Основна база тестів для підготовки іноземних студентів за 2015-2019 рр.

The first answer is correct for all questions

1. What drug should be administered for individual prevention of malaria?
A. Chingamin
B. Rifampicin
C. Ampicillin
D. Gentamicin
E. Biseptol (Co-Trimoxazolel) **(2013р., №31) (2014р., №196) (2015р., №16) (2016р., №23)**

2. In course of long-term treatment of an infectious patient with penicillin, the pathogen transformed into the L-form. What changes occur in the pathogen cell in case of L-transformation?
A. Absence of a cell wall
B. Absence of flagella
C. Absence of a capsule
D. Absence of a spore
E. Absence of inclusions **(2013р., №76) (2015р., №44) (2016р., №43)**

3. A sample of water used in drug production has been sent to a laboratory for sanitary and virological analysis. Presence of what virus group will be indicative of fecal contamination of water and thus the need for its additional purification?
A. Picornaviridae
B. Herpesviridae
C. Orthomyxoviridae
D. Retroviridae
E. Flaviviridae **(2013р., №131) (2015р., №90) (2016р., №96)**

4. For the specific prevention of influenza, the employees of an enterprise were vaccinated with "Influvac". What type of immunity will develop in the body of the vaccinated?
A. Artificial active
B. Innate congenital
C. Artificial passive
D. Natural active
E. Natural passive **(2013р., №194) (2015р., №134) (2016р., №130)**

5. Soil microflora often includes the representatives of pathogenic microorganisms. Specify the diseases, whose causative agents may say viable in the soil for a long time:
A. Tetanus and gas anaerobic infection
B. Tuberculosis and mycobacterioses
C. Colibacillosis and cholera
D. Leptospirosis and plague
E. Typhoid fever and dysentery **(2013р., №199) (2015р., №136) (2016р., №131)**

14. Microbiological purity of tableted drugs had been tested at factory. Samples cultivation in mannitol salt agar resulted in growth of golden yellow colonies, microscopic examination of colonies detected grampositive globular bacteria positioned in clusters; microorganisms had plasma coagulation prorerties. What pure bacterial culture was obtained?
A. Staphylococcus aureus
B. Enterobacteriaceae
C. Staphylococcus epidermidis
D. Staphylococcus saprophyticus
E. Pseudomonas aeruginosa **(2014р., №91) (2015р., №86) (2016р., №92)**

15. Leaves damage by mosaic discoloration has been detected at medicinal plantations. What microorganisms are the cause?
A. Plant-pathogenic viruses
B. Plant-pathogenic bacteria
C. Plant-pathogenic fungi
D. Protozoa
E. Rickettsia **(2014p., №92) (2015p., №87) (2016p., №93)**

20. Pharmacy has received viricides. Choose the viricide used for influenza treatment from the list given below.
A. Rimantadine
B. Metisazone
C. Levamisole
D. Azidothimidine
E. Acyclovir **(2014p., №135) (2015p., №105) (2016p., №112)**

31. Microbe survival in environment is facilitated by spore formation. What microorganisms of those listed below are spore formers:
A.Clostridium
B.Bacteroides
C.Staphylococcus
D.Peptococcus
E.Peptostreptococcus **(2015p., №4) (2016p., №8) (2017p. №8)**

32. Bacteria rapidly become resistant to drugs in the course of antibacterial treatment. What structural components of bacteria provide for their resistance?
A.R-plasmids
B.Spores
C.Capsule
D.Flagella
E.Volutine granules **(2015p., №5)**

33. In a surgical unit an outbreak of purulent infections has been registered. The infections are caused by Staphylococcus aureus with multiple resistance to antibiotics. What plasmid has provided this property?
A.R
B.F
C.Col
D.Tox
E.Hly **(2015p., №28)**

34. Analysis of the cerebrospinal fluid of a child with signs of purulent lesion of brain tunics revealed gram-negative beanshaped diplococci. What provisional diagnosis can be made on the basis of the analysis results?
A.Meningitis
B.Gonorrhea
C.Cholera
D.Plague
E.Anthrax **(2015p., №40) (2016p., №39)**

