

THE QUESTIONS FOR THE STATE EXAMINATION 2019/2020

Question No. 1

- a) Health damage of workers occupationally exposed to noise. Possibilities of prevention.
- b) Addictive behavior. Addiction to alcohol (alcohol intoxication, acute, chronic, health/social consequences).
- c) Social medicine. Public health; definition, concept, objectives, the view from the history to modern era. Major public health problems in European countries.

Question No. 2

- a) Basic characteristics of environmental/occupational exposure (organism, environmental factors, identification, carcinogenic and non-carcinogenic effects).
- b) Primary and early secondary prevention of cervix uteri carcinoma.
- c) Epidemiology. The role of epidemiology. The relationship between epidemiology and clinical medicine. Epidemiological studies.

Question No. 3

- a) Addictive behavior. Addiction of cannabis type, volatile substances/inhalants, central depressants.
- b) Hospital hazards (chemical, genotoxic). Ways of prevention.
- c) Health promotion and disease prevention. Levels of prevention. Examples of preventive measures.

Question No. 4

- a) Major contaminants in drinking water (non-carcinogenic/carcinogenic hazard). Bottled water. Recommendation to adults and children.
- b) Hygiene of children: child development, preventive check-ups in CR and your country. Health consequences of education.
- c) Observational epidemiology. Evidence based medicine. How to use it for practice?

Question No. 5

- a) Health nutrition - role of fats in nutrition.
- b) Health effects of smoking. Prevalence of smoking habits. Possibilities of prevention, mainly health prevention.
- c) Experimental epidemiology. Potential errors in epidemiological studies. Random error. Systematic error. Bias. Confounding.

Question No. 6

- a) The main exposure pathways of contaminants (respiratory tract, GIT, skin) and body defense.
- b) Direct health effects of nutrition – malnutritions (overnutrition, undernutrition). Healthy food recommendations.
- c) Quality of health care. Health care quality assessment. Interventions for improving quality of health care.

Question No. 7

- a) Environmental and occupational hazards and exposures. The main environmental contaminants (overview and resources).
- b) Health damage of workers occupationally exposed to vibration. Possibilities of prevention.
- c) World Health Organization and its role in public health. HFA in the 21st century. Health 2020. Equity in health.

Question No. 8

- a) Hospital hazards (physical and biological). Most frequent professional diseases of health care workers.
- b) Environmental and life style factors contributing to the carcinogenesis. Identification of carcinogens (overview of possibilities). Classification according to IARC (Group 1, 2A, 2B examples).
- c) Health care systems – basic characteristics. The principle of solidarity. Indicators of health care systems. Health care system in the Czech Republic. Health care system in your country.

Question No. 9

- a) Occupational skin illnesses. Possibilities of prevention – collective and individual. Absolute and relative contraindications for work at risk.
- b) Nutrition of children – nutrition in pregnancy, breastfeeding, complementary foods, nutrition of older children.
- c) Stress in health professionals; factors related to specific aspects of medical profession and working conditions. Burnout syndrom; key risk factors, prevention, intervention.

Question No. 10

- a) Enhanced susceptibility to environmental (occupational) exposure.
- b) Primary and early secondary prevention of colorectal carcinoma.
- c) Social patterns of illness – geography, occupation, gender, ethnicity, unemployment, age, social class.

Question No. 11

- a) Ways of prevention in occupational medicine – collective (technical, technological, organizational) and individual (PPE, medical periodical preventive check – ups).
- b) Factors affecting the quality of the internal environment (temperature, humidity, lighting, air ionization).
- c) Screening. Criteria for a screening program. Sensitivity, specificity of a screening test.

Question No. 12

- a) Indirect risks of nutrition – physical and biological contamination of nutrition. Foodborne infections. Food poisoning. Prevention.
- b) Ionizing radiation - effect to organism.
- c) Demography. The structure of the population. Distribution by sex and age. Current world demographic trends.

Question No. 13

- a) Prevention of cardiovascular diseases. Table of coronary risk.
- b) Factors affecting the quality of the internal environment (chemicals, pollen, mold, mites, plant toxins and allergens). Sick building syndrome and building related illnesses. Interior decontamination (possibilities).
- c) Psychosocial aspects of mental health. Stigma and stereotyped images of mentally ill people. Other stigmatized groups of patients. Prevention of stigma and discrimination.

Question No. 14

- a) Outdoor air pollution – sources and nature of ambient air pollutants (smog, particulate matters, nitrogen oxides, sulphur dioxide, ozone). Possibilities of prevention.
- b) Addictive behavior. Addiction to opiates, psychostimulants, dance drugs, hallucinogens.
- c) Health and disease. Determinants of health and disease. Ways of influencing the determinants on various dimensions.

