Tests for II module control

1. For researching of attention switching
   A. use chronoreflexmeter
   B. register number of the conditioned responses disturbances is registered due to differentiated stimulus – red colour light signal
   C. register value of the mistake which was made during determination of the reaction to mobile object
   D. offering to investigated person three variants of work with red-black Scultze-Platonov table*
   E. use specialized correction tables

2. Efficiency of the mechanical memory is high, if results of this test are
   A. 80 – 100%*
   B. 50 – 100%
   C. 50 – 80%
   D. less than 50%
   E. 20 – 50%

3. ... is used for determination of speed of the simple visual and motor reaction.
   A. Chronoreflexmeter*
   B. number of the conditioned responses disturbances is registered due to differentiated stimulus – red colour light signal – appears
   C. specialized correction tables
   D. offering to investigated person three variants of work with red-black Scultze-Platonov table
   E. value of the mistake which was made during determination of the reaction to mobile object

4. Hand and mercury dynamometers are used for
   A. research of the linear eye
   B. research of kinesthesia
   C. research of the thremor
   D. research of coordination of movements
   E. research of muscle strength and muscle stamina*

5. Kern-Irasik test includes ... tasks
   A. 3*
   B. 4
   C. 1
   D. 2
   E. 5

6. Control of the time-table includes:
   A. examination of time of classes at school, duration of lessons, correspondence of number of classes during school year and week to curriculum
   B. examination of time of classes at school, duration of lessons, breaks between lessons and sections, correspondence of number of classes during school year and week to curriculum*
   C. examination of time of classes at school, duration of lessons, breaks between lessons and sections
   D. correspondence of number of classes during school year and week to curriculum
   E. correspondence of number of classes during school year and week to age peculiarities of the children

7. For researching of the nervous processes mobility
   A. use chronoreflexmeter
   B. register number of the conditioned responses disturbances is registered due to differentiated stimulus – red colour light signal*
   C. register value of the mistake which was made during determination of the reaction to mobile object
   D. offering to investigated person three variants of work with red-black Scultze-Platonov table
   E. use specialized correction tables

8. For researching of the attention stability
   A. use specialized correction tables*
   B. use chronoreflexmater
C. register number of the conditioned responses disturbances is registered due to differentiated stimulus – red colour light signal
D. register value of the mistake which was made during determination of the reaction to mobile object
E. offering to investigated person three variants of work with red-black Scultze-Platonov table

9. Methods of ... are used for hygienic assessment of the day regimen of children and adolescents.
   A. questionnaire, interview and time-keeping observation*
   B. questionnaire and time-keeping observation
   C. questionnaire and interview
   D. interview and time-keeping observation
   E. questionnaire, interview dynamometeria and time-keeping observation

10. For researching of the nervous processes steadiness
    A. use chronoreflexmeter
    B. register number of the conditioned responses disturbances is registered due to differentiated stimulus – red colour light signal
    C. register value of the mistake which was made during determination of the reaction to mobile object*
    D. offering to investigated person three variants of work with red-black Sultze-Platonov table
    E. use specialized correction tables

11. Thremormeter and special gage probe are used for
    A. researching of the linear eye
    B. researching of kinesthesia
    C. researching of coordination of movements*
    D. researching respiration disorders
    E. researching of muscle strength and muscle stamina

12. Duration of a lesson in general educational establishments is the following: 1st year of study -
   A. 45 minutes
   B. 30 minutes
   C. 35 minutes*
   D. 20 minutes
   E. 25 minutes

13. Beginning of lessons must be not earlier than ... in general educational establishments
    A. 8.30
    B. 8.00*
    C. 9.00
    D. 7.30
    E. 7.45

14. Hygienic assessment of organization of a lesson includes
    A. research of the lesson conduction, peculiarities of the study material presentation, methods of teaching and use of visual methods, degree of development of the pupils fatigue during study, time of main structure elements of the lesson*
    B. research of the lesson conduction, methods of teaching and use of visual methods, degree of development of the pupils fatigue during study, time of main structure elements of the lesson
    C. research of peculiarities of the study material presentation, methods of teaching and use of visual methods, degree of development of the pupils fatigue during study, time of main structure elements of the lesson
    D. research of the lesson conduction, peculiarities of the study material presentation, methods of teaching and use of visual methods, degree of development of the pupils fatigue during study
    E. research of the lesson conduction, peculiarities of the study material presentation, methods of teaching and use of visual methods, time of main structure elements of the lesson

15. Indicate the main source of the classes air pollution
    A. emissions of the industrial plants
    B. human vital activity products*
    C. soil dust
    D. polymeric material
    E. home appliances
16. Name the physiometric indices
   A. thorax circumference
   B. lung vital capacity*
   C. body weight
   D. body length
   E. form of lower extremities

17. Give the definition of the “child’s physical development” concept
   A. totality of morphological and functional features of the organism characterized its growth and development in a certain period of life*
   B. factors of expansion and development of organs and tissues
   C. degree of muscular development and its functional readiness in different periods
   D. totality of actions directed to training the physically developed children
   E. objective test of health and sanitary state assessment

18. Name the main index used for hygienic evaluation of children furniture.
   A. Modern design matching
   B. Correspondence between the size of children’s and school furniture and the body length*
   C. Distance from front edge of the desk to the chair hack
   D. Body position using furniture
   E. Desk and chair linked into one unit or not

19. Point out the indices of artificial illumination used for evaluation of lighting in classrooms?
   A. lighting coefficient
   B. angle of incidence
   C. angle of aperture
   D. depth coefficient
   E. evenness*

20. Point the main criterion of complex assessment of the children and adolescents health state
   A. presence or absence of chronical diseases*
   B. puberty
   C. state of mental stability
   D. indices of morpho-functional development
   E. child functional readiness to training at school

21. What children are pertained to the fourth health group?
   A. they are ill frequently during long period of time
   B. has weak myopia
   C. children and adolescents suffering from chronic diseases in compensation stage
   D. children and adolescents with significantly lowered funcional resources of organism.
   E. children and adolescents suffering from chronic diseases in subcompensation stage*

22. What is the best length between the blackboard and the first row of the desks (4 class) m?
   A. 1,0
   B. 2,0
   C. 3,0*
   D. 4,0
   E. 5,0

23. How many % must have green area of land plot of general education establishment?
   A. 12-15%
   B. not less than 25%
   C. not less than 30%
   D. not less than 65%
   E. not less than 50%*

24. First health group includes
   A. healthy children and adolescents who have functional and some morphological deviations after illness
   B. healthy children and adolescents with harmonious development*
   C. healthy children and adolescents who have low resistance to acute diseases
   D. healthy children and adolescents who are ill frequently during long period of time
   E. children and adolescents who have rheumatism in inactive phase

25. What is the profile of physical development?
A. side projection of children’s body in vertical position
B. frontal projection of children’s body in vertical position
C. ratio of body length in sitting and standing position
D. ratio of body weight and thorax circumference
E. graphic presentation of received sigma deviation data of main anthropometric indices*

26. Hygienic norm of daylight factor in the classroom must be
   A. not less than 0.5%
   B. not less than 1.0%
   C. not less than 1.25%
   D. not less than 1.5%*
   E. not less than 2.0%

27. What is the number of school desk for 130-145 cm height pupils?
   A. 1
   B. 2
   C. 3*
   D. 4
   E. 5

28. What children are ill frequently?
   A. they are ill no less than 1 time during a month
   B. they were ill 4 times and more during the last year*
   C. they were ill no less the 3 times during the last quarter
   D. they were ill no less than 5 times during the last year
   E. they were ill no less than 6 times during the last year

29. What children are pertained to the third health group?
   A. they are ill frequently during long period of time
   B. has weak myopia
   C. children and adolescents suffering from chronic diseases in compensation stage*
   D. children and adolescents with significantly lowered functional resources of organism.
   E. children and adolescents suffering from chronic diseases in subcompensation stage

