

Questions for the exam in the discipline "Hygiene"

main professional educational program of higher education - specialty program in specialty
31.05.01 General Medicine (partially implemented in English), approved 24.05.2023

1. The role of hygienic and environmental sciences in ensuring preventive health care tasks. Factors shaping population health.
2. History of the development of hygiene. The main stages in the development of hygienic science and practice.
3. Environmental factors, their classification and role in the occurrence and spread of diseases.
4. Hygienic characteristics of the atmosphere. Atmospheric air pollution as the most important hygienic and environmental problem. Sources of air pollution and measures for its protection.
5. Physical properties of air, their hygienic assessment and methods of determination.
6. Heat transfer, types of thermoregulation. The effect of high temperatures on the body. Prevention and first aid for heat stroke.
7. The effect of atmospheric pressure on the body. Caisson disease and preventive measures.
8. Hygienic value of air humidity. Methods for assessing certain types of humidity.
9. The concept of microclimate. Hygienic characteristics of the indoor air environment.
10. Complex influence of meteorological conditions on the body.
11. Climate and weather, their hygienic significance. The concept of acclimatization.
12. Solar radiation and its biological effect. Biological significance of the ultraviolet part of the solar spectrum.
13. The use of artificial ultraviolet radiation for preventive purposes.
14. Natural and artificial lighting of premises. Hygienic requirements, assessment methods.
15. Water as a factor in the biosphere and a necessary condition for the existence of life on earth. Ecological and hygienic problems of the hydrosphere.
16. Hygienic requirements for drinking water quality.
17. Chemical indicators of water pollution, their hygienic assessment.
18. Methods for improving the quality of drinking water.
19. Soil as an environmental factor. Basic properties of soil, hygienic significance. Soil pollution and self-purification.
20. Hygienic principles and requirements for cleaning populated areas.
21. Nutrition as a factor in maintaining and promoting health.
22. Basics of rational nutrition.
23. Dietary and therapeutic nutrition. Therapeutic and preventive nutrition at work and its importance for the body.
24. Assessing the completeness and adequacy of nutrition. Rules for creating menu layouts for various population groups.
25. Basic principles of constructing a food diet.
26. Nutritional and biological value of food products.
27. The role of proteins for the body, their nutritional and biological value. Signs of protein deficiency in children and adults. Protein supplier products. Consumption standards for various population groups.
28. Food fats, their classification and significance for the body. Consumption standards for the population taking into account climatic conditions. Products are suppliers of fats in the diet of children and adults.

29. Carbohydrates, their classification. Importance for the body and consumption rates. Products are suppliers of carbohydrates in the diet of children and adults.
30. Vitamins, their classification. The role of vitamins in population nutrition.
31. Water-soluble vitamins, their importance for the body, sources and consumption rates. Indicators of vitamin deficiency.
32. Fat-soluble vitamins, sources, consumption rates. Indicators of vitamin deficiency.
33. The importance of minerals in human nutrition. Classification, products - sources, consumption standards.
34. Methods for assessing the quality of food products and their falsification.
35. Ecological problems of human nutrition. The concept of "foreign substances", "food chain" and biologically active substances.
36. Diseases caused by ingestion of poor quality food products. Classification of food poisoning.
37. Food poisoning of microbial etiology and its prevention.
38. Food poisoning of non-microbial etiology and its prevention. Food for organized groups and its provision. Requirements for the layout, equipment and operation of catering units.
39. Hygiene of mental and physical labor. Occupational hazards and occupational diseases. Main directions of prevention of occupational diseases.
40. Physiological and hygienic foundations of the labor process. The concept of severity and intensity of work, the main evaluation criteria.
41. Classification of working conditions. The main occupational hazards encountered at work.
42. Industrial dust, classification, physicochemical properties, effect on the body.
43. Specific diseases of the lungs and other organs under the influence of industrial dust. Classification of pneumoconiosis.
44. Industrial poisons. Classification, routes of entry and release of poisons from the body, effect on the body.
45. Standardization of industrial poisons in production. Toxicity indicators and their determination. Main directions for the prevention of occupational poisoning.
46. Methods for determining toxic substances in the air.
47. The influence of heavy metals on the body of workers.
48. Toxicological characteristics of fatty hydrocarbons. Measures to prevent poisoning caused by gasoline.
49. Toxicological characteristics of aromatic hydrocarbons. Measures to prevent poisoning caused by benzene, toluene, xylene.
50. Lead, industrial use, effects on the body and preventive measures.
51. Mercury, effects on the body and preventive measures.
52. Carbon monoxide, sources of formation, toxicological characteristics, prevention of poisoning.
53. Physical and hygienic characteristics of noise, vibration, their assessment, main directions of prevention.
54. Ultrasound and its effect on the body. Measures to prevent adverse effects.
55. Non-ionizing electromagnetic radiation and fields, their effect on the body, prevention of adverse effects.
56. Occupational hygiene when working with radioactive substances and sources of ionizing radiation. Principles of protection.
57. Health activities at industrial enterprises.
58. Treatment and preventive institutions of somatic profile. Hygienic requirements for placement and layout.
59. Infectious diseases departments of the hospital. Requirements for their layout, equipment and operation. Prevention of nosocomial infections.

60. Hygienic requirements for the planning and functioning of children's medical institutions.
61. Nosocomial infections. Classification, causes, principles of prevention. Protective regime of medical institutions.
62. Occupational hygiene of physicians. The main occupational hazards in healthcare and their prevention.
63. Features of working conditions for radiologists and radiologists. Principles of protection when working with radioactive substances and sources of ionizing radiation.
64. Hygienic and environmental problems of modern large cities.
65. Hygiene of children and adolescents. Subject and tasks. Age periodization.
66. Factors shaping children's health. Hygienic principles for ensuring normal growth and development of a child.
67. Basic patterns of growth and development of the child's body.
68. Basic patterns of physical development of children and adolescents.
69. Methods for studying and assessing physical development.
70. Assessment of the health status of children and adolescents. Health groups.
71. The role of physical education in ensuring the development of children and adolescents. Medical control over the physical education of schoolchildren.
72. Hardening of children and adolescents. Methods, positive and possible adverse effects.
73. Sanitary and hygienic examination of projects of united preschool institutions. The principle of group isolation.
74. Hygienic requirements for children's clothing and shoes.
75. Hygienic requirements for toys and other children's household items.
76. Determining a child's readiness for school.
77. Sanitary and hygienic examination of projects of schools and boarding schools .
78. Hygienic assessment of school furniture. Requirements for TSO, textbooks and visual aids.
79. Hygiene of classroom activities at school. Organization of the educational process in extended day mode in secondary schools.
80. Hygienic requirements for computer classes. Hygienic aspects of operator work on personal computers.
81. Vocational guidance and medical-professional consultation for children and adolescents. Contents of medical and preventive work of a pediatrician in children's institutions .
82. Healthy lifestyle and personal hygiene issues.
83. Hygienic issues of accommodating people in emergency situations.
84. Medical control over nutrition and water supply of organized population groups in extreme conditions.