$N_{\underline{0}}$	krok 2023
Topic	RNA-genomic viruses: Orthomyxoviruses. Paramyxoviruses. Picornaviruses. Rhabdoviruses. Arboviruses
	A person bitten by a stray dog has wide lacerated wounds localized on the face. What therapeutic and
Task	preventive aid must be provided to this person for prevention of rabies?
Correct answer	Begin the immunization with antirabic vaccine
В	Hospitalize the patient and monitor the patient's condition
C	Urgently administer normal gamma globulin
D	Prescribe a combined vitamin therapy
Е	Urgently administer DPT vaccine
No	krok 2023
Topic	Methods of laboratory diagnosis of bacterial infections. Pathogenic cocci
	A patient with osteomyelitis of the mandible developed sepsis. Blood culture microbiology detects Gram-
	positive and catalase-positive cocci capable of growing in the presence of NaCl. What microorganisms are
Task	the likely cause of this disease?
Correct answer	Staphylococci
В	Sarcinae
С	Corynebacteria
D	Escherichia
Е	Streptococci
$N_{\underline{0}}$	krok 2023
Topic	DNA-genomic viruses
	An 8-year-old child came to a dentist with a herpetic rash on the lower lip. What medicine needs to be
Task	prescribed for the child?
Correct answer	Acyclovir
В	Ampicillin
С	Ketoconazole

D	Oxacillin
Е	Furadonin (Nitrofurantoin
<u>№</u>	krok 2023
Topic	Microbiological basis of antimicrobial chemotherapy and antiseptic
	Bacterioscopy of a swab from the patient's urethra detected gonorrhea. Since fluoroquinolones are the
Task	drugs of choice for the treatment of gonorrhea, this patient must be prescribed:
Correct answer	Ciprofloxacin
В	Furazolidone
С	Urosulfan (Sulfacarbamide)
D	Cefazolin
E	Fluorouracil
<u>No</u>	krok 2023
	The methods of bacteriological investigation. Methods of isolation of pure cultures of aerobes and
Topic	anaerobes
	A doctor diagnosed a patient with meningococcal nasopharyngitis. What method of laboratory diagnostics
Task	would be a rational choice for confirmation of the diagnosis?
Correct answer	Bacteriology
В	Allergy testing
С	Biological method
D	Serology
Е	Microscopy
$N_{\underline{0}}$	krok 2023
Topic	Biology of immune response
	After entering the body, bacteria undergo phagocytosis by macrophages. What role do macrophages play
	in the cooperation of immunocompetent cells at the first stage of immune response formation?
Task	in the ecoperation of minimize competent cents at the first stage of minimize response formation.

Correct answer	They process antigens and present them to T-helpers
В	They activate NK-cells
С	They process antigens and present them to T-killers
D	They produce immunoglobulins
Е	They activate T-killers
№	krok 2023
Topic	Allergy
	A 25-year-old patient undergoes dental procedures. Several minutes after the patient's oral cavity was
	lavaged with a furacilin (nitrofural) solution, the patient developed marked edema of the lips. What type of
Task	allergic reaction is observed in this case?
Correct answer	Anaphylactic
В	Stimulating
С	Delayed-type hypersensitivity
D	Immune complex
E	Cytolytic
<u>No</u>	krok 2023
Topic	Methods of laboratory diagnosis of bacterial infections. Pathogenic cocci
Task	A culture of Gram-positive cocci was isolated from the oral cavity of a clinically healthy 25-year-old person. These cocci have a slightly elongated shape, are arranged in pairs or short chains, form a capsule, and exhibit alpha hemolysis on blood agar. This person is a carrier of the following pathogen:
Correct answer	Streptococcus pneumoniae
В	Streptococcus pyogenes
С	Streptococcus feacalis
D	Peptostreptococcus
Е	Streptococcus salivarius
<u>№</u>	krok 2023
	•

Topic	Medical mycology
	A patient diagnosed with oral candidiasis was prescribed an antifungal drug. What drug was prescribed for
Task	this patient?
Correct answer	Fluconazole
В	Ampicillin
С	Erythromycin
D	Levomycetin
Е	Biseptol
<u>No</u>	krok 2023
Topic	Biology of immune response
	Cancer cells form in the human body due to the effect of environmental factors. What cells provide
Task	antitumor protection?
Correct answer	Lymphocytes
В	Erythrocytes
С	Platelets
D	Neurocytes
Е	Epitheliocytes
<u>No</u>	krok 2023
Topic	Causative agents of viral hepatitis. Oncoviruses
	Ten weeks after a case of jaundice, HBsAg were detected in the patient's blood. What pathology is it
Task	characteristic of?
Correct answer	Viral hepatitis B
В	Viral hepatitis A
С	Viral hepatitis E
D	Viral hepatitis D
Е	Viral hepatitis C
No	krok 2023

Topic	Medical protozoology
Task	In the body of a female Anopheles mosquito, the malaria Plasmodium reproduces via copulation (a type of sexual process). What type of host is this insect for malaria Plasmodium?
Correct answer	Definitive
В	Optional
С	Additional
D	Intermediate
E	Reservoir
No	krok 2023
Topic	Medical protozoology
	A woman diagnosed with dysentery was hospitalized into the infectious diseases unit. Laboratory testing determined that the causative agents in this case are Entamoeba histolytica. What drug should she be
Task	prescribed?
Correct answer	Metronidazole
В	Benzylpenicillin sodium salt
С	Isoniazid
D	Chingamin (Chloroquine)
E	Rifampicin
<u>№</u>	krok 2023
Topic	RNA-genomic viruses: Orthomyxoviruses. Paramyxoviruses. Picornaviruses. Rhabdoviruses. Arboviruses
	A 3-year-old girl was diagnosed with rubella. Her 10-year-old sister was not infected, despite both girls constantly remaining in contact. TTe pediatrician determined that the elder girl had rubella 5 years ago.
Task	What type of immunity does the elder sister have?
Correct answer	Natural active
В	Natural passive

С	Artificial active
D	Innate
Е	Artificial passive
No	krok 2023
Topic	Methods of laboratory diagnosis of bacterial infections. Pathogenic cocci
Task	Bacteriology of dental plaque from the oral cavity of a 10-year-old child detects numerous Streptococcus mutans. This microorganism plays the leading role in the development of:
Correct answer	Caries
В	Chronic pulpitis
С	Ulcerative gangrenous stomatitis
D	Vesicular stomatitis
Е	Parodontosis
No	krok 2023
Topic	Microbiological basis of antimicrobial chemotherapy and antiseptic
Task	A certain antibiotic has low toxicity, relatively rarely causes side effects, and is a reserve antibiotic from the group of macrolides. Its mechanism of action consists of protein synthesis inhibition in bacterial ribosomes by inhibiting the peptide translocase enzyme. What antibiotic is it?
Correct answer	Azithromycin
В	Tetracycline
С	Sisomicin
D	Levomycetin (Chloramphenicol)
Е	Ampicillin
No	krok 2023
Topic	Concept of immunity. Types of immunity. Cellular and humoral factors of non-specific immunity.

	A woman was diagnosed with purulent stomatitis. What complete blood count finding is characteristic of
Task	this disease?
Correct answer	Lymphocytosis
В	Leukocytosis
С	Thrombocytosis
D	Monocytosis
Е	Anemia
№	krok 2023
Торіс	RNA-genomic viruses: Orthomyxoviruses. Paramyxoviruses. Picornaviruses. Rhabdoviruses. Arboviruses
Task	In a 6-year-old child, a dentist detected gray-white spots up to one millimeter in diameter on the buccal mucosa at the level of the premolars. The child was not vaccinated at the age of one year. The doctor suspects that the mucosal lesion was caused by a complex RNA virus with hemagglutinating properties. This virus has no neuraminidase activity and cannot not cultivated in chicken embryos. What pathogen caused the development of this disease?
Correct answer	Measles virus
В	Mumps virus
С	Coxsackievirus A
D	Varicella-zoster virus
Е	Herpes simplex virus
Nº	krok 2023
Topic	RNA-genomic viruses: Orthomyxoviruses. Paramyxoviruses. Picornaviruses. Rhabdoviruses. Arboviruses

Task	A 42-year-old man, a hunter, was preparing a fox pelt. One week later, he fell ill. The disease manifested as nervous excitement, hydrophobia, and seizures. Autopsy of the hunter's body revealed encephalitis with damage to the brainstem, walls of the third ventricle, and hippocampus. Encephalitis manifested as accumulation of lymphocytes and microglial cells around dead neurons and blood vessels. Eosinophilic inclusions (Babesh-Negri bodies) were detected in the hippocampal neurons. What disease can be diagnosed in the deceased?
Correct answer	Rabies
В	Tularemia
С	Brucellosis
D	Anthrax
Е	Plague
<u>No</u>	krok 2017, 2016, 2014
Topic	pathogenic protozoans
Task	Carious cavities of a 29-year-old patient contain parasitic protozoa. It is established that they belong to the <i>Sarcodina</i> class. Specify these protozoa:
Correct answer	Entamoeba gingivalis
В	Entamoeba coli
С	Entamoeba histolutica
D	Amoeba proteus
Е	Lamblia intestinalis
№	krok 2017
Topic	microflora of oral cavity
Task	During inspection of dental tools for sterility in one case gram-positive cocci were detected. They were situated in clusters and yielded positive plasma coagulation reaction; the cocci were fermenting mannitol in anaerobic conditions and exhibiting lecithinase activity. What microorganism was detected?

Correct answer	Staph. aureus
В	St. epidermidis
С	St. saprophiticus
D	Str. pyogenes
Е	Corinebacterium xerosis
№	krok 2017, 2012
Topic	microflora of nasopharynx
Task	Analysis of sputum taken from a patient with suspected pneumonia revealed slightly elongated gram-positive diplococci with tapered opposite ends. What microorganisms were revealed in the sputum?
Correct answer	Streptococcus pneumoniae
В	Staphylococcus aureus
С	Klebsiella pneumoniae
D	Neisseria meningitidis
Е	Neisseria gonorrhoeae
$N_{\underline{0}}$	krok 2017
Topic	fungi ana actinomycetes
Task	Microscopic examination of pus sample taken from mandibular fistula canal and stained by Gram's method has revealed druses with gram-positive coloring in the center and coneshaped structures with gram-negative coloring. Such morphology is characteristic of the agent of:
Correct answer	Actinomycosis
В	Candidiasis
С	Anaerobic infection
D	Staphylococcal osteomyelitis
Е	Fusobacteriosis
№	krok 2017

-	
Topic	Cultural properties of microorganisms
Task	A puncture sample has been taken from the inguinal lymph nodes of a patient provisionally diagnosed with
	plague. The sample was inoculated into hard nutrient medium. What shape will the colonies have, if the
	diagnosis is confirmed?
Correct answer	"Lace handkerchief"
В	"Mercury drops"
C	"Dewdrops"
D	"Shagreen leather"
Е	"Lion's mane"
№	krok 2017
Topic	immunodeficiency and immunopathology
Task	Often the cause of secondary immunodeficiency is an infectious affection of an organism, when agents
	reproduce directly in the cells of immune system and destroy them. Specify the diseases, during which the
	described above occurs:
Correct answer	Infectious mononucleosis, AIDS
В	Tuberculosis, mycobacteriosis
С	Poliomyelitis, viral hepatitis type A
D	Dysentery, cholera
E	Q fever, typhus
No	krok 2017
Topic	immunotherapy and immunoprophylaxis
Task	In the epicenter of the registered rabies cases among wild animals a 43-year-old man came to a clinic and
	claimed to have been bitten by a stray dog. He was given a course of antirabies vaccine. This preparation
	belongs to the following type of vaccines:
Correct answer	Attenuated
В	Inactivated
С	Molecular

D	Toxoids
E	Synthetic
№	krok 2017
Topic	factors of immune system
Task	The patient's saliva has been tested for antibacterial activity. What saliva component has antibacterial
	properties?
Correct answer	Lysozyme
В	Amylase
C	Ceruloplasmin
D	Parotin
E	Cholesterol
№	krok 2017, 2013
Topic	pathogenic protozoans
Task	A patient complains of frequent bowel movements and stool with blood admixtures ("raspberry jelly"
	stool). Microscopic examination revealed large mononuclear cells with absorbed red blood cells. What
	protozoon is this morphological structure typical of?
Correct answer	Entamoeba histolytica
В	Giardia lamblia
C	Campylobacter jejuni
D	Toxoplasma gondii
E	Balantidium coli
$N_{\underline{0}}$	krok 2017
Topic	anaerobic infection
Task	On microscopic examination of leftovers of the canned meat eaten by a patient with severe food
	toxicoinfection the following was detected: gram-positive bacilli with subterminal staining defect and
	configuration alteration of bacilli generally resembling a tennis racket. What agent was detected?

