantation of spleen tissue

TASK 13. Instructions: Choose one correct answer
Is it possible to use local hypothermia when the burn area is more than 20%?
1. Yes
2. No
3. Sometimes

*Sample answer:*2. No.

TASK 14. Instructions: Choose one correct answer
The most effective way of administering medications for frostbite is:
1. Intramuscular
2. Subcutaneous
3. Intravenous
4. Intra-arterial
*Sample answer:*4. Intra-arterial.

TASK 15. Instructions: Choose one correct answer
Indicate what surgical treatment of carbuncle involves:
1. Dissection of the carbuncle with a cross-shaped incision to the fascia with excision of necrotic tissue throughout and drainage of the purulent wound
2. Cross-shaped dissection of the carbuncle to the fascia and drainage of the purulent wound
3. Excision of the carbuncle with an oval incision to the fascia within the unchanged tissue
4. Step-by-step excision of necrotic cores of the carbuncle as purulent melting of tissues in the area of inflammatory infiltrate
*Sample answer:*1. Dissection of the carbuncle with a cross-shaped incision to the fascia with excision of necrotic tissue throughout and drainage of the purulent wound

TASK 16. Instructions: Choose one correct answer
Specify the direction of surgical incisions when opening purulent mumps:
1. The incisions should be parallel to the course of the branches of the facial nerve
2. The incisions should be perpendicular to the course of the branches of the facial nerve
*Sample answer:*1. The incisions should be parallel to the course of the branches of the facial nerve

TASK 17. Instructions: Choose one correct answer
Indicate which incision is used when opening a retromammary abscess:
1. Radial incision in the upper half of the gland
2. Radial incision in the lower half of the gland
3. Paraareolar incision
4. Semi-oval incision along the lower transitional fold of the gland
5. Semi-oval incision above the upper edge of the gland
*Sample answer:*4. Semi-oval incision along the lower transitional fold of the gland

TASK 18. Instructions: Choose one correct answer
Antibacterial therapy for sepsis should be started;
1. If blood cultures are positive
2. After receiving an antibiogram
3. When detecting primary or metastatic foci
4. From the moment of diagnosis
5. In case of inadequate opening of the primary lesion
*Sample answer:*4. From the moment of diagnosis

TASK 19. Instructions: Choose one correct answer
Is surgical treatment always indicated for acute hematogenous osteomyelitis?
1. Yes
2. No

*Sample answer:*2. No

TASK 20. Instructions: Choose one correct answer
For joint empyema, capsular phlegmon and panarthritis, use:
1. Puncture method of treatment
2. Arthrotomy with drainage of the joint cavity
3. Resection of articular surfaces
4. Amputation of a limb
Response standard: 2. Arthrotomy with drainage of the joint cavity

TASK 21. Instructions: Choose one correct answer
Specify the therapeutic dose of polyvalent anti-gangrenous serum:1.10 000 IU

2.20 000 ME
3.30 000 ME
4.50 000 ME
5.150 000 IU
Response standard: 5. 150,000 IU

TASK 22. Instructions: Choose one correct answer
Emergency specific prevention of tetanus in unvaccinated people consists of:
1. Single injection of 0.5 ml tetanus toxoid
2. Single injection of 3000 AE antitetanus serum
3. Single injection of 500 AE antitetanus gamma globulin
4. Administration of 1 ml of tetanus toxoid and 3000 AE of anti-tetanus serum or 450-600 AE of anti-tetanus gamma globulin, followed by revaccination with 0.5 ml of tetanus toxoid after 1 month and after 1 year
*Response standard*4. Administration of 1 ml of tetanus toxoid and 3000 AE of antitetanus serum or 450-600 AE of antitetanus gamma globulin, followed by revaccination with 0.5 ml of tetanus toxoid after 1 month and after 1 year

TASK 23. Instructions: Choose one correct answer
Specify the type of emergency operation for wet gangrene:
1. Emergency
2. Urgent
3. Planned
Response standard: 1. Emergency

TASK 24. Instructions: Choose one correct answer
The most rational ways of administering antibiotics for sepsis are:
1. Oral
2. Intramuscular
3. Intravenous and endolymphatic
4. Intraosseous
5. Intra-arterial
Response standard: 3. Intravenous and endolymphatic

TASK 25. Instructions: Choose one correct answer
Types of surgical interventions for chronic osteomyelitis:
1. Fistula excision, sequesternecrectomy, sanitation and filling of the cavity filling of the cavity
2. Limb amputation

3. Donor bone marrow transplant
4. Bone marrow canal plastic surgery
5. Resection of a section of bone with an osteomyelitic cavity followed by bone grafting

Response standard: 1. Excision of the fistula, sequesternecrectomy, sanitation and filling of the cavity filling of the cavity

Open type tasks

EXERCISE 1

The seamstress turned to the clinic surgeon with complaints of pain in the nail phalanx of the second finger of the right hand. I didn't sleep at night. From the medical history it is known that the day before, while working, she was pricked with a long needle in the area of the "pad" of the nail phalanx of the second finger of the right hand. On examination: on the palmar surface of the distal phalanx there is pronounced tension and tenderness of the soft tissues, local hyperthermia and hyperemia, at the injection site there is a detachment of the epidermis up to 0.3 cm in diameter with an accumulation of pus underneath. The diagnosis was made: subcutaneous panaritium of the distal phalanx of the second finger of the right hand.

Indicate the scope of treatment measures.

*Sample answer:*Opening and draining the panaritium at the site of greatest pain and hyperemia under general anesthesia, systemic antibacterial therapy with broad-spectrum antibiotics, antihistamines, non-steroidal anti-inflammatory drugs, physiotherapeutic procedures (UHF).

TASK 2

In patient A., 34 years old, the disease began with the appearance of a boil in the middle third of the right forearm. After 5 days, the pain in the forearm intensified, swelling, diffuse hyperemia, dysfunction of the limb appeared, and fluctuation appeared in the center of inflammation. Body temperature 390 C. Blood test: leukocytes -12.6x109/l. A diagnosis was made: abscessing boil of the forearm.

Indicate the scope of treatment measures.

*Sample answer:*Opening and drainage of the abscess with removal of the purulent-necrotic core under general anesthesia, systemic antibacterial therapy with broad-spectrum antibiotics, antihistamines, non-steroidal anti-inflammatory drugs, physiotherapeutic procedures (UHF).

TASK 3

A 50-year-old patient was brought to the emergency room of the surgical department with complaints of severe pain on the outer surface of the left shin, which was of a burning nature. The patient notes chills, headache, nausea, vomiting, fever up to
400 C. From the anamnesis: 7 days ago I injured my lower leg on a metal grill. Objectively: the skin on the outer surface of the leg is bright red with clear jagged edges at the border with healthy skin. In some areas in the zone of hyperemia there are epidermal blisters filled with transparent exudate. A diagnosis was made: erysipelas of the lower leg, erythematous-bullous form. Does the patient need surgical intervention? In which department should the patient be treated? Indicate the most effective antibacterial drugs. Sample answer: The patient does not need surgical treatment; phlegmonous and necrotic forms of erysipelas are subject to surgical treatment. Treatment should be carried out in an infectious disease hospital. The most effective drugs are semi-synthetic penicillins.

