

2025

M.Sc. 3rd Semester Examination
HUMAN PHYSIOLOGY

Paper : PHY - 305

(Human Immune System)

Full Marks : 25

Time : One Hour

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Group - A

Answer any *two* questions : $2 \times 2 = 4$

1. What does clonal selection mean? 2
2. Define affinity and avidity. 1+1
3. Mention the role of cytokines in the development of immunity. 2
4. How do the B- and T-cell lineage determination occur from a common lymphoid progenitor cell? 2

Group - B

Answer any *two* questions : $4 \times 2 = 8$

5. With relevant diagram(s) describe the T-cell processing, migration, and maturation in vivo. 4

P.T.O.

(2)

6. Write a brief note on monoclonal antibodies. 4
7. Differentiate between class-I and class-II MHC molecule. 4
8. Write a note on the SRID assay. 4

Group - C

Answer any *one* question : $8 \times 1 = 8$

9. What is meant by the Quantitative Precipitation Reaction? Mention the structure and functions of IgE. What is Homocytotropism? $2 + (2 + 2) + 2$
10. Discuss the mechanism of immunosurveillance by Treg cells. 8

Internal Assessment : 5 marks
