

**Ministry of Health, Labour and Social Protection of the Republic of Moldova
Nicolae Testemitanu State University of Medicine and Pharmacy
of the Republic of Moldova**

Department of Epidemiology

EPIDEMIOLOGY IN TESTS

Faculties of Medicine and Dentistry

**Under the editorship of Prof., corresponding member of ASM
V. Prisacaru**

Translated into English by A.Paraschiv, L.Guțu, I.Berdeu, A.Nastas

**Chisinau
Editorial Publishing Center Medicine
of Nicolae Testemitanu SUMPh
2019**

CZU: 616 – 036.22 (075.8)

E 61

Approved at the Meeting of the Central Methodological Council of Nicolae Testemitanu SUMPh, Minutes No. 5 from 05.07.19

Authors:

Viorel Prisacaru – prof., dr. habilitat, cores.member af ASM

Angela Paraschiv – PhD., associate professor

Adrian Cotelea – PhD., associate professor

Luminița Guțu – PhD., associate professor

Vasile Sofronie – PhD., associate professor

Ion Berdeu – PhD., assistant professor

Diana Spătaru – PhD., assistant professor

Aliona Nastas – aistant professor

Reviewers: *Stela Cojocari*, PhD, associate professor.

Valentina Vorobjit, PhD associate professor.

The book *Epidemiology in tests* is written in accordance with the Curriculum approved at the Department meeting and the Commission for Quality Assurance and Study Program Assasment, in order to optimize the training of the students at the Faculties of Medicine and Dentistry. It can be useful, also, for the family doctors and dentists in self-training and self-control in the field of epidemiology.

SUMMARY

A.	EPIDEMIOLOGY OF COMMUNICABLE DISEASES	4
1.	EPIDEMIOLOGY OF INFECTIOUS DISEASES.....	4
1.1.	GENERAL EPIDEMIOLOGY.....	4
1.1.1.	FEAUTURES OF EPIDEMIC PROCESS	4-12
1.1.2.	DISINFECTION, STERILIZATION, DISINSECTION	12-20
1.1.3.	IMUNOPROPHYLAXIS.....	20-35
1.1.4.	EPIDEMIOLOGICAL METHODS OF STUDIES.....	35-45
1.2.	SPECIAL EPIDEMIOLOGY.....	45
1.2.1.	GASTROINTESTINAL INFECTIONS.....	45-60
1.2.2.	RESPIRATORY INFECTIONS	60-88
1.2.3.	BLOOD-BORNE INFECTIOUS DISEASES.....	88
1.2.3.1.	PARENTERAL VIRAL HEPATITIS	88-96
1.2.3.2.	HIV INFECTION	96-103
1.2.3.3.	VECTOR-BORNE INFECTIONS.....	104-110
1.2.4.	HEALTHCARE-ASSOCIATED INFECTIONS (HCAIs) (NOSOCOMIAL INFECTIONS).....	110-118
1.2.5.	ZOOANTHROPONOSIS.....	118-126
1.2.6.	CONVENTIONAL INFECTIONS.....	126-129
B.	EPIDEMIOLOGY OF NON-COMMUNICABLE DISEASES.....	129-137
C.	MILITARY AND DISASTER EPIDEMIOLOGY	137-143
	ANSWER KEYS TO THE TESTS.....	143-150

A. EPIDEMIOLOGY OF COMMUNICABLE DISEASES
1. EPIDEMIOLOGY OF INFECTIOUS DISEASES
1.1. GENERAL EPIDEMIOLOGY
1.1.1. CHARACTERISTICS OF THE EPIDEMIC PROCESS

Simple choice

- 1. The study object of epidemiology of infectious diseases is:**
 - a) infectious process
 - b) epidemic process
 - c) epidemic outbreak
 - d) epidemic foci
 - e) infectious disease

- 2. The intensity of the epidemic process can be defined as "sporadic", "epidemic" and "pandemic" according to the:**
 - a) severity of the disease manifestations
 - b) speed of spread of the disease
 - c) number of patients
 - d) number of contact persons
 - e) microorganism virulence

- 3. Sporadic morbidity is:**
 - a) the population infected with an infectious disease not specific for a certain region
 - b) the infection of a group of people with infectious diseases
 - c) single cases of a disease
 - d) multiple cases of a disease in collectives
 - e) a disease spreading in different regions, countries

- 4. The duration of the epidemic outbreak corresponds to:**
 - a) the period of hospitalization of the patient
 - b) maximum duration of the incubation period since terminal disinfection
 - c) the moment of patient's recovery, if the patient was treated on an out-patient basis
 - d) minimum duration of the incubation period
 - e) medium duration of the incubation period

- 5. The focality index is the:**
 - a) number of foci in a given period of time
 - b) number of foci in a certain region
 - c) number of cases in one focus
 - d) number of cases in a given population group
 - e) total number of foci

- 6. Natural focality is specific for:**
 - a) sapronosis
 - b) antroponosis
 - c) zooanthroponosis
 - d) contagious helminthiasis
 - e) soil-transmitted helminthiasis

- 7. The chain of the epidemic process is:**
 - a) causative agent of infectious disease
 - b) mechanism of transmission of microorganism
 - c) water, air
 - d) soil
 - e) food products

8. Choose anthroponosal infections:

- a) measles, leptospirosis
- b) scarlet fever, exantematic typhus
- c) diphtheria, listeriosis
- d) typhoid fever, brucellosis
- e) rubella, anthrax

9. The mechanisms of transmission are:

- a) fecal-oral, vertical
- b) airborne, alimentary
- c) parenteral, hydric
- d) hydric, alimentary
- e) respiratory, habitual contact

10. Mosquitoes can be vectors of transmission in:

- a) malaria, plague
- b) tick encephalitis, exantematic typhus
- c) yellow fever, Dengue fever
- d) tularemia, leptospirosis
- e) borreliosis, Lassa fever

11. Vectors are epidemiologically important in:

- a) dysentery, measles
- b) exantematic typhus, tularemia
- c) rabies, VAH
- d) rubella, borreliosis
- e) tularemia, measles

12. Choose the persons that have a higher epidemiological risk as a source of infection:

- a) acute carriers
- b) chronic carriers
- c) transitive carriers
- d) hospitalized patients
- e) recovery patients

13. In zooanthroponosis the sources of pathogens are:

- a) humans
- b) animals
- c) soil
- d) water
- e) food products

14. The most common infections in small children are:

- a) antroponosis
- b) zooanthroponosis
- c) sapronosis
- d) zoonosis
- e) biohelminthiasis

15. Emergency fact sheet (about disease) is transmitted to the Centre of Public Health:

- a) immediately, on suspicion of a contagious disease
- b) after a definitive diagnosis

- c) after detection of a contagious disease within 36 hours
- d) after primary anti-epidemic measures within 36 hours
- e) during first 72 hours of hospitalization

16. Hospitalization of patients with anthrax, leptospirosis and brucellosis:

- a) is compulsory according to clinical indications
- b) is not required
- c) is carried out according to epidemiological indications
- d) is carried out according to clinical and epidemiological indications
- e) is mandatory only for the first case of disease

17. The focus is considered liquidated:

- a) after hospitalization of the patient
- b) after terminal disinfection in the hotbed
- c) at the end of the maximum incubation period in the last person who was in contact with the source
- d) after primary anti-epidemic measures
- e) after recovery of the patient

18. The index of epidemiological effectiveness is the ratio of the:

- a) population morbidity after taking anti-epidemic measures to the total morbidity in the population
- b) population morbidity without taking anti-epidemic measures to the total morbidity in population
- c) population morbidity without taking anti-epidemic measures to the population morbidity with taking anti-epidemic measures
- d) population morbidity to the population mortality
- e) population morbidity to the focality index

19. Which of the following measures is applied in combating intestinal diseases:

- a) measures applied to the source of pathogens
- b) measures applied to the mechanism of transmission
- c) increase of non-susceptible population
- d) an early detection and isolation of the source of infections
- e) laboratory tests

20. Which of the following measures is applied in combating respiratory diseases:

- a) disinfection
- b) immunoprevention
- c) an early detection and isolation of the sources of causative agents
- d) isolation of the sources
- e) treatment of patients

21. Calculation of the duration of focus surveillance starts from the time of:

- a) detection of the patient
- b) isolation of the patient after terminal disinfection
- c) the patient's visit to the doctor
- d) detection of contact people
- e) immunization of healthy people in foci

22. Ubiquitous infectious diseases are considered to be with:

- a) the global spread
- b) the spread in certain natural areas
- c) the limited geographical spread
- d) spreading in communities
- e) the endemic spread

23. The periodicity of epidemic process manifestations specific to antroponosis is determined by:

- a) changes of natural and climatic conditions
- b) formation of immune population
- c) changing of social and hygienic conditions (housing)
- d) migration of human population
- e) natality level

24. The factor of transmission means:

- a) all elements of the environment that ensure the transmission of the causative agent from the source of infection to the susceptible person
- b) dissemination of the infection
- c) transferring the pathogen from one organism to the other via the source
- d) continuing chain of infectious states
- e) the causative agent of infectious diseases

25. The vertical mechanism of transmission of diseases includes:

- a) intrauterine infection of foetus with an infectious disease
- b) foetus contamination during the delivery process
- c) contamination with pathogens during blood transfusion
- d) habitual contamination with pathogens
- e) contamination with pathogens in hospitals

26. Premunition is the result of:

- a) specific hereditary immunity
- b) administration of biological remedies according to the epidemiological indications
- c) frequent contact with small doses of causative agents of infectious diseases
- d) immunization according to the National Immunization Program
- e) immunity after an infectious disease

27. Epidemiological surveillance is:

- a) an ongoing public health state assessment
- b) measures aimed at people contacted with the source of infection in the epidemic focus
- c) planning of anti-epidemic measures in the epidemic focus
- d) measures that are taken by family doctor
- e) an evaluation system of immunization level of the population

28. An immune carrier can be a:

- a) vaccinated person
- b) person in recovery
- c) patient with asymptomatic clinical form
- d) patient who excretes pathogenic microorganisms up to 3 months after recovery
- e) person who excretes pathogenic microorganisms for more than 3 months after recovery

29. Receptivity is:

- a) the property of alive organisms, belonging to a species, to serve as a living environment for pathogenic microorganisms
- b) the organism in which an infectious process cannot develop
- c) a specific resistance of the organism
- d) the state of organism non-susceptibility to different species of microorganisms
- e) the organism condition, developed as a result of premunition

30. The immunological structure of the population is:

- a) the ratio of the number of receptive people to the number of non-receptive people of the

population to infectious diseases

b) the ratio of the number of receptive people to the total population number

c) the ratio of the number of non-receptive people to the number of receptive people to infectious diseases at the population level

d) the proportion of the number of receptive persons to the number of non-recipients, in relation to the total population.

e) the absolute number of non-receptors in the population

Multiple choice

31. The basic concepts explaining the mechanism of epidemic process development are:

a) theory of transmission mechanism

b) theory of natural focus

c) theory of outbreak formation

d) self-regulation theory of parasitic systems

e) theory of pathogen evolution

32. Choose the factors determining the patient's contagiousness in anthroponosis:

a) clinical manifestations of the disease

b) hygienic conditions

c) duration of development of the infectious process

d) weather

e) precipitation

33. Choose the chains of the epidemic process:

a) causative agent

b) source of pathogenic agents

c) transmission mechanism of causative agents

d) water, air, soil, household objects, vectors of transmission

e) susceptible population

34. Choose the diseases with natural focality:

a) brucellosis

b) leptospirosis

c) tularemia

d) rabies

e) anthrax

35. Choose the sapronosal infectious diseases:

a) tetanus

b) cholera

c) legionellosis

d) brucellosis

e) polio

36. Choose the possible sources of pathogenic agents:

a) healthy carriers

b) birds

c) mosquitoes

d) rodents

e) dairy

37. The sources of pathogenic agents are:

a) domestic animals

- b) xenanthropic animals
- c) arthropods
- d) rodents
- e) mollusks

38. Choose the mechanisms of transmission of pathogenic agents:

- a) respiratory
- b) alimentary
- c) fecal-oral
- d) parenteral
- e) hydric

39. Parenteral transmission is characteristic of the following diseases:

- a) leptospirosis
- b) plague
- c) tularemia
- d) brucellosis
- e) endemic typhus

40. According to the International Sanitary Regulations each country has an obligation to inform immediately (24 hours) the World Health Organization in case of:

- a) recording of patient with a disease with high level of contagiousness
- b) detection of mosquitoes and mammals with yellow fever
- c) detection of synanthropic or xenanthropic rodents with *Y. pestis*
- d) substantial social and economic consequences as a result of implementation of the quarantine
- e) the treatment of patients who imported malaria

41. The emergency fact sheet needs to be transmitted to the public Health Center in case:

- a) only if the diagnosis was confirmed by laboratory methods
- b) only after an exam by an infectionist
- c) immediately, in case of suspected infectious diseases
- d) no later than 12 hours after detection of the patient
- e) till the performing of terminal disinfection in the hotbed

42. Choose the anti-epidemic measures targeted to the source of pathogenic agents:

- a) deratization
- b) disinfection
- c) sterilization
- d) isolation
- e) disinsection

43. Choose the criteria of liquidation of the hotbed:

- a) detection and isolation of the source
- b) terminal disinfection
- c) identification of the pathogenic agent
- d) current disinfection
- e) medical supervision of contacts during a maximum incubation period since the performing of terminal disinfection

44. The anti-epidemic measures targeted to the transmission mechanism of causative agents are:

- a) deratization
- b) disinfection
- c) disinsection
- d) sterilization

e) immune correction

45. Choose the specialists who participate in organization and implementation of anti-epidemic measures in the hotbed:

- a) family doctor
- b) district nurse
- c) infectionist
- d) hygienist
- e) bacteriologist

46. In case of suspicion of communicable disease the doctor should:

- a) take epidemiological history
- b) transmit emergency information to the Public Health Center
- c) perform current disinfection in the hotbed
- d) organize the vaccination of people in the hotbed
- e) determine the option of patient's isolation

47. Hospitalization is required in case of:

- a) dysentery
- b) typhoid fever
- c) endemic typhus
- d) salmonellosis
- e) tetanus

48. In intestinal infections the basic prevention measures are:

- a) detection of infection sources
- b) detection and treatment of carriers
- c) sanitary and hygienic measures
- d) vaccination of susceptible persons
- e) prophylactic and terminal disinfection

49. Epidemiological classification of infectious diseases is based on the:

- a) source of infection
- b) stages of clinical evolution of disease
- c) transmission mechanism of infectious disease
- d) transmission routes of disease
- e) ecological relationships with animals

50. Choose the natural factors that contribute to the onset of the epidemiological process among the population:

- a) high density of the population
- b) gender of the susceptible population
- c) landscape
- d) atmospheric air temperature
- e) precipitation level

51. The natural factors that contribute to the onset of the epidemiological process among the population are:

- a) high density of the population
- b) population susceptibility
- c) environmental conditions
- d) environmental resistance of pathogen
- e) sensitivity of the causative agent to disinfectants

52. The periods of infectious disease are:

- a) incubation
- b) prodromal
- c) clinical manifestation
- d) recovery
- e) elimination of the pathogen

53. Choose the synanthropic animals:

- a) felines
- b) mice
- c) rats
- d) foxes
- e) wild boars

54. Synanthropic animals can be the source of infection in:

- a) tularemia
- b) leptospirosis
- c) ornithosis
- d) anthrax
- e) taeniasis

55. Choose the xenantropic animals:

- a) field rabbits
- b) water rats
- c) foxes
- d) parrots
- e) dogs

56. Xenantropic animals can be sources of infection in:

- a) rabies
- b) leptospirosis
- c) plague
- d) brucellosis
- e) taeniasis

57. Choose the sapronosal infectious diseases:

- a) brucellosis
- b) botulism
- c) foot and mouth disease
- d) legionellosis
- e) tick-borne diseases caused by rickettsia

58. Choose the vertical transmitted diseases:

- a) toxoplasmosis
- b) HBV
- c) HIV/AIDS
- d) Q fever
- e) mycosis

59. The type of congenital immunity is:

- a) hereditary
- b) mother-borne
- c) artificial
- d) active
- e) all variants are correct

60. Epidemics can be classified according to transmission route into:

- a) air-borne
- b) food-borne
- c) water-borne
- d) parenteral
- e) vertical

61. Contributing factors of infection re-emergence are:

- a) diminishing level of population immunization
- b) considerable decrease of living standards in the population
- c) intensification of population migration
- d) decreased population susceptibility
- e) seasonal climate change

62. Choose global infectious diseases:

- a) cholera
- b) HIV/AIDS
- c) diphtheria
- d) measles
- e) anthrax

63. The social factors that contribute to the onset of the epidemiological process among the population are:

- a) demographic evolution
- b) land shaft
- c) natural disasters like earthquakes, tornadoes
- d) density of population
- e) anthropological actions

64. Anthropogenic factors are:

- a) population structure
- b) biological weapons
- c) bioterrorism
- d) nature modification
- e) pollution of water and air

65. The attitudinal factors that can influence the epidemic process evolution are:

- a) level of knowledge
- b) population density
- c) individual hygienic habits
- d) family and society attitude towards the infectious diseases
- e) social services

1.1.2. DISINFECTION, STERILIZATION, DISINSECTION

Simple choice

66. Current disinfection is carried out:

- a) twice a day
- b) 4 times/day
- c) once a week
- d) twice a week
- e) during the elimination of the pathogen in the environment

67. Chose the most reliable method to control the quality of disinfection:

- a) chemical
- b) bacteriological
- c) visual
- d) physical
- e) thermal

68. Chloramine is used as:

- a) a powder
- b) a solution
- c) an emulsion
- d) an aerosol
- e) a paste

69. In disinfection, Lime chloride (dust) may be used if active chlorine constitutes not less than:

- a) 0.1%
- b) 3.0%
- c) 5.0%
- d) 16.0%
- e) 25.0%

70. In medical practice, hydrogen peroxide is used in concentration of:

- a) 0.1-3.0%
- b) 0.1-6.0%
- c) 0.1-10.0%
- d) 0.1-20.0%
- e) 0.1-33.0%

71. Sterilization aims to destroy:

- a) pathogenic flora
- b) conditional pathogenic flora
- c) total microflora
- d) saprophytic flora
- e) fungi

72. In lime chloride (standard) active chlorine constitutes:

- a) 16.0%
- b) 20.0%
- c) 25.0%
- d) 28.0%
- e) 33.0%

73. Terminal disinfection is required in the outbreak of:

- a) measles
- b) diphtheria
- c) epidemic parotiditis
- d) flu
- e) rubella

74. After the source isolation, terminal disinfection is carried out in the first:

- a) 6 hours
- b) 6-12 hours
- c) 12-24 hours
- d) 24-36 hours
- e) 36-72 hours

75. Disinfection has a higher importance in infections with the following transmission mechanism:

- a) respiratory
- b) fecal-oral
- c) parenterally by hematopoietic vectors
- d) vertical
- e) habitual contact

76. Disinfection aims to destroy:

- a) total microflora
- b) pathogenic flora
- c) fungi
- d) vegetative form of pathogenic agents
- e) sporulated form of pathogens

77. Current disinfection is organized by:

- a) specialists from the Agency of Public Health (APH)
- b) a family doctor
- c) specialists of the disinfection center
- d) an epidemiologist
- e) disinfectionist

78. Choose an anti-epidemic measure aimed to interrupt the mechanism of transmission:

- a) deratization
- b) disinfection
- c) vaccination of contact persons
- d) isolation of the patient
- e) prophylactic examination at the employment

79. Disinfection in the focus is carried out in function of:

- a) the pathogen transmission mechanism
- b) the resistance of the pathogen to the environment
- c) pathogenic tropism (specific localization)
- d) virulence of the pathogen
- e) genetic changes of the pathogen

80. The bacteriological control of the disinfection quality can be performed from the moment of disinfection:

- a) immediately
- b) over 20-45 minutes
- c) between 45 minutes and 2 hours
- d) over 24 hours
- e) over 48 hours

81. In the shigelosis focus, the current disinfection is carried out:

- a) 3 times/day
- b) 5 times/day
- c) once a week
- d) twice a week
- e) the entire period of elimination of the pathogen from the patient.

82. Sterilization is of high importance in the prophylaxis of:

- a) HBV, diphtheria
- b) HAV, poliomyelitis
- c) HCV, botulism

- d) measles, typhoid fever
- e) escherihiosis, shigelosis

83. Disinsection is one of the basic measures in:

- a) dysentery, typhoid fever
- b) anthrax, leptospirosis
- c) exanthematic typhus, malaria
- d) yellow fever, brucellosis
- e) ascariasis, influenza.

84. In patients with pediculosis, the hair can be treated with:

- a) carbophos, Dimethyl phthalate, dihlophos
- b) nitiphor, chlorophos
- c) anti-P shampoo, carbophos
- d) zinc phosphide, albihtol
- e) chloramine, shale oil

85. Choose the preparations that are used to treat pediculosis in patient:

- a) nitiphor, methylacetophos
- b) chlorophos, dichlovos
- c) diethyltoluolamide, monofluorine
- d) zinc phosphide, chloramine
- e) ratindan, anti-P shampoo

86. Sterile surgical water can be used after sterilization:

- a) during the day when it was prepared
- b) within 24 hours from preparation time
- c) within 48 hours from the time of preparation
- d) within 1 week
- e) within 2 weeks

87. The chemical (cold) sterilization method can be used to:

- a) medical items of glass
- b) needles
- c) syringes
- d) dressing material
- e) probes

88. Items sterilized with gas and wrapped in a polyethylene film shall be storaed during:

- a) 1 year
- b) 2 years
- c) 3 years
- d) 4 years
- e) 5 years

89. Items sterilized with gas and wrapped in a parchment or paper shall be stored during:

- a) 20 days
- b) 30 days
- c) 60 days
- d) 90 days
- e) 1 year

90. Items sterilized in autoclave without wrapper shall be used:

- a) immediately after sterilization
- b) within 48 hours
- c) within 72 hours
- d) within 1 week
- e) within one month

Multiple choice

91. Terminal disinfection is required in the focus after:

- a) the patient detection
- b) hospitalization of the patient
- c) recovery of the patient
- d) 5 days of clinical manifestations in patient with measles
- e) the hospital of infectious diseases is reprofiled into the therapeutical one

92. Choose the groups of chemical disinfectants:

- a) oxidants
- b) activators
- c) preparations that coagulate protein
- d) preparations that denaturate protein
- e) phosphorus derivatives

93. Terminal disinfection shall be carried out in the focus of:

- a) measles
- b) shigellosis
- c) hepatitis A
- d) typhoid fever
- e) epidemic parotiditis

94. Choose the types of ovens used in disinfection:

- a) ovens with detergents
- b) ovens with formalin
- c) ovens with vapors
- d) ovens with hot dry air
- e) ovens with acids

95. Chemical disinfection is required in the focus of:

- a) anthrax
- b) measles
- c) diphtheria
- d) typhoid fever
- e) malaria

96. Choose the required conditions for storage of disinfectants:

- a) dry place
- b) well heated room
- c) light
- d) in the dark
- e) in an open vessel

97. Solution of hydrogen peroxide with detergent may be used:

- a) once and immediately after preparation
- b) in different concentrations (0.1-6.0%)
- c) within 2-3 days of preparation

- d) at room temperature
- e) after heating

98. Choose the factors that influence the effectiveness of disinfection:

- a) concentration of the solution
- b) purpose of the room
- d) volume of the solution per 1m²
- c) exhibition
- e) room temperature

99. The effectiveness of the disinfectant action depends on:

- a) the temperature of disinfectant solution
- b) concentration
- c) exhibition
- d) atmospheric pressure
- e) the presence of activators

100. In which of the following cases is the final disinfection performed:

- a) if the infected patient is transferred from the therapeutic ward to the insulator
- b) according to the epidemiological situation, the dysentery department is re-profiled for the hospitalization of patients with influenza
- c) the department with flu patients is re-profiled in the department for patients with shigelosis
- d) if the patient with tularemia is transferred from the insulator box into the department
- e) if the patient with typhoid fever is hospitalized

101. The steps of sterilization of multi-purpose medical instruments are:

- a) disinfection
- b) presterilization cleaning
- c) disinsection
- d) sterilization
- e) selection of materials for sterilization

102. Choose the objects that can be processed in the steam oven:

- a) pillows, mattresses
- b) clothes of leather
- c) books
- d) cotton clothes
- e) cotton bed linen

103. The processing of clothes in the oven is necessary in the case of outbreak of:

- a) typhoid fever
- b) dysentery caused by *Sh. sonnei*
- c) diphtheria
- d) meningococcal infection
- e) epidemic typhus

104. What medical instruments must be sterilized:

- a) those that have the contact with the wound
- b) those that have the contact with the blood
- c) those that have the contact with the skin
- d) the equipment from the physiotherapy room
- e) pressure meters, phonendoscope

105. The patient with pediculosis must be desinsected with:

- a) dichlophos
- b) chlorophos
- c) benzyl benzoate
- d) methylacetophos
- e) permethrin

106. The examination for pediculosis should be done in:

- a) all patients during the admission to the hospital
- b) persons admitted to the nursing homes
- c) all population in the territory
- d) children from boarding schools
- e) pregnant women during the admission into maternity home

107. Choose the institutions where the participation of medical staff in the examination of the patient for pediculosis is necessary:

- a) preschool institutions
- b) boarding schools
- c) hostels (campus)
- d) hospitals
- e) all children institutions

108. Repellents are used as:

- a) processing the clothes
- b) impregnation of tents, curtains, etc.
- c) application on the skin
- d) substances that kill rodents
- e) substances that kill vectors

109. Which of the preparations listed below is an insecticide:

- a) benzyl benzoate
- b) acetophos
- c) benzimine
- d) permethrin
- e) methylacetophosphate

110. Choose the objects to be disinfected in the shigelosis focus:

- a) dishes
- b) urine of the patient
- c) underwear
- d) air
- e) toys

111. Choose the critical medical instruments:

- a) surgical instruments
- b) phonendoscope
- c) pressure meter
- d) scalpel
- e) equipment for anesthesia

112. Choose the semi-critical medical instruments:

- a) thermometer
- b) surgical instruments
- c) implant

- d) laryngoscope
- e) fibrogastroscope

113. Choose the non-critical medical instruments:

- a) thermometer
- b) phonendoscope
- c) hospital furniture
- d) surgical instruments
- e) scalpel

114. What are the main causes of microorganism resistance?

- a) incorrect selection of disinfectants
- b) low-quality disinfection
- c) use of disinfectants with a concentration below the permissible limit
- d) rotation of disinfectants every 3 months
- e) the rational use of disinfectants

115. Choose the necessary measures to prevent the resistance to disinfectants:

- a) strict monitoring of disinfectant application
- b) monitoring of the microorganism resistance to disinfectants
- c) to use predominantly multicomponent biocides
- d) keeping disinfectants at light
- e) to use substances that contain chlorine with a concentration of active chlorine lower than 16%

116. Choose the stages of complete sterilization cycle:

- a) heating the oven up to the indicated temperature for sterilization
- b) maintaining the working temperature during the entire process of sterilization
- c) cooling the sterilization device
- d) packaging of medical instruments
- e) mechanical cleaning of medical instruments

117. The method of sterilization of medical instruments depends on:

- a) the composition and structure of the material
- b) the resistance to sterilizing agents
- c) the construction type of the medical instrument
- d) the capacity of the sterilization oven
- e) the level of medical instrument contamination

118. Choose the conditions required to maintain the sterility of sterilized objects:

- a) ensuring the sealing of boxes with sterile products
- b) keeping in closed cabinets
- c) storage together with other sterilized items
- d) keeping sterilized instruments in the operating room
- e) to use immediately after sterilization

119. After the sterilization of medical instruments in the autoclave, they were stored in boxes without filters during 5 days, after which they were distributed among the departments.