Correct answer	C. botulinum
В	S. aureus
C	E. coli
D	S. enteritidis
Е	P. vulgaris
№	krok 2017
Topic	pathogenic properties of microorganisms
Task	Typical signs of food poisoning caused by C. botulinum include diplopia, swallowing and respiration
	disorders. These signs develop due to:
Correct answer	Exotoxin action
В	Enterotoxin action
С	Enterotoxic shock development
D	Adenylate cyclase activation
Е	Adhesion of the agent to enterocyte receptors
<u>No</u>	krok 2017, 2012
Topic	zoonotic infection
Task	A worker of a cattle farm consulted a surgeon about fever up to 40° C, headache, weakness. Objective examination of his back revealed hyperemia and a dark red infiltration up to 5 cm in diameter with black bottom in its center, which was surrounded with pustules. What disease are these presentations typical of?
Correct answer	Anthrax
В	Plague
С	Tularemia
D	Furuncle
E	Abscess
<u>№</u>	krok 2017

Topic	immune response
Task	A patient with acute bronchitis has been prescribed sulfanilamide drugs for treatment. In an hour after administration the patient developed itching and vesicles filled with light transparent liquid on the face, palms and soles. Name the mechanism of immune response:
Correct answer	Reaginic reaction
В	Antibodymediated cytolysis
С	Cell cytotoxicity
D	Immune complexmediated hypersensitivity
Е	-
№	krok 2017
Topic	anaerobic infection
Task	A 47-year-old man consulted a dentist about difficult mouth opening (trismus). The patient has a history of a stab wound of the lower extremity. What infection can be manifested by these symptoms?
Correct answer	Tetanus
В	Brucellosis
С	Whooping cough
D	Anaerobic wound infection
E	Tularemia
<u>No</u>	krok 2017
Topic	types of immunity
Task	A patient diagnosed with botulism has been prescribed antibotulinic serum for treatment. What immunity will be formed in the given patient?
Correct answer	Antitoxic passive immunity
В	Antitoxic active immunity
С	Antimicrobic active immunity

D	Antimicrobic passive immunity
E	Infection immunity
<u>№</u>	krok 2017
Topic	anaerobic infection
Task	Bacilli were extracted from the investigated sample. The bacilli are curved, extremely mobile, gramnegative, form no spores or capsules, have anaerobic form of respiration. They form transparent smooth colonies in alkaline agar, ferment saccharose and mannose into acid, produce exotoxin, fibrinolysin, collagenase, and hyaluronidase. What agent was extracted?
Correct answer	Comma bacillus
В	Blue pus bacillus
С	Proteus
D	Colibacillus
Е	Dysentery bacillus
No	krok 2017
Topic	CULTURAL PROPERTIES OF MICROORGANISMS
Task	In 8 days after a surgery the patient developed tetanus. The surgeon suspects this condition to be caused by suture material contaminated by tetanus agent. The material is delivered to a bacteriological laboratory. What nutrient medium is required for primary inoculation of the suture material?
Correct answer	Kitt-Tarozzi medium
В	Endo agar
С	Sabouraud agar
D	Egg-yolk salt agar
Е	Hiss medium
No	krok 2016
Topic	PATHOGENIC PROTOZOANS

Task	A puncture sample taken from the lymph node of a patient with preliminary diagnosis of protozoan disease
	has been investigated. The preparation was processed with Giemsa stain and the following was detected:
	crescentshaped bodies with pointed tips, blue cytoplasm and red nuclei. What protozoa have been detected
	in the preparation?
Correct answer	Toxoplasma
В	Plasmodium malariae
C	Dermatotropic Leishmania
D	Viscerotropic Leishmania
Е	Trypanosoma
№	krok 2016, 2014
Topic	MICROFLORA OF nasoPHARYNX
Task	While studying blood and mucus samples from the nasopharynx, a bacteriologist took certain measures to
	conserve the pathogens in the material. Bacterioscopic study revealed the presence of gram-negative cocci
	resembling coffee beans and arranged in pairs or tetrads. Name the pathogen that was isolated by the
	bacteriologist:
Correct answer	Neisseria meningitidis
В	Staphilococcus aureus
С	Neisseria gonorrhoeae
D	Moraxella lacunata
Е	Acinetobacter calcoaceticus
№	krok 2016
Topic	morphology of microorganisms
Task	In a microslide of the patient's regional lymph node stained with Giemsa method a doctor detected thin
	microorganisms with 12-14 uniform tendrils with pointed tips, 10-13 micrometers in length, pale pink in
	color. In this case they can be identified as infectious agents of the following disease:
Correct answer	Syphilis
) ·-

В	Trypanosomiasis
C	Leptospirosis
D	Relapsing fever
Е	Leishmaniasis
$N_{\underline{0}}$	krok 2016, 2015
Topic	microflora of nasoPHARYNX
Task	There are several cases of children from boarding school suffering from sore throat. Microscopy of tonsil smears stained according to Neisser method has revealed thin yellow bacilli with dark brown grains on their ends situated in the shape of the Roman numeral five. What infection can be suspected in this case?
Correct answer	Diphtheria
В	Infectious mononucleosis
С	Listeriosis
D	Tonsillitis
Е	Scarlet fever
<u>№</u>	krok 2016
Topic	IMMUNOTHERAPY AND IMMUNOPROPHYLAXIS
Task	In a maternity hospital a newborn should receive vaccination against tuberculosis. What vaccine should be chosen?
Correct answer	BCG vaccine
В	STI vaccine
С	EV vaccine
D	DPT vaccine
Е	Tuberculin
Nº	krok 2016, 2014
Topic	methods of diagnostics of pathogenic microorganisms

Task	A patient had been provisionally diagnosed with syphilis. A laboratory assistant took the blood serum for
	an immunologic test based on the detection of antibodies preventing the movement of treponemes and
	causing their death. What reaction was used to make the diagnosis?
Correct answer	Immobilization
В	Complement binding
С	Agglutination
D	Precipitation
Е	Neutralization
№	krok 2016
Topic	CULTURAL PROPERTIES OF MICROORGANISMS
Task	During bacteriological examination of the purulent discharge obtained from a postoperative wound an
	inoculation on meat infusion agar has been performed. The inoculation has resulted in large colorless
	mucous colonies that in 24 hours with exposure to sunlight developed green-blue pigmentation and smell of
	honey or jasmine. Bacterioscopy revealed gram-negative lophotrichea. What bacterial culture is contained
	in purulent discharge?
Correct answer	Pseudomonas aeruginosa
В	Proteus vulgaris
С	Klebsiella osaenae
D	Streptomyces griseus
Е	Brucella abortus
№	krok 2016
Topic	ZOONOTIC INFECTION
Task	In the armpits of a patient there are small (1-1,5 mm), dorsoventrally flattened, wingless, blood-sucking
	insects. Their larvae developed in the armpits too. What disease is caused by these insects?

Correct answer	Phthiriasis
В	Sleeping sickness
С	Chagas' disease
D	Plague
Е	Relapsing fever
No	krok 2016
Topic	IMMUNOTHERAPY AND IMMUNOPROPHYLAXIS
Task	In the area that is the epicenter of the registered rabies cases among wild animals a 43-year-old man
	arrived at a clinic and claimed to have been bitten by a stray dog. He was given a course of antirabies
	vaccine. This preparation belongs to the following type of vaccines:
Correct answer	Attenuated
В	Inactivated
С	Molecular
D	Toxoids
Е	Synthetic
№	krok 2016
Topic	sanitary microbiology
Task	Routine investigation of microbiological sanitary condition of air in a hospital is performed once in 3
	months. What microorganism is the sanitary indicator of air condition in an enclosed space?
Correct answer	S.aureus S.aureus
В	E.coli
С	E.faecalis
D	P.aeruginosa
Е	C.perfringens
№	krok 2016

Topic	anaerobic infection
Task	When examining a patient presumptively diagnosed with food toxicoinfection, a doctor on duty has
	detected symptoms characteristic of botulism. The patient named the meals he ate the day before. What is
	the most probable cause of infection?
Correct answer	Homemade canned meat
В	Custard pastry from a private bakery
C	Sour cream from a local dairy factory
D	Strawberries from a suburbanvegetable garden
Е	Fried eggs
$N_{\underline{0}}$	krok 2016
Topic	METHODS OF DIAGNOSTICS OF PATHOGENIC MICROORGANISMS
Task	A doctor examines a 17-year-old girl. The following is detected: pharyngitis, cervical lymphadenopathy,
	fever. The preliminary diagnosis is infectious mononucleosis. What method of investigation allows to
	confirm this diagnosis at the disease onset?
Correct answer	Determining antibodies IgM to Epstein-Barr virus
В	Microscopy of blood smear according to Giemsa method
С	Determining antibodies IgG to Epstein-Barr virus
D	Sabin-Feldman dye test
Е	Determining the amount of C-reactive protei
No	krok 2016
Topic	FUNGI ANA ACTINOMYCETES
Task	After long-term antibiotic treatment a patient has developed whitish spots on the oral mucosa. Gram-
	positive oval budding cells were detected in the smear preparations. What causative agents were detected?
Correct answer	Candida fungi
В	Staphylococci
С	Sarcinae

D	Actinomycete
E	Tetracocci
$N_{\underline{0}}$	krok 2015
Topic	zoonotic infection
Task	A paitent, who works as a milkmaid, has made an appoinment with a dentist with complaints of aphtha-
	shaped rash on the mucosa of oral cavity. The doctor detected rash on her hands in the area of nail plates.
	What agent causes this disease?
Correct answer	Foot-and-mouth disease virus
В	Cytomegalovirus
С	Vesicular stomatitis virus
D	Herpesvirus
Е	Coxsackie B virus
№	krok 2015
Topic	METHODS OF DIAGNOSTICS OF PATHOGENIC MICROORGANISMS
Task	Microscopy of smear preparation stained with methylene blue revealed bacilli with clublike expansions on
	their ends similar to C.diphteriae. What additional method of staining should be used to verify this
	assumption?
Correct answer	Neisser
В	Kozlovsky
С	Ziehl-Neelsen
D	Zdrodovsky
Е	Aujeszky
№	krok 2015
Topic	IMMUNOTHERAPY AND IMMUNOPROPHYLAXIS

Task	In the area being the epicenter of the registered rabies cases among wild animals a 43-year-old man presented to a clinic and claimed to have been bitten by a stray dog. He was given a course of anti-rabies vaccine. This preparation relates to the following type of vaccines:
Correct answer	Attenuated
В	Inactivated
С	Molecular
D	Toxoids
E	Synthetic
№	krok 2015, 2013
Topic	IMMUNODEFICIENCY AND IMMUNOPATHOLOGY
Task	Throughout a year a 37-year-old woman periodically got infectious diseases of bacterial origin, their course was extremely lingering, remissions were short. Examination revealed low level of major classes of immunoglobulins. The direct cause of this phenomenon may be the following cell dysfunction:
Correct answer	Plasmocytes
В	Phagocytes
С	Neutrophils
D	Macrophages
E	Lymphocytes
№	krok 2015
Topic	anaerobic infection
Task	When examining a patient with a suspicion of food toxicoinfection, a doctor on duty has detected symptoms characteristic of botulism. The patient named the meals he had eaten the day before. What is the most probable cause of infection?
Correct answer	Homemade canned meat
В	Custard pastry from private bakery

С	Sour cream from local dairy factory
D	Strawberries from suburban vegetable garden
Е	Fried eggs
№	krok 2015, 2013
Topic	IMMUNODEFICIENCY AND IMMUNOPATHOLOGY
Task	A patient consulted an immunologist about diarrhea, weight loss within several months, low-grade fever,
	enlarged lymph nodes. The doctor suspected HIV infection. What immunocompetent cells must be studied
	in the first place?
Correct answer	Helper T-lymphocytes
В	Suppressor T-lymphocytes
С	B-lymphocytes
D	Monocytes
Е	Plasma cells
№	krok 2015, 2014
Topic	IMMUNOTHERAPY AND IMMUNOPROPHYLAXIS
Task	Diphtheria exotoxin had been treated with 0,3-0,4% formalin and kept in a thermostat for 30 days at a
	temperature of ° C. What preparation was obtained as a result of these manipulations?
Correct answer	Anatoxin
В	Antitoxin
С	Diagnosticum
D	Therapeutic serum
Е	Diagnostic serum
№	krok 2015, 2014
Topic	ANAEROBIC INFECTION
	•