30. What must be the distance of the seat?
   A. Negative (2-3 cm)*
   B. Negative (10-12 cm)
   C. Zero
   D. Positive (2-3 cm)
   E. Positive (10-12 cm)

31. Hygienic norm for temperature in classroom is:
   A. 16-18°C
   B. 18-22°C*
   C. 20-22°C
   D. 21-25°C
   E. 22-24°C

32. Point the somatoscopic indices
   A. form of spinal column*
   B. lung vital capacity
   C. body length
   D. index of external respiration
   E. thickness of belly fat folds

33. Biological age of a child has to be determined based on
   A. body weight
   B. body length
   C. thorax circumference
   D. number of permanent teeth*
   E. circumferences of head

34. Hygienic norm of lighting coefficient in the classroom must be:
   A. 1:7
   B. 1:6
   C. 1:5
35. What is the main hygienic demand for natural lighting in the classroom?
   A. the brightness must be no more than 2000 Cd/m²
   B. the lighting coefficient not less than 1:10
   C. the daylight factor not less than 1,5%*
   D. windowsill height is 1m
   E. angle of incidence not less than 50°

36. We use … as the main for assessment of the children and adolescents health state
   A. morbidity rate
   B. pathological affection
   C. presence or absence of chronical diseases during examination*
   D. infectious morbidity
   E. health index

37. Name the most complete method of children’s and adolescent’s health assessment
   A. determination of the chronological age
   B. determination of the development regional standards
   C. assessment of physical development using complex method*
   D. assessment of physical development using regression scales
   E. measurements of somatometric indices

38. … must be taken into account to calculate required ventilation rate.
   A. type of ventilation
   B. the number of pupils in the classroom*
   C. Windows orientation
   D. MAC of CO₂
   E. the number of the windows

39. Area of the classroom must be not less than … m²
   A. 30
   B. 35
   C. 45
   D. 50
   E. 60*

40. Give the definition of the “rational nutrition” concept.
   A. Nutrition which provides the proteins, fats and carbohydrates enough intake
   B. Nutrition good in taste
   C. Nutrition corresponds to body enzyme system possibilities
   D. Nutrition which provides optimal body growth and development, its high work capacity and longevity*
   E. Nutrition corresponds to energy expenditures

41. Biological oxidation of 1 g proteins release… calories
   A. 2,0
   B. 3,0
   C. 4,0*
   D. 9,0
   E. 10,0

42. … is the main source of the carbohydrates
   A. Berries
   B. Cereals
   C. Potato*
   D. Dairy foods
   E. Black crop

43. What is the main physiological function of vitamins in organism?
   A. Energy
   B. Plastic
   C. Catalytic*
   D. Protective
   E. Gustatory
44. What type of sugar is specific for milk?
   A. fructose
   B. sucrose
   C. glucose
   D. lactose*
   E. maltose

45. Food poisoning by solanine is caused by … consumption.
   A. almonds
   B. jam with stones
   C. beans
   D. haricot
   E. green potato*

46. Consumption of cereals may lead to …
   A. renal calculi
   B. sprue
   C. cachexia
   D. kwashiorkor
   E. mycotoxicosis*

47. Avitaminoses are …
   A. morbid conditions caused by overconsumption of vitamins
   B. diseases caused by total lack of some vitamin in food
   C. morbid conditions resulted of inadequate intake of vitamins in food
   D. morbid conditions caused by malabsorption of vitamins
   E. diseases caused by total lack in food or malabsorption of vitamins*

48. Patient with a high temperature (38.5°C), nausea, multiple vomiting, stomachache, diarrhea and general weakness got in hospital reception. Patient was having lunch in cafeteria 6 hours before (pea soup, mashed potatoes, fish cake and scalded cream cake). Point out the probable cause of disease.
   A. botulism
   B. staphylococci toxicosis
   C. alimentary toxicoinfection*
   D. alimentary mycotoxicosis
   E. poisoning by xenobiotics

49. Breakfast in 4 meals a day system must be … % by energy.
   A. 15-20
   B. 30-35
   C. 35-40
   D. 20-25*
   E. 30-45

50. The obesity is diagnosed when BW is more than …% of normal BW
   A. < 5%
   B. = 5%
   C. 6-8%
   D. 9-14%
   E. 15%

51. … is taken into account during calculation of nutrients requirements
   A. Intensity of labour
   B. Daily energy expenditures*
   C. Ideal body mass
   D. Basal metabolism
   E. Regimen of nutrition

52. Recommended daily dose/rate of vitamin A (retinol equivalent) for adults (in μg)
   A. 800
   B. 1000*
   C. 20
   D. 400
   E. 100

53. What mineral is not enough in milk?
A. Calcium
B. Phosphorus
C. Iron
D. Copper
E. Iodine*

54. Give the definition of the bacterial toxicosis concept.
   A. acute disease caused by consumption of food which contains a lot of toxins produced during the
growth and development of microorganisms*
   B. acute disease caused by consumption of food which contains a lot of live causative agents and
toxins produced during the growth and development of special causative agent
   C. acute and frequently mass disease caused by consumption of food which contains a lot of special
causative agent
   D. chronic disease caused by consumption of food which contains a lot of toxic recremens of fungi
   E. chronic disease of gastrointestinal tract caused by permanent consumption of bad quality food

55. The nutritional state is…
   A. amount of food in daily allowance
   B. qualitative composition of daily allowance
   C. physical development of organism
   D. degree of fatness
   E. state of the organism depending on nutrition*

56. Energy value of the products is determined by content of … in it.
   A. Carbohydrates*
   B. Flavoring agents
   C. Mineral substances
   D. Preservatives
   E. Vitamins

57. How much fat must be in milk according to standard?
   A. no less than 1,5%
   B. no less than 2,0%
   C. no less than 2,5%*
   D. no less than 3,0%
   E. no less than 3,5%

58. The most physiological ratio between proteins, fats and carbohydrates is…
   A. 1:1:4*
   B. 1:1,3:5
   C. 1:5:0,5
   D. 1:1,1:4,3-4,9
   E. 1:1,5:5

59. What distribution of energy during the day is the most appropriate for night workers?
   A. dinner after sleep 20-25%, supper before work 30%, night meal 20%, breakfast 25-30%
   B. dinner after sleep 40%, supper before work 30%, night meal 15%, breakfast 15%
   C. dinner after sleep 25%, supper before work 20%, night meal 25%, breakfast 30%
   D. dinner after sleep 50%, supper before work 15%, night meal 10%, breakfast 25%
   E. dinner after sleep 25%, supper before work 35%, night meal 20%, breakfast 20%

60. The richest in polyunsaturated fatty acids product is…
   A. Butter
   B. Beef fat
   C. Fat-tail
   D. Lard
   E. Sunflower oil*

61. What is the most typical symptom of vitamin C hypovitaminosis?
   A. gingival hemorrhage during tooth brushing and pressing the gums*
   B. day blindness
   C. cheilosis
   D. conjunctivitis
   E. ruddy, dry, painful tongue

62. Point out the products the staphylococci toxin formation may become in.
A. juice and mineral water  
B. sausage and smoked meat  
C. milk and milk products  
D. Plant salad  
E. Eggs, scalded cream*

63. The most valuable protein is a compound of …
A. meat  
B. fish  
C. milk  
D. eggs*  
E. beans

64. … is caused by D avitaminosis.
A. scurvy  
B. hemeralopy  
C. rachitis*  
D. beriberi  
E. pellagra

65. Appearance of widespread diseases of gastrointestinal system such as gastritis, pancreatitis is frequently caused by…
A. quantitative adequacy of allowance  
B. eating [dietary] pattern*  
C. qualitative adequacy of allowance  
D. inadequacy of enzyme system possibilities  
E. epidemiological unsafeness of food

