

QP Code: 101108

Reg. No.:.....

**PG Degree Regular/Supplementary Examinations in Immuno  
Haematology and Blood Transfusion Medicine (MD) January 2025**

**Paper I – Applied Aspects of Basic Sciences in Relation to Transfusion Medicine**

**Time: 3 hrs**

**Max marks:100**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

**Essay: (20)**

1. What is Histocompatibility complex. Write in detail HLA antigens and add a note on Clinical importance and methods of HLA typing.

**Short essays: (8x10=80)**

2. Discuss red cell membrane - structure and physiological function. Give examples of red cell membrane disorders
3. Platelet storage lesions
4. Discuss the causes and pathogenesis of hypovolemic shock
5. Enlist the types of hypersensitivity reactions and explain the pathogenesis of each type with examples
6. Draw a detailed flowchart of the Coagulation cascade
7. Discuss the structure and metabolism of Hemoglobin
8. List the various types of Immunoglobulins. Discuss the synthesis, structure and mechanism of action of IgG
9. Discuss the differences between Innate and Acquired Immunity

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