Choose the correct answers for this situation:

- a) medical instruments are sterilized qualitatively and can be used
- b) medical instruments are not sterilized qualitatively
- c) medical instruments can only be stored within 3 days
- d) medical instruments may be used within 10 days
- e) medical items may be used within 20 days

- 120. During the control of the presterilization stage done with amidoprime, the test was stained in blue-green color. What does this test point to?**
- a) the presterilization stage is performed in a low-quality way
 - b) instruments have not been thoroughly cleaned from blood remnants
 - c) instruments have not been thoroughly cleaned from detergent residues
 - d) the presterilization stage is performed qualitatively
 - e) it is necessary to repeat the presterilization stage
- 121. During the control of the presterilization stage done with the phenolphthalein test, it was stained in pink color. What does this test point to?**
- a) the presterilization stage is performed in a non-qualitative way
 - b) the instruments have not been thoroughly cleaned by blood remnants
 - c) the instruments have not been thoroughly cleaned of detergent residues
 - d) the presterilization stage is performed qualitatively
 - e) it is necessary to repeat the presterilization stage
- 122. During the planned control of medical institution, the epidemiologist from the APH assessed the quality of sterilization of medical instruments by Sudan-III test. The result of the control turned out to be positive. What does this result point to?**
- a) the presterilization stage was done in a low-quality way
 - b) the instruments were not thoroughly cleaned from blood remnants
 - c) the instruments were not thoroughly cleaned from grease residues
 - d) the presterilization stage was done qualitatively
 - e) it is necessary to repeat the presterilization stage
- 123. The sterilized boxes must contain the following information:**
- a) the date and time of sterilization
 - b) the sterilization device
 - c) the data of the person who performed the sterilization
 - d) the department where the medical items were collected
 - e) sterilization method
- 124. The staff of the centralized sterilization unit shall be subjected to:**
- a) medical examination
 - b) hygienic training
 - c) training on personnel safety
 - d) training in bacteriological investigations
 - e) training on the anti-epidemic measures in case of influenza
- 125. Choose the necessary measures to reduce the development of resistance to insecticides:**
- a) monitoring the level of insect resistance to insecticides
 - b) rotation of insecticides according to the planned and approved scheme
 - c) monitoring of vectors and their resistance to insecticides
 - d) use of insecticides with residual action
 - e) use of the same insecticide within 3 years

1.1.3. Immunoprophylaxis

Simple choice

126. The minimum interval between the administration of planned vaccines is:

- a) 2 weeks
- b) 1 month

- c) 2 months
- d) 3 months
- e) 6 months

127. Choose the method of the BCG vaccine administration:

- a) intramuscular
- b) intracerebral
- c) intradermal
- d) subcutaneous
- e) per os

128. Choose the infections that are planned according to the vaccination schedule in the Republic of Moldova:

- a) whooping cough, flu
- d) yersiniosis, anthrax
- c) diphtheria, typhoid fever
- d) leptospirosis, brucellosis
- e) tetanus, epidemic parotiditis

129. Choose the type of immunity developed after infection:

- a) natural active
- b) artificial active
- c) passive natural
- d) artificial passive
- e) nonspecific immunity

130. Choose the possible way to form artificial active immunity:

- a) to acquire any infectious disease
- b) administration of toxid
- c) administration of interferon
- d) administration of bacteriophage
- e) administration of immunoglobulin

131. The time required to form active immunity after the vaccination is:

- a) several hours
- b) a few days
- c) several weeks
- d) several months
- e) few years

132. Choose the preparations to be administered by fractional method:

- a) inactivated corpuscular vaccines
- b) homologous serum
- c) heterologous serum
- d) live vaccines
- e) homologous immunoglobulins

133. Specify the definition of live vaccines:

- a) suspension of microorganisms with low virulence obtained by multiple passages on culture media
- b) suspension of inactivated microorganisms treated by physical and chemical agents
- c) vaccine where antigenic substrate is disaggregated from mother-strains by detergents
- d) products prepared from exotoxins and neutralized with formalin
- e) vaccine obtained by gene cloning with encoding specific antigens

134. Specify what inactivated vaccines are:

- a) suspension of microorganisms with low virulence obtained by multiple passages on culture media
- b) suspension of inactivated microorganisms treated by physical and chemical agents
- c) vaccine where antigenic substrate is disaggregated from mother-strains by detergents
- d) products prepared from exotoxins and neutralized with formalin
- e) vaccine obtained by gene cloning with encoding specific antigens

135. Specify what the split vaccines are:

- a) suspension of microorganisms with low virulence obtained by multiple passages on culture media
- b) suspension of inactivated microorganisms treated by physical and chemical agents
- c) vaccine where antigenic substrate is disaggregated from mother-strains by detergents
- d) products prepared from exotoxins and neutralized with formalin
- e) vaccine obtained by gene cloning with encoding specific antigens

136. Associated vaccines are:

- a) those that contain several species of microorganisms
- b) those that include a single microorganism but a few subspecies
- c) those that contain adjuvants
- d) preparations administered in several doses
- e) vaccines dissolved with a solvent

137. Live vaccines are used in the following infections:

- a) measles, whooping cough
- b) tuberculosis, polio
- c) epidemic parotiditis, diphtheria
- d) tetanus, anthrax
- e) scarlet fever, ascariasis

138. Toxoid is used in prophylaxis of:

- a) anthrax
- b) tetanus
- c) brucellosis
- d) poliomyelitis
- e) tuberculosis

139. Oral vaccine is given against:

- a) poliomyelitis
- b) whooping cough
- c) epidemic parotiditis
- d) tetanus
- e) rabies

140. The tuberculin test can be evaluated within:

- a) 6 hours
- b) 12 hours
- c) 24 hours
- d) 48 hours
- e) 72 hours

141. The National Immunization Program includes vaccination against:

- a) tuberculosis, typhoid fever
- b) diphtheria, scarlet fever
- c) epidemic parotiditis, whooping cough
- d) varicella, rotavirus infection

e) hepatitis A, anthrax

142. When can vaccine be administered after immunoglobulin administration:

- a) in 2 weeks
- b) in one month
- c) in 2 months
- d) in 3 months
- e) in 6 months

143. Choose the preparations with minimal reactogenicity:

- a) live vaccines
- b) chemical vaccines
- c) inactivated corpuscular vaccines
- d) heterologous serum
- e) heterologous immunoglobulins

144. Vaccination against diphtheria is given with:

- a) live vaccine
- b) toxoid
- c) inactivated corpuscular vaccine
- d) recombinant vaccine
- e) vaccine with protein carrier

145. The conditional course of rabies vaccination shall be indicated to:

- a) children according to the vaccination schedule
- b) people that were bitten by supervised animals
- c) people bitten by wild animals
- d) people bitten by an escaped dog
- e) people with multiple bites

146. Vaccine against epidemic parotiditis is given at the age of:

- a) 2 months
- b) 3 months
- c) 6 months
- d) 12 months
- e) 18 months

147. Vaccination and revaccination against polio are given in:

- a) one vaccine administration
- b) 2 administrations of vaccine
- c) 3 vaccine administrations
- d) 4 doses of vaccine
- e) 5 doses of vaccine

148. In case of the possible contamination vaccination is indicated in the following infection:

- a) anthrax
- b) rabies
- c) diphtheria
- d) tuberculosis
- e) tularemia

149. Choose the vaccination schedule against whooping cough:

- a) 2, 4, 6 months
- b) 0, 1, 3 months

- c) 0, 1, 6 months
- d) 0, 2, 4, 6 months
- e) 3, 4, 5, 6 months

150. Choose the vaccine to be administered intramuscularly:

- a) BCG
- b) HBV
- c) against poliomyelitis
- d) against rotavirus infection
- e) against anthrax

151. Vaccination against influenza is recommended to be carried out:

- a) according to epidemiological indications
- b) according to clinical indications
- c) planned according to the National Program of Immunization
- d) only in children
- e) only in adults

152. The vaccination schedule includes vaccination against:

- a) HBV and typhoid fever
- b) rotavirus infection and epidemic parotiditis
- c) diphtheria and scarlet fever
- d) flu and measles
- e) salmonellosis and anthrax

153. Simultaneous administration of the vaccine and immunoglobulin is allowed in case of:

- a) measles
- b) HBV
- c) diphtheria
- d) HAV
- e) typhoid fever

154. Upon failure of the refrigerator, the temperature dropped to -6 ° C. What vaccines can be used in this case:

- a) diphtheria serum
- b) recombinant hepatitis B vaccine
- c) the BCG vaccine
- d) diphtheria vaccine
- e) Hib vaccine

155. If the instruction for the use is not available in the box with rabies vaccine, it is necessary to do the following:

- a) to use the instruction from another box with the same serial number
- b) administer the vaccine without instruction, keeping the administration technique
- c) the use of the vaccine is prohibited
- d) inform the Agency for Public Health about this fact
- e) to place the vaccine into the waste bin

156. Choose the term for BCG vaccination after the Mantoux test:

- a) within 24 hours
- b) within 72 hours
- c) within a week
- d) within 3 days and 2 weeks
- e) not later than the 11th day after the evaluation of the Mantoux test

157. In which of the following situations will a child be vaccinated against DTP:

- a) a healthy 5-month-old child who was not vaccinated against whooping cough, diphtheria and tetanus
- b) a healthy 6-month-old child who had whooping cough at the age of 2 months
- c) a healthy 8-month-old child who had diphtheria at the age of 2 months
- d) a 2-years-old healthy child who was not vaccinated against pertussis, diphtheria, and tetanus
- e) a healthy child aged 4 years and one month who was not vaccinated against pertussis, diphtheria, tetanus

158. Is it allowed to immunize a child with a vaccine purchased from abroad without instruction?

- a) It is allowed, if the vaccine is included in the list of biological preparations registered in the country
- b) it is allowed with the APH agreement
- c) it is not allowed
- d) it is allowed only in private immunization centers
- e) it is allowed after clinical testing

159. Choose the consequence of the BCG vaccine administration to a person with positive Mantoux test:

- a) the possibility to develop anaphylactic shock
- b) the possibility to develop generalized tuberculosis
- c) development of postvaccinal "cold" abscess
- d) development of axillary lymphadenitis
- e) development of tuberculous lupus

160. Choose the contraindication in administration of the rabies vaccine:

- a) second stage of hypertonic disease
- b) pregnancy
- c) hydrophobia
- d) acute respiratory infection
- e) chronic viral hepatitis B

161. The administration of the BCG vaccine is contraindicated to:

- a) neonates with congenital immunodeficiency
- b) HIV-positive persons
- c) children born from mothers with HIV
- d) children after the recovery from viral hepatitis
- e) children after the recovery from measles

162. Can people with symptomatic HIV (AIDS) infection be vaccinated against tuberculosis?

- a) yes, immediately
- b) yes, depending on the results of the Mantoux test
- c) no, vaccination is contraindicated
- d) yes, after attenuation of clinical manifestations
- e) it is performed according to epidemiological indications

163. Choose the possible complication after the administration of the BCG vaccine:

- a) Postvaccinal tuberculosis
- b) axillary or epicondylial lymphadenitis, which may form fistulas
- c) sclerosing encephalopathy
- d) urticaria
- e) no side effects recorded

164. The BCG vaccine is administered:

- a) strictly intradermally in the lower third of the left forearm
- b) strictly intradermally in the deltoid region of the left arm
- c) strictly intradermally regardless of the anatomical area

- d) subcutaneously
- e) by cutaneous scarification

165. Which of the following conditions appears on the injection side, if the the BCG vaccine is administrated in the correct way:

- a) ulceration that disappears after a week
- b) small red induration with a diameter up to 10 mm, which persists within 1-2 weeks
- c) "orange peel" poppy, which is kept for about 30 minutes
- d) red macular rashes
- e) cutaneous rosacea of brick color

166. The purpose of BCG vaccination is:

- a) tuberculosis eradication
- b) the implementation of the National Immunization Program
- c) prevention of severe forms of tuberculosis (milliar or meningitis) in infants and children
- d) prevention of axillary lymphadenitis
- e) prevention of death among children

167. The BCG vaccine is:

- a) live attenuated vaccine that contains M.tuberculosis
- b) attenuated vaccine that contains M.bovis
- c) inactivated vaccine
- d) chemical vaccine
- e) recombinant vaccine

168. Choose the necessary steps to be taken, if a child aged 4 months was not vaccinated in maternity:

- a) to be vaccinated immediately
- b) to be vaccinated after the clinical examination
- c) to be vaccinated after the clinical examination and positive result of the Mantoux test
- d) to be vaccinated after DTP vaccination
- e) to be vaccinated based on the result of the Mantoux test

169. Choose the recommended temperature for the vaccine storage in polyclinics:

- a) $-4 + 4^{\circ} \text{C}$
- b) $+ 2 + 8^{\circ} \text{C}$
- c) $0 + 8^{\circ} \text{C}$
- d) $+ 4 + 10^{\circ} \text{C}$
- e) $+ 4 + 15^{\circ} \text{C}$

170. Choose the statistical recording form for the vaccination side effect monitoring:

- a) Form no. 058/e
- b) Form no. 063/e
- c) Form no.166/e
- d) Form no. 063-3/e
- e) Form no.6/e

171 Vaccine-associated reaction may be suspected if:

- a) there are recorded multiple cases of side effects among immunized persons
- b) complications occur in a child immunized with the given vaccine
- c) local allergic reaction after the vaccination of a child
- d) edematiated skin on vaccine administration side
- e) axillary lymphadenitis in the child vaccinated against BCG

172. The immunological efficacy of vaccination is assessed according to:

- a) the level of antibodies after vaccination
- b) the level of antigens after vaccination
- c) the level of morbidity among vaccinated and unvaccinated people
- d) the cost-effectiveness of the administered vaccines
- e) the number of side effects after giving vaccine

173. The epidemiological efficacy of vaccination is evaluated by:

- a) identification of the number of cases among unvaccinated and vaccinated persons
- b) morbidity evaluation after the implementation of vaccination
- c) serological screening among immunized persons
- d) minimal level of antibodies that provide protection against infection
- e) assessment of the morbidity among non-immunized children

174. Specify the definition of "Cold Chain":

- a) it is a system that provides the necessary temperature conditions to keep the vaccines throughout their transportation and storage
- b) it is a system that ensures hygienic conditions for immunoprophylaxis
- c) it is a system that ensures the medical staff training in immunoprophylaxis domain
- d) it is a system that ensures the licensing for medical institutions to carry out the immunoprophylaxis
- e) it is a system that provides the monitoring of side effects after vaccination

175. Lyophilized vaccine may be used after its preparation within:

- a) 4-6 hours
- b) 10 hours
- c) 24 hours
- d) 48 hours
- e) 72 hours

Multiple choice

176. Children are vaccinated in the first 6 months of life against:

- a) tuberculosis
- b) tetanus
- c) epidemic parotiditis
- d) typhoid fever
- e) measles

177. According to the planned vaccination schedule, children are vaccinated against:

- a) HBV, tuberculosis, rubella
- b) poliomyelitis, epidemic parotiditis, whooping cough
- c) diphtheria, scarlet fever, measles
- d) poliomyelitis, diphtheria, tetanus
- e) diphtheria, typhoid fever, salmonellosis

178. Choose which vaccines cannot be administered in case of its freezing:

- a) measles vaccine
- b) BCG
- c) DTP
- d) DT
- e) polio vaccine

179. In which cases will active protective immunity be formed, if immunoglobulin is given concomitantly with the vaccine?

- a) vaccination against rabies
- b) vaccination against measles
- c) vaccination against tetanus
- d) vaccination against epidemic parotiditis
- e) vaccination against HVB

180. Choose the infections controlled by the vaccination:

- a) measles
- b) diphtheria
- c) whooping cough
- d) rotavirus infection
- d) varicella

181. Choose the vaccines that cannot be used:

- a) those that have unclear characteristic physical properties
- b) those with damaged vial
- c) those transported under the wrong temperature conditions
- d) those with the expiry date
- e) polio vaccine stored in the freezer

182. Choose the tasks of the person responsible for the vaccine:

- a) the evidence of persons who require vaccination
- b) health education of the population on the importance of vaccinations
- c) training of medical staff responsible for giving the vaccination
- d) daily reporting to the APH about the coverage with vaccinations
- e) vaccination planning

183. Choose the persons who require vaccination according to epidemiological indications:

- a) persons who had the contact with the patient infected with cholera
- b) persons who had the contact with the patient infected with measles
- c) persons who go to a natural outbreak of tick-borne encephalitis
- d) persons bitten by animals
- e) persons who go to malaria endemic regions

184. Specify in which cases unconditional rabies vaccination is indicated:

- a) a person bitten by a wild animal
- b) a person bitten by an unknown animal
- c) a person bitten by a dog that develops rabies after 20 days from the bite
- d) a case when an animal is under surveillance
- e) a person bitten by an animal that was immediately killed

185. Choose the preparations that are administered unfractionated:

- a) tetanus serum
- b) influenza immunoglobulin
- c) measles immunoglobulin
- d) staphylococcal immunoglobulin
- e) tetanus immunoglobulin

186. Choose the preparations that cannot be used if the ice melted completely in the refrigerator 12 hours ago?

- a) polio vaccine
- b) tetanus toxoid

- c) diphtheria toxoid
- d) DTP
- e) measles vaccine

187. Specify what is used to obtain homologous immunoglobulins:

- a) donor blood
- b) placental blood
- c) the blood of hyperimmune animals
- d) the blood of people that had the disease
- e) the blood of immunized persons

188. Choose the infections characterized by the vaccine providing a long-lasting protective immunity:

- a) measles
- b) leptospirosis
- c) rabies
- d) tularemia
- e) cholera

189. Choose the preparations that are administered fractionated in the body:

- a) staphylococcal immunoglobulin
- b) diphtheria serum
- c) tetanus serum
- d) rabies immunoglobulin
- e) tetanus immunoglobulin

190. Choose the infections that are included in the vaccination schedule of the Republic of Moldova:

- a) tuberculosis
- b) leptospirosis
- c) typhoid fever
- d) whooping cough
- e) epidemic parotiditis

191. Choose the infections that are controlled by the planned vaccination:

- a) poliomyelitis
- b) epidemic parotiditis
- c) whooping cough
- d) scarlet fever
- e) varicella

192. Choose the infections controlled by the planned vaccination given to a 2-month-old baby:

- a) epidemic parotiditis
- b) whooping cough
- c) poliomyelitis
- d) tetanus
- e) viral hepatitis B

193. Choose the infections prevented by the vaccination:

- a) rubella
- b) HBV
- c) malaria
- d) toxoplasmosis
- e) yellow fever

194. Choose the infections included in the vaccination schedule of a 6-month-old baby:

- a) tuberculosis
- b) measles
- c) viral hepatitis B
- d) polio
- e) viral hepatitis A

195. Choose the infections included in the planned vaccination in the Republic of Moldova:

- a) HBV, epidemic parotiditis
- b) tuberculosis, diphtheria
- c) rubella, tetanus
- d) flu, whooping cough
- e) poliomyelitis, measles

196. Choose the correct statements on vaccination:

- a) the minimum interval between the administration of the vaccine and immunoglobulin is 6 months
- b) the minimum interval between the administration of the immunoglobulin and the vaccine is 4-6 weeks
- c) vaccination against measles starts at the age of 3 months
- d) bacteriophages do not form passive immunity
- e) planned vaccination against poliomyelitis is performed with recombinant vaccine

197. Choose the preparations given for passive immunity:

- a) chemical vaccine
- b) homologous serum
- c) immunoglobulin
- d) heterologous serum
- e) toxoid

198. Live vaccines are used in the following infections:

- a) polio
- b) tuberculosis
- c) whooping cough
- d) tetanus
- e) epidemic parotiditis

199. Chemical vaccines are used in the following infections:

- a) whooping cough
- b) measles
- c) viral hepatitis B
- d) typhoid fever
- e) tuberculosis

200. Inactivated corpuscular vaccines are used in the following infections:

- a) rabies
- b) meningococcal infection
- c) epidemic parotiditis
- d) whooping cough
- e) flu

201. Immunoglobulins are used as prophylaxis in the following infections:

- a) rabies
- b) measles
- c) diphtheria
- d) tuberculosis
- e) tetanus

202. According to the epidemiological indications, vaccination is performed against:

- a) leptospirosis
- b) yersiniosis
- c) botulism
- d) tularaemia
- e) plague

203. Choose the properties of live vaccines:

- a) they lose the pathogenicity and preservation of antigenic properties of vaccine strains
- b) they can be used for a long time
- c) low immunogenicity that necessitates repeated application of vaccines
- d) vaccines are subject to lyophilization for prolongation of the application period
- e) they develop short-term immunity

204. Choose the right placement options for vaccines in the refrigerator:

- a) some vaccines may be stored in the freezer
- b) it is equally effective to keep the vaccines on different shelves
- c) the placement of vaccines according to the expiry date
- d) vaccine boxes must fill completely the shelf space
- e) vaccines are placed according to their sensitivity to temperature

205. Choose the advantages of BCG vaccination:

- a) it reduces the risk of latent infection of tuberculosis in children
- b) it diminishes significantly the risk of severe forms of TB in children
- c) it prevents the TB disseminated forms in newborns and young children
- d) it prevents any form of TB, regardless of age
- e) it prevents the occurrence of axillary lymphadenitis

206. Monitoring indicators for the Immunization Program are:

- a) the rate of coverage with vaccine of each type
- b) global vaccine coverage rate
- c) increase of vaccine refusals due to inadequate public information about vaccination
- d) the incidence of infectious diseases prevented by the vaccination
- e) the rate of side effect reactions recorded in the country

207. Choose the tasks of the national authority to ensure the quality and safety of vaccines:

- a) licensing of vaccines
- b) evaluation of vaccine quality
- c) monitoring the "cold chain"
- d) surveillance of vaccine quality in administrated regions
- e) informing the population

208. Choose the requirements for immunobiological preparations:

- a) to be immunogenic to produce the specific immune response
- b) to be purified and free from ballast substances
- c) to have optimal concentration to avoid antigenic effect in small doses
- d) to be resistant to low temperatures
- e) to have adjuvants in its contents

209. Specify the requirements for the administered vaccines:

- a) the presence of the label on the box
- b) the packaging has to be intact
- c) the preparation must correspond to the accompanying document

- d) the content of the preparation must resist to low temperatures
- e) the presence of white sediment when the vaccine vial shaken

210. Choose vaccines that are not allowed to be frozen:

- a) HepB
- b) DTP
- c) DT
- d) Polio
- e) Hib

211. The Basic Principles of Vaccination Planning are:

- a) vaccination is carried out in vaccination centers
- b) vaccination is given by doctors in the primary care service
- c) vaccination is free of charge according to the legislation in force
- d) vaccination is not mandatory for all children
- e) the minimum interval between vaccinations must be of 2 weeks

212. Choose the serious postvaccinal side effects:

- a) anaphylactic shock
- b) collapse
- c) convulsions
- d) urticaria
- e) allergic reactions

213. Choose the persons who cannot be vaccinated with live vaccines:

- a) children with immunodeficiency
- b) patients with tuberculosis
- c) children that take immunodepression treatment
- d) patients with clinical symptoms of AIDS
- e) patients with chronic viral hepatitis

214. Choose the false contraindications in vaccination:

- a) premature birth
- b) low birth weight
- c) hypotrophy
- d) encephalopathy
- e) eczema

215. Choose the parenteral methods of vaccine administration:

- a) intramuscular
- b) cutaneous
- c) subcutaneous
- d) scarification
- e) per os

216. Choose the vaccines that are administrated intramuscularly:

- a) DTP
- b) HepB
- c) Td
- d) Antrax
- e) Rotarix

217. Choose the vaccines administrated subcutaneously:

- a) measles vaccine
- b) rubella vaccine

- c) mumps vaccine
- d) Hib vaccine
- e) pneumococcal vaccine

218. Choose the vaccines to be administered by scarification:

- a) smallpox
- b) tularemia
- c) anthrax
- d) BCG
- e) Hib

219. Choose the possible side effect reactions after the vaccination:

- a) induced by vaccine
- b) accelerated by vaccine
- c) associated with the Immunisation Program
- d) coincidental side effects
- e) temporary side effects

220. Choose the postvaccinal side effects:

- a) pain
- b) erythema
- c) sterile abscess
- d) convulsion
- e) anaphylactic shock

221. Choose the correct statements on normal side effects recorded after the vaccination:

- a) they usually occur in 24-48 hours
- b) fever can sometimes occur 5-12 days after immunization (in the case of MMR vaccine)
- c) they do not require any special treatment
- d) all persons are hospitalized
- e) antibiotics are administered to attenuate side effect reactions

222. Choose the undesirable post-vaccination adverse reactions:

- a) convulsions
- b) encephalopathy
- c) paralysis
- d) erythema
- e) sterile abscess

223. The reactions associated with the immunization program are:

- a) those related to technical errors in the storage and administration of the vaccine
- b) those caused by ignorance of the vaccine requirements
- c) those caused by compromising the sterility of the syringe
- d) those dissolving the vaccine with an improper diluent
- e) those caused by components of the vaccine itself

224. Vaccination of children with allergic diseases includes:

- a) vaccination against all infections included in the vaccination calendar
- b) vaccination during the remission period
- c) children are vaccinated in an in-patient department (severe asthma) in some cases
- d) vaccination with live vaccines is prohibited
- e) vaccination is contraindicated

225. Choose the correct statements on vaccination of people infected with HIV/AIDS:

- a) people with asymptomatic HIV infection can receive all vaccinations, excluding BCG
- b) it is forbidden to vaccinate persons with asymptomatic HIV infection
- c) it is forbidden to vaccinate children in the AIDS stage
- d) in the AIDS stage, children are vaccinated with inactivated vaccines
- e) in the AIDS stage, children are vaccinated with live vaccines

226. What steps are taken in the planning of mass vaccination?

- a) determination of the number of people that require the vaccination
- b) determination of necessary amounts of vaccines
- c) determination of necessary amounts of syringes, waste collection boxes, vaccine supplies
- d) evaluation of adverse reactions after vaccination
- e) analysis of morbidity of infections controlled by the vaccination

227. Choose the tests used to check the patient's sensitivity to serum:

- a) conjunctival test
- b) cutaneous test
- c) intradermal test
- d) subcutaneous test
- e) intramuscular test

228. Serum is administered as prophylaxis in:

- a) tetanus
- b) rabies
- c) flu
- d) diphtheria
- e) anthrax

229. Choose the specific human immunoglobulins:

- a) immunoglobulins derived from plasma from healthy individuals
- b) immunoglobulins obtained from serum of the convalescent patient
- c) immunoglobulins obtained from immunized persons
- d) immunoglobulins obtained from the sick
- e) immunoglobulins obtained from a carrier person

230. Choose the equipment used to transport vaccines:

- a) cold bags
- b) thermos/containers
- c) needle and syringe boxes
- d) polyethylene bags
- e) plastic packages

231. Choose the Temperature Monitoring Tool:

- a) thermometers
- b) vial indicators
- c) the card of "Cold Chain"
- d) electronic freezing indicator
- e) refrigerator

232. Choose the vaccines sensitive to freezing:

- a) HepB
- b) DTP-HepB + Hib
- c) Td

- d) MMR
- e) Polio

233. The vial with vaccine will be destroyed if:

- a) there is no compliance with the conditions of the "cold chain"
- b) there are indications that the vial was contaminated during opening
- c) the expiration date has expired
- d) the BCG vaccine was frozen
- e) the DTP vaccine was used more than 6 hours since the vial had been opened

234. Choose the risk procedures for medical staff during carrying out the immunoprophylaxis:

- a) putting the cover over the used needle
- b) the assembly, cleaning or processing of the syringes
- c) wrong hand hygiene
- d) keeping the vaccines and medicines in the same refrigerator
- e) use of self-destructive syringes to vaccinate population

235. Choose the inactivation methods of vaccines:

- a) boiling during 45 minutes at a $t^{\circ} + 100^{\circ}\text{C}$
- b) steam autoclaving at a $t^{\circ} + 122^{\circ}\text{C}$, pressure 1.0 atm, exposure 40 min
- c) steam autoclaving at a $t^{\circ} + 132^{\circ}\text{C}$, pressure 2.0 atm, 20 min
- d) burning vaccines in specially arranged areas
- e) collection of vaccines in bags and their transportation to the special garbage for vaccines

1.1.4. EPIDEMIOLOGICAL METHOD

Simple choice

236. Choose the analysis to determine morbidity dynamics on annual basis:

- a) morbidity index in the country being studied compared to other countries
- b) annual evolution and seasonal features of morbidity
- c) multi-annual dynamics of morbidity
- d) average annual rate
- e) periodicity of morbidity in multi-annual dynamics

237. The seasonal growth index is:

- a) the share of diseases within the growth limit appeared as a result of seasonal factors
- b) the ratio of the average number of cases per day in a particular month to the number of cases per day in a year
- c) the ratio of the number of cases in a month with high morbidity rate to the annual morbidity index
- d) the ratio of the number of cases in a month with high morbidity to the seasonal variation index
- e) the ratio of the number of cases in a month with high morbidity to the number of annual cases

238. What happens when the seasonal index is 3.9:

- a) the morbidity is 3.9 times less than in the other months of the year
- b) the morbidity in the months with high morbidity is 3.9 times higher than the annual average
- c) the morbidity in the months with high morbidity is 3.9 times higher than the rest of the months of the year
- d) the morbidity in the months with high morbidity is 3.9 times higher than in the months with high morbidity in the past year
- e) the morbidity in the months with high morbidity is 3.9 times higher than in the months with high morbidity in the last three years

239. Seasonal coefficient equal to 75.5% shows:

- a) the morbidity in the months with high morbidity is 75.5% of annual morbidity
- b) the morbidity in the months with high morbidity is 75.5 times higher than in the rest of the months of the year
- c) the morbidity in the months of the year is 75.5 times lower than in the months with high morbidity rate
- d) the morbidity in the months with high morbidity is 75.5 times higher than in the months with high morbidity of the previous year
- e) the morbidity in the months with high morbidity is 75.5% of the multi-annual morbidity average

240. Analytical epidemiological studies include:

- a) individual studies
- b) cohort studies
- c) experimental studies
- d) transversal studies
- e) descriptive studies

241. Experimental epidemiological studies include:

- a) correlational studies
- b) randomized controlled trials
- c) cohort studies
- d) transversal studies
- e) retrospective analysis

242. Which of the following is applied in order to determine the structure of morbidity of communicable and non-communicable diseases:

- a) extensive index
- b) intensive index
- c) demonstration index
- d) cumulative index
- e) frequency index

243. Which of the following is applied in order to determine the level of morbidity:

- a) extensive index
- b) intensive index
- c) demonstration index
- d) frequency index
- e) seasonal index

244. The prevalence indicator includes:

- a) new cases
- b) the total number of old and new cases in a particular disease
- c) total morbidity of all nosological forms
- d) number of cases recorded in a year
- e) numerical distribution values

245. The intensive index characterizes:

- a) the structure of the phenomenon
- b) the frequency of the phenomenon
- c) the dynamics of epidemic process
- d) the comparison of index value
- e) phenomena with variable characteristics

246. Student's t-coefficient represents:

- a) the standardized index
- b) the medium value
- c) the veracity index
- d) an extensive index error
- e) a standard error of the sample

247. The minimum value of the Student's coefficient which indicates the difference between two quantitative characteristics is:

- a) 1.0
- b) 2.0
- c) 3.0
- d) 0.5
- e) 2.5

248. While increasing the number of cases taken into the study, the statistical error:

- a) increases significantly
- b) does not change
- c) decreases
- d) increases slowly
- e) increases in geometrical proportions

249. What does the correlational method of analysis determine:

- a) the relationship between phenomena
- b) the difference in veracity between statistical indexes
- c) the veracity of statistical indexes
- d) the error of morbidity index
- e) the dispersion error

250. Correlation is applicable in epidemiological studies to determine:

- a) the veracity of difference between the values of two variables that are being compared
- b) the amount of change in the value of a variable when the value of the other variable is modified
- c) the power and direction of influence of some factors towards well-being
- d) the comparison of percentages of expressions
- e) the confidence interval of probability

251. Epidemiological case-control study is:

- a) retrospective
- b) prospective
- c) transversal
- d) experimental
- e) laboratory

252. Epidemiological cohort study is:

- a) transversal
- b) retrospective
- c) prospective
- d) experimental
- e) laboratory

253. Which of the following is the extensive index:

- a) 10 cases
- b) 10%
- c) 10⁰/₀₀₀₀

- d) 10‰
- e) 10‰

254. Which of the following is related to the intensive index:

- a) 36%
- b) 43^o/_{oooo}
- c) 58 cases
- d) 40°C
- e) 36 ml

255. The prevalence index has a major importance in case of:

- a) dysentery
- b) tuberculosis
- c) enterobiosis
- d) virosis
- e) flu

256. Simple arithmetic mean is:

- a) the average value of the observations obtained from the sum of the discrete variable values divided by the sum of the variables
- b) the average value of the observations obtained from the sum of the discrete variable values multiplied by the frequency of each value
- c) the average value of the observations obtained from the sum of the discrete variable values divided by the frequency of each value
- d) the sum of the values of the statistical strings compared to the sum of the effects
- e) the frequency of each value divided by the sum of the values of the statistical strings

257. The confidence interval is:

- a) the difference between the highest and lowest value of the variable string
- b) the interval between the highest and lowest value of the variable string
- c) the probability that the average values of the statistical variants are within the safety limits
- d) the interval between the average of the highest and the average of the lowest values of the variable string
- e) the interval obtained from the difference between the highest and the lowest value of the variable string divided by simple arithmetic mean

258. The relative risk (RR) measures are:

- a) the prevalence of the risk factor in the population
- b) the incidence of the disease in the population
- c) the proportion of exposed cases
- d) the force of epidemiological association
- e) the proportion of unexposed group

259. When the relative risk (RR) is greater than 1:

- a) the studied subject is not a risk factor
- b) there is an association between the disease and the risk factor
- c) there is no significant difference between the exposed and unexposed groups
- d) the probability of appearance of one event in certain conditions
- e) the difference of cumulative indices between the two compared groups

260. When attributable risk (AR) is greater than zero (0):

- a) the risk is the same in exposed and unexposed groups
- b) the exposure is protective
- c) it indicates high incidence of the disease in the population

- d) the exposure to the risk factor has adverse health effects
- e) the prevalence of particular risk factor in the population

261. Odds ratio (OR) less than 1 indicates:

- a) the exposure to the risk factor has adverse health effects
- b) the exposure (intervention) was effective in reducing the risk factor
- c) the risk is the same in exposed and unexposed groups
- d) it indicates high incidence of the disease in the population
- e) it has no significance

262. Epidemiological efficiency of taken measures indicates:

- a) the estimation of the quality of treatment
- b) the prevention of financial loss
- c) growth in decreasing real morbidity
- d) the decrease in social significance of the disease
- e) the estimation of the diagnostic methods

263. The efficiency of prevention and control measures is:

- a) the final results obtained via the application of measures in correlation with the costs of time, money, and real resources that were deployed
- b) the completeness of the application of those measures to the subject exposed to intervention
- c) gains in decreasing real morbidity
- d) prevention of financial loss
- e) decrease in social significance of the disease

264. Screening is:

- a) a mass examination in order to diagnose a disease or suspected abnormalities
- b) an examination in order to diagnose a hospitalized patient
- c) an examination to confirm a preventive diagnosis
- d) an investigational procedure of a sick person at home
- e) an emergency reporting method of new cases of the disease

265. Mortality as a measure of well-being of the population indicates:

- a) the proportion of deaths due to a particular cause compared to total deaths
- b) the number of deaths due to a particular cause within the population
- c) the proportion of deaths relative to new cases of illnesses within a particular administrative territory
- d) the number of deaths within a population regardless of the cause
- e) the rate of deaths from the number of cases of a certain disease

266. Lethality as a measure of well-being of the population indicates:

- a) the number of deaths due to a particular cause within the population
- b) the number of deaths within a population regardless of the cause
- c) the proportion of deaths relative to new cases of illnesses within a certain territory
- d) the rate of deaths from the number of cases of a certain disease
- e) the proportion of deaths due to a particular cause compared to total deaths

267. Which of the following epidemiological studies is most appropriate when comparing the frequency of a disease in the same population but at different times:

- a) correlational
- b) transversal
- c) case-control
- d) cohort
- e) randomized

268. A strong uphill (positive) correlation coefficient “r” is:

- a) 0.0 -- +0.20
- b) +0.20 – +0.40
- c) +0.40 -- +0.70
- d) +0.70 -- +1.0
- e) +1.0

269. A weak downhill (negative) correlation coefficient “r” is:

- a) -1.0
- b) 1.0 -- -0.70
- c) 0.70 -- -0.40
- d) 0.40 -- -0.20
- e) 0.20 – 0.0