35. During feces analysis of a 3-month old child with signs of enteric infection, numerous dark-red colonies has grown on Endo agar. What microorganisms can be the cause of such enteric infection?
A.Escherichia
B.Streptococci
C.Gonococci
D.Salmonellae
E.Shigella **(2015p., №46) (2017p., №33)**

36. During assessment of air purity in an aseptic unit of a pharmacy, sedimentation analysis had been applied. Test resulted in growth of the small colonies with areas of hemolysis. What medium was used for inoculation?
A.Blood agar
B.Levine's formulation (Eosin Methylene Blue agar)
C.Endo agar
D.Ploskirev's agar
E.Egg-yolk salt agar **(2015p., №47)**

37. What enzyme allows for synthesys of various genes from template-RNA to DNA in genetic engineering (this enzyme catalyzes the process detected in RNA-viruses)?
A.Reverse transcriptase
B.Exonuclease
C.DNA-ligase
D.Helicase
E.Endonuclease **(2015p., №48) (2016p., №45)**

38. A dry-heat box is used for sterilization of various materials and instruments in a bacteriological laboratory. This sterilization method can be applied to the following objects:
A.Glass test tubes
B.Rubber gloves
C.Simple nutrient medium
D.Wire inoculating loops
E.Physiological solution **(2015p., №88)**

39. A 3,5-year-old child has been diagnosed with dysbacteriosis in the form of critical reduction of gram-positive anaerobic bacteria and increased number of staphylococci and yeast fungi. What preparation should be used for the correction of dysbacteriosis?
A.Bifidumbacterin
B.Colibacterin
C.Coli-Proteus bacteriophage
D.Furazolidone
E.Lactoglobulin **(2015p., №89)**

40. A student in severe condition was delivered into a contagious isolation ward of a hospital. He is diagnosed with toxic diphtheria of the pharynx. What drug should be administered immediately for specific treatment and prevention of complications?
A.Antidiphtheric serum
B.Diphtheria and tetanus toxoids and pertussis adsorbed vaccine
C.Diphtheria anatoxin
D.Penicillin antibiotic
E.- **(2015p., №127)**

41. Microorganisms that reach blood and other biological systems have negative surface charge. What surfactants are used as antibacterial agents to suppress the action of microorganisms?

A.Cationic
B.Anionic
C.Lyophilic
D.Lyophobic
E.Micellar **(2015p., №150)**

42. A ready-made drug was inoculated on Sabouraud's agar and incubated under 22^{o}C for 5 days. This nutrient medium was used to determine the following:
A.Number of mold and yeast fungi
B.Total number of bacteria
C.Presence of E. coli
D.Presence of S. aureus
E.Presence of Salmonella **(2015p., №151) (2016p., №161) (2019, 7)**

43. Plant pathogens are represented by various microorganisms: bacteria, fungi, actinomycetales, viruses. Name the main location of plant pathogens in the natural environment:
A.Soil
B.Water
C.Air
D.Plant parts
E.Plant vascular system **(2015p., №158)**

44. Prolonged application of broad spectrum antibacterial drugs resulted in the patient being hospitalised with diagnosis of candidiasis. What side effect of antibiotic therapy has developed in the patient?
A.Disbacteriosis
B.Endotoxic reaction
C.Toxic reaction
D.Allergic reaction
E.Formation of resistant microorganism strains **(2015p., №169)**

45. An impression smears of the dead person's brain and salivary glands revealed Negri bodies, when coloured with Mann methyl blue-eosin stain. These results confirm the presence of the following disease:
A.Hydrophobia
B.Influenza
C.Parotitis
D.Parainfluenza
E.Encephalitis **(2015p., №178)**