TASK 4
A 55-year-old patient was admitted to the surgical department with a carbuncle on the back of the neck.
Indicate the scope of treatment measures.
*Sample answer:*Cross-shaped opening of the carbuncle according to the size of the infiltrate, removal of necrotic fatty tissue, sanitation and drainage of a purulent wound under general anesthesia, systemic antibacterial therapy with broad-spectrum antibiotics, antihistamines, non-steroidal anti-inflammatory drugs, physiotherapeutic procedures (UHF).

TASK 5
When examining the 2nd finger of the patient's left hand, it was revealed that it was sharply increased in volume, swollen, had an irregular shape, and there was no movement in it. There are multiple fistulas through which pus is released, bone sequesters, pieces of dead tendon, and the skin is necrotic. A diagnosis was made: pandactylitis of the 2nd finger of the left hand.
Offer treatment.
*Sample answer:*Disarticulation of the 2nd finger of the left hand under general anesthesia, followed by systemic antibacterial therapy with broad-spectrum antibiotics.

TASK 6
A 62-year-old patient, after hypothermia, developed a painful infiltrate measuring 4x6 cm on the back of the neck. The skin over it was hyperemic and tense. In the center there are several purulent-necrotic rods, with the discharge of pus. A diagnosis was made: carbuncle of the back of the neck.
Offer treatment.
*Sample answer:*Cross-shaped opening of the carbuncle according to the size of the infiltrate, removal of necrotic fatty tissue, sanitation and drainage of a purulent wound under general anesthesia, systemic antibacterial therapy with broad-spectrum antibiotics, antihistamines, non-steroidal anti-inflammatory drugs, physiotherapeutic procedures (UHF).

TASK 7
A young man has severe swelling of the upper lip extending to the right cheek. The skin of the lip is more hyperemic on the right. There is also a painful infiltrate with a necrotic core in the center. Body temperature 380 C. Diagnosis: Furuncle of the upper lip.
Indicate the scope of treatment measures.
*Sample answer:*Emergency hospitalization of the patient in the department of maxillofacial surgery, opening and drainage of the boil with a linear incision with removal of the purulent-necrotic rod under general anesthesia, systemic antibacterial therapy with broad-spectrum antibiotics, antihistamines, non-steroidal anti-inflammatory drugs, physiotherapeutic procedures (UHF), rheological solutions and anticoagulants for the prevention of thrombosis of the facial veins, strict bed rest.

TASK 8
A 30-year-old woman was brought to the emergency room of the surgical department with complaints of pain in the left axillary region and an increase in body temperature to 380C. From the anamnesis: the symptoms appeared after shaving the hair in the axillary area on the third or fourth day. Objectively: a painful lump is palpated in the left axillary area

3x3 cm, the skin over the induration is hyperemic. There is no fluctuation. A diagnosis was made: acute suppurative axillary hidradenitis.
Indicate the scope of treatment measures.
*Sample answer:*openingand drainage of hidradenitis under local or general anesthesia, systemic antibacterial therapy with broad-spectrum antibiotics, antihistamines, non-steroidal anti-inflammatory drugs, physiotherapeutic procedures (UHF). A ban on the use of antiperspirant deodorants and hair shaving to prevent relapse.

TASK 9
A 40-year-old woman was brought to the emergency room of the surgical department with complaints of pain in the left axillary region with a temperature of up to 380 C. From the anamnesis it was revealed that the patient was treated for 10 days in a clinic for subcutaneous panaritium of the index finger of the left cyst. At the moment, the wound on the finger is healing by secondary intention. Objectively: enlarged, painful lymph nodes tightly connected to the surrounding tissue are palpated in the left axillary region. The skin over them is hyperemic. The diagnosis was made: panaritium of the 2nd finger of the hand, complication – acute purulent axillary lymphadenitis.
Offer treatment.
*Sample answer:*Openingand drainage of abscess lymphadenitis under local or general anesthesia, systemic antibacterial therapy with broad-spectrum antibiotics, antihistamines, non-steroidal anti-inflammatory drugs, physiotherapeutic procedures (UHF).

TASK 10
A 47-year-old woman, working in her garden, injured her leg in the area of the back of her right foot with a shovel. She did not go to the doctor, but independently washed the wound with a solution of hydrogen peroxide and applied an aseptic bandage. After 2 days, she noted a significant deterioration in her general condition and called a doctor. Upon admission to the hospital, the patient's condition was of moderate severity. Complaints of severe pain in the area of the right lower limb. Temperature up to 390C, shortness of breath, tachycardia. Blood pressure tends to decrease. Locally: the injured limb is sharply swollen to the level of the knee joint. The skin is bluish, sometimes purple. The wound on the back of the foot measures 3 x 7 cm, the tissue in the bottom is gray, does not bleed. The exudate is cloudy. When palpating the lower leg, the symptom of crepitus is determined. An overview R-gram of the lower leg reveals intermuscular air accumulations. Microscopy of fingerprint smears revealed spore-forming rods. The diagnosis was made: Anaerobic clostridial myonecrosis (gas gangrene). Offer treatment.
*Sample answer:*After short-term preoperative preparation (infusion detoxification therapy, stimulation of diuresis, broad-spectrum antibiotics, a therapeutic dose of polyvalent anti-gangrenous serum), emergency surgery - high amputation of the limb at the level of the upper third of the thigh in a guillotine manner with the application of bandages with oxidizing solutions to the wound, hyperbaric oxygenation.

TASK 11
In wounded N., 25 years old, during surgical treatment of a gunshot wound of the anterior abdominal wall, the pressure dropped. The surgeon stopped further revision of the wound and applied sparse stitches. The patient's condition improved. However, two days later he developed bursting pain in the area of the surgical wound, crepitus around it, and a pulse of 120 beats. in a minute. Body temperature 37.80 C. Microscopy of fingerprint smears revealed spore-forming rods. The diagnosis was made: Anaerobic clostridial infection, phlegmon of the anterior abdominal wall.

Offer treatment.
*Sample answer:*Emergency surgery - separation of the wound edges, strip incisions of surrounding tissues for oxygenation, infusion detoxification therapy, stimulation of diuresis, broad-spectrum antibiotics, therapeutic dose of polyvalent anti-gangrenous serum

TASK 12
A patient was admitted to the surgical department after an injury with suspected intra-abdominal bleeding. Laparoscopy revealed 1.5 liters of blood in the abdominal cavity, a rupture of the mesentery of the small intestine with transition to the intestinal wall and its rupture.
Offer treatment. Is blood reinfusion possible?
*Sample answer:*Emergency laparotomy, suturing of the defect of the intestine and mesentery (stopping bleeding), sanitation and drainage of the abdominal cavity. The operation is performed against the background of replenishment of blood loss on the operating table (anti-shock blood substitutes, blood transfusion). Reinfusion is not indicated because there is bacterial contamination of the blood if a hollow organ is damaged.