270. The correlation coefficient for $r = +0.45$ will be:

- a) weak uphill (positive)
- b) moderate uphill (positive)
- c) strong uphill (positive)
- d) weak downhill (negative)
- e) moderate downhill (negative)

Multiple choice

271. The observational epidemiological studies include:

- a) descriptive studies
- b) analytical studies
- c) experimental studies
- d) modeling of epidemic process
- e) interventional studies

272. The descriptive epidemiological studies include:

- a) individual studies
- b) populational studies
- c) cohort studies
- d) randomized studies
- e) field studies

273. The analytical epidemiological studies include:

- a) populational studies
- b) ecological studies
- c) randomized studies
- d) case-control studies
- e) cohort studies

274. In which situations can the prevalence of one disease be lower than its own incidence?

- a) the quick healing after the treatment
- b) the low number of new cases
- c) the low number of patients that are completely treated
- d) appearance of a new remedy that contributes to longevity
- e) sudden death after the onset of the disease

275. Which of the following characteristics corresponds to the true statements about descriptive studies?

- a) it allows the evaluation of a new treatment

- b) it measures the association between a disease and a risk factor
- c) it determines the distribution of the disease according to the person, place, and time
- d) it includes a series of cases
- e) they are expensive and difficult to accomplish

276. What are the advantages of case-control studies versus cohort studies?

- a) multiple possible effects of one exposure
- b) they require smaller number of subjects
- c) they may study rare diseases
- d) period of study is shorter
- e) they are less expensive to carry out

277. Case-control epidemiological studies can be of the following types:

- a) simple-blind
- b) double-blind
- c) triple-blind
- d) stochastic
- e) ecological

278. Analytical epidemiological study can be:

- a) retrospective
- b) prospective
- c) observational
- d) experimental
- e) field study

279. Epidemiological investigation is:

- a) an outbreak investigation of infectious disease
- b) a case-control investigation performed in clinics
- c) a case-control investigation performed in the field
- d) a research of tinctorial properties of microorganisms
- e) an investigation of outbreaks of disease with unique cases

280. The preparatory period of an epidemiological study includes:

- a) development of the work hypothesis
- b) development of the research program
- c) motivating research
- d) drawing up the research plan
- e) drawing up the measures plan

281. The advantages of transversal epidemiological studies are:

- a) they are simple to accomplish at a low cost
- b) they allow appreciation or the approval of health issues and establishing priorities in interventional actions
- c) they allow the time of study to be set depending on exposure and disease
- d) they are useful in evaluation of incidences of rare diseases
- e) they can serve as a first step in describing epidemic eruptions with an unknown cause

282. Intensive indexes are:

- a) 20 cases of the disease
- b) 10%
- c) 12‰
- d) 24‰
- e) 11^o/₀₀₀₀

283. The observational and describing epidemiological phenomena methods include:

- a) descriptive procedures
- b) analytical procedures
- c) bacteriological investigations
- d) parasitological investigations
- e) clinical laboratory investigations

284. The role of descriptive procedures is:

- a) description of epidemiological situations at the entire population level
- b) description of epidemiological situations in different groups or groups of population
- c) implementation and evaluation of treatment and prophylaxis measures
- d) formulation of the hypothesis about causes and conditions of the appearance and spreading of epidemic process in certain situations
- e) implementation of laboratory methods for studying different aspects of the epidemic process

285. Laboratory methods are implemented in epidemiology:

- a) to improve the process and reveal the etiology of diseases
- b) to delimit the scale of some epidemiological processes
- c) to determine the structure and content of the epidemiological method of investigation
- d) to improve epidemiological surveillance techniques
- e) to promote effective prophylaxis and control measures

286. Indicators that demonstrate the level of health in the population are:

- a) natality
- b) morbidity
- c) mortality
- d) the immune level of population
- e) access of the population to medical services

287. Types of morbidity are:

- a) general
- b) real
- c) disability
- d) the handicap
- e) fertility

288. Which of the following confidence intervals is used in statistical and mathematical calculations:

- a) 99.90%
- b) 99.00%
- c) 95.00%
- d) 68.26%
- e) 31.74%

289. The standard deviation (sigma) applied in statistical and mathematical calculations is:

- a) +/- 6.02 sigma
- b) +/- 5.25 sigma
- c) +/- 3.29 sigma
- d) +/- 2.58 sigma
- e) +/- 1.96 sigma

290. The student's t-criteria are used for:

- a) comparison of two media in the case of research sample formation
- b) comparison of two standard deviations in the case of research sample formation
- c) comparison of obtained results in different research samples
- d) to determine if observed distribution frequencies correspond to theoretical frequencies
- e) to determine the confidence threshold

291. Pearson's chi square test (X^2) determines:

- a) if frequencies of observed distribution correspond to theoretical frequencies
- b) if distributions of the two strings of observed values concur or not
- c) the safety threshold
- d) the total number of existing cases in a certain population at a certain moment
- e) the strength of epidemiological associations

292. The advantages of descriptive populational studies are:

- a) statistical data are used in official reports
- b) data are obtained through studies of epidemiological outbreak investigations
- c) the cost is minimal, rapid, and easy to accomplish
- d) the results identify the health issues, epidemiological and clinical features of the disease
- e) absence of the standard methods of diagnostics

293. The purpose of analytical epidemiological studies is:

- a) describing distinctive features of phenomena
- b) establishment and quantitative evaluation of the causes of appearance and spread of the disease
- c) revealing the causes and conditions leading to health phenomena
- d) revealing the cause and effect relationship in the mechanism of morbidity formation
- e) describing unusual cases of the disease or some risk factors

294. Ecological or correlation epidemiological studies determine:

- a) the health of the population depending on risk factors
- b) revealing the cause and effect relationship in the mechanism of morbidity formation
- c) the strength of the determinants and their consequences
- d) the possibility of appearance of other variants with probability of 99.73%
- e) the correlation between exposure and effect

295. Which of the following correlations appears according to the variation of values:

- a) direct correlation function
- b) indirect correlation function
- c) blind correlation function
- d) direct stochastic (statistical) correlation
- e) indirect stochastic (statistical) correlation

296. The degree of association depending on the value of the correlation coefficient can be:

- a) very strong
- b) strong
- c) moderate (medium)
- d) weak
- e) negligible

297. Linear regression coefficient reflects:

- a) the link between the phenomena
- b) dependence between phenomena
- c) quantitative modifications of a particular phenomenon under the influence of another phenomenon
- d) how much higher the risk factor of the disease is to exposed persons versus to unexposed ones
- e) the difference between two absolute risks divided to the level of the disease

298. The types of experimental epidemiological studies are:

- a) epidemic process modeling
- b) natural experiment
- c) uncontrolled experimental studies
- d) controlled experimental studies
- e) descriptive populational

299. The stages of meta-analysis are:

- a) to collect information from epidemiological bulletin
- b) analysis of collected information from patients' records
- c) search and selection of all publications on the subject using the safest qualitative and authentic investigations
- d) estimating the degree of relationship between publication research criteria and planned meta-analysis criteria
- e) merging the quantitative information from selected studies

300. Attributable risk can have values of:

- a) equal to zero
- b) greater than zero
- c) less than zero
- d) greater than 1
- e) less than 1

301. The relative risk can have values of:

- a) equal to zero
- b) equal to 1
- c) greater than zero
- d) greater than 1
- e) less than 1

302. The description of multi-year dynamics of morbidity allows:

- a) predicting the epidemiological situation in the future
- b) launching hypotheses about possible causes that have led to changes in the epidemiological situation
- c) the assessment of evolutionary changes in the epidemiological situation for a certain period of time
- d) determining the annual evolution in the epidemiological situation
- e) determining the period of the year with increased incidence

303. Calculation of seasonality is determined by:

- a) the maximum level of seasonal morbidity
- b) the average of multi-annual morbidity
- c) the beginning of seasonality
- d) the end of seasonality
- e) the duration of seasonality

304. The role of screening is:

- a) to organize a meta-analysis study
- b) to organize cohort studies
- c) to organize transversal studies
- d) to organize case-control studies
- e) to evaluate some programs

305. The epidemiological testing of the outbreak is used to:

- a) determine indicators of the health status of the population
- b) detect the source of pathogens

- c) determine the causes of the outbreak
- d) determine the ways, factors and conditions of the transmission of the disease
- e) develop anti-epidemic measures

306. The objectives of the epidemiological testing of the outbreak are:

- a) diagnosing the disease
- b) formulation of the epidemiological diagnosis
- c) development of the complex of measures to locate and liquidate the outbreak
- d) assessing the quality and effectiveness of anti-epidemic measures performed in the outbreak
- e) organizing and building the experimental model of the epidemic process

307. In epidemic outbreak investigation with simple cases of disease, the stages of investigation are:

- a) calculating the moment prevalence
- b) realization of the field experiment
- c) preparation for the epidemiological outbreak investigation
- d) investigation of the epidemiological outbreak
- e) outbreak surveillance

308. The epidemiological anamnesis is taken by the:

- a) family doctor
- b) doctor who suspected the disease in the patient
- c) epidemiologist
- d) bacteriologist who does bacteriological and serological tests
- e) infectious diseases specialist who consults the patient

309. The purpose of the epidemiological history is:

- a) establishing the onset of the disease
- b) determining the patient's contact with others
- c) assessment of the sanitary-hygienic situation of the outbreak
- d) determining the conditions that could have contributed to the occurrence of the illness
- e) surveillance of the outbreak

310. The use of microbiological, parasitological, immunological methods of investigation is aimed at:

- a) confirming clinical diagnosis
- b) detection of pathogen carriers
- c) confirmation of ways and factors of transmission
- d) determination of the workload in the outbreak
- e) determining the spatial dimensions of the outbreak

1.2. SPECIAL EPIDEMIOLOGY

1.2.1. GASTROINTESTINAL INFECTIONS

Simple choice

311. The main source of pathogens of typhoid fever is:

- a) acute carriers
- b) chronic carriers
- c) patients with severe form of the disease
- d) patients with mild form of the disease
- e) all patients regardless of disease severity

312. The main mode of typhoid fever transmission is:

- a) waterborne
- b) foodborne
- c) airborne
- d) transplacental
- e) habitual contact

313. Incubation period of typhoid fever is:

- a) 1-7 days
- b) 7-14 days
- c) 3-21 days
- d) 15-35 days
- e) 50-180 days

314. The main laboratory test for early diagnosis of typhoid fever is:

- a) serological analysis
- b) urine culture analysis
- c) blood culture analysis
- d) stool culture analysis
- e) bile (duodenal contents) analysis

315. The basic anti-epidemic measures in typhoid fever are aimed at:

- a) neutralizing the source of pathogens
- b) neutralizing the mechanism of transmission
- c) reduction in susceptibility of the population
- d) immunoprophylaxis
- e) emergency prophylaxis

316. Surveillance of persons that were in contact with typhoid fever infected person is done within:

- a) 7 days
- b) 14 days
- c) 21 days
- d) 35 days
- e) 50 days

317. Isolation of hospitalized patients is:

- a) done according to clinical indications
- b) done according to epidemiological indications
- c) mandatory for all patients
- d) selective, according to clinical indications
- e) patients with typhoid fever can be treated at home

318. Patients with typhoid fever are discharged from the hospital:

- a) without bacteriological tests
- b) with one negative bacteriological result
- c) with three negative bacteriological results
- d) based on serological tests
- e) based only on clinical data

319. The prophylactic means to protect persons that were in contact with a typhoid fever patient is:

- a) antibiotics

- b) bacteriophage
- c) drugs
- d) immunoglobulin
- e) vaccine

320. The period of surveillance of chronic carriers with *Salmonella typhi* is:

- a) 3 months
- b) 6 months
- c) 1 year
- d) 3 years
- e) lifelong

321. In dysentery the main source of pathogens is:

- a) chronic patients
- b) chronic carriers
- c) patients during prodromal period
- d) patients during prodromal and incubation periods
- e) patients with mild form of the disease, during clinical manifestation period

322. Patients with shigellosis are highly contagious in:

- a) incubation period
- b) prodromal period
- c) incubation and prodromal period
- d) convalescence
- e) clinical manifestations

323. The duration of medical supervision of persons that were in contact with a dysentery patient is:

- a) 3 days
- b) 7 days
- c) 14 days
- d) 21 days
- e) 35 days

324. Which of the following statements regarding shigellosis is true:

- a) the infection is a zoonosis
- b) the maximum period of incubation is up to 21 days
- c) it is caused by several species of pathogenic agents
- d) serological test is necessary for laboratory diagnosis
- e) the infected person is a transmission risk at the end of the first week of infection

325. Foodborne transmission is predominantly characteristic of:

- a) enteritidis caused by *Sh. sonnei*
- b) enteritidis caused by *Sh. flexneri*
- c) enteritidis caused by *Sh., dysenteriae*
- d) enteritidis caused by *Sh. boydi*
- e) all species of the bacteria genus *Shigella*, in equal amounts

326. Waterborne transmission is predominantly characteristic of:

- a) enteritidis caused by *Sh. sonnei*
- b) enteritidis caused by *Sh. flexneri*
- c) enteritidis caused by *Sh., dysenteriae*
- d) enteritidis caused by *Sh. boydi*
- e) all species of the bacteria genus *Shigella*, in equal amounts

327. After inpatient treatment patients with the diagnosis of shigellosis are discharged:

- a) without bacteriological test
- b) after doing one mandatory bacteriological test
- c) after doing two mandatory bacteriological tests
- d) after doing three mandatory bacteriological tests
- e) according to individual scheme for the groups with high risk of infection

328. In salmonellosis the main source of infection is:

- a) the sick person
- b) carriers of some species of salmonella
- c) infected animal-based food products
- d) sick animals or carriers of some species of salmonella
- e) the sick person or sick animal or carriers of some species of salmonella

329. The main factors of salmonellosis transmission are:

- a) vegetables and fruit
- b) air in enclosed spaces
- c) flies and some hematophagous insects
- d) eggs and meat
- e) medical instruments

330. Food poisoning of bacterial origin is attributed to:

- a) dysentery
- b) botulism
- c) salmonellosis
- d) escherichiosis
- e) campylobacteriosis

331. Escherichiosis that causes diarrhea affects primarily:

- a) children predominantly in rural areas
- b) children predominantly in urban areas
- c) infants in their first year of life
- d) children attending kindergarten or school, regardless of age
- e) children not attending kindergarten or school, regardless of age

332. Incubation period for cholera is:

- a) from a few hours up to 24 hours
- b) 1-6 days
- c) 3-10 days
- d) 7-14 days
- e) 10-17 days

333. Cholera emergency prophylaxis is done with:

- a) antibiotics
- b) vaccine
- c) immunoglobulin
- d) immune sera
- e) bacteriophage

334. How does cholera spread these days:

- a) endemically
- b) sporadically
- c) epidemically

- d) pandemically
- e) through eruption

335. Which of the following disinfectants is the pathogenic agent of cholera susceptible to:

- a) halogens
- b) acids
- c) alkalies
- d) oxidants
- e) phenol and its derivatives

336. Persons with cholera, are permitted to go back to work regardless of their type of work:

- a) after three months
- b) immediately after being discharged as an inpatient
- c) after expiration of postdischarge care
- d) during six months after expiration of postdischarge care
- e) immediately after being discharged as an inpatient, within three months of postdischarge care

337. Which of the following statements regarding cholera is true:

- a) the pathogenic agent is non-agglutinating (NAG) vibrios
- b) the main way of transmission is foodborne
- c) the main source of pathogenic agents is an animal
- d) the pathogenic agent is very resistant to disinfectants
- e) under particular conditions the pathogenic agent can stay alive for a long period of time

338. The main way of transmission of cholera is:

- a) waterborne
- b) foodborne
- c) habitual contact
- d) parenteral
- e) specific inoculation

339. The minimum incubation period for cholera is:

- a) up to 24 hours
- b) 2-3 days
- c) 4-5 days
- d) 6-7 days
- e) 7-8 days

340. The maximum incubation period for hepatitis A (HAV) is:

- a) 15 days
- b) 21 days
- c) 35 days
- d) 50 days
- e) 180 days

341. The sick person with HAV presents a major epidemiological hazard in:

- a) incubation period
- b) prodromal period
- c) clinical manifestation period
- d) convalescence period
- e) all periods of the disease

342. Medical surveillance for persons that have been in contact with a HAV patient should last:

- a) 14 days
- b) 21 days
- c) 35 days

- d) 50 days
- e) 180 days

343. In HAV outbreak disinfection must be done with solution of chloramine with a concentration of:

- a) 0.1%
- b) 3.0%
- c) 5.0%
- d) 10.0%
- e) 25.0%

344. The fecal-oral mechanism is characteristic of:

- a) HAV and HBV
- b) HAV and HCV
- c) HAV and HDV
- d) HAV and HEV
- e) all viral hepatitis

345. The waterborne way of transmission has major importance in case of:

- a) yersiniosis
- b) salmonellosis
- c) viral hepatitis A
- d) campylobacteriosis
- e) food poisoning

346. Vaccination against polio starts at the age of:

- a) 2 months
- b) 4 months
- c) 6 months
- d) 12 months
- e) 24 months

347. The main way of transmission of the polio pathogen agent is:

- a) airborne
- b) fecal-oral
- c) parenteral
- d) direct and indirect contact
- e) transplacental

348. The incubation period for polio varies between:

- a) 1-7 days
- b) 5-35 days
- c) 7-14 days
- d) 14-21 days
- e) 50-180 days

349. In polio prophylaxis the basic element is:

- a) sanitary-hygiene measures
- b) effective treatment
- c) detection and isolation of the source
- d) care of the carriers
- e) vaccinal prevention

350. In the Republic of Moldova the aim of epidemiological surveillance of polio is:

- a) timely detection of successive cases of polio

- b) outbreak prevention
- c) prevention of the import of the wild virus to the country
- d) effective treatment of severe forms of polio
- e) strict maintenance of the anti-epidemic regime in children's institutions

351. The most frequent and dangerous source of infection with enterotoxigenic staphylococcus is:

- a) patients with staphylococcal infections
- b) nasopharyngeal staphylococcal carriers
- c) sick animals (cattle)
- d) animals carrying staphylococci
- e) dairy products

352. In food poisoning prevention the basic element is:

- a) compliance with food safety legislation with the norms and actions that need to be enforced
- b) control of cooking technologies
- c) control of compliance with food transport conditions
- d) control of compliance with food storage conditions
- e) control of compliance with food production conditions

353. Food poisoning is defined as:

- a) infections caused by the consumption of food contaminated with pathogenic microorganisms and endotoxins thereof
- b) infections caused by the consumption of food contaminated with exotoxins eliminated by microorganisms
- c) infections caused by *Cl. Botulinum*
- d) infections with long incubation period (over 72 hours)
- e) infections with unidentified transmission mechanism

354. The incubation period for botulinum intoxication is:

- a) 30 minutes-7 hours
- b) 1 hour-3 days
- c) 6 hours-7 days
- d) 2-10 days
- e) 7-14 days

355. The main way of transmission of yersiniosis is:

- a) foodborne
- b) waterborne
- c) habitual contact
- d) airborne
- e) parenteral

356. In yersiniosis the main source of infection is:

- a) sick persons
- b) healthy carriers
- c) sick animals and carriers
- d) human carriers and sick animals
- e) humans and carriers in domestic animals

357. The main sources of pathogen agent of rotaviral infection are:

- a) sick persons, especially adults
- b) sick animals and carriers
- c) human carriers and sick animals
- d) standing water during warm seasons

e) sick persons, especially children in their first three years of life

358. In countries of the temperate zone, rotaviral infections are predominantly recorded during the period of:

- a) winter
- b) spring
- c) spring-summer
- d) summer
- e) autumn

359. In the Republic of Moldova, specific prevention of rotaviral infection includes:

- a) common remedies
- b) administration of antivirals and interferon to high-risk persons
- c) vaccination of children according to planned schedule
- d) vaccination of teenagers and young adults during national immunization campaign
- e) antibiotic treatment to prevent microbial complications

360. Choose the correct method to isolate patients with rotaviral infections:

- a) compulsory hospitalization
- b) all patients are treated in outpatient conditions
- c) hospital isolation of high-risk cases that will develop severe disease evolution
- d) obligatory hospitalization of children under seven years of age
- e) hospitalization of pregnant women in their first semester of pregnancy

Multiple choice

361. The true statements about typhoid fever are:

- a) the sick person is a danger from the first appearance of clinical symptoms
- b) mandatory terminal disinfection in outbreak
- c) planned vaccination of particular groups of the population in endemic zones
- d) preschool children belong to high-risk groups
- e) bacteriological tests are of epidemiological importance prior to the discharge from hospital

362. The true statements about typhoid fever are:

- a) a sick person can be a source of infection
- b) typhoid fever morbidity can be regulated by immunoprophylaxis
- c) very young children are more receptive to it
- d) the incubation period is 3-21 days
- e) patients are discharged from the hospital without laboratory test

363. The true statements about typhoid fever are:

- a) sick animals and carriers present an epidemiological danger
- b) infected person presents an epidemiological danger during prodromal period
- c) blood culture is an early confirmation method of the diagnosis
- d) chronic carriage is characteristic of the disease
- e) vaccinations are planned in the Republic of Moldova

364. In typhoid fever the sources of infection are:

- a) domestic animals
- b) sick persons
- c) recovered carriers
- d) water, soil
- e) xenotropic (wild) animals

365. The true statements about typhoid fever are:

- a) the sick person does not present any danger at the initial stage of the disease
- b) persons that were in contact with the typhoid fever patient must be under surveillance for 21 days
- c) persons from the outbreak should be vaccinated
- d) bacteriological tests of blood are necessary for persons that were in contact with the disease
- e) persons that were in contact with the typhoid fever patient should have serological tests

366. The true statements about typhoid fever are:

- a) a chronic carrier of *S.typhi* is the main source of pathogenic agents
- b) the disease may also be caused by *S.typhimurium*
- c) urine culture test is an early diagnostic method
- d) bile culture test is used to diagnose carriers
- e) convalescence carriage cannot be excluded

367. The following ways of transmission are specific to typhoid fever:

- a) waterborne
- b) sexual
- c) foodborne
- d) parenteral
- e) habitual contact

368. The set of anti-epidemic measures applied to persons that were in contact with a person ill with typhoid fever includes:

- a) daily thermometry
- b) investigation of laboratory samples for hemoculture
- c) investigation of laboratory samples for stool culture
- d) administration of a typhoid bacteriophage
- e) medical surveillance for 21 days

369. The main factors of transmission of salmonellosis are considered to be:

- a) water
- b) eggs
- c) meat
- d) vegetables and fruit
- e) meat products

370. The true statements about salmonellosis are:

- a) it is a zoonosis
- b) adults are more susceptible to it
- c) vaccination is carried out according to epidemiological indications
- d) *S.enteritidis* and *S.typhimurium* are most common in the Republic of Moldova
- e) persons exposed to contamination risk are under medical surveillance for 7 days

371. In salmonellosis the epidemic process has the following characteristics:

- a) it affects all age groups equally
- b) children up to two years old are more susceptible to it
- c) salmonellosis morbidity is not influenced by seasonal factors
- d) salmonellosis morbidity is influenced by seasonal factors
- e) epidemic outbreaks of animal origin can be recorded

372. The true statements about salmonellosis are:

- a) it is primarily foodborne

- b) it can cause epidemic eruptions of food poisoning
- c) only one species of *Salmonella* may cause salmonellosis in humans
- d) all species of *Salmonella* known in medical science are currently recorded in the Republic of Moldova
- e) multiple factors contribute to morbidity of salmonellosis including population migration and food imports

373. Choose the sources of salmonellosis infection:

- a) a sick person with salmonellosis
- b) *Salmonella* carriers
- c) domestic birds
- d) poultry meat
- e) meat of cattle and small livestock

374. Meat may be contaminated with *Salmonella*:

- a) during the animal life as a result of septic salmonellosis
- b) as a result of non-compliant transport regulations
- c) as a result of non-compliant storage regulations
- d) as a result of non-compliant processing regulations
- e) only as a result of non-compliant processing regulations

375. What measures are necessary to take in case of epidemic eruptions of salmonellosis in boarding schools:

- a) to hospitalize all sick persons
- b) to hospitalize sick persons depending on clinical indications
- c) to administer antibiotics as a prophylactic measure to all pupils
- d) to investigate all kitchen workers bacteriologically
- e) to investigate all persons that consume food from the kitchen bacteriologically and clinically

376. In salmonellosis anti-epidemic measures include:

- a) to report the case or carriage to the Public Health Center within 72 hours
- b) strict isolation of all sick persons in the hospital
- c) isolation of sick or suspected persons according to clinical and epidemiological indications
- d) treatment of the patients according to approved protocols
- e) discharge from the hospital after clinical convalescence and performing laboratory tests according to existing scheme

377. Prevention and control of salmonellosis include:

- a) measures to neutralize the mechanism and way of transmission
- b) compliance with transportation, storage, and production conditions of food, especially food of animal origin
- c) to prohibit the sale of raw milk and other food products at non-licensed outlets
- d) vaccination of the population in accordance with the National Immunization Program
- e) promotion of healthy habits and health education

378. Pathogenic agents of shigellosis are the following species:

- a) *Sh.dysenteriae*
- b) *S.enteritidis*
- c) *Sh.flexneri*
- d) *S.virhov*
- e) *Sh.sonnei*

379. Through which way may *Shigella* be transmitted:

- a) waterborne

- b) parenteral
- c) foodborne
- d) habitual contact
- e) transplacental

380. Hospitalization of sick persons with shigellosis is accomplished according to the following indications:

- a) clinical
- b) epidemiological
- c) clinical and epidemiological
- d) mandatory to hospitalize all sick persons
- e) all sick persons are treated at home

381. In shigellosis prophylactic measures include:

- a) early detection of mild form of the disease in sick persons
- b) interrupting the ways of transmission
- c) immunization of the high-risk groups
- d) supplying the population with safe drinking water and food
- e) health education

382. Choose the persons infected with mild form of shigellosis caused by *Sh.sonnei* that require mandatory hospitalization:

- a) an engineer that lives in his own room sharing facilities with other residents in the building
- b) a kindergarten nanny
- c) a machinist at a dairy production factory
- d) an employee at a multi-service facility
- e) a student at a technical university

383. What is specific to foodborne epidemic eruptions caused by the genus *Shigella* microorganisms?

- a) predominance of clinical forms with mild evolution and medium severity
- b) identification of the same species of the pathogenic agent in all patients
- c) persons that were in contact with the source of infection are predominantly affected
- d) recording of epidemic eruptions predominantly in places where children gather
- e) high morbidity is recorded through other acute diarrheal diseases in pre-eruption period

384. The true statements about shigellosis are:

- a) *Sh.boydii* produces exotoxin
- b) serological test may confirm the laboratory diagnosis
- c) children are more susceptible to it
- d) some convalescent persons can be discharged without laboratory tests
- e) an effective vaccine is not available

385. The true statements about shigellosis are:

- a) discharge from the hospital can be done following any scheme
- b) morbidity due to *Sh.sonnei* is common in the Republic of Moldova
- c) pathogenic agent has moderate resistance and varies in the environment
- d) transmission of *Sh.flexneri* is predominantly waterborne
- e) medical surveillance of persons that were in contact with a sick person lasts for 5 days

386. The following statements about shigellosis are true:

- a) it is a sapronosis
- b) it is widespread
- c) there are no remedies for specific prophylaxis

- d) *Sh.dysenteriae* produces exotoxin
- e) the contagious period starts between the end of the first week and the beginning of the second week of clinical manifestations

387. The following statements about shigellosis are true:

- a) the transmission of *Sh.sonnei* is predominantly waterborne
- b) animal carriers can be the sources of infection
- c) transmission of *Sh.flexneri* is predominantly foodborne
- d) effective vaccines are not available
- e) seasonality is characteristic of it

388. Choose the persons that are subject to medical postdischarge care after shigellosis:

- a) all preschool age children
- b) children that attend kindergarten
- c) pupils
- d) personnel of catering facilities
- e) all convalescent persons regardless of age and profession

389. Pathogenic agents of escherichiosis belong to the following groups:

- a) enterohemolytic *Escherichia coli*
- b) enteropathogenic *Escherichia coli*
- c) enteroinvasive *Escherichia coli*
- d) enterotoxigenic *Escherichia coli*
- e) enterolabil *Escherichia coli*

390. Choose the groups of children with high receptivity to enteropathogenic *E.coli*:

- a) newborns
- b) premature infants and children suffering from malnutrition
- c) children from preschool institutions
- d) breastfed infants
- e) children from institutions with special regime

391. The following statements about escherichiosis are true:

- a) the sources of infection are domestic animals (ovine)
- b) it is an anthroponosis that affects children in majority of cases
- c) seasonality is characteristic of it
- d) the incubation period is 1-7 days
- e) the mechanism of transmission is contact

392. The following statements about escherichiosis are true:

- a) the causing agent is *I.enterocolitica* or *I.pseudotuberculosis*
- b) transmission factors of infection are vegetables and fruit that are not properly washed
- c) the transmission of infection occurs when mothers and nurses contaminate hands while caring for and feeding the child
- d) sick persons are contagious during all periods of the disease
- e) the care of *Escherichia coli* carriers is the basic preventive measure of the infection

393. Choose the persons with the diagnosis of escherichiosis that require hospitalization:

- a) children aged 0-14 years
- b) patients with severe form of the disease
- c) all children regardless of the form of the disease
- d) persons working in food-related industries
- e) children from kindergartens, boarding schools, and orphanages

394. In enteropathogenic escherichiosis the sources of pathogenic agents can be:

- a) a sick person with typical form of the disease
- b) a sick person with an inapparent clinical manifestation of the disease
- c) carrier
- d) animal carrier
- e) sick animal

395. The following statements about enteropathogenic escherichiosis are true:

- a) the main way of transmission is waterborne
- b) the source of infection may be the carrier
- c) clinical manifestations vary depending on the type of pathogenic agent
- d) children in their first year of life are most frequently affected
- e) enteroinvasive *Escherichia coli* may cause clinical manifestations similar to shigellosis

396. Cholera can be caused by:

- a) *V.cholerae* biovar cholera (classical) serological group O1
- b) *V.parahaemoliticus*
- c) *V.cholerae* biovar El-Tor serological group O1
- d) *V.cholerae* 0139 “Bengal” serological group O1
- e) NAG vibrios

397. In Campylobacteriosis the sources of infection are:

- a) chicken eggs
- b) large and small cattle
- c) birds
- d) sick humans
- e) dogs and cats

398. In Campylobacteriosis the factors of transmission are:

- a) meat
- b) meat products
- c) birds
- d) sick humans and carriers
- e) chicken meat

399. The following statements about hepatitis A are true:

- a) it is caused by enterovirus
- b) parenteral way of transmission is possible
- c) autumn/winter seasonality is characteristic of it
- d) babies aged 0-1 year are affected
- e) surveillance of the persons that were in contact lasts during the maximum incubation period from the moment of isolation of the source of pathogenic agent

400. The following statements about hepatitis A are true:

- a) the high-risk age group varies in different countries
- b) an effective vaccine is already available
- c) disinfection has an important role
- d) immunoglobulin prophylaxis is not rationally applicable
- e) the sick person becomes contagious with the appearance of jaundice

401. In hepatitis A the ways of transmission are:

- a) direct contact
- b) foodborne

- c) waterborne
- d) indirect contact
- e) habitual contact

402. In hepatitis A the sources of infection are:

- a) a sick person with inapparent form
- b) a sick person with acute form
- c) re-convalescent carriers
- d) immune carriers
- e) a sick person in prodromal period

403. Vaccines are available for which of the following hepatitis A:

- a) HAV
- b) HBV
- c) HBV and HDV
- d) HCV
- e) HEV

404. Polio can be transmitted through the following mechanisms:

- a) fecal-oral
- b) respiratory
- c) transmissive
- d) contact
- e) transplacental

405. In polio the sources of infection are:

- a) a sick person
- b) carriers of the virus
- c) sick animals
- d) animal carriers of the virus
- e) human and animal carriers of the virus

406. The most common sources of polio infection are:

- a) sick animals
- b) animal carriers of the virus
- c) human and animal carriers of the virus
- d) sick persons with mild form of the disease
- e) sick persons with inapparent form of the disease

407. The following ways of transmission are characteristic of polio:

- a) foodborne
- b) airborne
- c) habitual contact
- d) transmissive
- e) waterborne

408. The following statements about polio are true:

- a) three types of viruses exist
- b) live and inactivated vaccines are used as specific prophylaxis
- c) polio is considered eradicated in the Republic of Moldova
- d) emergency prophylaxis is performed with antibiotics
- e) paralytic forms of the disease prevail after infection

409. The following statements about polio are true:

- a) a sick person is the main source of infection for all forms of the disease
- b) it is transmitted through two mechanisms: fecal-oral and respiratory
- c) the incubation period is 5-35 days
- d) patients with polio are hospitalized for 40-42 days
- e) live attenuated and inactivated vaccines are used as immunoprophylaxis

410. Enteroviruses are pathogenic agents for:

- a) HAV
- b) HCV
- c) polio
- d) enteritidis caused by *ECHO* viruses
- e) enteritidis caused by *Coxsackie A* and *B*

411. The following statements are true in case of infections caused by viruses *Coxsackie A* and *B*:

- a) the sources of infection can be both sick and healthy persons
- b) the sources of infection can be sick persons with typical and atypical forms
- c) the infections have winter-spring seasonality
- d) specific prophylaxis is not available
- e) adults are more frequently affected

412. The following statements about botulism are true:

- a) it is a sapronosis
- b) terminal disinfection is mandatory in outbreaks
- c) the sick person is isolated according to epidemiological indications
- d) one of the main prophylactic methods is thermal processing of food before consumption
- e) *Cl.botulinum* may change the organoleptic properties of food products

413. Food poisoning with enterotoxigenic staphylococcus is characterized by:

- a) the absence of seasonality
- b) the absence of secondary cases
- c) very high attack rate
- d) young adults are primarily affected
- e) epidemic eruptions have a dramatic onset

414. In food poisoning with enterotoxigenic staphylococcus the sources of infection are:

- a) sick persons with staphylococcal skin infections
- b) nasopharyngeal carriers of staphylococci
- c) sick animals (cattle)
- d) animal carriers of staphylococci
- e) dairy products

415. In food poisoning with enterotoxigenic staphylococcus the factors of transmission are:

- a) milk and milk products
- b) bakery products
- c) above-ground water
- d) meat and meat products
- e) potato salads that may contain eggs, mayonnaise, seafood, etc.

