

2019

MSc

2nd Semester Examination

MICROBIOLOGY

PAPER – MCB-201

**(Supplementary)
(Theory)**

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Group – A

Answer any **TWO** questions

10X2=20

- 1) Define pathogen and its virulence. What are opportunistic pathogen? Cite one example. State Koch's postulates. (2+1)+(2+1)+4
- 2) Write in brief about the mechanism of tissue injury in relation to microbial infection. What are the chemical weapons of pathogens? What do you mean by virus-induced cell transformation? 4+3+3
- 3) Write short note on (any **FOUR**) 2.5 X 4
- a) Microbial toxin
 - b) Local and systemic acquired resistance
 - c) Stages in the development of disease
 - d) Horizontal resistance
 - e) Disease resistant plant

Group – B

Answer any **TWO** questions:

10 X 2=20

- 4) Differentiate between humoral and cell-mediated immunity. What is antibody diversity? Write in brief about B and T cells epitopes. 3+3+(2+2)
- 5) What do you mean by T-dependent antigen? State the hyper variable region of immunoglobulin. What is primary and secondary lymphoid organ? State the structure and function of Ig M. 2+2+2+4
- 6) Write short note on : (any **FOUR**) 2.5 X 4
- a) Toll-like receptor
 - b) Autoimmunity
 - c) MHC complex
 - d) Complement system
 - e) APC cell