TASK 13
A young man, 25 years old, turned to the surgeon with a complaint about the presence of long-term non-closing pinholes with purulent discharge in the area of a postoperative scar in the right iliac region. From the anamnesis it was established that the patient was operated on for gangrenous appendicitis 3 months ago. In the early postoperative period, extensive suppuration of the wound was noted, which subsequently healed by secondary intention. Upon examination of the patient, it was found that in the area of the postoperative scar in the right iliac region there were two pinholes, measuring 1x2 mm, with scanty purulent discharge. The edges of these holes, due to excess hypergranulation, rise somewhat above the scar tissue. The inflammatory process in the area of surrounding tissues near these holes is not pronounced. When inspecting these holes with a button probe, the latter goes through a narrow channel into the thickness of the anterior abdominal wall by 4.5 cm. The diagnosis was made: Ligature fistulas of the postoperative scar. The diagnosis was confirmed by fistulography.
Offer treatment.
*Sample answer:*Excision of fistulas within healthy tissue, removal of infected ligatures from the aponeurosis, suturing of the aponeurosis defect with monofilament threads, layer-by-layer suturing and drainage of the postoperative wound, broad-spectrum antibiotics, physiotherapeutic treatment (UHF).

TASK 14
A young man, 32 years old, consulted a surgeon with complaints of fatigue, severe pain in the calf muscles of the left leg, which appeared when walking quickly and disappeared when stopping, a feeling of numbness, and freezing of the toes of the left foot. The patient has a history of neuropsychic stress, smoking abuse, and frequent hypothermia of the legs. An objective examination of the patient revealed atrophy of the muscles of the left leg, deformation, fragility of the nail plates of the fingers and hyperkeratosis of the left foot. The skin of the left foot is pale and cold to the touch. On the left, pulsation on the femoral artery was satisfactory, on the popliteal and dorsal artery of the foot it was weakened, on the posterotibial artery it was not detected. Positive tests of Oppel, Samuels, Moshkovich on the left were determined. Angiography reveals an extensive narrowing of the femoral artery in the middle third of the thigh. The diagnosis was made: Obliterating endarteritis of the middle third of the femoral artery.
Offer treatment.

Sample answer:. Removal of a narrowed section of the femoral artery with simultaneous prosthetics.

TASK 15
A young woman, 30 years old, suffering from rheumatoid endocarditis, suddenly felt a sharp pain in her left upper limb, a feeling of numbness and freezing of her left hand. The pain syndrome sharply intensified when trying to move the joints and touch the skin of the left upper limb. When examining the patient 8 hours after the onset of pain, the doctor on duty discovered pallor with a marble tint and significant coldness of the skin of the left forearm and left hand. There was a slight decrease in tactile and pain sensitivity and limited mobility in the joints of the left upper limb. Pulsation in the brachial and radial arteries of the left limb was not detected. Angiography reveals a block of blood flow at the level of the upper third of the brachial artery. The diagnosis was made: Thromboembolism of the brachial artery.
Offer treatment.
*Sample answer:*Emergency thromboembolectomy followed by the administration of rheological solutions and anticoagulants to prevent recurrent thromboembolic complications. Subsequent treatment by a cardiologist and rheumatologist.

TASK 16
A 22-year-old patient was taken to the surgical department after an injury to the abdomen and lumbar region on the left. The patient notes pain in the left half of the abdomen, radiating to the left collarbone and shoulder, and general weakness. An ultrasound examination reveals heterogeneity of the spleen and free fluid in the abdominal cavity. Laparoscopy revealed a splenic rupture and 1 liter of blood in the abdominal cavity.
Specify the optimal amount of operational benefit.
*Sample answer:*Laparoscopic splenectomy, blood reinfusion, reimplantation of splenic tissue into the greater omentum pocket, drainage of the left subphrenic space.

TASK 17
The victim has a closed chest injury on the left. There is pain in the left half of the chest when inhaling. Auscultation on the left - weakening of breathing, percussion - dullness of sound. A general blood test shows anemia. A plain X-ray of the chest organs showed darkening on the left up to the angle of the scapula; an ultrasound scan of the chest organs revealed 800 ml of fluid in the left pleural cavity; a pleural puncture revealed blood that did not coagulate in a test tube.
Indicate the optimal volume of treatment measures.
*Sample answer:*Thoracentesis in the 7-8 intercostal space along the posterior axillary line, drainage of the pleural cavity according to Bulau, blood transfusion.

TASK 18
The victim was brought to the emergency department. From the anamnesis it was revealed that 2 hours ago he was beaten by unknown persons. Complains of weakness, dizziness, pain in the left half of the abdomen. During examination: pulse 122 beats per minute, blood pressure 90/60 mm Hg. The abdomen is soft, painful in the left half, where there is a small hematoma on the anterior abdominal wall. In sloping areas, dullness of percussion sound is noted. Blood test: Hb 90 g/l, red blood cells 3.0x1012/l. Abdominal ultrasound revealed 800 ml of free fluid in the abdominal cavity. Laparoscopy revealed a rupture of the spleen, a rupture of the splenic angle of the colon, and free blood in the abdominal cavity. Installed

diagnosis: closed injuryabdomen, rupture of the spleen and large intestine, intra-abdominal bleeding.
Specify the optimal volume of the operation. Is blood reinfusion possible?
*Sample answer:*emergency laparotomy, splenectomy, suturing of colon rupture, sanitation and drainage of the abdominal cavity. Reinfusion of blood and reimplantation of splenic tissue is impossible, since there is bacterial contamination of the blood and abdominal cavity with the contents of the colon.

TASK 19
An unconscious patient was taken to the hospital. Upon examination, no bone damage was found. Blood pressure 120/80 mm Hg. Pulse 56 beats per minute. Tendon reflexes in the right leg and arm are sharply weakened. The employee accompanying the patient reported that the victim fell from a height of 1.5 m, hitting his head. A computed tomography scan of the skull revealed an area of brain matter destruction in the left half of the brain. The diagnosis was made: brain contusion, right-sided paraparesis.
Indicate the optimal volume of treatment measures.
*Sample answer:*Dehydration therapy to reduce cerebral edema. If symptoms of cerebral edema increase (increasing cardiopulmonary dysfunction and neurological disorders), emergency decompression craniotomy above the bruise site, removal of cerebral detritus and stopping bleeding.

TASK 20
A patient was brought to the emergency department from the scene of the disaster. From the anamnesis it was found that during a car collision, the victim hit his head, losing consciousness for several minutes. Currently, I am worried about dizziness, weakness, and mild nausea. Pulse 66 beats. per minute Blood pressure 120/70 mm Hg. Plain radiographs of the skull and computed tomography showed no damage to the bones or brain. A diagnosis was made: concussion.
Offer treatment.
*Sample answer:*Hospitalization in the department of neurosurgery or neurology for 10-14 days, bed rest for 5-7 days, dehydration therapy, sedatives, drugs that improve the bioenergy of the brain.

