Database of questions for the Medical Final Examination (LEK)

Part 1

Public health

Modified 27.05.2025

Question nr **1**

The World Health Organization is an international organization with broad powers focused on health issues including:
1) fight against malaria;
2) fight against tuberculosis;
3) valid eradication of smallpox;
4) quality testing of biological and pharmacological preparations;
5) fight against diarrhoea.
The correct answer is:

A. 1,2,3.

B. 1,2,3,5.

C. 1,3,4,5.

D. 2,3,4,5.

E. all the above.

Question nr **2**

In a given national population the body mass of women aged 19-25 shows a normal distribution and amounts to an average of 55 kg. The standard deviation is 5.5 kg. How many women are there in this population that weigh less than 49.5 kg?

A. 5%.

B. 10%.

C. 15%.

D. 16%.

E. 32%.

Question nr 3

Significant improvement in health and wellbeing of the population. Reducing inequalities in access to health care. Strengthening the position of public health. Provision of patient-orientated healthcare systems which are common, equal, stable and of high quality. Those constitute the strategic framework of EU regional policy for public health, a framework which was prepared by:

A. the Association of Schools of Public Health in the European Region (ASPHER) in the form of The Agency for Public Health Education Accreditation.

B. the World Health Organization in the form of The Ottawa Charter for Health Promotion.

C. the WHO Regional Committee for Europe in the form of the document entitled "Health 2020. The European policy framework supporting action across government and society to promote health and wellbeing".

D. the European Public Health Association (EUPHA).

E. the Council of the European Union in the document of 1992 entitled "The Treaty on European Union" signed in Maastricht..

Question nr 4

A patient of Polish nationality born in 1973 and suffering from high fever, dry cough, runny nose, conjunctivitis and photophobia reports to the doctor office. The doctor finds Koplik's spots on the buccal mucosa and individual spots and papules on the hairline behind the ears. According to the Act of 5 December 2008 on preventing and combating infections and infectious diseases in humans the doctor is obliged to:

A. report suspected infectious disease within 48 hours to the state county sanitary inspector relevant for the place of suspicion.

B. report suspected infectious disease within 24 hours to the state county sanitary inspector relevant for the place of suspicion.

C. refer the patient to the periodontist for consultation.

D. ask the patient if he has travelled abroad lately or had contact with measles.

E. ask the patient if he suffered from measles in his childhood.

Question nr 7

In cost benefit analysis (comparison of two interventions that have different health effects) the most commonly used measure to compare the health effects is:

A. fatality.

B. QALY.

C. VOLY.

D. DALY.

E. HYE.

Question nr **8**

According to the World Health Organization infections associated with health care occur in about:

A. 10 out of 100 hospitalized patients.

B. 15 out of 100 hospitalized patients.

C. 20 out of 100 hospitalized patients.

D. 25 out of 100 hospitalized patients.

E. 30 out of 100 hospitalized patients.

Question nr **9**

The Haddon matrix should be used for analyzing the factors which prevent:

A. cardiovascular diseases.

B. children's injuries resulting from falls in the playground.

C. locomotor organ diseases.

D. drinking water contamination.

E. indoor air pollution.

Question nr **10**

The first clear legal basis for EU activities in public health is The Treaty of:

A. Lisbon.

B. Amsterdam.

C. Nice.

D. Maastricht.

E. Rome.

Question nr **11**

According to the Cochran review of January 2019, GP health reviews for people under 65 (medical history, physical examinations, screening for several diseases at once, behavioral interventions) have little or no impact on the reduction in mortality from cancer and cardiovascular diseases. Such reviews are an example of:

A. analysis of alternative solutions for technology.

B. technology cost-effectiveness analysis.

C. technology safety analysis.

D. health technology assessment.

E. health needs analysis.

Question nr **12**

The chief executive of a hospital decided to conduct a study on the experiences of patients, i.e. the feelings of patients and their families or caregivers that arise from the medical care at the hospital. Quantitative studies suitable for measuring patient experiences are:

