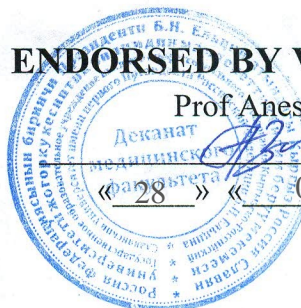


MINISTRY OF EDUCATION AND SCIENCE OF THE KYRGYZ REPUBLIC

Government-run Educational Institution of Higher Professional Education
Kyrgyz-Russian Slavic University named after B.N.Yeltcin

ENDORSED BY VICE RECTOR

Prof. Anes Zarifyan



« 28 » « 02 » 2020 year

Epidemiology

Course Outline (Module)

Assigned to **Epidemiology and Immunology**
Academic Curriculum 560001_23_1LDi.pli.xml
560001 KR General Medicine (for foreign student)

Qualification specialist


Mode of Study **Intramural**
Total Credit Value **3 credit points**

Course Hours
including:
in-class learning 54
individual work 36

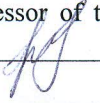
Scope of Testing Semesters:
exams
credits


Course Hours Scheduling (per semester)						
Semester Academic Year	1 (1.1)		2 (1.2)		Total	
Weeks	18,7		18			
Type of Training	AC	CO	AC	CO	AC	CO
Lectures	18	18			18	18
Practical Session	54	54			54	54
Including Interactive Session	4	4			4	4
Total In-class Session	72	72			72	72
Face-to-face Learning	72	72			72	72
Individual Work	36	36			36	36
Total	108	108			108	108

The Course outline developed by:

PhD, MD, Associate Professor of the Department of Epidemiology and Immunology: Isakova Zh.T. 

Reviewers:

Doctor of Medical Sciences, Professor of the Department of Hygiene, Kyrgyz-Russian Slavic University named after B.N.Yeltcin, Kasymova R.O. 

PhD, MD, Associate Professor of the Department of General and clinical epidemiology, Kyrgyz state medical academy named after I.K. Akhunbaev, Yrysova M.B. 

The Course Outline

EPIDEMIOLOGY AND IMMUNOLOGY

in accordance with Academic Curriculum:


Specialty 560001 – KR – General Medicine (for foreign students)

Confirmed by KRSU Board of Academics in 28.02.2023 y. record №7.

The Course Outline endorsed by Epidemiology and Immunology Department Meeting

Record of 20.02.2023 r. №8

Valid for: 2023 – 27 academic years

The Head of Department of Epidemiology and immunology, Professor Orozbekova B.T. 

The course outline endorsed for the following academic year

Chairman of the Educational and Methodological Board
_____ 2023.

The course outline has been revised, considered and endorsed for implementation
in 2023 - 2024 Academic Year at the Staff Meeting of **Epidemiology and Immunology** Department

Record of _____ 2023. № ____
The Head of Department Orozbekova B.T., professor, DMS



The course outline endorsed for the following academic year

Chairman of the Educational and Methodological Board
_____ 2024.

The course outline has been revised, considered and endorsed for implementation
in 2024 - 2025 Academic Year at the Staff Meeting of **Epidemiology and Immunology** Department

Record of _____ 2024. № ____
The Head of Department Orozbekova B.T., professor, DMS

The course outline endorsed for the following academic year

Chairman of the Educational and Methodological Board
_____ 2025.

The course outline has been revised, considered and endorsed for implementation
in 2025 - 2026 Academic Year at the Staff Meeting of **Epidemiology and Immunology** Department

Record of _____ 2025. № ____
The Head of Department Orozbekova B.T., professor, DMS

The course outline endorsed for the following academic year

Chairman of the Educational and Methodological Board
_____ 2026.

The course outline has been revised, considered and endorsed for implementation
in 2026 - 2027 Academic Year at the Staff Meeting of **Epidemiology and Immunology** Department

Record of _____ 2026. № ____
The Head of Department Orozbekova B.T., professor, DMS

1. COURSE OUTLINE OBJECTIVES

The course objective is to acquire the theoretical knowledge and practical skills epidemiology of infection diseases

2. PLACE OF THE COURSE IN THE EDUCATIONAL PROGRAM

Educational Program	
Units:	
2.1	Students' Preliminary Training Requirements:
2.1.1.	Microbiology, virusology
2.1.2	Immunology
2.2	Course Units and Practical Sessions imposing the prior Proficiency

3. STUDENTS' COMPETENCIES RESULTING FROM THE COURSE UNIT (MODULE)

PC-1: ability and readiness to implement a set of measures aimed at preserving and strengthening health and including the formation of a healthy lifestyle, preventing the occurrence and (or) spread of diseases, their early diagnosis, identifying the causes and conditions of their occurrence and development, and also aimed at eliminating harmful effects on human health of environmental factors

Knowledge:

Level 1	Causes, conditions and development of diseases, as well as elimination of harmful factors impact on human health
Level 2	Organization of a set of measures aimed at the preservation and promotion of health and elimination of harmful factors
Level 3	Principles of the organization and carrying out preventive and anti-epidemic actions at different groups of infectious diseases of bottom factors

Skills:

Level 1	Identify the causes and conditions of communicable and non-communicable diseases
Level 2	To carry out a set of measures aimed at early detection of the causes and conditions of occurrence actual infectious diseases
Level 3	Make a plan of preventive and anti-epidemic measures in relation to specific infectious pathology taking into account the environment

Expertise:

Level 1	A complex of measures to maintain a healthy lifestyle
Level 2	Make a plan of preventive and anti-epidemic measures against specific infectious disease
Level 3	Assessment of the quality and effectiveness of preventive and anti-epidemic measures actual diseases

PC-3: ability and readiness to carry out anti-epidemic measures, organization of protection of the population in the centers of high dangerous infections, with a deterioration of the radiation situation, natural disasters and other emergency situations

Knowledge:

Level 1	The concept of particularly dangerous infections and emergencies (natural disasters), especially preventive and anti-epidemic measures
Level 2	Fundamentals of legislation on sanitary and epidemiological welfare of the population, the main official documents regulating the anti-epidemic service of the population at infectious and parasitic diseases, international health regulations, epidemiology infectious and parasitic diseases, implementation of anti-epidemic measures, protection population in the centers of particularly dangerous infections, natural disasters
Level 3	Epidemiological features of the separate nosological forms relating to especially dangerous infections, legislative documents regulating preventive and anti-pandemic measures in case of particularly dangerous infections, features of protection of state borders from importation of particularly dangerous infections

Skills:

Level 1	To define an infection source, the mechanism, ways and factors of transfer of particularly dangerous infections
Level 2	Apply this knowledge to develop of the plan of preventive and anti-epidemic measures for protection of the population from the spread of infectious and mass non-infectious diseases in the emergency zone
Level 3	To organize preventive and anti-epidemic measures in case of the threat of and distribution of particularly dangerous infections on the regulated territory

Expertise:

Level 1	Inspection of the epidemic center of particularly dangerous infections, definition of its spatial and temporary borders
Level 2	Prompt collection of information on morbidity and environmental and social objects, which can contribute to the spread of infectious and mass non - communicable diseases
Level 3	Analysis of completeness, quality and effectiveness of preventive and anti-epidemic events'

PC-16: willingness to educate on the elimination of risk factors and the formation of skills for a healthy lifestyle

Knowledge:	
Level 1	Major factors of risk
Level 2	Riskfactors and skills to form a healthy lifestyle
Level 3	A complex of measures aimed at the preservation and promotion of health, the formation of healthy lifestyle and factors affecting human health
Skills:	
Level 1	To eliminate risk factors and to form skills of a healthy lifestyle
Level 2	To form and eliminate social risk factors affecting human health
Level 3	To estimate the quality of forming skills of healthy lifestyle and eliminate risk factors
Expertise:	
Level 1	Fundamental sofeducational activities
Level 2	Educational activities for formation of skills of a healthy lifestyle and elimination of risk factors on health of the person
Level 3	Educational activities for elimination of risk factors and skills of a healthy lifestyle

FinalStudents' Competences

3.1	Knowledge:
3.1.1.	purposes and problems of discipline;
3.1.2.	regularities of spread of infectious diseases among the population;
3.1.3	fundamental laws of development of epidemic process;
3.1.4	anti-epidemic and preventive actions for prevention and localization of the centers infectious diseases;
3.1.5	methods of the epidemiological analysis of infectious incidence;
	epidemiological features of infections of airways, digestive tract, blood and external covers and also antropoz, zoonoz, and sapronoz;
3.1.7	Features of anti-epidemic providing the population at emergency situations and military time.
3.2	Skills:
3.2.1	to analyze infectious incidence for establishment "territories, time and the contingent risk" and identification of "risk factors";
3.2.2	to plan anti-epidemic actions in the centers of infectious diseases;
3.2.3.	to carry out sanitary - educational work among the population;
3.2.4	to estimate a sanitary and epidemiologic situation of the area at threat possible application bacteriological weapon and at emergency situations.
3.3	Expertise:
3.3.1	methods of epidemiological analysis of infectious diseases;
3.3.2.	system of measures for the prevention and control of infectious diseases;
3.3.3	ability to work with the population on the prevention of diseases and instilling sanitary - hygienic skills
3.3.4.	methods for assessing the epidemiological situation in the use of bacteriological weapons and emergency situation;
3.3.5	methods of carrying out anti-epidemic measures in the foci of infection.

4. COURSE (MODULE) STRUCTURE AND CONTENT

Class Code	Subject Name /Type of Class/	Semester / Academic Year	Hours	Competenc es	Literature	Interactive Sessions	Notes
	Section 1. General epidemiology						
1.1.	History of development and place of Epidemiology in modern structure of medical science. Structure and the maintenance of epidemiological method of research. Classification of infection diseases./Lec/	7	2				
1.2	Epidemiology as medical science and science about epidemic process. Role of the family doctor in carrying out preventive and epidemics actions. /Pr/	7	3				
1.3	Bases the doctrine about epidemic process. /Lec/	7	2				
1.4	Role of vaccination in struggle against	7	2				

	infectious diseases. Place and role of medical service in its realization./Lec /						
1.5	The active and passive immunoprophylaxis. /Pr/	7	3				
1.6	Organization of vaccination / Pr/	7	3				
1.7	Conception about disinfection, disinsection, deratization and sterilization. / Pr/	7	3				
1.8	Unit 1	7	2				
2.1	Section 1. Private epidemiology						
2.2	Epidemiological features of aerosol infections, system of epidemiological control. /Lec /	7	2				
2.3	Epidemiological features of intestinal infections, system of epidemiological control. /Lec /	7	2				
2.4	Epidemiological features of bloodborne infections group and infection of external covers, system of epidemiological control. /Lec /	7	2				
2.5	Epidemiological features of helminthiasis and zoonosis, system of epidemiological control. /Lec /	7	2				
2.6	Epidemiology and prophylaxis of aerosol vaccine-preventable infections (diphtheria, mumps, measles, rubella, flu ext.). / Pr/	7	3				
2.7	Epidemiology and prophylaxis of aerosol vaccine-no preventable infections (MM, scarlet fever, chicken pox ext.). / Pr/	7	3				
2.8	Epidemiology and prophylaxis of intestinal infections (typhoid fever, viral hepatitis A and E, salmonellosis, shigellosis, poliomyelitis ext.). / Pr/	7	6				
2.9	Unit 2/ Pr/		2				
2.10	Epidemiology and prophylaxis of helminthiasis (ascariasis, enterobiasis, echinococcosis. amebiasis) / Pr/	7	3				
2.11	Epidemiology and prophylaxis of zoonosis (rabies, anthrax, brucellosis). / Pr/	7	3				
2.12	Epidemiology and prophylaxis of AIDS and malaria. / Pr/	7	3				
2.13	Unit 3/ Pr/	7	2				
2.14	Epidemiology of chronic non-communicable diseases (Coronary heart disease, hypertension, rheumatic fever, cancers, obesity, blindness)	7	3				
	Section 3. Clinical epidemiology.						
3.1.	Epidemiologic methods. Descriptive Epidemiology. Analytical study. Experimental Epidemiology. /Lec /	7	2				
3.2	Clinical epidemiology. Effectiveness of treatment. Prevention in clinical practice. /Lec /	7	2				
3.3	Basic measurements in Epidemiology. Tools of measurement. / Pr/	7	2				
3.4	Epidemiologic methods. Descriptive Epidemiology. Distribution in time, place and person. / Pr/	7	2				
3.5	Analytical study. Case control study. Cohort study. / Pr/	7	2				

