

IMMUNOHAEMATOLOGY & BLOOD TRANSFUSION

PAPER-I

Time: 3 hours
Max. Marks:100

IMHT/J/19/15/I

Important Instructions:

- *Attempt all questions in order.*
- *Each question carries 10 marks.*
- *Read the question carefully and answer to the point neatly and legibly.*
- *Do not leave any blank pages between two answers.*
- *Indicate the question number correctly for the answer in the margin space.*
- *Answer all the parts of a single question together.*
- *Start the answer to a question on a fresh page or leave adequate space between two answers.*
- *Draw table/diagrams/flowcharts wherever appropriate.*

Write short notes on:

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| 1. | a) Define hypersensitivity reactions. | 4+6 |
| | b) Role of Type I hypersensitivity reaction in Transfusion medicine. | |
| 2. | a) Normal coagulation pathway. | 5+5 |
| | b) Describe laboratory investigations in bleeding disorders. | |
| 3. | Draw platelet membrane structure with its antigenic profile. Discuss the most commonly involved platelet antigens in fetal and neonatal alloimmune thrombocytopenia. | 5+5 |
| 4. | Discuss iron metabolism. Discuss the laboratory markers to pick up Iron Deficiency Anemia in blood donors. | 10 |
| 5. | a) Define & classify cytokines. | 5+5 |
| | b) Role of cytokines in febrile non-hemolytic transfusion reactions. | |
| 6. | Current Biomedical waste management practices in blood banks. | 10 |
| 7. | a) Describe various subtypes of lymphocytes. | 5+5 |
| | b) Functions of T and B lymphocytes in immune response. | |
| 8. | Hybridoma technology and its application in Immunohematology. | 10 |
| 9. | Hardy Weinberg equation and its application in transfusion medicine. | 5+5 |
| 10. | a) Synthesis of antigens of ABO blood group system. | 5+5 |
| | b) Procedure to detect subgroups of A blood group. | |
