

**IMMUNOHAEMATOLOGY & BLOOD TRANSFUSION**

PAPER-II

IMBT/D/18/15/II

Time: 3 hours

Max. Marks:100

**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:**

1. a) What are the merits/demerits of automated immunohaematology testing? 5+5  
b) Describe briefly various automated pre-transfusion testing platforms.
2. Transfusion support in ABO incompatible hematopoietic stem cell transplant. 10
3. a) Describe electronic cross-match. 6+4  
b) Discuss its feasibility in India.
4. Discuss Transfusion Protocols in the management of Thalassemia. 10
5. a) Discuss the types and pathophysiology of Autoimmune Hemolytic Anemia. 5+5  
b) Its laboratory evaluation and transfusion support.
6. a) Principle of apheresis technique. 2+8  
b) Classify therapeutic indications of apheresis as per ASFA guideline.
7. a) Pathophysiology of vasovagal reactions. 5+5  
b) Their management and preventive strategies.
8. a) Enumerate the transfusion transmitted infections. 5+5  
b) How will you investigate an alleged incident of transfusion transmitted HIV infection in recipients?
9. a) What is meant by 'Extended Phenotyping' of red cells? 5+5  
b) What is the advantage of molecular methods of extended phenotyping over serological methods?
10. a) Discuss the principles of flow Cytometry using diagrams. 3+7  
b) Describe the uses of flow cytometry in current transfusion medicine practice.

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