ОЙТÚSTIK QAZAQSTAN MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ	ская академия»
Department of microbiology, virology and immunology	50-11-
Control and measuring means	1 p. from 5
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skma.edu.k2 Issues of the program for midterm control

skma.edu. Discipline: Microbiology and Immunology

Discipline code: MI 2219

Name and cipher of the EP: «Medicine»

Amount of study hours/credits: 150 hours (5 credits) skma.edu.k2

Course and semester of study: 2, IV

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ОЙТÚSTIK QAZAQSTAN MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ	SOUTH KAZAKHSTAN MEDICAL ACADEMY AO «Южно-Казахстанская медицинская академия»
Department of microbiology, virolog	y and immunology 50-11-
Control and measuring mea	ns 2 p. from 5

## **QUESTIONS OF THE MID-TERM № 1**

- 1. The concept of "immunity", types of immunity, the main functions of immunity.
- 2. The human immune system as a diffuse organ. Cells of the immune system
- 3. Define the concept of "antibody" and their functions.
- 4. Classes of immunoglobulins, their main characteristics, differences and features.
- 5. Agglutination reaction. Indirect or passive agglutination reaction (RPA).
- 6. Precipitation reaction. Immunodiffusion.
- 7. Immunoelectrophoresis (IEF). Immunoblotting.
- 8. Coombs reaction (antiglobulin test).
- 9. Neutralization and flocculation reactions.

10. Hemagglutination inhibition reaction (RTGA). Complement binding reaction (RSC).

11. The reaction of immune lysis, hemolysis and immobilization.

- 12. Reactions involving labeled antigens or antibodies.
- 13. The method of hybridization of nucleic acids.
- 14. Polymerase chain reaction.
- 15. The method of DNA sequencing.
- 16. Morphology, cultural properties, pathogenesis of staphylococci.
- 17. Microbiological diagnosis, prevention and treatment of staphylococcal infection.
- 18. Morphology, cultural properties, pathogenesis of streptococci.
- 19. Microbiological diagnosis, prevention and treatment of streptococcal infection.
- 20. Morphology, cultural properties, pathogenesis of the causative agent of syphilis.
- 21. Morphology, cultural properties, pathogenesis of the causative agent of gonorrhea.

22. Morphology, cultural properties, pathogenesis of the causative agent of urogenital chlamydia.

23. Microbiological diagnosis, prevention and treatment of sexually transmitted diseases (syphilis, gonorrhea, urogenital chlamydia).

- 24. Morphology, cultural properties and pathogenesis of gas gangrene.
- 25. Morphology, cultural properties and pathogenesis of tetanus.
- 26. Morphology, cultural properties and pathogenesis of botulism.

27. Microbiological diagnosis of clostridium (sowing on a Kitta -Tarotsi medium). specific prevention.

- 28. Morphology, cultural properties, pathogenesis of salmonella.
- 29. Morphology, cultural properties, pathogenesis of Escherichia.
- 30. Morphology, cultural properties, pathogenesis of shigella.

31. Microbiological diagnosis, prevention and treatment of escherichia, shigella, salmonella.

32. Morphology, cultural properties, pathogenesis of vibrio cholera.

33. Microbiological diagnosis, prevention and treatment of campylobacteria and vibrio cholera.

34. Biological properties, laboratory diagnostics of Pseudomonas aeruginosa.

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Department of microbiology, virology and immunology	50-11-
Control and measuring means	3 p. from 5
35 Biological properties laboratory diagnostics of hemophili	c bacillus
55. Diological properties, laboratory diagnostics of hemophinic	e bacinus.
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## 35. Biological properties, laboratory diagnostics of hemophilic bacillus.

And Compiler Senior teacher Abdramanova A.A.

