

## **Krok 2 – Hygiene Base**

1. A number of viable fetuses per 1000 women at the age between 15 and 44 is determined by:  
**A. Genital index**  
B. Perinatal rate  
C. Obstetric rate  
D. Reproductive level  
E. Birth rate
  
2. Point out the unit for statistical observation for the determination of blood sugar level influence on a wound surface healing during postoperative period.  
**A. The patient in a postoperative period**  
B. Blood test  
C. The patient who was discharged to outpatient treatment  
D. The patient who has a wound surface  
E. Blood sugar level
  
3. What methods of the collecting of the information is preferable for study of housing conditions of students of medical HIGH SCHOOL for a training period?  
**A. Questioning**  
B. Interviewing  
C. A method of the directed selection  
D. Statistical  
E. Selecting of materials
  
4. What information gathering method is preferable to study housing conditions of medical students during training period?  
**A. Questionnaire**  
B. Interviewing  
C. Directed selection method  
D. Statistical  
E. Materials selection
  
5. Choose a method of a graphic representation of monthly information about number of the registered cases of acute intestinal infection and their comparisons to the average monthly values, obtained for 5 previous years:  
**A. The linear diagram**  
B. The radial diagram

- C. The figured diagram
- D. The curvilinear diagram
- E. The sector diagram

6. The parameter of infantile mortality for the last year was - 16,3, in present year - 15,7. Name a kind of the diagram that can be used for a graphic representation of it:

- A. **Stylar**
- B. Intrastylar
- C. Linear
- D. Sector
- E. Radial

7. The average body length of newborn boys is 50,9 cm at a sigma 1,66; and average mass - 3432 at a sigma 5,00. What criterion is necessary in order to compare degree of variability of these signs?

- A. **Coefficient of variation**
- B. Amplitude
- C. Coefficient of association
- D. Sigma
- E. Limit

8. What method is applied to establish rate of correlation between age of men and their mortality due to myocardial infarction?

- A. **Method of grade correlation (Spirman)**
- B. Method of graduated correlation (Armler)
- C. The quadrate method (Pirson)
- D. Correlation ratio
- E. The Indirect method (Student)

9. Indicate the registration medical document for the patient, who 21.02. was addressed to the doctor with diagnosis ARVD for the first time in this year:

- A. **The statistical coupon is to be filled in and it is necessary to deliver on a sign (+)**
- B. The statistical coupon for registration of final diagnosis is not necessary
- C. It is necessary to fill in the emergency notice on a case of a contagion
- D. The necessary registration form is not indicated
- E. The statistical coupon is to be filled in, but a sign (+) is not necessary to be put in

10. Define the basic registration document at the profound study of a case rate with temporary lost labor ability at the industrial enterprise:

**A. A card of the personal account of a case rate**

- B. "The Report on reasons of a temporary lost labor ability"
- C. A ambulatory medical card
- D. The inpatient medical record
- E. The sick-leave certificate

11. Head of a department and a trade-union group have appealed to the head of a hospital about dismissal of the senior nurse who has 17-year record of service. The facts of charge were confirmed and recognized by the nurse herself. The nurse lives with a daughter (who is divorced and unemployed) and a 9-month-old grandson. Make an administrative decision:

**A. To continue the worker in office with a warning of dismissal in case of repeated violation of labor discipline**

- B. To issue the sick leave
- C. To discharge the worker, i.e. to satisfy demands of the collective
- D. To embark other officials or public organizations with this problem

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**A. To continue the worker in office with a warning of dismissal in case of repeated violation of labor discipline**

- B. To shift the solution of this problem on other officials or public organizations
- C. To discharge the worker, i.e. to satisfy demands of the collective
- D. To issue the sick list

13. A child is 6 years old. Within one year of observation he had URI that lasted 8 days. Physical state is satisfactory. Specify hi health group:

**A. I**

- B. III (a)
- C. II
- D. III (b)
- E. III (c)

14. A 38 year old man was admitted to a hospital from his working place on July 19 because of hip fracture. He was invalid till November 19. Requires prolongation of treatment. Who decides on the issue of further temporary invalidity?

**A. Specialized (traumatologic) MSEC**

- B. The head physician of a polyclinic
- C. Regional MSEC

- D. Interregional general MSEC
- E. DCC

15. What is the maximum duration of medical certificate in case of tuberculosis?

- A. **2 months**
- B. Week
- C. Month
- D. 10 months
- E. 2 weeks

16. An engineer-chemist at the age of 47 often falls ill with an occupational skin disease. Who makes a decision to transfer him to other job accepts?

- A. **DCC**
- B. The attending physician
- C. A head physician
- D. The chief of shop
- E. MSEC

17. A patient with high temperature came to a first-aid post in the evening. The fact of temporary disability was established. Indicate the order of examination in this case:

- A. **The night duty doctor should issue a medical certificate, which will be subsequently used for issuing a sick list from the date of the previous day**
- B. The sick list for 3 days should be issued
- C. Any document shouldn't be issued
- D. The sick list for 1 day should be issued
- E. The sick list for up to 3 days should be issued

18. A 5 tons milk batch was sampled. The lab analysis revealed: fat content 2%, specific density - 1,04 g/cm<sup>3</sup>, acidity - 210°, reductase probe - weak-positive. What way is the product to be used in?

- A. **Sell but inform customers about milk quality**
- B. Sell without limitations
- C. Do the product away
- D. Discard for animal feeding
- E. Technical utilization

19. A sample of milk was taken for testing from a 5 ton milk batch. Lab analysis showed the following: fat content 2%, specific density- 1,04 g/cm<sup>3</sup>, acidity 21°C, reductase probe – weak positive. What way the product is to be used in? What would you advise?

**A. Sell but inform customers about milk quality**

- B. Utilize technically
- C. Write the product off for animal feeding
- D. Sell without limitations
- E. Annihilate the product

20. The student has the following devices: Geiger counter, Ebert counter, Krotovs apparatus, Mischuk device, Ebert device. What device can he use to assess air germ pollution?

**A. Krotovs apparatus**

- B. Eberts counter
- C. Mischuks device
- D. Eberts device
- E. Geigers counter

21. Thyreotoxicosis patient is in the two-place hospital ward of therapeutic department. The area of the ward is 18 m<sup>2</sup>, height is 3 m, ventilation rate is 2,5/h. Air temperature is 20°C, relative humidity is 45%, air movement velocity is 0,3 m/sec, light coefficient is 1/5, noise level constitutes 30 dB. Make a hygienic assessment of these conditions.

**A. Discomfortable microclimate**

- B. All conditions are OK
- C. Poor lighting
- D. Non-effective ventilation
- E. High level of noise

22. A 9 y.o. girl has an average height and harmonic growth development. She was ill with acute respiratory infection for five times. Define the group of her health.

**A. 2nd group**

- B. 3rd group
- C. 1st group
- D. 4th group
- E. 5th group

23. A student lives in the modern house in the flat with a complete set of sanitary equipment (WC, bath, shower, local water heater). How much water consumption has he got?

