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**INFECTIOUS DISEASES, EPIDEMIOLOGY AND TROPICAL MEDICINE STATE EXAMINATION SYLLABUS**

1. Infection, Infectious Process, Host – Pathogen Interactions.

 Infectious Disease – definitions, periods, clinical forms.

1. Clinical Syndromes.
2. Acutely Ill Infected Febrile Patient. Fever of Unknown Origin.
3. Infections in Immunocompromised Host. HIV/AIDS
4. Diagnostic Approach to Infectious Diseases – Biochemical, Microbiological, Virological and Serological Investigations Diagnosis.
5. Therapy of Infectious Diseases
6. Emerging Infections.
7. Infections in Pregnancy.
8. Subject, Goals and Methodology of Epidemiology.
9. Epidemiological Investigation
10. Epidemic Process – Nature and Characteristics.
11. Categories of Epidemic Outbreaks.
12. Mechanism of Transmission of the Infection. Categories of Epidemic Mechanisms. Source of Infection. Types of Sources.
13. Susceptibility and Immunity – Epidemiological Approach.
14. Vaccines. Prophylaxis with Vaccine. Immunization Calendar. Immunization - Indications and Contraindications. Side Effects and Complications.
15. Nosocomial Infections (NI). Organization of the Control of NI. Medical Standards for the Control of NI. Microorganisms responsible for NI. Organization of The Control In Hazardous Hospital Wards
16. Common Prophylactic and Anti-epidemic Measures for Control of Acute Infectious Diseases.
17. Disinfection. Disinsection . Deratisation.
18. Acute Infectious Diarrhoeal Diseases - Etiology and Pathogenesis.
19. Typhoid and Non-typhoid Salmonelloses.Typhus abdominalis.
20. Shigellosis /Bacterial dysentery/
21. Infections due to E. coli - bacteria
22. Food poisoning. Botulism.
23. Campylobacter- and Yersinia- enterocolitis
24. Cholera.
25. Viral Gastroenteritis
26. Diagnosis, Differential Diagnosis and Treatment of Acute Gastroenteritis.
27. Diseases due to Enteroviruses, Including Poliovirus /Poliomyelitis, Coxsackie, ECHO – v. Infections/
28. Influenza, Parainfluenza
29. Common Viral Respiratory Infections: Adeno-, Rhino, REO -, RS – Viral Infections. Severe Acute Respiratory Syndrome /SARS/
30. Whooping Cough.
31. Legionnaire’s Disease.
32. Mycoplasma and Chlamydia infections.

 35. Diseases with Macullopapullous Rash: Measles. Rubella (German Measles).

 Exanthema subitum, Erythema infectiosum .

1. Varicella – Zoster Virus – Infections. Differential Diagnosis in Patient with Vesicullous Exanthema. Smallpox. Vaccinia
2. Mumps.
3. Epstein – Barr V. Infection Incl. Mononucleosis Infectiosa. Infections due to Other Human Herpesviruses, incl. Cytomegalovirus
4. Scarlet Fever and Other Infections cause by Streptococci. / STSS, Phagedaena, Erysipelas/
5. Sepsis. SIRS. MODS. Septic Shock.
6. Diphtheria. Throat Alterations in Infectious Diseases -Differential Diagnosis.
7. Meningococcal Infections. Meningitis еpidemica. Syndroma Waterhouse Friderichsen. Diagnosis. Treatment.
8. Oedema Cerebri and Meningitis in Acutely Ill Infected Patient. Differential Diagnosis in Meningitis.
9. Acute Viral Hepatitis A, E.
10. Acute Viral Hepatitis B, D. Acute Viral Hepatitis C
11. Differential Diagnosis of Icterus in Acutely Ill Infected Patient
12. Leptospirosis.
13. Brucellosis
14. Yersinioses. Plague
15. Tularemia
16. Glanders and Melioidosis
17. Rickettsioses. Typhus exanthematicus. Tick Born Typhus.
18. Mediterranean Spotted fever. Q Fever
19. Erlichioses.
20. Borrelioses. Typhus recurrens.
21. Lymeborreliosis.
22. Bartonella Infections, Incl. Cat-Scratch Disease.
23. Tetanus. Immunoprophylaxis and Treatment
24. Anthrax. Gas-gangrene.
25. Rabies.
26. Arboviral encephalites /West-Nile; Tick born etc./
27. Viral Haemorrhagic Fevers.
28. Yellow Fever. Dengue.
29. Disorders in Haemostasis and Haemorrhagic Syndrome in Ifectology.
30. Miscellaneous Infections /Sodoku, Aphthe epizootizae, Actinomicosis, Nocardiosis/.
31. Infectious Diseases Common for both Temperate and Tropical Climate.

 Infectious Diseases Subjected for International Health Regulation.

1. Organization of the Control of Tropical Diseases. Sanitary Border Protection. Health Advice for International Travel Medicine.

