

**PG Degree Supplementary Examinations in Microbiology (MD) -  
November 2016**

**Paper II - Bacteriology and Mycology**

**Time: 3 hrs**

**Max marks:100**

- ***Answer all questions***
- ***Draw diagrams wherever necessary***

**Essays: (20)**

1. Discuss newer genotypic and phenotypic methods for the diagnosis of mycobacterium tuberculosis and status of the newer diagnostic tools for tuberculosis.

**Short essays: (8x10=80)**

2. Outline serological classification of the genus leptospira and discuss the epidemiology and laboratory diagnosis of leptospira.
3. Discuss the criteria for diagnosis of various stages of syphilis including congenital syphilis.
4. Describe briefly yeast and yeast like fungi of medical importance. Outline various laboratory and biochemical methods to differentiate various yeasts.
5. What are mycotoxins. Discuss its role as biological warfare agents.
6. Outline classification of mycoplasma. Enumerate the infections caused by them and briefly discuss their morphology, virulence factor and laboratory diagnosis.
7. Classify non-sporing anaerobic bacteria of medical importance and describe its laboratory identification methods.
8. Enumerate fungi infecting lower respiratory tract in immunocompromized patients. Discuss the laboratory diagnosis of pulmonary aspergillosis.
9. Discuss the mechanism of action of various antifungal agents. Outline in-vitro anti fugal susceptibility testing methods.

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