A. polls.

B. focus group interviews.

C. individual in-depth interviews.

D. case study.

E. observation.

Question nr **13**

The main cause of death of the elderly (65+) in Poland is associated with:

A. infectious diseases.

B. neoplasms (cancers).

C. cardiovascular diseases.

D. nervous system diseases.

E. hearing organ diseases.

Question nr **14**

The Health Belief Model explains:

A. distress.

B. incidence.

C. health hazard.

D. probability of taking a recommended health action.

E. remission.

Question nr **15**

Epidemiology as a science deals with the assessment of:

A. occurrence of health phenomena.

B. conditioning of health phenomena.

C. effectiveness of interventions.

D. A and B are correct.

E. A, B and C are correct.

Question nr **16**

It was proved in an experimental study in 2013 that surgical masks are about 3 times more effective in filtering exhaled air (for *Bacillus atrophaeus* and MS2 bacteriophage) than homemade masks made of T-shirts, scarves or pillowcases. Despite that, homemade masks seem to be better than not having any protection against airborne diseases and can be used for:

A. immunization of people susceptible to infection.

B. neutralizing the source of infection.

C. cutting the transmission pathways of infection.

D. general epidemiological surveillance.

E. identification of the epidemiological chain.

Question nr **17**

Which of the following risk factors are conducive to injuries and accidents (especially traffic ones)?
1) drugs;
2) alcohol abuse;
3) dangerous car driving;
4) failure to use seatbelts;
5) low physical activity.
The correct answer is:

A. 1,2,3.

B. 1,2,3,4.

C. 1,3,4,5.

D. 2,3,4,5.

E. all the above.

Question nr **19**

A potential relationship between a given disease and a given exposure, expressed by odds ratio, is possible to assess using an analysis of data provided by epidemiological study performed according to the scheme of:

A. cross-sectional study.

B. case-control study.

C. ecological study.

D. correlational study.

E. descriptive study.

Question nr **20**

Hospital accreditation is:

A. compulsory quality system, regulated by law.

B. voluntary quality system, implemented as total quality management.

C. voluntary quality system based on available and published standards.

D. voluntary network of hospitals promoting health.

E. compulsory integrated quality system.

Question nr **21**

Which of the following measures are necessary in order to reduce morbidity and premature mortality due to cardiovascular diseases?
1) improving nutrition;
2) reducing incidence of diabetes;
3) increasing physical activity;
4) reducing smoking and alcohol consumption;
5) fighting hypertension and atrial fibrillation.
The correct answer is:

A. 1,2,3.

B. 1,2,3,5.

C. 1,3,4,5.

D. 2,3,4,5.

E. all the above.

Question nr **22**

A biomarker of exposure used in environmental epidemiology to assess the effect of environmental exposure on the examined health outcome is defined as:

A. marker of individual susceptibility to the exposure to a harmful environmental factor.

B. marker of early (subclinical) health effects of the exposure to a harmful environmental factor.

C. marker of the exposure to a harmful environmental factor obtained using dosimetry techniques that measure the individual exposure.

D. marker of the exposure to a harmful environmental factor calculated as the average concentration of the xenobiotic provided by analyses of various environmental media in the microenvironment of the exposed individual.

E. marker of the exposure to a harmful environmental factor provided by the direct

measurement of the concentration of a xenobiotic or its metabolite in a biological material obtained from the individual who is exposed to the factor in question.

Question nr **23**

The family doctor has a patient, a 54-year-old male with 2nd degree obesity, type 2 diabetes and arterial hypertension, and with a family history of heart disease from his father's side. The doctor decided to use a transtheoretical model for the slimming therapy of this patient. When starting therapy, the doctor should check:

A. patient's awareness of the relationship between obesity and health.

B. patient's perception of his susceptibility to heart disease.

C. patient's perception of the severity of heart diseases.

D. patient's perception of social norms and influences.

E. patient's self-efficacy in weight loss..

Question nr **24**

In the years 2016 - 2018 African Swine Fever occurred in Asia and Africa (only in domestic pigs) as well as in Europe (in wild boars and domestic pigs). In 2018 ASF outbreaks in domestic pigs occurred in six EU countries (Romania, Poland, Lithuania, Latvia, Italy, Bulgaria). The occurrence of ASF bears the hallmark of:

A. epidemic.

B. endemic.

C. epizootic.

D. enzootic.

E. epidemic outbreak.

Question nr **25**

Nosocomial infections are an example of the contemporary epidemic spread of infectious diseases. Which of the following concerning these infections is **false**?