3.6	Experimental Epidemiology. Animal studies. Human experiments. Randomized controlled trials. Non-randomized trials. / Pr/	7	2				
3.7	Association and causation. Indirect association. Direct (causal) association. Investigation of an epidemic. / Pr/	7	2				
3.8	Clinical epidemiology. Definitions of normality and abnormality. Effectiveness of treatment. Prevention in clinical practice. Screening for disease / Pr/	7	2				
3.9	Diff. offset / Pr/	7	2				
3.10	Periods of development of epidemiology as medical science / Iw/	7	2				
3.11	Epidemiological analysis infectious incidence	7	2				
3.12	System of preventive and control measures in struggle against infectious diseases.	7	2				
3.13	The estimation of quality and efficiency of carried preventive actions/ Iw/	7	2				
3.14	Bases of epidemiological diagnostics and its value in fight infectious diseases. / Iw/	7	2				
3.15	Preventive use of vaccines and anatoxins /Iw//	7	2				
3.16	Preventive use of gamma globulins and immune serums /Iw/	7	2				
3.17	Disinfection mode in organizations of different profile/Iw/	7	2				
3.18	Nonspecific prevention infectious diseases/Iw/	7	2				
3.19	Epidemiology of antroponoz with fecal and oral mechanism transfers/Iw/	7	2				
3.20	Epidemiology of antroponoz with aerosol mechanism transfers/Iw/	7	2				
3.21	Epidemiology of zoonosis and sapronozis/Iw/	7	2				
3.22	The doctrine about epidemic process. Anti-epidemic measures/Iw/	7	2				
3.23	Epidemiology of HIV infection and parenteral virushepatitises/Iw/	7	2				
3.24	Epidemiological control for hospital infection/ Iw/	7	2				
3.25	Epidemiological control of parasitic disease/ Iw/	7	2				
3.26	Militaryepidemiology. Bioterrorism/Iw/	7	4				

5. ASSESSMENT FUND

5.1. Advancement Questions and Assignments

Questions to check the level of training knowledge:

1. Definition of Epidemiology infectious diseases
2. Definition of Epidemiology noninfectious diseases
3. A subject of Epidemiology
4. Classification of infectious diseases

5. Definition of epidemic process
6. Three links of epidemic process.
7. Three units of epidemic process
8. Biological factor of epidemic process
9. Natural factor of epidemic process
10. Social factor of epidemic process
11. The epidemic focus
12. The natural focus
13. Antiepidemic actions
14. A role of the doctor in carrying out of preventive actions in the epidemic focus
15. Concept about epidemiological diagnostics.
16. Sections of epidemiological diagnostics
17. Extensive parameters of disease
18. Intensive parameters of disease
19. Ways of drawing up of graphic representations and diagrams
20. Studying disease in long-term dynamics
21. Studying disease in annual dynamics
22. Definition of a level and structure of disease
23. Immunity and its kinds, types of immunoprophylaxis
24. Active immunization, means of active immunization (a vaccine, toxoid)
25. Passive immunization, means of passive immunization (antibodies, wheys, bacteriophages, interferon)
26. Ways of immunization
27. Revaccination, its ways
28. Contra-indications to vaccination (relative and absolute)
29. Postvaccinal complications and reactions, their classification.
30. A calendar of obligatory preventive inoculations
31. A calendar of preventive inoculations on epidemic situations, indications.
32. The expanded immunization programme of WHO, periods, tasks.
33. The account of the population
34. Maintenance public health organizations with vaccinal preparations
35. Observance of a temperature mode of storage and transportation of vaccinal preparations
36. Forms of registration of inoculations
37. An estimation of efficiency immunoprophylaxis
38. Epidemiological supervision by immunoprophylaxis
39. Disinfection, kinds, ways
40. Classification of agents of disinfection
41. Forms of application of agents of disinfection
42. The basic requirements to agents of disinfection
43. Concept about disinfection, its kinds, ways
44. The characteristic insecticides
45. Requirements to insecticides
46. Forms of application of insecticides
47. Methods of biological disinfection
48. Deratization, kinds, ways
49. Rodenticides, the characteristic and requirements
50. Sterilization. Clearing, methods, means and a mode. Quality assurance of presterilizing clearing.
51. The control of sterility of instruments
52. Epidemiological features of group of intestinal infections; - epidemiological characteristic of concrete nozoforma (typhoid, shigella, viral hepatitis A, cholera), factors, mechanism of development and manifestation epidemic process; - content of epidemiological surveillance and system preventive and anti-epidemic actions.
53. Epidemiological features of group of drop infections; - epidemiological characteristic of concrete nozoforma (diphtheria, flu, measles, whooping cough and other children's drop infections), factors, mechanism of development and manifestations of epidemic process; content of epidemiological surveillance and system preventive and anti-epidemic actions
54. Epidemiological features of group of infections with the contact mechanism of transfer; - epidemiological characteristic of a concrete nozoforma (VGV, S, D, HIV-infection), factors, mechanism of development and manifestation of the EDS; content of epidemiological surveillance and system of preventive and anti-epidemic actions.
55. Epidemiological features of group of drop infections; epidemiological characteristic of VBI, factors, mechanism of development and manifestation of epidemic process; content of epidemiological surveillance and system preventive and anti-epidemic actions.
56. Epidemiological features of group of helminthoses and protozoan infections; epidemiological characteristic of a concrete nozoforma (enterobiosis, ascariasis, toxocariasis, giardiasis, etc.), factors, development mechanism and manifestations; content of epidemiological surveillance and system preventive and anti-epidemic actions.

Tasks for checking the level of training "knowledge/skills/expertise":

1. to use in daily activity the instructive and methodical documents regulating preventive and anti-epidemic work;
2. own techniques of epidemiological diagnosis priority nosological forms and use of diagnostic results in practical activity;
3. carry out primary preventive and anti-epidemic measures in the foci of the most common infectious disease;
4. to maintain the system of sanitary and anti-epidemic regime in hospitals of various profiles.
5. to apply an epidemiological approach to the study of the actual (infectious and non-infectious) pathology of children with the purpose of its prevention;
6. to describe the incidence;
7. to find out the causes, mechanism of development and spread of diseases;
8. to predict the incidence of,
9. to evaluate the quality and effectiveness of therapeutic, preventive and anti-epidemic measures for the purpose of its preventions.
10. to carry out primary activities in epidemic outbreaks
11. choose the right methods of disinfection and disinfectants, depending on the nature of the infection, the type of epidemic
12. focus, characteristics of the treated objects;
13. calculate the required amount of disinfectants;
14. carry out disinfection quality control;
15. choose the right sterilization methods depending on the characteristics of the material or object to be treated;
16. use specific drugs and technical equipment for sterilization;
17. carry out sterilization quality control.
18. make plans for preventive vaccinations;
19. organize vaccinations carried out according to epidemic indications;
20. calculate the number of IBP required for immunization of contingents;
21. fill in accounting documents and prepare quarterly and annual reports;
22. monitor the storage conditions of the IBP ("cold chain»);
23. to identify contraindications and to choose the tactics of immunization if available; - to evaluate adverse events, related to vaccination;
24. perform diagnostics, treatment, monitoring and investigation of air defense;
25. to arrange vaccinations in accordance with the results of seromonitoring;
26. to evaluate the cost-effectiveness of immunization.
27. to analyze the manifestations of the epidemic process of infections with the fecal-oral transmission mechanism;
28. plan a set of preventive measures and carry out primary activities in the hearth with fecal mechanism of transmission;
29. to analyze the manifestations of the epidemic process of infections with aerosol transmission mechanism;
30. plan a set of preventive measures and carry out primary measures in the hearth with aerosol mechanism of transmission;
31. to analyze the manifestations of the epidemic process of zoonotic infections;
32. plan a set of preventive measures and carry out primary activities in the focus of zoonotic infections';
33. to analyze the manifestations of the epidemic process of hemocontact infections;
34. plan a set of preventive measures and carry out primary activities in the focus of hemocontact infections';
35. to analyze the manifestations of the epidemic process of nosocomial infections;
36. plan a set of preventive measures and carry out primary activities in the hospital infections';
37. to analyze the manifestations of the epidemic process of parasitic diseases;
38. plan a set of preventive measures and carry out primary activities in the focus of parasitic diseases;
39. describe each of the specific groups of activities, including the use of bacteriological weapons by the enemy.

5.2. Course Papers Themes

Course paper is not required for this discipline

5.3. Assessment Fund

The test (the list of test questions in appendix 2)

Questions of 1 module on epidemiology according to the section "General Epidemiology"

- 1) Definition of Epidemiology infectious diseases
- 2) Definition of Epidemiology noninfectious diseases
- 3) A subject of Epidemiology
- 4) Classification of infectious diseases
- 5) Definition of epidemic process
- 6) Three links of epidemic process.
- 7) Three units of epidemic process
- 8) Biological factor of epidemic process
- 9) Natural factor of epidemic process
- 10) Social factor of epidemic process
- 11) The epidemic focus
- 12) The natural focus
- 13) Antiepidemic actions
- 14) A role of the doctor in carrying out of preventive actions in the epidemic focus

- 15) Concept about epidemiological diagnostics.
- 16) Sections of epidemiological diagnostics
- 17) Extensive parameters of disease
- 18) Intensive parameters of disease
- 19) Ways of drawing up of graphic representations and diagrams
- 20) Studying disease in long-term dynamics
- 21) Studying disease in annual dynamics
- 22) Definition of a level and structure of disease
- 23) Immunity and its kinds, types of immunoprophylaxis
- 24) Active immunization, means of active immunization (a vaccine, toxoid)
- 25) Passive immunization, means of passive immunization (antibodies, whey's, bacteriophages, interferon)
- 26) Ways of immunization
- 27) Revaccination, its ways
- 28) Contra-indications to vaccination (relative and absolute)
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- 43) Concept about disinfection, its kinds, ways
- 44) The characteristic insecticides
- 45) Requirements to insecticides
- 46) Forms of application of insecticides
- 47) Methods of biological disinfection
- 48) Deratization, kinds, ways
- 49) Rodenticides, the characteristic and requirements
- 50) Sterilization. Clearing, methods, means and a mode. Quality assurance of presterilizing clearing.
- 51) The control of sterility of instruments

Questions of 2 and 3 module on epidemiology according to the section "Private Epidemiology"

Control questions:

- 1) A general characteristic of infections with the aerosol mechanism of transfer.
- 2) Structure and levels of disease of infections of the given group.
- 3) Classification of infectious diseases with the aerosol mechanism of transfer.
- 4) Sources of infections, the period of the greatest epidemiological danger of the patient for associates.
- 5) The mechanism and ways, factors of transfer.
- 6) Stages of realization of the aerosol mechanism of transfer.
- 7) The characteristic of long-term and annual dynamics of disease of the given group of an infection.
- 8) Antiepidemic actions directed on a source of infections and the mechanism of transfer;
- 9) Prevention of aerosol infections (general and specific).

10) Epidemiology and prevention of diphtheria.

- Definition of diphtheria.
- The microbiological characteristic of the infectious agent of a diphtheria (morphology serological variants, property of producing toxin, stability to adverse factors of an environment and agents of disinfection and their accumulation in laboratory conditions).
- Duration of the incubatory period and the period of the greatest epidemiological danger of the patient for associates.
- The recovering period, formation of carrier status the infectious agent.
- Intensity of postinfectious immunity.
- Features of display of epidemic process: prevalence of an infection
- Susceptibility of the population and seasonal display.
- Source of an infection, the mechanism, ways and factors of transfer of the infectious agent of an infection.
- The basic ways, factors of transfer of the infectious agent of an infection
- Actions in the epidemic focus: preventive measures concerning the patient, contact, mechanism of transfer.
- Isolation or hospitalization of the patient
- Establishment of quarantine, medical supervision for contact

- Carrying out дезинфекционных actions
- Prevention of diphtheria: general and specific prevention.
- Characteristic DPT vaccine, contra-indications to vaccination.

11. Epidemiology and prevention of whooping cough.

- Definition of whooping cough.
- The microbiological characteristic of the infectious agent (morphology, serovariants, stability to factors of an environment, ability of preservation and duplication on artificial nutrient mediums).
- Duration of the incubatory period and the period of the greatest epidemiological danger to associates.
- The period of recovering and formation of carrier status the infectious agent.
- Intensity of postinfectious immunity.
- Features of display of epidemic process (prevalence of an infection, a susceptibility of the population and seasonal displays).
- Sources of an infection; including the basic sources of an infection, the mechanism, ways and factors of transfer.
- Antiepidemic actions in the focus: concerning a source of an infection, the mechanism of transfer and factors of transfer of an infection
- Antiepidemic actions concerning contact persons: revealing, medical supervision over them, an establishment of quarantine action
- The organization and carrying out of vaccinal prevention and emergency prevention under epidemiological indications
- Specific prevention of whooping cough.

