**State exam questions from Public and Occupational Medicine, Public Health, Social and Preventive Medicine**

**1**.

a) Social medicine and public health. Historical backgrounds of SM and public health .

b) Irritative Chemical Substances

c) Methods of examination of nutritional state (clinical, somatometric, body composition assessment,

 and biochemical examinations, examples of nutritional state disturbances).

**2.**

a) Health and disease as a biopsychosocial category. The value of health. Natural history of disease.

 Influencing pathological process. Health status of Czech population. Comparisn with other countries.

b) Nefrotoxic Chemical Substances

c) Definitions of Child Abuse and Neglect.

**3.**

a) Determinants of health, categories. Social determinants and health and disease. Influencing social

 determinants. Natural history of disease Influencing pathological process The way of life and the health, healthy lifestyles.

b) Hematotoxic Chemical Substances

c) Carbohydrates in the diet, their dietary sources, recommended allowances.

**4.**

a) WHO, role , goals and organs. Main goals of health development over the world. European regional strategy. Health 21 : major targets. Health 2020.

b) Diseases Caused by Vibrations

c) Nutrition during pregnancy and lactation.

**5.**

a) World Health Organisation: goals and tasks. International Classification of Diseases.

b) Hepatotoxic Chemical Substances

c) Hydro-thermic complex as an important factor of living conditions; the methods of measuring and

 evaluating it.

**6.**

a) Main principles of modern health care. Methods of medical care ( prevention, therapy). Health education. Comprehensive disease prevention.

b) Occupational Infectious Diseases

c) Lipids in the diet, their dietary sources, usual and recommended intakes, their pathophysiological

 significance for health.

**7.**

a) Disease prevention: primary, secondary and tertiary prevention. Meaning for human health and medical practice. Preventive control, regular check-ups. Role of Family Doctor, General Practitioner and specialists.

b) Tumorous diseases of airway and lung

c) Growth and development of children .Characteristics of growth and development in different

 periods of childhood and adolescence.

**8.**

a) Systems approach in the health care. Inputs and outputs of medical care. Methodological principles of health care administration. Quality of medical care. Health care systems: main types in the world.

b) Ocular Damage

c) Proteins and amino acids, their dietary sources, recommended allowances for protein, general

 signs of deficiency, risks of high protein intake.

**9.**

a) Secondary prevention. Screening for disease: screening tests, measures of validity. Examples from medical practice.

b) Plumbum, Mercury

c) Differentiation of energy needs. Resting energy expenditure. Thermic effect of food. Thermic

 effect of exercise. The world fatigue problem of hunger, general signs of marasmus.

**10.**

a) Health education: principles, methods and techniques.

b) Ionizing Radiation. Non-ionizing Radiation

c) Dietary fiber, its function on the digestive system, their dietary sources, daily recommended intake

 and preventive effects.

**11.**

a) Aging and old age : demographic and social aspects. Social problems of elderly.

b) Effects of over- and underpressure. Caisson Disease. Hyperbaroxytherapy. Effects of Coldness and

 Heat

c) The transportable diseases potentially spread by drinking water, prevention them; principles and

 practice of disinfection of the water. The main sources of the chemical and microbiological

 pollution of drinking water.

**12.**

a) Aging and old age : health and ethical aspects . Main causes of morbidity in old age .Comprehensive care for elderly.

b) Neurotoxic Chemical Substances

c) Vegetarian diet (Classification of vegetarian diets, risk for infants and children).

**13.**

a) Social and medical problems of cardiovascular disease. The potential of prevention

 b)Occupational Infectious Diseases - Lyme Borreliosis, Tick- borne meningoencephalitis

c) Planning of Community health projects (identifying priorities, setting aims and objectives, defining

 target population, identifying resources, strategy, personal responsibility, time schedule, budget

 and strategy of evaluation.

**14.**

a) Social and medical problems of malignant tumors. The potential of prevention.

b) Occupational Medicine, Occupational Health, Occupational Injuries. Occupational Medical History.

c) Methods of examination of dietary intake and food habits (nutritional monitoring).

**15.**

a) Medical ethics in medical practice and medical science. Current ethical problems in medical care. Dehumanization and technology in medicine.

b) Pulmonary Occupational Diseases – Occupational Asthma, Hypersensitivity Pneumonitis

c) Primary prevention of tumours from the community nutrition point of view.