46. Bacterial culture obtained from patient DOES NOT grow when exposed to oxygen. Conditions suitable for bacterial culture growth can be created in:
A.Anaerobic culture jar
B.Serum-supplemented medium
C.Pasteur oven
D.Krotov apparatus
E.Oxidative medium **(2016p., №42) (2017p., №30)**

47. Sedimentation analysis has been applied for assessment of air purity in an aseptic unit of a pharmacy. The test resulted in growth of the small colonies with areas of hemolysis. What medium was used for inoculation?
A.Blood agar
B.Levine's agar (Eosin Methylene Blue agar)
C.Endo agar
D.Ploskirev's agar

E.Egg-yolk salt agar **(2016p., №44) (2017p., №34)**

48. Smears from tonsillar coating of a patient were stained by Neisser's method. Microscopy revealed thin yellow V-shaped bacilli with dark-blue grains at their ends. Make the preliminary diagnosis:
A.Diphtheria
B.Measles
C.Tuberculosis
D.Whooping cough
E.Influenza **(2016p., №46)**

49. According to the Pharmacopoeia regulations non-sterile drugs can contain certain microorganisms. Name the microorganisms that CANNOT be present:
A.Enterobacteriaceae
B.Yeast fungi
C.Micrococci
D.Mold fungi
E.Sarcinae **(2016p., №53)**

50. A pharmaceutical enterprise produces a tetanus-specific preventive drug. Which drug of those listed below is it?
A.Anatoxin
B.Dead vaccine
C.Live vaccine
D.Immunoglobulin
E.Recombinant vaccine **(2016p., №64)**

51. Inoculation in a nutrient medium was performed to determine probable contamination of a drug with fungi. The colonies are large, resembling sour cream. What nutrient medium had been used in this case?
A.Sabouraud
B.Loewenstein-Jensen medium
C.Roux
D.Loeffler
E.FINN-II **(2016p., №65)**

52. During influenza epidemic a patient with severe case of disease developed hacking cough and chest pain; signs of focal pneumonia were visible on X-ray. Microscopy of sputum detected large number of pneumococci. What type of infection is it?
A.Secondary
B.Superinfection
C.Abortive
D.Relapse
E.Reinfection **(2016p., №84)**

53. A factory producing typhoid fever vaccine cultivates bacteria of virulent strain in optimal nutrient medium. Then the cells are separated from culture fluid by means of centrifugation and processed with formalin. What type of vaccine is it?
A.Inactivated
B.Attenuated
C.Chemical
D.Anatoxin
E.Autovaccine **(2016p., №85)**

54. A pharmaceutical enterprise offers wide range of antimicrobial agents. Select the broad spectrum antimicrobial agent:
A. Tetracycline
B. Rimantadine
C. Nystatin
D. Griseofulvin
E. Phthalazolum **(2016p., №124)**

55. Aurococcus culture was obtained from the nasal cavity of a child suffering from chronic tonsillitis. Causative agent's sensitivity towards a number of antibiotics was tested to choose the optimal drug. What drug WAS NOT included in antibiotic susceptibility testing?
A. Nystatin
B. Ampicillin
C. Tetracycline
D. Levomycetin (Chloramphenicol)
E. Erythromycin **(2016p., №156)**

56. Air contamination with pathological microorganisms can be anticipated by the presence of indicator bacteria. Specify the bacteria that indicate immediate epidemiologic danger:
A. Hemolytic streptococci
B. Sarcinae
C. Mold fungi
D. Yeast fungi
E. Micrococci **(2016p., №193)**

57. Different structures of a bacterial cell perform different functions. What dispensable component of a cell ensures its survival within hostile environment?
A. Spores
B. Flagella
C. Capsule
D. Cilia
E. Inclusions **(2017p., №158)**

58. In a child-rearing facility there was an outbreak of measles. What specific urgent prophylaxis should be administered to contact UNVACCINATED children?
A. Gamma globulin against measles
B. Measles virus vaccine live
C. DPT vaccine
D. Medical screening of the children
E. Isolation and treatment of infected children **(2017 p., №1)**