12. Epidemiology and prevention of a scarlet fever.

- Definition of a scarlet fever.
- The microbiological characteristic of the infectious agent.
- Duration of the incubatory period and the period of the most epidemiological danger of the patient for associates.
- The period of recovering, process of formation of carrier status the infectious agent.
- Intensity of postinfectious immunity.
- Features of display of epidemic process at a scarlet fever (prevalence, a susceptibility of the population, the characteristic of annual dynamics of disease).
- The sources of an infection conducting a source, epidemiological value of medical workers, пищеви́ков and children of younger age in distribution of an infection, seasonal display of epidemic process.
- The mechanism, ways and factors of transfer of an infection, the basic mechanism and a way of transfer of the infectious agent
- Preventive actions in the focus concerning a source of an infection, medical workers, and workers of children's establishments
- Preventive actions concerning contact persons: children visiting kinder garden and first two classes of school, the medical personnel working in obstetrical establishments and surgical branches, working in dairy and food manufacturers.
- Prevention of a scarlet fever.

13. Meningococcal infection (MI).

- Definition.
- The characteristic of the infectious agent (stability to antibiotics, to adverse factors of an environment, action of disinfectants serological landscape of infectious agents, including most frequently meeting serological variant, its sensitivity antibiotics)
- Duration of the incubatory period and the period of the greatest epidemiological danger of the patient.
- Postinfectious immunity and its intensity.
- Prevalence MI and forms of display of epidemic process among various age and professional groups of the population.
- Susceptibility of the population
- Features long-term and annual dynamics of MI.
- Sources of an infection.
- The mechanism and ways of transfer of an infection
- Features of the epidemic focus of MI, categories of the epidemic focus with different forms of infection, delimitation of the focus, an establishment of quarantine and its duration.
- Major factor of distribution of an infection
- Preventive measures in the focus of an infection.
- Antiepidemic actions concerning a source of an infection with located and generalized forms, indications to hospitalization and isolation of the patient, a condition of an extract of the patient from a hospital
- Antiepidemic actions concerning contact persons and a condition of their admission in children's collectives, term of medical supervision for contact in the epidemic focus
- General and specific prevention, category of persons subject to emergency prevention. Indications to vaccination, frequency rate of vaccination, the characteristic of vaccines.

14. A flu and ARD (acute respiratory diseases).

- Definition.
- The characteristic of the infectious agent to kinds, serological variants, a degree of virulence various serological variants, antigenic structure of the infectious agent, stability to adverse factors of an environment variability of the infectious agent)

- Duration of the incubatory period and the period of the greatest infectious the patient for associates.
- Intensity and kind of postinfectious process.
- Features of display of epidemic process (prevalence, a susceptibility among various groups of the population, seasonal display of epidemic process in annual dynamics of flu).
- Preventive measures in the focus (concerning sources of an infection revealing and isolation treatment)
- Antiepidemic actions concerning contact persons. An establishment of quarantine, carrying out disinfective actions in the epidemic focus.
- General and specific prevention of a flu and ARD (the characteristic of vaccines).

15. A general characteristic of intestinal infections.

- Structure and level of disease of intestinal infections.
- Classification of intestinal infections.
- Sources of infections, the mechanism, ways and factors of distribution of intestinal infections.
- Forms of display of epidemic process depending on factors of distribution (food, water and subjects of use).
- The measures directed on prevention of intestinal infections.
- The measures directed on struggle against intestinal infections.

16. A typhoid fever.

- Definition.
- The brief microbiological characteristic of the infectious agent (morphology, antigenic structure, serological types, the optimum conditions necessary for cultivation of the infectious agent in laboratory on artificial nutrient mediums, stability to factors of an environment, antibiotics, agents of disinfection). Laboratory diagnostics.
- Duration of the incubatory period of the greatest epidemiological danger of the patient for associates.
- The period of recovering and formation of carrier status the infectious agent.
- Types of carrier status and their epidemiological value in distribution of an infection.
- Intensity of postinfectious immunity.
- Laboratory diagnostics (the basic and auxiliary methods of research, materials of research for laboratory diagnostics)
- Prevalence of a typhoid fever (worldwide, the CAR and in KR), forms of display of epidemic process. Features of display of epidemic process depending on climatic and socially economic conditions, a level of sanitary culture of the population
- Susceptibility of the population to a typhoid fever (a contingent of risk).
- Preventive measures in the focus of infection:
- Source of an infection (revealing, isolation, diagnostics etc.). Conditions of an extract of the had been ill risk concerning to a contingent and the persons who are not concerning to this category;
- The mode of transmission. Contact persons (revealing, inspection, discharge from work and collective, conditions of the admission of this category of persons to work and collective).
- Preventive actions. The list of the general actions;
- Specific (a contingent subject to inoculations, the indication to vaccination the characteristic of vaccines)

17. Prevention of salmonellosis.

- Definition.
- Etiology. The microbiological characteristic of infectious agents.
- Duration of the incubatory period and the period of epidemiological danger of the patient for associates.
- Features of the recovering period. Formation and types of carrier status.
- Intensity of post infectious immunity.
- Prevalence of an infection in the countries of the world.
- Susceptibility of the population to salmonellosis.
- Feature of annual dynamics of disease.
- Features of display of a salmonellosis in conditions of city and a countryside
- The mechanism and ways of transfer of an infection.
- Features of food and water factors in distribution of salmonellosis.
- Modes of transmission of an infection
- Preventive actions in the focus of an infection and in conditions of village and city.
- Prevention of salmonellosis.

18. Classification of helminthiasis.

- Sources of invasion.
- Mechanisms and ways, factors of transfer of helminthiasis.
- Actions on decrease and prevention of helminthiasis.

19. Epidemiology and prevention of ascariasis.

- Definition.
- The characteristic of the infectious agent (type, the form, the size and development of helminths).
- Duration of the incubatory period and the period of the most epidemiological danger of the patient.
- Laboratory diagnostics.
- Prevalence of ascariasis.
- Sources of invasion, the mechanism, ways and factors of its transfer (a contingent of risk, time of risk and territory)

of risk).

- Preventive actions in the focus of invasion.
- Prevention of ascariasis.

20 Epidemiology and prevention of echinococcosis

- Definition
- Etiology. The characteristic of the infectious agent
- Duration of the incubatory period. A role of an organism of the person in distribution of echinococcosis
- Diagnostics (laboratory)
- Prevalence of echinococcosis in KR
- Natural and synantropic the focus of echinococcosis
- Final and intermediate owners in whom there is a growth and development of helminths
- A place of localization of helminths in an organism of final and intermediate owners
- A susceptibility of the population. A contingent of risk
- The mechanism, ways and factors of transfer of the infectious agent
- Preventive actions

21. Epidemiology and prevention of enterobiosis

- Definition
- Etiology (type, the form, the size, life expectancy of the agent in an organism of the person, allocation of eggs, term of maturing and the optimum conditions necessary for eggs, stability to factors of an environment and agents of disinfection)
- Duration of the incubatory period
- Duration of the period of the patient for associates
- Laboratory diagnostics
- Prevalence of enterobiosis in KR
- A source of invasion. A susceptibility of the population (a contingent of risk)
- The mechanism and ways of transfer of enterobiosis. Antiepidemic actions in the focus (the notice about fallen ill, sanitary epidemiological inspection, improvement of the revealed patients, laboratory inspection)
- Preventive actions

22. Concept about zoo infections.

- Classification of zoonosis
- Structure, levels of disease of zoonosis in KR
- A role agricultural and pets in Epidemiology of zoonosis
- The basic ways of decrease of zoonosis
- Prevention of zoonosis (general and specific)

23. Epidemiological features and prevention of brucellosis.

- Definition.
- Etiology (morphological and serological variants, virulence infectious agents and their stability to factors of an environment)
- Duration of incubatory process (duration, the beginning of illness, a body - target)
- Laboratory diagnostics
- Prevalence in the world, the CAR, KR
- A susceptibility of the population (a contingent of risk)
- Seasonal display of epidemic process in conditions of city and countryside
- A source of an infection
- The basic sources
- Mechanisms of transfer
- The reasons unsuccessful epidemic situations in KR
- Antiepidemic actions in the focus
- Prevention brucellosis: communicating, specific (character of postvaccinal immunity)
- Prophylactic medical examination had been ill

23. Epidemiological features and prevention of the anthrax

- Definition.
- Etiology (vegetative both sporous forms of the infectious agent and mechanisms,
- Conditions of their formation, stability to factors of an environment, duration of preservation in an environment, virulence of the infectious agent).
- Pathogenesis (an entrance gate, process of formation of pathological changes at introduction of the infectious agent of the sporous form, the factors causing pathological process).
- Duration of the incubatory period and epidemiological danger of animals and the person.
- Intensity of postinfectious immunity. Laboratory diagnostics.
- Prevalence of the anthrax (in the countries of the world, the CAR, KR).
- A susceptibility of the population (a contingent of risk); seasonal prevalence.

- Epidemiological value of the soil focus. Classification of the soil focus.
- Sources of infections. Value of the person - as source of an infection.
- Mechanisms, ways, factors of infection of the person and animals.
- Types of disease (depending on a condition of infection).
- Antiepidemic actions in the attitude: the patient skin, lung and intestinal forms; the mechanism of transfer.
- Preventive actions: the general and specific (vaccination, emergency prevention), the characteristic of vaccines.

24. Epidemiological features and prevention of furiousness

- Definition.
- Etiology. The infectious agent, kinds of the infectious agent their pathogenicity, stability to factors of an environment.
- Localization of infectious process, allocation of the infectious agent from an organism of a source and the sick person.
- Duration of the incubatory period. The epidemiological importance of the person for associates.
- The periods of illness and an outcome.
- Prevalence (in the countries of the world, the CAR, KR).
- Types of epidemic focus.
- A susceptibility of the population (a contingent of risk).
- Mechanisms, ways of transfer of infections.
- Antiepidemic actions in the attitude: the missed person (rendering of the first medical aid, supervision); the mechanism of transfer.
- Prevention. General (veterinary) and specific (medical) vaccination, kinds of vaccines, ways of vaccination; emergency prevention.

25. Epidemiological features and prevention of a malaria and AIDS.

- Definition.
- Etiology. The agent, kinds of the infectious agent their pathogenicity, stability to factors of an environment.
- Localization of infectious process, allocation of the infectious agent from an organism of a source and the sick person.
- Duration of the incubatory period. The epidemiological importance of the person for associates.
- The periods of illness and an outcome.
- Prevalence (in the countries of the world, the CAR, KR).
- A susceptibility of the population (a contingent of risk).
- Mechanisms, ways of transfer of infections.
- Antiepidemic actions in the attitude: the patient and contact persons; the mechanism of transfer.
- Prevention. Nonspecific and specific (medical).

Credit - class

5.4. List of Assessment Tools

Module

Frontal poll in the form of the test

Graded credit.

(Estimation scales by all types of estimated means in appendix 3)

6. COURSE (MODULE) METHODOLOGICAL AND INFORMATIONAL SUPPORT

6.1 Recommended Reading

6.1.1 Required Reading List

	Authors, Compliers	Title	Bookpublisher, Year

6.1.2 Advanced Reading

	Authors, Compliers	Title	Bookpublisher, Year

6.1.3 Guidance Papers

	Authors, Compliers	Title	Bookpublisher, Year

6.2 Online Resources

6.3. List of Information and Education Technologies

6.3.1 Competence-based Educational Technologies

6.3.3.1. Traditional educational technologies are lectures, a practical training, and consultations, focused on the message of knowledge imparted to students in finished form.

6.3.3.2. Innovative educational technology classes in an interactive form, what form of system thinking and the ability to generate ideas in solving various problems. These include electronic texts of lectures with presentations.

6.3.3.3. Information educational technologies - independent use by the student computer equipment and Internet resources for practical tasks and independent work.

6.3.2 List of Information Reference Systems and Software

6.3.2.1. <http://meduniver.com/Medical/Book/28.html>

7. COURSE (MODULE) LOGISTICS

7.1. The department is located on the territory of the Ilbirs LLC - address: Bishkek, 77 Kievskaya St.,

7.2. Classroom №1 for 24 seats, for practical training, individual work (multimedia, video, visual aids - stands, board, sets of tables and diagrams).