A. particular risk related to hospital stay is due to frequent contacts with mutations of pathogens resistant to antibiotics and antimicrobial/antibacterial agents.

B. nosocomial infections require additional tests and therapeutic agents.

C. as a result of nosocomial infections the number of deaths in each age range increases.

D. from the epidemiological point of view, nosocomial infections may be of pandemic nature.

E. hospital personnel and visitors are additional source of infection.

<div align="center">Question nr 26</div>

The general real (rough) death rate in Poland in 2014 was 970/100 000. In a small developing country in the same year it was 810/100 000. Which of the following best describes that situation?

A. in Poland more people die because the population is larger.

B. in this developing country infant mortality is high and infant mortality is not included in the death rate.

C. in this small country the healthcare system is better than in Poland.

D. in the developing country the death rate is lower because of emigration.

E. in developed countries the real death rate is usually higher because the percentage of the elderly in their populations is also higher.

<div align="center">Question nr 27</div>

According to NCD Risk Factor Collaboration studies published in 2016 (eLife 2016;5:e13410), among men born in 1996 the tallest are the Dutch, whose height on average is 182.5 cm, and the 95% level of confidence is 180.6-184.5 cm. The probability that the average height of the Dutch falls outside that level is:

A. 0%.

B. 2.5%.

C. 5%.

D. 95%.

E. 100%.

<div align="center">Question nr 28</div>

Health policy programs are developed and implemented by:

A. National Health Fund.

B. hospitals.

C. primary care physicians.

D. local government units.

E. local government units and ministers.

Question nr **29**

The risk factors of nosocomial infections include:

A. patient's age.

B. length of a stay in the hospital (hospitalization).

C. inappropriate antibiotic therapy.

D. A,B,C are true.

E. B,C are true.

Question nr **30**

The method of cardiovascular disease prevention which belongs to high risk strategy is:

A. reduction of the sodium chloride content in processed foods.

B. blood pressure measurement during a checkup with the family doctor.

C. education about a good diet for the heart.

D. setting up city parks.

E. setting routes for walking, running and cycling.

Question nr **31**

Identifying sources of infection, routs of its transmission and people susceptible to infection are action taken in the case of:

A. disinfection.

B. sterilization.

C. disinfestation.

D. deratization.

E. epidemic outbreak.

Question nr **32**

Which of the following are components of the Regional and National Maps of Health Needs specified in the Polish Ministry of Health Regulation of 26 of March 2015?

A. WHO health need projections for the European Region; analysis of the state of resources and their utilization; health need projections.

B. analysis of the state of healthcare resources and their utilization; analysis of health risk factors; analysis of the main causes of death in the population.

C. demographic and epidemiological analysis; analysis of the state of resources and their utilization; health need projections.

D. monitoring of zoonotic diseases and zoonotic agents; keeping records of the new incidence of infectious diseases; analysis of the state of health of children and young people from different provinces.

E. analysis of the state of health of the elderly; analysis of health needs of children and young people; analysis of the state of resources and their utilization.

Question nr **34**

Nosocomial infection takes place in:

A. stable.

B. garden.

C. zoo.

D. hospital.

E. airplane.

Question nr **35**

What kind of study is a cohort study?

A. observational.

B. experimental.

C. intervention.

D. screening.

E. clinical.

Question nr **36**

In one calendar year mortality due to malignant diseases was compared between the population of Town A (mortality: 420 / 100 000) and the population of Town B (mortality: 458 / 100 000). Indicate the correct interpretation of the obtained data:

A. two populations (A and B) differ statistically significantly in terms of mortality because the difference is greater than 5%.

B. incidence of malignant diseases is larger in Town B than in Town A.

C. case fatality in malignant diseases is larger in Town B than in Town A providing that the observed difference in mortality is statistically significant.