416. In food poisoning with enterotoxigenic staphylococcus the most important sources of infection are:

- a) nasopharyngeal carriers
- b) animal carriers of staphylococci
- c) sick animals (cattle)
- d) sick persons with gastrointestinal and upper respiratory infections

e) sick persons with skin infections (boils, felon, eczema, infected skin abrasions)

417. In rotaviral infections the main sources of infection are:

- a) sick persons
- b) healthy carriers
- c) convalescent carriers
- d) domestic animals
- e) aquatic birds

418. Choose the intestinal infections that are included in the vaccination calendar:

- a) shigellosis
- b) rotaviral infections
- c) polio
- d) typhoid fever
- e) salmonellosis

419. Planned vaccination against rotaviral infections in children is carried out at the age of:

- a) 2 months
- b) 4 months
- c) 6 months
- d) 12 months
- e) 24 months

420. Choose the prophylactic measures applied in rotaviral infections:

- a) disinfection
- b) common remedies
- c) specific prophylaxis
- d) sterilization
- e) disinsection and deratization

1.2.2 RESPIRATORY INFECTIONS

Simple choice

421. Choose the population group with a high risk to develop respiratory infectious diseases:

- a) children
- b) teenagers
- c) aged people
- d) males
- e) females

422. Seasonal autumn-winter recording of respiratory infections is determined by:

- a) crowding of people during the cold period of the year
- b) modification of typical characteristics of pathogens
- c) reduction of the immune population
- d) increase of immune population
- e) intensification of the migration phenomenon in population

423. Choose the most efficient measure in combating respiratory infections:

- a) early isolation of the source of pathogens
- b) disinfection applied in epidemic foci

- c) disinfection in public locations
- d) specific prophylaxis
- e) prophylactic disinfection

424. What does the notion "controlled infectious diseases" mean?

- a) possibility to be identified as soon as possible
- b) possibility for early identification of carriers
- c) capability for urgent isolation of the source
- d) ability to apply current and terminal disinfection in the hotbed
- e) infectious disease with the morbidity influenced by population immunization

425. Choose the main feature of the epidemic process in controlled diseases:

- a) preponderant record of the disease in children
- b) preponderant record of the disease in aged population
- c) correlation between the level of population morbidity and immunization
- d) seasonal increasing of morbidity
- e) morbidity increase in the warm period of the year

426. Currently, in diphtheria the main source of infection is:

- a) the diseased
- b) immune carrier
- c) chronic recovery carrier
- d) transit carrier
- e) acute recovery carrier

427. In diphtheria the protective titer of antibodies is:

- a) 0.001 AU
- b) 0.003 AU
- c) 0.03 AU
- d) 0.1 AU
- e) 0.3 AU

428. The duration of medical supervision of contact people in diphtheria is:

- a) 3 days
- b) 7 days
- c) 10 days
- d) 14 days
- e) 21 days

429. In diphtheria the duration of communicable period is:

- a) up to two weeks
- b) from few weeks up to 4-6 months
- c) up to one year
- d) life-long
- e) few years

430. What action is to be taken in case of the record of the healthy carrier of toxigenic *Corynebacterium*?

- a) isolation of the carrier at home
- b) sanitation of the carrier at home provided by the family doctor
- c) isolation of the carrier and his sanitation
- d) the isolation is not indicated
- e) measures are not applicable, because of less of contagiousity of the source

431. In the diphtheria hotbed, terminal disinfection...

- a) is indicated
- b) is not indicated
- c) is applied according to epidemiological indications
- d) is applied according to clinical indications
- e) is applied according to clinical and epidemiological indications

432. Choose the group of population at high risk for diphtheria:

- a) young children
- b) adult population, involved in the service of the population
- c) teenagers
- d) children attending kindergartens
- e) the unvaccinated population regardless of age and activity

433. During the last 4 years there have been no cases of diphtheria in the population of C. According to this it is important to:

- a) continue vaccination of population at risk of infection only
- b) vaccinate just children
- c) interrupt planned vaccination of population
- d) vaccinate just adult population according to vaccination schedule
- e) apply vaccination of population according to the National Program of Immunization

434. In diphtheria the incubation period lasts:

- a) 1-2 days
- b) 1-7 days
- c) 2-10 days
- d) 8-17 days
- e) 3-21 days

435. Maintenance of epidemic process of diphtheria despite of the record of sporadic morbidity is due to:

- a) the existence of patients with typical evolution of diphtheria in population
- b) patients in recovery
- c) the presence of lysogenic *Corynebacterium* carriers in the population
- d) the persistence of carriers of atoxigenic *Corynebacterium*
- e) the existence of patients with atypical evolution of diphtheria in population

436. Clinical manifestations of diphtheria are developed in the population:

- a) with a low level of antitoxic immunity
- b) with a low level of antimicrobial immunity
- c) with a high level of antitoxic immunity but in case of decrease of general resistance
- d) with decrease of the antiviral immunity
- e) with a high level of antimicrobial immunity

437. Toxigenic *Corynebacterium* carriage is the result of:

- a) antitoxic immunity in the lack of antimicrobial immunity
- b) antimicrobial immunity in the lack of antitoxic immunity
- c) decrease of protective level of antitoxic immunity
- d) simultaneous development of antitoxic and antimicrobial immunity
- e) decrease of general immunity of the organism

438. In whooping cough the incubation period lasts:

- a) 1 – 6 days
- b) 3 – 14 days
- c) 7 – 21 days
- d) 14 – 28 days
- e) 15 – 45 days

439. The patient with whooping cough is contagious:

- a) at the end of the incubation period
- b) from prodromal period to the first two weeks of paroxysmal stage
- c) the last two weeks of paroxysmal stage
- d) during the whole paroxysmal stage
- e) in recovery

440. Choose the most effective preventive measure in combating whooping cough morbidity:

- a) terminal disinfection
- b) patient treatment
- c) early detection and isolation of the diseased
- d) post-exposure prophylaxis
- e) prophylactic disinfection

441. In combating whooping cough morbidity the main preventive measure is:

- a) detection and isolation of the diseased
- b) prophylactic disinfection
- c) immunization
- d) focal disinfection
- e) disinsection

442. Postinfectious immunity to whooping cough lasts:

- a) 5 years
- b) 10 years
- c) 15 years
- d) 20 years

e) life-long

443. The causative agent of whooping cough may be transmitted:

- a) by solid aerosols
- b) by liquid aerosols
- c) in habitual relationships
- d) through direct contact
- e) through indirect contact

444. Choose the population group vaccinated against whooping cough:

- a) children aged up to two months
- b) children aged up to three years
- c) 5-year-old children
- d) children aged up to ten years
- e) all children and adults

445. Which of the following must be used for the post-exposure prophylaxis of whooping cough:

- a) DTP vaccine
- b) bacteriophage
- c) antitoxin immunoglobulin
- d) antimicrobial medications
- e) immune serum

446. Choose the group of population at high risk for diphtheria:

- a) new-born children
- b) children aged up to 2-3
- c) teenagers
- d) adult population and children attending kindergartens
- e) unvaccinated population regardless of age and their activity

447. The patient with rubella is contagious:

- a) 4 days before a rash appears and 4 days of rash
- b) 7 days before a rash appears and 7 days of rash
- c) from the appearance of skin rash to its disappearance
- d) 10 days before a rash appears and 10 days of rash
- e) from the last days of the incubation stage and during the clinical manifestations stage

448. The correct statement about rubella is:

- a) the disease may become chronic
- b) vaccination is not the most efficient preventive measure
- c) congenital malformations may appear as a result of the disease
- d) the disease is preponderantly recorded among pregnant women
- e) the disease is preponderantly recorded among adult population

449. In rubella the duration of incubation stage is:

- a) 1 – 3 days

- b) 9 – 15 days
- c) 7 – 24 days
- d) 8 – 21 days
- e) 3 – 14 days

450. Complete the statement: In rubella the postinfectious immunity...

- a) is for a short period of time
- b) has a long duration
- c) is life-long
- d) is nonspecific
- e) depends on the severity of the disease

451. Which of the following communicable disease groups does rubella belong to?

- a) anthroponosis with viral etiology
- b) zooanthroponosis with viral etiology
- c) sapronosis with viral etiology
- d) sapronosis with bacterial etiology
- e) anthroponosis with bacterial etiology

452. In measles immunoglobulin is administrated:

- a) for immunization of population
- b) for revaccination of population
- c) as a post-exposure measure to contact children with the diseased
- d) for treatment
- e) to reduce the complications after administration of the vaccine against measles

453. The diseased with measles is contagious:

- a) 3-4 days before a rash appears and 4 days of rash
- b) 7 days before a rash appears and 7 days of rash
- c) from the first days of rash and till their involution
- d) the whole period of skin rash
- e) the whole period of skin rash and recovery

454. Maximum duration of the incubation period in persons vaccinated against measles is:

- a) 11 days
- b) 14 days
- c) 17 days
- d) 20 days
- e) 21 days

455. In measles the main combating measure is:

- a) isolation of the diseased with measles
- b) terminal disinfection in the hotbed
- c) current disinfection in the hotbed
- d) immunization of the population
- e) the use of immunoglobulin use in the hotbed

456. According to the WHO recommendations, the coverage of 2-year-old children with vaccine against measles must be:

- a) 50%
- b) 60%
- c) 75%
- d) 80%
- e) 95%

457. The protective titre of antibodies after vaccination against measles constitutes:

- a) 1:4
- b) 1:10
- c) 1:20
- d) 1:40
- e) 1:60

458. What is the period between the administrations of vaccine and immunoglobulin in measles?

- a) 10 days
- b) 2 weeks
- c) one month
- d) 1.5 month
- e) 3 months

459. In measles hotbed the terminal disinfection is:

- a) not necessary to be applied
- b) a mandatory measure
- c) performed according to epidemiological indications
- d) a very important measure
- e) the main anti-epidemic measure

460. Hospitalization of the diseased with measles:

- a) is carried out according to epidemiological indications
- b) is carried out according to clinical indications
- c) is an obligatory measure applied for all patients
- d) is not indicated
- e) is carried out according to clinical and epidemiological indications

461. What is the action applied to the patient after measles?

- a) all patients after the disease are monitored
- b) none of the patients after the disease is supervised
- c) patients are monitored as a role
- d) all patients after the disease are monitored throughout their lives
- e) all patients after the disease are monitored for thirty days

462. Immunization against measles of a newborn of the seronegative women:

- a) is carried out at the age of 8 months

- b) is carried out according to the National Program of Immunization, regardless mother's status
- c) is not is carried out
- d) is carried out by concomitant administration of vaccine and immunoglobulin
- e) is carried out through the administration of immune serum

463. Choose the group of persons to be monitored after a contact with patient with measles:

- a) children, vaccinated against measles
- b) persons who suffered measles before
- c) unvaccinated children, who didn't suffered measles
- d) children up to the age of 1
- e) children, born by sero-positive mothers

464. Choose the persons to be isolated in the kindergarten, in case of the record of a measles outbreak:

- a) a 7-year-old child, who suffered measles before
- b) a 5-year-old child, who did not suffer measles before, vaccinated at the age of one year and a half
- c) a 3-year-old child, who did not suffer measles and unvaccinated before
- d) all children and teachers of the kindergarten
- e) the canteen staff

465. Hospitalization of the diseased with mumps is done:

- a) compulsory, even in the case of suspicion of the disease
- b) according to clinical and epidemiological indications
- c) according to epidemiological indications
- d) according to the laboratory test results
- e) on an urgent basis

466. Choose the main anti-epidemic measure in mumps:

- a) early detection and isolation of the patient
- b) restrictive measures in children's institutions
- c) specific prophylaxis
- d) post-exposure prophylaxis
- e) nonspecific prevention

467. Planned vaccination against mumps:

- a) is carried out at the age of 12 months
- b) starts at the age of 2 months
- c) is carried out at the age of 22-24 months
- d) is carried out according to the lab test results evaluating antibodies titre level
- e) is not applied in the Republic of Moldova

468. In mumps the duration of incubation stage is:

- a) 7 – 12 days
- b) 11 – 21 days
- c) 4 – 16 days
- d) 1 – 6 days

e) 8 – 17 days

469. In mumps the source of infection is:

- a) the diseased
- b) a healthy carrier
- c) an immune carrier
- d) a patient in recovery stage
- e) a transit carrier

470. The diseased with mumps is isolated at home for:

- a) 4 days
- b) 6 days
- c) 9 days
- d) 12 days
- e) 21 days

471. The mumps patient is more contagious:

- a) in the incubation period
- b) the last 2-3 days of incubation and 6 days of clinical manifestation
- c) in recovery
- d) during the whole duration of incubation and prodromal periods
- e) since the development of clinical manifestations

472. The hospitalization of the diseased with mumps:

- a) is obligatory
- b) as a rule, is not indicated
- c) is in the department of otorhinolaryngology
- d) is compulsory in case of adult patients, because of the high risk of complications
- e) is carried out according to clinical and epidemiological indications

473. Persons from a mumps hotbed, who did not suffer mumps and were not vaccinated before, but had a contact with the diseased are monitored:

- a) 14 days
- b) 9 days
- c) from the 10th to the 21st day after the contact
- d) 18 days
- e) 21 days

474. Pandemic spread is more common for:

- a) influenza
- b) measles
- c) chickenpox
- d) mumps
- e) diphtheria

475. In influenza the duration of incubation period is:

- a) 1 – 7 days
- b) from two hours to 3 days
- c) 3 – 5 days
- d) 1 – 10 days

e) 3 – 14 days

476. In influenza the source of infection is:

- a) the diseased in clinical manifestation period
- b) the diseased in recovery period
- c) domestic animals, as a reservoir of influenza virus
- d) birds as a reservoir of influenza virus
- e) healthy carriers

477. In the pre-epidemic period of influenza it is more rational to administer:

- a) vaccine
- b) human interferon
- c) remantadine
- d) Vit C
- e) immunoglobulin

478. Choose the population group, which is vaccinated against influenza in the first place:

- a) population over the age of 50 years
- b) patients with chronic cardiovascular , respiratory, endocrine diseases
- c) newborns
- d) population with II (A) and IV (AB) blood group
- e) family members of the diseased with flu

479. The patient with influenza is hospitalized:

- a) compulsory
- b) according to clinical and epidemiological indications
- c) according to his social status
- d) according to his occupation
- e) according to his age

480. Choose the population group which suffers from chickenpox more frequently than others:

- a) newborns
- b) infants
- c) children aged from 2 to 8
- d) teenagers
- e) adult population

481. In chickenpox the duration of incubation period is:

- a) 4 – 12 days
- b) 6 – 12 days
- c) 11 – 17 days
- d) 21 – 28 days
- e) 15 – 45 days

482. Choose the period when the chickenpox patient is contagious:

- a) from the last days of the incubation period, rash period up to the 5th day after the last rash onset

- b) in the incubation period only
- c) the whole incubation period until the first days of rash
- d) in the rash period only
- e) from the first days of rash until the crusts fall out

483. The patient with chickenpox is hospitalized:

- a) compulsory
- b) according to clinical indications
- c) according to epidemiological indications
- d) according to clinical and epidemiological indications
- e) hospitalization is not carried out

484. In adenoviral infection the duration of incubation period is:

- a) 1 – 6 days
- b) 4 – 14 days
- c) 5 – 28 days
- d) 15 – 45 days
- e) 45 – 180 days

485. In adenoviral infection the source of infection is:

- a) the diseased or/and carrier
- b) domestic animals
- c) synanthropic animals
- d) xenanthropic animals
- e) both humans and animals

486. Mononucleosis is:

- a) a bacterial infection
- b) a viral infection
- c) a protozoan disease
- d) a disease caused by arthropods
- e) a fungus pathology

487. The diseased with mononucleosis is contagious in:

- a) the incubation period
- b) in the last days of incubation period and four more days of the clinical manifestations
- c) from the first days of incubation period and during the whole period of clinical manifestations
- d) only in the incubation period
- e) from the first days of clinical manifestations and during the recovery

488. In mononucleosis the incubation period is:

- a) 1-6 days
- b) 5-10 days
- c) 10-15 days
- d) 4-45 days
- e) 45-180 days

489. Meningococcal infection is:

- a) an anthroponosal infection with viral etiology
- b) an anthroponosal infection with bacterial etiology
- c) a zooanthroponosal infection with bacterial etiology
- d) a zooanthroponosal infection with viral etiology
- e) a sapronosis

490. The population group at high risk of contamination with meningococcal infection is:

- a) children aged to 6 months
- b) children aged to 5
- c) children from 7 months to 14 years
- d) teenagers
- e) adults

491. The route of transmission of meningococcal infection is:

- a) by liquid aerosols
- b) by solid aerosols
- c) by habitual contact
- d) by direct contact
- e) by indirect contact

492. The main source of causative agents of meningococcal infection is:

- a) a healthy carrier
- b) a patient with meningococcal septicaemia
- c) a patient with meningococcal nasopharyngitis
- d) a recovery carrier
- e) an immune carrier

493. In meningococcal infection the incubation period is:

- a) 0-2 hours
- b) 1-6 days
- c) 2-10 days
- d) 3-14 days
- e) 8-17 days

494. The patient with meningococcal infection is more contagious in the:

- a) prodromal period
- b) incubation period
- c) in recovery
- d) catarrhal stage
- e) incubation period and catarrhal stage

495. After a contact with the patient with meningococcal infection people are to be under medical supervision during:

- a) 7 days
- b) 10 days

- c) 14 days
- d) 21 days
- e) 35 days

496. Chemical disinfection is not an obligatory measure to be undertaken in the outbreak of meningococcal infection because of:

- a) high sensibility of the causative agent to the action of environmental factors
- b) low resistance of the causative agent in the environment
- c) high resistance to the action of chemicals and disinfectants
- d) the lack of the pathogen in the environment
- e) high price of disinfection

497. After a contact with the patient with scarlet fever people are to be under medical supervision during:

- a) 3 days
- b) 7 days
- c) 12 days
- d) 21 days
- e) 35 days

498. The causative agent of scarlet fever is:

- a) Staphylococcus aureus
- b) Streptococcus pyogenes
- c) Staphylococcus epidermidis
- d) Streptococcus viridians
- e) Streptococcus pneumoniae

499. In scarlet fever the maximal incubation period is:

- a) 3 days
- b) 7 days
- c) 12 days
- d) 17 days
- e) 21 days

500. The patient with scarlet fever is more contagious:

- a) in the first 7-10 days of clinical manifestations
- b) during 22 days of clinical manifestations
- c) only in the incubation period
- d) during clinical manifestations and recovery
- e) only in recovery

501. When can children, attending kindergarten, and pupils of the first and second grades who suffered scarlet fever, be admitted to childrens institutions:

- a) after a clinical recovery
- b) in 12 days after clinical recovery
- c) in 22 days after clinical recovery
- d) in case of negative results of the bacteriological test for streptococci
- e) after recovery and presentation of the certificate about treatment with antibiotics

502. The patient who suffered scarlet fever is discharged from the hospital:

- a) after 2 weeks of the occurrence of the disease
- b) after clinical recovery, but not earlier than the 10th day after the onset of the disease
- c) after clinical recovery and one negative result of bacteriological test
- d) after clinical recovery regardless the result of the bacteriological test
- e) after 22 days of the occurrence of the disease

503. What is the duration of medical surveillance of contact people from the scarlet fever focus?

- a) 7 days
- b) 12 days
- c) 17 days
- d) 21 days
- e) 35 days

504. In tuberculosis the main preventive measure is:

- a) immunization
- b) disinfection
- c) disinsection
- d) deratization
- e) hygienic, social and economic assistance

505. The National Programme of Immunization recommends vaccination against tuberculosis with the:

- a) administration of one dose of vaccine
- b) vaccination in four steps
- c) vaccination and administration of one buster dose
- d) vaccination and administration of two buster doses
- e) administration of buster doses each ten years

506. Chose the concentration of the solution of chlorinated lime, recommended to be used for disinfection in the tuberculosis focus:

- a) 1 %
- b) 3 %
- c) 5 %
- d) 10 %
- e) 20 %

507. Choose the main anti-epidemic measure to be taken in the tuberculosis focus:

- a) disinfection in the hotbed
- b) immunoprophylaxis
- c) treatment of the patient
- d) deratization
- e) disinsection

508. Is the patient, diagnosed with tuberculosis and HIV contagious?

- a) not at all
- b) yes, even if the Xray examination does not show any changes
- c) it depends on the immune status of the patient
- d) it depends on the stage of HIV infection
- e) no data are available

509. In patients with tuberculosis hypersensitivity occurs after a contact with the diseased:

- a) in the period of 24 hours
- b) in 2-3 days
- c) in 1-2 weeks
- d) in 4-6 weeks after infection
- e) in 2 months

510. Choose the most efficient preventive measure of tuberculosis:

- a) early isolation and treatment of patients with pulmonary form of tuberculosis
- b) selective vaccination of newborns against tuberculosis
- c) vaccination of all newborns
- d) tuberculin tests of newborns
- e) tuberculin testing of the population regardless of age

Multiple choice

511. Choose the persons who must be vaccinated in the diphtheria focus after the contact with diphtheria diseased:

- a) people who were not vaccinated against diphtheria
- b) persons who are to be vaccinated or revaccinated according to the vaccination schedule,
- c) adults who were vaccinated more than 10 years ago
- d) people with antibodies below 0.03 / ml AU
- e) persons with diphtheria antibodies above 1.0 / ml AU

512. Choose the population to be tested for C. dyphtheria:

- a) patient with lacunae angina
- b) patient with pneumonia on the admission to the hospital
- c) patient with paratonsillar abscess
- d) children before tonsillectomy
- e) people who were in contact with a diphtheria patient

513. Choose the correct statements about diphtheria:

- a) carriers of C.diphtheriae require hospitalization
- b) serum is given only for the treatment
- c) diphtheria vaccine is used in emergency prophylaxis
- d) infection occurs only in children
- e) the contagious period may take up to several months

514. The patient with diphtheria presents a danger as a source of infection:

- a) from the last day of the incubation period

- b) from the first clinical signs
- c) the entire period of clinical manifestations
- d) in the period of convalescence
- e) beginning with the second week of clinical manifestations

515. The correct statements about diphtheria are:

- a) the vaccination induces the formation of passive antitoxic immunity
- b) the revaccination is carried out until the age of 40
- c) the protective titre is 0.03 IU / ml
- d) the main source of infection is immune carriers
- e) terminal disinfection is strictly necessary in the focus

516. The correct statements about diphtheria are:

- a) it is an anthroponosis
- b) the protective titre is 0.003 IU / ml
- c) the primary source of infection is the immune carrier
- d) the minimum incubation period is few hours
- e) specific prophylaxis is done with anatoxin

517. The transmission of the causative agent of diphtheria is possible by:

- a) liquid aerosols
- b) solid aerosols
- c) habitual contact
- d) food products
- e) hematofagoes vectors

518. The correct statements about diphtheria are:

- a) the carrier is the main source of infection
- b) the postvaccinal immunity is protective for many years
- c) diphtheria serum is used in emergency prophylaxis
- d) receptivity does not correlate with age
- e) morbidity is determined by the quality of immunoprevention

519. Choose the persons that are subject to bacteriological investigations according to epidemiological indications:

- a) persons living in areas with high diphtheria morbidity
- b) contact persons from the diphtheria focus
- c) persons that were in contact with the carrier of toxigenic corynebacterium
- d) persons that were in contact with a carrier of atoxigenic corynebacterium
- e) patients with tonsillitis

520. Choose the categories of patients who are subject to bacteriological investigations to detect pathogens of diphtheria:

- a) patients with otitis
- b) patients with tonsillitis
- c) patients with paratonsillar abscess
- d) patients with laryngotracheitis

e) patients discharged from the ORL department

521. The sources of diphtheria infection are:

- a) the sick person during the incubation period
- b) the immune carrier of toxigenic corynebacterium
- c) the carrier of atoxigenic corynebacterium
- d) the convalescent carrier
- e) the sick person during the period of clinical manifestations

522. Choose the measures that the family doctor is required to undertake for the early detection of patients with diphtheria:

- a) clinical examination of all patients with suspected diphtheria
- b) bacteriological examination of patients with angina and pharyngeal deposits
- c) active surveillance of patients with tonsillitis
- d) serological test by DRHA in patient with suspected diphtheria
- e) virological test of patient with suspected diphtheria

523. The correct statements about meningococcal infection are:

- a) the pathogen is not resistant in the environment
- b) the source of infection may be the patient with acute meningococcal nasopharyngitis
- c) the vaccination is carried out on schedule
- d) monitoring of the contact persons is carried out during 21 days
- e) the main diagnostic method is bacteriological

524. Indicators of worsening epidemiological situation in meningococcal infection are:

- a) increasing morbidity through generalized forms of meningococcal infection among adults and adolescents
- b) outbreaks with multiple cases of infection and carriage state
- c) increased meningococcal infection morbidity compared to previous years
- d) increased number of cases in children under the age of 3
- e) increased number of cases of meningococcal infection caused by a certain strain of meningococci

525. The following statements about meningococcal infection are true:

- a) the main source of infection is the carrier
- b) the mechanism of transmission of the infection is contact
- c) the incubation period is 2-10 days
- d) the main method to identify carriers and the sick is bacteriological
- e) in the Republic of Moldova, the main prophylactic measure is vaccination according to the National Program of Immunization

526. In meningococcal disease the main sources of pathogens are:

- a) patients with meningococcal nasopharyngitis
- b) healthy meningococcal carriers
- c) patients with meningococcal meningitis
- d) patients with meningococcal disease
- e) patient in the convalescence period after meningococcal infection

527. Choose the patients that are subject to a compulsory hospitalization in the case of meningococcal infection:

- a) patients with meningitis
- b) patients with nasopharyngitis
- c) patients with meningococcaemia
- d) patients with meningoencephalitis
- e) carriers of meningococcal pathogen

528. Choose the carriers of meningococcal infection that are not to be admitted temporarily to the work:

- a) pre-school teachers
- b) medical workers in the infectious disease department
- c) students of vocational school
- d) employees of orphanages
- e) nurses of the elderly people

529. Choose the biological fluids that are collected for the laboratory test in meningococcal infection:

- a) urine
- b) cerebrospinal fluid
- c) rhinopharyngeal secretions
- d) sputum
- e) blood

530. Choose the anti-epidemic measures carried out for the contact persons in the focus of meningococcal infection:

- a) otorhinolaryngological examination
- b) serological examination
- c) mandatory thermometry
- d) immunoprophylaxis
- e) post-exposure prophylaxis with administration of immunoglobulin

531. The following anti-epidemic measures are required in the meningococcal infection focus:

- a) medical surveillance of contact persons during 10 days
- b) bacteriological investigation of contact persons
- c) hospitalization of the patients with nasopharyngitis according to epidemiological indications
- d) treatment of meningococcal carriers
- e) post-exposure prophylaxis with vaccine

532. Choose the correct statements about whooping cough:

- a) the vaccines are ineffective
- b) it mainly affects young children
- c) patients are treated at home
- d) all patients are subject to the isolation for 20-25 days
- e) the main source of infection is the sick

533. Choose the correct statements about whooping cough:

- a) the primary source of whooping cough is the immune carrier
- b) the infection occurs in case of direct contact with the source of pathogen
- c) the incubation period is 1-6 days
- d) it has an autumn-winter seasonality
- e) only one revaccination is foreseen in the National Program of Immunization

534. In a family focus with whooping cough it is necessary to perform:

- a) vaccination of contacts
- b) current disinfection
- c) bacteriological examination of family members
- d) terminal disinfection
- e) medical supervision of the contact persons for 14 days

535. Currently, the epidemic process of whooping cough is characterized by:

- a) sporadic morbidity
- b) cases of disease predominantly are recorded among children
- c) increased number of carriers
- d) the prevalence atypical forms of the disease
- e) morbidity prevailing in adults

536. Choose the body fluids that are tested bacteriologically in whooping cough:

- a) nasal mucus
- b) oropharyngeal mucus
- c) pharyngeal exudate
- d) drops of mucus excreted during coughing
- e) venous blood

537. Choose the correct statements about scarlet fever:

- a) it is an anthroponosis
- b) there is no specific prophylaxis
- c) it has a summer-autumn seasonality
- d) convalescence presents an epidemiological hazard
- e) chemical disinfection is mandatory

538. Hospitalization of the patient with scarlet fever is required:

- a) according to clinical indications
- b) according to epidemiological indications
- c) according to clinical and epidemiological indications
- d) it is not required
- e) it is obligatory

539. Choose the probable sources in scarlet fever:

- a) the sick person with palms and soles desquamating during the convalescence period
- b) the patient with acute rhinitis
- c) the sick with acute otitis as a complication of lacunar tonsillitis
- d) the sick in the period of convalescence after tonsillitis

e) the patient with purulent conjunctivitis

540. The primary prophylaxis of streptococcal infections is provided by:

- a) Centers of Public Health
- b) urological departments
- c) rheumatological dispensaries
- d) Centers of Family Doctors
- e) specialists of ORL departments

541. In scarlet fever focus, the medical supervision of contact persons includes:

- a) examination of the skin
- b) examination of the nasopharynx
- c) determination of liver limits
- d) detection of diuresis
- e) thermometry

542. Choose the contact people from a scarlet fever focus that are to be subject to medical supervision:

- a) a 3-year-old brother who did not suffer scarlet fever
- b) the mother of the patient, that is a laboratory assistant at the milk factory
- c) the father that is a surgeon
- d) a 10-year-old sister with scarlet fever in the anamnesis
- e) the grandfather, employed at the water treatment plant

543. Choose the possible source of infection if scarlet fever was identified after the epidemiological investigation:

- a) a child treated for tonsillitis, with scarring marks on the skin of the palms
- b) a child with acute rhinitis
- c) a child with otitis, that developed as a complication of tonsillitis
- d) a child with lymphadenitis, treated for tonsillitis
- e) a child with chronic pyelonephritis

544. What measures are required to be carried out in a scarlet fever focus?

- a) contact children aged 7-8, are to be supervised during 7 days if the patient is isolated in the hospital
- b) contact children aged 7-8, are to be supervised during 21 days if the patient is treated at home
- c) current disinfection in the focus
- d) immunoglobulin prophylaxis
- e) bicillin prophylaxis