66. High in calories are…
A. Fruits and vegetables  
B. Fats*  
C. Meat  
D. Crops  
E. Fish

67. Main sources of vitamin E
A. green foliage of plants  
B. vegetable oil*  
C. rosehip and black currant  
D. cod liver  
E. citrus plants

68. Why milk is falsified by starch?
A. to decrease milk acidity  
B. to increase the bactericidal features of milk  
C. to improve gustatory of milk  
D. to increase relative density of milk*  
E. giving the salable conditions

69. Main sources of vitamin A
A. green foliage of plants  
B. vegetable oil  
C. rosehip and black currant  
D. cod liver*  
E. citrus plants

70. Maximum of cellulose and minimum of carbohydrates are in … (very useful for elder people, for those who are employee of mental work)
A. millet  
B. rice  
C. semolina  
D. pearl barley and barleycorn  
E. buckwheat and oats*

71. What is the difference between food poisonings and enteric infection?
A. short incubation period*
B. transmitted from ill to healthy person
C. sporadic cases
D. contact way of transmitting
E. highly zymotic

72. What food poisoning is the most dangerous to human health?
   A. Bacterial toxicosis*
   B. Toxicoinfection
   C. Mycotoxicosis
   D. Poisoning by plants
   E. Poisoning by pesticides

73. The most danger of food contamination by pathogenic staphylococcus is presented by…
   A. persons suffering from ARVI
   B. carriers of ETEC
   C. sick suffering from frog felon*
   D. persons suffering from pyelitis
   E. persons suffering from peptic ulcer

74. What is the most typical symptom of vitamin A hypovitaminosis?
   A. neurasthanic asthanopia
   B. polyneuritis
   C. cheilosis
   D. gingival hemorrhage during tooth brushing and pressing the gums
   E. day blindness*

75. … is the exogenous cause of hypovitaminosis
   A. Increased need in vitamins
   B. Decomposition of vitamins in gastrointestinal tract
   C. Underconsumption of natural vitamins with food*
   D. Malabsorption of vitamins
   E. Liver and pancreas diseases

76. Give the definition of the alimentary toxicoinfection concept:
   A. acute disease caused by consumption of food which contains a lot of toxins produced during the
growth and development of special causative agent
   B. acute disease caused by consumption of food which contains a lot of live causative agents and
toxins produced during the growth and development of special causative agent*
   C. acute and frequently mass disease caused by consumption of food which contains a lot of special
causative agent
   D. chronic disease caused by consumption of food which contains a lot of toxic recremens of fungi
   E. chronic disease of gastrointestinal tract caused by permanent consumption of bad quality food

77. Acidity of milk is provided by…
   A. lactic acid, phosphate and lactic salts*
   B. mineral salts and phosphfatecontaining substances
   C. lactic and acetic acids
   D. albumin and globulin
   E. lactose

78. Main symptoms of scurvy are…
   A. Small cutaneous and large cavitary hemorrhages*
   B. Digestive upsets
   C. Peripheral neuritis
   D. Bone formation abnormalities
   E. Maceration and desquamation of epithelium

79. Main sources of vitamin D
   A. green foliage of plants
   B. vegetable oil
   C. rosehip and black currant
   D. cod liver*
   E. citrus plants

80. Main sources of vitamin B
   A. green foliage of plants*
B. vegetable oil
C. rosehip and black currant
D. cod liver
E. citrus plants

81. Meat of which animal can be a source of invasion by trichinosis?
   A. rabbit
   B. pig*
   C. livestock
   D. lamb
   E. poultry

82. What is significant disadvantage of mango, tamarind, pineapple?
   A. full-value protein deficiency*
   B. low content of polyunsaturated fatty acids
   C. low content of vitamins
   D. rich in calories
   E. high content of cholesterol

83. What are the vitamins according to modern concepts?
   A. Organic substances which are the complex ethers of triatomic alcohol and fatty acids
   B. Low-molecular compounds necessary to enzyme catalysis, metabolism, homeostasis*
   C. Polyoxylketonic compounds and their derivatives
   D. Essential compounds, absence of which leads to life, growth and development impossibility
   E. High-molecular substances built from residues of 20 amino acids

84. The most simple method of hypovitaminosis diagnosing is …
   A. somatometric
   B. somatoscopic*
   C. physiometric
   D. biochemical
   E. clinical and statistics

85. In which cases the energy value of daily allowance must exceed energy expenditures?
   A. Pregnancy
   B. Sportsman
   C. Child
   D. Breastfeeding*
   E. Elders

86. PAC for II physical activity group is …
   A. 1,0
   B. 1.2
   C. 1,4
   D. 1,6*
   E. 1,8

87. PAC for III physical activity group is …
   A. 1,9*
   B. 1.2
   C. 1,4
   D. 1,6
   E. 1,8

88. Give the definition of the mycotoxicosis concept.
   A. acute disease caused by consumption of food which contains a lot of toxins produced during the growth and development microorganisms
   B. acute disease caused by consumption of food which contains a lot of live causative agents and toxins produced during the growth and development of special causative agent
   C. acute and frequently mass disease caused by consumption of food which contains a lot of special causative agent
   D. chronic disease caused by consumption of food which contains a lot of toxic recremens of fungi*
   E. chronic disease of gastrointestinal tract caused by permanent consumption of bad quality food

89. What is the protein content (in%) in rice?
   A. 10
90. PAC for IV physical activity group (woman) is …
   A. 1,0
   B. 1,2
   C. 2,2*
   D. 1,6
   E. 1,8

91. PAC for IV physical activity group (man) is …
   A. 1,0
   B. 1,2
   C. 2,3*
   D. 1,6
   E. 1,8

92. Recommended daily dose/rate of vitamin C (ascorbic acid) for adults (in mg)
   A. 50-70
   B. 60-90
   C. 70-100*
   D. 80-120
   E. 90-130

93. Biological oxidation of 1 g carbohydrates release… calories
   A. 2,0
   B. 3,0
   C. 4,0*
   D. 9,0
   E. 10,0

94. Point out the products the salmonella toxin formation may become in.
   A. juice and mineral water
   B. sausage and smoked meat*
   C. milk and milk products
   D. Plant salad
   E. Eggs, scalded cream

95. … is caused by PP avitaminosis.
   A. scurvy
   B. hemeralropy
   C. rachitis
   D. beriberi
   E. pellagra*

96. Physiological factors determining requirements of organism in vitamins are …
   A. Nutrition habits
   B. Live conditions
   C. Climatic conditions
   D. Age, sex*
   E. Geographical latitude

97. The patient with poisoning was taken to hospital. It is estimated the mechanisms of detoxication in liver are deranged. What type of hepatocyte organelle can determine this state?
   A. mitochondrion
   B. agranular endoplasmic reticulum*
   C. granular endoplasmic reticulum
   D. Golgi apparatus
   E. Ribosomes

98. Low in calories are…
   A. Fruits and vegetables*
   B. Fats
   C. Meat
D. Crops
E. Fish

99. PAC for first physical activity group is …
   A. 1,0
   B. 1,2
   C. 1,4*
   D. 1,6
   E. 1,8

100. Vitamin-forming action of ultraviolet radiation is concerned with influence on provitamin in…
    A. skin fat
    B. the liver
    C. sebaceous glands of the skin*
    D. the blood
    E. the bones

101. … is caused by D avitaminosis.
    A. scurvy
    B. hemeralopy
    C. rachitis*
    D. beriberi
    E. pellagra

102. … is caused by B\textsubscript{1} avitaminosis.
    A. scurvy
    B. hemeralopy
    C. rachitis
    D. beriberi*
    E. pellagra

103. The most exact methods of hypovitaminosis C diagnostics are…
    A. sanitary inspections of products handling, storage, culinary cooking conditions
    B. calculations of vitamin C content in daily allowance
    C. determination of vitamin C content in food using laboratory methods
    D. somatoscopic examination of patients’ nutrition state
    E. carrying out the functional tests of capillary resistance, tongue test with Tilmans reagent*

