

BHARATI VIDYAPEETH (DEEMED TO BE UNIVERSITY), PUNE, INDIA
M. Sc. (MEDICAL MICROBIOLOGY): Winter-2022
SUBJECT : PAPER - 1
(GENERAL MICROBIOLOGY)

Day : Friday

Time : 01:30 PM-04:30 PM

Date : 16-12-2022

W-792-2022

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.
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Q. 1 Describe virulence factors of bacteria. **(15)**

Q. 2 Describe the structure, functions and methods of demonstration of various bacterial cell organelles. **(15)**

Q. 3 Write briefly **ANY SEVEN** of the following: **(70)**

- a) What are the contributions of Robert Koch? Describe Koch's postulates.
- b) Describe various methods of antibiotic susceptibility testing.
- c) Describe various genetic mechanisms of drug resistance with suitable example.
- d) Define sterilization. Write in details about moist heat sterilization.
- e) Describe fluorescent microscope and its applications.
- f) Describe bacterial growth curve.
- g) Write details about post exposure prophylaxis to occupational exposure to blood borne pathogen.
- h) Describe various anaerobic culture methods.

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