



Approved by Dept. Council
№4/11.09.2023

PRACTICAL EXERCISES IN MEDICAL MICROBIOLOGY

English-speaking medical students 2nd TERM - 2023/2024

1. Microbiological examination of Pus. Microbiological diagnosis of staphylococcal and streptococcal infections.
2. Microbiological diagnosis of Diphtheria and Whooping cough. Throat culture procedures. The upper respiratory tract infections.
3. Microbiological diagnosis of Tuberculosis and Leprosy. Laboratory diagnosis of *S.pneumoniae* infections. The lower respiratory tract infections.
4. Microbiological diagnosis of Gas gangrene and Tetanus. Isolation and identification of bacteria from infected wounds and abscesses.
5. Microbiological diagnosis of Bacterial meningitis (*Neisseria meningitidis* and *Haemophilus influenzae*). Microbiological diagnosis of CSF and primary sterile specimens.
6. Microbiological diagnosis of particularly dangerous infectious diseases – Anthrax, Cholera and Plague.
7. **Seminar (Exercises №1 – 6, TEST №1)**
8. Microbiological diagnosis of bacterial Shigellosis, Salmonellosis, and *E. coli* enteritis. Microbiological examination of faeces. Microbiological diagnosis of food poisoning (*S. aureus*, *Salmonella*, *Clostridium* (*C. botulinum*, *C. perfringens*)). Detection of *Helicobacter pylori*.
9. Microbiological diagnosis of Bacteriuria. Enumeration and identification of microorganisms in urinary tract infections: traditional (*E. coli*, *Klebsiella*, *Proteus-Providentia-Morganella*, *Pseudomonas*) and emerging (*Streptococci*, *Salmonella*, *Leptospira*, *Mycobacterium tuberculosis*).
10. Microbiological diagnosis of Gonorrhoea, Syphilis, *C. albicans*, Chlamydia and *Mycoplasma*. Microbiological examination of genital tract.
11. Microbiological diagnosis of Typhoid fever, Undulant fever, Typhus fever and Relapsing fever. Microbiological examination of blood culture.
12. Hospital acquired infections – *Pseudomonas*, *Enterococcus*, MRSA, *C. difficile*. Invasive mycoses caused by *Candida*, *Aspergillus*, *Actinomyces* and *Cryptococcus* spp. Antifungal therapy.
13. Microbiological examination of viruses – HIV and Hepatitis A, B, C, D and E.
14. Microbiological examination of specimens of sanitary importance. Sanitary indicative microorganisms. **TEST №2 (Exercises №8-13).**
15. **Practice skills revision from summer and winter terms with mark.**

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immunology „Prof. Dr. Elissay Yanev“