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THIRD SEMESTER M.Sc. DEGREE (REGULAR/SUPPLEMENTARY) EXAMINATION, NOVEMBER 2021

(CBCSS)

Zoology

ZOL 3C 07—IMMUNOLOGY

(2019 Admission onwards)

Time : Three Hours

Maximum: 30 Weightage

General Instructions

- 1. In cases where choices are provided, students can attend all questions in each section.
- 2. The minimum number of questions to be attended from the Section / Part shall remain the same.
- 3. The instruction if any, to attend a minimum number of questions from each sub section / sub part / sub division may be ignored.
- 4. There will be an overall ceiling for each Section / Part that is equivalent to the maximum weightage of the Section / Part.

Part A

- I. Answer any four of the following. Each question carries 2 weightage:
 - 1 Precipitation reactions.
 - 2 B-cell receptors.
 - 3 Common adjuvants.
 - 4 Exogenous pathway of antigen processing.
 - 5 Recombinant Signal Sequence.
 - 6 Distinguish between allografts and autografts.
 - 7 What are monoclonal antibodies?

 $(4 \times 2 = 8 \text{ weightage})$

Part B

- II. Answer any four of the following. Each question carries 3 weightage:
 - 8 Write a short essay on the structure of MHC-I molecules.
 - 9 Compare ELISA with Western Blot technique.
 - 10 Compare humoral and cellular immunity.

- With illustrations describe the structure of a typical immunoglobulin $m_0|_{e_{C_0|_e}}$
- Write a short essay on Type-II hypersensitivity reaction.
- 13 Briefly describe the factors that influence immunogenicity
- 14 Write a short essay on Classical complement pathway.

(4×3×2)

- Answer any two of the following. Each question carries 5 weightage:
 - 15 Write an elaborate account on cytokines and their role in immune mechanism.
 - 16 Write an essay on hematopoiesis.
 - Write an essay on different types of vaccines. Add a note on their merits and im-
 - 18 Write an essay on immune deficiency diseases.

(2 x 5 = 3)