MICROBIOLOGY

PAPER - I

MICRO/D/13/18/I

Time : 3 hours
Max. Marks : 100

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.*

1.	Classify mycoplasma and enumerate the various mycoplasma associated with humans. Briefly describe the pathogenicity and laboratory diagnosis of Mycoplasma pneumoniae.	(2+2)+(2+4)
2.	Enumerate various bacterial zoonotic diseases with their causative agent. Briefly write on the epidemiology and recent advances in the laboratory diagnosis of human brucellosis.	3+(2+5)
3.	Briefly describe the various Shigellae with special reference to their pathogenecity and laboratory diagnosis.	4+4+2
4.	Enumerate the various invasive and non-invasive infections caused by H.influenzae. Briefly describe its characteristics on various media used for its isolation. How will you prevent its infection?	3+5+2
5.	Briefly write on the various virulence markers, epidemiology and advances in prophylaxis of S.pneumoniae.	3+3+4
6.	Define mycetoma. Enumerate the types of mycetoma and their causative agents. Write in details the laboratory diagnosis of eumycotic mycetoma.	1+4+5
7.	Write briefly on various types of botulism and its laboratory diagnosis.	6+4
8.	Enlist opportunistic fungal infections in an AIDS case and discuss the clinical presentation, pathogenesis and laboratory diagnosis of cryptococcal infections.	2+2+2+4
9.	Enumerate the conditions and causative agents of fungal infections of the hair. Briefly describe the laboratory diagnosis of each condition.	4+6
10.	Enumerate the various virulence factors of S.aureus and briefly write their role in human disease.	4+6

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