Task	A 47-year-old male patient consulted a dentist about difficult mouth opening (lockjaw). The patient has a
	history of a stab wound of the lower extremity. What infection can be manifested by these symptoms?
Correct answer	Tetanus
В	Brucellosis
С	Whooping cough
D	Anaerobic wound infection
Е	Tularemia
<u>№</u>	krok 2015, 2013
Topic	PATHOGENIC PROTOZOANS
Task	Microscopy of dental plaque revealed unicellular organisms. Their cytoplasm had two distinct layers,
	barely visible core, wide pseudopodia. The patient is most likely to have:
Correct answer	Entamoeba gingivalis
В	Lamblia
С	Trichomonas tenax
D	Entamoeba histolytica
E	Entamoeba coli
<u>№</u>	krok 2015
Topic	immune response
Task	The patient's condition after blood transfusion has been aggravated by posttransfusion shock. Name the
	type of allergic reaction causing this pathology.
Correct answer	Cytotoxic
В	Anaphylactic
С	Immune complex
D	Delayed-type hypersensitivity
E	Receptor-mediated
№	krok 2015
C D E	Immune complex Delayed-type hypersensitivity Receptor-mediated

Topic	methods of diagnostics of pathogenic microorganisms
Task	To conduct serum diagnostics of typhoid fever a test is carried out, when diagnosticums of three types of microorganisms are being added into different solutions of patient's serum; then agglutinate formation is checked. Name the author of this kind of test.
Correct answer	Widal
В	Wassermann
С	Ouchterlony
D	Wright
Е	Sachs-Witebsky
No	krok 2015
Topic	characteristic of procariotic cells
Task	Ability to divide is characteristic of procariotic and eukaryotic cells. Procariotic cell division is different from that of eukaryotic, but there is one molecular process that is the basis of both types of division. Name this process.
Correct answer	DNA replication
В	Transcription
С	Reparation
D	Translation
Е	Gene amplification
No	krok 2015
Topic	ortho- and paramyxoviruses

is high as 38° C. Physical examination has revealed the following: conjunctivitis; bright red
rash covering the skin of face, neck and torso; hyperemic pharynx; serous purulent
the nose; dry rales in the lungs. What is most probable diagnosis?
ction
ion
al laboratory studied the home-made dried fish which had caused a severe food poisoning.
he culture grown on the Kitt-Tarozzi medium revealed microorganisms resembling a tennis
the most likely diagnosis?
ies of microorganisms
e initial inoculation of water sample into 1% peptone water, the growth of a culture in form
le on the medium surface was registered. Such cultural properties are typical for the
of the following disease:

В	Plague
С	Tuberculosis
D	Dysentery
Е	Pseudotuberculosis
No	krok 2014
Topic	sanitary microbilogy
Task	After the sanitary and bacteriological study of tap water the following results were obtained: the total number of bacteria in 1,0 ml was 80, coli index was 3. How would you interpret the study results?
Correct answer	Water is safe to be consumed
В	Water is of doubtful quality
С	Water is of highly doubtful quality
D	Water is contaminated
Е	Water is highly conaminated
<u>№</u>	krok 2014
Topic	Viral hepatitis
Task	Examination of a 27-year-old donor who had not donated blood for a long time revealed HBs antibodies detected by ELISA method. In this case, the positive ELISA results indicate that the donor:
Correct answer	Had hepatitis B
В	Has acute hepatitis B
С	Has acute hepatitis C
D	Has chronic hepatitis B
Е	Has chronic hepatitis C
No	krok 2014
Topic	IMMUNOTHERAPY AND IMMUNOPROPHYLAXIS

Task	To prevent the seasonal influenza epidemics in the city hospitals, sanitary epidemic station gave orders to
	immunize health care workers. Which of the following preparations should be used for immunization?
Correct answer	Subunit vaccine
В	Interferon
С	Gamma-globulin
D	Rimantadine
Е	Amantadine
<u>No</u>	krok 2014
Topic	pathogenic protozoans
Task	A 40-year-old patient presents with abdominal pain, frequent loose stools with mucus and blood. Stool
	analysis revealed vegetative forms of some protozoa sized 30-40 microns, with short pseudopodia,
	containing large amounts of phagocytosed erythrocytes. What protozoan disease does the patient have?
Correct answer	Amebiasis
В	Leishmaniasis
С	Trichomoniasis
D	Giardiasis
Е	Toxoplasmosis
№	krok 2014
Topic	molecular biology
Task	During reproduction of some RNA-containing viruses that cause tumors in animals, genetic informati-on
	can be transmitted in the opposite direction from the RNA to the DNA via a specific enzyme. The enzyme
	of reverse transcription is called:
Correct answer	Reverse transcriptase
В	DNA polymerase
С	Ligase

D	Primase
E	Topoisomerase
<u>№</u>	krok 2014
Topic	MICROFLORA OF ORAL CAVITY
Task	Microscopy of a dental plaque revealed a large number of cocci arranged in pairs and strings, as well as Gram-positive bacilli which were likely to be the cause of cariogenesis. What microorganism associations are involved in the development of dental caries?
Correct answer	S.mutans streptococci and lactobacilli
В	S.salyvarius streptococci and lactobacilli
С	S.mutans streptococci and corynebacteria
D	S.aureus and lactobacilli
Е	S.salyvarius streptococci and enterococci
No	krok 2014
Topic	METHODS OF DIAGNOSTICS OF PATHOGENIC MICROORGANISMS
Task	A 32-year-old patient undergoing dental examination was found to have some rash-like lesions resembling secondary syphilis in the oral cavity. The patient was referred for the serological study with the purpose of diagnosis confirmation. In order to detect antibodies in the serum, living Treponema were used as diagnosticum. What serological test was performed?
Correct answer	Immobilization
В	Neutralization
С	Complement binding
D	Precipitation
E	Passive hemagglutination
No	krok 2013
Topic	TYPES OF IMMUNITY

Task	Blood serum of a newborn contains antibodies to measles virus. What kind of immunity is this indicative
	of?
Correct answer	Natural passive
В	Natural active
С	Artificial passive
D	Artificial active
Е	Heredoimmunity
<u>№</u>	krok 2013
Topic	METHODS OF DIAGNOSTICS OF PATHOGENIC MICROORGANISMS
Task	When examining a child the dentist found the deposit on both tonsils and suspected atypical form of diphtheria. A smear was taken, and after the nutrient media inoculation the toxicity of the isolated pure culture was determined. What reaction was used to determine the toxigenicity of the isolated strain of diphtheria bacillus?
Correct answer	Gel precipitation reaction
В	Agglutination reaction on a glass slide
С	Complement binding reaction
D	Hemolysis reaction
Е	Ring precipitation reaction
<u>№</u>	krok 2013
Topic	METHODS OF DIAGNOSTICS OF PATHOGENIC MICROORGANISMS
Task	From the fecal sample of a patient Shigella sonnei were isolated. What additional studies are required to identify the source of infection?
Correct answer	Phagotyping of the isolated pure culture
В	Antibiogram
С	Precipitation reaction
D	Complementfixation reaction
E	Neutralization reaction

$N_{\underline{0}}$	krok 2013
Topic	Morphological properties of microorganisms
Task	When examining a child the dentist found the deposit with acute purulent periostitis revealed gram-positive bacteria arranged in clusters resembling bunch of grapes. What microorganisms is this morphology typical for?
Correct answer	Staphylococci
В	Sarcina
С	Tetracocci
D	Candida fungi
E	Streptococci
№	krok 2013
Topic	METHODS OF DIAGNOSTICS OF PATHOGENIC MICROORGANISMS
Task	A female woman has been clinically diagnosed with gonorrhea. Which of the following studies can be used to confirm the diagnosis?
Correct answer	Microscopy of the pathological material
В	Disinfection of laboratory animals
С	Bacteriophage test
D	Hemagglutination reaction
Е	Immobilization reackrok 2013
No	krok 2013
Topic	enterobacterial infection
Task	A 71-year-old man had been presenting with diarrhea for 10 days. The feces had admixtures of blood and mucus. He was delivered to a hospital in grave condition and died 2 days later. Autopsy of the body revealed the following: diphtheritic colitis with multiple irregularly-shaped ulcers of different depth in both sigmoid colon and rectus. Bacteriological analysis revealed Shigella. What was the main disease?
Correct answer	Dysentery

В	Typhoid fever
С	Salmonellosis
D	Nonspecific ulcerous colitis
E	Yersiniosis
$N_{\underline{0}}$	krok 2013
Topic	METHODS OF DIAGNOSTICS OF PATHOGENIC MICROORGANISMS
Task	A physician is planning to diagnose an infectious disease by means of agglutination test. What is required for this reaction apart from the serum of a patient?
Correct answer	Diagnosticum
В	Diagnostic serum
С	Complement
D	Hemolytic serum
E	Anatoxin
№	krok 2013
Topic	MORPHOLOGY OF MICROORGANISMS
Task	Microscopy of a smear taken from the film that appeared on the peptone water 6 hours after seeding and culturing of a fecal sample in a thermostat revealed mobile gram-negative bacteria curved in form of a comma that didn't make spores or capsules. What microorganisms were revealed?
Correct answer	Vibrios
В	Spirochetes
С	Clostridia
D	Corynebacteria
Е	Spirilla
<u>№</u>	krok 2013, 2011, 2010
Topic	MICROFLORA OF ORAL CAVITY

Task	A 70-year-old man has developed prosphetic stomatitis. Apart of this he was found to have an evident
	lesion of mouth corners. Microscopical examination revealed large ovoid gram-positive cells. What
	microorganisms are most likely to be the leading etiological agent of such a lesion?
Correct answer	Candida fungi
В	Streptococci
С	Staphylococci
D	Neisseria
Е	Corynebacteria
<u>No</u>	krok 2013
Topic	IMMUNOTHERAPY AND IMMUNOPROPHYLAXIS
Task	In order to eliminate occupational risks dental workers underwent vaccination. The vaccine should protect
	them from a viral infection, whose pathogen may be found in blood of dental patients who had had this
	infection or who are its chronic carriers. What vaccine was used?
Correct answer	Genetically engineered HBs antigen
В	Inactivated hepatitis A vaccine
С	Live measles vaccine
D	Subunit influenza vaccine
Е	Anti-rabies vaccine
№	krok 2013
Topic	CULTURAL PROPERTIES OF MICROORGANISMS
Task	A patient has wound abscess. Bacteriological examination of the wound content revealed a gram-negative
	bacillus which forms semitransparent mucous colonies of blue-green colour with a pearlescent appearance
	on the beef-extract agar. Culture has a specific odour of violets or jasmine. What type of pathogen was
	isolated from the patient's wound?

Correct answer	P. aeruginosa
В	P. vulgaris
С	S. aureus
D	S. pyogenes
E	S. faecalis
No	krok 2013
Topic	chemotherapy and antibiotics
Task	A patient has herpetic conjunctivitis. What etiotropic drug should be administered?
Correct answer	Acyclovir
В	Ampicillin
С	Methisazonum
D	Furagin
Е	Tetracycline
№	krok 2013
Topic	types of infection
Task	Examples of human-specific parasites are malaria plasmodium, enterobius vermicularis and some other. The source of invasion of such parasites is always a human. Such human-specific parasites cause diseases that are called:
Correct answer	Anthroponotic
В	Zoonotic
С	Anthropozoonotic
D	Infectious
Е	Multifactorial
№	krok 2013
Topic	Cultural properties of microorganisms

On the base of the clinical data a child was diagnosed with atypical pneumonia resistant to the effects of
beta-lactam antibiotics. The patient's sputum was cultured and incubated in a special medium, which
resulted in growth of microorganisms forming microscopic colonies with a dense center (looking like fried
eggs). What microorganism caused the disease?
Mycoplasma pneumoniae
Klebsiella pneumoniae
Streptococcus pneumoniae
Legionella pneumophila
Chlamidia pneumoniae
krok 2013
zoonotic infection
After a thorough examination the patient who had returned from Central Asia to Ukraine was diagnosed
with spring-summer encephalitis. Its pathogen might have entered the body through the bite of the
following arthropod:
Taiga tick
Dog-louse Dog-louse
Argasid tick (ornithodorus papillipes)
Itch mite
Mosquito
krok 2013
infection of intestinal tract
A patient with marked manifestations of exsicosis died in the infectious disease hospital. Postmortem
examination results: the corpse with contracted muscles, dry skin and mucous membranes, thick and dark
blood in veins, edematous plethoric mucosa, distended bowel loops, the lumen contains about 4 liters of
rice-water fluid. What is the most likely diagnosis?