59. The following should be used for sterilization of laboratory glassware in a microbiological laboratory:
A. Hot-air sterilizer
B. Bacteria-excluding filters
C. Koch's steam sterilizer
D. Disinfectant
E. Bactericidal lamps **(2017 p., №14)**

60. A smear of purulent excharge from urethra contains gram-negative beanshaped diplococci with both extra- and intracellular positions. Make the provisional microbiological diagnosis:
A. Gonorrhea
B. Syphilis
C. Chlamydiosis

D. Trichomoniasis
E. Candidiasis **(2017 p., №17)**

61. During investigation of bacterial contamination of air it is necessary to take into account both total amount of microorganisms in a certain volume and qualitative content of microflora. What microorganisms are the sanitary indicators of air contamination within enclosed spaces?
A. Staphylococcus aureus
B. Colibacillus
C. Hay bacillus
D. Yeast fungi
E. Mold fungi **(2017 p., №21)**

62. During examination of a patient with intestinal infection, inoculation in Endo medium resulted in multi-colored colonies: red and colorless. According to its purpose this medium can be determined as:
A. Differential diagnostic
B. Universal
C. Special
D. Selective
E. - **(2017 p., №42)**

63. Since 2005 in Asian and European countries there was recorded unusually high avian flu morbidity. Such spread of epidemic process can be determined as:
A. Pandemia
B. Epidemic
C. Endemia
D. Sporadic
E. Epizooty **(2017 p., №51)**

64. In a research center there is a live vaccine against dysentery being created. What property of attenuated vaccine strain should coincide with the properties of original virulent strain of dysentery bacillus?
A. Antigenic structure
B. Morphology
C. Biochemical activity
D. Antibiotic susceptibility
E. Toxin production **(2017 p., №66)**

65. Microbiological investigation of vaginal suppositories determined them to be CONTRARY to the Pharmacopoeia demands. What microflora was detected in the suppositories, resulting in such a conclusion?
A. Blue pus bacillus
B. Sarcina
C. Micrococcus
D. Tetracoccus
E. Citrobacter **(2017 p., №68)**

66. What antiprotozoal drug can be recommended to a woman with trichomoniasis?
A. Metronidazole
B. Primaquine
C. Chloridine
D. Solusurminum (Sodium stibogluconate)
E. Chiniofon **(2017 p., №86)**

67. A patient developed herpetic rashes. What drug should be prescribed in this case?
A. Acyclovir

B. Gentamicin
C. Clotrimazole
D. Benzylpenicillin
E. Biseptol (Co-trimoxazole) **(2017 p., №99)**

68. A drug solution sterilized by means of boiling was tested for sterility. Inoculation on Kitt-Tarozzi medium revealed clostridia. Clostridia survived the boiling because they are:
A. Spore-formers
B. Thermophilic
C. Anaerobic
D. Prototrophic
E. Acid-fast **(2017 p., №111)**

69. Selective medium can be used to separate various species of bacteria in a bacteriological laboratory. What medium of those listed below can be determined as selective?
A. Alkaline peptone water
B. Meat infusion broth
C. Meat infusion agar
D. Hiss' serum water medium
E. Endo agar **(2017 p., №117)**

70. To obtain exotoxins of some microorganisms, these microorganisms are inoculated into liquid nutrient medium, where microbial cultivation occurs and toxins are produced. At a certain stage it is necessary to remove the microbial cells from the medium, that is, to separate the toxins from microbes. What method should be applied in this case?
A. Bacteria-excluding filters
B. Boiling
C. Autoclaving
D. Ultraviolet irradiation
E. Disinfectants (chloramine) **(2017 p., №123)**

71. On autopsy there are numerous suppurative foci within many of the internal organs. What pathological process is it characteristic of?
A. Septicopyemia
B. Septicemia
C. Sepsis
D. Bacteriemia
E. Toxemia **(2017 p., №133)**

