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Total Pages: 3 Roll No.

ZO-551

Immunology

M.Sc. Zoology (MSCZO)

2nd Year Examination, 2023 (June)

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. Candidates should limit their answer to the questions on the given answer sheet. No additional (B) answer sheet will be issued.

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.

 $(2 \times 19 = 38)$

1. Write in detail on innate and acquired immunity.

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- **2.** Describe the characteristic features of various antibody classes and discuss their biological properties.
- **3.** What is autoimmunity? Classify the autoimmune diseases.
- **4.** Explain the mechanism of graft rejection with suitable diagrams.
- **5.** Write in detail classification of vaccines.

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.** Write short note on :
 - (i) MHC associated disease.
 - (ii) MHC restriction.
- **2.** Discuss functions of cell mediated immunity.
- **3.** Define antigens and haptens.

- **4.** Write notes on :
 - (i) Spleen.
 - (ii) Lymphoid organ.
- **5.** Write briefly the role of lymphocyte in immune response.
- **6.** Give an account of the immune responses exhibited by malarial parasite.
- **7.** Explain the principle of ELISA and how it is useful in diagnosing HIV?
- **8.** Explain tumour antigens and different immune responses against them.