

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, JUNE 2019

(CUCSS)

Microbiology

MB 2C 06—IMMUNOLOGY

(2010 Admissions)

Time : Three Hours

Maximum : 36 Weightage

I. Answer *all* questions. Comment on the following. Each question carries 1 weightage :

- 1 Secretory IgA.
- 2 Immunoglobulin class switching.
- 3 Immuno-electrophoresis.
- 4 Thymus.
- 5 Memory B cells.
- 6 LE phenomenon.
- 7 Tumour necrosis factors.
- 8 Arthus reaction.
- 9 X-linked agammaglobulinemia.
- 10 Lymphadenoid goitre.
- 11 GVH reaction.
- 12 Bombay blood group.
- 13 Lymphokines.
- 14 Antigen dependant cytotoxic cells.

(14 x 1 = 14 weightage)

II. Write note in *one paragraph* on any *seven* of the following. Each question carries 2 weightage :

- 15 Processing and presentation of antigens.
- 16 T-cell maturation and development.
- 17 Immunodiffusion in gel.
- 18 ELISA.
- 19 Anaphylaxis.

Turn over

20 Immune responses to tumours.

21 Secondary immunodeficiencies.

22 Immunoglobulin isotypes and allotypes.

23 HLA.

(7 x 2 = 14 weightage)

III. Explain any *two* of the following. Each question carries 4 weightage :

24 Structure of IgG.

25 Cells of immune system.

26 Hybridoma technology and monoclonal antibody production.

(2 x 4 = 8 weightage)