104. What is the main physiological function of proteins in organism?
    A. Energy
    B. Plastic*
    C. Catalytic
    D. Protective
    E. Gustatory

105. What is the main physiological function of fats in organism?
    A. Energy
    B. Plastic*
    C. Catalytic
    D. Protective
    E. Gustatory

106. The most appropriate method of organized collectives nutrition characteristic is …
    A. Questionnaire
    B. Laboratory
    C. Calculation by menu-schedule*
    D. Sanitary inspection
    E. Nutrition state evaluation

107. What meals are recommended to vitaminize during winter-spring period for nutrition of organized collectives?
    A. Appetizers
    B. First and third course*
    C. Second course
    D. Only third course (including milk)
    E. Desserts
108. Which meat can be a source of invasion by opisthorchiosis?
   A. rabbit
   B. fish*
   C. livestock
   D. lamb
   E. poultry

109. Modern and the most effective method of the food concentrates preparation is…
   A. regular drying
   B. sterilization
   C. refrigeration
   D. fermentation
   E. freeze drying

110. Sick girl with a temperature (37.5°C), nausea, multiply vomiting, stomachache, diarrhea and
general weakness got in hospital reception. Girl 4 hours before was having lunch prepared by her
grandma (veg soup, buckwheat porridge, meat rissoles and scalded cream cake). Point out the probable
cause of disease.
   A. botulism
   B. staphylococci toxicosis*
   C. alimentary toxicoinfection
   D. alimentary mycotoxicosis
   E. poisoning by xenobiotics

111. Recommended daily dose/rate of vitamin B_{12} for adults (in µg)
   A. 800
   B. 1000
   C. 3*
   D. 400
   E. 100

112. Dinner in 4 meals a day system must be … % by energy.
   A. 15-20
   B. 30-35
   C. 35-40
   D. 20-25*
   E. 30-45

113. If PNI (Protein nutrition index) is 83% the level of protein nutrition is…
   A. adequate
   B. sub compensated
   C. insufficient
   D. sub adequate
   E. low*

114. What products can substitute a meat in the absence of it in ration?
   A. bread, dried crust
   B. canned fish, meat*
   C. peas, soy beans, haricot
   D. macaroni, cereals
   E. potato, cabbage, vegetables

115. Why milk is falsified by soda?
   A. to decrease milk acidity*
   B. to increase the bactericidal features of milk
   C. to improve gustatory of milk
   D. to increase relative density of milk
   E. giving the salable conditions

116. Recommended daily dose/rate of vitamin E for adults (in µg)
   A. 800
   B. 1000
   C. 15
   D. 400*
   E. 100
117. How much fats of vegetable origin must be in daily allowance (of general account of fats) in %?
   A. 10
   B. 20
   C. 25
   D. 30*
   E. 40

118. Supper in 4 meals a day system must be … % by energy.
   A. 15-20*
   B. 30-35
   C. 35-40
   D. 20-25
   E. 30-45

119. Give the definition of the “menu schedule” concept.
   A. Number of meals during the day, energy value, intervals between meals
   B. Calculation of energy value and chemical compound using tables and nomograms
   C. Features of origin, chemical compound, culinary cooking, portion in food allowance
   D. Adequacy of daily allowance to energy expenditures
   E. Collective nutrition plan or list of the meals distributed by ingestions with food staff inclusion (quantity, energy value and chemical compound)*

120. What quantity of iron fillings is allowable due in wheat to standard?
   A. no less than 1 mg/1 kg of wheat
   B. no less than 2 mg/1 kg of wheat
   C. no less than 3 mg/1 kg of wheat*
   D. no less than 4 mg/1 kg of wheat
   E. no less than 5 mg/1 kg of wheat

121. Biological oxidation of 1 g fats release… calories
   A. 2.0
   B. 3.0
   C. 4.0
   D. 9.0*
   E. 10.0

122. … is taken into consideration during evaluation of biological value of the products.
   A. Nutrient content
   B. Organoleptic properties
   C. Food safety
   D. Meals variety
   E. Culinary cooking

123. The most physiological ratio between P and Ca
   A. 1:1*
   B. 1:2
   C. 2:1
   D. 1.2:2
   E. 3:4

124. What is the mean level of proteins in fish meat?
   A. 4-7%
   B. 7-13%*
   C. 13-17%
   D. 17-20%
   E. 20-25%

125. Food poisoning by phasin is caused by … consumption.
   A. almonds
   B. jam with stones
   C. beans*
   D. haricot
   E. green potato

126. The signs of A-hypovitaminosis of rescuers are…
   A. capillary resistance reduction (causeless bruises)
B. cheilosis  
C. keratomalacia  
D. xerophthalmia*  
E. dermatosis  

127. Food poisoning by amygdaline is caused by … consumption.
A. Almonds  
B. jam with stones*  
C. beans  
D. haricot  
E. green potato  

128. Hypervitaminosis are …
A. morbid conditions caused by overconsumption of vitamins*  
B. diseases caused by total lack of some vitamin in food  
C. morbid conditions resulted of inadequate intake of vitamins in food  
D. morbid conditions caused by malabsorption of vitamins  
E. diseases caused by total lack in food or malab  

129. The main transmitting way for nosocomial infections is:
A. Genetic  
B. Through the water  
C. Physicochemical  
D. Zoonotic  
E. Fecal-oral*  

130. Percentage of green area is:
A. Ratio of the green planting area to the area of land plot, shown in %*  
B. Ratio of the plot area to the green planting area, shown in %  
C. Ratio of the green planting area to the building area, shown in %  
D. Ratio of the building area to the green planting area, shown in %  
E. Area of park and garden zone  

131. What type of modern field quarters is the easiest to manage and to tent?
A. cylinder uniform blocks  
B. framed-inflatable*  
C. sliding container rooms  
D. stretching buildings  
E. camp tents  

132. The distances between the walls with wards and doctors’ rooms windows of hospital buildings should be the
A. 20 m  
B. 50 m  
C. 2.5 of the opposite building height*  
D. not less than 15 m  
E. 10 m  

133. Consumption of water of which zone may cause the endemic goiter?
A. Arid tropic  
B. Humid tropic*  
C. Moderate  
D. Cold  
E. Arctic  

134. The most appropriate ward windows orientation in Northern hemisphere is…
A. south-west  
B. west and east  
C. north-east, north  
D. south and west  
E. south-east and south*  

135. Name the main measures of preventive sanitary inspection, which are used for prevention of nosocomial infection appearance
A. Carrying out of preliminary and periodical medical examinations  
B. Carrying out of disinfection
C. Environmental factor monitoring  
D. Fundamental assessment of new-built object and its setting to work*  
E. The assurance of optimal antimicrobial conditions  

136. Percentage of building area is…:  
A. Ratio of the green planting area to the area of land plot, shown in percents  
B. Ratio of the building area to the area of land plot, shown in percents*  
C. Ratio of the green planting area to the building area, shown in percents  
D. Ratio of the building area to the green planting area, shown in percents  
E. Area of park and garden zone  

137. What type of water disinfection is used mostly in the emergencies?  
A. boiling  
B. according to chlorine demands  
C. ozone treatment  
D. with preammonation  
E. post-critical doses of chlorine*  

138. Maximum allowable number of beds in ward section to adults is…  
A. 5  
B. 10  
C. 15  
D. 20  
E. 30*  

139. Box of infectious diseases unit has an area of 22 m². How many beds this box is meant to?  
A. 1*  
B. 2  
C. 3  
D. 4  
E. 5  

140. The most important water requirements to water during emergencies are…  
F. Optimal mineral and microelemental composition  
G. Good organoleptic properties  
H. Safety of water from the epidemic and toxic point of view*  
I. Quantum satis of water  
J. Absence of radioactive substances  