**A. 160-200 L/day**

- B. 50-100 L/day
- C. 500 -600 L/day
- D. 300-400 L/day
- E. 10-15 L/day

24. A 30-year-old patient with complaints of occipital headache, disturbed sleep with nightmares came to a polyclinic. BP was 150/95 mm Hg. He was diagnosed with hypertensive crisis. The patient should be registered in the following dispensary group for arterial hypertension surveillance:

- A. **In the second**
- B. In the third
- C. In the fifth
- D. In the first
- E. In the fourth

25. A young patient who came to a polyclinic was diagnosed with the 1 stage of hypertension. How often should he undergo the medical check-up?

- A. **Twice a year**
- B. 3 times a year
- C. Once a year
- D. 4 times a year
- E. 5 times a year

26. 25 children at the age of 2-3 years who don't attend any child welfare institutions should be observed by a district pediatrician within the current year. How many initial visits of this group of children should be planned?

- A. **50**
- B. 40
- C. 200
- D. 100
- E. 20

27. Studying of pulmonary tuberculosis incidence provided data about patients' socioeconomic living conditions and bad habits. What method allows to estimate the impact of these factors on tuberculosis incidence?

- A. **Calculation of correlation coefficient**
- B. Standardized index calculation
- C. Calculation of reliability coefficient
- D. Calculation of correspondence index
- E. Calculation of regression coefficient

28. What juice should be included in a complex drug and dietary therapy for patients with gastric ulcer or duodenal ulcer and increased gastric juice acidity in order to accelerate the ulcer healing?

- A. **Potato, potato and carrot**
- B. Apple, birch and apple

- C. Cabbage, cabbage and carrot
- D. Celery, parsley
- E. Pumpkin

29. A teacher of a secondary school was diagnosed with pulmonary tuberculosis. What is the maximum duration of his medical certificate?

- A. Ten months**
- B. Two months
- C. A month
- D. Five months
- E. Four months

30. An employee of a private company was ill with acute respiratory viral infection. Consulted a district doctor, who determined the fact of temporary loss of working ability, but refused to issue a sick-list, arguing that the patient worked in the private and not state-owned company. Should the sick-list be issued to the employees of private companies?

- A. Issued regardless of company's ownership**
- B. Issued only on condition of payment guarantee by the company's proprietor
- C. Issued only to employees of state-owned companies
- D. Issued a medical certificate of a set form
- E. Issued a medical certificate of a free form

31. Clinic of a research institute for occupational diseases examined a worker who works at a concentration plant and diagnosed him with chronic dust bronchitis. The case is investigated by a commission including the representatives of: the plant, clinic, territorial SES, department of Social Insurance Fund, trade union. According to the "regulation on investigation of...", the commission should be headed by the representative of the following authority:

- A. Territorial SES**
- B. Social Insurance Fund
- C. Clinic
- D. Trade union
- E. Plant

32. Basing upon the data of laboratory assessment of sanitary state of soil in a certain territory, the soil was found to be low-contaminated according to the sanitary indicative value; contaminated according to the coli titer; low-contaminated according to the anaerobe titer (Cl. Perfringens). This is indicative of:

- A. Fresh fecal contamination**
- B. Old fecal contamination

- C. Insufficient intensity of soil humification
- D. Constant entry of organic protein contaminations
- E. Insufficient insolation and aeration of soil

33. A maternity hospital registered 616 live births, 1 stillbirth, 1 death on the 5th day of life over a 1 year period. What index allows the most precise estimation of this situation?

- A. **Perinatal mortality**
- B. Crude mortality rate
- C. Neonatal mortality
- D. Natural increase
- E. Natality

34. In one of the surgical departments the quality assurance testing of sterilization of surgical instruments was performed. After an instrument had been treated with 1% phenolphthalein, the solution turned pink. This indicates that the instrument has:

- A. **Synthetic detergent residues**
- B. Drugs residues
- C. Residual blood
- D. Residual tissue
- E. Disinfectant residues

35. A patient complained about problems with pain and tactile sensitivity, pain in the nail bones at the end of the working day. He works at a plant with mechanical devices. What pathology can be suspected?

- A. **Vibration disease**
- B. Noise disease
- C. Hypovitaminosis of B1
- D. Overwork symptoms
- E. Caisson disease

36. Bacterial analysis of air in a living space in winter period by means of Krotovs apparatus revealed that total number of microorganisms in 1 m<sup>3</sup> of air was 7200. What is the permissible number of microorganisms for the air to be characterized as "pure"?

- A. **Up to 4500**
- B. Up to 3500
- C. Up to 2500
- D. Up to 5500
- E. Up to 7500



37. Maximum permissible concentration of carbon dioxide in the air is considered to be a sanitary index of air purity in a classroom. What concentration of carbon dioxide in the air is accepted as maximum permissible?

- A. **0,1%**
- B. 0,15%
- C. 0,05%
- D. 0,2%
- E. 0,3%

38. Study of actual diet of an adult revealed the following: proteins make up 16% of energy value of daily ration, fats - 25%, carbohydrates - 59%. Evaluate compliance of protein, fat and carbohydrate share in the energy value of daily ration with the recommended shares of these nutrients?

- A. **Carbohydrate share is insufficient, there is excess of proteins**
- B. Carbohydrate share is excessive
- C. Nutrient content complies with the recommended shares of energy value
- D. Fat share is insufficient
- E. Carbohydrate share is insufficient

39. A patient who has been consuming refined foodstuffs for a long time complains about headache, fatiguability, depression, insomnia, irritability. Objectively: muscle asthenia, pain and cramps in the gastrocnemius muscles, during walking the patient lands onto his heel first, then on the external edge of foot. Cardiovascular system exhibits tachycardia, hypoxia, dystrophic changes of myocardium. There are also gastrointestinal disorders. What is the most likely diagnosis?

- A. **Hypovitaminosis B1**
- B. Hypovitaminosis B6
- C. Hypovitaminosis B15
- D. Hypovitaminosis B2
- E. Hypovitaminosis B12

40. A patient who had eaten mushrooms in the morning was delivered to the infectious diseases hospital at night. The disease development was rapid. The patient presented with stomach pain, frequent diarrhea, intractable vomiting, burning thirst, headache and dizziness. He died on the third day. What mushrooms are most likely to have caused mycetismus?

- A. **Deadly amanita**
- B. Russules
- C. Fly agarics
- D. Morels
- E. Sulfur-tufts

41. Periodical survey of a worker of a chemicals plant revealed a malignant neoplasm on the urinary bladder. This occupational disease was the most probably caused by contact with the following industrial poison:
- Benzidine**
  - Vinyl chloride
  - Asbestos
  - Arsenic
  - Nickel carbonyl
42. A 37 year old patient applied to a local therapist. As a result of exacerbation of chronic obstructive bronchitis the patient had been temporarily disabled for 117 days within 1 year. What tactics will be legally correct?
- The patient should be referred to the medicosocial expertise**
  - The patient should be referred to the medical consultation commission for extension of medical certificate
  - The patient should be referred to the sanatorium-and-spa treatment
  - The therapist should issue a new medical certificate
  - The therapist should extend a medical certificate
43. A 46-year-old patient once took part in elimination of breakdown at an atomic power plant. Currently he is being treated at an in-patient hospital. He was diagnosed with progressing vegetative insufficiency. This disease relates to the following group of ionizing radiation effects:
- Somato-stochastic**
  - Heterosis
  - Genetic
  - Somatic
  - Hormesis
44. In treatment and prevention establishments, regardless of their organisational and proprietary form, the rights of patients should be observed. Which of these rights is the most significant?
- The right to the protection of the patients interests**
  - The right to the free choice
  - The right to be heard
  - The right to the protection from incompetence
  - The right to the information
45. A military unit stopped for 3-days rest in an inhabited locality after a long march. The sanitary-epidemiological reconnaissance found several water sources. It is necessary to choose the source complying with the hygienic standards for drinking water in the field conditions:
- Artesian well water**

- B. River water
- C. Melt snow water
- D. Rain water
- E. Spring water

46. A district doctor was commissioned with a task to work out a plan of treatment-and-prophylaxis actions for the population of his district. What actions of secondary prophylaxis must he include into this plan?