7.3. Classroom №2 for 24 seats, for practical training, individual work and viewing multimedia, video materials, visual aids - stands, board, sets of tables and diagrams).

7.4. Classroom №3 (small lecture hall) for 50 seats, for conducting practical exercises and individual work (multimedia, video materials, visual aids - stands, board, sets of slides, tables, multimedia visual materials on various sections of the discipline).

7.5. Classroom №4 for 12 seats for practical training.

7.6. Classroom №5 for 12 seats, for practical training.

7.7. Information sources: - library - 80 copies;

7.8. Computer

7.9. Projector

7.10. Printer

7.11. Scanner

7.11. Netbook

8. COURSE (MODULE) PROFICIENCY METHODOLOGICAL GUIDELINES (FOR STUDENT)

Discipline planning sheet (appendix 3).

Recommendations about use of RPD:

- RPD materials course guidelines contains all main tendencies of the current state of of epidemiology issues;
- when studying a subject concepts of epidemiology fundamentals discussins of the main approaches of some problems of public health care;

- a practical part of a subject is based on the of situational tasks, determination of of self-testing results, analysis of infectious incidence, studying of standard and directive documentation.

Recommendations to study the discipline:

- 1 section "General Epidemiology" studying of the main laws of development epidemic is necessary process, planning and holding anti-epidemic and preventive actions for prevention andlocalizations of the centers of infectious diseases;

- 2 sections "Private Epidemiology" are necessary development of epidemiological features separate relevant infectious diseases and bases of epidemiological surveillance behind them;

- The 3rd section "Military Epidemiology" studying of features of anti-epidemic providing the population is necessaryat emergency situations and wartime.

Recommendations regarding work with the educational materials / readings:

- large number of publications on epidemiology issues are available on the website -www.epidemiolog.ru.

Testing:

- test questions reflect a basic course of a subject;

- represent subject material fixing.

Recommendations for discussion on some epidemiology problems:

- the teacher and students express their opinion regarding the main problematic and debatable issues. The teacher and students express their opinion on the most critical issues directed to population epidemiological wellbeing.

Recommendations to the solution of situational tasks:

- the situational tasks prepared on all subjects of discipline;

- at the solution of situational tasks the student has to seize theoretical knowledge of a subject and logical thinking.

Recommendations to the work with the test system of disciplines:

- tests are made on modular questions;

- 5 answer available for each question, one of them is true/correct.

Recommendations to the prepare for to graded credit:

- it is recommended to refer to the set of discipline questions ;

- if the assessment is positive.

PROBLEM №1

In chamber branch disinfection stations have arrived things from the focus typhoid fever and epidemic typhus. In branch there is Krupin's steam chamber, hot-air and steam-formalin chambers.

It is required to specify:

In what chamber it is possible to carry out disinfection of things from those and other focus?

What should be a mode and the operating procedure of the chamber?

To describe the device of the chosen chamber.

PROBLEM №2

At check of preparations, there were frozen 200 dozes vaccines against plaque, 60 ml. Ig, 50 ml of a chemical vaccine and 20 ampoules with vaccine BCG. How to use these vaccines?

a - to destroy all preparations as lost the validity.

b - to resolve application of all preparations.

c - to resolve selectively use of separate preparations.

PROBLEM №3

In the beginning of the working day the medical assistant of a health focus has opened and has dissolved an ampoule (20 dozes) measles and a bottle polio vaccines. Within 6 hours on an inoculation against reproach also a poliomyelitis were on 10 person. How to act with the dissolved vaccine?

a - to keep it in a refrigerator till next day.

b - to destroy.

PROBLEM №4

At check of intensity of immunity at school №15 (1000 person) by reaction of straight hemagglutination it is revealed: seronegative - 110 person, antibodies against measles virus 1:10 - 1:20 - 260, 1:40 and 630 person with higher parameters.

1) Whether probably distribution reproach in case of its drift in the given collective? The answer prove.

2) Give the recommendation on increase of collective immunity among schoolboys.

3) What laboratory methods of an estimation of efficiency of the carried out actions are expedient for carrying out, and in what terms?

PROBLEM №5

On reception in Center of family medicine 12.XII.05r.the doctor has diagnosed "laryngotracheitis" the boy 9 years old which coughs within 7-8 days. The boy is released from employment for 3 days, thermal procedures are appointed. On December, 15 at repeated visiting a polyclinic at the child it is marked fit of cough with reddening the person. The diagnosis is «Whooping cough». It is released from employment up to 25. XII.05r. The boy has vaccinated and revaccinated by the DPT-vaccine.

At epidemiological inspection of school, that patients with whooping cough it is not registered, however in a class where studies the boy, diseases with long cough are marked from the end of October.

At the moment of inspection in group three children coughed. The family of the patient lives in a separate apartment, mother the medical sister of a kindergarden. The sister of 6 years visits the same kinder garden. At the moment of inspection she is healthy, vaccinated and revaccinated the DPT-vaccine, last inoculation was 4 years ago.

Specify: 1) whether all is correctly made by the family doctor at an establishment of the diagnosis;

2) Possible source of an infection;

3) What actions still are necessary for carrying out?

PROBLEM №6

In trauma department is delivered the boy of 13 years bitten by the wolf in area of a head and the bottom jaw. The boy has been hospitalized in infectious hospital. Introduced Ig against rabies on 0,25 ml / kg and 3 booster doses for 10, 20, 35 day.

At epizootological-epidemiological inspection it is established, that the same day the wolf has been killed by shepherds, it have skinned, have cut off paws, have withdrawn from the wolf a gallbladder and teeth, and the everything else have thrown out. The father of the boy, the head of the wolf has been delivered for laboratory inspection. At carrying out of laboratory inspection of a brain of the wolf are found out Babeshi-Negri's bodies.

1) Whether define the rate of antirabic treatment is correctly appointed.

2) Make the plan of the further work of the epidemiologist in the focus.

PROBLEM №7

The doctor caused to the patient of 5 years, has established the diagnosis of a scarlet fever on April, 5. The boy visits a kindergarden. Last visiting on April, 4. This day by the evening he has been transferred in isolator in connection with rise in temperature up to 38,5°C and vomiting. In group of 18 children, 5 from them earlier were sick a scarlet fever, and within last 2 months of infectious diseases it was not marked. On April, 5 it is established, that 3 days prior to disease of the boy in group after 5-day's absence concerning quinsy other child has come back. The sister of the patient, 8 years, a scarlet fever was not sick. Mother is the midwife of a maternity hospital, father - the driver. At flatmates children 3 and 6 years visiting kinder garden, were not suffer from a scarlet fever.

- Specify:
- 1) Possible source of an infection;
 - 2) What actions are necessary for carrying out?

PROBLEM №8

At the operated patient in surgical branch the case of a virus hepatitis B. The patient of 5 years old is registered, there were in branch 24 days during which he received blood transfusion twice, once native plasma. Donors are known. Three months ago was on treatment in therapeutic branch of same hospital.

- 1) Define where he was infected with a virus hepatitis B? The answer prove.
- 2) Define actions on liquidation of the focus of a virus hepatitis in a surgical hospital.

PROBLEM №9

At night November 20, 21 in 3 daily groups of kindergarden 8 children - were ill. Complaints: pains in a stomach, an often chair with slime, high temperature (37, 9-38, 7°C) at two children were marked spasms. The doctor has diagnosed "dysentery". Children are hospitalized. To evening of November 21 in the same groups 15 more patients have been revealed. 22.11. 9 more children, 23.11, 24.11 - on 3 children were ill. To all children have diagnosed "dysentery"; at the majority fallen ill dysenteric bacteria Sonnei have been allocated.

- 1) Define character of group disease
- 2) Make the plan of investigation of the reasons of flash and organize antiepidemic actions on its liquidation.

PROBLEM №10.

At the girl of 6 years old who are not visiting kindergarden, the diagnosis a scarlet fever it is established in first day of illness. Her brother, 1 year of 6 months a scarlet fever not ill, does not visit kindergarden. Mother does not work. The father - engineer. In family of flatmates at the schoolgirl of first class the peeling on palms is revealed. What measures on liquidation of the focus?

PROBLEM №11.

In group kindergarden revealed case of sick scarlet fever. The group is completely isolated from other groups, totals 18 children. At survey 2 more patients (at one quinsy, at another an otitis) are revealed. In connection with detection in group of the patient with hepatitis A of 15 days ago all children enters immunoglobulin. Define actions on liquidation of the created situation.

PROBLEM №12

In trauma branch 2 persons were. One of them has a superficial sting of the right shin. Damages are put by a neighbour's dog. The dog is adhered and healthy. At the forearm second a laceration, put by the wolf.

- 1) To define necessity of purpose antirabic inoculations.
- 2) The scheme of its carrying out.
- 3) What preparations are necessary for using?

PROBLEM №9.

At inspection of a kindergarden on enterobiosis it is revealed infection 37 % of children. Eggs of worms from washouts of pots, hands of children and toys are found.

- 1) List actions on liquidation of the focus of enterobiosis in kindergarden.
- 2) Specify methods of inspection on enterobiosis, a contingent subject to inspection.

PROBLEM №10.

The pediatricist has diagnosed a virus hepatitis to the girl of 4 years old which are not visiting kindergarden. The family occupies a room in a hostel with hall system. Water from kolodes, a toilet in outside. In family of 4 persons: mother - the worker of a dining room, father - the mechanic, the sister - the factory worker, now in a maternity leave, the husband of the sister - техник. In other 5 rooms, 12 more adults and 6 children from 2 till 9 years old live. Three of them visit a kindergarden where on contact to the patient with measles they one and a half months ago were inoculated by immunoglobulin. How carry out necessary antiepidemic actions.

PROBLEM №11

At the pensioner 65 years old (December, 3, 2005) the diagnosis: Virus hepatitis B. Since, June, 21 – July, 22, 2004 the patient was treated in trauma branch where repeatedly received donor's blood. Water supply centralized. In family 6 persons.

What infringements antiepidemic mode could lead to infection with a virus hepatitis of B?

PROBLEM №12

To the teenager of 14 years, 10.02.05 on the basis of the clinical data the diagnosis has been put: Virus hepatitis B. He is schoolboy. 26.09.04 it addressed in a stomatologic polyclinic where to him have removed a tooth with anesthesia

At check by Center of sanitary epidemiological supervision of this stomatologic polyclinic infringements in rules of sterilizing of instruments have been revealed. Boy lives in a separate apartment with parents. Mother is the engineer. Father is the worker. Carry out necessary antiepidemic actions and give instruction to stomatologic polyclinic on elimination of infringements of sterilization of medical instruments.

PROBLEM №13

On November, 17 in a kindergarden at the child (Sasha, 3 years) was unitary vomiting, the temperature has raised up to 37,5°C. According to mother, the child is not absolutely healthy with 15.11.05, but continued to visit a kindergarden. 21.11.05 the doctor the pediatricist diagnosed a virus hepatitis. The kindergarden is located in a typical room, groups are isolated. In group of 20 children. Family of Sasha lives in a separate apartment. Mother with 12.11.05 up to 22.11.05 was at home concerning disease of respiratory ways. Specify a possible source of an infection and carry out necessary antiepidemic actions.

PROBLEM №14

On the natural focus of a plague, the doctor at visiting cattle breeders in one of yurt has found out the patient which suspected disease by a plague. In family 4 persons (2 adults, 2 children). During visiting the doctor in yurt there was mother of the patient.

- 1) Make the plan of primary actions which the doctor should carry out.
- 2) State reasons about circumstances of infection.
- 3) Make the plan antiepidemic actions in the focus.

PROBLEM №15

7 cases of acute intestinal disease have been registered in one of groups of kinder garden during September. The first (3.09) the child who has come to group 1.09 was ill, having returned after rest with parents. At the child the liquid stool has appeared, and in a children's polyclinic have diagnosed "gastroenteritis". The following diseases have arisen in group 7.09, 3.09, 12.09, 13.09, 15.09, 17.09. Fallen ill children have sent on houses. In a polyclinic have put them diagnoses "enteritis", "toxicoinfection", "gastroenteritis". In two cases have diagnosed ARD. Any other actions in group did not carry out.

- 1) Give the analysis to flash.
- 2) Estimate validity of the put diagnoses.
- 3) Carry out antiepidemic actions.

PROBLEM №16

In the plane of flight Deli - Bishkek 2 passengers were ill. There was a suspicion on a cholera that has been transferred to airport "Manas".

What also organize actions among passengers of this plane?

What document regulates measures under the prevention of drift and distribution of cholera in republic?

What measures are necessary for accepting in relation to patients with cholera and contacting?

