

**The West Bengal University of Health Sciences**  
**M.D. (Microbiology) March- April, 2020 Examination**

**Paper: II**

**Full Marks: 100**  
**Time: 3 Hours**

*Attempt all questions*

1. Discuss the recent advances in the laboratory detection of Mycobacterium tuberculosis complex & drug resistance. Define MDR, XDR- TB. 10
2. Discuss the application of the CLSI/ EUCAST 2020 document in Clinical Microbiology reporting. 10
3. Discuss Community Acquired pneumonia with respect to clinical features, etiology agents, treatment guidelines along with drug resistance issues. 10
4. Differentiate between sepsis & septic shock. Discuss the overall management of such a pattern with special emphasis on antibiotic selection. 10
5. Discuss epidemiology & laboratory diagnosis of leptospirosis in Indian context. 10
6. Enlist the fungal agents responsible for chronic meningitis. Discuss lab diagnosis of such cases. 10
7. Discuss the pathogenesis & diagnosis of diseases caused by halophilic vibrios. 10
8. Discuss about types of Pneumococcal vaccines, it's indications & schedule of use. 10
9. What are the virulence factors of Neisseria gonorrhoea. Write briefly on drug resistance of N. gonorrhoea. 5+5
10. Write an essay on surgical site infection. 10