72. A pregnant woman was diagnosed with vaginal dysbacteriosis. What drug should be prescribed in this case?
A. Probiotic
B. Antibiotic
C. Bacteriophage
D. Interferon
E. Polyvitamins **(2017 p., №141)**

73. A local general practitioner recommends taking interferon for influenza prevention. What is the mechanism of action of this drug?
A. Blocks virus protein synthesis
B. Blocks virus stripping
C. Inhibits virion exit from cells
D. Prevents adsorption of virus in cell receptors

E. Disrupts the process of virus assembly **(2017 p., №149)**

74. A child had been administered anti-diphtheric serum. What resistance was formed in the child?
A. Passive
B. Active
C. Primary
D. Pathologic
E. Physiological **(2017 p., №153)**

75. In a nursery-garden some medicinal plants developed signs of a disease: there are yellow spots and necrotic foci on the leaves. Sap of the diseased plants remained infectious even after passing through a bacteria-excluding filter. No microorganisms growth was detected on the nutrient medium. What microorganisms could be the cause of this disease?
A. Viruses
B. Fungi
C. Ray fungi
D. Bacteria
E. Mycoplasma **(2017 p., №156)**

76. In 9 days after administration of a therapeutic serum the patient developed urticaria, itching, edemas, and lymph nodes enlargement. What type of allergic reaction has occurred in the patient?
A. Immune complex
B. Cytotoxic
C. Anaphylactic
D. Stimulating
E. Cellular **(2017 p., №165)**

77. A group of children in the kindergarten (6-year-olds) received Mantoux test; 15 children presented with negative results. What measures should be taken towards these children?
A. BCG vaccination
B. Tuberculosis antitoxin
C. Isolation
D. Repeat the test
E. Referral for fluorography **(2017 p., №172)**

78. Antibiotics derived from various species of actinomycetes are widely used in medical practice. Point out these drugs among those listed below:
A. Aminoglycosides (streptomycin, monomycin)
B. Penicillin, cephalosporin, griseofulvin
C. Polymyxin, bacitracin
D. Chloreline, arenarinum
E. Lysozyme, erytrinum **(2017 p., №175)**

79. Many drugs must be manufactured under strictly aseptic conditions. One such possible source of microbiological contamination of drugs is laboratory glassware. What method should be used to sterilize the glassware?
A. Dry heat
B. Ignition
C. Boiling
D. Tyndallization
E. Pasteurization **(2018 p., №8)**

80. Cerebrospinal fluid of a patient diagnosed with meningitis was taken for analysis. To detect the causative agent the sample was inoculated in a nutrient medium. Prior to that a serum had been added to the medium. What causative agent is expected to be obtained in this case?
A. Meningococcus
B. Mycobacteria
C. Staphylococcus
D. Viruses
E. Rickettsia **(2018 p., №13)**

81. A structural analog of vitamin PP (nicotinic acid) is used as an antituberculous medicine. Name this medicine:
A. Isoniazid
B. Streptocide
C. Riboflavin
D. Tetracycline
E. Aspirin **(2018 p., №15)**

82. The defensive mechanisms against some infectious diseases can be greatly reinforced with interferon. Interferon preparations will be the most advisable incases of the following type of infections:
A. Viral
B. Helminthic
C. Protozoal
D. Microbioses
E. Fungal **(2018 p., №18)**

83. A chemotherapeutic agent has bactericidal effect against streptococci, staphylococci, bacilli, and clostridia. According to its action spectrum this drug belongs to the following group:
A. Broad spectrum antibacterial agents
B. Narrow spectrum antibacterialagents
C. Broad spectrum antifungal agents
D. Antiviralagents
E. Antituberculous agents **(2018 p., №19)**

84. A certain infection leads to fetus malformation if a pregnant woman is affected. What vaccine should be used for prevention of this infection?
A. Rubella virus vaccine
B. Influenza virus vaccine
C. Mumps vaccine
D. Poliovirus vaccine
E. Antirabic vaccine **(2018 p., №24)**