Correct answer	Cholera
В	Enteric fever
С	Dysentery
D	Anthrax, intestinal form
E	Yersiniosis
№	krok 2012, 2011
Topic	RNA-containing viruses
Task	The immunoblot detected gp120 protein in the blood serum. This protein is typical for the following disease:
Correct answer	HIV-infection
В	Virus B hepatitis
С	Tuberculosis
D	Syphilis
Е	Poliomyelitis
№	krok 2012, 2011
Topic	cultural properties of microorganisms
Task	A patient of oral surgery department has developed a purulent complication. Bacteriological analysis of the wound discharge allowed to isolate a culture producing a blue-and-green pigment. Which of the listed
Correct answer	Pseudomonas aeruginosa
В	Proteus vulgaris
С	Bacillus subtilis
D	Klebsiella pneumoniae
Е	Staphylococcus epidermidis
№	krok 2012
Topic	immunotherapy and immunoprophylaxis

Task	Dentists are at increased risk of being infected with the type B hepatitis. What preparation should be used
	for reliable active prevention of this disease?
Correct answer	Recombinant vaccine of HBsAg proteins
В	Live type B hepatitis vaccine
C	Specific immunoglobulin
D	Antihepatitis serum
Е	Monoclonal HBsAg antibodies
$N_{\underline{0}}$	krok 2012
Topic	RNA-containing viruses
Task	HIV has gp41 and gp120 on its surface interacts with target cells of an organism. Which of the following human lymphocyte antigens is gp120 complementary bound with?
Correct answer	CD 4
В	CD 3
С	CD 8
D	CD 19
E	CD 28
№	krok 2012
Topic	METHODS OF DIAGNOSTICS OF PATHOGENIC MICROORGANISMS
Task	The contents of vesicles that appeared on the mucous membrane of a patient with variola was sent to a virological laboratory. Which of the listed changes were revealed during the smear microscopy?
Correct answer	Paschen bodies
В	Babes-Negri bodies
С	Guarnieri bodies
D	Babes-Ernst bodies
E	Syncytium
№	krok 2012, 2011, 2010

PATHOGENIC PROTOZOANS
While examining a blood smear taken form a patient and stained by Romanovsky's method a doctor
revealed some protozoa and diagnozed the patient with Chagas disease. What protozoan is the causative
agent of this disease?
Trypanosoma cruzi
Toxoplasma gondii
Leishmania donovani
Leishmania tropica
Trypanosoma brucei
krok 2012
CHEMOTHERAPY AND ANTIBIOTICS
After the second abortion a 23-year-old woman has been diagnosed with toxoplasmosis. Which drug
should be used for toxoplasmosis treatment?
Co-trimoxazole
Itraconazole
Mebendazole
Azidothimidine
Acyclovir
krok 2012
immune response
Examination of patients with periodontitis revealed the interdependence between the rate of affection of
periodontal tissues and the amount of lysozymes in saliva and gingival liquid. These results can be obtained
during studying the following protection system of an organism:
Non-specific resistance
Humoral immunity
Cellular immunity

D	Autoresponsiveness
Е	Tolerance
№	krok 2012, 2009
Topic	IMMUNOTHERAPY AND IMMUNOPROPHYLAXIS
Task	Specific prophylaxis involved application of a vaccine containing microorganisms and exotoxin detoxicated
	by formalin. It relates to the following type of vaccine:
Correct answer	Combined
В	Genetically engineered
С	Anatoxin
D	Chemical
Е	Live
№	krok 2012, 2010
Topic	PATHOGENIC PROTOZOANS
Task	A patient has roundish ulcers on his face, inflammation and enlargement of lymph nodes. These symptoms turned up as a result of mosquito bites. Laboratory examination of discharge from the ulcers revealed unicellular aflagellar organisms. What is the most probable diagnosis?
Correct answer	Dermatotropic leishmaniasis
В	Toxoplasmosis
С	Scabies
D	Trypanosomiasis
E	Myasis
№	krok 2012
Topic	MICROFLORA OF NASOPHARYNX

Task	A sample taken from the pharynx of a patient with angina was inoculated on the blood-tellurite agar. This
	resulted in growth of grey, radially striated (in form of rosettes) colonies up to 4-5 mm in diameter.
	Microscopically there can be seen gram-positive rods with clubshaped ends arranged in form of spread
	fingers. What microorganisms are these?
Correct answer	Corynebacteria diphtheriae
В	Clostridium botulinum
С	Diphtheroids
D	Streptococci
Е	Streptobacilli
№	krok 2012
Topic	IMMUNOTHERAPY AND IMMUNOPROPHYLAXIS
Task	There was a record of some anthrax cases among animals in a countryside. The spread of disease can be
	prevented by means of immunization. What kind of vaccine should be used?
Correct answer	STI live vaccine
В	BCG vaccine
С	Salk vaccine
D	Sabin's vaccine
E	Diphteria and tetanus toxoids and pertussis vaccine
<u>No</u>	krok 2012
Topic	PATHOGENIC PROTOZOANS
Task	Examination of duodenal contents revealed some pyriform protozoa with twin nuclei and four pairs of
	flagella. There were two supporting filaments between the nuclei and a suctorial disc on the ventral side.
	What representative of protozoa was revealed in this patient?
Correct answer	Lamblia

В	Toxoplasma
С	Leishmania
D	Intestinal trichomonad
Е	Trypanosome
<u>No</u>	krok 2010, 2011
Topic	PATHOGENIC PROTOZOANS
Task	Two weeks after haemotransfusion a patient has developed fever. What protozoal disease can be suspected?
Correct answer	Malaria
В	Toxoplasmosis
С	Leishmaniasis
D	Amebiasis
Е	Trypanosomiasis
No	krok 2011, 2010
Topic	immune response
Task	A teenger had his tooth extracted under novocain anaesthesia. 10 minutes later he presented with skin pallor, dyspnea, hypotension. When this reaction is developed and the allergen achieves tissue basophils, it reacts with:
Correct answer	IgE
В	IgA
С	IgD
D	IgM
Е	T-lymphocytes
No	krok 2011
Topic	ORTHO- AND PARAMYXOVIRUSES

Task	Such presentations as catarrhal conjunctivitis, pharyngitis, laryngotracheobronchitis, white spots on the
	buccal mucosa in the region of lower premolar teeth, maculopapular rash on face, body
	andextremities are typical for the following disease:
Correct answer	Measles
В	Spotted fever
С	Scarlet fever
D	Meningococcal infection
E	Influenza
$N_{\underline{0}}$	krok 2011
Topic	IMMUNOTHERAPY AND IMMUNOPROPHYLAXIS
Task	In order to establish the level of antidiphtheritic immunity in a child it was decided to use a passive hemagglutination test. This task can be completed by the sensibilization of erythrocytes by:
Correct answer	Diphtheria anatoxin
В	Diphtheria antitoxin
С	Diphtheria bacillus antigens
D	Antidiphtheric serum
Е	Haemolytic serum
No	krok 2011
Topic	pus infection
Task	Purulent discharges of a patient with a mandibulofacial phlegmon contain spheroid microorganisms making S-shaped colonies with golden pigment that produce lecithinase, plasmocoagulase, hemolysin and decompose mannitol under anaerobic conditions. Specify the kind of microorganisms that had caused the suppuration:
Correct answer	S. aureus
В	Str. pyogenes

С	Str. mutans
D	S. epidermidis
E	Str. sanguis
№	krok 2011
Topic	RNA-containing viruses
Task	HIV has gp41 and gp120 on its surface interacts with target cells of an organism. Which of the following
	human lymphocyte antigens is gp120 complementary bound with?
Correct answer	CD 4
В	CD 3
С	CD 8
D	CD 19
E	CD 28
№	krok 2011
Topic	METHODS OF DIAGNOSTICS OF PATHOGENIC MICROORGANISMS
Task	Dwellers of a village noticed mass mortality of rats in some farms. It was suspected that the animals might have died from plague. What postmortal analyses should be conduced in order to establish the causative
	agent of the infection as soon as possible?
Correct answer	Ring precipitation reaction
В	Agglutination reaction
С	Passive agglutination reaction
D	Complement-binding reaction
Е	Neutralization reaction
<u>No</u>	krok 2011
Topic	CULTURAL PROPERTIES OF MICROORGANISMS

Task	After inoculation of feces sample into the 1% alkaline peptonic water and 8-hour incubation in the
	thermostat at a temperature of 37° C a culture in form of a tender bluish film has grown. Such cultural properties are typical for the causative agent of the following disease:
Correct answer	Cholera
В	Plague
С	Typhoid fever
D	Paratyphoid fever A
E	Dysentery
No	krok 2011
Topic	enterobacterial infection
Task	A 71-year-old man had been presenting with diarrhea for 10 days. The feces had admixtures of blood and mucus. He was delivered to a hospital in grave condition and died 2 days later. Autopsy of the body revealed the following: diphtheritic colitis with multiple irregularly-shaped ulcers of different depth in both sigmoid colon and rectus. Bacteriological analysis revealed Shigella. What was the main disease?
Correct answer	Dysentery
В	Typhoid fever
С	Salmonellosis
D	Nonspecific ulcerous colitis
Е	Yersiniosis
No	krok 2010
Topic	IMMUNOTHERAPY AND IMMUNOPROPHYLAXIS
Task	Vaccination is done by means of a toxin that has been neutralized by a formaldehyde (0,4%) at a
	temperature -40° C for four weeks. Ramond was the first to apply this preparation for diphtheria prophylaxis. What preparation is it?

Correct answer	Anatoxin
В	Immunoglobulin
С	Antitoxic serum
D	Adjuvant
Е	Inactivated vaccine
<u>No</u>	Akrok krok 2010
Topic	anaerobic infection
Task	A patient with convulsive contractions of facial muscles was admitted to the infectious disease ward. From a scratch on his lower right extremity analysts isolated bacteria with terminal endospores that gave them drumstick appearance. What bacteria are compliant with given description?
Correct answer	Clostridium tetani
В	Clostridium botulinum
С	Clostridium perfringens
D	Bacillus anthracis
Е	Bacillus cereus
<u>№</u>	krok 2010, 2008
Topic	infection of anthrax
Task	A patient complained about a carbuncle on his face. Examination results: neither dense nor painful edema of subcutaneous cellular tissue, there is black crust in the middle of the carbuncle and peripheral vesicular rash around it. Bacteriological examination revealed presence of immobile streptobacilli able of capsulation. What microorganisms are causative agents of this disease?
Correct answer	Bacillus antracis
В	Staptylococcus aureus
С	Bacillus anthracoides
D	Bacillus megaterium

Е	Bacillus subtilis
<u>No</u>	krok 2010, 2008
Topic	pus infection
Task	A patient being treated in the burns department has suppurative complication. The pus is of bluish-green colour that is indicative of infection caused by <i>Pseudomonas aeruginosa</i> . What factor is typical for this causative agent?
Correct answer	Gram-negative stain
В	Presense of spores
С	Coccal form
D	Cell pairing
Е	Mycelium formation
No	krok 2010
Topic	tinctorial properties of microorganisms
Task	Specimen of a patient's sputum was stained with the following dyes and reagents: Ziehl's solution, methylene blue solution, 5% solution of sulfuric acid. What staining method was applied?
Correct answer	Ziehl-Neelsen
В	Burri's
С	Gram's
D	Peshkov's
Е	Neisser's
No	krok 2010
Topic	FACTORS OF IMMUNE SYSTEM
Task	Various cells of the oral mucous membrane and antimicrobial substances synthesized by these cells play an important part in the local immunity of the oral cavity. Specify the key factors for the local immunity:
Correct answer	Secretory IgA

В	B-lymphocytes
С	IgG
D	Macrophages
Е	Eosinophils
<u>№</u>	krok 2010
Topic	Cultural properties of microorganisms
Task	A sample taken from the pharynx of a patient with angina was inoculated on the blood-tellurite agar. This resulted in growth of grey, radially striated (in form of rosettes) colonies up to 4-5 mm in diameter. Microscopically there can be seen gram-positive rods with clubshaped ends arranged in form of spread fingers. What microorganisms are these?
Correct answer	Corynebacteria diphtheriae
В	Clostridium botulinum
С	Diphtheroids
D	Streptococci
Е	Streptobacilli
<u>№</u>	krok 2010
Topic	herpes viruses
Task	A patient consulted a dentist about pains, reddening and swelling of gums. The dentist assumed herpetic gingivostomatitis. What virus might have caused this disease?
Correct answer	Herpes simplex virus type 1
В	Herpes simplex virus type 2
C	Herpes zoster
D	Cytomegalic virus
Е	Epstein-Barr virus
№	krok 2009
Topic	PATHOGENIC PROTOZOANS