D. reliable assessment of the difference in between-town mortality due to malignant diseases is not possible without age standardization.

E. duration of observation (one calendar year) is too short to implement population-based comparisons of two mortalities due to malignant diseases.

Question nr **37**

In Poland, reports on suspected or diagnosed infectious diseases that are subject to compulsory notification are to be submitted to:

A. National Health Fund.

B. Ministry of Health.

C. State Sanitary Inspectorate.

D. Central Statistical Office.

E. Department of Health in a region-specific Voivodship Office.

Question nr **38**

The following institutions participate in the public health information system, **except from**:

A. Center of Information Systems in Health Care.

B. Chief Sanitary Inspection.

C. National Health Fund.

D. National Institute of Public Health.

E. Social Insurance Fund (ZUS).

Question nr **39**

In many countries, the key method of fighting the COVID-19 pandemic in 2019-2020
was the so-called flattening the epidemic curve that serves to:
1) reduce the overall number of cases;
2) spread the number of cases over time;
3) slow down the rate of spread of SARS-CoV-2 infection;
4) counteract the paralysis of treatment under the pressure of new cases;
5) gain time to develop treatment procedures and vaccines.
The correct answer is:

A. only 1.

B. 1,2,3.

C. 1,2,3,4.

D. all the above.

E. 2,3,4,5.

Question nr **40**

The register of deaths resulting from occupational diseases is kept by:

A. Registry Office.

B. Statistics Poland (Central Statistical Office).

C. National Health Fund.

D. Provincial Public Health Centers.

E. Social Insurance Fund (ZUS).

Question nr **41**

The QALY indicator means:

A. human development index.

B. healthy life years index.

C. quality-adjusted life years index.

D. metric area index.

E. quantity of aggressive living years.

Question nr 42

In February 2019 the Supreme Administrative Court dismissed A.D.'s (plaintiff's initials) cassation appeal from the verdict of the Provincial Administrative Court in Warsaw which in 2016 supported the Health Minister's decision who in turn upheld the provincial governor's decision to impose a fine of 420 PLN on A.D. for avoiding subjecting his minor daughter to preventive vaccinations. The SAC's verdict is an example of the following law function in the field of public health:

A. ban on actions and behaviors harmful to the health of individuals and the community.

B. regulation of the rights of individuals and groups to health care.

C. regulation of health care resources.

D. regulation of healthcare financing.

E. regulation of requirements in the field of healthcare quality.

Question nr 43

Which of the following concerning positive features of screening tests, which justify their application, **is false**?

A. methods used in screening usually carry no risk for examined patients.

B. there is a possibility to verify diagnoses obtained through these tests.

C. methods used in screening do not have to be accepted by examined patients.

D. diagnostic tests used in screening are generally fast and easy.

E. costs of screening tests and possible further treatment are economically justified.

Question nr 44

The HLY indicator means:

A. human development index.

B. healthy life years.

C. quality-adjusted life years.

D. metric area index.

E. humanitarian list of the year.

Question nr **45**

Epidemiological surveillance of hospital-related infections in healthcare includes all the following **except for**:

A. epidemiological description of infections and pathogens.

B. monitoring the microbiological flora, antibiotic susceptibility, trends in drug resistance of pathogens causing nosocomial infections.

C. evaluation of problem level, i.e. incidence, mortality, drug resistance, etc.

D. vaccination of healthcare professionals.

E. comparative analysis of the situation of nosocomial infections in different healthcare facilities.

Question nr **46**

In the US, it is popular to say that 'the zip code is a better predictor of health than the genetic code.' This statement illustrates the phenomenon:

A. globalization.

B. technological progress.

C. health inequalities.

D. demographic transformation.

E. epidemiological transformation.

Question nr **47**

In present-day Poland the main cause of death of adults due to CVD is:

A. arterial hypertension.

B. ischemic heart disease.

C. stroke.

D. rupture of an aortic aneurysm.

E. congenital heart disease.

Question nr **48**

In 2017 in a place populated by 50 000 inhabitants there were the following numbers of injuries according to causes and deaths resulting from those injuries:
The formula for the calculation of mortality rate per 100,000 resulting from violence is:

Cause of injury	Injures according to causes		Deaths resulting from injuries according to causes	
	Number	%	Number	%
Road traffic	100	66.7	25	62.5
Professional work	10	6.7	5	12.5
Sport, recreation	15	10	5	12.5
Violence	25	16.6	5	12.5
Total	150	100	40	100

A. 5/50 000 x 100 000 = 10.

B. 25/50 000 x 100 000 = 50.

C. 5/25 x 100 000 = 20 000.

D. 5/40 x 100 000 = 12 500.

E. 5/150 x 100 000 = 3 333.

Question nr **49**

According to WHO which of the following **is not** a criterion for recognizing the alcohol addiction syndrome?

A. alcohol craving.

B. loss of control over alcohol consumption.

C. increase in alcohol tolerance.

D. increasing neglect of pleasure and interests.

E. earlier anti-social behaviour.

Question nr **50**

The phrase 'the art and science of preventing disease, prolonging life and promoting health through the organized efforts of society' is a definition of:

A. fight against health illiteracy.

B. healthy upbringing.

C. health education.

D. health promotion.

E. public health.

Question nr **51**

According to NHS Scotland data in the last decade the participation in cytological screening has dropped from 80% to 70% in women aged 25 -34 with low education. Indicate health effects of this situation:

A. increase in public spending on medical services.

B. increase in inequalities in health.

C. blaming women for not being responsible for their health.

D. intensification of information campaigns.

E. greater involvement of gynecologists.

Question nr **52**

Syphilis treatment in pregnant woman is an action in the area of:

A. phase I prevention.

B. phase II prevention.

C. phase III prevention.

D. phase I and II prevention.

E. phase I and III prevention..

Question nr **53**

According to the current law patients have to have a referral from their family doctor (NHF doctor) if they need medical services from:
1) cardiologist;
2) ophthalmologist;
3) dentist;
4) dermatologist;
5) oncologist;
6) psychiatrist;
7) gynecologist.
The correct answer is:

A. 1,2,3.

B. 1,2,4.

C. 2,3,5.

D. 4,5,6.

E. 3,5,6,7.

Question nr **54**

Which denominator number is used for calculating the mortality rate of the disease?

A. number of all incidence of the disease.

B. number of new incidence of the disease in the given time.

C. number of deaths of the disease.

D. average number of people in the population in the given period of time.

E. number of people in the population suffering from the disease.

Question nr **55**

In August 2017 Madagascar recorded the largest outbreak of plague in the decade. As of 12 October 2017 there were 560 cases of plague comprising 394 cases of pneumonic plague, 143 cases of bubonic plague, 1 case of septicemic plague and 22 cases of clinically undefined plague. 57 deaths were recorded. Madagascar has a population of 24.9 million people. The mortality rate expressed as a percentage is:

A. 57/560 x 100% = 10.2%.

B. 143/560 x 100% = 25.5%.

C. 394/560 x 100% = 70.4%.

D. 57/24 900 000 x 100% = 0.0002%.

E. 560/24 900 000 x 100% = 0.002%.

Question nr **56**

The data on the number of the cases of X disease obtained in surveys carried out during health festivities is of little value as far as epidemiology and the disease spreading are concerned because:

A. data on comorbidities is not collected.

B. self-selection of the respondents means that the sample is not representative.

C. false negative results are common.

D. there is no further diagnostic system.

E. most diseases are rare in the population.

Question nr **57**

Researches from the Cleveland Clinic (OH, USA) found that a microbiome present in breast tissue may be associated with breast cancer (Oncotarget 2017; 8:88122-88138). They hope to find a biomarker which help in fast and easy breast cancer diagnosis. Let us assume that they have already found such an biomarker and prepared a diagnostic test for detecting its presence. Using this test they examined 100 women with breast cancer and 100 healthy women who were diagnosed with other methods. They obtained the following results:
Indicate the **false** interpretation of those results:

	Sick women	Healthy women
Positive test result	93	11
Negative test result	7	89
Total	100	100

A. test sensitivity is 93%.

B. test specificity is 11%.

C. the percentage of false positive results is 11%.

D. the percentage of false negative results is 7%.

E. the results do not allow to determine a positive and negative predictive value.

Question nr **58**

The Helsinki Declaration of 1964 concerns:

A. primary health care.

B. protection of the rights of clinical trial participants.

C. health promoting hospitals.

D. improving quality in healthcare.

E. millennium development goals.

Question nr **59**

In a given calendar year there were 100 cases of X disease in a city of 500,000 inhabitants. Half of the patients died. All the cases occurred in the same city district. Given the circumstances, what else do we have to know to calculate the incidence rate in this district and year?

A. age structure of the city's population.

B. case fatality rate in this district.

C. that district population in the middle of this year.

D. duration of the prodromal period of X disease.

E. no further data is needed to calculate the incidence rate.

Question nr **60**

Which of the following deaths are termed as premature death?

A. perinatal.

B. up to 3 years of age.

C. up to 18 years of age.

D. before reaching 60 or 65 years of age.

E. unavoidable.

Question nr **61**

Indicate screening tests that will be conducted according to the guidelines of the National Program for Combating Cancer 2016-2024:
1) colonoscopy in 50-65 years olds once every 15 years;
2) colonoscopy in 50-69 years olds once every 5 years;
3) colonoscopy in 55-64 years olds once every 10 years;
4) cytology in women aged 25-59 once every 3 years;
5) mammography in women aged 50-69 once every 3 years.
The correct answer is:

A. 1,4.

B. 1,5.

C. 2,5.

D. 3,4.

E. 3,5.

Question nr **62**

Activities early detecting diseases and their causes make up secondary prophylaxis.
Which of the following are part of secondary prophylaxis?
1) active guidance;
2) dispanserization;
3) vaccination;
4) health checks;
5) screening;
6) epidemiological supervision over food production.
The correct answer is:

A. 1,3.

B. 2,3.

C. 4,5,6.

D. 1,2,4,5.

E. 2,3,5,6.

Question nr **63**

In a population of 1.000.000 inhabitants 1.000 persons suffer from pancreatic cancer and in this population there were 200 deaths from that disease in one calendar year. Which of the following is the best overall measure of the described epidemiological situation with regard to pancreatic cancer?

A. incidence rate of 100 / 100 000.

B. morbidity rate of 80 / 100 000.

C. case fatality rate of 20 / 100 000.

D. case fatality rate of 200 / 1000.

E. mortality rate of 200 / 1000.

Question nr **64**

Which of the following **is not** a proven risk factor for hospital-onset pneumonia?

A. recent history of multiple episodes of treatment with wide spectrum antibiotics.

B. diagnosis of chronic obstructive pulmonary disease.

C. swallowing disorders.

D. polytrauma (multiple traumatic injuries), which is the cause of the patient's hospitalization.

E. viral infection of the upper respiratory tract in the last 4 weeks preceding the patient's hospitalization.

Question nr **65**

When calculating the incidence rate for a given disease the numerator of the fraction denotes:

A. the number of people suffering from the disease.

B. the number of known cases of the disease.

C. the number of new cases of the disease in a given period of time.

D. the number of asymptomatic cases.

E. the number of deaths for the disease in a given period of time.

Question nr **66**

A population-based screening of breast cancer was performed using mammography. The sensitivity of the diagnostic tool was 90%, and its specificity was 95%. As a result it can be estimated that in the examined population:

A. 5% of the screening participants have a false positive result.

B. 10% of the screening participants have a true positive result.

C. 10% of the screening participants have a true negative result.

D. 95% of the screening participants have a true positive result.

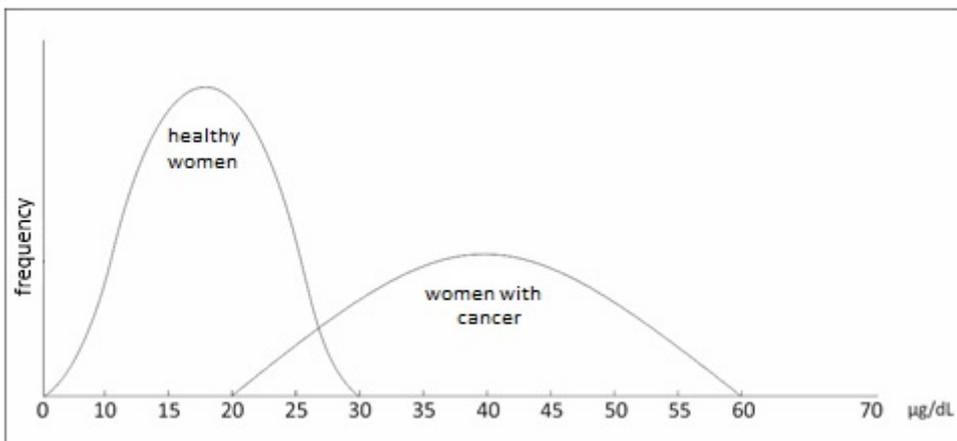**E.** 90% of the screening participants have a true negative result.

Question nr **67**

The sentence: "10% of cases in meningococcal sepsis with meningitis end in death" describes:

A. mortality.

B. standardized mortality.

C. fatality.

D. morbidity.

E. incidence.

Question nr **68**

Let us assume that a new screening test was prepared to detect ovarian cancer. The chart below shows the frequency of its results. Which of the following is true if we take as a referential value the result of 0-30 µg/dL?

A. test is in 100% specific.

B. test is in 100% sensitive.

C. some healthy women will have a false-positive result.

D. all women with cancer will have a positive result.

E. all women with cancer will have a negative result.

Question nr **69**

Factors which influence health according to Lalonde's concept **<u>do not</u>** include:

A. environmental factors.

B. genetic factors.

C. lifestyle.

D. health care organization.

E. financial factors.

Question nr **70**

In post-exposure prophylaxis against tetanus in the patient who is at a small risk of infection and vaccinated four years ago, the following is recommended:

A. tetanus-diphtheria vaccine or tetanus vaccine.

B. antitoxin (LIT-specific immunoglobulin 250/500 IU).

C. tetanus vaccination schedule on 0 - 1 - 6 month basis.

D. A and C are correct.

E. none vaccination is recommended.

Question nr **71**

Morbidity rate reaches higher values if:

A. disease has a short duration.

B. disease has a long duration.

C. disease is severe and causes more deaths.

D. the number of the new cases of the disease is low.

E. the ill are emigrating.

Question nr **72**

On a medical statement form confirming temporary incapacity for work or a stay in a stationary healthcare institution (ZUS ZLA form) A code means incapacity for work:

A. caused by a disease which symptoms appear after the period longer than 14 days since the onset of the disease.

B. which arose after a break shorter than 60 days and was caused by the same disease which caused it before the break.

C. in pregnancy.

D. caused by alcohol abuse.

E. caused by tuberculosis.

Question nr **73**

What kind of prophylaxis is mass screening according to Bogdan Kleczkowski?

A. non-specific prophylaxis of phase I prevention.

B. specific prophylaxis of phase I prevention.

C. phase II prevention.

D. phase III prevention.

E. metaphylaxis.

Question nr **74**

In the formula for calculating the specificity of the test, the following number of results is entered in the numerator of the fraction:

A. true negative.

B. false negative.

C. true positive.

D. false positive.

E. all positive.

Question nr **75**

For a dataset, the median is the value which:

A. splits dataset in half (with one half being below and the other one above this value).

B. is the most frequent.

C. is statistically closest to all of the values in the distribution.

D. is a measure of statistical dispersion.

E. splits data set into five sub-groups.

Question nr **76**

The information stating that "in Poland, in week 45 of the year 2020, the total number of deaths among the persons infected with SARS-CoV-2 was 2262" applies to:

A. forensic epidemiology.
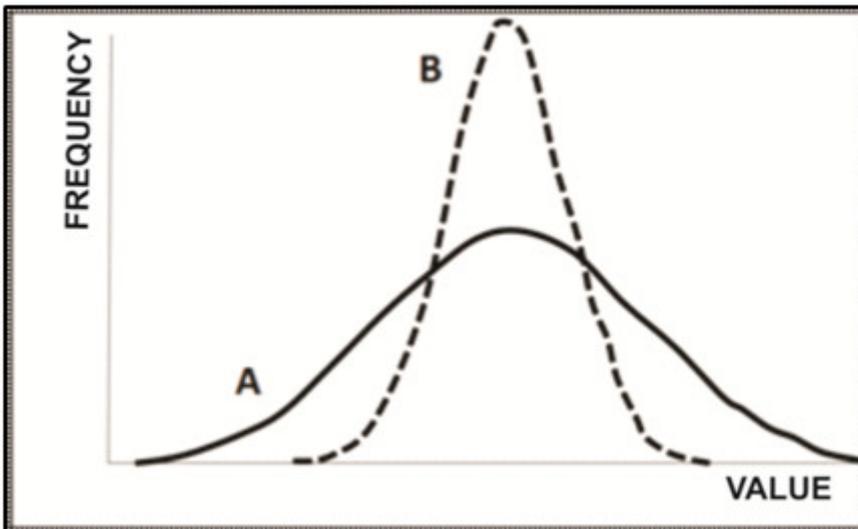
B. clinical epidemiology.

C. experimental epidemiology.

D. descriptive epidemiology.

E. analytic epidemiology.

Question nr **77**

The diagram shows two distributions of the same characteristic among adult population of the towns A and B. The difference between these distributions can be numerically expressed with the use of:

A. the median.

B. arithmetic mean.

C. the mode.

D. standard deviation.

E. number of adult inhabitants of towns A and B.

Question nr **78**

A study was conducted that aimed to identify the risk factors for SARS-CoV-2 infection among physicians. From the population of physicians in contact with COVID-19-infected patients, 50 physicians were selected who had SARS-CoV-2 infection confirmed within the period of 6 months preceding the study, and a group of 50 uninfected ones. Both groups were inquired about the personal protective measures and hygiene practices they had been using in previous months. The above description refers to:

A. experimental study.

B. cross-sectional study.

C. case-control study.

D. cohort study.

E. ecological study.

Question nr **79**

Mounting scientific evidence supports the hypothesis that the postal code is a better health predicting factor than the genetic code. This hypothesis refers to:

A. health inequality.

B. prevention paradox.

C. reverse healthcare.

D. the Pareto principle.

E. overdiagnosis of diseases.

Question nr **80**

The use of variolisation in the past was associated with the spreading of:

A. plague.

B. cholera.

C. spotted typhus.

D. smallpox.

E. yellow fever.

Question nr **81**

In accordance with the Act on Preventing and Combating Infections and Infectious Diseases in Humans in Poland, persons subject to compulsory treatment include:

A. HIV and SARS cov-2 infected patients.

B. AIDS and COVID-19 patients.

C. pulmonary tuberculosis, syphilis and gonorrhoea patients.

D. syphilis and COVID-19 patients.

E. tuberculosis and gonorrhoea patients.

Question nr **82**

Which of the following is the document stipulating the rules of health promotion actions in the fight against the epidemic accumulation of diseases of affluence and defining health promotion as "the process of enabling people to increase control over the factors affecting their lives"?

A. Paris Charter for Health Promotion.

B. Amsterdam Charter for Health Promotion.

C. Berlin Charter for Health Promotion.

D. Ottawa Charter for Health Promotion.

E. Washington Charter for Health Promotion.

Question nr **83**

The first international treaty on evidence-based public health, accepted by over 170 United Nations countries is:

A. Political Declaration on Non-Communicable Diseases (UN NCD).

B. World Health Organization Framework Convention on Tobacco Control (WHO FCTC).

C. World Health Organization Global Strategy to Reduce the Harmful Use of Alcohol (GlobAlcRed WHO).

D. Convention for the Protection of Human Rights and Fundamental Freedoms.

E. Alma Ata Declaration.