

## **SYLLABUS OF QUESTIONS FOR EXAMINATION**

### **GENERAL MICROBIOLOGY**

### **DENTISTRY**

1. Characterization of prokaryotic cells, their shape, size, and arrangement. Spores.
2. Internal structure in bacteria (nucleoid, plasma, cell membrane, mesosomes). Cell wall of bacteria. Surface structures of bacteria.
3. Morphology and multiplication of viruses.
4. Chemical structure of microorganisms. Enzymes in bacteria.
5. Reproduction of bacteria.
6. Genotype and phenotype. Mutation of bacteria. Gene transfer. Conjugation, transformation, transduction. Lysogenic conversion.
7. Pathogenicity and virulence of microorganisms.
8. Characterization of bacterial exotoxins and endotoxins.
9. Factors of bacterial invasiveness.
10. Decontamination. Sterilization. Disinfection.
11. Antibiotics. Effects, resistance, tests of susceptibility, danger of antibioticotherapy.
12. Penicillins.
13. Cephalosporins and carbapenems.
14. Chloramphenicol and tetracyclines.
15. Macrolides and lincosamides.
16. Aminoglycosides and glycopeptides.
17. Quinolones and fluoroquinolones.
18. Antifungal agents.
19. Microorganisms in healthy humans. Endogenous and nosocomial infections.
20. Humoral mechanisms of immunity. Cellular mechanisms of immunity.
21. Antigens and antibodies. Serologic reactions.
22. Active and passive immunization. Vaccines.
23. Classification of viruses. Virus-host cell interactions. Antiviral agents.

**SYLLABUS OF QUESTIONS FOR EXAMINATION**  
**SPECIAL MICROBIOLOGY**  
**DENTISTRY**

1. Staphylococcus.
2. Streptococcus pneumoniae. Streptococcus pyogenes.
3. Viridans streptococci and Enterococcus.
4. Neisseria.
5. Enterobacteriaceae.
6. Pseudomonas. Bacillus.
7. Vibrio. Haemophilus.
8. Bacteroides and Fusobacterium.
9. Clostridium perfringens. Clostridium tetani.
10. Clostridium botulinum and Clostridium difficile.
11. Corynebacterium.
12. Actinomyces and Nocardia.
13. Mycobacterium.
14. Treponema. Borrelia. Leptospira.
15. Mycoplasma.
16. Chlamydia and Chlamydophila.
17. Candida. Superficial (cutaneous) mycoses.
18. Herpes simplex virus. Varicella zoster virus.
19. Epstein - Barr virus. Cytomegalovirus.
20. Hepatitis A virus. Hepatitis B virus.
21. Influenza viruses.
22. Enteroviruses.
23. Retroviruses.