Doctor of medical sciences, prof. Seitkhanova Nee Head of department: skma.edu.kl skma.edu. B.T. Ana edukt skina ed

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ОŃTÚSTIK QAZAQSTAN MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ	SOUTH KAZAKHSTAN SKMA 	цинская академия»
Department of microbiology, v	rirology and immunology	50-11-
Control and measuring	ng means	4 p. from 5
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## QUESTIONS OF THE MID-TERM № 2

1. General characteristics and microbiological methods of diagnosis of meningococcal infection.

2. Morphology, cultural properties, pathogenesis of mycobacterium tuberculosis.

3. Microbiological diagnosis, prevention and treatment of tuberculosis.

4. Morphology, cultural properties, pathogenesis of the causative agent of whooping cough.

5. Microbiological diagnosis, prevention and treatment of pertussis pathogens.

6. Morphology, cultural properties, pathogenesis of the causative agent of diphtheria.

7. Microbiological diagnosis, prevention and treatment of diphtheria pathogens.

8. Morphology of the plague pathogen, sowing properties.

9. Pathogenesis, microbiological diagnosis, prevention of plague.

10. Morphology, cultural properties of the causative agent of anthrax.

11. Pathogenesis, microbiological diagnosis, prevention of anthrax.

12. Morphology of the causative agent of brucellosis, cultural properties.

13. Pathogenesis, microbiological diagnosis, prevention of brucellosis.

14. Etiology, pathogenesis, microbiological diagnosis, prevention of West Nile fever.

15. Characteristics, pathogenesis, microbiological diagnosis, prevention of the causative agent of zoonotic cutaneous leishmaniasis.

16. Biological features and laboratory diagnosis of keratomycosis.

17. Biological features and laboratory diagnosis of trichomycosis.

18. Biological features and laboratory diagnostics of histoplasmosis.

19. Biological features and laboratory diagnosis of leishmaniasis.

20. Biological features and laboratory diagnostics of balantidiosis.

21. Biological features and laboratory diagnosis of giardiasis.

- 22. Biological features and laboratory diagnostics of reversible typhus
- 23. Biological features and laboratory diagnostics of epidemic typhus.

24. Biological features and laboratory diagnostics of Ku fever.

25. General characteristics of CCGL, Laboratory diagnostics.

26. General characteristics, Laboratory diagnostics, prevention of coronavirus infection.

27. Structure and antigenic properties of adenoviruses, Laboratory diagnostics.

28. Pathogenesis, clinic, prevention and treatment of adenovirus infection.

29. Morphology and chemical composition of the influenza virus, environmental resistance and epidemiology.

- 30. Pathogenesis, clinic and laboratory diagnosis of influenza.
- 31. Morphological and antigenic features of hepatitis A, Laboratory diagnostics.
- 32. Pathogenesis, clinic, emidymology and immunity of hepatitis B.
- 33. Laboratory diagnosis of hepatitis B.
- 34. Morphological and biological features, Laboratory diagnosis of hepatitis D.
- 35. General characteristics, epidemiology clinic and laboratory diagnosis of hepatitis C.

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Department of microbiology,	virology and immunology	50-11-
Control and measuri	ng means	5 p. from 5

- 36. General characteristics of enteroviruses, their classification and taxonomy.
- 37. Morphological and antigenic features of poliovirus, Laboratory diagnostics.
- 38. Features of epidemiology, pathogenesis and clinical picture of polio.
- 39. Advantages and disadvantages of vaccines used for the prevention of polio. Treatment of polio.

40. General characteristics, epidemiology, clinical picture and laboratory diagnosis of rotavirus infection,

- 41. General characteristics of the human immunodeficiency virus.
- 42. Pathogenesis, clinic, Laboratory diagnosis of HIV infection.
- 43. General characteristics of oncogenic viruses.
- 44. Morphology of the measles virus, culture properties.
- 45. Pathogenesis, microbiological diagnosis and prevention of measles virus.
- 46. Morphology of the rubella virus, culture properties.
- 47. Pathogenesis, microbiological diagnosis and prevention of rubella virus.
- 48. Pathogenesis, microbiological diagnosis, prevention of varicella zoster virus.
- 49. Morphology of mumps, sowing properties.
- 50. Pathogenesis, microbiological diagnosis, prevention of mumps.
- 51. General characteristics of herpesviruses, their classification and taxonomy.

52. Pathogenesis, microbiological diagnosis and prevention of diseases caused by herpesviruses.

- 53. Morphology of tick-borne encephalitis, cultural properties.
- 54. Pathogenesis, microbiological diagnosis, prevention of tick-borne encephalitis.
- 55. General characteristics, clinic, Laboratory diagnosis of cytomegalovirus infection.
- 56. Morphology of rabies, properties of culture.

Compiler: Senior teacher Abdramanova A.A.

Head of department: \_\_\_\_\_ Doctor of medical sciences, prof. Seitkhanova B.T.

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