M. Sc. (MEDICAL MICROBIOLOGY): Winter-2022 SUBJECT: PAPER-II (SYSTEMATIC BACTERIOLOGY)

Day : Monday Time : 01:30 PM-04:30 PM

Date: 19-12-2022 W-793-2022 Max. Marks: 100

N. B. :

1) All questions are **COMPULSORY**.

- 2) Figures to the right indicate FULL marks.
- 3) Draw neat and labelled diagrams WHEREVER necessary.
- Q. 1 Describe the pathogenesis and laboratory diagnosis of pulmonary (15) tuberculosis.
- Q. 2 Describe the difference between bacillary and amoebic dysentery. Describe (15) the laboratory diagnosis of shigellosis.
- Q. 3 Write briefly ANY SEVEN of the following: (70)
 - a) Enumerate organisms causing UTI. Describe laboratory diagnosis of UTI caused by E.coli.
 - b) Describe laboratory diagnosis of leptospirosis.
 - c) Describe the virulence factors, pathogenicity and laboratory and diagnosis of Staphylococcus aureus. Add a note on PVL toxin.
 - d) Enumerate the differences in the biochemical, cytological laboratory findings in Cerebrospinal fluid examination to differentiate between bacterial, viral and tubercular meningitis.
 - e) Enumerate organisms causing Gastroenteritis. Describe the laboratory diagnosis of Cholera.
 - f) Discuss the laboratory diagnosis of Whooping Cough. Add a note on its prophylaxis.
 - g) Enumerate the organisms causing food poisoning. Discuss the laboratory diagnosis of clostridium botulinum food poisoning.
 - h) Discuss laboratory diagnosis of Corynebacterium diphtheriae and add a note on its immune-prophylaxis.

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