**A. Prevention of disease complications**

- B. Improvement of populations living conditions
- C. Rehabilitation actions
- D. Disease prevention
- E. Elimination of disease causes

47. The district pediatrician is charged with the analysis of infant mortality. What is taken for the unit of observation in infant mortality investigation?

**A. A baby dead at the age up to 12 months**

- B. A baby dead at birth
- C. A baby dead at the age over 28 days
- D. A baby dead at the age up to 1 months
- E. A baby dead at the age up to 6 days

48. Chief district pediatrician has to carry out analysis of infant mortality rate. What should he take as a unit of the observation?

**A. Child death case at the age up to 1 year**

- B. Child death case after 28 days of life
- C. Child death case at the age up to the first month
- D. Child death case during first 7 days of life
- E. Child death case on labor

49. Deputy of chief medical officer carried out a study of morbidity rate for population which had been served at the polyclinics within the last 5 years. What statistical values can help in calculation of morbidity rates?

**A. Relative values**

- B. Dynamic series
- C. Average values
- D. Standard values
- E. Absolute values

50. There were registered 500 cases of urolithiasis per 10000 inhabitants. What kind of statistical indices is presented?

**A. Prevalence rate**

- B. Index of visualization
- C. Index of compliance
- D. Incidence rate
- E. Correlation coefficient

51. At year-end hospital administration has obtained the following data: annual number of treated patients and average annual number of beds used for patients treatment. What index of hospital work can be calculated on the base of this data?

- A. **Bed turnover**
- B. Average bed idle time
- C. Average annual bed occupancy
- D. Bed resources of the hospital
- E. Average duration of patients presence in the hospital

52. Examination of a 13-year-old boy reveals that his body length is 147 cm (+2), body weight - 38 kg (+1,5), circumference of chest - 72 cm (+0,2). Estimate the harmonicity of the child's physical development:

- A. **Disharmonious**
- B. Sharply disharmonious
- C. Supernormal
- D. Harmonious
- E. Above the average

53. A children's health camp received a party of tinned food. External examination of the tins revealed that they had deep dents, could be easily concaved when pressed and wouldn't immediately return to the initial state; rust was absent; the tins were greased with inedible fat. Specify the bloat type:

- A. **Physical**
- B. Biological
- C. Physicochemical
- D. Combined
- E. Chemical

54. On physiologic-sanitary examination of railway department work it was revealed that loaders' work is of III degree of difficulty. They unload wagons with sand, manually break coagulated mass by shovel and shift it. What criteria was used to evaluate work of loaders?

- A. **Maximum load weight which is shifted**
- B. Value of static loading for the shift
- C. Time of passive observation, % to the shift duration
- D. Intellectual efforts
- E. Time of active activities, % to the shift duration

55. Workers of fishery are subjected to low temperatures of the air (from 5 till 15°C). Diseases of what organs and systems are the most frequent among workers of such enterprises?

- A. **Respiratory system**
- B. Cardiovascular system
- C. Liver
- D. Gastrointestinal tract
- E. Blood

56. During the periodic medical examination an assembly fitter (works on soldering details) didn't report any health problems. Closer examination revealed signs of asthenic-vegetative syndrome. Blood included red blood cells with basophilic aggregations and a somewhat higher number of reticulocytes, urine had a high concentration of delta-aminolevulinic acid. The complex of symptoms indicates the initial stage of chronic intoxication with:

- A. **Lead**
- B. Ethanol
- C. Mercury
- D. Manganese
- E. Tin

57. Some of the population of a city district have uneven teeth color. The individuals have white spots, transverse brown stripes on the incisors. Occurrence of these symptoms is associated with the quality of drinking water from a deep well. Which of the following components of water can be the cause of the disease?

- A. **F**
- B. Mg
- C. Ca
- D. J
- E. Fe

58. An outpatient hospital made record of 11600 diseases within one year. Among them influenza and ARD make up 5800, circulatory system diseases - 3480, digestion diseases - 1300, other diseases - 1020. What relative index can be calculated according to this data?

- A. **Extensive**
- B. Intensive
- C. Correlation
- D. Visualization

59. Prevalence of a disease in region N amounted 1156 occurrences per 1000 of inhabitants. What of the mentioned indices characterizes the disease prevalence?

- A. **Intensive**
- B. Standardized
- C. Ratio
- D. Extensive
- E. Visual index

60. A pupil of the 8th form after trauma has acute atrophy of the left arm muscles, tonus of which is distinctly decreased, active movements are only in the left joint, pupils foot is deformed. Function of support of the left leg is absent, support function of the right leg is preserved. The boy wears an orthopedic footwear. What group of physical training does the boy belong to?

- A. **Special**
- B. Preparatory
- C. Additional
- D. Basic
- E. Other

61. District physician was charged with plan drafting concerning medical and preventive measures among the population in the area he is assigned to. What measures must he include in this plan as regards primary prevention of illness?

- A. **Prevention of disease onset**
- B. Measures to increase patients life quality
- C. Referral of patients to sanatorium
- D. Measures to improve patients life conditions
- E. Prevention of disease complications

62. A therapist needs to analyze adult health in the area of service. Which groups of indicators will be included into this analysis?

- A. **Demographic, sickness rates, disability**
- B. Birth rates, sickness rates, disability
- C. Sickness rates, death rates, physical development
- D. Demographic, sickness rates, physical development
- E. Sickness rates, disability, death rates

63. A district pediatrician has carried out infant mortality rate analysis in his area. What data has been used?

- A. **Mortality of children under 1 y.o. structured by age, sex, causes**
- B. Mortality of children under 1 y.o., natimortality
- C. Mortality of district adolescents

- D. Mortality of district newborn
- E. Hospital mortality of children, structured by age

64. At the radiological unit of a hospital gamma-devices of radiotherapy of "Agat" type and other closed sources of ionizing radiation are used for treatment of malignant neoplasms. What measures are to be taken to protect personnel during working with radioactive sources of such type?

- A. **Reduction of working time and screening of the source**
- B. Capsulation of devices and organization of room ventilation
- C. The increase of distance to the source and individual hygiene compliance
- D. Systematical cleansing of surfaces from the radioactive contamination and shortening of working time
- E. Screening of the source and the use of means of individual protection of respiration organs

65. A patient undergoes inpatient treatment with the diagnosis of acute pancreatitis. To spare pancreas as much as possible the doctor prescribed for him starvation for 1-3 days. What products is the patient allowed to eat during recovery period after cancelling of starvation?