**16.**

a) Methods of measuring population health status.

b) Skin Damage

c) Actual problems of atmosphere and global climate - greenhouse effect, ozonosphere injury,

 chemical pollution of seas etc.: causes, international co-operation in prevention them; their impact

 on the human health.

**17.**

a) Indicators of health status of the population. Mortality rate and life expectancy.

b) Occupational Diseases in Food Industry

c) Classification of water by use and by origin from the hygienic point of view. The principles of

 chemical and bacteriological assessment of drinking water; criteria of health safety for tape water.

**18.**

a) The main indicators of morbidity (incidence, prevalence and duration of disease). Reported morbidity.

b) Occupational Diseases in Forest Industry

c) Nutrition of infants and toddlers.

**19.**

a) Demography in public health and medicine. Demographic indicators. Population problems world-wide

b) Carcinogenic Chemical Substances

c) The main widespread micronutrient problems: deficiency of iodine, iron, vitamin A, folic, acid.

**20.**

a) Population, gender and age distribution. Population mobility and its indicators.

b) Chemical Substances, Effects of Chemical Substances, The Most Common Poisonings, Protective

 Working Tools, First Aid, Antidotes

c) Three levels of dietary recommendations, their definition and application. Global strategy on diet,

 physical activity and health. EHO, A57/9, 2004, Food based dietary recommendations, nutritional

 standards (PRI)

**21.**

a) Epidemiology, definition, history. Types of epidemiological methods in the health status study.

b) Perceptive Hearing Malfunction Caused by Noise

c) Occupational carcinogens, testing the genotoxicity and carcinogenicity of chemical substances:

 antimutagenic and anticarcinogenic dietary factors: primary prevention of tumorigenesis.

**22.**

a) Prospective epidemiological studies. Advantages, disadvantages, examples. Relative risk, different risk – meaning.

b) Occupational Diseases in Mining Industry

c) Vitamins and minerals in the diet, their physiological needs, function in the body, manifestation of

 deficiency.

**23.**

a) Retrospective epidemiological studies. Advantages, disadvantages, examples. Relative risk, different risk – meaning.

b) Occupational Diseases in Agriculture

c) Primary prevention of cardiovascular disease from the community nutrition point of view.

 Interventional programmes.

**24.**

a) The use of sociological methods in public health. Interview , questionnaire, examples from medical practice.

b) Occupational Infectious Diseases - Hepatitis, Tuberculosis, Scabies

c) Three main aspects of diet: 1. Food supply in the range of sustainable development; 2. Food safety

 (food legislation, food control, food safety surveillance and monitoring); 3. Nutrition (choice of

 healthy composition of diet).

**25.**

a) Biostatistics in medicine and public health, meaning. Fundamentals of statistics (population, sample,

 variables). Meaning for medical research, experiments, publications.

b) Occupational Diseases in Metallurgy

c) Obesity definition and characteristics, preventing and managing the global epidemic. Obesity and

 its co-morbidities, metabolic syndrome.

**26.**

a) Methods of random sampling. Stages of statistical investigation.

b) Carbon monoxide, Chlorine

c) The health-harmful sound; the sources of it: the modes of evaluating and limiting of noise in

 out- and in-door ambient.

**27.**

a) Sample characteristics : measures of location, measures of variation.

b) Diseases Caused by Overload

c) Health problems of tobacco using, options for treatment of nikotinism, WHO preventing activities

 of tobacco using.

**28.**

a) Probability, probability rules. Statistical estimation: principles, methods and application.

b) Occupational Diseases, History, Legislation, The Most Common Occupational Diseases

c) The hazard effects of the common chemical pollutants in the open air; the photooxidative smog,

 their formation and their health- risks; biomonitoring of the athmosphere pollution.

**29.**

a) Hypothesis testing : general concept and main steps, interpretation of results.

b) Pulmonary Occupational Diseases – Pneumoconioses – Silicosis, Coal Workers´ Pneumoconiosis,

 Asbestosis

c) Health and its dimension. Major determinants of health. Health promotion (health education

 programmes, economic and regulatory activities, environmental health measures, healthy public

 policies, organisational development, community based work, preventive health services)

**30.**

a) Tables and graphs in statistics. Statistical bias.

b) Occupational Diseases in Health Care

c) The principles of the physiologically adequate lighting; the methods of measuring and evaluating of

 both daily and artificial light in a room.