Task	Examination of a man revealed a protozoan disease that affected brain and caused vision loss. Blood
	analysis revealed unicellular half-moon-shaped organisms with pointed end. The causative agent of this
	disease is:
Correct answer	Toxoplasma
В	Leishmania
С	Lamblia
D	Amoeba
Е	Trichmonad
№	krok 2009
Topic	pathogenic protozoans
Task	A married couple applied to the genetic consultation in order to consult about their child with multiple abnormalities (microcephaly, idiocy etc). The woman has had an illnesses during her pregnancy but she didn't take any teratogens or mutagens. The parents' and the child's karyotype is normal. Anamnesis study revealed that the family kept a cat. What gravidic disease caused the child's abnormalities?
Correct answer	Toxoplasmosis
В	Leishmaniasis
С	Dysentery
D	Balantidiasis
E	Trichomoniasis
№	krok 2009
Topic	pathogenic protozoans
Task	A female patient has symptoms of inflammation of urogenital tracts. A smear from the vaginal mucous membrane contained big unicellular pyriform organisms with a sharp spike on the back end of their bodies; big nucleus and undulating membrane. What protozoa were revealed in the smear?
Correct answer	Trichomonas vaginalis

В	Trichomonas hominis
C	Trichomonas buccalis
D	Trypanosoma gambiense
E	Lamblia intestinalis
<u>№</u>	krok 2009
Topic	pathogenic protozoans
Task	Among public catering workers examined by doctors of sanitary-and-epidemiologic station often occur asymptomatic parasite carriers. This means that a healthy person carries cysts that infect other people. Such parasitizing is impossible for the following causative agent:
Correct answer	Dysenteric amoeba
В	Malarial plasmodium
С	Intestinal trichomonad
D	Dermatotropic leishmania
E	Viscerotropic leishmania
<u>№</u>	krok 2009
Topic	METHODS OF DIAGNOSTICS OF PATHOGENIC MICROORGANISMS
Task	Autopsy of a dead patient revealed that pia mater was dull, there were greenish-yellow overlays covering almost all convexital surface of cerebral hemispheres. Histological examination revealed extreme hyperemia of maters along with diffuse leukocytic infiltration. What is the most probable diagnosis?
Correct answer	Meningococcal infection
В	Measles
С	Anthrax
D	Tuberculosis
E	Influenza
<u>№</u>	krok 2009

Topic	meningococcal infection
Task	A 5 year old child has the following symptoms: body temperature up to 40° C, acute headache, vomiting, anxiety, shiver. 4 days later there appeared hemorrhagic skin rash, oliguria and adrenal insufficiency that caused death. Bacteriological examination of pharyngeal smears revealed meningococcus. What form of meningococcal infection was it?
Correct answer	Meningococcemia
В	Meningococcal meningitis
С	Meningoencephalitis
D	Meningococcal nasopharyngitis
Е	-
No	krok 2009
Topic	immunotherapy and immunoprophylaxis
Task	Medical examination of the first-year pupils included Mantoux test. 15 pupils out of 35 had negative reaction. What actions should be taken against children with negative reaction?
Correct answer	BCG vaccination
В	Antitoxin vaccination
С	Rabies vaccination
D	Repeat Mantoux test
Е	Examination of blood serum
Nº	krok 2009
Topic	methods of diagnostics of pathogenic microorganisms
Task	On a certain territory mass death of rodents was registered. It was suspected that their death might have been caused by plague. What serological reaction should be applied for quick identification of antigen of the causative agent of this epizooty?

Correct answer	Precipitation
В	Agglutination
С	Passive hemagglutination
D	Complement binding
E	Neutralization
№	krok 2009
Topic	immune response
Task	A 10 year old child underwent Mantoux test (with tuberculin). 48 hours later there appeared a papule up to 8 mm in diameter on the site of tuberculin injection. Tuberculin injection caused the following hypersensitivity reaction:
Correct answer	IV type hypersensitivity reaction
В	Arthus reaction
С	Seroreaction
D	Atopic reaction
E	II type hypersensitivity reaction
№	krok 2009
Topic	infection of anthrax
Task	A 34 year old male patient cosulted a doctor about face carbuncle. Objectively: a loose, painless edema of hypodermic tissue; black crust in the centre of carbuncle, vesicular rash around it. Microbiological examination revealed static streptobacilli capable of capsule building. What microorganisms are the causative agents of this disease?
Correct answer	Bacillus antracis
В	Staptylococcus aureus
С	Bacillus anthracoides
D	Bacillus subtilis
Е	Bacillus megaterium
№	krok 2009, 2008

Topic	fungi ana actinomycetes
Task	A 3 month old infant has got a white deposition on the mucous membrane of his mouth, tongue and lips. The doctor suspected candidosis. What nutrient medium should be used for inoculation of the material under examination in order to confirm this diagnosis?
Correct answer	Sabouraud
В	Endo
С	Loewenstein-Jensen
D	Roux
Е	Clauberg
<u>№</u>	krok 2009
Topic	microflora of oral cavity
Task	After continuous treatment with antibiotics a patient got symptoms of stomatitis. Examination of specimens of oral mucous membrane revealed some oval polymorphous Gram-positive microorganisms arranged in clusters. What microorganism may be the cause of such manifestations?
Correct answer	C.albicans C.albicans
В	C.perfringens
С	S.aureus
D	S.pyogenes
E	C.pylori
<u>№</u>	krok 2009
Topic	zoonotic infection
Task	A patient has roundish ulcers on his face, inflammation and enlargement of lymph nodes. These symptoms turned up as a result of mosquito bites. Laboratory examination of discharge from the ulcers revealed unicellular aflagellar organisms. What is the most probable diagnosis?

Correct answer	Dermatotropic leishmaniasis
В	Toxoplasmosis
С	Scabies
D	Trypanosomiasis
Е	Myasis
No	krok 2009
Topic	microflora of nasopharynx
Task	A new-born child has hyperemia, edema of the oral mucous membrane, small erosions with viscous mucopus. Smears from the mucopus contain a lot of leukocytes with Gram-negative diplococci. The same microorganisms can be found also beyond the leukocytes. What is the most probable diagnosis?
Correct answer	Gonococcal stomatitis
В	Toxoplasmosis
С	Congenital syphilis
D	Staphylococcal stomatitis
E	Blennorrhea
№	krok 2009
Topic	microflora of urethra
Task	Microscopical study of discharges from urethra of a patient suffering from acute urethritis revealed bean-shaped microorganisms up to 1 micrometer in diameter arranged in pairs and placed inside the leukocytes. What microorganisms are these?
Correct answer	Gonococci
В	Meningococci
С	Tetracocci
D	Streptococci
E	Staphylococci
№	krok 2009

Topic	methods of sterilization and disinfection
Task	What method should be applied for sterilization of heatproof and moistureproof stomatological instruments in order to ensure total destruction of viruses, vegetative and spore forms of microorganisms?
Correct answer	Autoclaving
В	Boiling
С	Pasteurization
D	Tyndallization
Е	Burning in the flame of gas burner
$N_{\underline{0}}$	krok 2009
Topic	cultural properties of microorganisms
Task	Pathological material taken from a patient suffering from pulpitis was inoculated onto Kitt-Tarozzi cultural medium. It is planned to find the following microorganisms:
Correct answer	Anaerobic
В	Acid-resistant Acid-resistant
С	Acidophilic
D	Haemolytic
Е	Aerobic
No	krok 2009
Topic	immunotherapy and immunoprophylaxis
Task	What preventive medications should be injected to a patient with open maxillofacial trauma provided that
	he has never got prophylactic vaccination before?
Correct answer	Antitetanus immunoglobulin and anatoxin
В	Anticonvulsive drugs and anatoxin
С	Antitetanus serum and antibiotics
D	Diphtheria, tetanus toxoids and pertussis vaccine and antibiotics
Е	Tetanus anatoxin and antibiotics

№	krok 2008
Topic	pathogenic protozoans
Task	A man is ill with a protozoan disease characterized by cerebral affection and loss of sight. Blood analysis revealed half-moon-shaped unicellular organisms with pointed ends. This disease is caused by:
Correct answer	Toxoplasma
В	Leishmania
С	Lamblia
D	Amoeba
E	Trichomonad
No	krok 2008
Topic	pathogenic protozoans
Task	Microscopical examination of discharges from the gums of a patient ill with paradontosis revealed some protozoan pearshaped organisms 6-13 micrometer long. The parasite has one nucleus and undulating membrane, there are four flagella at the front of its body. What protozoan were found?
Correct answer	Trichomonads
В	Leishmania
С	Amoebae
D	Balantidia
E	Lamblia
No	krok 2008
Topic	PATHOGENIC PROTOZOANS
Task	When doctors of a sanitary-and-epidemiologic institution examine employees of public catering establishments they often reveal asymptomatic parasitosis, that is when a healthy person is a carrier of cysts that infect other people. What causative agent cannot parasitize in such a way?

Correct answer	Dysenteric amoeba
В	Malarial plasmodium
С	Enteral trichomonad
D	Dermatotropic leishmania
Е	Viscerotropic leishmania
No	krok 2008
Topic	MICROFLORA OF nasoPHARYNX
Task	A 5 y.o. girl has high temperature and sore throat. Objectively: soft palate edema, tonsills are covered with grey films that can be hardly removed and leave deep bleeding tissue injuries. What disease is the most probable?
Correct answer	Pharyngeal diphtheria
В	Vincent's angina
С	Lacunar angina
D	Infectious mononucleosis
Е	Necrotic angina
№	krok 2008
Topic	Viral hepatitis
Task	Immune-enzyme assay of blood serum revealed presence of HBs-antigen. What disease is signalized by this antigen?
Correct answer	Viral hepatitis B
В	Viral hepatitis A
С	AIDS
D	Tuberculosis
Е	Syphilis
№	krok 2008
Topic	IMMUNOTHERAPY AND IMMUNOPROPHYLAXIS

Task	Vaccination is done by means of a toxin that has been neutralized by a formaldehyde (0,4%) at a
	temperature $37 - 40^{-0}$ for four weeks. Ramond was the first to apply this preparation for diphtheria
	prophylaxis. What preparation is it?
Correct answer	Anatoxin
В	Immunoglobulin
С	Antitoxic serum
D	Adjuvant
Е	Inactivated vaccine
No	krok 2008
Topic	immune response
Task	A 2 y.o. child has catarrhal effects and skin eruption. A doctor suspected scarlet fever. The child was
	injected intracutaneously with some serum to the erythrogenic streptococcus toxin, on the spot of injection
	the eruption disappeared. What do the reaction results mean?
Correct answer	They confirm the clinical diagnosis
В	The child has hypersensitivity to the erythrogenic toxin
С	The disease was caused by nonhemolytic streptococcus
D	The complete dose of serum could be introduced intravenously
E	The child's immune system is very weakened
<u>№</u>	krok 2008
Topic	methods of diagnostics of pathogenic microorganisms
Task	A pregnant woman applied to a doctor with complaints typical for toxoplasmosis. The doctor took a
	sample of her blood. What serological tests should be performed in this case?
Correct answer	Complement binding assay
В	Precipitation test

С	Neutralization test
D	Widal's test
Е	Wassermann test
№	krok 2008
Topic	MICROFLORA OF NASOPHARYNX
Task	A child is presumably ill with diphtheria. A specimen of affected mucous membrane of his pharynx was
	taken for analysis. The smear was stained and microscopical examination revealed yellow rods with dark
	blue thickenings on their ends. What structural element of a germ cell was revealed in the detected microorganisms?
Correct answer	Volutin granules
В	Plasmids
С	Capsule
D	Spores
Е	Flagella
No	krok 2008
Topic	enterobacterial infection
Task	It was reported an outbreak of food poisoning connected with consumption of pastry that had been stored
	at a room temperature and had duck eggs as one of the ingredients. What microorganisms might have
	caused this disease?
Correct answer	Salmonella
В	Colon bacilli
C	Staphylococci
D	Legionella
Е	Comma bacilli
№	krok 2008
Topic	CHEMOTHERAPY AND ANTIBIOTICS

Task	A 30 y.o. patient is diagnosed with amebic dysentery. This diagnosis was bacteriologically confirmed.
	Name the preparation for its treatment:
Correct answer	Metronidazole
В	Mebendazole
С	Itrakonazole
D	Furacillin
Е	Acyclovir
<u>No</u>	krok 2008
Topic	microflora of nasopharynx
Task	A newborn child has hyperemia, edema of mouth mucous membrane, small erosions with viscous mucopurulent discharge. Examination of mucopus smears reveals a great number of leukocytes containing gram-negative diplococci. The same microorganisms can be found outside the leukocytes. What is the most probable diagnosis?
Correct answer	Gonococcal stomatitis
В	Toxoplasmosis
С	Prenatal syphilis
D	Staphylococcal stomatitis
Е	Blennorrhea
No	krok 2008
Topic	fungi ana actinomycetes
Task	Microscopical examination of an infiltrate removed from the submandibular skin area of a 30 y.o. man revealed foci of purulent fluxing surrounded by maturing granulations and mature
Correct answer	connective tissue, the pus contains druses consisting of multiple short rod-like elements with one end
D	attached to the homogenous centre. What disease is it?
В	Actinomycosis
С	Tuberculosis

