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Total Number of Pages : 1

AR-19

M.SC

M.Sc 1ST SEMESTER REGULAR EXAMINATIONS, NOV/DEC 2019-20

LSPC103-Microbiology & Immunology

Time: 3 Hours

Max Marks: 80

The figures in the right hand margin indicate marks.

SECTION A

Q.1 Answer any **four** of the following:

[4 X4 =16]

- Structure of TMV
- Cell wall of bacteria
- Economic importance of *Cyanobacteria*
- What is gene transduction
- What is difference between innate and acquired immunity
- Acquired immunodeficiency syndroms

OR

2. Answer **all** questions from the following

[2 x 8 =16]

- T4 Bacteriophage
- Gram negative bacteria
- What are yeasts used for ?
- Why do we need to preserve food ?
- What is Metagenomic analysis ?
- How does a viral vector work ?
- What type of immunity leads to memory ?
- What is acute Glomerulonephritis ?

SECTION-B

3. Answer **all** Questions:

[16 x4 =64]

- Write an essay on Lytic cycle in phage lamda ?

OR

- Describe the structure of *E.coli* and explain it ?

4.

- Write an essay on *Actinomycetes* ?

OR

- How antibiotics are produced by fermentation technology ? Explain

5.

- Describe in detail the mechanism of genetic recombination in T4 Bacteriophage ?

OR

- How are viruses used in Genetic Engineering ? Explain

6.

- Explain the structure of the deferent types of Immunoglobulins met with in the human system.

OR

- What are the functions of major histocompatibility complexes in immune system ?