141. What is the difference between box and semi-box?  
A. presence of lavatory  
B. presence of ward  
C. presence of outward entrance*  
D. presence of lock  
E. presence of internal entrance  

142. What indices of nutritional status are the most available to doctor to determine the health condition of rescue team staff during emergencies in field conditions?  
A. Somatoscopic*  
B. Somatometric  
C. Physiometric  
D. Biochemical  
E. Clinical  

143. Maximum allowable indices of microclimate in shelters of III mode are:  

<table>
<thead>
<tr>
<th>Index</th>
<th>Temperature, °C</th>
<th>Humidity, %</th>
<th>EET</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>26</td>
<td>50</td>
<td>19.0</td>
</tr>
<tr>
<td>B.</td>
<td>28</td>
<td>60</td>
<td>19.5</td>
</tr>
<tr>
<td>C.</td>
<td>30</td>
<td>70</td>
<td>21.0</td>
</tr>
<tr>
<td>D.*</td>
<td>32</td>
<td>80</td>
<td>21.5</td>
</tr>
<tr>
<td>E.</td>
<td>34</td>
<td>90</td>
<td>22.0</td>
</tr>
</tbody>
</table>

144. What method of water treatment is used mostly in the emergencies?  
K. desilting
L. filtration through the low-rate trickling filters
M. coagulation and filtration
N. flocculation
O. simultaneous coagulation with chlorination and filtration*

145. The most important function of water during emergencies is… one.
P. Physiological*
Q. Hygienic
R. Domestic
S. Economic
T. Balneal

146. How many times during the day a ward must have wet cleaning with disinfectant?
A. 1
B. 2*
C. 3
D. 4
E. 5

147. Name the factors increasing bad influence of the dust on the patient’s organism.
A. Increased level of noise
B. Increased humidity level*
C. Lack of UV
D. Lack of lighting
E. Excess UV

148. Operating room has the following parameters: area – 38 m², window orientation – north, level of luminescent illumination – 400 lx, air temperature - 27°C, ventilation rate – 10 times per hour (possibility of sterile air supply). What is fall short of hygienic requirements?
A. air temperature*
B. window orientation
C. level of luminescent illumination
D. area
E. ventilation rate

149. Determine the indices rely on them you decide about prohibition of the usage of this water as a water supply source.
A. Decreased organoleptic indices
B. Oxidizability, ammonia and nitrate nitrogen content is up to standard
C. Radioactivity is within limits
D. Total microbial number exceed 100 colonies per ml, coli-index – 10*
E. Mineral content of microelements isn’t within limits

150. Point out the basic system of therapy department planning.
A. Pavilion-like
B. Single-sided*
C. Compact type
D. Three-sided system
E. Mixed system

151. All listed below are related to the main stages of preventive sanitary inspection of medical institutions, except…
A. The selection and allotment of building land and its associating with the project of land parcel
B. Project expertise
C. Supervision at the stage of object building
D. Control of compliance to hygienic regulations, sanitary rules and instruction documents during the object exploitation*
E. New-built object supervision under its setting to work

152. What food poisoning is the most dangerous to human health?
F. Bacterial toxicosis*
G. Toxicoinfection
H. Mycotoxicosis
I. Poisoning by plants
J. Poisoning by pesticides
153. The minimal size of shelters for affected population per 1 person is:

<table>
<thead>
<tr>
<th></th>
<th>Area, m²</th>
<th>Cubic capacity, m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>0.5</td>
<td>4</td>
</tr>
<tr>
<td>B.*</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>C.</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>D.</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>E.</td>
<td>4</td>
<td>10</td>
</tr>
</tbody>
</table>

154. The main drawback of centralized system of hospital site development is
A. complicated fight the nosocomial infections*
B. difficulty during the usage of the diagnostic measures
C. impossibility of the patients to stay outdoors
D. complications to transport the food
E. doubling of the physiotherapeutic measures

155. The ward of purulent postoperative department is cleaned up with 1% chloramine 1 time per day, aerated – 4 times per day, change of underwear – 1/week (in case of need – immediately), hygienic shower of patients – 1/week. Point out the shortcoming of sanitary-hygienic regimen of the ward.
A. inadequate concentration of chloramines
B. inadequate aeration
C. behind time change of underwear
D. insufficient number of cleaning*
E. insufficient number of hygienic shower of patients

156. What final expert report would you make during the medical expertise of meat lot 3 days after nuclear explosion if radioactivity of the carcass is 140 µR/hour (10 times exceed the MAL to emergencies) and season of the year – summer?
A. The product may be allowed to consumption without restriction
B. The product is liable to deactivation by time (storing)
C. The product may be used as fodder
D. The product may be recycled to fertilizer
E. The product is destined to destruction*

157. The hospital site housing density should not exceed… %
A. 1-5
B. 6-10
C. 12-15*
D. 21-25
E. 60 and more

158. Daylight factor is…:
A. Period of room illumination with sunbeams
B. Ratio of the glazed part area to the floor area
C. Ratio of building depth to the height of upper edge of window above the floor
D. Ratio of the actual illuminance at a point in a room (lux) and the illuminance available from an identical unobstructed sky, shown in percents*
E. Ratio of illuminance on horizontal surface under unobstructed sky to illuminance on horizontal surface in the room, shown in percents

159. The “insolation” is a meaning of…:
A. Illumination of the building with the sunbeams and penetration of direct sunbeams through the light apertures in premises*
B. Ratio of the actual illuminance at a point in a room and the illuminance available from an identical unobstructed sky, shown in percents
C. The level of artificial illuminance at a point in a room
D. The level of illuminance with artificial sources (incandescent lamps, gas and luminescent lamps, etc.)
E. Illumination of the room depending on windows orientation

160. To prevent nosocomial infection the solid wastes from dermatovenerological, surgery and TB departments must be…
A. disposed on tip beyond the city line
B. disposed on special places in cemetery
C. buried in soil of the hospital land plot
D. buried in soil beyond the hospital land plot
E. burned in special destructor set in hospital site*

161. Hygienic demands in water in tropical climate are…1.
F. 10-50
G. 50-100
H. 100-150
I. 150-500*
J. 500-1000

162. Point out the parameter which does not influence on the level of insolation in premises:
A. Geographic latitude
B. Period of day (morning, afternoon, evening)
C. The system of area building
D. Microclimate*
E. Presence of shading objects

163. … is the most used reagent for field disinfection of huge amounts of water.
F. chlorinated lime*
G. pantothenatecide
H. aquasept
I. silver chloride
J. iron acid

164. In which side from the combustion plant has to be built a hospital, if the prevalent wind direction is north at the area?
A. Eastern
B. Southern
C. Western
D. Northern-eastern
E. Northern*

165. The best type of water sources during emergencies is …
K. water from shaft wells (ground water)
L. surface water (rivers, lakes)
M. artesian water*
N. rain water, snow water
O. imported water

166. The noise level is 70 dBA at the street near hospital. What effect of noise action is may have the most on worker’s organism?
A. irritant action*
B. decreasing of body general resistibility
C. galloping clinical course of chronic disease
D. risk of general industrial injuries increasing
E. risk of acoustic trauma receiving

167. Indicate the main source of the ward’s air pollution
A. emissions of the industrial plants
B. human vital activity products*
C. soil dust
D. polymeric material
E. home appliances

168. The modern systems of hospital’s waste disposal are:
A. “flushing” removal, “pick-up” removal and combined removal*
B. Burning, utilization
C. Cesspool cleaning , burying, composting
D. Centralized, decentralized
E. Organized, non-organized

169. 12 rescue team men appealed to the aid post doctor for medical aid. They had acute stomach ache, nausea, intestinal upset, high temperature. It was determined during anamnesis taking that they ate concentrated food and tea for breakfast, soup with pasta and meat, boiled pearl barley with tinned stewed meat and compote for lunch. Determine the provisional diagnosis.
K. botulism
L. salmonellosis*
M. staphylococcal poisoning
N. dysentery
O. typhoid fever