- A. **Potato and carrot mash**
- B. Boiled meat
- C. Grape juice
- D. Milk
- E. Broth

66. A local doctor has to prepare a report about the health condition of the population of his region. What medical indexes of population health condition should he use?

- A. **Morbidity, disabilities, demographic, physical development**
- B. Way of life, genetic, pollution
- C. Average longevity
- D. Average treatment duration, complications
- E. Social welfare, satisfaction of life quality

67. To study physical development of children and adolescents, anthropometric studies are widely used. Choose a physiometric method of study from the below given.

- A. **Determination of vital capacity of lungs**
- B. Determination of vertebra form
- C. Determination of body weight
- D. Measurement of growth
- E. Determination of thorax form

68. Study of morbidity with temporary disability among workers of a machine building plant revealed that average duration of a case was 20 days. What diseases influenced upon the index value?

- A. **Chronic**
- B. Acute
- C. Preexisting diseases
- D. Hard to determine
- E. Subacute

69. A patient consulted a doctor about acute respiratory viral infection. The patient was acknowledged to be off work. The doctor issued him a medical certificate for 5 days. The patient is not recovering. What measures should the doctor take in order to legalize the further disability of patient?

- A. **To prolong the medical certificate at his own discretion but no more than for 10 days in total**
- B. To send the patient to the medical consultative commission
- C. To send the patient to the medical social expert commission
- D. To prolong the medical certificate at his own discretion but no more than for 6 days in total
- E. To prolong the medical certificate together with department superintendent

70. A patient is on the sick leave for 4 months continuously from the date of injury. The treatment is going to last for 1-2 months more. Who has the right to extend the duration of medical certificate for this patient?

- A. **Medical advisory commission after medico-social expert commission examination**
- B. District doctor by agreement with a department chief
- C. Medico-social expert commission
- D. Medical superintendent
- E. Medical advisory commission after inpatient treatment

71. Working conditions of a building company worker are characterized by cooling microclimate effect, silica-containing dust, caustic alkali (quicklime) and noise. What medical expert should be the chief of the commission that periodically examines the workers of the mentioned category?

- A. **Therapist**
- B. Ophthalmologist
- C. Dermatologist
- D. Otolaryngologist
- E. Neurologist



72. It is determined that 30 of a 100 women with risk factor had preterm labor, and of a 100 women without risk factor 5 women had preterm labor. What method of statistic data processing should the doctor use in order to estimate reliability of differences between the compared groups?

**A. Students criterion calculation**

- B. Standardization method
- C. Correlation analysis
- D. Average computing
- E. Relative numbers calculation

73. 350 workers of a metalurgical plant had to undergo a yearly preventive examination. A territorial polyclinic carried out preventive examination of 325 workers. As a result of it, 1 worker was recognized as temporarily disabled, 15 workers underwent further rehabilitation at an after-work sanatorium, 10 workers were provided with diet meal. What index characterizing the preventive work of the polyclinic should be applied in this case?

**A. Coverage of preventive medical examinations**

- B. Frequency of case detection during examinations
- C. Percentage of people who were provided with diet meal
- D. Percentage of temporarily disabled people
- E. Percentage of people who underwent rehabilitation at an after-work sanatorium

74. District doctor of rural medical department was called to a 42-year-old patient. While examining the patient, the doctor suspected the dysentery. What document must the doctor issue?

**A. Urgent notification of infectious disease**

- B. Infectious disease report
- C. Statistical coupon of final (precise) diagnosis
- D. Abstract of outpatient medical card
- E. Report addressed to Head of the village

75. During coal extraction in a mine the concentration of coal dust in the working area is 450 mg/m<sup>3</sup> (MPC is 10 mg/m<sup>3</sup>). What occupational respiratory disease may develop in miners?

**A. Anthracosis**

- B. Talcosis
- C. Byssinosis
- D. Allergic nasopharyngitis
- E. Siderosis

76. A district doctor keeps the record of reconvalescents after infectious diseases, people who are disposed to frequent and long-lasting diseases, patients with

chronic pathologies. What category of patients should belong to the III health group?

- A. **People with chronic diseases**
- B. Reconvalescents after infectious diseases and patients with chronic pathologies
- C. All above mentioned categories
- D. People disposed to frequent and long-lasting diseases
- E. People with chronic pathologies and disposed to frequent and long-lasting diseases

77. Over a current year among workers of an institution 10% haven't been ill a single time, 30% have been ill once, 15% - twice, 5% - 4 times, the rest - 5 and more times. What is the percentage of workers relating to the I health group?

- A. **55%**
- B. 40%
- C. 10%
- D. 60%
- E. 22%

78. During a regular medical examination at a metallurgical plant 20% of workers were found overweight (body weight was 5-14% higher than normal), and had early signs of obesity (grade I-II) with Quetelet index from 26 to 30. What products share must be reduced in the diet of this group of people in the first place in order to normalize their body weight?

- A. **Bakery products**
- B. Vegetables
- C. Milk and dairy products
- D. Meat and fish products
- E. Fruit

79. Chief physician of a polyclinic entrusted a district doctor with a task to determine the pathological prevalence of disease N in his district. What document allows to estimate the disease prevalence in the population of a medical district?

- A. **Prophylactic examinations register**
- B. Statistic coupons (+)
- C. Statistic coupons (+) and (-)
- D. Vouchers for medical appointments
- E. Statistic coupons (-)

80. A 48-year-old male in-patient undergoes treatment for essential hypertension of II-B stage. It is known from history that he works in a design engineering office. His job involves neuro-emotional stress. Which of these foodstuffs do

not stimulate the central nervous system and can be recommended for the patient?

- A. **Whole milk**
- B. Carbonated beverages
- C. Mushroom broths
- D. Meat broths
- E. Vegetable broths

81. In a forest summer camp children have variable procedures to harden their organisms. What procedure has the most hardening power?

- A. **Contrast shower**
- B. Bath with hydromassage
- C. Hygienic shower
- D. Morning exercises on the fresh air
- E. Walking on the fresh air

82. There is a dynamic growth of number of congenital abnormalities such as central paralysis, newborns blindness, idiocy among the population that lives near to pesticides production enterprise. Compounds of which pollutant can cause the development of this pathology?

- A. **Mercury**
- B. Cadmium
- C. Strontium
- D. Iron
- E. Chrome

83. Ats planned to construct multifield a new hospital in one of the central city districts. What building type is the most appropriate in this case?

- A. **Centralized and blocked**
- B. Decentralized
- C. Centralized
- D. Mixed
- E. Blocked

84. In an urban settlement situated on the riverbank, an outbreak of hepatitis A was registered. The disease might have water origin. This assumption can be confirmed by growth of the following values of water quality:

- A. **Number of coli-phages**
- B. Oxidability
- C. Index of fecal coli-forms
- D. Presence of benign leptospirosis pathogen
- E. Escherichia coli index

85. During inspection of sanitary conditions of studying at a technical university it was necessary to evaluate the visual regimen of students, who study from 9 a.m to 3 p.m. What index of natural light will be the most informative?