85. HIV-infection occupational risk groups include people of various professions, healthcare workers included. Specify the most likely route of infection transmission for healthcare workers:
A. Parenteral transmission
B. Fecal-oral transmission
C. Droplet transmission
D. Transmission via airborne dust particles
E. Vector-borne transmission **(2018 p., №27)**

86. Microbial survival within environment is facilitated by spore formation. What microorganism soft those listed below are spore formers:
A. Clostridia
B. Bacteroides

C. Staphylococci
D. Peptococci
E. Peptostreptococci (**2018 p., №28)**

87. After the pus sample taken from the urethra had been inoculated on ascitic agar, it resulted in growth of round transparent colonies. Microscopy of the colonies shows gram-negative kidney bean-shaped diplococci. What causative agent is it?
A. Gonococcus
B. Pneumococcus
C. Meningococcus
D. Micrococcus
E. Streptococcus (**2018 p., №41)**

88. During assessment of air purity in an aseptic unit of a phamacy, sedimentation analysis had been applied. Test resulted in growth of the small colonies with areas of hemolysis. What medium was used for inoculation?
A. Blood agar
B. Levine's formulation (Eosin Methylene Blue agar)
C. Endo agar
D. Ploskirev's agar
E. Egg-yolk salt agar (**2018 p., №55)**

89. Microorganisms in the environment are being affected by various physical factors. What is the effect of high temperature on a microbial cell?
A. Irreversible degradation of all cellular structures
B. Mutagenic effect
C. Transition into anabiosis state
D. Albuminolysis
E. Fats saponification (**2017 p., №39)** (**2018 p., №60)**

90. Causative agents of infectious diseases can be carried both by humans and animals. Name the group of infections that affect animals and can be passed onto humans:
A. Zooanthroponoses
B. Sapronoses
C. Anthroponoses
D. Zoonoses
E. Mixed (**2018 p., №75)**

91. In the age of 5 months the child had measles antibodies in the blood. By the age of 1year these antibodies disappeared from the child's blood. Why were these antibodies present in the child's blood?
A. Acquired natural passive immunity
B. Non-specific resistance
C. Acquired natural active immunity
D. Innate immunity
E. Artificial immunity (**2018 p., №86)**

92. A Gram stained smear shows large oval violet cells that form pseudomycelium. Name these microorganisms:
A. Candida fungi
B. Mucor fungi
C. Plasmodium vivax
D. Actinomycetales

E. Penicillium fungi (**2018 p., №87)**

93. During skill building session in the field of microbiology, a student performed inoculation of microorganisms into the solid nutrient medium to obtain isolated colonies. How should inoculation loops be sterilized after that?
A. Heating in the burner flame
B. Boiling under 60^{o}C five times
C. Soaking in 1% chloramine-B solution
D. Dry heat sterilization under 160^{o}C for 120-150 minutes
E. Formaldehyde vapor sterilization (**2018 p., №94)**

94. A dry-heat box is used for sterilization of various materials and instruments in a bacteriological laboratory. This sterilization method can be applied to the following objects:
A. Glass test tubes
B. Rubber gloves
C. Simple nutrient medium
D. Wire inoculating loops
E. Physiological saline (**2018 p., №95)**

95. What is the main mechanism of benzylpenicillin bactericidal action on the coccal flora?
A. Disturbed synthesis of microbial cell wall
B. Inhibitionof protein synthesis
C. Disturbed cytoplasmic membrane permeability
D. Activation of macroorganism immune system
E. Increased phagocytic activity of leukocytes (**2018 p., №114)**

96. Sanitary microbiological investigation of potable water has detected coliphages. What conclusion can be made about the sanitary-hygienic status of this water?
A. Fecal contamination
B. The water is safe to drink
C. The water is safe to drink after boiling
D. Artesian water
E. The water is for industrial use only (**2018 p., №124)**