D	Syphilis
Е	Candidosis
No	krok 2008
Topic	CHEMOTHERAPY AND ANTIBIOTICS
Task	A patient is ill with herpetic stomatitis provoked by immunosuppression. What preparation introduced intravenously, internally and locally can provide antiviral and immunopotentiating effect?
Correct answer	Acyclovir
В	Remantadinum
С	Levamisole
D	Methisazonum
Е	Amoxicillin
No	krok 2007
Topic	PATHOGENIC PROTOZOANS
Task	A patient with suspected liver abscess was admitted to the surgical department. The patient had been staying for a long time on business in one of african countries and fell repeatedly ill with acute gastrointestinal disorders. What protozoal disease may the patient be now ill with?
Correct answer	Amebiasis
В	Trypanosomosis
С	Leishmaniasis
D	Malaria
Е	Toxoplasmosis
№	krok 2007
Topic	methods of diagnostics of pathogenic microorganisms

Task	Post-mortem examination of a 5 year old boy who died from acute pulmonary and cardiac insufficiency
	revealed the following: serohemorrhagic tracheobronchitis with some necrotic areas of mucous membrane,
	multiple foci of hemorrhagic pneumonia in lungs. What disease is in question?
Correct answer	Influenza
В	Measles
С	Scarlet fever
D	Diphtheria
Е	Croupous pneumonia
№	krok 2007
Topic	methods of diagnostics of pathogenic microorganisms
Task	A patient was taken to the hospital with complaints of headache, high temperature, frequent stool, stomach
	pain with tenesmus. Doctor made a clinical diagnosis dysentery and sent the material (excrements) to the
	bacteriological laboratory for analysis. What diagnostic method should the laboratory doctor use to confirm
	or to disprove the clinical diagnosis?
Correct answer	Bacteriological
В	Biological
С	Bacterioscopic
D	Serological
E	Allergic
№	krok 2007
Topic	Viral hepatitis
Task	Immune-enzyme reaction revealed in blood serum HBs-antigene. What disease is this antigene associated
	with?
Correct answer	Viral hepatitis type B
В	Viral hepatitis type A

C	AIDS
D	Tuberculosis
Е	Syphilis
No	krok 2007
Topic	morphology of microorganisms
Task	Microscopic analysis of tissue sampling from affected area of mucous membrane of oral cavity revealed bacillus in form of accumulations that looked like a pack of cigarettes. Ziehl-Neelsen staining gives them red colour. What kind of pathogenic organism was most likely revealed in tissue sampling?
Correct answer	M.leprae
В	M.tuberculosis
С	A.bovis
D	A.israilii
E	M.avium
No	krok 2007
Topic	NA-containing viruses
Task	A doctor examined a patient with recurrent aphthous stomatitis with concominant candidosis and decided to eliminate a possibility of HIV-infection. What examination can help to clear the situation up and make a provisional diagnosis?
Correct answer	Immune-enzyme analysis
В	Gel precipitation reaction
С	Reaction of hemagglutination inhibition
D	Reaction of hemagglutination
Е	Phase-contrasr microscopy
No	krok 2007
Topic	methods of diagnostics of pathogenic microorganisms

Task	On the territory of a certain region the mass death of rodents was observed. It was assumed that it may be
	caused by plague agent. What serological reaction should be applied for quick determination of antigene of
	this epizootic agent?
Correct answer	Precipitation reaction
В	Agglutination reaction
С	Reaction of passive hemagglutination
D	Bordet-Gengou test
Е	Neutralization reaction
№	krok 2007
Topic	CHEMOTHERAPY AND ANTIBIOTICS
Task	A patient with streptococcal gingival infection was prescribed a medication that contains beta lactam ring
	in its structure. What preparation belongs to this group?
Correct answer	Benzylpenicillin
В	Rifampicin
С	Erythromycin
D	Streptomicin sulfate
E	Chloramphenicol
№	krok 2018
Topic	Serological identification. Serological diagnostics of infectious diseases. Diagnostic antigens. Diagnostic antisera.
Task	Significant shortcoming of microscopy in infection diagnostics is its insufficient information value due to
	morphological similarity between many species of microorganisms. What immunoassay can significantly
	increase informativity of this method?
Correct answer	Fluorescence immunoassay
В	Coombs' test
С	Immuneenzyme assay
	1 * *

D	Opsonization
Е	Radioimmunoassay
<u>№</u>	krok 2018
Topic	Corynebacteria. Mycobacteria.
Task	What drugs are used for specific treatment of diphtheria?
Correct answer	Antitoxic serum
В	Placental gamma globulin
С	Native plasma
D	Antibiotics
E	Anatoxin
<u>№</u>	krok 2018
Topic	Methods of laboratory diagnostics of bacterial infections. Pathogenic cocci.
Task	An ophthalmologist suspects blennorrhea (gonococcal conjunctivitis) in a child with signs of suppurative keratoconjunctivitis. What laboratory diagnostics should be conducted to confirm the diagnosis?
Correct answer	Microscopy and bacteriological analysis
В	Serum diagnostics and allergy test
С	Biological analysis and phagodiagnostics
D	Biological analysis and allergy test
Е	Microscopy and serum diagnostics
№	krok 2018
Topic	Methods of laboratory diagnostics of bacterial infections. Pathogenic cocci
Task	Analysis of sputum taken from a patient with suspected pneumonia revealed slightly elongated gram-positive diplococci with tapered opposite ends. What microorganisms were revealed in the sputum?
Correct answer	Streptococcus pneumoniae
В	Staphylococcus aureus
R.	· · · · · · · · · · · · · · · · · · ·

С	Klebsiella pneumoniae
D	Neisseria meningitidis
Е	Neisseria gonorrhoeae
No	krok 2018
Topic	Corynebacteria. Mycobacteria.
Task	In a closed community it is necessary to determine community members immunity to diphtheria and verify the need for their vaccination. What investigation is necessary in this case?
Correct answer	Determine antitoxin titer by means of indirect hemagglutination assay
В	Test community members for diphtheria bacillus carriage
С	Determine diphtheria antibody titer
D	Check medical records for vaccination
Е	Determine community members immunity to diphtheria bacillus
No	krok 2018
Topic	Estimation of immune status. Immunodefficiencies.
Task	Often the cause of secondary immunodeficiency is an infectious affection of an organism, when agents reproduce directly in the cells of immune system and destroy them. Specify the diseases, during which the described above occurs:
Correct answer	Infectious mononucleosis, AIDS
В	Tuberculosis, mycobacteriosis
С	Poliomyelitis, viral hepatitis type A
D	Dysentery, cholera
Е	Q fever, typhus
No	krok 2018
Topic	Cloctridia of wound anaerobic infection. Tetanus. Botulism.

Task	A bacteriological laboratory received a sample of dried fish from an outbreak of food poisoning.
	Inoculation of the sample on Kitt-Tarozzi medium revealed microorganisms resembling tennis racket.
	These microorganisms are causative agents of the following disease:
Correct answer	Botulism
В	Salmonellosis
C	Dysentery
D	Diphtheria
E	Typhoid fever
№	krok 2018, 2019
Topic	Hepatitis viruses. Oncoviruses.
Task	A patient is registered for regular checkups. Laboratory analyses for viral hepatitis diagnostics are made. In
	the blood serum only antibodies to HbsAg are detected. Such result is indicative of:
Correct answer	After vaccination against viral hepatitis type B
В	Acute viral hepatitis type B
С	Acute viral hepatitis type C
D	Viral hepatitis type A
E	Chronic viral hepatitis type C
№	krok 2018
Topic	Bases of sanitary microbiology. Sanitary microbiology and virology of water, soil, air
Task	After the water supply system had been put into operation in a new residential area, the medical officers of
	sanitary and epidemiological station measured total microbial number in the water. Name the maximum
	permissible value of this indicator for potable water:
Correct answer	100
В	10

400
500
1000
krok 2018
Infection. Biological method of investigation
At the end of winter a student, who had been lately in the state of nervous tension, developed a case of URTI after overexposure to cold. What is the case of this disease?
Pathogenic agent
Nervous stress
Overexposure to cold
Improper diet
Hypovitaminosis
krok 2018
Immunopathology: Allergy, etc.
A patient has been administered conduction anesthesia with novocaine in preparation for tooth extraction. After the anesthesia administration the patient developed swelling and hyperemy around the injection site, skin itch, general fatigue, motor agitation. Name the developed complication:
Allergy
Idiosyncrasy
Tachyphylaxis
Drug dependence
Inflammation
krok 2018
Infection. Biological method of investigation

Biological material taken from a patient contains several species of microorganisms (staphylococci
and streptococci) that are causative agents of the patient's disease. Name this type of infection:
Mixed infection
Superinfection
Reinfection
Consecutive infection
Coinfection
krok 2018
Causative agents of zoonotic infections.
A worker of a cattle farm consulted a surgeon about fever up to 40° C, headache, weakness. Objective
examination of his back revealed hyperemia and a dark red infiltration up to 5 cm in diameter with black
bottom in its center, which was surrounded with pustules. What disease are these presentations typical of?
A
Anthrax
Plague
Tularemia
Furuncle
Abscess
krok 2018
Causative agents of zoonotic infections
2 days after a hunter cut a ground squirrel's body, he developed fever up to 39° C, his lymph nodes
enlarged. Later he developed pneumonia with serohemorrhagic exudate that contained egg-shaped
microorganisms with bipolar staining. What provisional diagnosis can be made in this case?
Plague

В	Tetanus
С	Pseudotuberculosis
D	Brucellosis
Е	Anthrax
<u>№</u>	krok 2018
Topic	. Cloctridia of wound anaerobic infection. Tetanus. Botulism.
Task	In 8 days after a surgery the patient developed tetanus. The surgeon suspects this condition to be caused by suture material contaminated by tetanus agent. The material is delivered to a bacteriological laboratory. What nutrient medium is required for primary inoculation of the suture material?
Correct answer	Kitt-Tarozzi medium
В	Endo agar
С	Sabouraud agar
D	Egg-yolk salt agar
Е	Hiss medium
No	krok 2018
Topic	Hepatitis viruses. Oncoviruses
Task	Dentists have high risk of contracting viral hepatitis type B in the course of their duties and therefore are subject to mandatory vaccination. What vaccine is used in such cases?
Correct answer	Recombinant vaccine
В	Chemical vaccine
С	Inactivated vaccine
D	Anatoxin
Е	Live vaccine
No	krok 2018
Topic	Corynebacteria. Mycobacteria

Task	A girl presents with high fever and sore throat. Objectively the soft palate is swollen, the tonsils are
	covered with gray films that are firmly attached and leave deep bleeding lesions when removed. What is
	the most likely disease in this case?
Correct answer	Pharyngeal diphtheria
В	Pseudomembranous (Vincent's) tonsillitis
С	Lacunar tonsillitis
D	Infectious mononucleosis
Е	Necrotic tonsillitis
№	krok 2019
Topic	Corynebacteria. Mycobacteria
Task	A girl presents with high fever and sore throat. Objectively the soft palate is swollen, the tonsils are
	covered with gray films that are firmly attached and leave deep bleeding lesions when removed. What is the most likely disease in this case?
Correct answer	Pharyngeal diphtheria
В	Infectious mononucleosis
С	Lacunar tonsillitis
D	Necrotic tonsillitis
E	Pseudomembranous (Vincent's) tonsillitis
№	krok 2019
Topic	Bases of sanitary microbiology. Sanitary microbiology and virology of water, soil, air
Task	After the water supply system had been put into operation in a new residential area, the medical officers of sanitary and epidemiological station measured total microbial number in the water. Name the maximum permissible value of this indicator for potable water:
Correct answer	100 -
В	400
С	1000

D	10
Е	500
№	krok 2019
Topic	Causative agents of zoonotic infections
Task	A worker of a cattle farm consulted a surgeon about fever up to 40°C, headache, weakness. Objective examination of his back revealed hyperemia and a dark red infiltration up to 5 cm in diameter with black bottom in its center, which was surrounded with pustules. What disease are these presentations typical of?
Correct answer	Anthrax
В	Furuncle
С	Tularemia
D	Plague
Е	Abscess
№	krok 2019
Topic	Corynebacteria. Mycobacteria
Task	What drugs are used for specific treatment of diphtheria?
Correct answer	Antitoxic serum
В	Antibiotics
С	Placental gamma globulin
D	Anatoxin
Е	Native plasma
№	krok 2019
Topic	Cloctridia of wound anaerobic infection. Tetanus. Botulism.
Task	In 8 days after a surgery the patient developed tetanus. The surgeon suspects this condition to be caused by suture material contaminated by tetanus agent. The material is delivered to a bacteriological laboratory. What nutrient medium is required for primary inoculation of the suture material?