- A. **Natural light coefficient**
- B. Presence of mixed (superolateral) light
- C. Depth of study room
- D. Light coefficient
- E. Time of the room insolation

86. 200 patients suffering from essential hypertension were examined in order to obtain data about patients arterial pressure and age. What statistic value should be applied in order to measure relation between these characteristics?

- A. **Correlation coefficient**
- B. Representation error
- C. Sygmal deviation
- D. Students coefficient
- E. Coefficient of variation

87. A doctor of the general practice has registered the following death causes for the previous year: the first place was taken by cardiovascular diseases (60%), the second - by tumors (18%), then - traumas (8,3%) etc. What diagrams will provide the most substantial information about the registered occurrences?

- A. **Pie diagram**
- B. Cartogram
- C. Circle diagram
- D. Column diagram
- E. Line diagram

88. On medical observation a doctor identified girl (162 cm tall and 59 kg weight) who complained loss of ability to see surrounding objects clearly in the evening. On examination: dry skin, hyperkeratosis. Her daily ration includes the following vitamins: vitame A– 0,5 mg, vit.B1– 2,0 mg, vit.B2– 2,5 mg, vit.B6– 2 mg, vit.C?– 70 mg. What is the hypovitaminosis type?

- A. **A-hypovitaminosis**
- B. B2-hypovitaminosis
- C. C-hypovitaminosis
- D. B6-hypovitaminosis
- E. B1-hypovitaminosis

89. As a result of prophylactic medical examination a 35 year old woman was diagnosed with alimentary and constitutive obesity of the III degree. It is

known from her anamnesis that the patient doesn't observe rules of rational nutrition: she often overeats, the last food intake is usually 10-15 minutes before going to bed, prefers fattening and rich in carbohydrates food. What is the main alimentary risk factor of obesity development?

**A. Energetic unprofitableness of nutrition**

- B. Excess of carbohydrates
- C. Lack of cellulose
- D. Violation of dietary pattern
- E. Excess of fats

90. The air of a foundry workers working zone contains condensation aerosol with dust particles sized 2 nm (90%), 2-5 nm (2%), over 5 nm (6%), below 2 nm (about 2%). Characterize the dust dispersivity:

**A. Fine-dispersed**

- B. Ultrafine-dispersed
- C. Mist
- D. Median-dispersed
- E. Coarsely dispersed

91. The major repair of a hospital included renewal of colour design of hospital premises because it is of great psychological and aesthetical importance; and so the walls of patient wards will be painted under consideration of:

**A. Windows orientation**

- B. Diseases of patients who will be staying in these wards
- C. Hospital profile
- D. Wall reflection coefficient
- E. Creation of cozy atmosphere

92. Atmospheric air of an industrial centre is polluted with the following wastes of metallurgical plants: sulphuric, nitric, metal, carbon oxides that have negative influence upon the inhabitants health. The effect of these hazards can be characterized as:

**A. Combined**

- B. Adjacent
- C. Mixed
- D. Complex
- E. Associated

93. Study of morbidity rate in a city N revealed that population of different administrative districts differed in age structure. What statistic method allows to eliminate influence of this factor upon morbidity indices?

**A. Standardization**

- B. Correlative regressive analysis

- C. Wilcoxon's t-criterion
- D. Analysis of dynamic series
- E. Calculation of average values

94. A driver had been fixing a car in a closed garage and afterwards complained about headache, dizziness, nausea, muscle asthenia, sleepiness. Objectively: pulse and respiratory rate elevation, excitement, hypertension, delirium of persecution. What is the most likely diagnosis?

**A. Intoxication with carbon oxide**

- B. Posttraumatic encephalopathy
- C. Intoxication with ethyl gasoline
- D. Hypertensive crisis
- E. Asthenovegetative syndrome

95. An outbreak of food poisoning was recorded in an urban settlement. The illness was diagnosed as botulism on the grounds of clinical presentations. What foodstuffs should be chosen for analysis in the first place in order to confirm the diagnosis?

**A. Tinned food**

- B. Potatoes
- C. Boiled meat
- D. Cabbage
- E. Pasteurized milk

96. A worker who undergoes regular medical check-up for duodenal ulcer received a subsidized 24-day sanatorium voucher from his plant. The term of annual leave of a worker is 24 calendar days, it will take 4 days more to get to the sanatorium and back home. What is the procedure of obtaining a 4-day sick-leave?

**A. Medical Expert Commission issues a 4-day sick list**

- B. The doctor in charge issues a health certificate and sanatorium patients file for 28 days
- C. Medical Expert Commission issues a 4-day health certificate
- D. Medical Expert Commission issues a 28-day sick list
- E. The doctor in charge issues a 4-day sick list

97. A 42 year old metalworker has been working at the turning machine for production of heavy large-size parts for 5 years. His work requires using of hand and pedal levers that involves considerable physical force. What means for osteoarthritis prevention should be recommended?

**A. To limit physical work**

- B. To administer protein-and-carbohydrate diet
- C. To improve health at the Black sea coast

- D. To go in for weightlifting
- E. To administer protein-and-vitamin diet

98. Administration of a plant producing red lead paint intends to form a group of medical specialists for periodical medical examinations. What specialist must be obligatory included into this group?

- A. **Neuropathologist**
- B. Psychiatrist
- C. Otolaryngologist
- D. Dermatologist
- E. Gynaecologist

99. The total area of a ward at the therapeutical department is 28 m<sup>2</sup>. What is the maximum number of beds that can be exploited in this ward?

- A. **4**
- B. 1
- C. 3
- D. 5
- E. 2

100. The amount of ultraviolet radiation dose was measured in minutes. What device was applied for measurement of the biodose?

- A. **Gorbachevs biodosimeter**
- B. Actinometer
- C. Catathermometer
- D. Radiometer
- E. UV-meter

101. The institutions which take part in medical examinations can be prevention and treatment facilities, medical board of Ministry of Defense, medical board of Ministry of Home Affairs, medico-social expert commissions, forensic medical boards etc. What institutions are responsible for temporary disability examination?

- A. **Prevention and treatment facilities**
- B. Medico-social expert commissions
- C. Sanitary-and-prophylactic institutions
- D. Medical boards of Ministry of Defense
- E. Medical boards of Ministry of Home Affairs

102. The institutions which take part in medical examinations can be prevention and treatment facilities, medical board of Ministry of Defense, medical board of Ministry of Home Affairs, medico-social expert

commissions, forensic medical boards etc. What institutions are responsible for temporary disability examination?

- A. **Prevention and treatment facilities**
- B. Medico-social expert commissions
- C. Medical boards of the Ministry of Home Affairs
- D. Medical boards of the Ministry of Defense
- E. Sanitary-and-prophylactic institutions

103. A mother who is on partially paid maternity leave got sick and was hospitalized. What document is to be issued to a working father who will be taking care of a child during his mothers illness?

- A. **Sick-leave**
- B. Certificate of mothers illness
- C. Extract from the medical card of out- or in-patient
- D. Free-form certificate
- E. Certificate of childs care necessity

104. Clinical and statistical study was devoted to the effect of a new pharmacological medication upon the patients with coronary heart disease. What parametric criterion (coefficient) can be used for estimation of results validity?