TASK 21
Patient M., 42 years old, was admitted to a surgical hospital after an accident (hit by a car). The patient's condition is moderate. Pulse 88 beats per minute, blood pressure 130/60 mmHg. He complains of intense pain in the right half of the chest, where upon examination crepitus is detected in the projection of the 5th rib and pain. An x-ray revealed a fracture of the fifth rib without displacement of the fragments, and the fluid level was determined in the right pleural sinus. The diagnosis was made: closed chest injury, fracture of the 5th rib, small hemothorax.
What are your next steps?
*Sample answer:*It is necessary to perform a pleural puncture with the Rivilois-Gregoire test to evacuate blood from the pleural cavity. Perform novocaine blockade of the fracture site. Apply an immobilizing adhesive bandage. Prescribe broad-spectrum antibiotics for the prevention of congestive pneumonia, analgesics, physiotherapy (electrophoresis with novocaine). Continue dynamic monitoring of the patient with a control radiograph and ultrasound of the chest organs.

TASK 22

Patient P., 36 years old, has been experiencing increased temperature and weakness for a long time. Over the past 8 months, the patient has undergone 3 operations for ulcers of various locations. This condition developed against the background of an abscess of the right lung. Clinically diagnosed: Sepsis.
What are your next steps?
*Sample answer:*It is necessary to perform a bacteriological blood test for sterility and determine the sensitivity of microflora to antibiotics. Prescribe empirical starting antibacterial therapy: 2-3 broad-spectrum antibiotics, cumulatively active against all microorganisms. Perform an immunogram and prescribe immunocorrectors. Carry out detoxification therapy. To adjust homeostasis indicators, I focus on biochemical and other laboratory tests. After intensive therapy for 1-2 days and preparing the patient, eliminate the primary septic focus - perform a lobectomy of the affected lobe of the lung with an abscess.

TASK 23
A patient was brought to the hospital with complaints of severe swelling of the right hand, numbness, and the presence of conflicts. From the anamnesis it was established that, being in a state of alcoholic intoxication, he slept through the night sitting, leaning his hand on the back of a chair. On examination, the right hand is swollen, mainly in the forearm area, there are phlycts on the skin, there is no superficial sensitivity, and deep sensitivity is sharply reduced. There is an increase in serum myoglobin levels. A diagnosis was made: Positional compression syndrome.
What are your next steps?
*Sample answer:*Carry out detoxification therapy with forced diuresis and renoprotectors, prescribe antiplatelet agents, rheological solutions, anticoagulants to improve microcirculation. Prescribe broad-spectrum antibiotics to prevent infectious complications, taking into account their nephrotoxicity. Perform a fasciotomy on the forearm to reduce plasmatic edema and improve blood supply to the muscle masses. Immobilize the upper limb.

TASK 24
A patient undergoing treatment in the surgical department for an extensive scalped wound of the left thigh, after surgical debridement and local treatment, has a skin defect measuring 13x20 cm on the anterior outer surface of the thigh. The bottom of the wound is represented by bright, fine-grained granulation tissue, the discharge is scanty, serous, perifocal there is no inflammation.
Your suggestions for further treatment.
*Sample answer:*It is necessary to perform autodermoplasty with a free split perforated skin flap. The donor area can be the anterior surface of the thigh of a healthy limb.

TASK 25
During dressing, the patient was found to have a superficial wound of the anterior abdominal wall, measuring 6x3x3 cm, covered with purulent-necrotic tissue.
Your suggestions for further treatment.
*Sample answer:*Since the wound is in the phase of inflammation (the period of cleansing the wound from necrosis), mixed antiseptics are used to combat pathogenic microflora and quickly cleanse the wound from necrosis (necrectomy, washing the wound with antiseptics, adequate drainage of the wound, quartzing the wound, applying sorption dressings, using proteolytic enzymes).

TASK 26

A patient was admitted to the surgical department with complaints of pain throughout the abdomen, nausea, vomiting of foul-smelling contents, and an increase in temperature to 38.50 C. Upon examination, it was determined that he had been ill for 2-3 days. At the beginning of the disease, the pain was localized in the right iliac region, and subsequently spread throughout the abdomen. Upon objective examination, the patient's condition is serious. The skin is gray-earthy in color, the features are pointed, the tongue is dry, covered with brown crusts, the abdomen is evenly swollen. Palpation of the abdomen is sharply painful in all parts, peristalsis cannot be heard, a positive Shchetkin-Blumberg sign is determined in all parts. A plain X-ray of the abdominal cavity reveals distended intestinal loops without horizontal fluid levels, and an ultrasound examination reveals free fluid in the abdominal cavity. When inserting a nasogastric tube, a large amount of stagnant gastric contents was released. The diagnosis was made: Acute destructive appendicitis, widespread peritonitis. Phase of acute enteral failure.
What is your treatment strategy before surgery?
*Sample answer:*Short-term preoperative preparation (2 hours), including correction of water and electrolyte disturbances, detoxification therapy, replenishment of blood volume, stimulation of diuresis, cardiotonics, normalization of acid-base status, administration of a loading dose of broad-spectrum antibiotics.

TASK 27
Patient N., 46 years old, has been treated in the therapeutic department for 10 days with a diagnosis of right lower lobe pneumonia. Against the background of ongoing antibacterial and detoxification therapy, a high temperature of up to 390 C, chills, and malaise persist. Suddenly the patient's condition worsened, shortness of breath, cyanosis, pain in the right half of the chest appeared, and signs of intoxication began to increase. A chest x-ray on the right shows a horizontal level of fluid and a shadow of a collapsed lung. In the general blood test - leukocytosis 15.0x109/l with a shift of the formula to the left to juvenile forms. A diagnosis was made: abscessing right-sided lower lobe pneumonia, pyopneuthorax.
What are your immediate actions?
*Sample answer:*It is necessary to perform drainage of the pleural cavity according to Bulau at 2 points: 7-8 intercostal space along the posterior axillary line and 2-3 intercostal space along the midclavicular line with active aspiration of air and purulent exudate from the pleural cavity.

TASK 28
A 30-year-old man was brought to the emergency room of the surgical department 6 hours after the onset of the disease, complaining of severe abdominal pain. From the anamnesis it was revealed that he had been suffering from gastric ulcer for 10 years. The pain appeared suddenly and was dagger-like in nature. Objectively: the tongue is dry, tachycardia, the abdomen is board-like tense, sharply painful on palpation, a positive Shchetkin-Blumberg sign is detected in all parts of the abdomen. An endoscopic examination revealed an ulcer of the antrum of the stomach. X-ray examination shows free gas under the right dome of the diaphragm. The surgeon on duty made a diagnosis: perforated gastric ulcer, widespread peritonitis, reactive phase.
Specify the optimal volume and urgency of the operation.
*Sample answer:*emergency laparoscopy (the operation should begin within 2 hours of hospitalization), laparoscopic suturing of a perforated ulcer, sanitation and drainage of the abdominal cavity.

TASK 29

A 38-year-old woman came to the emergency room because she twisted her left leg in the icy conditions, after which sharp pain and swelling immediately appeared in the ankle joint. Upon examination, it was revealed that the contours of the joint were smoothed, its tissues were swollen, and on palpation there was moderate pain. Active and passive movements are sharply limited due to severe pain, there is no crepitus. There are no bone lesions on the x-ray. A diagnosis was made: ankle sprain.
What are your suggestions for treatment?
*Sample answer:*Apply a fixing 8-shaped bandage to the ankle joint from an elastic bandage, prescribe analgesics and non-steroidal anti-inflammatory drugs, rest, physiotherapeutic procedures (electrophoresis with novocaine).