170. What type of facilities deepened into the ground is meant for field habitation only?
F. Trench
G. Ditch
H. Dug-out
I. Shelter
J. Blindage

171. What is minimum adequate rate of air sanation efficiency in hospitals?
A. 30%
B. 45%
C. 60%
D. 80%*
E. 95%

172. Loss of what water amount (in %) may cause deafness?
K. 1-5
L. 6-10
M. 11-20*
N. 21-25
O. 26-30

173. The most reasonable system of hospital site development for multisectoral hospital is…
A. decentralized
B. centralized-blocked*
C. centralized
D. mixed (3-4 separate buildings)
E. mixed (5-6 separate buildings)

174. Point out the index thereunder you make a decision about prohibition of water usage.
P. nitrites – 0,001 mg/l
Q. nitrates – 10 mg/l
R. NH₄ – 0,15 mg/l
S. Phosgene – 2,0 mg/l*
T. TMN - 50

175. Operating room has the following parameters: area – 38 m², window orientation – north, level of luminescent illumination – 200 lx, air temperature - 22°C, ventilation rate – 10 times per hour (possibility of sterile air supply). What is fall short of hygienic requirements?
A. air temperature
B. window orientation
C. level of luminescent illumination*
D. area
E. ventilation rate

176. Minimal water consumption rate per 1 person during a day (early phase of emergency) in moderate climate conditions is … l.
U. 40
V. 20
W. 10
X. 5
Y. 2,5*

177. List the main types of premises insolation regimen:
A. Maximum, medium, minimum*
B. Sufficient, insufficient, surplus
C. Morning, daytime, evening
D. Minimal, maximal
E. Permanent, non-permanent

178. The size of the hospital landscape zone must be not less than… m² per one bed.
A. 10  
B. 15  
C. 20  
D. 25*  
E. 30

179. The hospital site housing density should not exceed… %  
A. 1-5  
B. 6-10  
C. 12-15*  
D. 21-25  
E. 60 and more

180. What type of research is obligatory to carry out during emergencies to prevent the outbreaks of infectious diseases?  
P. Sanitary and toxicological  
Q. Sanitary and chemical  
R. Sanitary and microbiological*  
S. Radiometric  
T. Organoleptic

181. MAC of CO₂ in the air of shelters for affected population is:  
<table>
<thead>
<tr>
<th>Mode of ventilation</th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>0.1</td>
<td>0.15</td>
<td>0.2</td>
</tr>
<tr>
<td>B.</td>
<td>0.2</td>
<td>0.4</td>
<td>0.8</td>
</tr>
<tr>
<td>C.</td>
<td>0.3</td>
<td>0.6</td>
<td>1.2</td>
</tr>
<tr>
<td>D.</td>
<td>0.5</td>
<td>1.0</td>
<td>2.0</td>
</tr>
<tr>
<td>E.*</td>
<td>1.0</td>
<td>2.0</td>
<td>3.0</td>
</tr>
</tbody>
</table>

182. Artificial illumination of the wards should be…  
A. only general  
B. general combined with local and night light*  
C. only local (lighting fittings in lower part of wall)  
D. night light combined with local  
E. luminescent lamps combined with night light

183. Point out the units of equivalent dose measurement.  
A. gray, rad  
B. curie, Bq  
C. R, Sv  
D. Sv, ber*  
E. R/hour, Wr

184. Length of β-particle track in air depends on …  
A. energy of β-particles *  
B. CO₂ concentration  
C. air temperature  
D. air humidity  
E. air speed

185. Level of radioactive pollution of work surfaces is determined by …  
A. radiometers*  
B. annunciators of pollution by beta-emitting isotopes  
C. radiation dosage indicators  
D. individual dosimeters  
E. roentgenmeters

186. Smear technique to determine the level of pollution by radioactive substances is used…  
A. when surface is highly polluted by radioactive substances  
B. when surface have irregular shape and γ background is increased*  
C. during accurate quantitative assessment of pollution  
D. when personnel present complaints
187. Natural activity of open waters is … than activity of underground waters.
A. higher
B. less*
C. the same
D. no matter
E. depends on season

188. Point out the material possessing the best shielding properties to γ and X- radiation
A. organic glass
B. graphite brick
C. concrete
D. aluminium plate
E. lead*

189. Source of γ-radiation is used for treatment of oncological patients of radiological department. Point out the index which should be chosen as the main characteristic of ionizing radiation in radiological department.
A. Effective dose rate
B. Absorbed dose rate in the air*
C. Equivalent dose rate
D. Effective equivalent dose
E. Absorbed dose

190. Frequency of sanitary-radiological inspection of X-ray rooms is 1 time per…
A. quarter
B. half a year
C. year*
D. month
E. 10 days

191. Effective dose of roentgenologist is formed 21 mSv per year. Suggest a measure to reduce irradiation of roentgenologist
A. increase the rate of ventilation in X-ray room
B. decrease the time of film development
C. extend the thickness of lead rubber apron
D. use the rubber gauntlets
E. decrease the time of working shift*

192. Protection from external radiation is provided by …
A. special ventilation and sewerage system
B. personal hygiene
C. shield and personnel training*
D. special features of planning and equipment of premises
E. usage of body creams

193. Preventive examination of schoolchildren should be carried out. Choose the most from the radiosafety point of view safe method of roentgendiagnosis.
A. roentgenoscopy
B. roentgenography
C. fluorography*
D. computer-aided tomography
E. magnetic resonance tomography

194. Bare radionuclides are used in…
A. diagnosis and contact methods of radiotherapy *
B. application therapy
C. distant γ and X-ray therapy
D. intracavitary therapy
E. orthopedic diagnosis

195. The patient appealed to dentist for medical aid. To confirm diagnosis the X-ray of tooth root should be carried out. What type of personal protective gear must be used to protect thoracic cage and pelvis?
A. cotton gown
B. rubber gown  
C. lead rubber apron*  
D. tarpaulin apron  
E. rubber apron

196. Allowable levels of total radioactive pollution of work surfaces are determined by…  
A. half-life period and duration of pollution  
B. type of radiation  
C. type of radiation and object of pollution*  
D. type of radiation, coating material and object of pollution  
E. type of radiation, half-life period, coating material and object of pollution

197. The law of K-capture is…  
A. when nucleus (one of protons) captures an electron from the nearest K-orbit and, as a result, this proton transforms into neutron and nucleus of new chemical element with the same mass number*  
B. typical for heavy transuranous elements, where ratio of neutrons and protons is more than 1.6. As a result of it nuclei of two new elements are generated, where ratio n:p is closer to 1 and «superfluous» neutrons leave atoms in form of a neutron radiation  
C. process when positron takes off from the nucleus of atom (one of protons) and, as a result, proton transforms into neutron and a new chemical element with the same mass number and charge, smaller by 1 is generated  
D. a process when electron takes off from nucleus of atom (from one of neutrons) and, as a result, this neutron transforms into proton and a new element with the same mass number and charge, bigger by 1 is generated  
E. typical for heavy (with great mass number) elements and consists in takeoff of α-particle (helium nucleus by its nature, consisting of 2 protons and 2 neutrons) from the nucleus of atom, and a nucleus of new chemical element with mass number, smaller by 4 and charge, smaller by 2 appears as a result

198. Main principles of protection from external irradiation are…  
A. prevention of internal ingress of radioactive substance  
B. by amount, by time, by distance, by shield*  
C. planning measures, by time  
D. personal hygiene, by shield  
E. organizational and planning measures

199. Method of thermoluminescence dosimetry is used for…  
A. indication of pollution of personal protection equipment  
B. indication of pollution of cutaneous covering  
C. individual dosimetry*  
D. determination of bioassay specific activity  
E. group dosimetry

