FINAL EXAM
DECEMBER 2019

NATIONAL BOARD OF EXAMINATIONS

MICROBIOLOGY

PAPER-II

Time: 3 Hours
Max. Marks: 100

MICRO/D/19/18/II

Important Instructions:

- *Attempt all questions in order.*
- *Each question carries 10 marks.*
- *Read the question carefully and answer to the point neatly and legibly.*
- *Do not leave any blank pages between two answers.*
- *Indicate the question number correctly for the answer in the margin space.*
- *Answer all the parts of a single question together.*
- *Start the answer to a question on a fresh page or leave adequate space between two answers.*
- *Draw table/diagrams/flowcharts, wherever appropriate.*

Write short notes on:

1. Discuss pathogenesis, epidemiology and the High-Level Aminoglycoside Resistance (HLAR) in enterococci. 2+2+6

2. Classify non-tuberculous mycobacteria (NTM). Discuss the pathogenicity, laboratory diagnosis and treatment of non-tuberculous mycobacteria. 3+(2+3+2)

3. a) Aflatoxicosis. 5+5
   b) Changing epidemiology of mucormycosis.

4. Enumerate causes of meningitis. Write in detail on laboratory diagnosis of bacterial meningitis. 3+7

5. Write morphology, antigenic property, pathogenicity and laboratory diagnosis of infections caused by *Chlamydia* species. 1+2+2+5

6. Briefly discuss the clinical features, pathogenesis, laboratory diagnosis and treatment of talaromycosis. 2+2+4+2

7. Enumerates bacterial causes of sexually transmitted diseases. Describe pathogenesis and laboratory diagnosis of gonorrhea. 3+(3+4)

8. Describe epidemiology of scrub typhus in India and its laboratory diagnosis. 3+7

9. Hyalophyphomycosis: 2+3+5
   a) Define.
   b) Enumerate causative fungi.
   c) Laboratory diagnosis.

10. Write briefly on antifungal susceptibility testing technique and the recent advances in the field of antifungal testing. Briefly describe about mechanisms of drug resistance in fungi. (4+2)+4

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