545. What is included in the medical surveillance of contact persons in the scarlet fever focus:

- a) examination of the skin
- b) examination of the nasopharyngeal mucosa
- c) daily thermometry
- d) determining the size of the liver
- e) detection of diuresis

546. Choose the correct statements about tuberculosis:

- a) vaccination contributes to the formation of active immunity
- b) not all patients present an epidemiological danger as a source of infection
- c) the evaluation of the Mantoux reaction is carried out after 24 hours of application
- d) the negative result of the Mantoux reaction indicates the lack of vaccination
- e) the disinfection is carried out with a 5% chloramine solution in the tuberculosis focus

547. The contagiousness of the tuberculosis patient is determined by:

- a) the intensity of pathogen elimination;
- b) the duration of elimination of mycobacteria
- c) the virulence of mycobacteria
- d) the age of the patient
- e) the living conditions

548. The sources of tuberculosis infection caused by *Mycobacterium tuberculosis* are:

- a) a sick bovine with tuberculosis
- b) people with cavitary pulmonary TB
- c) patients with tuberculosis that were not treated and eliminating acid-alcohol-resistant bacilli
- d) patients with chronic tuberculosis
- e) people with latent tuberculosis

549. The infection with *Mycobacterium bovis* may occur:

- a) during the care of sick animals
- b) by the consumption of contaminated and thermally unprocessed animal products
- c) lesions at the mucocutaneous level
- d) after the contact with patients with extrapulmonary forms of tuberculosis
- e) by invasive medical manipulation

550. The active detection of tuberculosis includes:

- a) systematic identification of suspected patients with active tuberculosis from the risk group by tests
- b) identification of cases of tuberculosis in patients with subfebrile fever, coughing for more than 3 months and weight loss of more than 10%
- c) identification of patients with tuberculosis by standard pulmonary radiography carried out annually and mandatory for the general population
- d) detecting new patients in the tuberculosis focus
- e) detection of persons with tuberculosis during the mandatory investigations before the registration of marriage

551. The basic principles to reduce nosocomial transmission of tuberculosis infection are:

- a) placement of patients with tuberculosis in a sunny room with efficient ventilation
- b) placement of patients with tuberculosis together with patients with HIV infection
- c) placement of patients with tuberculosis separately from other patients with respiratory infections
- d) proper ventilation of rooms where sputum is collected, bronchoscopy is carried out and bacteriological laboratories where mycobacteria tuberculosis are handled

e) tuberculin testing of all patients during the admission to the hospital, regardless the diagnosis

552. In tuberculosis the elements of epidemiological surveillance are:

- a) epidemiological analysis of morbidity and lethality from tuberculosis
- b) determining the high-risk groups for tuberculosis
- c) early detection of people affected by tuberculosis
- d) treatment of patients with tuberculosis and their subsequent follow-up
- e) implementation of international programs of tuberculosis prophylaxis and treatment

553. The correct statements about adenovirus infections are:

- a) the source of infection is the sick man or carrier
- b) the virus is excreted with the faeces from the first days of illness to 3 weeks
- c) transmission can take place via fecal-oral mechanism
- d) live attenuated vaccine may be used for the prophylaxis purpose
- e) the main diagnostic method is bacteriological

554. Choose the wrong statements about adenovirus infection:

- a) it is a digestive infection
- b) dairy products and meat are transmission factors
- c) respiratory forms are predominantly recorded in autumn-winter season
- d) the incubation period is 4-14 days
- e) prophylactic methods are similar to those of influenza

555. Choose the correct statements about varicella:

- a) it is an anthroponosis
- b) the transmission mechanism is fecal-oral
- c) it may develop serious complications
- d) vaccination against varicella is not practiced in Moldova
- e) the sporadic type of morbidity is characteristic of the RM

556. The causative agent of varicella is characterized by:

- a) low resistance in the environment
- b) high resistance in the environment
- c) complex antigenic structure
- d) spreading through liquid aerosols
- e) ability to pass through the placental barrier

557. The varicella patient presents hazard as a source of infection:

- a) during the convalescence period
- b) till the last crusts disappear from the patient's body
- c) from the last day of the incubation period
- d) till the 5th day after the last eruptions occurred
- e) only during the onset of rash on the body

558. The correct statements about measles are:

- a) the pathogen is less resistant in the environment
- b) the patient presents a danger as a source of infection during the entire period of clinical

manifestations

- c) laboratory diagnosis is based on bacteriological tests
- d) the incubation period may last up to 21 days
- e) live attenuated vaccine is used for the prophylaxis

559. The correct statements about measles are:

- a) the causative agent is a rhabdovirus
- b) the infection has no chronic evolution
- c) the patient with measles is contagious till the clinical signs appear
- d) the medical surveillance of contact persons start from the 8th day to the 17th day from the contact with the patient
- e) chemical disinfection is not required in the measles focus

560. The correct statements about measles are:

- a) in measles the morbidity correlates with the vaccine coverage of the population
- b) the patient with measles starts to be contagious in the prodromal period
- c) virus carriers are a secondary source of infection
- d) the pathogen is very resistant to low temperatures
- e) chemical disinfection is a mandatory measure

561. The measles pathogen is transmitted by:

- a) liquid aerosols
- b) solid aerosols
- c) habitual contact
- d) direct contact
- e) vertically

562. The correct statements about measles are:

- a) the carrier is one of the sources of infection
- b) the patient with measles is contagious only 8-9 days
- c) inactivated vaccine is used in measles prophylaxis
- d) a 1% chloramine solution is used for the disinfection in the measles focus
- e) in some cases of measles, specific immunoglobulin is administrated for post-exposure prophylaxis

563. The correct statements about measles are:

- a) measles is a vaccine preventable infection
- b) the patient with measles becomes contagious during the incubation period
- c) the sources of measles are convalescent carriers
- d) in measles the incubation period lasts from 8 to 17 days
- e) terminal disinfection is not indicated in the measles focus

564. The patient with measles is contagious in:

- a) the first days of the incubation period
- b) the last days of the incubation period
- c) the prodromal period
- a) 4-5 days of rash onset
- b) the period of convalescence

565. In the measles focus the post-exposure prophylaxis:

- a) is not indicated
- b) means the administration of anti-rabies vaccine
- c) means the administration specific immunoglobulin
- d) means the administration antimicrobial preparations
- e) means the administration of interferon

566. Choose the anti-epidemic measures carried out in case of measles:

- a) isolation of the sick person
- b) terminal disinfection in the outbreak
- c) administration of immunoglobulin to people with contraindications to measles vaccination
- d) vaccination of contact persons
- e) revaccination of individuals with antibody titre of 1:10 and above

567. In rubella the source of pathogens can be:

- a) the patient with manifested clinical forms
- b) the patient with atypical forms
- c) the virus carrier
- d) the person during the convalescence period
- e) a child with congenital rubella

568. The patient with mumps is contagious:

- a) during the incubation period
- b) in the last 2-3 days of the incubation period
- c) up to the 9th day of clinical manifestations
- d) during the convalescence period
- e) during the prodromal period

569. The following statements about mumps are true:

- a) the patient with mumps is isolated for a period of 9-10 days from the onset of the disease or till the disappearance of the clinical signs
- b) post-exposure vaccination may be performed in the mumps focus
- c) the virus is presistant in the environment
- d) in the RM the specific prophylaxis of mumps is carried out on schedule
- e) contact persons are subject to medical supervision during 12 days

570. The transmission of mumps may occur:

- a) through contaminated dishes
- b) by toys contaminated with saliva
- c) transplacentally
- d) by kissing
- e) by hematophaegoes vectors

571. The diagnosis of mumps is based on:

- a) epidemiological anamnesis
- b) typical clinical manifestations
- c) the result of laboratory test of urine and blood

- d) virological test
- e) bacteriological test

572. Specific prophylaxis of mumps includes:

- a) reducing the mumps morbidity among children
- b) reducing the number of post-infectious complications
- c) the elimination of mumps morbidity among children
- d) the elimination of mumps morbidity among adults
- e) maintaining the mumps morbidity exclusively among children

573. The hospitalization of the mumps patient in the infectious disease department is carried out:

- a) mandatory for all patients
- b) upon the indication of the infectious disease specialist
- c) to evaluate the epidemic increase of the disease in the territory
- d) according to clinical indications
- e) according to epidemiological indications

574. In mumps the post-exposure prophylaxis means the administration of:

- a) human immunoglobulin
- b) specific immunoglobulin against mumps
- c) the live vaccine
- d) interferon
- e) antibiotics

575. After the exposure to mumps pathogen, the children aged up to 1 are to be administered:

- a) monovaccine against mumps
- b) specific immunoglobulin
- c) nonspecific human immunoglobulin
- d) interferon
- e) antibiotics

576. The duration of administration and immunobiological products used in post-exposure prophylaxis for children aged over 1, who previously did not suffer mumps and were not immunized are:

- a) 24 hours
- b) 5 days
- c) up to 7 days
- d) human immunoglobulin
- e) mumps vaccine

577. Choose the measures carried out in a focus of mumps:

- a) isolation of the patient
- b) emergency immunoprophylaxis
- c) antibiotic emergency prophylaxis
- d) terminal disinfection
- e) compulsory serological tests of persons in the outbreak

578. Choose the anti-epidemic measures taken in relation to children in collectives who had a contact with the mumps patients and had not been vaccinated before:

- a) medical surveillance for 21 days
- b) thermometry and daily objective exam
- c) the children will be not admitted to the institutions in the period from the 11th to the 21st days after the contact
- d) emergency vaccination within the first 72 hours after the contact
- e) administration of human or specific immunoglobulin

579. Wich of the following persons will be subject to isolation from the mumps focus:

- a) a 6-year-old child, vaccinated against mumps at the age of 2
- b) a 5-year-old child who was not vaccinated and did not suffer mumps
- c) a 7-year-old child who sufferd mumps two years ago, and was not vaccinated
- d) a 11-year-old child, who did not previously suffer mumps and was not vaccinated
- e) a 17-year-old teenager did not suffer mumps, he is vaccinated and revaccinated according to the age and schedule

580. The correct statements about mononucleosis are:

- a) it is a viral infection
- b) it is recorded mainly among young people
- c) the incubation period is 15-45 days
- d) serological reactions are an objective diagnostic criterion
- e) human immunoglobulin is indicated for immunocompromised contacts

581. The sources of infectious mononucleosis may be:

- a) patients with manifested forms of infection
- b) patients with frustrating forms of disease
- c) convalescent carriers
- d) healthy carriers
- e) persons infected with any virus from the Herpesviridae family

582. Choose the possible route of transmission of infectious mononucleosis:

- a) by liquid aerosols
- b) by solid aerosols
- c) by food
- d) by habitual contact
- e) by direct contact

583. Currently, the epidemic process of infectious mononucleosis, is characterized by:

- a) global spread
- b) sporadic morbidity
- c) morbidity with autumn seasonality
- d) children aged up to 7 are most common affected
- e) cases among adolescents prevail

584. The anti-epidemic measures carried out in the focus with infectious mononucleosis are:

- a) hospitalization according to clinical indications
- b) current and final disinfection
- c) medical supervision of contact persons during 20 days

- d) quarantine
- e) selective post-exposure prophylaxis with the administration of human immunoglobulin

585. The correct statements about flu are:

- a) Flu can have a pandemic spreading
- b) certain types of influenza virus are circulating in certain geographical areas
- c) Influenza usually does not cause considerable social and economic impact
- d) Influenza sequelae may be dramatic
- e) the source of the infection is the sick person only

586. The criteria for the discharge of the convalescent patient with influenza from the hospital are:

- a) patient's recovery
- b) after 5 days from general health improvement
- c) regardless of laboratory results
- d) negative laboratory results
- e) microradiography of the lungs

587. Choose the risk groups that require influenza vaccination:

- a) persons aged over 50
- b) persons with chronic diseases of the cardiovascular, respiratory, endocrine systems
- c) newborn children
- d) persons with blood group A and B
- e) family members of the patient with influenza.

588. The features of the influenza A virus are:

- a) it is the most virulent type of influenza virus
- b) the reservoir of virus may be the animal population as well
- c) fast pandemic spread
- d) changes of the viral structure of shift type
- e) lack of sensitivity to common antiviral preparations

589. The features of influenza B virus are:

- a) it is the most virulent type of influenza virus
- b) the reservoir of virus is human population only
- c) epidemic spread
- d) modifications of the viral structure by drift type
- e) lack of sensitivity to common antiviral preparations

590. The features of influenza C virus are:

- a) it is the most virulent type of influenza virus
- b) the reservoir of virus may be both humans and animals
- c) epidemic spread
- d) the stability of the antigenic structure
- e) lack of sensitivity to common antiviral preparations

591. The people with high risk for pandemic flu are:

- a) people working in the education system
- b) people working in the health system

- c) children
- d) adults with chronic pathology
- e) the entire population, regardless of age and pathology in the anamnesis

592. In seasonal influenza the prophylactic measures are:

- a) free seasonal vaccination of the population at high risk of the disease
- b) free vaccination of the entire population
- c) providing people with access to the flu vaccination
- d) health education of the population on the epidemiological situation and prevention measures
- e) hospitalization of all sick people and the ones suspected to have influenza

593. The correct statements about flu are:

- a) the most variable type of virus is influenza A virus
- b) influenza C virus is the most stable antigenic
- c) the main transmission mechanism is by contact
- d) interferon is administered in emergency prophylaxis
- e) Flu can be transmitted through direct contact with the patient

594. The correct statements about flu are:

- a) the sporadic morbidity prevails in influenza
- b) there is no periodicity of the epidemic process in Flu
- c) the flu patient is a secondary source of infection
- d) periodic increases of morbidity are typical for Flu
- e) more frequently, influenza affects children, older people, pregnant women, etc.

595. Influenza vaccine is rational to be administered during the epidemic spread to:

- a) children aged up to 3
- b) children aged over attending pre-school institutions
- c) persons of the third age
- d) persons with chronic diseases
- e) only persons from the service area

596. Influenza A virus (H1N1) transmission ways are:

- a) by solid aerosols
- b) by liquid aerosol
- c) by habitual contact
- d) by food
- e) by water

597. Which of the following medicines can be administered in influenza prophylaxis:

- a) immune serum
- b) influenza vaccine
- c) antibiotics
- d) interferon
- e) remantadine

598. Choose the means of influenza prophylaxis for people who had the contact with the patient:

- a) influenza vaccine
- b) alpha-interferon

- c) influenza immunoglobulin
- d) oxoline ointment
- e) antibiotics

599. The features of parainfluenza are:

- a) sporadic morbidity between seasons
- b) local epidemic eruptions with the predominance among children
- c) autumn-winter seasonality
- d) it more frequently affects children
- e) thermoresistance of the pathogen

600. Choose the people at risk to get infected with parainfluenza:

- a) children attending children's institutions
- b) children that are not attending children's institutions
- c) recruits
- d) pregnant women
- e) older persons

1.2.3. BLOOD-BORNE INFECTIOUS DISEASES

1.2.3.1. PARENTERAL VIRAL HEPATITIS

Simple Choice

601. The main source of HBV infection is:

- a) the patient with chronic hepatitis
- b) the patient with acute hepatitis
- c) the HBsAg carrier
- d) the person with anti-HBs antibodies in the blood
- e) the person with anti-HAV antibodies in the blood

602. Transmission ways of HBV are:

- a) natural and artificial
- b) natural
- c) artificial
- d) nosocomial
- e) habitual

603. The incubation period of HBV is:

- a) 15-50 days
- b) 45-90 days
- c) 90-110 days
- d) 60-180 days
- e) 120-180 days

604. The patient with HBV is contagious in:

- a) the incubation period
- b) the prodromal period
- c) clinical manifestations
- d) the recovering period
- e) the incubation – convalescence period

605. Choose the correct statement on HBV:

- a) there is no specific prophylaxis
- b) the main source of infection is animals
- c) vaccination is done according to the vaccination schedule
- d) children are the main risk group for the infection
- e) the main way of transmission is by food

606. Vaccination against HBV is required if:

- a) anti-HBs antibodies are detected
- b) anti-HBc antibodies are detected
- c) anti-HBe antibodies are detected
- d) anti-HCV antibodies are detected
- e) antibodies to HBV were not detected

607. Vaccination against HBV must be carried out:

- a) with one booster dose
- b) with two booster doses
- c) with three booster doses
- d) with four booster doses
- e) with five booster doses

608. Babies born from positive HBsAg mothers are followed up during:

- a) 3 months
- b) 6 months
- c) 9 months
- d) 12 months
- e) 18 months

609. Choose the planned vaccination schedule against HBV in children:

- a) 0, 2, 4, and 6 months
- b) 0, 2, 4 months
- c) 0, 2, and 6 months
- d) 3, 4, 5 months
- e) 3, 4, 5 and 6 months

610. Perinatal transmission of HBV virus may occur in:

- a) the first week of pregnancy
- b) the first month of pregnancy
- c) the first trimester of pregnancy
- d) the second trimester of pregnancy
- e) the third trimester of pregnancy

611. Choose the people that are at risk to acquire HDV infection:

- a) people who did not have hepatitis B in anamnesis
- b) patients with chronic hepatitis B in anamnesis
- c) people who did not have hepatitis B or D
- d) patients with hepatitis C
- e) patients with hepatitis A

612. The host for coinfection with HDV is considered to be:

- a) people with HBsAg
- b) patients with acute or chronic hepatitis B
- c) all persons who had no hepatitis B or D in any forms
- d) people positive to anti-HBs

e) people positive to HBc antigens

613. In the Republic of Moldova, the highest rates of HBV among adults are at the age of:

- a) 20-29
- b) 30-39
- c) 40-49
- d) 50-59
- e) over 60 years

614. The incubation period of HCV is:

- a) 15-45 days
- b) 30-60 days
- c) 7-140 days
- d) 14-110 days
- e) 45-180 days

615. HBsAg is detected in the blood of the patient with acute viral hepatitis:

- a) once jaundice occurs
- b) during the period of clinical manifestation
- c) during the incubation period
- d) during the prodromal period
- e) during the convalescence period

616. The carriage of HBsAg is considered to be chronic if antigenemia continues:

- a) up to 3 months
- b) up to 6 months
- c) more than 3 months
- d) more than 6 months
- e) more than one year

617. Viral hepatitis B cannot occur in people with high levels of:

- a) anti-Hbc
- b) anti-HBe
- c) anti-HBs
- d) anti HVA
- e) anti HBc

618. Choose the groups at highest risk of hepatitis B contamination:

- a) the medical staff from operating room and nurses from procedures room
- b) the staff from physiotherapy room
- c) the persons that work in sterilization department
- d) the staff from therapy department
- e) the staff from neurology department

619. Choose the correct measure to be taken if a health worker that deals with the collection and processing of donated blood is found to be positive to HBsAg:

- a) to continue professional activity without any restrictions
- b) to transfer him to other activity to avoid the contact with blood
- c) to supply with individual protection equipment and continue the professional activity
- d) to comply with universal standard precautions and continue the professional activity
- e) to recommend on wearing personal protective equipment

620. The socio-economic impact of hepatitis C is determined by:

- a) developing of fulminant forms of the infection

- b) predominance of latent forms of the disease
- c) high probability of chronization
- d) high lethality
- e) temporary work incapacity

621. Antibodies HBcor IgM start to be detected in blood since:

- a) the end of the first week of the disease
- b) the 2nd week of the disease
- c) the 3rd week of the illness
- d) the 4th week of the disease
- e) the 5th week of the illness

622. In HBV the contagiousness of the source of infection is determined by:

- a) the concentration of the antigen in blood
- b) the virulence of the causal agent
- c) the transmission way of the pathogen
- d) the age of the patient
- e) the presence of comorbidities

623. HBV transmission occurs through:

- a) insufficiently sterilized medical instruments
- b) contaminated food
- c) water from open pools
- d) hematophagous vectors
- e) insufficiently processed meat

624. In the Republic of Moldova, vaccination against HBV is carried out:

- a) to all newborns
- b) only to those born from carrier mother
- c) to children aged 12 months
- d) to all adults
- e) only to those from the risk group

625. The specific prophylaxis of HBV is carried out with:

- a) recombinant genetic vaccine
- b) live vaccine
- c) inactivated polysaccharide vaccine
- d) anatoxin
- e) immunoglobulin

626. The HepB vaccine is administered:

- a) cutaneously
- b) intradermally
- c) subcutaneously
- d) intramuscularly
- e) perorally

627. The period of the follow-up of the person who suffered acute hepatitis B is:

- a) 1 month
- b) 3 months
- c) 6 months
- d) 12 months
- e) lifelong

628. In the HBV outbreak, the emergency prophylaxis of contact people is carried out by the administration of:

- a) the genetic recombinant HepB vaccine
- b) the live HepB vaccine
- c) the polysaccharide vaccine
- d) specific immunoglobulin against HBV
- e) heterologous immunoglobulin

629. A higher risk of chronization of hepatitis is in case of:

- a) HVA
- b) HBV
- c) HCV
- d) HVE
- e) HVG

630. In post-transfusional HCV the incubation period is:

- a) 2-10 days
- b) 5-15 days
- c) 7-50 days
- d) 15-45 days
- e) 7-140 days

Multiple choice

631. In HBV the transmission factors are:

- a) blood
- b) saliva
- c) water, food
- d) sperm and vaginal secretions
- e) amniotic fluid

632. Choose viral hepatitis that is prevented by the vaccination:

- a) HAV
- b) HBV
- c) HBV and HDV
- d) HCV
- e) HEV

633. The bundle measures of HBV prophylaxis include:

- a) use of disposable syringes
- b) qualitative sterilization
- c) vaccination of newborns
- d) testing of people for HBsAg
- e) surveillance of food units

634. In HBV the sources of pathogens may be:

- a) patients with acute forms of disease
- b) chronic patients
- c) carriers
- d) patients infected with HDV
- e) convalescence with anti-HBs in the blood

635. The patient with HBV is contagious:

- a) throughout the incubation period
- b) in the prodromal period

- c) in the period of clinical manifestations
- d) in the recovery period
- e) during the discharge from the hospital as 40-50% of convalescents have antigenemia

636. The patient infected with HCV presents a danger:

- a) during the incubation period
- b) during the prodromal period
- c) during the clinical manifestations
- d) during the convalescence period
- e) only till clinical recovery

637. The correct statements on HDV are:

- a) in the RM vaccination can influence considerably the morbidity
- b) it is an anthroponosis
- c) chronic forms do not develop
- d) medical workers are in high risk group of contamination
- e) the quality of sterilization of medical instruments does not influence the level of morbidity

638. The prophylactic measures to prevent the occurrence of HDV are:

- a) vaccination against HDV
- b) to reduce the number of donors to a patient
- c) correct sterilization of medical instruments
- d) vaccination against HBV
- e) donor blood testing to HBV

639. The socio-economic impact of HDV is determined by:

- a) high lethality
- b) increased rate of chronic forms
- c) increased rate of liver cancer
- d) very short incubation period
- e) frequent contamination of children

640. The parenteral mechanism of transmission is predominant in:

- a) HAV
- b) HBV
- c) HCV
- d) HDV
- e) HEV

641. The correct statements on HCV are:

- a) the parenteral mechanism of transmission is the most common
- b) the main source of infection is chronic diseased patients
- c) vaccination is one of the basic measures
- d) the pathogen is quite resistant in the environment
- e) the results of serological investigations do not always allow to conclude on the epidemiological risk of a person

642. The correct statements on HCV are:

- a) the HCV pathogen can cause coinfection or superinfection only in the presence of HBV virus
- b) the mechanism and ways of transmission are similar to those of HBV
- c) the artificial way of the transmission prevails
- d) it has a wide spread among IDUs
- e) the prognosis is moderately favorable, but with high lethality in pregnant women

643. The following statements on HBV are correct:

- a) in the epidemic process of HBV the medical staff play a major role
- b) during a needle puncture it can contain up to 100 infectious doses of virus B
- c) the postvaccinal minimal protective titre is 1/10 mU.I./ml
- d) the live attenuated vaccine is used for the prevention
- e) the chronization rate is 95%

644. The control of HBV infection is carried out by:

- a) providing people with quality drinking water
- b) soil solubilization
- c) proper organization of the management of used syringes
- d) ensuring the protection of the skin and mucous membranes of the medical personnel at the working place
- e) vaccination of newborns, medical staff with major risk of infection

645. Sexually transmitted diseases are:

- a) HBV
- b) syphilis
- c) HIV/AIDS infection
- d) Herpes Zoster
- e) HEV

646. The control of HBV infection consists of:

- a) the vaccination of newborns and people from the risk group
- b) screening of donated blood, organs, tissues and sperm for the presence of HBsAg
- c) replacing multipurpose instruments with disposable one
- d) to reduction of blood transfusions
- e) prohibition of the use of pharmaceutical preparations obtained from the blood

647. The maintenance of hepatitis B virus as a biological species is determined by the following ways of transmission:

- a) blood transfusion
- b) sexual way
- c) parenteral
- d) intranasal
- e) habitual transmission

648. The intensity of the HBV epidemic process is determined by:

- a) the vaccine coverage rate among newborn infants
- b) the spread of hepatocellular carcinoma
- c) the quality of sterilization of medical instruments
- d) the spread of HBsAg, including other markers of hepatitis B virus in the population
- e) limited spread of morbidity due to infection eradication in some territories

649. Health professionals who are in contact with blood or blood components are tested for HBsAg:

- a) before the employment
- b) once a year
- c) once in 2 years
- d) quarterly
- e) on release from work

650. The HBsAg testing of pregnant women is performed:

- a) on the first 2 weeks of pregnancy

- b) on the 8th week of pregnancy
- c) on the 16th week of pregnancy
- d) on the 32th week of pregnancy
- e) before the delivery

651. Choose the high-risk group for viral hepatitis B infection:

- a) pediatricians
- b) surgeons
- c) primary medical care staff
- d) blood transfusion staff
- e) the staff of the bacteriological laboratory

652. Bundle prevention measures for viral hepatitis B are:

- a) the use of disposable syringes
- b) the control over the compliance with the sterilization regime of reusable medical instruments in medical practice
- c) vaccination of people with high risk of infection
- d) hygienic control of the water supply system
- e) sanitary surveillance of the food units

653. The factors involved in the viral hepatitis B transmission are:

- a) insufficiently sterilized medical instruments
- b) blood transfusions
- c) intravenous drug administration
- d) intravenous administration of physiological preparations
- e) administration of the vaccine

654. Choose the persons to be vaccinated according to the epidemiological indication against HBV:

- a) medical workers
- b) hemodialysis patients
- c) haemophiliac patients
- d) all hospitalized patients
- e) pregnant women

655. Choose the nonspecific prophylactic measures in HBV:

- a) the use of disposable medical equipment
- b) proper management of wastes resulting from medical activity
- c) screening of the donated blood, organs and tissues for the presence of HBsAg
- d) mandatory testing of all patients in the hospital
- e) vaccination of risk groups

656. The necessary anti-epidemic measures to be performed in case of the patient with chronic HBV are:

- a) the patient is isolated according to clinical and epidemiological indications
- b) the isolation of the patient must be in the hospital
- c) vaccination of family members
- d) current disinfection in the focus
- e) terminal disinfection in the focus

657. The source of HCV infection is:

- a) a sick man with acute form
- b) a sick man with chronic form
- c) a carrier

- d) a sick animal
- e) transfused blood

658. In HCV the main risk factors are:

- a) the use of injectable drugs
- b) hemodialysis
- c) blood transfusion
- d) parenteral medical procedures
- e) the use of the disposable syringes

659. Choose the nonspecific prophylactic measures in HCV:

- a) the compliance with standard precautions by medical personnel
- b) the use of disposable medical instruments
- c) mandatory testing of donated blood
- d) vaccination of medical staff
- e) screening of all hospitalized patients

660. The necessary anti-epidemic measures to be performed in case of the patient with acute HCV are:

- a) obligatory hospitalization of the patient
- b) clinical examination and laboratory investigation of contacts
- c) medical follow-up of patients during 12 months
- d) vaccination of contacts
- e) current disinfection in the focus

1.2.3.2 HIV INFECTION

Simple choice

661. In HIV / AIDS the pathogen is:

- a) retrovirus
- b) picornavirus
- c) rhabdovirus
- d) paramyxovirus
- e) adenovirus

662. Depending on the source of pathogens, HIV / AIDS infection is:

- a) an anthroponosis
- b) a zoonosis
- c) a sapronose
- d) a zooanthroponosis
- e) a parasitosis

663. In reducing morbidity in HIV / AIDS the main action is:

- a) antiretroviral treatment
- b) immunomodulatory treatment
- c) haematopoietic stem cell transplantation
- d) specific prophylaxis
- e) nonspecific prophylaxis

664. In HIV / AIDS infection the basic group of anti-epidemic measures is:

- a) neutralizing the source of the infection
- b) interruption of the transmission mechanism
- c) reducing the receptivity of the population
- d) increasing the receptivity of the population
- e) general measures

665. HIV infection is predominantly related to the cells of the:

- a) urogenital system
- b) gastrointestinal system
- c) endocrine system
- d) nervous system
- e) immune system

666. HIV / AIDS patients are subject to medical surveillance for:

- a) 6 months
- b) 2 years
- c) 10 years
- d) it depends on the results of the investigations
- e) the entire life

667. Which of the following social groups is subject to mandatory screening for HIV?

- a) medical workers
- b) blood donors
- c) pregnant women
- d) young people before marriage
- e) people with psychiatric pathology

668. In the Republic of Moldova HIV infection is recorded more frequently in the age group:

- a) 20-29 years
- b) 30-39 years
- c) 40-49 years
- d) 50-59 years
- e) after 60 years

669. What is the main factor determining the cumulative magnitude of the HIV infection epidemic?

- a) the concentration of the virus in the blood and other body fluids
- b) high variability of the virus
- c) life-long persistence of the infection
- d) the body susceptibility to HIV
- e) reduced resistance of the virus to the environment

670. Contracting HIV infection by medical workers is possible:

- a) in any medical maneuver
- b) during surgery
- c) in the preparation of the oral cavity for dental prosthesis
- d) teeth scaling
- e) in physiotherapy procedures

671. What is the basic argument for abstaining from total screening of HIV-infected patients in various medical institutions?

- a) lack of the latest generation diagnostic reagents
- b) significant cost of diagnostic reactions
- c) lack of qualified specialists in the field

- d) the length of time for conducting tests and obtaining the result
- e) compliance with standard precautions minimizes significantly the risk to healthcare professionals

672. In HIV / AIDS infection the source of pathogens is:

- a) males
- b) females
- c) equally males and females
- d) animals
- e) immune carriers

673. The HIV positive person poses a high risk as a source of infection:

- a) only in the acute period of the disease
- b) only in the asymptomatic period of the disease
- c) only during the development of opportunistic infections
- d) only at the terminal AIDS stage
- e) in all stages of the development of HIV infection

674. After contracting the human immunodeficiency virus the minimal occurrence of antibodies is:

- a) one week
- b) 2 weeks
- c) one month
- d) 2 months
- e) 6 months

675. Seropositivity of HIV / AIDS infection occurs more frequently after a risky contact in:

- a) 2-4 weeks
- b) 4-12 weeks
- c) 10-12 months
- d) one year
- e) at the end of AIDS stage

676. In HIV-positive persons the period of seroconversion takes about:

- a) 3 months
- b) 6 months
- c) 9 months
- d) one year
- e) 5 years

677. The risk of HIV contraction from a contaminated needlestick is:

- a) 0.1%
- b) 0.3%
- c) 1%
- d) 10%
- e) 30%

678. HIV virus retains its viability in dried blood for up to:

- a) 15 minutes
- b) one hour
- c) 24 hours
- d) 7 days
- e) one month

679. The maximum HIV concentration can be identified in:

- a) blood

- b) sperm
- c) vaginal fluid
- d) breast milk
- e) urine

680. Which sample is collected for laboratory tests for HIV?

- a) vaginal secretion
- b) blood
- c) cerebrospinal fluid
- d) sputum
- e) feces

681. The basic measure to reduce the onset of HIV epidemic is:

- a) education of the population on HIV infection
- b) post-exposure treatment
- c) antiretroviral treatment
- d) immunoprophylaxis
- e) sanitary-hygienic measures

682. What is the optimal term for initiating prophylactic post-exposure treatment at the time of contact with a risk of HIV infection?

