

**C 22042**

**(Pages : 2)**

**Name.....**

**Reg. No.....**

**FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, JUNE 2017**

**(CUCSS)**

**Zoology**

**ZO 4C T10—IMMUNOLOGY**

**Time : Three Hours**

**Maximum : 36 Weightage**

**I. Answer the following :—**

- 1 Dendritic cells.
- 2 ADCC.
- 3 Toll-like receptors.
- 4 M cells.
- 5 Cytokines.
- 6 Immune clearance.
- 7 Passive immunity.
- 8 RIA.
- 9 Chimeric antibodies.
- 10 Immunological tolerance.
- 11 B cell receptor.
- 12 Ig determinants.
- 13 MHC polymorphism.
- 14 Agglutinins.

**(14 × 1 = 14 weightage)**

**II. Answer any seven of the following :—**

- 15 Describe complement mediated biological functions.
- 16 Describe briefly humoral immune response.
- 17 Explain delayed type hypersensitivity reactions.

**Turn over**



- 18 Explain the mechanism of class switching.
  - 19 Describe the structure and function of MHC molecules.
  - 20 Explain briefly hybridoma technology.
  - 21 Write notes on subunit vaccines.
  - 22 Describe immune responses to bacterial infections.
  - 23 Describe different classes of immunoglobulins.
  - 24 What are adjuvants ? Write the functions of different types of adjuvants.
- (7 × 2 = 14 weightage)

III. Answer any *two* of the following :—

- 25 Describe different types of innate immunity mechanisms.
  - 26 Describe various antigen presentation pathways.
  - 27 Write the structure and functions of secondary lymphoid organs.
  - 28 What are immunodeficiency disorders ? Classify and enumerate immunodeficiency diseases.
- (2 × 4 = 8 weightage)