

S-189

Total Pages : 2

Roll No.

MSCZO-604

Microbiology and Immunology

M.Sc. Zoology (MSCZO)

3rd Semester Examination, 2022 (Dec.)

Time : 2 Hours]

Max. Marks : 70

Note : This paper is of Seventy (70) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

SECTION-A

(Long Answer Type Questions)

Note : Section 'A' contains Five (05) long answer type questions of Nineteen (19) marks each. Learners are required to answer any Two (02) questions only.

(2×19=38)

1. Explain the degradation reaction taking place in anaerobic digester.
2. Explain the various vaccination strategies against viral diseases.

3. Write a comprehensive note on structure genome organisation and replication of HIV.
4. Discuss the technologies used for diagnosis of cholera, typhoid and Leprosy infections.
5. Explain tumour antigens and different immune responses against them.

SECTION-B
(Short Answer Type Questions)

Note : Section 'B' contains Eight (08) short answer type questions of Eight (08) marks each. Learners are required to answer any Four (04) questions only. (4×8=32)

1. What is microbiology ? Explain importance of microbiology.
2. Draw a well labelled diagram of a bacterial cell.
3. Discuss the role of microbes in carbon cycling.
4. Why *Bacillus thuringiensis* is used as a biopesticide.
5. Write a brief note on innate and acquired immunity.
6. Discuss the basic structure of an immunoglobulin molecule.
7. Discuss various T-cell deficiency diseases.
8. Name various types of graphs with suitable examples.