- a) the first 12-24 hours
- b) the first 24-72 hours
- c) the first 24-96 hours
- d) the first week
- e) the first month

Multiple choice

683. The significance of HIV / AIDS infection is determined by:

- a) pandemic spread of the disease
- b) absolute lethality of HIV infected persons in the absence of ART (antiretroviral therapy)
- c) predominant occurrence in older persons
- d) lack of remedy that would contribute to the complete elimination of HIV
- e) increase of HIV-positive people in the general population

684. The features of a low-level epidemic are:

- a) preponderant recording of cases in risk-sensitive population groups
- b) the prevalence index in high-risk population groups is up to 5%
- c) the prevalence among pregnant women is below 1%
- d) the prevalence among pregnant women is higher than 1%
- e) certain age groups are affected

685. Choose the features of concentrated epidemic:

- a) spread of HIV / AIDS infection in the general population (affecting all age groups)
- b) rapid spread of infection in certain groups of the population
- c) the prevalence index is greater than 5% in a major high-risk group of infected persons
- d) the prevalence of pregnant women is less than 1%
- e) the prevalence among pregnant women is greater than 1%

686. The features of generalized epidemic are:

- a) the spread of HIV / AIDS infection in the general population
- b) affecting all age groups of the population
- c) rapid spread of infection in certain groups of the population
- d) the prevalence index is greater than 5% in a major high-risk group of infected persons

e) the prevalence among pregnant women is greater than 1%

687. HIV transmission is possible through:

- a) unprotected sexual contact
- b) habitual contact
- c) exposure to blood
- d) parenteral manipulation
- e) hematophagous vectors

688. The human immunodeficiency virus cannot be transmitted by:

- a) protected sexual contact
- b) habitual contact
- c) crockery (pots, pans, dishes, cups, etc.)
- d) by parenteral manipulation
- e) bed linen

689. There is no risk for transmitting the human immunodeficiency virus through:

- a) habitual relationships
- b) travels in public transport
- c) visits to swimming pools, sports halls
- d) insect bites
- e) blood transfusions

690. HIV infection can occur through:

- a) parenteral maneuvers
- b) surgery
- c) physiotherapy procedures
- d) dental extraction
- e) performing radiographs

691. There is a risk of HIV infection in:

- a) sexual promiscuity
- b) sexual contacts during the bleeding period
- c) bisexual contacts
- d) protected sexual contacts
- e) use of chemical contraceptive methods

692. Human immunodeficiency virus infections or contamination by exposure to blood may occur in:

- a) parenteral maneuver with non-sterile medical instruments
- b) blood transfusion
- c) blood donation
- d) transplantation of cells, tissues, organs
- e) visceral haemorrhage

693. Indications for HIV test are:

- a) fever lasting more than 1 month
- b) migraine
- c) chronic diarrhea
- d) the presence of infections that are not treatable by traditional schemes
- e) patient's repeated complaints of dyspepsia

694. Which of the following may cause transmission of HIV / AIDS infection by blood transfusion:

- a) use of reusable medical devices
- b) the practice of direct blood donations (donor → recipient)
- c) transfusion of a large volume of blood, which increases the risk of infecting by increased doses of infection
- d) false-negative result of donor investigation
- e) lack of modern technologies in the processing of medical instruments

695. The following statements about HIV /AIDS are true:

- a) it is a disease that can be transmitted by hematophagous vectors
- b) the source of pathogens are synanthropes
- c) In the Republic of Moldova, the main route of transmission of HIV is parenteral
- d) contagiousness of infection lasts throughout the patient's life
- e) one of the basic anti-epidemic measures is health education of the population

696. Major high-risk groups prone to acquiring HIV are:

- a) preschool children
- b) injecting drug users
- c) volunteer blood donors
- d) people with multiple sexual partners
- e) patients of medical institutions

697. At least one dose of HIV infection is contained in:

- a) breast milk
- b) blood
- c) vaginal secretions
- d) saliva
- e) tears

698. What are the standard precautions when the medical worker has a prick with an infected syringe needle?

- a) only gloves are changed
- b) to dress the wound and then change the gloves
- c) to wash the affected area under running water
- d) to apply potassium permanganate or hydrogen peroxide solution
- e) to apply waterproof gauze dressing and wear new gloves

699. HIV infection can be transmitted by:

- a) unprotected sex
- b) shared use of public baths
- c) habitual contact in the family
- d) transfusions of blood and / or blood products
- e) from mother to fetus

700. The following groups are subject to compulsory testing for HIV markers:

- a) blood donors
- b) sperm donors
- c) organ donors
- d) pregnant women
- e) surgical inpatient patients

701. Opportunistic infections associated with AIDS are:

- a) pneumocystis
- b) Kaposi's sarcoma

- c) tuberculosis
- d) cytomegalovirus infection
- e) streptococcal and/or staphylococcal infection

702. Choose the infectious diseases often associated with HIV / AIDS:

- a) shigellosis
- b) tuberculosis
- c) diphtheria
- d) candidiasis
- e) toxoplasmosis

703. Which of the following groups of people are subject to the HIV test:

- a) blood donors
- b) patients in surgical stations
- c) pregnant women
- d) blood recipients
- e) all medical workers

704. The categories of people with a high risk of HIV infection are:

- a) intravenous drug users
- b) workers of sanitary institutions
- c) workers of garment factories
- d) persons providing sexual services for payment
- e) promiscuous persons

705. HIV infection can occur in cases of:

- a) protected sexual contact
- b) blood transfusion
- c) natural breastfeeding of the child by a HIV-positive mother
- d) mosquito bites
- e) parenteral manipulation

706. The risk of HIV contamination can be reduced by:

- a) correct use of methods of mechanical contraception
- b) compliance with standard precautions
- c) isolation of HIV-positive persons
- d) educational activities undertaken in the general population
- e) prohibition of free staying of HIV-positive persons among healthy people

707. The basic objectives of HIV testing are as follows:

- a) epidemiological surveillance of HIV / AIDS infection in the country
- b) ensuring the security of hemotransfusion
- c) prophylaxis of maternal-fetal transmission
- d) diagnosis of infection for the purpose of granting specific antiretroviral treatment (ART)
- e) the record of all HIV-positive persons and their mandatory medical surveillance

708. The purpose of identifying people with HIV is:

- a) isolation of HIV-positive persons
- b) influencing the lifestyle of people with HIV
- c) criminal prosecution and conviction of HIV-positive persons
- d) medical advice and treatment of HIV / AIDS infection
- e) to include them in prevention programs

709. High risk of accidental occupational exposure to HIV is likely to be:

- a) specialists of emergency medical teams
- b) nurses of surgery and procedure rooms
- c) clinical and diagnostic laboratory staff
- d) accidentally injured doctors, dentists
- e) cosmetologists

710. Testing of the medical worker shall be provided after exposure in about:

- a) one month
- b) 3 months
- c) 6 months
- d) 12 months
- e) 18 months

711. The following first aid measures should be provided in case of exposure to the HIV virus:

- a) immediately wash the area affected by biological fluid with water and soap
- b) stop bleeding of the damaged tissue
- c) apply antiseptic to the area at risk
- d) avoid rubbing the damaged skin after contact with blood and / or other biological fluids
- e) apply dressing of impermeable protective material

712. In the management of post-exposure HIV risk the essential elements are:

- a) first aid
- b) risk assessment
- c) post-exposure prophylaxis
- d) notification of the exposure
- e) lifetime medical surveillance

713. The necessary measures to be taken in case of accidental exposure to the HIV virus by the medical worker are:

- a) report the accident to the head of the department of the hospital / the doctor on call, and the head nurse
- b) recording the case in the Register of Evidence of Exposure and Occupational Accidents
- c) immediate HIV testing
- d) immediate risk assessment, counseling, serological testing and PPE (personal protection equipment) assurance against HIV and / or HBV infection
- e) immediate initiation of ART, regardless of the patient's status

714. The risk of HIV infection by puncture varies depending on:

- a) the type of needle (surgical with lumen)
- b) the depth of the lesion
- c) the volume of blood involved
- d) professional training of the medical nurse
- e) used protective equipment

715. The risk assessment of transmission of blood-borne infections, including HIV, includes:

- a) determining the type of biological fluid to which the accident was exposed
- b) determining the type of accident
- c) determining the status of the possible source of infection by further tests
- d) identification of the institution and the specialist, who will then supervise the injured person
- e) identification of financial resources for coverage with ART

1.2.3.3. VECTOR-BORNE INFECTIONS

Simple choice

716. A surveillance of typhus outbreak lasts for:

- a) 15 days
- b) 25 days
- c) 30 days
- d) 35 days
- e) 1 month

717. In epidemic typhus lice are contagious after blood feeding within:

- a) 1 to 2 days
- b) 5 to 6 days
- c) 10 days
- d) 14 days
- e) 3 weeks

718. Epidemic typhus is:

- a) an anthroponotic infection disease
- b) a zooanthroponotic infection disease
- c) a sapronotic infection diseases
- d) a zoonotic infection diseases
- e) a parasitic infection

719. The term of early detection of the sick with epidemic typhus (from the onset of the disease) is:

- a) 3-9 days
- b) up to 5 days
- c) 5-7 days
- d) 1-14 days
- e) up to 21 days

720. The source of infection of epidemic typhus can be:

- a) the patient with Brill disease
- b) carriers of *Borrelia recurrentis*
- c) patients with epidemic typhus during the incubation period
- d) patients with epidemic typhus during clinical manifestations
- e) lice

721. The level of epidemic typhus morbidity is:

- a) directly proportional to the level of pediculosis in the population
- b) inversely proportional to the level of pediculosis in the population
- c) directly proportional to the number of cases of Brill disease
- d) inversely proportional to the number of cases of Brill disease
- e) directly proportional to the precipitation level

722. In epidemic typhus, convalescents are discharged in:

- a) 12 days after temperature normalization
- b) 5 days after temperature normalization
- c) 10 days after temperature normalization
- d) 20 days after temperature normalization
- e) 3 days after temperature normalization

723. Cutaneous leishmaniasis is:

- a. anthroponosis
- b. zooanthroponosis
- c. sapronosis
- d. zoonosis
- e. parasitosis

724. In urban leishmaniasis the source of infection is:

- a. the germ carrier
- b. the sick human
- c. domestic animals
- d. synantropes animals
- e. wild animals

725. Specify the incubation period in urban leishmaniasis type:

- a. 2 months – 1.5 years
- b. 10-15 days
- c. several hours -1-2 days
- d. a few weeks
- e. 45-180 days

726. Urban skin leishmaniasis is spread in the following countries:

- a. Africa and Asia
- b. Latin America
- c. Republic of Moldova, Romania
- d. Norway, Sweden
- e. Australia

727. The vector of urban leishmaniasis is:

- a. phlebotomus
- b. Anopheles mosquito
- c. ticks
- d. fleas
- e. lice

728. The vector of trypanosomiasis is:

- a. ticks
- b. Tsetse fly
- c. fleas
- d. mosquitoes
- e. phlebotomus

729. Trypanosomiasis is spread in the countries of:

- a. South America
- b. Africa
- c. Europe and Asia
- d. North America
- e. Australia

730. In Moldova the main anti-epidemic measure of malaria is:

- a. disinsection
- b. prevention of the import of new cases
- c. chemoprophylaxis
- d. immunoprophylaxis
- e. deratization

731. In malaria the vector of transmission is mosquito:

- a. Aedes
- b. Anopheles
- c. Culex
- d. Dahliana
- e. Mansonia

732. Malaria prophylaxis is carried out with:

- a. live attenuated vaccine
- b. anatoxin
- c. chemotherapy
- d. inactivated vaccine
- e. chemical vaccine

733. Currently, in Moldova the main objective of epidemiological surveillance of malaria is:

- a. eradication of this parasitosis
- b. to prevent the appearance of epidemic outbreaks
- c. to prevent the import of disease
- d. to treat the patients with malaria
- e. to treat the animals

734. Choose the source of malaria pathogens:

- a. sick animals
- b. human and animals
- c. the sick human and the carrier of the parasites
- d. objects of the environment
- e. objects of the environment and animals

735. Which of the following is used in the parasitological diagnosis of malaria:

- a. blood collected from finger
- b. blood collected from vein
- c. blood collected from artery
- d. urine culture
- e. bile culture

736. In Lyme borreliosis the vector of transmission is:

- a. ticks
- b. fleas
- c. lice
- d. mosquito
- e. phlebotomus

737. Borreliosis seasonality is:

- a. spring-summer
- b. summer-autumn
- c. autumn-winter
- d. winter-spring
- e. throughout the year

Multiple choice

738. Choose the true statements about epidemic typhus:

- a. it has a parenteral transmission mechanism
- b. it has a summer seasonality
- c. patients with Brill disease may be the source of infection

- d. the major risk groups of infection are people from the service sector
- e. one of the main prophylactic measures is to combat pediculosis

739. In epidemic typhus the sources of infection are:

- a. the sick with epidemic typhus
- b. the sick with Brill disease
- c. body lice
- d. head lice
- e. convalescents

740. The entrance gates for the pathogens of epidemic typhus are:

- a. bite site
- b. intact skin
- c. eye conjunctiva
- d. airways
- e. digestive tract

741. Choose the true statements about epidemic typhus:

- a. the source of pathogens is the sick man
- b. control of pediculosis is the basic preventive measure
- c. early detection of patients is considered to be up to first 5 days of the disease
- d. epidemic typhus morbidity is controlled by the vaccination
- e. contact persons are under the medical surveillance in the term of 14 days

742. The true statements about epidemic typhus are:

- a. the pathogenic agent is *Rickettsia prowazekii*
- b. *Rickettsia prowazekii* is grown on cell cultures
- c. *Rickettsia prowazekii* is grown on common nutrient mediums
- d. the pathogen resists up to 60 days at room temperature
- e. *Rickettsia prowazekii* can resist for a long time at high temperatures

743. The patient with epidemic typhus is contagious in:

- a. the last 1-2 days of the incubation period
- b. all fever period
- c. the first 2-3 days of apyrexia
- d. the entire incubation period
- e. only in the fever period

744. Which of the following features of exanthema occurs in epidemic typhus:

- a. it occurs spontaneously on the 4th - 6th day of the disease
- b. it may be more pronounced on the trunk, subclavicular area, chest
- c. the appearance of exanthema is directly related to the severity of the disease
- d. it occurs spontaneously on the first day of the disease
- e. exanthema does not occur in benign forms

745. Choose the correct statements about Brill disease:

- a. it is a relapse of recurrent typhus
- b. it is a relapse of epidemic typhus
- c. the sick with pediculosis can be the source of infection
- d. the pathogen of Brill disease is *Rickettsia prowazeki*
- e. the transmission mechanism is transplacental

746. The true statements about malaria are:

- a. there is no specific prophylaxis
- b. it is worldwide spread

- c. a patient is contagious only under specific conditions
- d. laboratory diagnosis of malaria is based on serological method
- e. indigenous malaria was eradicated in the Republic of Moldova

747. Choose the true statements about malaria:

- a. it is a parasitosis
- b. chemoprophylaxis is applied
- c. mosquito Aedes is the main vector of transmission
- d. Pl.vivax has a high risk of spreading in RM
- e. worldwide spreading of malaria can be registered

748. Malaria can be transmitted:

- a.by direct contact with the sick with malaria
- b. by mosquitoes
- c. by hematransfusion
- d. by transplacental mechanism
- e.by mosquitoes and tick bites

749. In outbreaks of malaria the anti-epidemic measures are:

- a. detection of patients and carriers of malaria
- b. epidemiological investigation of the outbreak
- c. application of insecticides
- d. prophylaxis with antibiotics
- e. immunoprophylaxis

750. Plasmodium biological cycle develops in the following hosts:

- a. humans
- b. mosquito Anopheles
- c. domestic animals
- d. synantropes animals
- e. xenotropic animals

751. Choose the favourable factors that can influence the epidemic process in malaria:

- a. air temperature
- b. high number of vectors
- c. the presence of the sick or carriers of plasmodia
- d. the presence of chronic pathologies
- e. low population resistance

752. In malaria the type of post-infectious immunity is:

- a. unsterile
- b. typospecific
- c. sterile
- d. cellular
- e. nonspecific

753. In malaria diagnosis, the following methods are used:

- a. parasitological
- b. serological
- c. bloodculture
- d. stool analysis
- e. urine culture

754. The following reactions are used in the serological diagnosis of malaria:

- a. indirect hemagglutination (IHR)
- b. indirect immunofluorescence (IIR)
- c. ELISA
- d. PCR
- e. precipitation (PR)

755. Which of the following data should be specified in case of Plasmodium detection in the blood:

- a. species
- b. the number of parasites
- c. the form of parasites
- d. gram stain
- e. the presence or absence of the capsule

756. In malaria, the epidemiological surveillance includes:

- a. investigation of persons coming from endemic countries
- b. collecting and analysing malaria cases data
- c. surveillance of the entomological situation
- d. prediction of malaria emerging
- e. treatment of the sick with malaria

757. Choose the persons with suspected malaria from the list:

- a. persons with prolonged fever or low-grade fever
- b. persons with febrile accidents within the first 3 months after blood transfusion
- c. students arriving from an endemic country
- d. persons living in the Nordic countries less than 2 months
- e. persons living in the Nordic countries for more than 3 months

758. Effective methods of malaria prophylaxis are:

- a. application of repellents on the skin
- b. application of repellents on clothes
- c. long-sleeved clothing and long pants wearing
- d. anti-mosquito nets use
- e. antibiotic prophylaxis

759. Choose the true statements about malaria:

- a. the sick are hospitalized compulsory
- b. the sick are isolated from contact with mosquitoes
- c. the treatment of malaria is based on chemosensitivity
- d. the treatment of malaria is based on a general scheme
- e. chemoprophylaxis is carried out only with one drug

760. After malaria recovered patients are discharged:

- a. based on two negative haematological examinations
- b. on condition that the interval between exams is 48 hours
- c. on condition that the interval between exams is 72 hours
- d. immediately after temperature normalization
- e. after 72 hours after temperature normalization

761. Dispensarization of former malaria patients lasts:

- a. 2 years in case of *P. falciparum*
- b. 3 years in case of *P. vivax* and *P. ovalae*
- c. 5 years in case of *P. malaria*
- d. 10 years in case of *r P. malaria*

- e. 7 years in case of *P. vivax*

762. Specify anti-epidemic measures in malaria:

- a. epidemiological investigation of each case within the first 24 hours
- b. vector control by spraying insecticides
- c. surveillance of the outbreak for 2 years
- d. surveillance of the outbreak for 5 years
- e. dispensarization of former malaria patients for 10 years

763. Factors favouring the spread of Lyme borreliosis are:

- a. the presence of natural focus
- b. the warm season of the year
- c. density of infected ticks
- d. cold season of the year
- e. the precipitation level

764. The transmission of borreliosis is carried out by:

- a. tick saliva
- b. regurgitation of intestinal content
- c. lymph
- d. blood
- e. liquid aerosols

765. In borreliosis the prophylactic measures are:

- a. avoiding areas with high density of ticks
- b. limiting the exposure to tick bites
- c. removing ticks with tweezers
- d. twisting, crushing of ticks
- e. bite site is washed with water and soap

**1.2.4. HEALTHCARE-ASSOCIATED INFECTIONS (HCAIs)
(NOSOCOMIAL INFECTIONS)**

Simple choice

766. A healthcare-associated infection is:

- a) an infection sensitive to the antibiotics
- b) a community acquired infection
- c) an infection acquired in the medical institution
- d) an infection sensitive to disinfectants
- e) an infection sensitive to bacteriophage

767. Infectious wastes in medical institutions are considered to be:

- a) syringes, needles, catheters containing blood or other biological fluids
- b) reagents and substances used in laboratories
- c) wastes from food units
- d) animal carcasses resulting from research activities
- e) packaging from the sterile materials

768. In the procedure room, the sterile table is arranged:

- a) every 2 hours of work
- b) after each work shift

- c) after each working day
- d) weekly
- e) according to the necessity

769. The general cleaning-up of the procedure room should be performed:

- a) daily, after the end of the work
- b) daily, before the beginning of the working day, using 1% chloramine solution
- c) every 7 days with the use of the disinfectant for walls and floors, then it undergoes bactericidal treatment
- d) immediately after the patients have been cared of
- e) according to the necessity

770. Which of the proposed cases can be considered an infection associated with healthcare assistance?

- a) measles diagnosed in a child with face eruptions on the 4th day of hospitalization in the department of acute respiratory infections
- b) the toxigenic diphtheria cornebacterium was isolated in the pharyngeal smear collected from a patient with angina on the first day of hospitalization
- c) salmonellosis was detected in a patient with pneumonia on the 8-10th day after hospitalization
- d) a child was hospitalized with otitis confirmed on admission in the otolaryngology department of the children's hospital
- e) transplacental transmission of toxoplasmosis

771. What does the yellow color code on the packaging of the wastes collected from medical institutions mean?

- a) hazardous wastes: infectious, cutting-down, chemical and pharmaceutical
- b) non-hazardous wastes
- c) wastes similar to those of menageries
- d) food waste
- e) infusion bottles, packaging of sterile materials waste

772. Which of the following sources of infections has a higher importance in the development of HCAs?

- a) patients with acute form of the disease
- b) chronic carriers of pathogenic pathogens and conditional pathogens
- c) convalescent carriers
- d) immune carriers
- e) patients with a chronic form of the disease

773. In infections associated with healthcare assistance, the incubation period is:

- a) 4-7 days
- b) 3-10 days
- c) 11 days
- d) 14 days
- e) it may be from few days to several months

774. In healthcare institutions the responsibility for the control of HCAs, patient and staff safety rests with:

- a) chief-nurse
- b) hospital epidemiologist
- c) head of the institution
- d) deputy chief responsible for the medical activities
- e) the head of the department

775. What does the black color code on the packaging of the waste from medical institutions mean?

- a) general waste
- b) infectious waste
- c) pathological waste
- d) sharp waste
- e) chemical and pharmaceutical waste

776. In the medical institution decisions on purchasing of antibiotics according to the susceptibility of microorganisms take:

- a) the Prevention and Control Committee on HCAs
- b) the specialized medical council
- c) the head of the microbiological laboratory
- d) the head of department
- e) the administrative staff

777. Which of the following bacterial enzymes is responsible for the resistance to penicillins?

- a) clotting enzyme
- b) catalase enzyme
- c) beta-lactamase enzyme
- d) oxidase enzyme
- e) colonase enzyme

778. Choose the transmission factor of nosocomial HBV:

- a) medical instruments
- c) eggs, meat
- e) Anopheles mosquito
- b) water
- d) dirty hands

779. An accidental contamination of the medical staff through medical instruments is more probable in case of:

- a) viral hepatitis A
- b) viral hepatitis B
- c) viral hepatitis C
- d) HIV infection
- e) acinetobacter infection

780. Choose the critical medical instruments:

- a) the medical instruments that have contact with blood vessels
- b) the medical instruments that have contact with the mucous membrane and the skin
- c) the medical instruments that contact with the skin but not the mucous membrane
- d) the objects surrounding the patient
- e) the medical instruments of glass

781. Choose the semi-critical medical instruments:

- a) the medical instruments that contact with blood vessels
- b) the medical instruments that contact with the mucous membrane and the skin
- c) the medical instruments that contact with the skin but not the mucous membrane
- d) the objects surrounding the patient
- e) the medical instruments of glass

782. Choose the non-critical medical instruments:

- a) the medical instruments that contact with blood vessels
- b) the medical instruments that contact with the mucous membrane and the skin

- c) the medical instruments that contact with the skin but not the mucous membrane
- d) syringes, scalpels
- e) endoscopes

783. What is the biological indicator, placed inside the medical instrument kit for sterilization intended for?

- a) the assessment of sterilization quality
- b) the assessment of presterilization stage
- c) the evaluation of autoclave functionality
- d) the evaluation of temperature
- e) the evaluation of blood remains

784. In a dental unit, medical gloves will be used:

- a) during the treatment procedures
- b) on the order of the administration
- c) at the epidemiologist's indication
- d) only at the patient's request
- e) permanently

785 What actions are to be undertaken after the use of sharp medical instruments (syringes, etc.)?

- a) to throw them together with the habitual wastes
- b) to boil, then to throw them into the garbage bin
- c) to sink the instruments in hot water within an hour, then to throw them into the garbage bin
- d) to put the instruments in a disinfectant solution, then they have to be placed in the autoclave for one hour at a temperature of +132 ° C
- e) to sink the instruments in a disinfectant solution, then they have to be dismantled and put in the evacuation box

Multiple Choice

786. In healthcare-associated infections the risk factors are:

- a) long-term hospitalization
- b) the gender of the sick
- c) the administration of an antibiotic
- d) the duration of the surgery
- e) the quality of sterilization of medical instruments

787. The features of healthcare-associated infections are:

- a) high resistance to antibiotics
- b) high resistance to disinfectants
- c) predominance of pathogenic microorganisms
- d) the main transmission mechanism is fecal-oral
- e) they occur more frequently in therapeutic departments

788. The features of infections associated with healthcare are:

- a) polymorphism of clinical manifestations
- b) high resistance to antibiotics
- b) high resistance to disinfectants
- d) they are caused by many pathogens
- e) they are detected more frequently during the hot period of the year

789. The prevention measures of healthcare-associated infections are:

- a) immunoprophylaxis
- b) disinfection

- c) sterilization of medical instruments
- d) antibiotic administration must be based on antibiogram
- e) isolation of patients in the hospital of infectious diseases

790. Which of the cases listed below can be defined as healthcare-associated infections?

- a) on the 8th day of the hospitalization in the radiology department, the patient complains on vomiting, abdominal pain and Sh. sonnei was isolated from the the faeces
- b) during the admission into the urology department of the hospital, Salmonella London was isolated in the urine of the patient with pyelonephritis
- c) 6 months after the operation, the patient complains on clinical symptoms of HVB
- d) the diagnosis of typhoid fever was made to a patient with pneumonia on the second day of hospitalization
- e) on the 4th day of hospitalization, the diagnosis of the flu was made to the patient from the traumatology department

791. Which of the following agents predominates in the etiology of healthcare-associated infections?

- a) gram-positive cocci
- b) anaerobic bacteria
- c) fungi
- d) aerobic gram-negative bacteria
- e) gram-negative bacteria

792. Healthcare-associated infections are defined as:

- a) infections that occur after health care assistance
- b) infections that occur in the patient during hospitalization
- c) infections that affect health workers as a result of their activity
- d) infections that may occur after the patient's discharge
- e) infections that occur as a result of the disposable syringes use

793. The healthcare-associated infections more frequently occur in:

- a) the operating room
- b) the dressing room
- c) the ICU
- d) the therapeutic department
- e) the physiotherapy unit

794. The causes of high morbidity due to healthcare-associated infections are:

- a) the use of immunostimulatory preparations
- b) frequent application of invasive diagnostic and therapeutic manipulation methods
- c) reusable medical instruments
- d) long duration of hospitalization of the patient
- e) unreasonable use of antibiotics

795. In healthcare-associated infections, the risk factors are:

- a) duration of hospitalization
- b) comorbidities
- c) immunodeficiency
- d) the patient's gender
- e) the patient's living conditions

796. The following statements cannot be defined as healthcare-associated infections:

- a) infections transmitted transplacentally
- b) measles diagnosed on the 2nd day of hospitalization
- c) pathology that was in incubation period at the time of admission

- d) the complication of the basic disease of non-infectious origin
- e) osteomyelitis occurred one year after prosthetic surgery

797. Choose the healthcare-associated infections:

- a) purulent elimination from the postoperative wound
- b) peritonitis
- c) pneumonia
- d) open fracture
- e) septicemia

798. The features of nosocomial salmonellosis are:

- a) outbreaks occur more frequently in pediatric departments
- b) the source of infection is usually a man
- c) the transmission way is a habitual contact
- d) it is manifested more frequently as food poisoning
- e) the seasonality is summer-autumn

799. The procedures with potential risk to develop healthcare-associated infections are:

- a) operation;
- b) parenteral procedures
- c) catheterization of the bladder
- d) gastroscopy
- e) electrophoresis

800. Healthcare-associated infections can be prevented by:

- a) reducing the number of invasive interventions
- b) use of disposable instruments
- c) reducing the duration of patient's hospitalization
- d) the compliance with the anti-epidemic regime
- e) vaccination of all hospital staff

801. Patients can be infected with S. aureus through:

- a) the contaminated objects or ingestion of contaminated food
- b) the aerosols containing S.aureus eliminated from an infected person or carrier
- c) the contact with infected skin
- d) the contaminated hands of medical staff
- e) the patient diagnosed recently with HVC

802. The sources of pathogens of HCAs are:

- a) medical staff
- b) medical students
- c) insects
- d) visitors
- e) medical instruments

803. Choose the departments with high risk for the development of HCAs:

- a) intensive care units
- b) surgical departments
- c) combustion and burning departments
- d) pediatric wards
- e) therapeutic departments

804. Choose the factors that contribute to the development of hospital strains of microorganisms:

- a) the administration of antibiotics without antibiogram
- b) low-quality disinfection in the medical institution
- c) crowding in the medical institution
- d) the use of disinfectants approved by the Ministry of Health
- e) the administration of antibiotics based on antibiogram

805. Choose the superficial surgical wound infections:

- a) suppurative wound
- b) seroma of wound
- c) superficial abscess
- d) skin suppuration
- e) pneumonia

806. Deep surgical wound infections are:

- a) postoperative abscess
- b) osteochondrosis
- c) suppurative hematoma
- d) pleurisy
- e) arthritis

807. The cardiovascular system infections are:

- a) thrombophlebitis
- b) endocarditis
- c) pericarditis
- d) parametritis
- e) endometritis

808. The prophylactic measures to control HCAs are:

- a) recording and reporting of all cases of HCAs
- b) compliance with the rules for hand hygiene
- c) correct administration of antibiotics
- d) monitoring on the circulation of hospital strains
- e) periodic screening of medical staff

809. The factors that contribute to the contamination of medical staff with HCAs are:

- a) compliance with the hand hygiene technique
- b) non-compliance with standard precautions
- c) compliance with standard precautions
- d) ignoring the use of personal protective equipment
- e) the use disposable instruments

810. Choose the true statements on the mandatory hand hygiene according to the WHO recommendations:

- a) before the contact with the patient
- b) before performing an aseptic procedure
- c) after the exposure to body fluids
- d) after the hand rubbing with antiseptic
- e) after the removing the sterile gloves

811. The risk of medical personnel contamination with HCAs varies according to:

- a) the used protective equipment
- b) the frequency of professional exposures
- c) the prophylaxis of medical personnel with antibiotics
- d) the administration of specific immunoglobulin

e) the type of medical instrument

812. The development of HCAs and the severity of clinical manifestations depend on:

- a) the virulence of the pathogen
- b) the immune status of the host organism
- c) environmental factors
- d) the infection dose
- e) the patient's age

813. In HCAs standard precautions are applied in case of:

- a) the contact with blood
- b) the hospital environment
- c) the contact with biological fluids
- d) administration of antibiotics
- e) the contact with the mucous membranes

814. The components of the HCAs Control Program are:

- a) administrative control
- b) prophylactic administration of antibiotics
- c) disinfection and sterilization of medical instruments
- d) anti-epidemic regimen
- e) vaccination of patients

815. The groups with high risk of HCAs development are:

- a) patients with chronic pathologies
- b) patients from the therapy department
- c) patients with long duration of hospitalization
- d) medical staff
- e) auxiliary staff

816. The preventive measures for bloodborne HCAs are:

- a) to test donated blood
- b) maximum reduction of blood transfusions
- c) administration of chemoprophylaxis
- d) qualitative sterilization of medical instruments
- e) administration of antibiotic as a prophylaxis

817. In HCAs the indications for post-exposure prophylaxis are:

- a) damage of the skin with a needle or sharp object used by a patients
- b) puncture with a disposable syringe
- c) contamination of the mucosa with blood
- d) contamination of the eye conjunctiva with the patient's blood
- e) puncture with the needle during the preparation of physiological solution for infusion