TASK 30
During a football competition, the athlete suffered an injury to his right knee joint. Upon examination and palpation, the contours of the joint are smoothed, it is increased in volume, sharp pain is detected during movements and palpation, a symptom of patella balloting. An X-ray of the knee joint did not reveal any damage to the bone structures. During puncture of the joint, blood was obtained. A diagnosis was made: hemarthorsis.
What are your suggestions for treatment?
*Sample answer:*Evacuation of blood and washing of the joint cavity with antiseptics during puncture, plaster immobilization of the joint, non-steroidal anti-inflammatory drugs, rest. If necessary, repeat punctures with sanitation of the joint cavity.

TASK 31
You have been called by ambulance to a construction site. You find out that the patient fell from a height of 4 meters to his feet. He complains of pain in the lower back, the functions of the limbs are not impaired. When bending the torso forward and to the side, pain in the lower back increases. Presumable diagnosis: compression fracture of the lumbar spine.
First aid scope?
*Sample answer:*Transporting the patient to the trauma department on a rigid board with a bolster under the lumbar region, analgesics.

TASK 32
After falling on his right arm, the patient felt a sharp pain in the right shoulder joint. During the examination, the traumatologist discovered a gross deformity of the right shoulder joint, impaired mobility in the joint, and severe pain during passive and active movements of the right arm. X-ray of the shoulder joint in 2 projections revealed a dislocated shoulder.
Your actions?
*Sample answer:*Reduction of shoulder dislocation according to Kocher under general anesthesia, control radiography of the shoulder joint, plaster immobilization of the shoulder joint.

TASK 33
A patient transported by ambulance to the emergency department of a local hospital reported a stab wound to the left thigh 1 hour earlier. On examination: the patient's condition is satisfactory. The skin is of normal color. Hemodynamics are stable. Locally: on the anterior-inner surface in the upper third of the left thigh there is a stab wound measuring 2.5x0.5 cm with intense (after removal of the bandage) capillary bleeding. Along with this, a round-shaped tumor-like formation measuring 8x8x7 cm is detected next to the wound. The skin over it is tense,

imbibed with blood. Palpation reveals tissue tension and pulsation of the formation, synchronous with the heart rhythm.
The scope of the operational allowance?
*Sample answer:*Opening the hematoma, its revision, determining the location of damage to the femoral artery, applying a vascular suture to the damaged area.

TASK 34
A patient was admitted to the emergency room who received a thermal burn of the left upper limb and back from a flame. The patient is sharply agitated and makes almost no contact. The pulse is frequent, weak filling. On the burn surface there are areas of coagulative necrosis, as well as burst blisters with remnants of the epidermis. A diagnosis was made: thermal burn of the upper limb and back of IIIb-IV degree, area 27%, burn disease, burn shock phase.
Scope of treatment measures? When can a burn wound be treated?
*Sample answer:*Hospitalization in the intensive care unit, anti-shock therapy (hemodynamic blood substitutes, crystalloid solutions, adequate pain relief, cardiotonics, inhalation of humidified oxygen, gastric secretion blockers, broad-spectrum antibiotics, sedatives, protein drugs) under the control of hemodynamic parameters (pulse, blood pressure, central venous pressure) and hourly diuresis. Treatment of the burn wound is carried out after the patient has recovered from shock.

TASK 35
A patient with an extensive granulating wound of the left thigh, which occurred after a IIIb degree thermal burn, was brought to the dressing room.
What are your suggestions for treatment?
*Sample answer:*It is necessary to perform autodermoplasty with a free split perforated skin flap. The donor area can be the anterior surface of the thigh of a healthy limb.

TASK 36
A patient who received a burn to his right thigh and lower leg with boiling water was brought to the surgical department. When examined in the affected area, there is pronounced hyperemia of the skin, ruptured and intact blisters with serous discharge. A diagnosis was made: thermal burn of the lower extremity of IIIa degree, area 18%.
What will the local treatment consist of?
*Sample answer:*The blisters are opened, the necrotic epidermis is removed, the burn surfaces are treated with antiseptics, and antiseptic sorption dressings are applied. The goal of treatment is to prevent burn wounds from becoming infected. With effective treatment, spontaneous epithelization of burn wounds occurs.

TASK 37
After a long stay in the cold (-200 C), a patient developed frostbite on his fingers. After warming up, the fingers are swollen, hyperemic, with the presence of epidermal blisters with serous contents. The diagnosis was made: Frostbite of the fingers of the second degree, reactive period.
Offer treatment.
*Sample answer:*Local treatment: the blisters are opened, the necrotic epidermis is removed, the wound surfaces are treated with antiseptics, and antiseptic sorption dressings are applied. The goal of treatment is to prevent wound infection. With effective treatment, spontaneous epithelization of wounds occurs. General treatment: therapy aimed at normalizing blood circulation in the microcirculatory system (antispasmodics, rheological solutions, anticoagulants), reducing inflammatory

reactions (non-steroidal anti-inflammatory drugs, antihistamines), prevention of wound infections (antibacterial therapy).

TASK 38

There is a patient in the burn department with extensive IIIa degree burns to the torso (more than 20%). After 2 weeks, the patient developed signs of gastrointestinal bleeding (vomiting "coffee grounds", melena, a decrease in blood pressure to 90/40 mmHg, a decrease in the number of red blood cells and hemoglobin). Gastroscopy revealed acute gastroduodenal bleeding from an acute "burn" Curling ulcer located on the lesser curvature of the stomach.

Specify urgent treatment measures.

*Sample answer:*Perform endoscopic hemostasis, prescribe systemic hemostatic therapy (transfusion of donor fresh frozen plasma, hemostatic drugs), replenishment of blood volume (anti-shock blood substitutes, blood transfusion), antisecretory drugs to prevent recurrent bleeding.

TASK 39

The patient, 64 years old, was operated on for a malignant tumor of the stomach. During the operation, during revision of the abdominal cavity, the surgeon revealed the presence of a saucer-shaped cancer of the lesser curvature of the stomach with tumor metastasis to the liver and left ovary.

A diagnosis was made: stage IV stomach cancer, metastases to the liver and ovary. Which operation in terms of radicality and volume should the patient undergo?

*Sample answer:*Palliative surgery consisting of gastric resection and removal of the left ovary (cytoreductive surgery), followed by systemic chemotherapy.

TASK 40

In a 43-year-old patient, during fibrogastroscopy, an endoscopist discovered in the area of the lesser curvature of the stomach a rounded formation the size of a large pea, mobile, located on a thin stalk. The gastric mucosa in this area is not visually changed. After a biopsy of this formation, a morphological conclusion was obtained, which indicated that the biopsy sample was represented by cells of normal glandular epithelium of the stomach; no atypical cells were identified.

The diagnosis was made: adenomatous polyp of the stomach, clinical group 1b.