Correct answer	Kitt-Tarozzi medium -
В	Egg-yolk salt agar
С	Endo agar
D	Hiss medium
Е	Sabouraud agar
№	krok 2019
Topic	Estimation of immune status. Immunodefficiencies
Task	Often the cause of secondary immunodeficiency is an infectious affection of an organism, when agents
	reproduce directly in the cells of immune system and destroy them. Specify the diseases, during which the
	described above occurs:
Correct answer	Infectious mononucleosis, AIDS
В	Poliomyelitis, viral hepatitis type A
С	Tuberculosis, mycobacteriosis
D	Dysentery, cholera
Е	Q fever, typhus
$N_{\underline{0}}$	krok 2019
Topic	Causative agents of zoonotic infections
Task	2 days after a hunter cut a ground squirrel's body, he developed fever up to 39 °C, his lymph nodes enlarged. Later he developed pneumonia with serohemorrhagic exudate that contained egg-shaped microorganisms with bipolar staining. What provisional diagnosis can be made in this case?
Correct answer	Plague
В	Pseudotuberculosis
C	Brucellosis
D	Anthrax
E	Tetanus '
№	krok 2019

Topic	Methods of laboratory diagnostics of bacterial infections. Pathogenic cocci
Task	An ophthalmologist suspects blennorrhea (gonococcal conjunctivitis) in a child with signs of suppurative keratoconjunctivitis. What laboratory diagnostics should be conducted to confirm the diagnosis?
Correct answer	Biological analysis and allergy test
В	Biological analysis and phagodiagnostics
С	Microscopy and serum diagnostics
D	Microscopy and bacteriological analysis
E	Serum diagnostics and allergy test,
№	krok 2019
Topic	Cloctridia of wound anaerobic infection. Tetanus. Botulism
Task	A bacteriological laboratory received a sample of dried fish from an outbreak of food poisoning. Inoculation of the sample on Kitt-Tarozzi medium revealed microorganisms resembling tennis racket. These microorganisms are causative agents of the following disease:
Correct answer	Botulism
В	Dysentery
С	Salmonellosis
D	Diphtheria
Е	Typhoid fever
<u>№</u>	krok 2019
Topic	Methods of laboratory diagnostics of bacterial infections. Pathogenic cocci
Task	Analysis of sputum taken from a patient with suspected pneumonia revealed slightly elongated gram-positive diplococci with tapered opposite ends. What microorganisms were revealed in the sputum?
Correct answer	Streptococcus pneumoniae
В	Neisseria gonorrhoeae

С	Staphylococcus aureus
D	Klebsiella pneumoniae
Е	Neisseria meningitidis ^y
№	krok 2019
Topic	Serological identification. Serological diagnostics of infectious diseases. Diagnostic antigens. Diagnostic antisera
Task	Significant shortcoming of microscopy in infection diagnostics is its insufficient information value due to morphological similarity between many species of microorganisms. What immunoassay can significantly increase informativity of this method?
Correct answer	Fluorescence immunoassay
В	Immune-enzyme assay
С	Coombs' test
D	Opsonization
E	Radioimmunoassay
№	krok 2019
Topic	Corynebacteria. Mycobacteria
Task	In a closed community it is necessary to determine community members immunity to diphtheria and verify the need for their vaccination. What investigation is necessary in this case?
Correct answer	Determine antitoxin titer by means of indirect hemagglutination assay
В	Test community members for diphtheria bacillus carriage
С	Determine community members immunity to diphtheria bacillus
D	Check medical records for vaccination
Е	Determine diphtheria antibody titer
№	krok 2019

Topic	Infection. Biological method of investigation
Task	Biological material taken from a patient contains several species of microorganisms (staphylococci and streptococci) that are causative agents of the patient's disease. Name this type of infection:
Correct answer	Mixed infection
В	Reinfection
С	Consecutive infection
D	Superinfection
E	Coinfection
$N_{\underline{0}}$	krok 2019
Topic	Hepatitis viruses. Oncoviruses
Task	Dentists have high risk of contracting viral hepatitis type B in the course of their duties and therefore are subject to mandatory vaccination. What vaccine is used in such cases?
Correct answer	Recombinant vaccine
В	Chemical vaccine
С	Anatoxin
D	Inactivated vaccine
Е	Live vaccine
№	krok 2020
Topic	HIV.
Task	A man came to the virology laboratory of an infectious diseases hospital. He needs to be examined for HIV infection. What methods of laboratory diagnostics for HIV infection and AIDS are currently used in Ukraine?
Correct answer	Serological
В	Virological
С	Allergological

D	Biological
Е	Bacteriological
No	krok 2020
Topic	DNA-containing viruses.
Task	A patient is diagnosed with stomatitis caused by herpes simplex virus, type 1 and 2. What medicine that is
	an analogue of nucleosides and is converted by thymidine kinase can provide highly effective selective
	antiviral therapy?
Correct answer	Acyclovir
В	Acetylcysteine
C	Rimantadine
D	Laferon (recombinant human interferon alpha-2b)
E	Oxolin (Dioxotetrahydrooxytetrahydro- naphthaline)
$N_{\underline{0}}$	krok 2020
Topic	HIV.
Task	An AIDS patient presents with revertase enzyme activity in the cells affected by HIV infection. This
	enzyme takes part in the synthesis of the following nucleic acid:
Correct answer	DNA
В	mRNA
C	tRNA
D	rRNA
Е	Pre-mRNA
No	krok 2020
Topic	Methods of laboratory diagnostics of bacterial infections. Pathogenic cocci.
Task	An ophthalmologist suspects blennorrhea (gonococcal conjunctivitis) in a child with signs of suppurative
	keratoconjunctivitis. What laboratory diagnostics should be conducted to confirm the diagnosis?
Correct answer	Microscopy and bacteriological analysis

В	Microscopy and serum diagnostics
С	Biological analysis and phagodiagnostics
D	Biological analysis and allergy test
Е	Serum diagnostics and allergy test
No	krok 2020
Topic	Escherichia. Shigella. Salmonella.
Task	An inoculation of intestinal microorganisms on the Endo medium results in the growth of colonies that can be either colored or colorless. This process is based on the fermentation of a certain carbohydrate. Name this carbohydrate:
Correct answer	Lactose
В	Sucrose
С	Maltose
D	Arabinose
Е	Glucose
№	krok 2020
Topic	Corynebacteria. Mycobacteria.
Task	A sputum sample obtained from a tuberculosis patient was sent to a bacteriological laboratory. Bacterioscopy of smear microslides for detection of the tubercle bacillus requires the following staining method:
Correct answer	Ziehl-Neelsen
В	Romanovskyi
С	Burri-Gins
D	Zdrodovskyi
Е	Gram
№	krok 2020
Topic	Cloctridia of wound anaerobic infection. Tetanus. Botulism.

Task	A patient was delivered into a hospital with the provisional diagnosis of botulism. What serological reaction should be used for detection of botulinum toxin in the material being analyzed?
Correct answer	Neutralization reaction
В	Immunofluorescence reaction
С	Agglutination reaction
D	Precipitation reaction
Е	Complement fixation reaction
No	krok 2020
Topic	Rickettsiae. Chlamydiae. Mycoplasmas.
Task	A patient is diagnosed with pneumonia of mycoplasmal etiology. What antibiotics, based on their mechanism of action, SHOULD NOT be used in the course of the treatment?
Correct answer	Antibiotics that inhibit the synthesis of cell wall components
В	Antibiotics that disturb the synthesis of nucleic acids
С	Antibiotics that disturb the protein synthesis
D	Antibiotics that disturb oxidative phosphorylation processes
Е	Antibiotics that disturb the permeability of cytoplasmic membrane
No	krok 2020
Topic	RNA-containing viruses: Orthomyxoviruses. Paramyxoviruses. Picornaviruses. Rhabdoviruses. Arboviruses.
Task	A person bitten by a stray dog came to the surgeon's office. Wide lacerated wounds are localized on the patient's face. What rabies-prevention aid should be provided to this person?
Correct answer	Begin immunization with antirabic vaccine
В	Prescribe combined vitamin therapy
С	Hospitalize the patient and continue to monitor his condition

D	Immediately administer normal gamma globulin
Е	Immediately administer DPT vaccine
№	krok 2020
Topic	Pathogenic spirochaetae. Causative agents of cholera.
Task	A patient was diagnosed with peptic ulcer disease of the stomach and prescribed an antibacterial treatment.
	This treatment will be aimed against the following causative agent:
Correct answer	H. pylori
В	St. aureus
С	E. coli
D	Cl. thachomatis
E	Cl. perfringens
№	krok 2020
Topic	SRS - Medical protozoology
Task	A woman gave birth to a child with toxoplasmosis. The woman thinks that she contracted toxoplasma from
	her friend, who recently gave birth to a child with the same disease. A human CANNOT be infected with
	toxoplasma through the following route:
Correct answer	Contact with a sick person
В	Drinking water, contaminated with oocytes
С	Eating undercooked meat of an infected domesticated animal
D	Contact with a cat
E	Eating unwashed vegetables
№	krok 2020
Topic	The biology of immune response. Regulation of immune response. Theories of immunogenesis.

2 months after a kidney transplantation, the patient's condition deteriorated. Based on laboratory analysis,
it was determined that transplant rejection started. What factor of the immune system plays the key role in
the reaction of transplant rejection?
T killer cells
T helper 2 cells
Interleukin-1
B lymphocytes
Natural killer cells
krok 2020
Structure of bacterial cells. Morphology and cell structure of actinomycetes, spirochaeta, fungi and protozoa.
Microscopy with an immersion system was used to study a smear microslide with a Streptobacillus culture
stained according to the Aujeszky method. What structural feature of the bacteria was analyzed?
Spores
Inclusions
Capsule
Cell wall structure
Flagella
krok 2020
Methods of laboratory diagnostics of bacterial infections. Pathogenic cocci.
An inoculation of pus, obtained from a furuncle, revealed spheric microorganisms arranged in "grape
clusters". What microbes were detected?
Staphylococci
Micrococci
Tetracocci
Streptococci

Е	Diplococci
<u>№</u>	krok 2020
Topic	Antimicrobial chemotherapy: microbiological basis. Antiseptics.
Task	A dentist used a solution of potassium permanganate as an antiseptic. This preparation has a bactericidal
	effect because of:
Correct answer	Atomic oxygen
В	Manganese oxide
C	Potassium
D	Potassium hydroxide
Е	Potassium oxide
$N_{\underline{0}}$	krok 2020
Topic	Immunity. Types of immunity. Nonspecific factors of defence. Immune system. Antigens. Antibodies.
Task	The patient's saliva has been tested for antibacterial activity. What saliva component has antibacterial properties?
Correct answer	Lysozyme
В	Amylase
С	Cholesterol
D	Ceruloplasmin
Е	Parotin
$N_{\underline{0}}$	krok 2021
Topic	Corynebacteria. Mycobacteria
Task	A centrifugate of urine sample obtained from a patient with suspected renal tuberculosis was used to make
	a slide mount for microscopy. What method should be used to stain the slide and detect the causative
	agent?
Correct answer	Ziehl-Neelsen stain
В	Burri stain

С	Aujeszky stain
D	Loeffler stain
Е	Gram stain
No	krok 2021
Topic	Physiology of bacteria. Culture media. Methods of sterilization. Disinfection
Task	In the surgical department, dressing material was being sterilized in an autoclave. Because of nurse's oversight, the sterilization regimen was disturbed and temperature in the autoclave chamber reached only 100°C instead of required 120°C. What microorganisms could remain viable under such conditions?
Correct answer	Bacilli and Clostridia
В	Staphylococci and streptococci
С	Mold and yeast-like fungi
D	Salmonellae and klebsiellae
E	Corynebacteria and mycobacteria
No	krok 2021
Topic	The biology of immune response. Regulation of immune response. Theories of immunogenesis
Task	Dental implants were installed in a patient. Three weeks later, implant rejection occurred. What blood cells play the largest role in this pathological process?
Correct answer	T lymphocytes
В	Plasmacytes
С	B lymphocytes
D	Immunoglobulins E
Е	Immunoglobulins M
№	krok 2021
Topic	Bacteriophages. Microbial genetics. Nucleic acids techniques in diagnostic microbiology