Question No. 15

- a) Ionizing radiation - protection and dosimetry.
- b) Anti-smoking activities – smoking cessation (nicotine replacement therapy, non-nicotine pharmacological therapy). Program 4 A.
- c) Health legislation. Informed consent. Patient's refusal. Health documentation.

Question No. 16

- a) Occupational health – categories of risky professions, their proclamation (risk factors, OELs, BELs) and importance for health prevention.
- b) Main risks in children age – infections, injuries and the others. Ways of prevention.
- c) Public health policy. Priorities for health care. Assessing needs.

Question No. 17

- a) Nosocomial infections (transmission – sources, susceptible host, means of transmission). Possibilities of prevention.
- b) Hazardous wastes (sources, hazards, management).
- c) Types of health care. Self-care. Family care. Community care. Professional care. Instrumental support. Emotional support. The rights of patients.

Question No. 18

- a) Carcinogens and related types of cancer. Occupational exposure to carcinogens - principles of prevention (ALARA). Carcinogenicity tests (in vivo, in vitro).
- b) UV light – effect to organism, prevention.
- c) Medical ethics. Ethical principles in clinical practice, research and training. Overview of current ethical dilemmas in medicine.

Question No. 19

- a) Non-ionizing radiation (visible light, IR, microwaves, radio/TV waves, lasers).
- b) Wellness (parts of healthy life style). Basic types of physical activity. Health benefits and risks of physical activity.
- c) The ageing of population. Special care for elderly. Hospices. Ethical dilemmas in death and dying. Euthanasia controversy, different attitudes, practices and disapprovals. International perspective and experience.

Question No. 20

- a) Health damage of workers occupationally exposed to dust. Possibilities of prevention – collective and individual.
- b) Basic principles (recommendations) of suitable physical activity (type, volume, intensity, frequency). General recommendation for appropriate physical activity. Different types of physical activity. CORE.
- c) Measurement of population health, data sources. Morbidity, measures of disease frequency (Prevalence. Incidence. Prevalence rate. Incidence rate. Risk. Case – Fatality).

Question No. 21

- a) Health effects of stress. Sources of inadequate mental stress at work – possibilities of prevention. Burnout syndrome.
- b) Indirect risks of nutrition – chemical contamination (Pb, Hg, Cd), food additives; prevention.
- c) Mortality, data sources, basic indicators. Life expectancy. Standardized rates.

Question No. 22

- a) Assessment of neuropsychic load (possible methods). Examples of workplaces in higher risk of mental stress.
- b) Determinants of biological answer to chemicals. Basic (4) mechanisms of adverse effect (examples).
- c) Cultural influence on health beliefs and health behavior. Examples of culturally related syndromes/diseases. Culturally sensitive approach in clinical practice.

Question No. 23

- a) Classification of adverse effects of chemicals (local effects, systemic effects). Biological interactions between chemicals (examples).
- b) Primary and early secondary prevention of breast carcinoma.
- c) Quality of life. Quality of life measures. Health-related quality of life.

Question No. 24

- a) Health consequences of night shifts. Absolute and relative health contraindications.
- b) Health nutrition – role of proteins and carbohydrates in nutrition.
- c) Ethical aspects of communication between doctor and patient. Informed consent in clinical medicine and research.

Question No. 25

- a) Primary and early secondary prevention of skin carcinoma.
- b) Health risk assessment procedure and its relationship to the final legislative decisions.
- c) Bio-psycho-social model and interdisciplinary collaboration in medicine. Medicalisation; definition, factors, examples, and consequences.

Question No. 26

- a) Primary and early secondary prevention of prostate carcinoma.
- b) Drinking water (sources, quality indicators, analyses).
- c) Health care planning and evaluation. The planning cycle. Health economics. Efficacy. Effectiveness. Efficiency. Techniques of health care evaluation. QALY.

Question No. 27

- a) Primary and early secondary prevention of lung cancer.
- b) Important hazardous industrial chemicals (arsenic, lead, cadmium, mercury).
- c) Mental health in European and global perspective. Green Paper and similar documents regarding health in Europe. Family approach and community services in mental health.

Question No. 28

- a) Important hazardous industrial chemicals (benzene, PAHs, formaldehyde, organophosphates).
- b) Risky factors of cardiovascular diseases - overweight and obesity, blood lipids (risk identification, ways of prevention).
- c) Measuring health and disease. Measures of effect (rate ratio, risk ratio, odds ratio, risk difference). Measures of association (population attributable risk).