

M. SC. (MICROBIOLOGY) SEM-I (C.B.C.S.) (2012 COURSE) :

WINTER - 2017

SUBJECT : IMMUNOLOGY

Day : Thursday
Date : 26/10/2017

Time : 03.00 PM TO 06.00 PM
Max. Marks : 60

W-2017-0802

N.B.:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Draw neat and labelled diagram **WHEREVER** necessary.
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Q.1 Explain classical and alternative complement pathway. **[15]**

OR

Explain the structure and biological activities of various classes of immunoglobulins.

Q.2 a) Compare peptide binding clefts in MHC – I and MHC – II molecules. **[08]**

b) Explain type I hypersensitivity. **[07]**

Q.3 Attempt **ANY THREE** of the following: **[15]**

- a) Explain malignant transformation of cells.
- b) What is mechanism of induction of Autoimmunity?
- c) Write a note on immunosuppressive therapy.
- d) Describe the properties of cytokines.
- e) What are the primary immunodeficiencies? Explain with example.

Q.4 Write short notes on **ANY THREE** of the following: **[15]**

- a) Rheumatoid arthritis
- b) Tumor antigens
- c) Myasthenia gravis
- d) Antibody engineering
- e) MHC in disease susceptibility

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