What measures are carried out on break of ways of transfer of the infectious agent?

PROBLEM №17

On October, 5 in average group of kinder garden it is revealed by sick scarlet fever Peter. From September, 20 till September, 24, 2005 in group was absent Tom.

A kinder garden are placed in specially built building, all groups are completely isolated.

Mother of the sick child works in children's dairy kitchen, the brother of 4 years old visits to kinder garden and doesn't ill scarlet fever. Lead all necessary preventive actions.

1. The immunizing agents classified as:

- a) Ig M, IgG, IgE, IgD, IgA
- b) killed live attenuated vaccines
- c) normal & specific human Ig
- d) vaccines, Ig& antisera
- e) natural killer lymphocytes, lysozyme, phagocytes

2. The transmission of infection agent through some agency:

- a) vector – borne
- b) air - borne
- c) vehicle – borne
- d) fomite – borne
- e) biological transmission

3. EPIDEMIOLOGY is:

- a) study of distribution & determinants of health related states & events in specified population & application of this study to the control of health problems
- b) study of distribution & determinants of health related states & events animals & application of this study to the control of health problems
- c) study about immunization, immunizing agents, types of immunity & causes of failure of vaccination
- d) study about relation between disease & social conditions
- e) a scientific field that deals with the collection, classification, description, analysis, interpretation & presentation of data

4. The reservoir of influenza:

- a) man
- b) swine
- c) horses
- d) birds
- e) all

5. Toxoids are produced for:

- a) active immunization
- b) passive immunization
- c) innate immunization
- d) antisera immunization
- e) herd immunization

6. Immunity by transfer of maternal antibodies across the placenta is:

- a) active immunity
- b) passive immunity
- c) innate immunity
- d) herd immunity
- e) transplacental

7. Major Ig of serum, comprising about 75% of total serum Ig:

- a) Ig M
- b) IgG
- c) IgE
- d) IgD
- e) IgA

8. Equipment that does not penetrate the skin or sterile areas of the body but is in contact with intact mucous membranes or non – intact skin:

- a) low risk
- b) high risk
- c) intermediate risk

9. Chemical agent of disinfection:

- a) 2% glutaraldehyde, 6% hydrogen peroxide, 0.3% per acetic acid
- b) moist heat, hot water
- c) 0.5% diazinon, 2% dimehoate, 1% runnel
- d) 2.5% chlordane, 0.5% lindane
- e) malathion&fenitrothion

10. DDT, dieldrin, methoxychlor are:

- a) organochlorine compounds
- b) organophosphorous compounds
- c) carbamates
- d) residual sprays
- e) space sprays

11. Direct transmission of infectious agent possible by ways:

- a) contact with soil, bite of animal, droplet infection, transplacental
- b) via food, water, blood & organs
- c) by handkerchief, glass, spoon, googlesect.
- d) unclean hands & fingers
- e) biological or mechanical vector, dust

12. The unusual occurrence of a disease in a population in excess of its expeted frequency & if disease is not prevalent then presence of at least two cases of that disease at same place is called:

- a) pandemic
- b) epidemic
- c) endemic
- d) sporadic
- e) exotic

13. The host in which sexual cycle of agent occurs:

- a) intermediate host
- b) definite host
- c) source of infection
- d) carrier
- e) patient

14. The immunizing agents classified as:

- a) Ig M, IgG, IgE, IgD, IgA
- b) killed live attenuated vaccines
- c) normal & specific human Ig
- d) vaccines, Ig& antisera
- e) natural killer lymphocytes, lysozime, phagocytes

15. Ig which responsible for immediate allergic anaphylactic reaction:

- a) Ig M
- b) IgG
- c) IgE
- d) IgD
- e) IgA

16. Items that penetrate sterile tissues, including body cavities and the vascular system, e.g. surgical instruments, intra – uterine devices, vascular catheters:

- d) low risk
- e) high risk
- f) intermediate risk

17. The dependable, non toxic, inexpensive, sporicidal, with rapid heating and good penetration of fabrics method is:

- a) ethylene oxide gas
- b) chemical disinfection
- c) high – level disinfection
- d) steam sterilization
- e) thermal disinfection

18. Fleas control measures:

- a) environmental, chemical, biological control
- b) residual sprays, space sprays, pyrethrum extract, genetic control
- c) mosquito net, screening, repellents
- d) environmental, insecticidal control, fly papers, health education
- e) insecticides, repellents, rodent control

19. Transmission of arthropod – borne diseases:

- a) direct contact
- b) mechanical
- c) biological
- d) all correct
- e) all non – correct

20. If non – living thing is reservoir, disease called:

- a) anthroponozis
- b) zoonozis
- c) sapronosis

21. Types of reservoir:

- a) human being, animal & non living
- b) obligative, definitive & intermediate
- c) zoonozis, anthroponozis, sapronosis
- d) endemic, pandemic, sporadic & vector
- e) clinical & subclinical

22. When preformed antibodies in one body (human or animal) are transferred to another it produced:

- a) active immunity
- b) passive immunity
- c) innate immunity
- d) herd immunity
- e) antitoxin immunity

23. Cleaning is a process:

- a) that reduces the number of pathogenic microorganisms
- b) that removes foreign material (e.g. soil, organic material, microorganisms from an objects)
- c) that destroys all microorganisms including bacterial spores
- d) that kills larvae & pupae within short period of time
- e) that reduces the number of non - of pathogenic microorganisms

24. To kill Mycobacterium tuberculosis is often used:

- a) sterilization
- b) disinsection
- c) deratization
- d) high – level disinfection
- e) cleaning

25. The thermal & chemical are methods of:

- a) sterilization
- b) disinfection
- c) disinsection
- d) cleaning

e) deratization

26. The mechanical vector is:

- a) when arthropods acts only as a passive carrier of the disease agents
- b) arthropod can cause hypersensitive due to bites, stings, hairs ect.
- c) when the pathogenic depend on them for completing their cycle within the body of arthropods
- d) when animals acts only as a passive carrier of the disease agents
- e) when the arthropods depend on them for completing their cycle within the body of man

27. Sand flies control measures:

- a) environmental, chemical, biological control
- b) residual sprays, space sprays, pyrethrum extract, genetic control
- c) mosquito net, screening, repellents
- d) environmental, insecticidal control, fly papers, health education
- e) insecticides, sanitation

28. Insecticides classified into types:

- a) defensive, offensive
- b) contact poisons, stomach poisons, fumigants
- c) residual sprays, space sprays, pyrethrum extract
- d) larvicides, repellents, disinfectant, baits
- e) fly papers, cords, ribbons

29. Live attenuated vaccines:

- a) typhoid, cholera, pertussis
- b) measles, poliomyelitis
- c) rubella, measles, mumps
- d) yellow fever, tuberculosis
- e) anthrax, brucellosis

30. Most dangerous carriers are:

- a) incubatory carrier
- b) convalescent carrier
- c) chronic carrier
- d) healthy carrier
- e) temporary carrier

31. The host in which sexual cycle of agent occurs:

- a) intermediate host
- b) definite host
- c) source of infection
- d) carrier
- e) patient

32. Type of Ig has high agglutinating & complement fixing ability:

- a) Ig M
- b) IgG
- c) IgE
- d) IgD
- e) IgA

33. Cleaning methods are:

- a) by hot water
- b) by lower temperature
- c) thermal, chemical
- d) manual, environmental
- e) high, intermediate, low

34. The methods which preferred for reusable glass syringes & ointments, powders, oils ect. is:

- a) dry heat
- b) moist heat
- c) boiling
- d) autoclaving
- e) ethylene oxide gas

35. Anti - adult measures:

- a) environmental, chemical, biological control
- b) residual sprays, space sprays, pyrethrum extract, genetic control
- c) mosquito net, screening, repellents
- d) environmental, insecticidal control, fly papers, health education
- e) disinfection, sterilization

36. The anti – larval insecticides are:

- a) mineral oils, Paris green, synthetic insecticides
- b) residual sprays, space sprays, genetic control
- c) DDT, malathion, propoxur
- d) solid or liquid baits
- e) fumigants & repellents

37. Pandemic –

- a) is a diseases spread over a very large geographical area & effects a major portion of world
- b) the habitual occurrence of a disease in population
- c) cases occur irregularly, haphazardly from time to time & generally infrequent
- d) infection diseases primarily of animals, transmissible to human beings under natural conditions
- e) transmissible from one generation to other generation by genetic code

38. Types of acquired immunity:

- a) innate immunity
- b) herd immunity
- c) specific & non – specific immunity
- d) active, passive immunity
- e) antitoxin, antisera immunity

39. Duration of protection is long lasting, severe reactions are rare, cheaper and efficacy approaches 100%:

- a) active immunity
- b) passive immunity
- c) innate immunity
- d) herd immunity
- e) immediate allergic reaction

40. Normal human Ig are used for:

- a) post – exposure prophylaxis of Hepatitis B, rabies, tetanus
- b) temporary protection against hepatitis A for travelers to endemic areas
- c) against gas gangrene, tuberculosis, measles, mumps
- d) rubella, yellow fever
- e) pertussis, brucellosis

41. Can be contaminated soil, faeces, urine, contaminated food, milk, water a source of infection:

- a) yes
- b) no

41. The mode of transmission of tick – borne relapsing fever:

- a) vector – borne
- b) air - borne
- c) faeco - oral route
- d) fomite – borne

- e) direct contact

43. An immunobiological substance designed to produce resistance against a specific disease:

- a) immunoglobulin's
- b) antisera
- c) autoantibodies
- d) vaccines
- e) exotoxin

44. Type of Ig has high agglutinating & complement fixing ability:

- a) Ig M
- b) IgG
- c) IgE
- d) IgD
- e) IgA

45. Killed vaccines are:

- a) typhoid, cholera, pertussis
- b) measles, poliomyelitis
- c) rubella, measles, mumps
- d) yellow fever, tuberculosis
- e) anthrax, brucellosis

46. Environmental control of anti - adult measures is:

- a) eliminate their breeding places i.e. source eradication
- b) using small fishes (Gambusia affinis, Lebistes reticulatus)
- c) using chemical larvicides
- d) screening of houses, hospitals, food markets, restaurants
- e) disinfection & sterilization

47. Anti – adults insecticides are:

- a) mineral oils, Paris green, synthetic insecticides
- b) residual sprays, space sprays, pyrethrum extract, genetic control
- c) DDT, malathion, propoxur
- d) solid or liquid baits
- e) fumigants & repellents

48. Fly control insecticides are:

- a) mineral oils, Paris green, synthetic insecticides
- b) residual sprays, space sprays, pyrethrum extract, genetic control
- c) malathion, propoxur
- d) DDT, 0.5% lindane, 2.5% chlordane
- e) fumigants & repellents

49. The Paris green & sodium fluoride are:

- a) contact poisons
- b) stomach poisons
- c) fumigants
- d) residual sprays
- e) space sprays

50. Pyrethrum, DDT are:

- a) contact poisons
- b) stomach poisons
- c) fumigants
- d) residual sprays
- e) space sprays

51. EPIDEMIOLOGY is:

- a) the study of man & his environment
- b) study of health, health behavior & medical institution
- c) study of the physical, social & cultural history of man
- d) study about acute communicable diseases have been brought under control & good medical care is available to more people than ever before
- e) the study of the distribution & determinants of health related states or events in specified population & the application of this study to the control of health problems

52. Normal human Igare used for:

- a) typhoid, measles
- b) rubella, yellow fever
- c) tetanus, diphtheria, gas gangrene, botulism, snake bite
- d) tuberculosis, poliomyelitis
- e) Hepatitis B, mumps

53. Disinfection is a process:

- a) that reduces the number of pathogenic microorganisms
- b) that removes foreign material (e.g. soil, organic material, microorganisms from an objects)
- c) that destroys all microorganisms including bacterial spores
- d) that kills larvae & pupae within short period of time
- e) that reduces the number of non - of pathogenic microorganisms

54. Sterilization is a process:

- a) that reduces the number of pathogenic microorganisms
- b) that removes foreign material (e.g. soil, organic material, microorganisms from an objects)
- c) that destroys all microorganisms including bacterial spores
- d) that kills larvae & pupae within short period of time
- e) that reduces the number of non - of pathogenic microorganisms

55. Elimination of reservoir is not possible in:

- a) anthroponosis
- b) zoonosis
- c) sapronosis

56. It is substance which when introduced into body stimulates specific immune response:

- a) haptens
- b) antibody
- c) antigen
- d) phagocytus
- e) polypeptide

57. For heat – labile equipments using:

- a) disinfection by hot water
- b) disinfection at lower temperature
- c) chemical method
- d) moist heat
- e) autoclaving

