

NRT/KS/19/2179

Bachelor of Science (B.Sc.) Semester–VI Examination

IMMUNOLOGY

Optional Paper–1

(Microbiology)

Time : Three Hours]

[Maximum Marks : 50

N.B. :— (1) **ALL** questions are compulsory and carry equal marks.

(2) Draw well labelled diagrams wherever necessary.

1. Describe the first line of defence mechanisms of host. 10

OR

Discuss structure and functions of secondary lymphoid organs. 10
2. (a) Write a note on dendritic cell. 2½
(b) What are cytokines ? Describe in brief. 2½
(c) Explain T cell receptor. 2½
(d) Write a note on primary immune response. 2½

OR

(e) Describe types of T-Cell. 2½
(f) Give outline of T-Cell independent antibody response. 2½
(g) Explain Mast Cells. 2½
(h) Write a note on macrophages. 2½
3. Define Antigen. Describe antigens in relation to human beings. 10

OR

Describe various applications of precipitation reaction. 10
4. (a) Write a note on anaphylaxis. 5
(b) Explain direct ELISA test. 5

OR

(c) Discuss serum sickness. 5
(d) Discuss Mantoux test. 5
5. Answer any **TEN** :
(a) What is Bursa of Fabricius ? 1
(b) Define natural immunity. 1
(c) Give any two functions of thymus. 1
(d) What are antigen presenting cells ? 1
(e) What are interleukins ? 1
(f) What is the role of eosinophils ? 1
(g) Define haptens. 1
(h) Define antibody titre. 1
(i) What is the role of secretory piece ? 1
(j) What is an allergen ? 1
(k) What is erythroblastosis foetalis ? 1
(l) What is atopy ? 1