What are your suggestions for treatment?

*Sample answer:*Endoscopic polypectomy is necessary, since the gastric polyp is an obligate precancer, followed by annual endoscopic monitoring.

TASK 41

An athlete consulted a doctor with complaints of pain and swelling in the left knee joint, which appeared after an injury. Upon examination, the contours of the joint are smoothed, fluctuation, local hyperemia of the skin, and an increase in its temperature compared to the surrounding tissues are determined. Body temperature is increased. A test puncture of the joint yielded a yellowish liquid in a volume of 60 ml. A diagnosis was made: acute purulent arthritis, joint empyema.

What are your suggestions for treatment?

*Sample answer:*For this form of arthritis, puncture treatment is performed (joint puncture with removal of exudate and control of its volume and nature, washing the joint cavity with antiseptics, immobilization of the limb with a plaster splint, antibacterial therapy with broad-spectrum antibiotics, anti-inflammatory drugs, physiotherapeutic treatment). If treatment is ineffective, arthrotomy, sanitation and drainage of the joint cavity are performed.

TASK 42
Upon examination of patient A., 15 years old, there are 2 fistulas and soft tissue infiltration on the anterior outer surface of the right thigh. X-ray: in the lower third of the femur a cavity is detected, up to 4 cm in diameter, with the presence of a free-lying sequestrum. It is known that 2 years ago a phlegmon was opened in this area. A diagnosis was made: hematogenous osteomyelitis of the lower third of the femur, chronic stage, fistula form.
What kind of surgery is indicated for the patient?
*Sample answer:*Radical sequesternecrectomy: excision of fistula tracts within healthy tissues, opening of the sequestral cavity, removal of sequestration and purulent exudate, removal of granulations from the sequestral cavity, reaming of the medullary canal, sanitation, filling and drainage of the residual cavity.

TASK 43
A 5-year-old boy was brought to the pediatric surgical department one day after the onset of the disease with complaints of pain in the right thigh, fever up to 39.50C, malaise, and general weakness. From the anamnesis it was revealed that 10 days before the illness he suffered from a sore throat. Suddenly the child's condition worsened and the above complaints appeared. On examination: the patient's condition is serious. The skin and visible mucous membranes are pale, the right lower limb is in a forced position (half-bent). Active and passive movements in the joints are severely limited due to pain. When tapping the heel bone, a sharp pain in the thigh area is revealed. Ultrasound of the femur reveals an infiltration zone in the medullary canal up to 1.5 cm in diameter; there are no bone changes on the radiograph. A diagnosis was made: hematogenous osteomyelitis of the right femur, acute phase.
Offer treatment.
*Sample answer:*Antibacterial therapy, anti-inflammatory drugs, detoxification therapy, limb immobilization. If therapy is ineffective, surgical treatment is performed within 3-5 days - decompression osteoperforation, drainage of the bone marrow canal.

TASK 44
A patient was brought to the operating room with an incised wound measuring 6x2x3 cm in the soft tissue of the upper limb and bleeding from it. The wound was received 2 hours ago.
What operation should be performed on the patient? What
diseases need to be prevented?
*Sample answer:*It is necessary to perform primary surgical treatment of the wound (excision of the skin edges, walls and bottom of the wound within healthy tissues), revision of the wound, final stop of bleeding, layer-by-layer suturing of the wound with the application of primary sutures, drainage of the wound. Prevention of nonspecific infection is achieved by performing primary surgical treatment of the wound; it is necessary to additionally perform emergency prevention of a specific infection - tetanus.

TASK 45
A cannery worker consulted a doctor with complaints of severe itching, redness, burning, a feeling of tension and swelling on the dorsum of the 2nd finger of his right hand. According to him, 2 days ago he injured his finger while cutting pork. On examination: the edges of the swelling are sharply outlined from unchanged skin, uneven. Body temperature is normal. There are no changes in the blood test. A diagnosis was made: erysepeloid of the 2nd finger of the right hand.
What treatment will you prescribe?

Is surgical treatment used for this disease?
*Sample answer:*Immobilization of the hand, antibacterial therapy, ultraviolet irradiation of the skin, novocaine case blockades with simultaneous administration of antibiotics. Surgical treatment is not used.

TASK 46
In a 7-year-old child, against the background of severe general intoxication, the pediatrician discovered a small wound on the right thigh, covered with fibrinous films of gray-yellow color, tightly fused to the underlying tissues. When trying to remove the film, a bleeding wound with necrotic tissue formed. The edges of the wound are bright red, the surrounding tissues are infiltrated, the inguinal nodes on the right are sharply enlarged. When collecting an anamnesis of the disease, the doctor discovered that the child's older sister had had a sore throat and fever for several days. Presumptive diagnosis: wound diphtheria confirmed by bacteriological examination.
What treatment should be prescribed?
*Sample answer:*Isolation of the patient, rest. Administration of anti-diphtheria serum according to Bezredko in the amount of 2000-4000 AE. Applying a bandage with antibiotics and anti-diphtheria serum

TASK 47
A 12-year-old child was admitted to the intensive care unit in critical condition. According to his parents, about a week ago, while running barefoot on the ground, he pricked the sole of his foot with a thorn. Upon admission, the patient had an increase in body temperature to 420 C, an increase in heart rate to 130 per minute and an increase in respiratory rate to 32 per minute. Against this background, the child experienced convulsive contraction of the facial muscles with the formation of deep wrinkles on the forehead and cheeks. Periodically, attacks of convulsions spread to the muscles of the neck, back, and limbs, which was accompanied by spastic contraction of these muscles and a sharp hyperextension of the torso and limbs. A diagnosis was made: tetanus, severe general form.
What is included in specific treatment?
*Sample answer:*Administration of antitetanus serum in a course therapeutic dose of 200-350 thousand AE, administration of antitetanus gamma globulin in a course treatment dose of 20-50 thousand AE, administration of tetanus toxoid 0.5 ml 3-day intervals of 5 days.

TASK 48
You have been called to assist a patient with arterial bleeding from a stab wound in the right buttock. How will you stop the bleeding if you have a medical bag with medicines and dressings? Is it possible to apply a hemostatic tourniquet?
Sample answer: It is necessary to tighten the tampon buttocks.It is impossible to apply a hemostatic tourniquet.

TASK 49
At a railway crossing, you accidentally witnessed the amputation of a man's left leg above the knee joint by the wheels of a locomotive.
What is first aid?
*Sample answer:*It is necessary to stop the bleeding by pressing the femoral artery with your fingers, then with your free hand or calling someone for help, make an improvised tourniquet and apply it above the wound.

TASK 50

A young woman, 34 years old, consulted a surgeon due to the presence of a painless tumor-like formation in her right thigh. The patient discovered this formation about two years ago, which gradually increased in size over time, however, without causing any pain. Upon examination of the patient, the surgeon found that in the area of the posterior surface of the lower third of the right thigh there was a tumor-like formation the size of a chicken egg, round in shape, soft elastic consistency, painless on palpation, quite mobile and not fused with the surrounding tissues. The skin over this formation is not changed. The lymph nodes in the right groin area are not enlarged and painless. The diagnosis was made: hip lipoma, clinical group 1b
Is surgery necessary? If yes, then what is the scope and urgency of implementation? Is antibiotic therapy necessary?
Sample answer: Since benign tumors are precancerous diseases, the patient needs surgery to remove the lipoma, followed by histological examination as planned. Antibacterial therapy is not carried out; antibiotic prophylaxis is sufficient.