97. Investigation of bacterial contamination of indoor air in a pharmacy takes into account the total number of microorganisms present in a certain air volume, as well as qualitative content of indoor air microflora. Name the sanitary-indicative microorganisms for indoor air:
A. Staphylococcus and streptococcus
B. Colibacillus
C. Sarcina
D. Chromobacterium
E. Fungi and yeasts (**2018 p., №137)**

98. Preliminary disinfection of air and working surfaces of the equipment was conducted in the operating room of the surgical inpatient unit. What method of sterilization would be the most advisable in this case?
A. Ultraviolet irradiation
B. Irradiation sterilization
C. High-frequency current
D. Flowing steam
E. Formaldehyde vapor (**2018 p., №139)**

99. In a nursery-garden some medicinal plants developed signs of a disease: there are yellow spots and necrotic foci on the leaves. Sap of the diseased plants remained infectious even after passing through a

bacteria-excluding filter. No microorganisms growth was detected on the nutrient medium. What microorganisms could be the cause of this disease?
A. Viruses
B. Fungi
C. Ray fungi
D. Bacteria
E. Mycoplasma (**2018 p., №158)**

100. A pharmacy has received a batch of drugs for treatment of upper respiratory tract infection. What drug is used to treat influenza?
A. Rimantadine
B. Methisazone
C. Levamisole
D. Idoxuridine
E. Doxycycline (**2018 p., №168)**

101. Mother of a 10-year-old child came to the pharmacy to obtain a drug for prevention of upper respiratory tract infections. What drug would be recommended by the dispensing chemist?
A. Interferon
B. Benzoteph
C. Carvedilol
D. Tetracycline
E. Doxorubicin (**2018 p., №174)**

102. A pharmacy produces a batch of vials with physiological saline for injections. How should they be sterilized?
A. Under pressure in an autoclave
B. In a steam-jacketed autoclave chamber
C. In a dry heat sterilizer
D. X-ray irradiation
E. Ultraviolet irradiation (**2018 p., №182)**

103. It can be safely assumed that the infants born from the mothers with the history of measles will not be affected by the measles outbreak during their stay in the maternity ward. What classes of antibodies provide the infants with the resistance to this disease?
A. IgG
B. IgA
C. IgD
D. IgM
E. IgE (**2018 p., №186)**

104. The children attending a kindergarten were hospitalized with diagnosis of poliomyelitis. What was the route of infection transmission in this case?
A. Fecal-oral transmission
B. Alimentary transmission
C. Direct contact transmission
D. Transmission via airborne dust particles
E. Vector-borne transmission (**2018 p., №187)**

To obtain bacterial exotoxins, microorganisms are cultivated in a liquid nutrient medum, into which the toxinsare being discharged. What method allows clearing the medium of microorganisms, so that only pure exotoxins will remain in the medium? (2019, 21) {

=Filtration through bacterial filters
~Boiling
~Autoclaving
~Ultraviolet irradiation
~Application of disinfectants (Chloramine)
}

In the course of bacteriological examination of the feces of a patient with diarrhea, a pure culture of slightly curved bacilli was obtained. In the microslide these microorganisms were arranged in clusters resembling schools of fish. Cultivation in the alkaline medium (alkaline peptone water) in six hours resulted in formation of a blue-tinged film. These features are characteristic of the following causative agent: (2019, 146) {
=Vibrio cholerae
~Colibacilli
~Salmonellae
~Spirochetes
~Mycobacteria
}

One day after eating meatballs in the school canteen, several students came to the nurse's office complaining of stomachache, vomiting, high body temperature, and diarrhea. One of the students was hospitalized in a severe condition. What microorganisms can be the cause of this food toxicoinfection? (2019, 97) {
=Salmonellae
~Streptococci
~Clostridiae
~Shigellae
~Meningococci
}

For tetanus prevention a certain toxins used. For 4 weeks this toxin is being neutralized with formaldehyde (0.4%) under the temperature of 39^{o}C. Name the resulting preparation: (2019, 29) {
=Anatoxin
~Immunoglobulin
~Antitoxic serum
~Adjuvant
~Inactivated vaccine
}