- A. **Students coefficient (t)**
- B. Conformity coefficient
- C. Sign criterion
- D. Wilcoxons t-criterion
- E. Kolmogorov-Smirnovs criterion

105. It is planned to make complete isolation boxes in the infectious department in order to prevent nosocomial airborne infections. The boxes consist of a tambour, a ward and a lock chamber. What structure should be also included in a complete isolation box?

- A. **Bathroom unit**
- B. Doctors consulting room
- C. Manipulation room
- D. Patients examination room
- E. Nursing room

106. Educational rooms are illuminated with various lighting fittings. What type of lighting fittings is the most appropriate in respect of hygienic norms?

- A. **Indirect light fittings**
- B. Ambient light fittings
- C. Combined light fittings
- D. Direct light fittings



E. Semi-reflected light fittings

107. In terms of megacalorie ( $1000 \text{ kcal} = 4184 \text{ kJ}$ ) the ration of an adult includes 30 g of proteins, 37 g of fats, 137 g of carbohydrates, 15 mg of vitamin C, 0,6 mg of thiamine (vitamin B1). The ration is UNBALANCED as to the contents of:

- A. **Vitamin C**
- B. Carbohydrates
- C. Thiamine
- D. Proteins
- E. Fats

108. A city somatic hospital with 300 beds consists of the main building which houses the therapeutic and surgical departments. Several separate buildings house the maternity, pediatric and radiologic departments that are connected to the main building by underground walkways and above-ground covered skybridges. Specify the building system of the hospital:

- A. **Central-unit**
- B. Combined
- C. Decentralized
- D. Centralized
- E. Free

109. A heat station working on solid fuel is located in a residential district. On cloudy foggy days in december there was an increase in diseases with upper airway affection and signs of general intoxication. There were also mortal cases among the elderly people. What is the most likely factor that provoked toxic effect?

- A. **Suspended materials**
- B. Calm
- C. High air humidity
- D. Low air temperature
- E. Temperature gradient

110. Indices that characterize population health include demographic indices. What environment is used for calculation of these indices?

- A. **Population number**
- B. Number of hospitalized people
- C. Number of population being liable to preventive examination
- D. Number of patients
- E. Employment number

111. While making sanitary examination of burn unit for adults it was stated that wards for 4 persons are of 28 m<sup>2</sup> square. What should be the minimum ward area in this unit?

- A. **40 m<sup>2</sup>**
- B. 28 m<sup>2</sup>
- C. 52 m<sup>2</sup>
- D. 30 m<sup>2</sup>
- E. 24 m<sup>2</sup>

112. The results of 5 year monitoring allowed to estimate the level of environmental influence upon health indices of population. What statistic method should be chosen?

- A. **Calculation of correlation coefficient**
- B. Calculation of coefficient of difference validity
- C. Calculation of dynamic indices
- D. Calculation of regression coefficient
- E. Calculation of conformity coefficient

113. In order to improve organism tolerance of boarding-school pupils a doctor developed a program. The program is based upon the following principles: graduality, consistency, individuality, complexity. What of the main principles of organism tempering was not taken into account?

- A. **Systematicness**
- B. Increase of resistance
- C. Increase of influence force
- D. Autodefense increase
- E. Increase of influence intensity

114. A student analyzes noise level of cold-pressing process. What device should be applied for this hygienic study?

- A. **Noise and vibration analyzer**
- B. Actinometer
- C. Pyranometer
- D. Noise analyzer
- E. Sound tester

115. Environmental pollution is prevented by mechanical separation of nontoxic solid domestic waste. Specify the method which can be used for mechanical utilization of these wastes:

- A. **Compressing of wastes into building blocks**
- B. Burning as power-plant fuel
- C. Waste neutralization in biothermal boxes
- D. Burial of wastes

E. Hydrolysis

116. An emergency situation at a chemical plant caused acute occupational intoxication. A doctor who revealed the case of "acute occupational disease (intoxication)" must notify the following authority:

**A. Sanitary and epidemiological station**

B. Ministry of Health of Ukraine

C. Trade union committee of the plant

D. Plant administration

E. Medical unit of the plant

117. At a machine-building plant the casts are cleaned by means of abrasion machines that are a source of local vibration. What are the most efficient preventive measures for preventing harmful effect of vibration on workers organisms?

**A. Use of gloves that reduce vibration**

B. Giving sanitary instructions to the workers

C. Hand massaging

D. Preliminary and periodical medical examinations

E. Warm hand baths

118. In order to study impact of microclimate upon the human organism it is necessary to make systematic observation of air temperature over 3 days. Choose a device that will allow to make the most precise temperature records:

**A. Thermograph**

B. Assmann psychrometer

C. Mercury thermometer

D. Alcohol thermometer

E. Augusts psychrometer

119. The Carpathian region is characterized by constant high humidity of atmospheric air (over 80%). Inhabitants of this region feel severe cold in corresponding season at a medium low temperature. Its caused by heat emission by:

**A. Convection**

B. Vaporization

C. Radiation

D. Conduction

120. Carpathian region is characterized by permanently high (over 80%) air humidity. In the cold season the population of this region feels very cold at

moderately low temperatures. This is due to an increase in the heat transfer by:

- A. **Convection**
- B. Evaporation
- C. Radiation
- D. Conduction
- E. Emission

121. Poorly refined wastes of an industrial plant are usually thrown into the river that supplies drinking water. It causes perishing of some microorganisms, disturbs processes of water self-purification and worsens its quality that can have negative influence upon peoples health. How is this effect of environmental factors called?

- A. **Indirect**
- B. Associated
- C. Direct
- D. Complex
- E. Combined

122. In order to reduce weed growth on agricultural land, some herbicides have been used for a long time. In terms of environmental stability these herbicides are rated as stable. Specify the most likely route of their entry into the human body:

- A. **Soil-plants-humans**
- B. Soil-animals-humans
- C. Soil-insects-humans
- D. Soil-protozoa-humans
- E. Soil-microorganisms-humans

123. In a city with population 400000 people 5600 fatal cases were recorded, including 3300 cases because of blood circulation diseases, 730 - because of tumors. What index will allow to characterize mortality from blood circulation diseases in this city?

- A. **Intensive index**
- B. Correlation index
- C. Relative intensity index
- D. Extensive index
- E. Visuality index

124. A selective population research study was aimed at exploring the effect of air emissions from a metallurgical plant on the obstructive bronchitis morbidity in a city. The calculated correlation coefficient was +0,79. Evaluate the strength and direction of the relationship:

- A. **Direct, strong**
- B. Direct, average
- C. Inverse, average
- D. Inverse, strong

125.       Statistic of patients of common medical practice displays constant increase in elderly and old people number. What kind of pathology is expected to prevail in the morbidity structure of population in question?

- A. **Chronic pathology**
- B. Infectious pathology
- C. Non-epidemic pathology
- D. Occupational pathology
- E. Acute pathology

126.       A general practitioner visited a 2-year-old child and diagnosed him with measles. The child attends a nursery, has a 5-year-old sister. What document must be filled in for the effective antiepidemic measures in the given health locality?