Task	During an outbreak of a hospital-acquired infection, pure cultures of S. aureus were grown after
	inoculation of the samples obtained from the nasopharynxes of the medical personnel and from wound
	drainage of the surgical patients. What tests are necessary to determine the likely source of infection?
Correct answer	Phage typing of the obtained cultures
В	Sero-identification Sero-identification
С	Repeated inoculations
D	Biochemical profiles
E	Antibiotic sensitivity testing
$N_{\underline{0}}$	krok 2021
Topic	DNA-containing viruses
Task	A patient came to a dentist complaining of fever and characteristic small vesicles on the buccal, palatal,
	and lingual mucosa. The dentist suspects herpetic stomatitis. What additional test is necessary to confirm
	the diagnosis?
Correct answer	Inoculation of chick chorioallantoic membrane or brain tissue of white mice
В	Precipitation reaction
С	Inoculation on Eagle medium
D	Inoculation on medium 199 with addition of bovine serum
E	Inoculation on Rappaport medium
$N_{\underline{0}}$	krok 2021
Topic	Immunopathology: Allergy, etc.
Task	During pregnancy, specific proteins that can destroy rhesus-positive erythrocytes of the fetus were detected
	in the blood of a rhesus-negative mother. Name this defensive component of the mother's body:
Correct answer	Antibody
В	Enzyme
С	Antigen

D	Hormone
E	Serum
№	krok 2021
Topic	Hepatitis viruses. Oncoviruses
Task	Lately, the laboratory diagnostics of hepatitis B includes detecting the presence of viral DNA in the
	patient's blood. What reaction is used to determine it?
Correct answer	Polymerase chain reaction
В	Complement fixation reaction
С	Enzyme-linked immunosorbent assay
D	Indirect hemagglutination reaction
E	Hemagglutination inhibition reaction
№	krok 2021
Topic	General virology. Culturing of viruses. Prions. Methods of laboratory diagnostics of viral infections
Task	Influenza serology allows detecting the increase of antibody titer against the causative agent in the patient's blood serum. What antibody titer increase must be observed with paired serum samples, for the result to be considered valid?
Correct answer	Fourfold increase or more
В	Double increase
С	By one titer
D	By a half-titer
E	Triple increase
<u>No</u>	krok 2021
Topic	Causative agents of zoonotic infections

Task	A 43-year-old cattle farm worker is brought to the surgeon with fever, malaise, and inflamed lesions on his hands and arms. He reports that about 2 weeks before his presentation at the hospital he noticed small, painless, pruritic papules that quickly enlarged and developed a central vesicle. The vesicles developed into erosion and left painless necrotic ulcers with black, depressed eschar. Gram's staining of the ulcer reveals grampositive spore-forming bacilli. Which of the following diseases is the most likely cause of these findings?
Correct answer	Anthrax
В	Syphilis
С	Plague
D	Chickenpox
E	Tularemia
$N_{\underline{0}}$	krok 2021
Topic	Methods of laboratory diagnostics of bacterial infections. Pathogenic cocci
Task	A 5-year-old boy complains of intense headache and vomiting. Objectively, he has nuchal rigidity, vomiting without nausea, herpes rash on his face, and fever. What pathologic material should be obtained for bacteriology, to confirm the diagnosis of cerebrospinal meningitis?
Correct answer	Spinal tap
В	Vomit content analysis
С	Urine culture of <i>N. meningitidis</i>
D	Fecal culture of <i>N. meningitidis</i>
Е	A sample of N. meningitidis bacteria from urogenital mucosa
№	krok 2021
Topic	SRS - Medical mycologia

A man uses dentures. The dentist has noticed mucosal lesions with a white coating in his oral cavity.
Microscopy of the coating detected large oval Grampositive cells. What microorganisms have caused
stomatitis in the patient?
Yeast-like fungi of Candida genus
Oral spirochetes
Actinomycetes
Oral trichomonas
Streptococci
krok 2021
Main bacterial shapes. Simple and differential staining. Gram stain
When preparing a dental plaque smear and staining it according to the Gram method, a student during
microscopy detected there various violet and pink microorganisms. What structural component of
microorganisms causes different response to stains?
Cell wall
Cytoplasm
Internal periplasmic space
Cytoplasmic membrane
Outer membrane
krok 2021
The biology of immune response. Regulation of immune response. Theories of immunogenesis
A child has a congenital immunodeficiency. The cell-mediated immunity is affected, causing frequent viral infections. It is likely to be caused by a disorder of the following organ:
Thymus gland
Spleen
Red bone marrow

D	Lymph nodes				
Е	Palatine tonsils				
№	krok 2022				
Topic	Concept of immunity. Types of immunity. Cellular and humoral factors of non-specific immunity.				
	Antigens. Antibodies.				
Task	Bacteria that enter the body are being phagocytized by macrophages. What is the role of macrophages in				
	cooperation of immunocompetent cells during the first phase of immune response?				
Correct answer	Ensure antigen processing and presentation to T helper cells				
В	Activate T killer cells				
С	Activate NK cells				
D	Ensure antigen processing and presentation to T killer cells				
Е	Produce immunoglobulins				
№	krok 2022				
Topic	Immunoprophylaxis. Immunotherapy.				
Task	To prevent an increase in hepatitis B morbidity in the city hospitals, it is necessary to vaccinate the medical				
	personnel. What should be used for immunization in this case?				
Correct answer	Recombinant vaccine				
В	Interferon				
C	Inactivated vaccine				
D	Live attenuated vaccine				
Е	Arbidol (Umifenovir)				
№	krok 2022				
Topic	Immunoprophylaxis. Immunotherapy.				
Task	In a maternity hospital a newborn should receive vaccination against tuberculosis. What vaccine should be				
	chosen?				
Correct answer	BCG vaccine				

В	Tuberculin
C	EV vaccine
D	DPT vaccine
E	STI vaccine
$N_{\underline{0}}$	krok 2022
Topic	Main bacterial shapes. Simple and differential staining. Gram stain.
Task	A culture of coccal bacteria was obtained from the oropharynx of a boy with chronic tonsilltits. In the smears these bacteria are arranged in chains. What bacteria are likely in this case?
Correct answer	Streptococci
В	Vibrio
С	Clostridia
D	Escherichia
E	Staphylococci
<u>No</u>	krok 2022
Topic	Structure of bacterial cells. Morphology and cell structure of bacteria, fungi and protozoa.
Task	A 32-year-old woman with asymptomatic progression of the disease for the second time gave birth to a stillborn baby with marked microcephaly. What disease can be suspected in this case?
Correct answer	Toxoplasmosis
В	Histoplasmosis
С	Brucellosis
D	Syphilis
Е	Listeriosis
No	krok 2022

Topic	
	Structure of bacterial cells. Morphology and cell structure of bacteria, fungi and protozoa.
Task	A patient complains of acute spastic abdominal pain, frequent urge to defecate, liquid bloody feces with
	mucus. Laboratory analysis of fecal smear revealed inconstant in shape organisms with erythrocytes. What
	is the most likely diagnosis?
Correct answer	Amebiasis
В	Schistosomiasis
C	Lambliasis
D	Intestinal trichomoniasis
Е	Balantidiasis
№	krok 2022
Topic	
	Structure of bacterial cells. Morphology and cell structure of bacteria, fungi and protozoa.
Task	A 40-year-old man has returned home after his voyages along the coast of West Africa that lasted for
	many months.15 days later he developed weakness, headache, elevated temperature, and fever. He was
	diagnosed with malaria. What laboratory methods of analysis can confirm this diagnosis?
Correct answer	Microscopy, serology
В	Serology, biologic method
С	Bacteriology, allergy testing
D	Bacterioscopy, biologic method
Е	Microscopy, microbial culture
<u>No</u>	krok 2022
Topic	Allergy.
Task	A 43-year-old man complains of sudden skin edema and redness with vesicles and itching. He developed
	these signs after eating shrimps. Such local signs are characteristic of the following type of hypersensitivity:

Correct answer	Local signs of type I hypersensitivity
В	Local signs of type IV hypersensitivity
С	
D	Type III hypersensitivity reaction
Е	Local signs of type II hypersensitivity
No	krok 2022
Topic	Concept of immunity. Types of immunity. Cellular and humoral factors of non-specific immunity. Antigens.
Task	Autopsy of a 2-year-old child, who died of meningitis, shows absence of thymus and T-dependent areas in the peripheral lymphoid tissue. What immunodeficiency syndrome can be characterized by these changes?
Correct answer	Cellular immunodeficiency syndrome
В	Humoral immunodeficiency syndrome
С	Secondary immunodeficiency syndrome
D	Combined immunodeficiency syndrome
Е	Deficiency syndrome of monocytic phagocytes
No	krok 2022
Topic	Allergy.
Task	30 minutes after dental treatment the patient developed red itching spots on the face and oral mucosa. The patient was diagnosed with urticaria. What bioactive substance with vasodilating and pruriginous effect is produced in this type of allergic reaction?
Correct answer	Histamine
В	Bradykinin
С	Prostaglandin E2
D	Leukotriene B4
Е	Interleukin-1
№	krok 2022

Topic	Concept of immunity. Types of immunity. Cellular and humoral factors of non-specific immunity.
	Antigens. Antibodies.
Task	To speed up the healing process in a wound located on the patient's oral mucosa, the patient was prescribed a medicine that is a thermostable protein. This protein can be found in human tears, saliva, and breastmilk and it can be detected in freshly laid eggs. It is known as a factor of the body's natural resistance. Name this protein:
Correct answer	Lysozyme
В	Interferon
С	Interleukin
D	Complement
Е	Imanin
No	krok 2022
Topic	Structure of bacterial cells. Morphology and cell structure of bacteria, fungi and protozoa.
Task	A patient diagnosed with hepatic abscess was brought into the surgery department. He has a history of recurrent gastrointestinal disorders. Laboratory stool analysis detected round cells with 4 nuclei. What protozoa! invasion can be detected in this case?
Correct answer	Entamoeba hystolytica
В	Trichomonas hominis
С	Balantidium coli
D	Trichomonas vaginalis
E	Entamoeba gingivalis
No	krok 2022
Topic	Microbiological basis of antimicrobial chemotherapy and antiseptic.
Task	A sick child has gingivitis caused by anaerobic infection. The child needs to be prescribed an antimicrobial
	drug that belongs to the following class:
Correct answer	Nitroimidazoles

В	Sulfonamides			
С	Nitrofurans			
D	Polymyxins			
Е	Aminoglycosides			
$N_{\underline{0}}$	krok 2022			
Topic	Human Immunodeficiency Virus			
Task	When providing dental care, the dentist received a trauma of the index finger. The skin was breached ar:d			
	the wound is likely to be contammated with the patient's blood. In such cases regulations require for the			
	patient to be examined for HIV-infectson and viral hepatitis. What type of examination is necessary in this			
	case?			
Correct answer	Study blood for hepatitis markers and anti-HIV antibodies			
В	Inoculate blood sample on sugar broth			
С	Determine the causative agent by infecting cell culture			
D	Study the level of T helper cells			
Е	Identify specific antibodies			
No	krok 2022			
Topic	Concept of immunity. Types of immunity. Cellular and humoral factors of non-specific immunity.			
	Antigens. Antibodies.			
Task	What immunoglobulins produced in salivary glands ensure local immunity of oral mucosa?			
Correct answer	IgA			
В	IgG			
С	IgD			
D	IgE			
Е	IgM			
Nº	krok 2022			
Topic	Corynebacteria. Mycobacteria.			

Microscopy of the samples obtained from the patient's pharynx and stained according to Neisser shows bacilli with thickened poles situated at an angle to each other. Name the likely species of these				
Corynebacterium diphtheriae				
Mycobacterium tuberculosis				
Streptococcus pyogenes				
Neisseria gonorrhoeae				
Leptospira interrogans				
krok 2022				
DNA-genomic viruses.				
After ineffective treatment of stomatitis with antibiotics, the patient consulted a dentist. The dentist made a				
diagnosis of herpetic stomatitis. What medicine should the patient be prescribed?				
Acyclovir				
Metrogyl (Metronidazole)				
Azithromycin				
Clotrimazole				
Sulfacyl sodium (Sulfacetamide)				
krok 2022				
Cloctridia of wound anaerobic infection. Tetanus. Botulism.				
A bacteriological laboratory received a sample of dried fish from an outbreak of food poisoning.				
Inoculation of the sample on Kitt-Tarozzi medium revealed microorganisms resembling tennis racket.				
These microorganisms are causative agents of the following disease:				
Botulism				
Salmonellosis				
Diphtheria				

D	Typhoid fever
E	Dysentery

