



Approved by Dept. Council  
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## PRACTICAL EXERCISES IN MEDICAL MICROBIOLOGY

### English-speaking students in Pharmacy 2<sup>nd</sup> TERM - 2023/2024

1. Microbiological examination of pus. Diagnosis of staphylococcal and streptococcal infections.
2. Microbiological examination of throat swabs. Diagnosis of diphtheria and whooping cough as upper respiratory tract infections.
3. Microbiological examination of sputum. Diagnosis of *S. pneumoniae* infections. Tuberculosis and Leprosy.
4. Microbiological examination of infected wounds and abscesses. Diagnosis of Gas Gangrene and Tetanus.
5. Microbiological examination of CSF and punctate. Diagnosis and differential diagnosis of bacterial meningitis caused by *N. meningitidis* and *H. influenzae*.
6. Microbiological diagnosis of particularly dangerous infectious diseases – Anthrax, Cholera and Plague.
7. **Seminar (Exercises №1 – 6, TEST №1)**
8. Microbiological examination of faeces for diagnosis of Dysentery, Salmonellosis and Colienteritis. Detection of *H. pylori* from stomach biopsy.
9. Microbiological examination of urine. Enumeration and identification of microorganisms in urinary tract infections: Traditional (*E. coli*, *Klebsiella* spp., *Proteus-Providentia-Morganella*, *Pseudomonas*) and Emerging (*Streptococci*, *Salmopnella* spp., *Leptospira* spp., *M. tuberculosis*).
10. Microbiological examination of genital tract specimens for diagnosis of Gonorrhoea, Syphilis and infections caused by *Candida* spp., *Chlamydia* spp. and *Mycoplasma* spp.
11. Microbiological examination of blood culture for diagnosis of Typhoid fever, Undulant fever, Goal fever, Relapsing fever and other septic conditions.
12. Hospital acquired infections caused by *Pseudomonas* spp., *Enterococcus* spp., MRSA, *C. difficile* and systemic mycoses caused by *Candida* spp., *Aspergillus* spp., *Actinomyces* spp., *Cryptococcus* spp. Antifungal therapy.
13. Microbiological examination of viral infections – HIV and HVA, HVB, HVC, HVD, HVE.
14. Microbiological examination of water, air and hospital environmental samples for sanitary indicative microorganisms – *E. coli*, *C. perfringens*, *Enterococcus* spp., *Staphylococci*, *Streptococci*. **TEST №2 (Exercises №8-13).**
15. **Practical skills revision from the 1<sup>st</sup> and 2<sup>nd</sup> term.**

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immunology „Prof. Dr. Elissay Yanev“