58. The larvicides are:

- a) 2% glutaraldehyde, 6% hydrogen peroxide, 0.3% per acetic acid
- b) moist heat, hot water

- c) 0.5% diazinon, 2% dimehoate, 1% runnel
- d) 2.5% chlordane, 0.5% lindane
- e) malathion&fenitrothion

59. Equipment that does not penetrate the skin or sterile areas of the body but is in contact with intact mucous membranes or non – intact skin:

- a) low risk
- b) high risk
- c) intermediate risk

60. Biological vector is:

- a) when arthropods acts only as a passive carrier of the disease agents
- b) arthropod can cause hypersensitive due to bites, stings, hairs ect.
- c) when the pathogenic depend on them for completing their cycle within the body of arthropods
- d) when animals acts only as a passive carrier of the disease agents
- e) when the arthropods depend on them for completing their cycle within the body of man

61. The host in which sexual cycle of agent occurs:

- a) intermediate host
- b) definite host
- c) source of infection
- d) carrier
- e) patient

62. The methods which preferred for reusable glass syringes & ointments, powders, oils ect. is:

- a) dry heat
- b) moist heat
- c) boiling
- d) autoclaving
- e) ethylene oxide gas

63. Anti - adult measures:

- a) environmental, chemical, biological control
- b) residual sprays, space sprays, pyrethrum extract, genetic control
- c) mosquito net, screening, repellents
- d) environmental, insecticidal control, fly papers, health education
- e) disinfection, sterilization

64. The anti – adults insecticides are:

- a) mineral oils, Paris green, synthetic insecticides
- b) residual sprays, space sprays, pyrethrum extract, genetic control
- c) DDT, malathion, propoxur
- d) solid or liquid baits
- e) fumigants & repellents

65. Type of Ig has high agglutinating & complement fixing ability:

- a) Ig M
- b) IgG
- c) IgE
- d) IgD
- e) IgA

66. EPIDEMIOLOGY is:

- a) the study of man & his environment

- b) study of health, health behavior & medical institution
- c) study of the physical, social & cultural history of man
- d) study about acute communicable diseases have been brought under control & good medical care is available to more people than ever before
- e) the study of the distribution & determinants of health related states or events in specified population & the application of this study to the control of health problems

67. If non – living is reservoir, disease called:

- a) anthroponozis
- b) zoonozis
- c) sapronozis

68. Non – susceptibility to a given disease or a given organism:

- a) tolerance
- b) immunity
- c) resistance
- d) susceptibility
- e) responsibility

69. The immunizing agents classified as:

- a) Ig M, IgG, IgE, IgD, IgA
- b) killed live attenuated vaccines
- c) normal & specific human Ig
- d) vaccines, Ig& antisera
- e) natural killer lymphocytes, lysozime, phagocytes

70. Normal human Igare used for:

- a) post – exposure prophylaxis of Hepatitis B, rabies, tetanus
- b) temporary protection against hepatitis A for travelers to endemic areas
- c) against gas gangrene, tuberculosis, measles, mumps
- d) rubella, yellow fever
- e) pertussis, brucellosis

71. EPIDEMIOLOGY is:

- a) study of distribution & determinants of health related states & events in specified population & application of this study to the control of health problems
- b) study of distribution & determinants of health related states & events animals & application of this study to the control of health problems
- c) study about immunization, immunizing agents, types of immunity & causes of failure of vaccination
- d) study about relation between disease & social conditions
- e) a scientific field that death with the collection, classification, description, analysis, interpretation & presentation of data

72. When preformed antibodies in one body (human or animal) are transferred to another it produced:

1. active immunity
2. passive immunity
3. innate immunity
4. herd immunity
5. antitoxin immunity

73. Duration of protection is long lasting, severe reactions are rare, cheaper and efficacy approaches 100%:

- a) active immunity
- b) passive immunity
- c) innate immunity
- d) herd immunity

- e) immediate allergic reaction

74. Normal human Ig are used for:

- a) post – exposure prophylaxis of Hepatitis B, rabies, tetanus
- b) temporary protection against hepatitis A for travelers to endemic areas
- c) against gas gangrene, tuberculosis, measles, mumps
- d) rubella, yellow fever
- e) pertussis, brucellosis

75. Cleaning methods are:

- a) by hot water
- b) by lower temperature
- c) thermal, chemical
- d) manual, environmental
- e) high, intermediate, low

76. The methods which preferred for reusable glass syringes & ointments, powders, oils ect. is:

- a) dry heat
- b) moist heat
- c) boiling
- d) autoclaving
- e) ethylene oxide gas

77. Anti - adult measures:

- a) environmental, chemical, biological control
- b) residual sprays, space sprays, pyrethrum extract, genetic control
- c) mosquito net, screening, repellents
- d) environmental, insecticidal control, fly papers, health education
- e) disinfection, sterilization

78. The anti – larval insecticides are:

- a) mineral oils, Paris green, synthetic insecticides
- b) residual sprays, space sprays, pyrethrum extract, genetic control
- c) DDT, malathion, propoxur
- d) solid or liquid baits
- e) fumigants & repellents

79. Sporadic –

- a) is a diseases spread over a very large geographical area & effects a major portion of world
- b) the habitual occurrence of a disease in population
- c) cases occur irregularly, haphazardly from time to time & generally infrequent
- d) infection diseases primarily of animals, transmissible to human beings under natural conditions
- e) transmissible from one generation to other generation by genetic code

80. Types of acquired immunity:

- a) innate immunity
- b) herd immunity
- c) specific & non – specific immunity
- d) active, passive immunity
- e) antitoxin, antisera immunity

81. Malathion, Fenthion are:

- a) organochlorine compounds
- b) organophosphorous compounds
- c) carbamates

- d) residual sprays
- e) space sprays

82. Classification of infection risk from equipment or environment:

- a) high – level disinfection
- b) thermal, chemical, manual
- c) low, intermediate, high

83. Items in contact with normal and intact skin or the inanimate environment not in contact with the patient:

- a) low risk
- b) high risk
- c) intermediate risk

84. The preferred methods employed for sterilization of all items that penetrate the skin & mucosa is:

- a) dry heat
- b) moist heat
- c) boiling
- d) autoclaving
- e) ethylene oxide gas

85. Protection against mosquito:

- a) environmental, chemical, biological control
- b) residual sprays, space sprays, pyrethrum extract, genetic control
- c) mosquito net, screening, repellents
- d) environmental, insecticidal control, fly papers, health education
- e) insecticides, repellents, rodent control

86. Sulphur dioxide is:

- a) contact poisons
- b) stomach poisons
- c) fumigants
- d) residual sprays
- e) space sprays

87. Non – susceptibility to a given disease or a given organism:

- a) tolerance
- b) immunity
- c) resistance
- d) susceptibility
- e) responsibility

88. Elimination of reservoir is not possible in:

- a) anthroponozis
- b) zoonozis
- c) sapronosis

89. Immunity produced is only temporary till antibody is eliminated from body is:

- a) active immunity
- b) passive immunity
- c) innate immunity
- d) herd immunity
- e) antitoxin immunity

90. Endemic –

- a) is a diseases spread over a very large geographical area & effects a major portion of world
- b) the habitual occurrence of a disease in population
- c) cases occur irregularly, haphazardly from time to time & generally infrequent
- d) infection diseases primarily of animals, transmissible to human beings under natural conditions
- e) transmissible from one generation to other generation by genetic code

91. Equipment that does not penetrate the skin or enter sterile areas of the body but is in contact with intact mucous membranes or non – intact skin:

- a) low risk
- b) high risk
- c) intermediate risk

92. The dependable, non toxic, inexpensive, sporicidal, with rapid heating and good penetration of fabrics method is:

- a) ethylene oxide gas
- b) chemical disinfection
- c) high – level disinfection
- d) steam sterilization
- e) thermal disinfection

93. Transmission of arthropod – borne diseases:

- a) direct contact
- b) mechanical
- c) biological
- d) all correct
- e) all non – correct

94. Fleas control measures:

- a) environmental, chemical, biological control
- b) residual sprays, space sprays, pyrethrum extract, genetic control
- c) mosquito net, screening, repellents
- d) environmental, insecticidal control, fly papers, health education
- e) insecticides, repellents, rodent control

95. Malathion, Fenthion are:

- a) organochlorine compounds
- b) organophosphorous compounds
- c) carbamates
- d) residual sprays
- e) space sprays

96. Most dangerous carriers are:

- a) incubatory carrier
- b) convalescent carrier
- c) chronic carrier
- d) healthy carrier
- e) temporary carrier

97. Sporadic –

- a) is a diseases spread over a very large geographical area & effects a major portion of world
- b) the habitual occurrence of a disease in population

- c) cases occur irregularly, haphazardly from time to time & generally infrequent
- d) infection diseases primarily of animals, transmissible to human beings under natural conditions
- e) transmissible from one generation to other generation by genetic code

98. If carrier shed infectious agent for short period time (during acute illness), he called:

- a) incubatory carrier
- b) convalescent carrier
- c) chronic carrier
- d) healthy carrier
- e) temporary carrier

99. Non – susceptibility to a given disease or a given organism:

- a) tolerance
- b) immunity
- c) resistance
- d) susceptibility
- e) responsibility

100. The immunity of a group of people where the proportion of non – susceptible is greater than susceptible:

- a) active immunity
- b) passive immunity
- c) innate immunity
- d) herd immunity
- e) antitoxin immunity

101. Anti – larval measures includes:

- a) environmental, chemical, biological control
- b) residual sprays, space sprays, pyrethrum extract, genetic control
- c) mosquito net, screening, repellents
- d) environmental, insecticidal control, fly papers, health education
- e) insecticides, repellents, rodent control

102. A person of animal including birds & arthropods where infecting agents can be present under natural conditins:

- a) carrier
- b) vector
- c) host
- d) reservoir
- e) vehicle

103. If non – living thing is reservoir, disease called:

- a) anthroponozis
- b) zoonozis
- c) sapronosis

104. Normal human Igare used for:

- a) Diphteria, tetanus
- b) Typhoid fever, rabies
- c) Cholera, anthrax
- d) Pertussis, measles, poliomyelitis
- e) Brucellosis, mumps, tuberculosis

105. Specific humanIg are used for:

- a) post – exposure prophylaxis of Hepatitis B, rabies, tetanus
- b) temporary protection against hepatitis A for travelers to endemic areas

- c) against gas gangrene, tuberculosis, measles, mumps
- d) rubella, yellow fever
- e) pertussis, brucellosis

106. The steam under pressure, dry heat, by ethylene oxide gas or low temperature steam & formaldehyde are methods of:

- a) cleaning
- b) chemical disinfection
- c) sterilization
- d) disinsection
- e) high – level disinfection

107. The bronchoscopes require:

- a) dry heat
- b) moist heat
- c) boiling
- d) autoclaving
- e) ethylene oxide gas

108. Medical entomology is:

- a) since which dealth with the study of those arthropods, which carry or transmit the pathogenic organisms to human beings
- b) since which dealth with the study of those arthropods, which carry or transmit the pathogenic organisms to animals
- c) the study of man & his environment
- d) study of health, health behavior & medical institution
- e) study of the physical, social & cultural history of man

109. Proporux, carbaryl are:

- a) organochlorine compounds
- b) organophosphorous compounds
- c) carbamates
- d) residual sprays
- e) space sprays

110. Fly control measures:

- a) environmental, chemical, biological control
- b) residual sprays, space sprays, pyrethrum extract, genetic control
- c) mosquito net, screening, repellents
- d) environmental, insecticidal control, fly papers, health education
- e) insecticides, repellents, rodent control

Questions for 2 unite (EPIDEMIOLOGY)

1. Epidemiology of infectious diseases is:
Specific prevention of infectious diseases consists of:
 - a) Hand washing
 - b) Healthy food
 - c) Physical activities
 - d) Vaccination
2. Which of mentioned diseases has vesicula
 - a) Typhoid fever
 - b) Meningococcal infection
 - c) Chickenpox
 - d) Measles