After examination the patient was diagnosed with tick-borne encephalitis. What route of transmission is characteristic of this disease? (2019, 91) {
=Vector-borne transmission
~Vertical transmission
~Airborne droplet transmission
~Fecal-oral transmission
~Parenteral transmission
}

A chemotherapeutic agent has bactericidal effect against streptococci, staphylococci, bacilli, and clostridia. According to its action spectrum this drug belongs to the following group: (2019, 119) {
=Broad spectrum antibacterial agents
~Narrow spectrum antibacterial agents
~Broad spectrum antifungal agents
~Antiviral agents
~Antituberculous agents
}

It is known, that HIV infection leads to severe immunologic disturbances in the body that result in the development of AIDS (acquired immune deficiency syndrome). What cells of the human body are the most susceptible to HIV infection? (2019, 20) {
=T helper cells
~Hepatocytes
~Suppressor T cells
~Endotheliocytes
~B lymphocytes
}

Microbe survival within environment is facilitated by spore formation. What genus of microorganisms can be characterized as spore formers: (2019, 28) {
=Clostridium
~Bacteroides
~Staphylococcus
~Peptococcus
~Peptostreptococcus
}

To induce an artificially acquired active immunity, a three-month-old child was given orally a Sabin strain-based live cultural vaccine. This vaccine is used for prevention of: (2019, 34) {
= Poliomyelitis
~Tuberculosis
~Measles
~Rubella
~Parotitis
}

After examination the child was diagnosed with scarlet fever. What microorganism is a causative agent of this disease? (2019, 27) {
=Streptococcus
~Staphylococcus
~Meningococcus
~Klebsiella
~Actinomycete
}

A ready-made drug was inoculated on Sabouraud's agar and incubated under 22°C for 5 days. This nutrient medium was used to determine the following: (2019, 7) {
=Number of mold and yeast fungi
~Total number of bacteria
~Presence of E. coli
~Presence of S. aureus
~Presence of Salmonella
}

Seitz filters are widely used in laboratory practice. What is their purpose? (2019, 13) {
=Sterilization by means of filtration
~Disinfection of solutions
~Measurement of water contamination
~Growing of bacteriophages
~Virus destruction
}

Thermolabile medicinal preparation for extemporal use was heated to 65°C thrice with intervals of one day between the heatings. What method of sterilization was used in this case? (2019, 96) {
=Tyndallization

~Pasteurization
~Koch’s steam sterilization
~Calcination
~Filtration
}

Many serological reactions require strictly aseptic conditions. What method of sterilization is optimal for decontamination of laboratory glassware? (2019, 42) {
= Dry heat
~Tyndallization
~Pasteurization
~Filtration
~Calcination
}

During microscopy of a smear made from the sputum sample and stained according to the Ziehl-Neelsen technique, the medical laboratory scientist detected bright red acid-fast bacilli arranged separately and in groups. What microorganisms were detected? (2019, 147) {
=Micobacterium tuberculosis
~Bacillus anthracis
~Salmonella typhi
~Staphylococcus aureus
~Bordetella pertussis
}

Sanitary-microbiological assessment of water quality in the water supply system conducted by the sanitary-epidemiological station detected microorganisms indicative of fecal contamination of water. What microorganisms were detected? (2019, 31) {
=Escherichia coli
~Streptococcus agalactiae
~Haemophilus influenzae
~Neisseria sicca
~Staphylococcus aureus
}

Air contamination with pathological microorganisms can be anticipated by the presence of indicator bacteria. Specify the bacteria that indicate immediate epidemiologic danger: (2019, 57) {
=Hemolytic streptococci
~Sarcinae

~Mold fungi
~Yeast fungi
~Micrococci
}

It can be safely assumed that the infants born from the mothers with the history of measles will not be affected by the measles outbreak during their stay in the maternity ward. What classes of antibodies provide the infants with the resistance to this disease? (2019, 16) {
=IgG
~IgA
~IgD
~IgM
~IgE
}