TASK 51
An hour after the transfusion of red blood cells to a patient with ulcerative bleeding, the temperature rises to 380 C, headache, muscle pain, tremendous chills, increased heart rate and respiration. However, no decrease in blood pressure was observed. A diagnosis was made: a pyrogenic reaction of moderate severity.
Offer treatment.
*Sample answer:*Warming the patient, antipyretics, antihistamines, administration of calcium chloride.

TASK 52
In the maternity hospital, a postpartum woman who had been breastfeeding for 7 days consulted a doctor with complaints of twitching pain in the left mammary gland and an increase in temperature to 390C. Palpation reveals a compaction in the outer quadrant of the gland with areas of softening, hyperemia of the skin over the compaction, and a blood test reveals leukocytosis with a band shift. An ultrasound of the mammary gland locates a cavity with heterogeneous contents in the outer quadrant of the mammary gland. A diagnosis was made: acute purulent lactation mastitis.
What volume of operation needs to be performed? What cut is used in this situation?
*Sample answer:*Opening the abscess, removing necrotic tissue and pus, sanitizing the purulent cavity with antiseptic solutions, draining the purulent cavity. A radial incision is used.

TASK 53
When examining the patient at the scene of the incident, the emergency doctor identified the presence of a closed fracture of the right femur, applied a transport splint and took the patient to the trauma department.
Has the assistance been fully provided?
*Sample answer:*The assistance provided was not complete. In addition to immobilizing the limb, it was necessary to administer analgesics and begin an infusion of anti-shock blood substitutes in the ambulance. A hip fracture, as a rule, is accompanied by the development of traumatic and hemorrhagic shock, since with a fracture of the femur, blood loss can be 1 liter or more.

TASK 54

A patient was brought to the trauma department from the scene of a traffic accident. On examination: the condition is serious, blood pressure is 70/40 mm Hg. Art. Pulse 142, weak filling. There is extensive hemorrhage on the anterior surface of the right thigh. A sharp curvature of the limb axis was noted. The diagnosis was made: closed fracture of the right femur, traumatic shock.
What treatment method should be used for a fracture of the right femur?
*Sample answer:*It is necessary to apply skeletal traction - a minimally traumatic method of immobilization. After removing the patient from shock, decide on the advisability of open reduction with metal osteosynthesis.

TASK 55
The patient was taken to the surgical department with an extensive bruised and lacerated wound in the middle third of the left thigh. The edges of the wound are sharply swollen and hyperemic. There is copious serous-purulent discharge from the wound cavity. The bottom and edges of the wound are covered in patches with fibrinous-purulent plaque.
Can primary surgical treatment of the wound be performed? What local
treatment should be given to the patient?
*Sample answer:*Primary surgical treatment is performed for bacterially contaminated wounds in the first 24 hours from the moment of its receipt. In this case, the wound is purulent; primary surgical treatment cannot be performed. Local treatment of this wound will involve the use of mixed antiseptics (necrectomy, washing the wound with antiseptic solutions, adequate drainage of the wound, administration of proteolytic enzymes, ultraviolet irradiation of the wound, physiotherapy).

TASK 56. Interview question
Name the methods for finally stopping bleeding in case of damage to the great vessels.
*Sample answer:*In case of damage to the great vessels, to finally stop the bleeding, a vascular suture is used and the vessel is replaced with a synthetic prosthesis or an autovenous vein.

TASK 57. Interview question
What methods are used for surgical closure of wounds that heal by secondary intention in the regeneration phase of the formation and maturation of granulations?
*Sample answer:*Application of early or late secondary sutures, autodermoplasty.

TASK 58. Interview question
First aid for frostbite in the pre-reactive period at home.
Sample answer:

5. Remove frozen shoes and clothes
6. Place the patient's limb in a bath with a water temperature of 180 C. Gradually increase the temperature to 360 C over 1 hour while performing a massage.
7. Apply a heat-insulating bandage.
8. Give a hot drink and put her in a warm bed.

TASK 59. Interview question Treatment of
general cooling.
*Sample answer:*Quick warming in a bath with a water temperature of 280 C and bringing the water temperature to 40-430 C degrees in 10-15 minutes. Warming is carried out until the rectal temperature rises to 340 C. Against this background, concentrated solutions of glucose are administered (depletion of glycogen during cooling), means of improving

microcirculation. Subsequently, complications are treated - cerebral edema, pulmonary edema, collapse, etc. in the intensive care unit.

TASK 60. Interview question
List the main components of conservative treatment of acute thrombophlebitis of the superficial veins of the lower extremities.
Sample answer:
6. Rest with the lower limb elevated
7. Nonsteroidal anti-inflammatory drugs
8. Systemic and local anticoagulant and antiplatelet therapy
9. Paravasal novocaine blockades with heparin, hydrocortisone, antibiotic
10. Physiotherapy

TASK 61. Interview question
List the therapeutic measures used in the treatment of purulent-inflammatory diseases in the stage of purulent melting.
Sample answer:
9. Surgical treatment (opening, adequate drainage of the abscess)
10. Sanitation of the abscess using all antiseptic methods
11. Antibacterial therapy
12. Detoxification therapy
13. Corrective therapy (correction of homeostasis disorders)
14. Replacement therapy (transfusion of blood components, mixtures of amino acids, etc.)
15. Immunotherapy
16. Symptomatic therapy

TASK 62. Interview question.
What can cause massive blood transfusion syndrome?
Sample answer: With simultaneous blood transfusions exceeding 50% of the patient's initial bcc, massive blood transfusion syndrome may develop due to citrate intoxication, potassium intoxication, acute dilatation of the heart during rapid blood transfusion

TASK 63. Interview question.
What does the treatment of pyrogenic reactions during blood transfusion include?
Sample answer:
4. Warming the patient
5. Antipyretics
6. Intravenous administration of calcium chloride, antihistamines drugs,corticosteroids

TASK 64. Interview question. Name the dangers of applying a tourniquet.
Sample answer:
12. Tissue necrosis below the tourniquet site
13. Neurological disorders due to compression of large nerve trunks
14. Development of anaerobic infection in the wound

TASK 65. Interview question. State the rules for applying an arterial tourniquet. Sample answer:
15. A tourniquet is applied above the bleeding site

16. A tourniquet is applied to limb segments that have one bone
17. The tourniquet is applied to the tissue-protected skin
18. A note is placed under the tourniquet indicating the time of application.
19. Every 30 minutes the tourniquet is loosened for 10-15 minutes

TASK 66. Interview question.
Name the criteria for correct application of an arterial tourniquet.
Sample answer:
20. Disappearance of peripheral arterial pulsation
21. Stopping bleeding
22. Slight waxy pallor of the skin of the limb

TASK 67. Interview question.
List temporary ways to stop bleeding.
Sample answer:
9. Applying a pressure bandage
10. Maximum flexion of the limb at the joint
11. Application of a hemostatic tourniquet
12. Finger pressure on the artery throughout
13. Tight wound tamponade
14. Elevated limb position
15. Temporary vessel bypass
16. Applying a hemostatic clamp

TASK 68. Interview question. The main stages
of treatment of bone fractures.
*Sample answer:*1. Reposition of bone fragments when they are displaced
2. Immobilization of the fracture zone
3. Creating conditions to accelerate regeneration processes and restore function

TASK 69. Interview question. Basic principles of
treatment of burn shock.
*Sample answer:*1. Combating afferent impulses (analgesics, sedatives)
2. Stabilization of hemodynamics (replenishment of bcc with colloid, crystalloid solutions, donor plasma, albumin)
3. Correction of disturbances in water-salt balance, acid-base balance and renal excretory function.
4. Correction of energy metabolism disorders.
5. Oxygen therapy.