200. Protection of the patient in X-ray room is provided by…  
A. X-ray tube shielding, personal protective gear*  
B. planning measures  
C. proper equipment of premises  
D. usage of gowns  
E. special ventilation

201. Activity of radioactive substance is…  
A. absorbed energy, calculated for time unit  
B. dosage of quantum irradiation  
C. number of decays per time unit*  
D. absorbed energy, calculated for volume unit  
E. quantity of energy emitted during certain time unit

202. Harmful occupational factors in X–ray room are…  
A. pollution by radionuclides  
B. ionizing radiation, air radiolysis products, microclimate condition changes*  
C. increased γ background  
D. internal irradiation
E. noise and vibration

203. Point out the material possessing the best shielding properties to $\beta$ radiation
A. organic glass
B. graphite brick
C. concrete
D. aluminium plate*
E. lead

204. $\gamma$-radiation is …
A. high-speed electrons
B. photons*
C. flux of neutrons
D. flux of positrons
E. flux of electrons and positrons

205. Distant manipulators, protective shields are used during the work with sealed sources and working time is decreased. What principle of protection isn’t used by personnel?
A. distance
B. time
C. personnel training
D. dose of irradiation
E. activity or amount *

206. At the twice increase of contact time with a source of ionizing radiation absorbed dose will …
A. increased in 4 times
B. increased twice*
C. not change
D. diminished twice
E. diminished in 4 times

207. Radiation accidents are divided into … levels according to International Nuclear Event Scale.
A. 4
B. 5
C. 6
D. 7*
E. 9

208. Time, during which half of initial amount of atoms are decayed is called…
A. semiejection time
B. effective semiejection time
C. decay coefficient
D. half-life period*
E. acceleration period

209. Effective dose of radiological department economist formed 3 mSv/year. Give the evaluation of economist effective dose level.
A. lower the limit of dose by 2 mSv/year
B. lower the limit of dose by 1 mSv/year
C. equal to the limit of dose
D. exceed the limit of dose by 1 mSv/year
E. exceed the limit of dose by 2 mSv/year*

210. Maximum protection from the wave with pressure 3 kg/cm2 is provided by … type of the shelter.
A. C(V)
B. A
C. B(III) *
D. B(I)
E. C(VI)

211. Point out the units of absorbed dose measurement.
A. rad, gray*
B. roentgen, coulomb/kg
C. curie, Becquerel
D. ber, sievert
E. roentgen/hour, coulomb/kg/hour
212. X-ray examinations have …irradiation hazard.
   A. internal
   B. internal and external
   C. combined
   D. external*
   E. complex

213. Effective dose of X-ray department roentgenologist formed 12 mSv/year. Give the evaluation of the roentgenologist effective dose level.
   A. lower the limit of dose by 8 mSv/year*
   B. lower the limit of dose by 4 mSv/year
   C. equal to the limit of dose
   D. exceed the limit of dose by 4 mSv/year
   E. exceed the limit of dose by 8 mSv/year

214. Basic complex requirements are produced to work with … sources of irradiation.
   A. bare*
   B. sealed
   C. ionizing emitters
   D. roentgen apparatus
   E. mammograph

215. Newspaper page is set as an obstacle in the α, β, γ radiation pathways. What kind of radiation can penetrate through this obstacle?
   A. α, β, γ
   B. α, β
   C. α, γ
   D. α
   E. β, γ*

216. All radionuclides are divided into … groups due to their possible radiation hazard.
   A. 1
   B. 2
   C. 3
   D. 4*
   E. 5

217. Radioactivity of sunflower oil lot made from the sunflower in a half of the year after Chornobyl accident is 6 times more than MAL (maximum allowable level). What type of decontamination can you offer?
   A. by time
   B. by long term heating of the product
   C. by other products in daily allowance attenuation
   D. by dilution of pure oil to MAL*
   E. product destruction

218. What method of water treatment should to use if radioactive substances contaminated water?
   A. disinfection
   B. deactivation*
   C. decontamination
   D. desalination
   E. degassing

219. $^{131}$I solution is used in radioisotope laboratory. Determine the character of possible exposure of personnel.
   A. superficial
   B. external
   C. internal
   D. internal and external*
   E. distant

220. …are used for specific activity measurement
   A. roentgenmeters
   B. annunciators of pollution by beta-emitting isotopes
   C. radiation dosage indicators
221. The main dose limit for <all people> is...mZv/year
   A. 1*
   B. 2
   C. 3
   D. 4
   E. 5

222. The main dose limit for <people who work with sources of ionizing radiation> is...mZv/year
   A. 20*
   B. 10
   C. 30
   D. 5
   E. 2

223. The main dose limit for <people who does not work with sources of ionizing radiation but their working place is near such objects> is...mZv/year
   A. 1
   B. 2*
   C. 3
   D. 4
   E. 5

224. Nature of ionization method is
   A. atomic excitation
   B. formation of secondary radiation*
   C. possibility to influence to photoemulsion, causing the blackening
   D. possibility to cause the effect of substance luminescence
   E. possibility to change the optical density of solutions

225. What devices are used to determine absorbed dose in the air?
   A. radiometers
   B. annunciators of pollution by beta-emitting isotopes
   C. radiation dosage indicators
   D. individual dosimeters
   E. roentgenmeters*

226. The base on which main properties of textile had created classification of working clothes?
   A. air permeability
   B. protective properties
   C. capillarity
   D. heat conduction
   E. hygroscopic properties*

227. Chemical nonorganic fibres are used for manufacturing….clothes.
   A. everyday
   B. sport
   C. children’s
   D. hospital
   E. working*

228. What is air permeability?
   A. textile fibres’ property to absorb steam from the air and body surface and hold it in certain conditions*
   B. property to pass through pores steam
   C. property to pass through pores air
   D. property to absorb fluid moisture
   E. time of an evaporation of the moisture from textile surface

229. What is hygroscopic property?
   A. textile fibres’ property to absorb steam from the air and body surface and hold it in certain conditions
   B. property to pass through pores steam
   C. property to pass through pores air
230. Point out the main advantage of natural textiles.
A. low capillarity
B. high hygroscopic property*
C. low air permeability
D. low hygroscopic property
E. low porosity

231. Synthetic fibres are received by chemical synthesis from:
A. petroleum*
B. plait
C. asbestos
D. casein
E. viscose

232. Which factors heat conduction of textile depends on?
A. chemical composition
B. nature of fibre*
C. vapour permeability
D. fibres interweaving character
E. hygroscopic property

233. ...% of the UVR passes through synthetic textiles.
A. 10
B. 40
C. 0.2
D. 70
E. 1

234. Which device can measure heat conduction of textile?
A. reometer
B. phychrometer
C. cathathermometer
D. thermometer
E. micrometer

235. Synchronization of vital activity of the organism – is:
A. property of central nervous system to interact of periodic functions of the organism*
B. normalization of a sleep
C. improvement of a mood
D. increasing of a memory level
E. increasing of a capacity for work

236. Which factors can influence to biorhythms and move them?
A. worsening relationship in collective
B. weather conditions
C. changing of a time zone*
D. changing of a mood
E. influence of a high noise level

237. Period of a physical cycle amounts
A. 35 days
B. 26 days
C. 15 days
D. 23 days*
E. 28 days

238. Period of an emotional cycle amounts
A. 25 days
B. 28 days*
C. 35 days
D. 42 days
E. 55 days

239. Period of an intellectual cycle amounts
240. Unfavorable “critical” days of each cycle is days when
A. Sinusoid intersect zero point*
B. Intersection of two sinusoids
C. Intersection of three sinusoids
D. Sinusoid culminates
E. Two sinusoids culminate

241. Acrophase is
A. the level of the rhythm which is average value of the physiological function during one biological cycle
B. the level of the rhythm which is maximum value of the physiological function during one biological cycle*
C. the level of the rhythm which is maximum value of the physiological function during two biological cycles
D. the level of the rhythm which is maximum value of the physiological function during three biological cycles
E. average value of the physiological function during one biological cycle