818. Choose the actions to be taken in case of an accidental event in medical personnel:

- a) HIV, HVB and HVC testing patients with whom the medical worker had the contact
- b) HIV, HVB and HVC testing of the medical worker exposed to the patient's blood
- c) the report on the contact with contaminated material
- d) informing the National Agency of Public Health
- e) suspension of a medical worker from the basic activity till the results of laboratory tests

819. Choose the internal risk factors in HCAs related to the patient's condition:

- a) advanced age

- b) body weight
- c) immunodynamicity of the organism
- d) harmful behavior
- e) co-morbidities

820. Choose the risk factors in HCAs related to the surgery:

- a) low-quality preparation of the surgical field
- b) the duration of the operation
- c) low-quality sterilization of medical instruments
- d) daily dressing of wound
- e) surgical hand decontamination

821. The most common HCAs are:

- a) pneumonia (associated with ventilation)
- b) community-acquired pneumonia
- c) urinary tract infections (associated with catheterization)
- d) bloodstream infections (associated with intravascular catheterization)
- e) surgical site infections

822. In HCAs the anti-epidemic measures are:

- a) wearing the mask by medical staff
- b) qualitative disinfection in the hospital
- c) improving the quality of patients' life
- d) administration of antibiotics based on laboratory tests and antibiograms
- e) proper management of waste resulting from the medical activity

823. Choose the remedies to be used in case of contamination of the patient's eye with biological fluids of the patient:

- a) 6%, hydrogen peroxide potassium permanganate solution
- b) 3% hydrogen peroxide, 96% ethyl alcohol
- c) flowing water, boric acid
- d) flowing water, 1% boric acid
- e) flowing water, 3% protargol

824. Choose the statements that can be defined as medical accident occurred at the workplace in the dental clinic:

- a) skin damage with sharp objects
- b) spraying the personal protective equipment of the medical worker with the patient's blood
- c) contamination of the conjunctival eye, nasal or buccal cavity of the physician with biological fluids of the patient
- d) contamination of the skin of the physician with the patient's biological fluids
- e) the hand of a dental worker was bitten by the patient

825. The key elements of the prophylactic measures in dental service are:

- a) providing the dental room with hangers for the patient's clothes
- b) the presence and use of the individual protective equipment
- c) the use of individual protection kits
- d) sterilization of medical instruments at the dentist's workplace
- e) periodic disinfection of the dental equipment during the working day

1.2.5. ZOOANTHROPONOSIS

Simple choice

826. Tularemia is an infection:

- a) specific only for domestic animals
- b) specific only for wild animals
- c) with natural focality
- d) specific only for synantropes
- e) sapronosis

827. The most important individual protection measure against tularaemia in natural outbreaks is:

- a) the use of repellents
- b) the use of protective mosquito nets
- c) immunoprophylaxis
- d) the administration of antibiotics
- e) the administration of immunoglobulins

828. In tularaemia, specific prophylaxis is carried out with:

- a) live attenuated vaccine
- b) inactivated vaccine
- c) toxoid
- d) genetic recombinant vaccine
- e) chemical vaccine

829. The pathogen of anthrax is:

- a) not resistant in the environment
- b) not very resistant in the environment
- c) very resistant in the environment
- d) very resistant to high temperatures
- e) sensitive to disinfectants

830. The main sources of anthrax pathogens are:

- a) pigs
- b) cattle
- c) rats, mice
- d) humans
- e) birds

831. Which of the following is used for the prophylaxis of anthrax:

- a) attenuated vaccine
- b) antibiotics
- c) anatoxin
- d) inactivated vaccine
- e) synthetic vaccine

832. After the contact with the anthrax patient, the persons are supervised for:

- a) 10 days
- b) 15 days
- c) 20 days
- d) 30 days
- e) 40 days

833. In anthrax outbreaks, terminal disinfection is carried out with:

- a) a 20% lime chloride solution
- b) a 5% lime chloride solution
- c) formic acid
- d) oxalic acid

e) a 1% chloramine solution

834. The following animals can be the main sources of infection in brucellosis:

- a) synantropes
- b) xenotropic animals
- c) domestic animals
- d) dogs
- e) cats

835. The basic measure to prevent leptospirosis is:

- a) planned vaccination
- b) deratization
- c) isolation of the sick
- d) immunoprophylaxis with live attenuated vaccine
- e) immunoglobulin administration

836. Natural outbreaks of leptospirosis are formed by:

- a) synanthropic rats
- b) domestic animals
- c) xenotropic animals
- d) people
- e) mosquitoes

837. Check-up of leptospirosis patients lasts:

- a) 1 month
- b) 1.5 months
- c) 6 months
- d) 8 months
- e) 3 months

838. Emergency prophylaxis of leptospirosis is carried out with:

- a) antibiotics
- b) immunoglobulins
- c) immune serum
- d) live attenuated vaccine
- e) inactivated vaccine

839. Which group of infections does rabies refer to:

- a) anthroponosis
- b) sapronosis
- c) infections with natural focus
- d) re-emergence
- e) parasitosis

840. The surveillance of the animal that has bitten the human lasts:

- a) 4 days
- b) 6 days
- c) 10 days
- d) 17 days
- e) 20 days

841. The conditional course of rabies vaccination is indicated to:

- a) all persons bitten by carnivores
- b) persons bitten by animals that can be monitored for 10 days
- c) people with bitten fingers, neck, head

- d) persons bitten by animals that can be monitored for 7 days
- e) persons bitten by animals that cannot be monitored

842. Haemorrhagic fevers are:

- a) anthroponosis
- b) zooanthroponosis with natural focus
- c) sapronosis
- d) zoonosis
- e) parasitosis

843. Tetanus transmission way is:

- a) hydric
- b) alimentary
- c) parenteral
- d) direct contact
- e) habitual contact

844. The main measure to prevent tetanus is:

- a) detection and isolation of the source of pathogens
- b) disinfection
- c) specific prophylaxis
- d) sterilization
- e) hospitalization of sick people

845. In yersiniosis, the main source of infection is:

- a) sick people
- b) domestic animals and birds
- c) xenotropic carnivorous animals
- d) animal carriers
- e) human carriers

846. The main way of transmission of pseudotuberculosis and yersiniosis is:

- a) hydric
- b) alimentary
- c) habitual contact
- d) airborne
- e) parenteral

847. The typical seasonality of yersiniosis is:

- a) spring-summer
- b) summer-autumn
- c) autumn-winter
- d) winter-spring
- e) summer

848. In pseudotuberculosis the main sources of infection are:

- a) domestic animals
- b) synanthropes
- c) xenotropic animals
- d) people
- e) alimentary products

849. Tick encephalitis is characterized by:

- a) outbreaks
- b) natural outbreaks
- c) human outbreaks
- d) urban outbreaks
- e) tellurian outbreaks

850. Vaccination against tick encephalitis with inactivated vaccine is indicated to :

- a) the entire adult population
- b) the population aged 4-70 who live in natural outbreak
- c) people who come in areas with natural outbreaks during the spring-summer period
- d) all children
- e) all newborns

Multiple choice

851. Risk factors for tularaemia are:

- a) the presence of natural focus in the area
- b) food products import from natural focal areas
- c) increased rodent density
- d) increased density of the human population
- e) the use of water from authorized sources

852. Specify the anti-epidemic measures in tularaemia:

- a) hospitalization of patients according to clinical indications
- b) epidemiological investigation of the outbreak
- c) serological analysis of contact persons
- d) isolation of contact persons from the sick
- e) hospitalization of patients according to epidemiological indications

853. Choose the true statements about brucellosis:

- a) Br. abortus is the most virulent for humans
- b) the main source of infection is synanthropes
- c) different pathogens have different epidemiological importance
- d) the sick person has no epidemiological importance
- e) vaccination is performed according to epidemiological indications

854. Choose the types of brucellosis pathogens:

- a) Brucella gravis
- b) Brucella melitensis
- c) Brucella bovis
- d) Brucella intermedius
- e) Brucella suis

855. Choose the true statements about brucellosis:

- a) vaccination is carried out with live attenuated vaccine
- b) the pathogen retains viable in some food products up to 60 days
- c) xenotropic animals are the main source of infection
- d) the sick person is hospitalized according to epidemiological indications
- e) meat of sick animals can be used after rigorous thermal treatment

856. In pseudotuberculosis and yersiniosis the main factors of transmission are:

- a) vegetables
- b) milk
- c) meat

- d) water
- e) air

857. Choose the true statements about yersiniosis:

- a) the pathogen is *Yersinia pestis*
- b) the pathogen multiplies at low temperatures
- c) frequently the factors of transmission are fruit and vegetables
- d) vaccination is performed according to epidemiological indications
- e) it has a winter-spring seasonality

858. The true statements about leptospirosis are:

- a) it is a sapronosis
- b) the main source of infection is a human
- c) epidemiological indication for vaccination is after the age of 7
- d) it is caused by several types of pathogens
- e) more frequently leptospirosis is recorded during the warm season

859. Which of the following leptospire is more contagious for humans:

- a) *L.icterohaemorrhagiae*
- b) *L.canicola*
- c) *L.pomona*
- d) *L.grippotyphosa*
- e) *L.biflexa*

860. The sources of leptospirosis infection are:

- a) rats
- b) murines
- c) sheep, goats
- d) cattle
- e) water, soil

861. If the person had contact with the sick with leptospirosis, the necessary measures to be carried out are:

- a) medical surveillance for 14 days
- b) hospitalization in the infectious disease hospital is not required
- c) hospitalization in the infectious disease hospitals
- d) medical surveillance for 20 days
- e) medical surveillance for 30 days

862. The true statements about rabies are:

- a) it is reasonable to use immunoglobulin only within 30 minutes after the bite
- b) in some cases, vaccination is not indicated after the bite
- c) animal surveillance is carried out for 14 days
- d) rabies leads inevitably to death
- e) after the bite it is recommended to treat wounds with running water

863. Choose the measures to control rabies:

- a) to capture homeless animals
- b) prophylaxis of rabies among domestic animals
- c) to kill xenotropic animals that form natural outbreaks of rabies
- d) health education of the population
- e) monitoring the number of wild animals

864. Which of the following is administered to prevent rabies:

- a) immunoglobulin
- b) live attenuated vaccine
- c) corpuscular inactivated vaccine
- d) chemical vaccine
- e) bacteriophage

865. In rabies, the incubation period depends on:

- a) the severity of the bite
- b) the area of the bite
- c) species of the animal
- d) the age of the human
- e) the age of the animal

866. In human rabies the pre-exposure prophylaxis measures include:

- a) vaccination of risk contingents
- b) serological test of vaccinated people from the risk group for 2 years
- c) serological test of vaccinated people from the risk group for 4 years
- d) vaccination of the entire human population
- e) vaccination of children and the elderly

867. In human rabies the post-exposure prophylactic measures include:

- a) cleaning the wound with water and soap
- b) disinfection of the wound with 70% alcohol
- c) an urgent consulting of the family doctor
- d) urgent suturing of the wound
- e) compulsory hospitalization

868. Hospitalization of people bitten by an animal sick with rabies is indicated to:

- a) those who live in rural areas
- b) those with neurological and immunologically health problems
- c) those with multiple and deep bites
- d) those requiring revaccination
- e) those who live in urban areas

869. Humans can catch B. anthracis:

- a) in case of contamination of damaged skin during the care of a sick animal with anthrax
- b) in case of contact with any animal product
- c) in case of using the meat and meat products insufficiently thermally treated
- d) breathing in the dust contaminated with B. anthracis
- e) parenterally by hematopoietic vectors

870. Choose the true statements about anthrax:

- a) vaccination is planned according to epidemiological indications
- b) low resistance of pathogen in the environment
- c) anthrax is spread more among children
- d) anthrax vaccine may be administrated by scarification or subcutaneously
- e) generally, the sick person is not a source of pathogens

871. Choose the natural reservoir of B. anthracis:

- a) sick human
- b) small cattle
- c) cattle

- d) cats, dogs
- e) soil

872. Emergency prophylaxis of anthrax is done with:

- a) immunoglobulins
- b) live attenuated vaccine
- c) immune serum
- d) bacteriophages
- e) antibiotics

873. In anthrax the transmission factors can be:

- a) blood
- b) meat
- c) wool
- d) soil
- e) tears

874. Specify the prophylactic measures in anthrax:

- a) planned vaccination of farm animals
- b) vaccination of risk groups in the human population
- c) compliance with sanitary-hygienic rules
- d) incineration of dead animals
- e) slaughter of cattle in private households

875. Specify the anti-epidemic measures taken in the anthrax outbreak:

- a) compulsory hospitalization in infectious disease wards
- b) compulsory hospitalization of anthrax suspects
- c) terminal disinfection
- d) the use of anti-anthrax specific immunoglobulins
- e) vaccination of persons in contact with the sick

876. Anthrax vaccination in humans is carried out:

- a) only to risk groups
- b) by the administration of 2 doses of vaccine
- c) with live attenuated vaccine
- d) with inactivated vaccine
- e) chemical vaccine

877. In tetanus the source of pathogens can be:

- a) a human
- b) herbivorous animals
- c) xenotropic animals
- d) soil
- e) rodents

878. Choose the true statements about tetanus:

- a) it is an anthroponosis
- b) vaccination is the main prophylactic measure
- c) the pathogen is particularly resistant in the environment
- d) the patient is not contagious
- e) protective titre is 0.03 IU / ml

879. Tetanus emergency prophylaxis is carried out:

- a) after being bitten by the animal

- b) in any open trauma
- c) only if the trauma wound is contaminated with soil
- d) after any combustion
- e) second and fourth-degree burns

880. In the development of tetanus the favourable factors are:

- a) unskilled wound processing
- b) unskilled birth assistance
- c) non-immunized population
- d) use of sterile instruments
- e) mass vaccination of the population

1.2.6. CONVENTIONAL INFECTIONS

Simple choice

881. Sanitary protection of the territory from the import and spread of conventional (quarantine) infections is:

- a) enforcing quarantine in an administrative territory
- b) enforcing observation in an administrative territory
- c) a system of state interdepartmental measures in order to prevent the import and spread of highly contagious diseases
- d) a system of measures taken by the Ministry of Health to prevent the import, localization and eradication of epidemic outbreaks with contagious diseases
- e) sanitary protection of the territory from the import and spread of conventional infections consisting in the realization of the measures proposed by the Commission for Exceptional Situations of the Government of the Republic of Moldova

882. At present, the International Health Regulations set out the following priorities:

- a) limiting emigration from the country
- b) armed border guard of the country
- c) armed border guard of the country and limiting emigration from the country
- d) effective treatment of patients with infectious diseases, regardless of their origin
- e) epidemiological surveillance, primarily directed to the detection of infectious diseases and their control

883. In case of the risk of the spread of extremely dangerous infectious diseases, each country must inform the WHO within:

- | | |
|-------------|-------------|
| a) 12 hours | d) 48 hours |
| b) 24 hours | e) 72 hours |
| c) 36 hours | |

884. Quarantine as an anti-epidemic measure in case of conventional disease is implemented by:

- a) local public administration
- b) Primary healthcare service
- c) Emergency Medical Service
- d) Public Health Surveillance State Service
- e) Primary Health Service in common with Public Health Surveillance State Service

885. In case of the import of conventional infections the measures of limitation organized in the administrative territory are implemented by:

- a) the Public Health Surveillance State Service
- b) the Department of Health of the administrative territory
- c) the Primary healthcare service
- d) the National and Territorial Extraordinary Public Health Commissions

e) Public Health Surveillance State Service together with the Department of Health of the administrative territory

886. Conventional infections are:

- a) plague, tick encephalitis
- b) yellow fever, plague
- c) cholera, malaria
- d) diphtheria, tuberculosis
- e) tuberculosis, cholera

887. The true statement about quarantine infections is:

- a) quarantine infection lethality is 90-100%
- b) all quarantine infections are anthroponosis infections
- c) high resistance of pathogens in the environment
- d) quarantine infections are from the zooanthroponosis group
- e) the ability to affect high number of people in a relatively short time

888. Plague transmission from the sick man, is possible in case of:

- a) pneumonic plague
- b) intestinal plague
- c) bubonic plague
- d) skin plague
- e) visceral plague

889. The incubation period of plague is:

- a) 2-6 days
- b) 7-21 days
- c) 21-31 days
- d) 1-3 months
- e) 4-6 months

890. The principles of sanitary protection of the territory refer to:

- a) cholera, plague, yellow fever and MDR tuberculosis
- b) all infections that are able to spread fast
- c) plague, yellow fever, haemorrhagic fever and HIV/AIDS
- d) only cholera, plague, yellow fever and haemorrhagic fever
- e) all diseases of infectious origin

Multiple choice

891. International Health Regulations concern:

- a) plague
- b) cholera
- c) tularaemia
- d) yellow fever
- e) anthrax

892. In yellow fever the anti-epidemic measures are:

- a) disinsection
- b) territory protection from the virus import
- c) vaccination according to the epidemiological indication
- d) chemoprophylaxis
- e) deratization

893. Cholera compulsory measures as a quarantine infection are:

- a) to report the information about the sick to the Centres for Public Health

- b) hospitalization of the patient
- c) daily bacteriological control of running water, open water and standing water
- d) installation of quarantine in the territory with outbreak
- e) vaccination of the population

894. Compulsory anti-epidemic measures carried out in cholera outbreaks are:

- a) isolation of contacts and medical supervision
- b) urgent antibiotic prophylaxis is done in contact with the sick
- c) medical surveillance of persons in contact with the sick for 15 days
- d) terminal disinfection
- e) current disinfection

895. Plague is an infection:

- a) that refers to conventional infections
- b) with the faecal-oral transmission mechanism
- c) with natural focus
- d) with high lethality
- e) with high receptivity

896. In case of plague:

- a) patients are isolated at home
- b) patients are isolated in specialized hospitals
- c) persons in contact with the sick are isolated for a period of 5 days
- d) persons in contact with the sick are administered a prophylactic course of antibiotics
- e) disinfection and disinsection are not compulsory in the focus

897. Health protection of the territory of the Republic of Moldova means:

- a) the national system of measures aimed at preventing the import of infectious diseases, especially particularly dangerous
- b) localization and eradication of outbreaks in case of their occurrence
- c) import control of the goods that may have a negative impact on the country public health
- d) performance of the border police duties
- e) annual updating of the International Health Regulations

898. The principles of sanitary protection of the territory refer to:

- a) cholera, plague, yellow fever and MDR tuberculosis
- b) all infections that are capable of rapidly spreading
- c) cholera, plague, yellow fever and haemorrhagic fever
- d) plague, yellow fever, haemorrhagic fever and HIV / AIDS
- e) all diseases of infectious origin

899. In the Republic of Moldova International Health Regulations implementers are:

- a) railway
- b) civil aviation
- c) health services
- d) car transport services
- e) registry office

900. The International Health Regulations provide:

- a) measures for international transport and border crossings
- b) special measures to prevent the import and spread of diseases
- c) organization of sanitary protection measures in the territory of the country
- d) travel visa regime
- e) routing of migration

901. According to the International Health Regulations, the measures provided for transport are:

- a) maintenance of vehicles in ideal technical condition
- b) special training of crew members on the problems of preventing the import of infectious and highly contagious diseases
- c) supplying crew members and passengers with drinking water and quality food
- d) emergency information by the commanders of international transport, the sanitary service of the harbours
- e) carrying out primary anti-epidemic measures on different means of transport

902. The following clinical signs are the basis for suspecting a conventional disease:

- a) fever (38°C and higher)
- b) epidemiological data
- c) diarrhea, vomiting, rash
- d) swelling of the lymph nodes
- e) acute abdomen

903. The following clinical signs are the basis for suspecting a conventional disease:

- a) acute abdomen
- b) jaundice, haemorrhage
- c) diarrhea, vomiting, rash
- d) epidemiological data
- e) fever (38°C and higher)

904. In case of the suspicion of malaria, cholera, yellow fever, haemorrhagic fever in patients, the principle of organizing and conducting primary anti-epidemic measures is provided for:

- a) the diagnosis made by the specialists from the territorial institutions
- b) temporary isolation of the patient at the site of detection and taking primary restriction measures
- c) detection and isolation of people who had contact with the patient
- d) temporary hospitalization of all patients with the clinical picture that does not exclude plague, cholera, yellow fever or haemorrhagic fevers
- e) setting up a camp hospital

905. In case of the suspicion of malaria, cholera, yellow fever, haemorrhagic fever, the principle of organizing and conducting primary anti-epidemic measures is provided for:

- a) current disinfection
- b) setting up a camp hospital
- c) detection and isolation of people who had contact with the patient
- d) setting up special healthcare facilities and hospitalization of the detected patients
- e) temporary hospitalization of all patients with the clinical picture that does not exclude plague, cholera, yellow fever or haemorrhagic fevers

B. EPIDEMIOLOGY OF NON-COMMUNICABLE DISEASES

Simple choice

906. In the Republic of Moldova the high rate of non-communicable morbidity is attributed to:

- a) cardiovascular system diseases
- b) diseases of the central nervous system
- c) endocrine system diseases
- d) bone system diseases
- e) digestive system diseases

907. The primary method of prevention of non-communicable diseases is:

- a) surveillance of chronically ill persons

- b) the passive method of screening the sick persons
- c) promoting health
- d) laboratory testing of chronically ill persons
- e) post-discharge care of new cases of disease

908. In cardiovascular disease group the most common nosologic forms are:

- a) rheumatic heart disease
- b) hypertonic disease
- c) cardiomyopathy
- d) myocardial infarction
- e) cardiac malformations

909. The following ecological maladies are characteristic of the Republic of Moldova:

- a) endemic goiter
- b) alopecia
- c) cutaneous (skin) diseases
- d) cardiovascular diseases
- e) rheumatic diseases

910. The concept of prophylaxis of non-communicable diseases is achieved by:

- a) emergency prophylaxis
- b) primary prophylaxis
- c) post-discharge care of illness cases
- d) treating new cases of disease
- e) complex treatment of patients with non-communicable diseases

911. Primary prophylaxis:

- a) ensures the prevention of diseases by detecting and neutralizing the action of the risk factors
- b) provides for the complex treatment of patients with non-communicable diseases
- c) is not important in preventing non-communicable diseases
- d) ensures the treatment of new cases of disease
- e) ensures the strict awareness of the detected cases of the disease

912. Secondary prophylaxis provides:

- a) early and active detection of diseases for effective therapeutic intervention and to stop disease spreading
- b) highlighting major risk factors for non-communicable diseases
- c) medical recovery of people affected by non-communicable diseases
- d) preventing diseases by detecting the presence and action of risk factors
- e) reorganization of family medicine

913. Tertiary prophylaxis is reduced to:

- a) highlighting major risk factors for non-communicable diseases
- b) treatment and recovery measures aimed at reducing the capacity of an already manifested disease
- c) applying specific measures to prevent non-communicable diseases
- d) early and active detection of diseases for the purpose of their healing, prevention of exacerbations, complications, chronification and sequelae
- e) ensures the prevention of diseases by detecting the presence and the action of the risk factors in the population

914. The main cause of death due to non-communicable diseases at a global level is:

- a) diseases of the gastrointestinal tract
- b) cancerous disease
- c) cardiovascular and cerebrovascular diseases
- d) bone diseases
- e) skin diseases

915. In the Republic of Moldova tumors are:

- a) the first cause of death
- b) the second cause of death
- c) the third cause of death
- d) the fourth cause of death
- e) the fifth cause of death

916. Breast cancer:

- a) is recorded with the same frequency at all ages
- b) is the first cause of cancer mortality among women
- c) is not recorded in women under the age of 40
- d) is not recorded in women under the age of 50
- e) is the second leading cause of cancer mortality among women

917. Tertiary prophylaxis of cardiovascular diseases follows:

- a) preventing the unfavorable evolution of disease and complications
- b) rationalizing the life-style
- c) preventive measures applied at the pre-nosological, preclinical, latency stage
- d) preventive measures applied at the potential stage of illness
- e) preventive measures taken on the risk factors up to the illness

918. Secondary prophylaxis of cardiovascular diseases follows:

- a) the formation of health-conscious behavior in the population
- b) avoiding food abuse
- c) applying measures in the phase when the action of the risk factors is signaled, with or without the possibility to detect specific functional or immoral changes
- d) combating the excessive use of animal fats
- e) avoiding sedentarism and elimination of all toxic factors

919. In order to constitute an epidemiological process of a non-communicable disease it is necessary to meet the following requirements at the "critical moment":

- a) three determinant factors and two categories of dynamizing factors
- b) two determinant factors and three categories of dynamizing factors
- c) one determinant factor and three categories of dynamizing factors
- d) two determinant factors and two categories of dynamizing factors
- e) one determinant factor and two categories of dynamizing factors

920. Choose "Three Big" causative factors in morbidity with cardiovascular diseases:

- a) smoking, hypodynamia, hyperlipidemia
- b) smoking, alcoholism, stress
- c) genetic factors, hypertension, weight gain in adults
- d) diabetes mellitus, genetic factors, stress
- e) smoking, sports, stress

921. During screening for early identification of cancer, Pap-test is used for:

- a) detection of cervical cancer by screening urine test in the laboratory
- b) detecting cervical cancer through detecting changes at the level of cervical cells
- c) detecting cervical cancer screening using ultrasound during gynecological examinations
- d) detection of cervical cancer by microbiological tests
- e) detecting cervical cancer by paraclinical examinations

922. In active smokers the risk for colorectal cancer is higher by:

- a) 17 - 21%
- b) 10 - 15%
- c) 5 - 10%
- d) 2 - 3%
- e) up to 2%

923. In breast cancer prevention the protective factor is:

- a) regular consumption of aspirin
- b) use of combined oral contraceptives
- c) breast-feeding
- d) consumption of fruit and vegetables
- e) moderate consumption of alcohol

924. BMI (body mass index) can be calculated using the formula:

- a) $BMI = G \text{ (kg)} - T^2 \text{ (m}^2\text{)}$
- b) $BMI = G \text{ (kg)} + T^2 \text{ (m}^2\text{)}$
- c) $BMI = G \text{ (kg)} / T^2 \text{ (m}^2\text{)}$
- d) $BMI = GR + H$
- e) $BMI = HTA / \text{body mass}$

925. Score Z is:

- a) a quantitative measure that determines the BMI deviation of a particular child from BMI of a reference population of children of the same age and gender
- b) a qualitative measure that determines the BMI deviation of a particular child from the BMI of a reference population of children of the same age and gender
- c) a share that determines the BMI deviation of a particular child from BMI of a reference population of children of the same age and gender
- d) a baseline report of a child's BMI deviation from BMI of a reference population of children of the same age and gender
- e) a product of the BMI deviation of a particular child from BMI of a reference population of children of the same age and gender

926. The National iron and folic acid deficiency Programme provides:

- a) fortification of foodstuffs of animal origin with iron and folic acid
- b) iron and folic acid fortification of children's food products
- c) fortification of wheat flour with iron and folic acid
- d) iron and folic acid fortification of dairy products
- e) iron and folic acid fortification of sugar.

927. The long-term strategic priority (2020) set out in the National Strategy for the Prevention and Control of Non-Communicable Diseases is:

- a) to ensure the increase of the life expectancy of the Republic of Moldova population up to 72 years
- b) ensuring the increase in the life expectancy of the Republic of Moldova population up to 65 years
- c) ensuring the increase in the life expectancy of the Republic of Moldova population up to 80 years
- d) the retirement age of men is 65
- e) transition to the retirement of women at the age of 62

Multiple choice

928. Choose the epidemiological features of non-communicable diseases:

- a) they do not have any specific etiology
- b) a simple risk factor is sufficient to trigger the pathological process

- c) risk factors have different effects in relation to different patients
- d) there are several risk factors involved in the occurrence of chronic diseases
- e) the latency period is usually very short

929. The importance of studying non-communicable diseases is determined by:

- a) the high number of deaths
- b) 2/3 of people over the age of 65 have at least 2 chronic diseases
- c) non-communicable diseases do not require the application of prophylactic measures
- d) increased prevalence over time
- e) high treatment costs

930. Human biological factors are:

- a) individual genetic background
- b) growth
- c) aging
- d) pollution
- e) accidents

931. The environmental factors that determine health state are:

- a) food
- b) water
- c) air
- d) pollution
- e) alcoholism

932. Environmental factors that affect health condition are:

- a) residues
- b) microorganisms
- c) accidents
- d) violence
- e) aging

933. The objectives of the healthcare system are:

- a) promoting health
- b) maintaining health
- c) health surveillance
- d) preventing migration
- e) protecting the environment

934. The concept of prophylaxis of non-communicable diseases is achieved by:

- a) emergency prophylaxis
- b) primary prophylaxis
- c) secondary prophylaxis
- d) specific prophylaxis
- e) tertiary prophylaxis

935. Secondary prophylaxis of non-communicable diseases provides:

- a) early and active detection of diseases for the purpose of their cure
- b) early and active detection of diseases at the pre-nosological stage
- c) highlighting major risk factors for non-communicable diseases
- d) medical recovery of people affected by non-communicable diseases
- e) specific prophylactic measures of non-communicable diseases

936. Tertiary prophylaxis of non-communicable disease is reduced to:

- a) highlighting major risk factors for non-communicable diseases
- b) treatment and recovery of patients
- c) recovery of chronic or handicapped patients, their physical, social and professional reinsertion
- d) application of specific prophylactic measures of non-communicable diseases
- e) early and active detection of diseases for the purpose of their cure, prevention of exacerbations, complications, chronification and sequelae

937. In the Republic of Moldova the main causes of morbidity and mortality are:

- a) breast cancer
- b) cervical cancer
- c) bronchopulmonary cancer
- d) colon and rectal cancer
- e) skin and subcutaneous cellular tissue cancer

938. Measures for the prevention of cardiovascular diseases include:

- a) preparing new drugs for treatment
- b) finding the risk factors that determine high morbidity caused by cardiovascular diseases
- c) development and implementation of prophylactic programs
- d) the directions of surveillance are mainly oriented towards young people
- e) developing national and global prophylaxis policy and strategy

939. Risk factors for the development of ischemic heart disease are:

- a) living conditions
- b) smoking
- c) drug use
- d) inappropriate nutrition
- e) hypodynamy

940. Diseases caused by ecological factors are:

- a) oncological diseases
- b) endemic goiter
- c) pneumonia
- d) dental cavities
- e) kidney disease

941. The main risk factors for bronchopulmonary cancer are:

- a) constitutional type
- b) smoking
- c) professional factors
- d) atmospheric pollution
- e) genetic factors

942. The primary prophylaxis to prevent carcinogenic diseases includes:

- a) the detection and evaluation of oncogenic factors through complex epidemiological studies
- b) avoiding contact with carcinogens is totally impossible
- c) clarification of the mechanisms of action of risk factors
- d) identification of high-risk population groups
- e) oncological education of the medical staff and the population

943. Secondary prophylaxis of carcinogenic diseases includes:

- a) early cancer detection
- b) occasional detection or screening (radiological, endoscopic) of high-risk groups
- c) determining the therapeutic indications and prognosis

- d) treatment and surveillance of evolution
- e) avoidance of contact with carcinogens

944. Tertiary prophylaxis of carcinogenic diseases includes:

- a) identification of high-risk population groups
- b) post-discharge care of patients and avoiding relapses and metastases
- c) therapeutic medical-surgical treatment
- d) recovery of cancer patients without clinical signs
- e) determining the therapeutic indication and the prognosis.