- A. **Emergency notification on infectious disease (form No. 058/o)**
- B. Sick leave
- C. Infants record (report form No. 112/o)
- D. Carers leave certificate
- E. House call record (form No. 031/o)

127.       In the current year general practitioners of the municipal polyclinic have referred 11 patients with coronary artery disease to the in-patient hospital. In 3 cases the diagnosis wasn't confirmed. What managerial decision should be made in such case?

- A. **Analysis of each case of diagnostic divergence**
- B. Analysis of diagnostic examination quality
- C. Analysis of material and technical basis of the polyclinic
- D. Analysis of doctors skill level
- E. Analysis of medical check-up quality

128.       Hygienic expertise of a sample taken from the batch of grain revealed that 2% of grains were infected with microscopic Fusarium fungi. On the ground of laboratory analyses this batch of grain should be:

- A. **Sold without restrictions**
- B. Tested for toxicity
- C. Used for ethanol production
- D. Destroyed
- E. Used for forage production

129. An employee has been diseased for 4 months, further treatment is necessary, the patient is incapacitated. Who is authorized to provide further disability examination of this patient?

- A. **Medical and social expert board**
- B. Deputy chief responsible for disability examination
- C. Physician in charge and chief of department
- D. Medical consultative board
- E. Chief physician of a medical facility

130. Among the inhabitants of a workmens settlement located near an industrial plant the cases of nervous and endocrine system diseases as well as renal diseases became more frequent. Blood analyses revealed a decrease in sulfhydryl groups. These pathologies might have been caused by the following substance released into the environment:

- A. **Mercury**
- B. Boron
- C. Lead
- D. Chromium
- E. Cadmium

131. Examination of a 43-year-old man objectively revealed pallor of skin and mucous membranes, loss of tongue papillae, transverse striation of fingernails, cracks in the mouth corners, tachycardia. Blood test results: Hb-90 g/l, anisocytosis, poikilocytosis. The most likely causative agent of this state is inadequate intake of:

- A. **Iron**
- B. Copper
- C. Magnesium
- D. Selene
- E. Zinc

132. During the medical examination a port crane operator complained of dizziness, nausea, sense of pressure against tympanic membranes, tremor, dyspnoea, cough. He works aloft, the work is connected with emotional stress. Workers are affected by vibration (general and local), noise, ultrasound, microclimate that warms in summer and cools in winter. What factor are the workers complaints connected with?

- A. **Infrasound**
- B. Intensity of work
- C. Altitude work
- D. Noise
- E. Vibration

133. It is required to analyze the level of daylight illumination in a ward of therapeutics unit. What device should be applied to estimate the level of daylight illumination?

A. **Illuminometer**

B. Anemometer

C. Actinometer

D. Psychrometer

E. Katathermometer

134. During the medical examination at school the schoolchildren had to undergo plantography. After the analysis of footprints platypodia was found in 30% of pupils. What is the percentage of the flatfoot isthmus?

A. **65%**

B. 30%

C. 55%

D. 45%

E. 50%

135. A factory's sectorial doctor selects a group of persons who often fall ill for thorough monitoring. At the same time he takes into consideration the number of etiologically related cases with temporary disability in each of the employees over the last year. An employee falls into this group if the number of sickness cases is:

A. **4 or more**

B. 2 or more

C. 6 or more

D. 3 or more

E. 1 or more

136. Production areas of a greenhouse complex have the following microclimate parameters: air temperature - 42°C, humidity - 98%, air velocity - 0,05 mps, temperature of enclosing surfaces - 15°C. Characterize the microclimate of production areas:

A. **Overheated**

B. Comfortable

C. Uncomfortable

D. Satisfactory

E. Cooling

137. Sanitary-veterinary examination of a cow carcass revealed measles contamination (2-3 measles per 10 cm<sup>2</sup>). What tactics should be chosen in respect of this meat consumption?
- A. The whole carcass should be technically disposed**  
B. Meat should be disinfected by boiling  
C. Meat should be disinfected by freezing  
D. Meat can be sold without any restrictions  
E. The carcass should be used for the production of canned meat
138. A factory worker has ARD complicated by acute bronchitis. He receives treatment in the outpatient setting. The attending doctor has issued him a medical certificate for 5 days and then extended its duration by 5 more days. Patient can't get down to work because of his health status. Who should extend the duration of medical certificate for this patient?
- A. A department chief**  
B. Deputy medical superintendent in charge of temporary disability examination  
C. Medical advisory commission  
D. Deputy medical superintendent in charge of medical treatment  
E. Medical superintendent
139. Preventive examination of an 11 year old boy helped to determine his habitus type. It was established that the child's shoulders were deviated and brought forward, with forward flexion of head, the thorax was flattened, abdomen was convex. The child's backbone had signs of deepened cervical and lumbar curvatures. What habitus is it?
- A. Kyphosis**  
B. Corrected  
C. Normal  
D. Lordosis  
E. Round-shouldered
140. A plot of land with total area of 2,0 hectare was intended for building of a hospital. The maximal capacity of the hospital will be:
- A. 100 beds**  
B. 800 beds  
C. Over 1000 beds  
D. 200 beds  
E. 400 beds
141. During hygienic examination of a hospital it was established that the area for each bed in a double ward was: in the infectious department for children - 7 m<sup>2</sup>, in the infectious department for adults - 8 m<sup>2</sup>, in the burns department - 9 m<sup>2</sup>, in the radiological department - 10 m<sup>2</sup>, in the critical care



department - 13 m<sup>2</sup>. In which wards the area for each bed doesn't correspond with hygienic requirements?

- A. **In burns wards**
- B. In infectious wards for adults
- C. In infectious wards for children
- D. In radiological wards
- E. In critical care wards

142. According to the report of water quality control, drinking city water has the following characteristics: turbidity - 1,5 mg/m<sup>3</sup>, odour - 3 points, metallic taste - 2 points, pale yellow colour, colour index - 200, temperature - 12.0. Which of these factors doesn't comply with hygienic requirements?

- A. **Odour**
- B. Taste
- C. Colour index
- D. Turbidity
- E. Temperature

143. A 2 year old child has been ill with acute respiratory viral infection of upper thrice a year - in February, in April and in December. How should these occurrences be recorded?

- A. **It is necessary to fill in 3 statistic talons signed (+)**
- B. It is necessary to fill in 1 statistic talon signed (+)
- C. It is necessary to fill in 3 statistic talons signed (-)
- D. It is necessary to fill in 1 statistic talon signed (+) and 2 statistic talons signed (-)
- E. It is necessary to fill in 1 statistic talon signed (-)

144. A worker diagnosed with "acute dysentery" was sent to the infectious department by a doctor of aid post. What document should be used for registration of this disease?

- A. **Urgent report on infectious disease**
- B. Outpatients card
- C. Statistic coupon for registration of final diagnoses
- D. Inpatients card
- E. Statistic card of the patient who left in-patient hospital

145. Researchers studied disease incidence of influenza and acute respiratory viral infection within the last 5 years. What kind of graphic presentation should be used for the best visualization of this data?