**1. Mandell, Bennett and Dolin: Principles and Practice of Infectious Diseases, 6 th ed, 2005**

**2. Harrison’s Internal Medicine, 17th edition**

3. Burke Cunha: Infectious Diseases in Critical Care Medicine, 3rd edition

4. Jonathan Cohen, William G.Powderly, Steven M. Opal: Infectious Diseases 3rh edition

5. Frederick Southwick: Infectious Diseases: A Clinical Short Course, 2nd edition, 2007

6. R. Guerrant, David Walker, Peter Weller: Tropical Infectious Diseases, 3rd edition

**HYGIENE STATE EXAMINATION SYLLABUS**

1. Air pollution. Sources, types of pollutants, hygienic standardization.
2. Ecological and health problems due to air pollution. Ecological and biological monitoring.
3. Physical factors of atmosphere and their influence on health.
4. Climate, weather and microclimate . Influence of climate and weather on health. Meteotropic reactions and diseases. Acclimatization.
5. Importance of water. Methods for purification, disinfection and improvement of the quality of water.
6. Hygienic-ecological and health problems associated with pollution of water-reservoirs and water-supply systems.
7. Hygienic requirements for planning, building, furnishing of hospitals and outpatient clinics.
8. Hygienic requirements for specialized hospitals- infectious diseases, obstetrics - gynecology, pediatric hospitals, hospitals for TB patients, operational theaters.
9. Occupational medicine and health problems of the personnel in medical institutions. Prevention of nosocomial infections.
10. Main principals of protection from radiation of internal and external sources. Protection of patients and medical staff during medical examinations.
11. Healthy way of life. Prevention from diseases, caused by unhealthy way of life.
12. Healthy nutrition – main principles and requirements, physiological standards for nutrition. Methods for assessment of nutritional status.
13. Healthy nutrition of different groups of people and professions (pregnant women, breastfeeding women, children, adolescents, elderly people, workers, people involved with mental work)
14. Nutritional groups-proteins, fats, carbohydrates, fibers – biological meaning, importance for the nutrition of people.
15. Nutritional groups-vitamins, minerals- biological meaning, importance for the nutrition of people.
16. Curative nutrition – main principles and diets.
17. Milk and milk products, eggs – hygienic requirements and assessment. Importance for the nutrition of healthy and ill people.
18. Meat and meat products, fishes, fats – importance for nutrition. Hygienic requirement and assessment.
19. Bread and pasta, fruits and vegetables, legumes, nuts, soft drinks, alcohol, isotonic drinks – importance for healthy and ill people
20. Features of the nutrition of contemporary people. Non-communicable diseases associated with the improper nutrition and disbalance of nutritional groups. Alimentary risk factors for chronic non-infectious diseases. Prevention.
21. Food associated diseases-nutritional toxic-infections food intoxications, mycotoxicosis. .
22. Food borne diseases caused by chemical components of food (additives and impurities)-types, sources, importance for health. Prevention.
23. Hygienic requirements to restaurants. Control of the health condition of the staff and requirements for personal hygiene, food storage.
24. Contemporary occupations – hygienic characteristics. Adaptation of the organism to conditions of work (physiological changes). Problems of mental work.
25. Working ability, tiredness, overwork. Indexes and methods for assessment. Prevention of overwork.
26. Risk factors at work. Occupational diseases-classification. Tasks of the physician- discovers, reports and registers occupational diseases. Main indexes for health assessment of workers.
27. Influence of the unfavorable occupational physical factors on the organism. Occupational microclimate., air pressure,. Prevention
28. Noise, ultra, infrasound, vibrations – hygienic characteristic, biological importance. Prevention.
29. Ultraviolet radiation, electromagnetic fields, laser radiation as occupational factors- hygienic characteristic, biological importance. Prevention.
30. Chemical factors of occupational environment – classification, sources, factors on which the effects of the chemical compounds in occupational environment depend.
31. Toxicocinetics, toxicodynamics. Types of effect of chemical compounds on the organism. Prevention
32. Occupational intoxications with metals – lead, mercury, manganese, chromium, cadmium. Prevention of occupational intoxications.
33. Occupational intoxications with irritating gases – chlorine, nitric and sulphuric gases, ammonium, carbon oxide. Prevention.
34. Occupational intoxications with organic solvents, nitro and ammonium oderivatives of benzene. Prevention.
35. Dust aerosols as occupational factors. Factors on which the effects of dust in occupational environment depend. Diseases associated with dust. Prevention.
36. Pesticides-classification, biological importance. Occupational hygiene of work with pesticides. Control of the health status of people working with pesticides.
37. Growth and development-general characteristics, age dynamics of the main morphological indexes. Indexes and methods for assessment of the physical development and health of children and adolescents.
38. Anatomic –physiological characteristics of the different age groups of children. Acceleration, biological age. Specific pathology during childhood and adolescence.
39. Hygienic requirement to nurseries, kindergardens and schools. Main activities of the GP to protect and promote the health of children and adolescents.

**Bibliography:**

**Mandatory**

1. Environmental health, Dade W. Moeller, Harvard University press, Third edition, 2005

2. Handouts for students from department lectures

3. <http://www.who.int/en/>

4. <http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/>

5. <http://www.eea.europa.eu/>

**Optional**

1. Хигиена, хранене и професионални болести. Под ред. на проф.Б. Попов,С.

2. Хигиена и екология, том І, под ред. на проф. Д.Цветков, изд. “Знание”,

 (2005)

3. Ръководство по хигиена и проф.болести, 1994

4. Учебник по хигиена и проф.болести, 1990