

Code No. 2389 / CORE

FACULTY OF SCIENCE
M. Sc. III – Semester Examination, January 2018

Subject : Biochemistry

Paper – II
Immunology and Immunotechnology

Time : 3 Hours

Max. Marks: 80

Note : Answer all questions from Part–A and Part–B. Each question carries 4 marks in Part–A and 12 marks in Part – B.

PART – A (8 x 4 = 32 Marks)
(Short Answer Type)

- ~~1~~ Brief history of Immunology
- ~~2~~ Neonatal immunity
- ~~3~~ Functions of MHC proteins
- ~~4~~ Immune response to tumours
- ~~5~~ Microbial evasion of immune response
- ~~6~~ Coombs classification of hypersensitivity
- ~~7~~ Polyclonal and monoclonal antibodies
- ~~8~~ Western blotting and FACs techniques

PART – B (4 x 12 = 48 Marks)
(Essay Answer Type)

- 9 (a) Discuss the theories of antibody fermentation and add a note on genes involved in antibody production.

OR

- (b) Write note on :
- (i) Classification of immunoglobulins
 - (ii) Types of adjuvants and their applications

- 10 (a) Discuss the kinetics and regulations of immune response.

OR

- (b) Give an account of complement system.

- 11 (a) Write note on types of hypersensitivity and explain the mechanism of activation.

OR

- (b) Discuss about :
- (i) immunodeficiency disorders
 - (ii) Autoimmune diseases

- 12 (a) Discuss the Hybridoma technology and its applications.

OR

- (b) Write note on :
- (i) ELISA
 - (ii) Antigen-Antibody interactions and visualization