945. Risk factors contributing to the development of allergic diseases are:

- a) genetic predisposition
- b) environmental factors
- c) social conditions
- d) chronic infections
- e) age

946. Traditional (conventional) risk factors of cerebrovascular diseases are:

- a) high blood pressure
- b) smoking
- c) hypercholesterolaemia
- d) diabetes mellitus
- e) abdominal obesity

947. "Predictive" factors of ischemic heart disease are:

- a) obesity
- b) hyperuricemia
- c) hypertriglyceridemia
- d) ultraviolet radiation
- e) ionizing radiation

948. Modifying risk factors of cardiovascular diseases are:

- a) smoking
- b) obesity
- c) diabetes
- d) age
- e) family history of CVD (cardiovascular disease)

949. Cardiovascular disease protective factors are:

- a) increased HDL (high-density lipoproteins)
- b) physical activity
- c) moderate alcohol consumption
- d) using oral contraceptives
- e) estrogens

950. The moderate alcohol consumption of the "French Paradox" is:

- a) daily consumption of a glass of wine
- b) daily consumption of 25 ml of liquor
- c) daily consumption of 500 ml of beer divided in half and consumed at two different times
- d) daily consumption of 200 ml of beer
- e) daily consumption of 50 ml of liquor

951. In the prevention of cardiovascular diseases the justified effects of the "French Paradox" are:

- a) the effect of alcohol on moderate vasodilation
- b) the presence of antioxidant molecules in wine
- c) the decrease in the level of blood cholesterol
- d) normalizing the proportional distribution of lipids in the body
- e) normalization of deep breathing

952. The principles to organize and carry out a cardiovascular screening are:

- a) occasional detecting a risk factor requires research and other
- b) the screening action must be permanent
- c) the use of various cardiovascular treatment methods
- d) the predictive power of an investigated risk factor will depend on the number of measurements being taken
- e) the detection of risk factors must be global

953. The sources of generation of aggravating agents in non-communicable diseases are:

- a) chemicalization and urban agglomerations
- b) demographic structures and toxic residues
- c) informational systems and unhealthy lifestyle
- d) drug use and popular culture
- e) microbes, parasites, fungi

954. Early detection of obesity in children and adults includes:

- a) carrying out genetic screening
- b) calculating the incidence of obesity in children and adults
- c) calculating the prevalence of obesity in children and adults
- d) BMI measurement
- e) recording new cases of disease in various risk groups

955. Weight loss is possible by:

- a) a diet rich in fruit and vegetables
- b) a diet high in potato, rice, pasta
- c) sufficient amounts of food and beverages high in fat
- d) physical exercise
- e) smoking

956. In diabetes the risk factors are considered to be:

- a) excess body mass > 10% of the ideal weight
- b) excess body mass > 20% of the ideal weight
- c) type 2 diabetes in first level relatives
- d) excess body mass > 5% of the ideal weight
- e) blood pressure < 140/90 mmHg

957. Prevention of diabetes is focused on:

- a) body weight control
- b) promotion of physical activities
- c) quitting smoking
- d) high fiber diets and low fat diets
- e) regular consumption of aspirin

958. The major factors that modulate the epidemiology of gastric ulcer and duodenal ulcer are:

- a) *Helicobacter pylori* infection
- b) drinking coffee and chocolate
- c) consumption of non-steroidal anti-inflammatory drugs
- d) consumption of aspirin
- e) consumption of sugar

959. The final goals of the National Strategy for Control and Prevention of Non-Communicable Diseases for 2012-2020 are:

- a) avoiding premature death
- b) significant reduction in the burden of non-communicable diseases among the population
- c) retirement age increase
- d) improving the quality of people's lives
- e) increasing the life expectancy

960. The main objectives of the European Action Plan for Alimentation and Nutrition for 2015-2020 are:

- a) reducing inequalities in access to healthy food
- b) ensuring the right of each individual to have access to food
- c) promoting a healthy lifestyle
- d) improving the sustainable management of ecosystems in the cross-border area
- e) enabling people and communities to live in an environment that improves their health

C. MILITARY AND DISASTER EPIDEMIOLOGY

Simple choice

961. Observation is:

- a) a system of anti-epidemic measures with regime and restriction aimed at total isolation of the outbreak and liquidation of the infectious morbidity
- b) permanent medical surveillance of civilians, including the military staff from the zone of application of biological weapons
- c) a system of isolation measures, restriction and curative-prophylactic measures aimed to prevent the spreading of infectious diseases, inside and outside of the outbreak
- d) monitoring of the risk of bacteriological weapon application
- e) medical surveillance of persons eventually contaminated with infectious germs in case of eventual application of bacteriological weapons

962. Quarantine is:

- a) a system of anti-epidemic measures with special regime that includes total isolation of outbreaks
- b) a system of anti-epidemic measures organized in the outbreak, which involves special medical supervision during the minimum period of incubation from the moment of isolation of the last patient and terminal disinfection
- c) isolation of the epidemic outbreak by taking anti-epidemic measures
- d) risk monitoring of the emergence of contagious diseases in case of the use of biological weapons
- e) isolation of persons eventually contaminated with infectious germs in case of eventual use of biological weapons

963. Bacteriological indication is:

- a) the identification of the territory in which biological weapons were used and the specification of measures for the protection of the population
- b) a set of measures for detection and identification of biological weapons use by identification of pathogen species

- c) the assessment of epidemiological situation in the area of the contaminated outbreak and estimation of the health staff losses
- d) determination of the risk of use of biological weapons by an enemy
- e) the intention of using biological weapons by an enemy

964. Bacteriological recognition is:

- a) a complex of special measures aimed at the early detection of the preparation of the enemy to use biological weapons, detection of pathogens and toxins of infectious diseases in different substrates of the environment
- b) carried out by a special group of military professionals dealing with the detection of bacteriological laboratories, producing biological weapons
- c) a complex of measures carried out by medical specialists according to the Geneva Biological Weapons Convention
- d) a set of laboratory activities aimed to assess the genus identity of pathogens
- e) complex laboratory activities to assess sensitivity to antibiotics and substances used in sanitary processing of military staff in case of use of biological weapons

965. Which of the disasters listed below belong to the group of technogenic disasters, according to the classification:

- a) telluric disasters
- b) industrial disasters
- c) meteorological disasters
- d) social disasters
- e) specific disasters

966. In exceptional situations the main conditions favouring the mass spread of infectious diseases are:

- a) disruption of food and drinking water supply, as well as the decay of human and animal cadavers
- b) introduction of new pathogens into the territory
- c) changes in the resistance of various pathogens
- d) panic in the population
- e) the presence of animal and human cadavers

967. Specific disasters include:

- a) war, famine, bioterrorism
- b) intention to use biological weapons
- c) public order disturbances, earthquakes
- d) explosions and fires on the objects of the national economy
- e) pandemics, epidemics, large epidemic outbreaks, epizootics, mass poisoning of the population, drug addiction, alcoholism

968. Social disasters include:

- a) disorders of public order, earthquakes
- b) wars, famines, terrorism, bioterrorism
- c) alcoholism and drug addiction, floods, landslides, storms
- d) epidemics and outbreaks of contagious diseases with natural focus
- e) epidemics of contagious diseases, the result of the use of biological weapons

969. The risk of epidemic outbreaks in exceptional situations depends on several factors, the main being:

- a) the season when the calamity occurs
- b) the type of water supply of the population in the area of calamity
- c) type of disaster
- d) socio-economic level of the population registered before the calamity
- e) accessible roads in the area of calamity

970. In exceptional situations the main risk of mass contamination of people depends on:

- a) the season when the calamity occurs
- b) the contact with undetected sources of infection
- c) the opportunity for the intervention teams to arrive
- d) management activities of elimination of calamity consequences
- e) qualification of medical staff in medical institutions

971. In exceptional situation the spread of airborne infections among the population can be determined by:

- a) providing the affected population with qualitative drinking water and food
- b) crowding in different places not sufficiently ventilated
- c) the duration of the winding-up work
- d) qualification of rescue teams
- e) providing rescue teams with modern equipment

972. The risk of emergency of anthrax outbreaks in calamities is determined by:

- a) pathogenic features of the virus - pathogen
- b) the possibility to be infected with the pathogen by different transmission mechanisms
- c) a high stability of spore form of pathogens in the environment
- d) a low stability of spore form of pathogens in the environment
- e) carrying out the planned vaccination of animals and humans

973. The notion of primary sanitary losses in exceptional situations supposes:

- a) persons with injuries and traumas as a result of the calamity
- b) invading of infectious germs into the body
- c) emigrants from the disaster area
- d) economic losses caused by the disaster
- e) destruction of homes and institutions

974. In case of the disaster zone with massive destruction life losses, essential disorders in insurance systems with minimal necessary for existence, recorded outbreaks of infectious diseases, including conventional diseases with epidemic spreading, the epidemiological situation can be assessed, as:

- a) stable
- b) unstable
- c) satisfactory
- d) unsatisfactory
- e) extraordinary

975. In the calamity zone vaccinations are done in:

- a) normal conditions
- b) strictly aseptic conditions
- c) conditions depending on the infection
- d) conditions depending on the injected preparation
- e) no special requirements are needed to carry out vaccinations in the calamity zone

976. In case of the use of biological weapons the measure necessary to be taken is:

- a) deployment of military campaign hospitals
- b) stopping the realization of bacteriological recognition
- c) systematic taking sanitary-hygienic and anti-epidemic measures
- d) vaccination of the medical staff and affected population
- e) using the individual and collective protective measures

977. In case of the large disaster zone with massive destruction and disorders in social insurance system, contamination and pollution with microorganisms, toxins, etc., outbreaks of infectious diseases, epidemic outbreaks and conditions favouring their manifestation, the epidemiological situation can be assessed, as:

- a) satisfactory
- b) unstable
- c) partly difficult
- d) unsatisfactory
- e) extraordinary

Multiple choice

978. Which of the following is included in the notion of primary sanitary losses in exceptional situations:

- a) injuries and traumas as a result of the calamity
- b) contagious diseases as a result of the entering of infectious germs into the organism after the calamity
- c) worsening of chronic diseases
- d) only deaths during the calamity
- e) worsening of chronic diseases and deaths during the calamity

979. Biological weapons are characterized by:

- a) mass destruction
- b) retroactivity
- c) the ability to penetrate no-hermetic technical means
- d) single method of application
- e) quick in the indications

980. The observation system provides for:

- a) prohibition of the entry and exit from the calamities zone
- b) reduction of contacts among civilians and military men
- c) reduction of the entrance and exit from the area
- d) the military guard at the border area
- e) continuation of military activities

981. Quarantine regime involves:

- a) prohibition of the entry and exit from the area
- b) reduction of the contacts among civilians and military men
- c) the military guard at the border area
- d) reduction of the entry and exit from the area
- e) the contact with the outside territory is possible only through the special points

982. The specific features of the artificial epidemic process (after the use of biological weapons) are:

- a) there are no cases of disease in immune persons
- b) there is no source of pathogens
- c) cyclicity
- d) seasonality
- e) non-specific ways of transmission

983. The measures necessary to be taken in case of use of biological weapons are:

- a) to find the proof of the use of biological weapons
- b) to vaccinate the population
- c) to inform the population
- d) to use the individual protection equipment
- e) to use the collective protection means

984. Choose the measures aimed at eliminating the consequences of used biological weapons:

- a) emergency prevention and immunoprophylaxis
- b) sanitary processing of military staff
- c) sanitary processing of the equipment
- d) organization of evacuation and treatment the military staff
- e) carrying out bacteriological recognition

985. In calamities the risk of spreading the infectious diseases is determined by:

- a) previous epidemiological situation
- b) the level of training of medical staff
- c) the quality of the alarm system
- d) the level of hygiene education of the population
- e) the provision with drinking water and quality food

986. In exceptional situations the risk of outbreaks depends on:

- a) the season
- b) unorganized migration of groups of people
- c) the socio-economic level of the population before the disasters
- d) the accumulation of wastes and impossibility to evacuate them
- e) disorders of the environmental hygiene

987. Disasters are classified into the following types:

- a) natural disasters
- b) technogenic disasters
- c) social disasters
- d) economic disasters
- e) specific disasters

988. Social disasters are:

- a) disturbance of public order, earthquakes
- b) wars, famines
- c) acts of terrorism, bioterrorism
- d) high level of alcoholism and drug addiction among the population
- e) landslides, hurricanes, storms

989. In exceptional situations mass contamination of people is directly related to:

- a) the season
- b) a long-lasting period of undetected sources of infection
- c) a permanent contact with undetermined sources of infection
- d) deficiencies in isolation of contagious patients
- e) a multitude of ways of transmission of pathogens in the disaster area

990. To plan the anti-epidemic measures in calamities it is important to:

- a) establish the time of the activity of epidemic outbreak
- b) diagnose possible nosological forms
- c) monitor the progress of the epidemic process
- d) determine groups of population with high risk of infection
- e) determine accurately the trigger time of the disaster

991. The epidemiological situation in the disaster area can be assessed as:

- a) unsatisfactory
- b) partially difficult
- c) unstable
- d) extraordinary
- e) satisfactory

992. Choose the measures taken before the occurrence of the exceptional situation:

- a) to draw up action plans
- b) to install well-designed alarm systems
- c) evacuation of the population
- d) health education of the population
- e) to provide interested services with means of intervention

993. Which of the following actions is taken in places of mass agglomeration of the population in exceptional situations:

- a) organization of public evacuation points
- b) arrangement of healthcare points for medical assistance
- c) arrangement of isolation rooms for contagious patients
- d) setting up camp hospitals
- e) setting compulsory quarantine regime

994. Which of the following is necessary to take under rigorous control in exceptional situations:

- a) Ministries and Security forces
- b) water supply and sewerage systems
- c) facilities of food industry, catering and trade
- d) housing stock, including affected and unaffected by disasters
- e) public health institutions

995. In the area affected by the disaster, anti-epidemic measures need to be focused on:

- a) the compliance with the requirements of the anti-epidemic regime at the stages of evacuation of victims
- b) the anti-epidemic protection of the evacuated victims from the disaster area
- c) the prevention of the import and export of the infection to / from the affected area
- d) planning the anti-epidemic regime
- e) medical surveillance of victims with an objective of detecting contagious patients and their subsequent isolation

996. The effectiveness of anti-epidemic measures in the disaster area depends on:

- a) the type of disaster
- b) correctness and opportunity to perform sanitary-epidemiological recognition
- c) the correct assessment of the activity of the institutions and the population from the affected territory
- d) estimation of the epidemiological situation at possible evacuation stages and argumentation of the necessity to establish the observation or quarantine regime
- e) providing the active detection, hospitalization and treatment of contagious patients

997. The basic sanitary-hygienic and anti-epidemic measures taken during the evacuation of the population from the disaster area include:

- a) detection of infectious patients and suspected cases in specially designed evacuation points
- b) organizing the control of compliance with the required level of maintenance of sanitary conditions in the places of temporary deployment of the population
- c) control of organization of nutrition for refugees and personnel involved in rescue work
- d) ensuring control of drinking water treatment plants is not important
- e) water quality control to provide medical institutions

998. During the evacuation period, the insurance of sanitary-hygienic and anti-epidemic regime of population includes:

- a) to organize the control over the necessary level of compliance of sanitary conditions in the places of temporary deployment of the population
- b) monitoring the compliance sanitary-hygienic and anti-epidemic of rules during transportation of victims
- c) providing the population with means for individual water decontamination if it is necessary

- d) organizing the medical surveillance of the victims with the possible detection of contagious patients and their appropriate isolation
- e) only measures stated in the Order of the Supreme Commander of the Armed Forces

999. The requirements for carrying out vaccinations in the disaster area are:

- a) arrangement of facilities or special cars
- b) forming groups of specialists trained in immunoprophylaxis
- c) the use of instruments and means to obtain the desired effect in vaccine prevention
- d) vaccination in exceptional situations do not require strict aseptic conditions
- e) vaccination manipulations must be done under strict aseptic conditions

1000. The main causes of infectious disease outbreaks in wartime are:

- a) a sudden worsening of living and working conditions of the military forces and the population within the territory where military actions (campaigns) take place
- b) mass migration of the population
- c) worsening of sanitary-hygienic conditions
- d) living in disadvantaged areas from the point view of infectious diseases
- e) use of biological weapons

Answers Keys to the tests

1. b	36. a, b, d	71. c	106. a, b, d, e	141. c
2. c	37. a, b, d	72. c	107. a, b, d	142. a
3. c	38. a, c, d	73. b	108. a, b, c	143. b
4. b	39. b, c, e	74. b	109. a, b, d, e	144. b
5. c	40. a, b, c	75. b	110. a, c, e	145. b
6. c	41. c, d, e	76. b	111. a, d, e	146. d
7. b	42. a, d	77. b	112. d, e	147. d
8. b	43. b, e	78. b	113. a, b, c	148. b
9. a	44. b, c, d	79. b	114. a, b, c	149. a
10. c	45. a, b, c	80. c	115. a, b, c	150. b
11. b	46. a, b, c, e	81. e	116. a, b, c	151. a
12. b	47. b, c, e	82. c	117. a, b, c	152. b
13. b	48. a, b, c, e	83. c	118. a, b	153. a
14. a	49. a, c, e	84. c	119. b, c	154. c
15. a	50. c, d, e	85. a	120. a, b, e	155. a
16. a	51. c, d	86. a	121. a, c, e	156. d
17. c	52. a, b, c, d	87. a	122. a, c, e	157. a
18. c	53. b, c	88. e	123. a, b, c	158. c
19. b	54. a, b, c	89. a	124. a, b, c	159. b
20. b	55. a, b, c	90. a	125. a, b, c	160. c
21. b	56. a, b, c	91. b, e	126. b	161. a
22. a	57. b, d	92. a, b, c, d	127. c	162. c
23. b	58. a, b, c, d	93. b, c, d	128. e	163. b
24. a	59. a, b	94. b, c, d	129. a	164. b
25. a	60. a, b, c	95. a, c, d	130. b	165. c
26. c	61. a, b, c, e	96. a, d	131. c	166. c
27. a	62. a, b	97. a, b, e	132. c	167. a
28. a	63. a, d, e	98. a, c, d	133. a	168. e
29. a	64. b, c, d, e	99. a, b, c, e	134. b	169. b
30. a	65. a, c, d	100. b, e	135. c	170. a
31. a, b, d	66. e	101. b, d	136. a	171. a
32. a, b, c	67. b	102. a, d, e	137. b	172. a
33. b, c, e	68. b	103. a, c, e	138. b	173. a
34. b, c, d	69. d	104. a, b	139. a	174. a
35. a, b, c	70. b	105. c, d, e	140. e	175. a

176.	a, b	211.	a, b, c	246.	c	281.	a, b, e
177.	a, b, d	212.	a, b, c	247.	b	282.	c, d, e
178.	c, d	213.	a, c, d	248.	c	283.	a, b
179.	a, b, c	214.	a, b, c	249.	a	284.	a, b, d
180.	a, b, c, d	215.	a, b, c, d	250.	c	285.	a, b, d, e
181.	a, b, c, d	216.	a, b, c	251.	a	286.	a, b, c
182.	a, b, c, e	217.	a, b, c	252.	c	287.	a, b, c, d
183.	b, c, d	218.	a, b, c	253.	b	288.	a, b, c
184.	a, b, e	219.	a, b, c, d	254.	b	289.	c, d, e
185.	b, c, d, e	220.	a, b, c	255.	b	290.	a, b, c
186.	a, e	221.	a, b, c	256.	a	291.	a, b
187.	a, b, d, e	222.	a, b, c	257.	c	292.	a, b, c, d
188.	a, d	223.	a, b, c, d	258.	d	293.	b, c, d
189.	b, c, d	224.	a, b, c	259.	b	294.	a, b, c, e
190.	a, d, e	225.	a, c	260.	d	295.	a, b, d, e
191.	a, b, c	226.	a, b, c	261.	b	296.	b, c, d, e
192.	b, c, d, e	227.	a, b, c	262.	c	297.	b, c
193.	a, b, e	228.	a, b	263.	a	298.	a, b, c, d
194.	c, d	229.	b, c, d, e	264.	a	299.	c, d, e
195.	a, b, c, e	230.	a, b	265.	d	300.	a, b, d
196.	b, d	231.	a, b, c, d	266.	d	301.	b, d, e
197.	b, c, d	232.	a, b, c	267.	b	302.	a, b, c
198.	a, b, e	233.	a, b, c	268.	d	303.	a, c, d, e
199.	a, c, d	234.	a, b, c	269.	d	304.	b, c, d, e
200.	b, d, e	235.	a, b, c	270.	b	305.	b, c, d, e
201.	a, b, e	236.	b	271.	a, b	306.	a, b, c, d
201.	a, d, e	237.	a	272.	a, b	307.	c, d, e
203.	a, d	238.	c	273.	c, d, e	308.	a, b, c, e
204.	a, e	239.	a	274.	a, c, e	309.	a, b, d
205.	a, b	240.	b	275.	c, d	310.	a, b, c
206.	a, b, d	241.	b	276.	b, c, d, e	311.	b
207.	a, b, c, d	242.	a	277.	a, b, c	312.	a
208.	a, b, c	243.	b	278.	a, b, c, d	313.	c
209.	a, b, c	244.	b	279.	a, b, e	314.	c
210.	a, b, c, e	245.	b	280.	a, b, c, d	315.	b

316.	c	351.	b	386.	b, c, d	421.	a	456.	e
317.	c	352.	a	387.	d, e	422.	a	457.	b
318.	c	353.	a	388.	b, d	423.	d	458.	b
319.	b	354.	c	389.	b, c, d	424.	e	459.	a
320.	e	355.	a	390.	a, b	425.	c	460.	c
321.	e	356.	c	391.	b, c, d	426.	b	461.	b
322.	e	357.	a	392.	b, c, d	427.	c	462.	b
323.	b	358.	a	393.	b, d, e	428.	b	463.	c
324.	c	359.	c	394.	a, b, c	429.	b	464.	c
325.	a	360.	c	395.	b, c, d, e	430.	c	465.	b
326.	b	361.	b, c, e	396.	a, c, d	431.	a	466.	c
327.	e	362.	a, d, e	397.	b, c, d, e	432.	e	467.	a
328.	d	363.	c, d	398.	a, b, e	433.	e	468.	b
329.	d	364.	b, c	399.	a, b, c	434.	b	469.	a
330.	b	365.	a, b, d	400.	a, b, c	435.	c	470.	c
331.	c	366.	a, d, e	401.	b, c, e	436.	a	471.	b
332.	b	367.	a, c, e	402.	a, b, e	437.	a	472.	e
333.	a	368.	a, b, d, e	403.	a, b, c	438.	b	473.	e
334.	d	369.	b, c, e	404.	a, b	439.	b	474.	a
335.	b	370.	a, d, e	405.	a, b	440.	c	475.	a
336.	e	371.	b, d, e	406.	d, e	441.	c	476.	a
337.	e	372.	a, b, e	407.	a, b, c, e	442.	e	477.	a
338.	a	373.	a, b, c	408.	a, b, c	443.	b	478.	b
339.	a	374.	a, b, c, d	409.	b, c, d, e	444.	b	479.	b
340.	d	375.	a, d, e	410.	a, c, d, e	445.	c	480.	c
341.	b	376.	c, d, e	411.	a, b, d	446.	a	481.	d
342.	c	377.	a, b, c, e	412.	a, e	447.	b	482.	a
343.	b	378.	a, c, e	413.	a, b, c, e	448.	c	483.	b
344.	d	379.	a, c, d	414.	a, b, c, d	449.	c	484.	b
345.	c	380.	a, b, c	415.	a, d, e	450.	c	485.	a
346.	a	381.	a, b, d, e	416.	a, d, e	451.	a	486.	b
347.	b	382.	b, c	417.	a, b, c	452.	c	487.	e
348.	b	383.	a, b, d	418.	b, c	453.	a	488.	d
349.	e	384.	b, c, d	419.	a, b	454.	e	489.	b
350.	c	385.	a, b, c, d	420.	a, b, c	455.	d	490.	c

491.	a	526.	a, b	561.	a, e	596.	b, c
492.	a	527.	a, c, d	562.	b, e	597.	b, d, e
493.	c	528.	a, c, d	563.	a, d, e	598.	b, c, d
494.	a	529.	b, c, e	564.	c, d	599.	a, b, c, d
495.	b	530.	a, c	565.	b, c	600.	a, b, c
496.	b	531.	a, b, c, d	566.	a, c, d	601.	c
497.	d	532.	b, c	567.	a, b, e	602.	a
498.	b	533.	b, d, e	568.	b, c, e	603.	d
499.	c	534.	b, c, e	569.	a, b, d	604.	e
500.	a	535.	a, b, d	570.	a, b, c, d	605.	c
501.	b	536.	c, d	571.	a, b, c, d	606.	e
502.	b	537.	a, b, d	572.	a, b	607.	d
503.	a	538.	a, b, c	573.	d, e	608.	b
504.	e	539.	a, c, d	574.	a, b, c	609.	a
505.	a	540.	d, e	575.	b, c	610.	e
506.	c	541.	a, b, e	576.	c, e	611.	b
507.	c	542.	a, b, c, d	577.	a, b	612.	c
508.	b	543.	a, c, d	578.	a, b, c, d	613.	a
509.	d	544.	a, c, e	579.	b, d	614.	c
510.	a	545.	a, b, c	580.	a, b, c, e	615.	c
511.	a, b, d	546.	a, b, e	581.	a, b, c, d	616.	c
512.	a, c, e	547.	a, b	582.	a, d, e	617.	c
513.	a, b, e	548.	b, c, d	583.	a, b, e	618.	a
514.	b, c, d	549.	a, b	584.	a, c, e	619.	b
515.	c, d, e	550.	a, b, d, e	585.	a, d, e	620.	a
516.	a, c, e	551.	a, c, d	586.	a, c	621.	a
517.	a, b, c, d	552.	a, b, c, d	587.	a, b	622.	a
518.	a, b, e	553.	a, c	588.	a, b, c, d	623.	a
519.	a, b, c, e	554.	a, b	589.	b, c, e	624.	a
520.	b, c, d	555.	a, c, d	590.	d, e	625.	a
521.	b, d, e	556.	a, d, e	591.	b, c, d	626.	d
522.	a, b	557.	c, d	592.	a, c, d	627.	c
523.	a, b, e	558.	a, d, e	593.	a, b, d	628.	d
524.	a, b, c	559.	b, d, e	594.	d, e	629.	c
525.	a, c, d	560.	a, b	595.	b, c, d	630.	c

631.	a, b, d, e	666.	e	701.	a, c, d	736.	a
632.	a, b, c	667.	b	702.	b, d, e	737.	a
633.	a, b, c	668.	a	703.	a, d	738.	a, d, e
634.	a, b, c	669.	c	704.	a, d, e	739.	a, b
635.	b, c, d	670.	b	705.	b, c, e	740.	a, c, d
636.	a, b, c	671.	e	706.	a, b, d	741.	a, b, c
637.	a, b, d	672.	c	707.	a, b, c, d	742.	a, b, d
638.	c, d, e	673.	e	708.	d, e	743.	a, b, c
639.	a, b, c	674.	b	709.	a, b, c, d	744.	a, b, c, e
640.	b, c, d	675.	a	710.	a, b, c, d	745.	a, c, e
641.	a, b, e	676.	a	711.	a, d, e	746.	a, c, d, e
642.	b, c, d	677.	a	712.	a, b, c, d	747.	a, b, d
643.	a, b, c	678.	d	713.	a, b, c, d	748.	b, c, d
644.	c, d, e	679.	a	714.	a, b, c, e	749.	a, b, c
645.	a, b, c	680.	b	715.	a, b, c	750.	a, b
646.	a, b, c	681.	a	716.	b	751.	a, b, c
647.	a, b, c	682.	a	717.	b	752.	a, b, d
648.	a, c	683.	a, b, d, e	718.	a	753.	a, b
649.	a, b	684.	a, b	719.	b	754.	a, b, c, d
650.	b, d	685.	b, c, d	720.	a	755.	a, b
651.	b, c, d, e	686.	a, b, e	721.	a	756.	a, b, c, d
652.	a, b, c	687.	a, c, d	722.	a	757.	a, b, c
653.	a, b, c	688.	b, c, e	723.	a	758.	a, b, c, d
654.	a, b, c	689.	a, b, c, d	724.	b	759.	a, b
655.	a, b, c	690.	a, b, d	725.	a	760.	a, b
656.	a, c, d	691.	a, b, c	726.	a	761.	a, b, c
657.	a, b, c	692.	a, b, d	727.	a	762.	a, b, c
658.	a, b, c, d	693.	a, c, d	728.	b	763.	a, b, c
659.	a, b, c	694.	b, c, d	729.	b	764.	a, b
660.	a, b, c	695.	d, e	730.	b	765.	a, b, c
661.	a	696.	b, d	731.	b	766.	c
662.	a	697.	a, b, c	732.	c	767.	a
663.	e	698.	c, e	733.	c	768.	b
664.	b	699.	a, d, e	734.	c	769.	c
665.	e	700.	a, b, c	735.	a	770.	c

771.	a	806.	a, c, d	841.	b	876.	a, b, c
772.	b	807.	a, b, c	842.	b	877.	a, b, d
773.	e	808.	a, b, c, d	843.	d	878.	b, c, d
774.	c	809.	b, d	844.	c	879.	a, b, e
775.	a	810.	a, b, c	845.	b	880.	a, b, c
776.	a	811.	a, b	846.	b	881.	c
777.	c	812.	a, b, d	847.	c	882.	e
778.	a	813.	a, c, e	848.	b	883.	b
779.	b	814.	a, c, d	849.	b	884.	a
780.	a	815.	a, c, d	850.	c	885.	d
781.	b	816.	a, b, d	851.	a, b, c	886.	b
782.	c	817.	a, c, d	852.	a, b, c	887.	e
783.	a	818.	a, b, c	853.	c, d, e	888.	a
784.	a	819.	a, c, d	854.	b, c, e	889.	a
785.	d	820.	a, b, c	855.	a, b, e	890.	b
786.	a, d, e	821.	a, c, d, e	856.	a, b, c	891.	a, b, d
787.	a, b, c	822.	a, b, d, e	857.	b, c, e	892.	a, c
788.	a, b, c, d	823.	d, e	858.	c, d, e	893.	a, b, c
789.	b, c, d	824.	a, c, d, e	859.	a, c, d	894.	a, b, d, e
790.	a, c, e	825.	b, c	860.	a, b, d	895.	a, c, d
791.	a, d	826.	c	861.	a, b	896.	b, c, d
792.	a, b, c, d	827.	c	862.	b, d, e	897.	a, b, c
793.	a, b, c	828.	a	863.	a, b, e	898.	b, c
794.	b, c, d, e	829.	c	864.	a, b	899.	a, b, c, d
795.	a, b, c	830.	b	865.	a, b	900.	a, b, c
796.	b, c, d	831.	b	866.	a, b	901.	b, c, d, e
797.	a, b, c, e	832.	a	867.	a, b, c	902.	a, b, c, d
798.	a, b, c	833.	a	868.	a, b, c	903.	b, c, d, e
799.	a, b, c, d	834.	c	869.	a, c, d, e	904.	a, b, c, d
800.	a, b, c, d	835.	b	870.	a, d, e	905.	a, c, d, e
801.	a, b, c, d	836.	c	871.	b, c, e	906.	a
802.	a, b, d	837.	c	872.	a, e	907.	c
803.	a, b, c	838.	a	873.	a, b, c, d	908.	b
804.	a, b, c	839.	c	874.	a, b, c, d	909.	a
805.	a, b, c, d	840.	c	875.	a, b, c, d	910.	b

911.	a	946.	a, b, c, d	981.	b, c, e
912.	a	947.	a, b, c	982.	a, b, e
913.	b	948.	a, b, c	983.	a, c, d, e
914.	c	949.	a, b, c	984.	a, b, c
915.	b	950.	a, b, d	985.	a, d, e
916.	b	951.	a, b	986.	b, c, d, e
917.	a	952.	a, b, d, e	987.	a, b, c, e
918.	c	953.	a, b, c, d	988.	b, c, d
919.	a	954.	a, d	989.	b, c, d, e
920.	a	955.	a, b, d	990.	a, b, c, d
921.	b	956.	b, c	991.	a, c, d, e
922.	a	957.	a, b, d	992.	a, b, d, e
923.	c	958.	a, c, d	993.	a, b, c
824.	c	959.	a, b, d, e	994.	b, c, d, e
925.	a	960.	a, b, c, e	995.	a, b, c, e
926.	c	961.	c	996.	b, c, d, e
927.	a	962.	a	997.	a, b, c, e
928.	a, c, d	963.	b	998.	a, b, c, d
929.	a, b, d, e	964.	a	999.	a, b, c, e
930.	a, b, c	965.	b	1000.	a, b, c, d
931.	a, b, c, d	966.	a		
932.	a, b, c, d	967.	e		
933.	a, b, c	968.	b		
934.	b, c, e	969.	d		
935.	a, b	970.	b		
936.	b, c	971.	b		
937.	a, b, c, d	972.	c		
938.	b, c, e	973.	a		
939.	b, d, e	974.	e		
940.	b, d, e	975.	b		
941.	b, c, d	976.	e		
942.	a, c, d, e	977.	d		
943.	a, b, c, d	978.	a, b		
944.	b, c, d	979.	a, b, c		
945.	a, b, d	980.	b, c, e		