TASK 70. Interview question.
Principles of treatment of long-term crush syndrome at the prehospital stage: Standard answer: 1. Extraction of victims from under the rubble and release of compressed areas of the body from compression (carried out by rescue services).
2. Preventing the rapid entry of toxins from damaged tissues into the bloodstream. To do this, you need to apply a tourniquet to the visible part of the limb, and immediately after releasing the limb from compression, apply an elastic bandage to the limb and remove the tourniquet.
3. Immobilization of the injured limb.

4. Antishock infusion therapy (crystalloid solutions, antishock blood substitutes, adequate pain relief with narcotic analgesics), infusion of alkalizing solutions.

TASK 71. Interview question. Treatment of
open pneumothorax.
*Sample answer:*At the pre-hospital stage, an occlusive dressing is applied. In the hospital - primary surgical treatment of the wound with hermetically sealed suturing of the chest and drainage of the pleural cavity according to Bulau.

TASK 72. Interview question. Treatment of a
patient with valvular pneumothorax.
*Sample answer:*At the pre-hospital stage - puncture of the pleural cavity with a thick Dufault needle in the 2nd intercostal space to convert a tension pneumothorax into an open one. In the hospital, thoracentesis is performed in the 2-3rd intercostal space along the midclavicular line and drainage of the pleural cavity with a drainage tube (active or passive) or video thoracoscopy, which allows to determine and eliminate the cause of pneumothorax.

TASK 73. Interview question.
The main purpose of transport immobilization for fractures
*Sample answer:*Preventing displacement of bone fragments to avoid damage to great vessels and large nerve trunks.

TASK 74. Interview question. Basic principles of
treatment of patients with peritonitis
*Sample answer:*1. Elimination or isolation of the source of peritonitis surgically.
2. Directed rational antibacterial therapy.
3. Detoxification therapy
4. Immunocorrection
5. Correction of homeostasis indicators and impaired functions of organs and systems

TASK 75. Interview question.
Basic principles of treatment of patients with surgical sepsis
*Sample answer:*1. Elimination of the entrance gate of infection or primary septic focus.
2. Directed rational antibacterial therapy.
3. Detoxification therapy
4. Immunocorrection
5. Correction of homeostasis indicators and impaired functions of organs and systems

CRITERIA for assessing competencies and rating scales

Grade “unsatisfactory” (not passed) or lack of competence	**Grade "satisfactorily"(passed) or satisfactory (threshold) level of competence development**	**Grade"good" (passed) or a sufficient level of mastery of competence**	**“Excellent” (passed) or high level of competency development**
The student’s inability to independently demonstrate knowledge when solving tasks, lack of independence in applying skills. The lack of confirmation of the development of competence indicates negative results in mastering the academic discipline.	The student demonstrates independence in applying knowledge, skills and abilities to solve educational tasks in full accordance with the model given by the teacher; for tasks the solution of which was demonstrated by the teacher, it should be considered that the competence is formed at a satisfactory level.	The student demonstrates independent application of knowledge, skills and abilities when solving tasks similar to the samples, which confirms the presence of developed competence at a higher level. The presence of such competence at a sufficient level indicates a firmly established practical skill	The student demonstrates the ability to be completely independent in choosing a way to solve non-standard tasks within the discipline using knowledge, skills and abilities acquired both in the course of mastering this discipline and related disciplines; competence should be considered developed at a high level.

Criteria for assessing test control:

percentage of correct answers	Marks
91-100	Great
81-90	Fine
70-80	satisfactorily
Less than 70	unsatisfactory

When grading tasks with multiple correct answers, one error is allowed.

Interview assessment criteria:

Mark	**Descriptors**		
	strength of knowledge	**the ability to explain (represent) the essence of phenomena, processes, draw conclusions**	**logic and consistency of the answer**
Great	strength of knowledge, knowledge of the basic processes of the subject area being studied, the answer is distinguished by the depth and completeness of the topic; mastery of terminology; logic and consistency answer	high ability to explain the essence, phenomena, processes, events, draw conclusions and generalizations, give reasoned answers, give examples	high logic and consistency of the answer
Fine	strong knowledge of the basic processes of the subject area being studied, distinguished by the depth and completeness of the topic; mastery of terminology; fluency in monologue speech, but one or two inaccuracies are allowed answer	the ability to explain the essence of phenomena, processes, events, draw conclusions and generalizations, give reasoned answers, give examples; however, one or two inaccuracies in the answer are allowed	logic and consistency of the answer
satisfactory	satisfactory knowledge of the processes of the subject area being studied, an answer characterized by insufficient depth and completeness of the topic; knowledge of the basic issues of theory. Several are allowed errors in the content of the answer	satisfactory ability to give reasoned answers and give examples; satisfactorily developed skills in analyzing phenomena and processes. Several are allowed errors in the content of the answer	satisfactory logic and consistency of the answer
unsatisfactory	poor knowledge of the subject area being studied, shallow coverage of the topic; poor knowledge of basic theoretical issues, poor skills in analyzing phenomena and processes. Serious errors in response content	inability to give reasoned answers	lack of logic and consistency in the answer

Criteria for assessing situational tasks:

Mark	**Descriptors**			
	understanding Problems	**analysis of the situation**	**skills solutions to the situation**	**professional thinking**
Great	complete understanding Problems. All requirements, required for task, completed	high ability analyze situation, draw conclusions	high ability choose method solutions Problems, confident solution skills situations	high level professional thinking
Fine	complete understanding Problems. All requirements, required for task, completed	ability analyze situation, draw conclusions	ability choose method solutions Problems confident solution skills situations	enough level professional thinking. One or two are allowed inaccuracies in the answer
satisfactory really	partial understanding Problems. Majority requirements, required for task, completed	satisfactory ability analyze situation, draw conclusions	satisfactory skills solutions situations, difficulties with choice of method problem solving	enough level professional thinking. More than two inaccuracies in answer or error in sequences solutions
will not satisfy really	misunderstanding Problems. Many requirements, required for task, not completed. No answer. Did not have attempts to solve task	low ability analyze situation	insufficient solution skills situations	absent