

List of exam questions by discipline: "Microbiology, virology" in the specialty "General Medicine" of the 2022 / 2023 academic year

1. Definition of microbes (microorganisms) and microbiology
2. History of Microbiology. Microscopy as a method of microbiology
3. Types of culture media in microbiology
4. Methods of culturing in microbiology
5. Classification of microorganisms
6. Physiology of microorganisms
7. Physical methods of control of microbial growth
8. Chemical methods of control of microbial growth
9. Human–Microbial Interactions
10. Normal microflora of different parts of human body
11. Infection and Disease. Classification of infections
12. Sources of infection in Man
13. Pathogenicity and Virulence
14. Methods of transmission of infection
15. Prokaryotic (bacterial) cell structure. Cell shapes and arrangements
16. Plasma membrane structure of microorganisms
17. Cell wall structure. Difference between gram-positive and gram-negative bacteria
18. Bacteria: surface structures. Layers outside the cell wall
19. Bacteria: surface structures. Structures outside the cell wall
20. Bacterial internal components: Cytoskeleton, Endospore
21. Staining microscopic specimens (Gram stain, Acid-fast stain)
22. Morphology of spirochetes, mycoplasmas, actinomycetes
23. Virus Characteristics
24. Bacteriophage Characteristics
25. Microbial growth and reproduction
26. Microbial nutrition
27. Culturing microorganisms
28. Controlling microbial growth
29. Microflora of soil, water and air
30. Antibiotics (types, mechanisms of action, antibiotic resistance)
31. Bacterial infections of the respiratory tract (*Streptococcus pyogenes*, *Streptococcus pneumoniae*)
32. Bacterial infections of the respiratory tract (*Haemophilus influenzae*)
33. Bacterial infections of the respiratory tract (*Mycoplasma Pneumoniae*, Chlamydial Pneumonias)
34. Bacterial infections of the respiratory tract (Diphtheria, Whooping Cough or Pertussis)
35. Bacterial infections of the respiratory tract (Tuberculosis)
36. Staphylococcal Infections of the Skin
37. Streptococcal Infections of the Skin
38. Bacterial infections of the digestive system (foodborne diseases)
39. Bacterial infections of the digestive system (*Escherichia coli*)
40. Bacterial infections of the digestive system (Salmonellosis)
41. Bacterial infections of the digestive system (Shigellosis - Bacillary Dysentery, Campylobacteriosis).
42. Bacterial infections of the digestive system (Cholera)
43. Bacterial infections of the digestive system (Peptic ulcers)
44. Bacterial infections of the reproductive system (Bacterial vaginosis, Chlamydia)
45. Bacterial infections of the reproductive system (Gonorrhoea)
46. Bacterial infections of the reproductive system (Syphilis)
47. Bacterial zoonotic infections (Brucellosis, Rickettsia)
48. Bacterial zoonotic infections (Plague)
49. Bacterial zoonotic infections (Anthrax, Tularemia)

50. Viral infections (types, mechanisms of pathogenicity, the main Viral infections)
51. Viral infections of the respiratory tract (Common cold)
52. Viral infections of the respiratory tract (Influenza)
53. Viral infections of the nervous system (Rabies)
54. Viral infections of the nervous system (Poliomyelitis)
55. Viral infections of the nervous system (Arboviral Diseases)
56. Viral infections of the gastrointestinal tract (Rotaviruses. Noroviruses)
57. Viral infections of the gastrointestinal tract (Hepatitis)
58. Viral infections of the reproductive system (Herpes viruses)
59. Viral infections of the reproductive system (Human papillomavirus)
60. HIV and AIDS.