242. Mezor is
A. the level of the rhythm which is average value of the physiological function during one biological cycle*
B. the level of the rhythm which is maximum value of the physiological function during one biological cycle
C. the level of the rhythm which is maximum value of the physiological function during two biological cycles
D. the level of the rhythm which is maximum value of the physiological function during three biological cycles
E. average value of the physiological function during one biological cycle

243. Normal physiological curve is
A. parabolic curve with maximal acrophase at morning and at day*
B. parabolic curve with minimal acrophase at morning and at day
C. parabolic curve with maximal acrophase at night
D. parabolic curve with minimal acrophase at night
E. straight line which intersects zero point

244. Changed physiological curves are
A. off-centre
B. circadian
C. circular
D. traditional
E. plateau*

245. The main hygienic requirement to children’s toys is
A. corresponding to age
B. made from toxically safe material*
C. rich colored
D. interesting
E. have to form play skills

246. The height of letters in a book has to be...
A. 6-8 mm*
B. 10-12 mm
C. 4-6 mm
D. 8-10 mm
E. 6-10 mm

247. Reflection coefficient for schoolbook paper must be
A. 1,0-1,2
248. Quality of schoolbook design must corresponds with
A. class in which child studies
B. subject
C. age peculiarities of children’s organism*
D. sanitary requirements to schoolbooks
E. peculiarities of the eyes

249. Sanitary state of schoolbooks is characterized by
A. cleanness
B. maximal mass
C. quality of the printing
D. quality of the paper*
E. quality of the print and book jacket

250. Level of optical load during reading depends on
A. quality of the paper
B. easiness of reading, visibility of the text*
C. quality of the printing
D. garniture
E. quality of the print

251. Visibility of the text determines by
A. quality of the print*
B. garniture
C. size of type
D. quality of the print, line spacing
E. compactness of the type-setting

252. The optimal distance from head to text for children 8-9 years-old is
A. 20 cm
B. 25 cm
C. 20-30 cm
D. 30 cm*
E. not important

253. Allowable mass of everyday schoolbook set for schoolchildren of 1-2 class is
A. 2,0 kg*
B. 1,0 kg
C. 1,2 kg
D. 2,2 kg
E. 1,5 kg

254. Psychohygiene as a science studies and realizes such aspect
A. psychoneurological peoples health state
B. changes of the psychoneurological health in case of influence to them different factors
C. creates measures of active correction of the human’s health and environment
D. creates the most favorable conditions for human’s health
E. all listed*

255. Name the minimal level of artificial illumination (using the luminescent lamps) in operating-room
A. 200 lux
B. 500 lux
C. 400 lux*
D. 800 lux
E. 1000 lux

256. The optimal system of sewage disposal of hospitals in condition of canalized populated area is:
A. Pick-up system
B. Flushing system
C. Combined system*
257. The temperature standard for school premises in warm period of the year is
   A. 20-27°C
   B. 20-26°C
   C. 18-25°C
   D. 19-25°C
   E. 20-25°C*

258. What infectious disease isn’t typical of faecal-oral pathway by water?
   A. amebic dysentery
   B. typhoid fever*
   C. rabbit-fever
   D. trachoma
   E. girardiasis

259. Which value of air movement speed can be estimated by revolving-vane anemometer in wards?
   A. 0.5-10 m/sec*
   B. 1-50 m/sec
   C. 5-55 m/sec
   D. 10-20 m/sec
   E. 5-10 m/sec

260. What is the place for natural lighting measurement in case of one-sided lighting?
   A. at the distance of 1 m from the opposite wall*
   B. 1 meter above the floor
   C. in the middle of the room
   D. the average of the several lighting measurings
   E. using the “envelope” method

261. Which factors influencing to form psychical health?
   A. social and environmental factors
   B. physical and environmental factors
   C. natural and anthropogenic
   D. anthropogenic and environmental *
   E. genetic and economic

262. Name the main tasks of psychohygiene.
   A. analysis of the people’s psychoneurological health
   B. creation of the psychoneurological functions age standards
   C. creation of the development’s peculiarities age standards
   D. studying of an influence of the environment to people’s organism
   E. all listed*

263. Point out the main criteria of psychical health.
   A. absence of prominent forms of the psychical diseases marginal psycho-neurological disorders
   B. harmonic psychical development
   C. corresponding between age and psychical development
   D. development level of the main social and professional psychophysiological functions
   E. all listed*

264. Which signs from listed below not considered to be studied under psychohygienic investigations?
   A. adaptive properties*
   B. motivation direction
   C. properties of the temperament
   D. psychoneurological state
   E. character

265. Sensitive period of the psychological development is
   A. age period of individual development during which organism is the most sensitive to non specific influence of the environment
   B. age period of individual development during which organism is the most sensitive to specific influence of the environment
   C. age period of individual development during which organism is the most resistant to social influence
D. age period of individual development during which organism is the resistant non specific influence of the environment

E. age period of individual development during which organism is the most sensitive to social influence

266. Under psychological professional orientation of schoolchildren specialists determine such indexes:
   A. power of motive and motivation direction
   B. schoolchildren’s properties and psychophysiological peculiarities*
   C. psychological health state
   D. presence of the central nervous system diseases
   E. physical health state

267. What lies in the base of critical life periods?
   A. behavioral and emotional changes
   B. increasing of the motive direction and psychological orientation
   C. changing of a behavior and social orientatin
   D. psychophysiological and behavioral disorders
   E. reconstruction of a character

268. Name the main psychohygienic principles of an everyday activity optimization.
   A. hygienic norms for everyday activity
   B. determination of factors which can destroy adaptation mechanism
   C. rationalization of everyday activity
   D. psychohygienial corection and rehabilitation
   E. all listed

269. Health is
   A. full physical, mental and social well-being, not only absence of diseases*
   B. full biological, physical, mental and social well-being, when all organism’s functions balanced with environment, absent any diseases, and organism can to function fully
   C. interval of psychophysiological variations with optimal organism’s functions
   D. process of the biological, physiological functions saving and development
   E. all listed

270. Objective methods and means of healthy lifestyle are
   A. personal hygiene
   B. full, adequacy, balance, variety of nutrition
   C. regular washings
   D. regular physical training
   E. tempering

271. The most objective methods of healthy lifestyle effectiveness are
   A. increasing of the appetite under early tiredness
   B. vision and hearing
   C. appetite and absence of the thirst
   D. slight exceed of weight
   E. duration of the life, morbidity, physical development, capacity for work*

272. The main principle of a tempering
   A. complex*
   B. to start at winter
   C. tempering just in weekends
   D. tempering just in workdays
   E. tempering just in morning with contrast water temperature

273. Duration of the introductory part of a lesson is
   A. 3-4 min*
   B. 1-2 min
   C. 5-10 min
   D. 20 min
   E. 15 min

274. Motor compactness of physical training lesson is
   A. 60%*
   B. 20%
275. After how much weeks children can start physical training after leg fracture
   A. 1-3*
   B. 2-4
   C. 5
   D. 10-12
   E. 7-8

276. After how much weeks children can start physical training after influenza
   A. 1-2
   B. 2-4*
   C. 3-5
   D. 10-12
   E. 7-8

277. External signs of a tiredness are
   A. loss of consciousness
   B. redness of a face skin*
   C. breathlessness
   D. decreasing of an attention
   E. hyperhidrosis

278. On which periods you can divide the base part of a physical training lesson?
   A. forming of moving properties and active games*
   B. training and active games
   C. active games and rest
   D. organization and forming of moving properties
   E. limbering-up, game and rest

279. What is medical supplying of the physical training lesson?
   A. determination of the physical activity group for each child*
   B. doctor’s presence on the physical training lesson
   C. availability of first-aid set
   D. teacher’s medical education
   E. briefing for schoolchildren before each physical training