3. Positive Schick test indicate
 - a) Immunity to diphtheria
 - b) Susceptibility to diphtheria
 - c) Hypersensitivity to diphtheria
 - d) Infection with diphtheria
4. Carriers are important in all of the following except
 - a) Polio
 - b) Typhoid
 - c) Measles
 - d) Diphtheria
5. True about meningococcal meningitides is
 - a) Causative agent is a gram – ve diplococci
 - b) Cases are a most important source of infection
 - c) Treatment with penicillin eradicates carrier state
 - d) Vaccine can be in pregnancy
6. National Tuberculosis institute is located at
 - a) New Delhi
 - b) Chingelput
 - c) Bangalore
 - d) Chennai
7. All of the following are blood - borne infections except
 - a) Hepatitis B
 - b) Hepatitis C
 - c) Hepatitis D
 - d) Hepatitis E
8. Salmonellas are producing?
 - a) Endotoxins
 - b) Enterotoxins
 - c) Exotoxins
 - d) Endotoxins, enterotoxins
9. Incubation period for whooping cough is commonly:
 - a) 12 h
 - b) 7- 10 days
 - c) 15 days
 - d) 1 month
10. What is the reservoir for salmonella typhi?
 - A) Humans
 - B) Cattle
 - C) Humans and cattle
 - D) Rodents
11. New cases of patients with Variola (smallpox) are registered:
 - a) Globally
 - b) Only in Africa
 - c) Only in South-east Asia
 - d) Not registered
12. Influenza vaccine
 - a) The content of vaccine remains the same every year
 - b) Every season vaccine is different
 - c) Is not available
 - d) It is alive vaccine
13. The only known reservoir of Corynebacterium diphtheria?
 - A) Moskitos
 - B) Rats
 - C) Humans

D) Chimpanzees

14. Agent of Tuberculosis is:
 - a) Mycobacterium africanum
 - b) Mycobacterium bovis
 - c) Mycobacterium tuberculosis
 - d) All of the above mentioned
15. Typhoid in first week of illness is best diagnosed by
 - a) Serum Widal test
 - b) Stool culture
 - c) Urine test
 - d) Blood culture
16. Hepatitis E virus is transmitted by
 - a) Sexual route
 - b) Blood and blood products
 - c) Needles and syringes
 - d) Faecal-oral route
17. Period of infectivity for Measles is
 - a) 5 days prior to appearance of rash till 4 days afterwards
 - b) 4 days prior to appearance of rash till 5 days afterwards
 - c) 4 days prior to appearance of rash till 1 days afterwards
 - d) 1 days prior to appearance of rash till 4 days afterwards
18. The main preventive measure against polio is
 - a) planned and additional mass vaccination of children of the decreed age
 - b) detection of patients with polio and acute flaccid paralysis (AFP)
 - c) high-quality water supply, communal landscaping
 - d) health promotion among the population about the prevention of polio
19. The mode of transmission of varicella:
 - a) Air-borne
 - b) Fecal – oral route
 - c) vector-borne
 - d) sexual transmission
20. Specify the most effective measures for shigellosis
 - a) sanitary-and-hygienic
 - b) specific prevention
 - c) measures aimed at the source of infection
 - d) disinfection
21. Seasonality in measles
 - a) not observed
 - b) mild spring
 - c) pronounced winter-spring
 - d) summer-autumn
22. Which of the mentioned allegations of typhoid fever is not correct?
 - a) Characterized by viremia
 - b) Characterized by systematic damage of intestinal lymphatic system
 - c) Infectious source and carrier is diseased person
 - d) Incubation period is up to 2 weeks
23. Which of mentioned diseases has vesicula?
 - a) Typhoid fever
 - b) Chickenpox
 - c) Meningococcus infection
 - d) Measles
24. What is the source of infection in case of salmonellosis?
 - a) Wild and domestic animals

- b) Humans
- c) Birds
- d) A+b

25. Airborne/aeroegnic diseases are caused by:

- a) Virus
- b) Bacteria
- c) Mycoplasma
- d) All of the above

27. Which of infectious diseases WHO considers as the most important now?

- a) Malaria, HIV/AIDS, tuberculosis
- b) Pertussis, mumps, measles
- c) Chickenpox, virus hepatitis A, virus hepatitis E
- d) Diphtheria, salmonellosis, helicobacteriosis

28. «Hundred day cough» is the name of

- a) Cough due to Bordetella pertussis
- b) Cough due to Hemophylus influenza
- c) Cough due to Adenovirus
- d) Cough due to Respiratory syncytial virus

29.. Which of the following pairs of Rickettsial Diseases - Insect vectors is wrongly matched

- a) Epidemic typhus - Louse
- b) Scrub typhus - Flea
- c) Rocky Mountain spotted fever - Tick
- d) Rickettsialpox - Mite

30. The most appropriate test to assess the prevalence of tuberculosis infection in community is

- a) Mass Miniature Radiography
- b) Sputum examination
- c) Tuberculin test
- d) Clinical examination

31. The usual incubation period for pertussis is

- a) 7-14 days
- b) 3-5 days
- c) 21-25 days
- d) Less than 3 days

32. Risk of the damage of fetus by maternal rubella is maximum if mother gets infected is

- a) 6-12 weeks of pregnancy
- b) 20-24 weeks of pregnancy
- c) 24-28 weeks of pregnancy
- d) 32-36 weeks of pregnancy

33. The usual incubation period for typhoid fever is

- a) 10-14 days
- b) 3-5 days
- c) 21-25 days
- d) Less than 3 days

34. Chicken Pox is characterized by all except

- a) Scabs are infective
- b) Pleomorphic stages
- c) Rashes symmetrical centripetal dew-drop like
- d) Palms and soles not affected by rash

35. Period of infectivity for Measles is

- a) 5 days prior to appearance of rash till 4 days afterwards
- b) 4 days prior to appearance of rash till 5 days afterwards
- c) 4 days prior to appearance of rash till 1 days afterwards
- d) 1 days prior to appearance of rash till 4 days afterwards

36. Hepatitis which spreads by faecal – oral route is
- Hepatitis A
 - Hepatitis B
 - Hepatitis C
 - Hepatitis D
37. Prophylactic prevention of contact with measles case is necessary up to how many days after appearances of rash:
- 2 days
 - 5 days
 - 7 days
 - 9 days
38. Which of the following is not true about influenza virus
- Influenza virus A is subject to frequent antigenic variation
 - Antigenic drift is a gradual antigenic change over a period of time
 - Antigenic shift is due to genetic recombination of virus
 - Major epidemics are due to antigenic drift
39. Iceberg phenomenon is not seen in
- AIDS
 - TB
 - Poliomyelitis
 - Measles
40. BCG vaccination
- Recommended for all healthy newborns
 - Prevent anybody from TB infections
 - Revaccination is done at the age of 17
 - Post-vaccination immunity is active for the rest of the life
41. Rash on the skin in case of smallpox
- Shows immediately and remains same in development stage
 - Develops step by step and in different development stages
 - Not different from chickenpox
 - Will not leave scars on the skin
42. Influenza virus enters the human organism through:
- Skin
 - Upper respiratory tract mucosa
 - Digestive tract mucosa
 - Eyes' mucosa
43. The primary modes of spread of *diphtheriae* consist of :
- Direct or via airborne droplet
 - Fecal – oral
 - Sexual transmission
 - Through medical equipment
44. Lists biotypes of *Corynebacterium diphtheriae*:
- gravis, intermedius, mitis, belfanti
 - gravis, intermedius,
 - mitis, belfanti
 - intermedius, mitis
45. The source of infection in chickenpox is:
- contaminated air
 - chicken pox cases
 - insect
 - water
46. Susceptible to influenza a virus
- only human
 - man, ducks, geese, dogs
 - man, horses, chickens, geese, ducks, pigs

d) man, pigs, dogs, chickens and others

47. Time of risk in scarlet fever

- a) summer
- b) the first weeks of forming teams
- c) spring period of the year
- d) morbidity per year is distributed

48. Epidemiologic control of infectious diseases:

- a) Continuous and dynamic observation of disease
- b) Systemic collection and analysis of epidemiological data
- c) Preventive activities
- d) all of the above

49. Incubation period for measles is ranges from:

- a) 7 - 21 days
- b) 30 - 35 days
- c) few hours to 3 days
- d) 20 – 25 days

50. Definition of measles:

- a) An acute highly contagious viral disease with [fever](#), runny nose, cough, red eyes, and a spreading skin [rash](#)
- b) Communicable disease marked especially by fever, diarrhea, prostration, headache, and intestinal inflammation
- c) An infectious disease characterized by intense vomiting and profuse watery diarrhea and that rapidly leads to dehydration and often death
- d) An acute infectious upper respiratory tract disease that affects the throat

51. Koplik Spots are seen in which diseases

- a) Measles
- b) Mumps
- c) Rubella
- d) Enteric fever

52. Pathogenesis of airborne/aerogenic infections is characterized by?

- a) Cause of infection in URT
- b) Primary replication
- c) Viremia, bacteraemia
- d) All of the above

53. Definition of diphtheria is:

- a) An acute highly contagious viral disease with [fever](#), runny nose, cough, red eyes, and a spreading skin [rash](#)
- b) Communicable disease marked especially by fever, diarrhea, prostration, headache, and intestinal inflammation
- c) An infectious disease characterized by intense vomiting and profuse watery diarrhea and that rapidly leads to dehydration and often death
- d) An acute infectious upper respiratory tract disease that affects the throat

54. Period of infectivity for Chicken pox is

- a) 5 days prior to appearance of rash till 4 days afterwards
- b) 4 days prior to appearance of rash till 5 days afterwards
- c) 4 days prior to appearance of rash till 1 days afterwards
- d) 1 days prior to appearance of rash till 4 days afterwards

55. Chinese letter arrangement of bacilli under microscopy is shown by

- a) Mycobacterium tuberculosis
- b) Mycobacterium leprae
- c) Clostridium tetani
- d) Corynebacterium diphtheria

56. Orchitis without of epididymitis is manifestation of

- a) Measles
- b) Mumps
- c) Rubella
- d) Tuberculosis

57. Koplik Spots are seen in which diseases
- b) Measles
 - c) Mumps
 - d) Rubella
 - e) Enteric fever
58. Sub-acute Sclerosis Pan Encephalitis (SSPE) is a complication of
- a) Measles
 - b) Mumps
 - c) Rubella
 - d) Chicken pox
59. Incubation period for cholera is ranges from:
- a) 7 - 21 days
 - b) few hours to 5 days
 - c) 7-10 days
 - d) 2 - 3 days
60. Measures for the influenza patient
- a) isolation at home, hospitalization only for clinical and epidemiological indications
 - b) compulsory hospitalization in health facilities
 - c) hospitalization of sick children under 3 years
 - d) hospitalization of elderly patients
61. Who is mostly infected of measles
- a) children under 7 years
 - b) age does not matter
 - c) only children under 1 year
 - d) male persons
62. The period of the greatest contagion of the patient with measles
- a) from the beginning of the prodromal period and the first 4 days of rash
 - b) from the last day of incubation until the end of the inflammatory process
 - c) from 8 days of incubation until the end of the rash period
 - d) since the beginning of the period of the rash till normalization of the temperature
63. Immunity after suffering whooping cough
- a) resistant for life
 - b) short-term unstrained
 - c) relatively resistant
 - d) persistent, type-specific
64. The main measure of prevention of whooping cough
- a) vaccination
 - b) decompensation, isolating groups of kindergarten and schools
 - c) identification and isolation of patients
 - d) active health promotion
65. The main measures of prevention of typhoid fever are
- a) identification of patients and bacterial carriers
 - b) timely isolation and treatment of patients
 - c) vaccination of the population
 - d) provision of good-quality water
66. Types of carriage in typhoid and paratyphoid:
- a) acute and chronic
 - b) short-term
 - c) short-term, prolonged
 - d) acute, short-term
67. Maximum incubation period for polio
- a) 3-7 days
 - b) 8 days
 - c) 12 days
 - d) 20 days

68. The main sources of polio are
- cases with paralytic form of disease
 - healthy virus carriers
 - bacterial carriers
 - convalescents
69. Specific prophylaxis (vaccination) is possible against following disease:
- Cytomegalovirus infection
 - Parainfluenza
 - Mycoplasma pneumonia
 - Influenza
70. Influenza epidemics means that there are:
- 100 patients
 - 1000 patients
 - 100 patients from 100 000 inhabitants during 1 week
 - 100 patients children
71. The incubation period for shigellosis
- 2-10 days
 - 8-17 days
 - 10-21 days
 - from several hours to 7 days
72. Definition of typhoid fever is:
- An acute highly contagious viral disease with [fever](#), runny nose, cough, red eyes, and a spreading skin [rash](#)
 - Communicable disease marked especially by fever, diarrhea, prostration, headache, and intestinal inflammation
 - An infectious disease characterized by intense vomiting and profuse watery diarrhea and that rapidly leads to dehydration and often death
 - An acute infectious upper respiratory tract disease that affects the throat
73. The main factor of transmission of the causative agent of HAV is:
- water
 - food
 - household items
 - Flies
74. Who mostly infected HAV?
- children under 3 years
 - children of preschool and primary school age
 - adults
 - elderly persons
75. Manifestations of HVE:
- sporadic morbidity
 - epidemic
 - endemic
 - all of the above
76. Source of cholera infection:
- Infective person
 - Infective animal
 - Soil
 - Mosquito's
77. Typhoid is first week of illness is best diagnosed by
- Serum Widal test
 - Stool culture
 - Urine test
 - Blood culture
78. Hepatitis E virus is transmitted by
- Sexual route