- A. **Linear diagram**
- B. Bar diagram
- C. Pie diagram

- D. Histogram
- E. Radial diagram

146. The correlation between the service record and eosinophil concentration in blood was studied in workers at dyeing shops of textile factories. What index will be the most informative for the analysis of this data?

- A. Correlation factor**
- B. Standardized index
- C. Sign index
- D. Fitting criterion
- E. Students criterion

147. The objective of a statistical study was to find out the extent of seeking medical care by the population. For this purpose 300 residents of the area were interviewed. Information was collected by means of a special questionnaire. What method of collecting information was used by researchers?

- A. Anamnestic**
- B. Immediate examination
- C. Immediate registration
- D. Doing extracts

148. Analysis of organization of medical care in a regional centre has shown that every year about 12% of patients receive inpatient care for diseases that don't require round-the-clock monitoring and intensive care. What are the most appropriate organizational changes required to address this problem?

- A. Development of medical care forms replacing the in-patient care**
- B. Restructuring of specialized care
- C. Upgrading of hospital facilities
- D. Changes to the statute of outpatient clinics
- E. Development of primary care

149. A city's population is 400000 inhabitants in 2005 there were registered 5600 deaths, including 3300 cases caused by cardiovascular diseases, 730 - by tumours. Which of the following indicators allows to characterize the share of the circulatory system diseases as the cause of death in the city?

- A. Extensive index**
- B. Index of relative intensity
- C. Ratio
- D. Demonstrativeness index
- E. Intensive index

150. It is planned to organize a rural outpatient clinic. The patients will be able to visit the doctors of the following specialities:
- A. **Therapist, dentist, pediatrician, obstetrician-gynecologist**
  - B. Therapist, pediatrician, neurologist
  - C. Pediatrician, therapist, ophthalmologist
  - D. Obstetrician-gynecologist, therapist
  - E. Pediatrician, obstetrician-gynecologist, ophthalmologist
151. In a rural health district a child died in the first month of life. In order to analyze this situation it was necessary to complete expert evaluation of medical records. Which medical document was analyzed in the first place?
- A. **Child developmental history record**
  - B. Record of vaccinations
  - C. Child's medical record
  - D. Medical record of an outpatient
  - E. Neonatal record
152. A department chief of an in-patient hospital is going to inspect resident doctors as to observation of medical-technological standards of patient service. What documentation should be checked for this purpose?
- A. **Health cards of in-patients**
  - B. Annual report of a patient care institution
  - C. Treatment sheets
  - D. Statistic cards of discharged patients
  - E. Registry of operative interventions
153. The head of prenatal care department intends to complete expert evaluation of compliance with medical and technological standards of pregnancy follow-up. What documents must be verified for this purpose?
- A. **Individual records of pregnant and postpartum women**
  - B. Neonatal record
  - C. Medical records of outpatients
  - D. Prenatal records
  - E. Labour and delivery record
154. Workers of a laboratory producing measuring devices (manometers, thermometers etc) complain about a metallic taste in mouth, stomatitis, dyspepsia, sleep disturbance, unsteady walk, abrupt decrease in cardiac activity. These presentations must have been caused by the intoxication with the following substance:
- A. **Mercury**
  - B. Tetraethyl lead
  - C. Manganese

- D. Lead
- E. Toluol

155. While assessing the health status of graduates of a secondary school, the doctor found one of them to have grade 3 tonsillar hypertrophy, chronic rhinitis and vegetative-vascular dystonia. The organism functionality is reduced. This student belongs to the following health group:

- A. **III**
- B. I
- C. V
- D. IV
- E. II

156. At first appointment with an obstetrician-gynaecologist a pregnant woman is referred to other medical specialists. She must be obligatory examined by the following specialists:

- A. **Therapist and dentist**
- B. Dentist and phthisiatrician
- C. Dentist and cardiologist
- D. ENT and ophthalmologist
- E. Therapist and endocrinologist

157. Estimation of physical development of a child involved dynamometry and estimation of body weight and length, annual gain in body length, chest circumference, number of permanent teeth, secondary sexual characters, lung vital capacity. Which of the mentioned indices relates to the physiometric ones?

- A. **Lung vital capacity, dynamometry**
- B. Body length and weight, chest circumference
- C. Number of permanent teeth
- D. Annual gain in body length
- E. Secondary sexual characters

158. Estimation of community health level involved analysis of a report on diseases registered among the population of district under charge (reporting form 12). What index is calculated on the grounds of this report?

- A. **Common morbidity rate**
- B. Index of hospitalized morbidity
- C. Index of basic non-epidemic morbidity
- D. Index of pathological affection
- E. Index of morbidity with temporary disability

159. A 50-year-old male suburbanite underwent treatment in rural outpatient clinic for pneumonia. The treatment didn't have effect and the disease got complicated by exudative pleuritis. What prevention and treatment facility should the patient be referred to for further aid?
- A. Central district hospital**  
B. Regional hospital  
C. Municipal hospital  
D. Tuberculosis dispensary  
E. Phthisio-pulmonological dispensary
160. A 46-year-old patient was issued a 10-day sick list because of exacerbation of chronic cholecystitis. The patient's general condition got better, but the clinical manifestations of the disease are still present. What authority is entitled to extend the sick list?
- A. Medical Expert Commission**  
B. Family doctor  
C. Deputy head doctor for medical-labour expertise  
D. Head doctor  
E. Deputy head doctor for therapeutic management
161. A 59-year-old male patient with essential hypertension of stage II is registered with the dispensary department of a polyclinic. The patient regularly takes ACE inhibitors and calcium antagonists. How often should a therapist examine this patient (except for exacerbation periods)?
- A. Every 3 months**  
B. Every 4 months  
C. Every 9 months  
D. Once a year  
E. Every 6 months
162. A municipal hospital reported on the number of operated patients including fatal outcomes following the operations. Which index of hospital work can be calculated on the ground of this data?
- A. Postoperative lethality**  
B. Standardized lethality  
C. Total lethality  
D. Index of late hospitalization since a disease incursion
163. It is planned to build a multi-disciplinary hospital with 500 beds in a town. Specify the location of a polyclinic within the medical centre:
- A. At the main entrance**  
B. In the centre of the territory near medical buildings  
C. In the garden and park area

- D. It is not allowed to place the polyclinic within the centre territory
- E. In the service zone

164. Evaluation results of sanitary and hygiene conditions in a 4-bed ward were as follows: ward area - 30 m<sup>2</sup>, height - 3,2 m, temperature - 20°C, humidity - 55%, air velocity - 0,1 m/s, window-to-floor area ratio - 1:5, daylight ratio - 0,6%, concentration of carbon dioxide in the air - 0,1%. Which of the given indicators does not meet hygienic requirements?

- A. Daylight ratio**
- B. Concentration of carbon dioxide in the air
- C. Ward area
- D. Air velocity
- E. Window-to-floor area ratio

165. Within the structure of the regions population the share of persons aged 0 to 14 years is 25%, the share of persons aged 50 years and older is 30%. What concept most accurately describes this demographic situation?

- A. Regressive type of population age structure**
- B. Stationary type of population age structure
- C. Immigration of population
- D. Progressive type of population age structure
- E. Cohort reproduction