- b) Blood and blood products
- c) Needles and syringes
- d) Faecal-oral route

79. Period of infectivity for Measles is

- a) 5 days prior to appearance of rash till 4 days afterwards
- b) 4 days prior to appearance of rash till 5 days afterwards
- c) 4 days prior to appearance of rash till 1 days afterwards
- d) 1 days prior to appearance of rash till 4 days afterwards

80. Hepatitis which spreads by faecal – oral route is

- a) Hepatitis A
- b) Hepatitis B
- c) Hepatitis C
- d) Hepatitis D

81. Prophylactic prevention of contact with measles case is necessary up to how many days after appearances of rash

- a) 2 days
- b) 5 days
- c) 7 days
- d) 9 days

82. Definition of cholera is:

- a) An acute highly contagious viral disease with [fever](#), runny nose, cough, red eyes, and a spreading skin [rash](#)
- b) Communicable disease marked especially by fever, diarrhea, prostration, headache, and intestinal inflammation
- c) An infectious disease characterized by intense vomiting and profuse watery diarrhea and that rapidly leads to dehydration and often death
- d) An acute infectious upper respiratory tract disease that affects the throat

83. Which of the following modes of transmission is typical for cholera:

- a) Direct contact through droplet infection
- b) Fecal - oral
- c) Sexual transmission
- d) Through medical equipment

84. The leading role in the prevention of salmonellosis belongs to

- a) sanitary and veterinary supervision
- b) creation of collective immunity
- c) detection and isolation of sick people
- d) identification of bacterial carriers

85. Susceptible to measles disease:

- a) children only
- b) everyone, regardless of age
- c) only organized children
- d) men are more receptive

86. Manifestations of influenza:

- a) sporadic morbidity
- b) epidemic
- c) pandemic
- d) all of the above

87. After suffering a meningococcal infection immunity is formed:

- a) lifelong
- b) not formed
- c) short
- d) long-lasting, type-group-specific

88. The source of the causative agent of meningococcal infection is contagious with

- a) the beginning of the incubation period
- b) the end of the incubation period until recovery
- c) 2 days from the start of nasopharyngitis clinic
- d) end of the first week of the disease

89. What is the reservoir for salmonella typhi?
- Humans
 - Cattle
 - Humans and cattle
 - Birds
90. Infectious diseases cannot be caused by:
- Virus
 - Bacteria
 - Rat
 - Rickettsia
91. Measles virus enters the human organism through:
- Skin
 - Upper respiratory tract mucosa
 - Digestive tract mucosa
 - Eyes' mucosa
92. Which of the following modes of transmission is typical for shigellosis:
- Direct contact through droplet infection
 - Fecal - oral
 - Contact with skin surfaces
 - Through medical equipment
93. Variants of influenza a virus antigenic structure
- H0N1, H1N1, H2N2, H3N2
 - H0N1, H2N1, H3N2 H2N2
 - H1N1, H0N1, H1N2, H3N2
 - H1N1, H0N2, H2N3, H3N2
94. Transmission pathway in chickenpox
- airborne
 - vector-borne
 - household contact
 - water -borne
95. Which of the following toxins is the most important in the pathogenesis of cholera?
- Endotoxin
 - Enterotoxin
 - Hemolysin
 - Neuraminidase
96. For the active prevention of polio is used:
- live oral polio vaccine (OPV)
 - inactivated polio vaccine (IPV)
 - OPV and IPV
 - OPV and genetically engineered vaccine
97. Preventive measures in chickenpox
- vaccination
 - communal improvement
 - prevention of contact cases with chickenpox
 - not conducted
98. The source of mumps is
- sick person
 - convalescent carrier
 - healthy carrier
 - convalescents
99. Timing of immunization against mumps
- once in the first days of life
 - three times, in 2 - 3.5 - 5 months
 - twice, in 12 months and 6 years
 - once, in 15 months

e)

100. Causative agents of tuberculosis in the external environment

- a) stable
- b) unstable
- c) weakly resistant
- d) long-term resistant

101. The main source of human tuberculosis is

- a) sick animal(cattle)
- b) sick birds
- c) sick person
- d) sick animal and human

Assessment scale

Examination (theoretical questions) (midterm)

«85-100%» • deep and durable learning themes of the module;

- complete, consistent, competent and logically presented answers to questions;
- reproduction of educational material on the themes of the module with the desired high degree of accuracy.

«75-84%»

- the presence of minor errors in the presentation of the material of the module;
- demonstration of the students knowledge of the completed the program;
- clear presentation of training material.

«60-74%»

- the presence of significant errors in the responses on module;
- demonstration to students is not enough knowledge on the program;
- not a clear presentation of educational material in the answer.

«less than 60%»

- absence of knowledge;
- a serious mistakes in answers.

Control work of «General epidemiology module test / review work »

0-59% - 0-4 points rating of "poor»

60-74% - 5-6 points rating of "satisfactory»

75-84% - 7-8 points rating of "good»

85-100% - 9-10 points rating of "excellent»

PRESENTATION RUBICS (the formative assessment)

Nº p/p	Name of the indicator	Mark (in %)
PRESENTATION		70
1	Cover sheet with title	0-4
2	Design of slides and use of additional effects (slide transitions, sound, drawings)	0-10
3	The text of the presentation write a short, well-formed and ideas are clear and structured 0-40	0-40
4	Slides presented in a logical sequence	0-10
5	Slides printed	0-06
REPORT		30
1	The correctness and accuracy of speech while protecting	0-12
2	Breadth of vision (answers to questions)	0-10
3	The implementation of the rules	0-8

During the presentation

0-59% - 0-7 points, a rating of "poor»

60-74% - 8-9 points, a rating of "satisfactory»

75-84% - 10-11 points, a rating of "good»

85-100% - 12-13 points, a rating of "excellent»

OF FRONTAL SURVEY ASSESSMENT SCALE (the formative assessment)

1. Test consist of 20 questions.
2. The ready-made answers are given to choose from, one correct and the others are wrong.
3. For each correct answer – 5%.
4. Overall rating is defined as the amount of accumulated interest.
5. Scoring % is translated into points.

At testing: 0-59% - (0-11 correct answers), it is 0-7 points, a rating of "poor»

60-74% - (12 to 14 correct answers), it is 8-9 a rating of "satisfactory»

75-84% - (15-17 correct answers), it is 10-11 a rating of "good»

85-100% - (18-20 correct answers), it is 12-13 a rating of "excellent»

VERBAL TEST ASSESSMENT SCALE

(Intermediate control – "knowledge»)

(assessment in the VII semester) Assessing the oral answers of knowledge used the following criteria are used:

1. Knowledge of the basic processes of the studied subject area, depth and completeness of disclosure of the issue.
2. Ability to solve of situational problems, making inferences and generalizations, to give reasoned answers.
3. Ability of a monological speech, the consistency of the answer, ability to answer questions, to express their opinion on the problem.

SCALE OF ASSESSMENT AN ORAL TEST "TO KNOWELEDGE»

(credit in VII semester)

Assessing the oral responses to test the level of to knowledge following criterion:

1. Knowledge of the main processes of the studied subject area, depth and completeness of disclosure question's.
2. Ability to solve the situational problems, to draw conclusions and generalizations, to give reasonable answers.
3. Possession of monologic speech, logic and sequence of the answer, ability to answer on the questions posed, to express their opinion on the problem under discussion.

85-100% (16-20 points) estimated answer that shows solid knowledge the content of the subject of epidemiology; patterns of spread of infectious diseases among the population; the basic laws of the epidemic process; anti-epidemic and preventive measures for prevention and localization of infectious foci diseases; epidemiological features of infections of the respiratory tract, gastrointestinal tract, blood and external covers, as well as anthroponoses, zoonoses, and sapronoses; methods epidemiological analysis of infectious diseases.

75-84% (10-15 points) estimated response, revealing a strong knowledge of the content the subject of epidemiology; the legal framework of public health; biomedical statistics; regularities of the spread of infectious diseases among population; the basic laws of the epidemic process; anti-epidemic and preventive measures for prevention and localization of infectious foci diseases; epidemiological features of infections of the respiratory tract, gastrointestinal tract, blood and external covers, as well as anthroponoses, zoonoses, and sapronoses; methods epidemiological analysis of infectious diseases; consistency and consistency answer's. However, one or two inaccuracies in the answer are allowed.

60-74% (5-10 points) evaluates the response, indicating mainly about the basic knowledge of the subject of epidemiology; patterns of the spread of infectious diseases among population; the basic laws of the epidemic process; anti-epidemic and preventive measures for prevention and localization of infectious foci diseases; epidemiological features of infections of the respiratory tract, gastrointestinal tract, blood and external covers, as well as anthroponoses, zoonoses, and sapronoses; methods epidemiological analysis of infectious diseases. Several errors are allowed in the content of the answer.

0-59% (1-4 points) estimated response, detecting ignorance of the subject of epidemiology; regularities of the spread of infectious diseases among the population; basic laws development of the epidemic process; anti-epidemic and preventive measures prevention and localization of foci of infectious diseases; epidemiological features anthroponoses, zoonoses and sapronoses; inability to give reasoned answers, weak possession of monologue speech, lack of logic and consistency. Allowserious errors in the content of the answer.

EXPERTISE ASSESSMENT SCALE (credit in VII semester)

When assessing the answers to the test of the level of training are taken into accountfollowing criterion:

85-100% (8-10 points) estimated response in which the student is able to plan andcarry out anti-epidemic measures in the foci of infectious diseases; sanitary and educational work among the population; analyze infectious diseases to establish the "territory, time and risk contingent" and to identify the "risk factors"; methods of epidemiological analysis of infectious diseases; ability to work withthe population on the prevention of diseases and instilling sanitary and hygienic skills.Demonstrates full understanding of the problem.All requirements for the taskdone.

75-84% (4-7 points) estimated response in which the student is able to plan andconduct student anti-epidemic measures in the foci of infectious diseases;to carry out sanitary and educational work among the population; to analyze infectious diseases. morbidity to establish "territory, time and risk profile" and to identify " factorsrisk"; has the technique of epidemiological analysis of infectious diseases; ability work with the population on the prevention of diseases and instilling sanitary and hygienicskills'.

Demonstrates a significant understanding of the problem. Most of the requirements,presented to the task completed.

60-74% (1-3 points) estimated response in which the student is not able to plan and the student is able to plan and carry out anti-epidemic actions in the center of infectious diseases; carry out sanitary and educational work among the population; to analyze the incidence of infectious disease to establish "territory, time and contingent risk" and identifying "risk factors"; not sufficiently good command of the technique of epidemiological analysis of infectious diseases; not well-versed work with the population on the prevention of diseases and instilling sanitary and hygienic skills proficient in. Demonstrates partial or small understanding of the problem. Many of the requirements, the requirements for assignment are not met.

0-59% (0 points) is estimated the answer at which the student demonstrates misunderstanding problems or no answer and there was not even an attempt to solve the problem

The planning sheet of discipline

Discipline Epidemiology

Field of study/specialization Graded credit

Course/semester 4 / 7

Credit units (CU) 3

Title of module according to WPD	Type of control	Forms of control	Minimal credit points	Maximal credit points	Week of control
Module 1					
Module 1.	Formative assessment	Activity, attendance, lecture notes, performance and presentation of lab works, individual work with tables, discussion of situational tasks	8	13	3 weeks
	Midterm examination	Evaluation test	5	10	
Module 2					
Module 2.	Formative assessment	Activity, attendance, lecture notes, performance and presentation of lab works, individual work with tables, discussion of situational tasks, writing of reports	8	13	5 weeks
	Midterm examination	Evaluation test	5	10	
Module 3					
Module 3.	Formative assessment	Activity, attendance, lecture notes, performance and presentation of lab works, individual work with tables, discussion of situational tasks, reports	8	13	7 weeks
	Midterm examination	Tests	6	11	
Module 4					
Total			40	70	9 weeks
Midpoint assessment			20	30	
Summative assessment			60	100	