

**PATHOLOGY****PAPER-IV**Time: 3 hours  
Max. Marks:100

PATH/J/19/32/IV

**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) Algorithm to use of blood components therapy in bleeding disorders. 5+5  
b) Cord blood stem cells.
2. a) Qualitative defects of platelets and their diagnosis. 5+5  
b) Hemophilia.
3. a) Recent advances in Myelodysplastic syndrome diagnosis. 5+5  
b) Diagnostic criteria of light chain disease.
4. a) TRALI. 5+5  
b) Diagnosis of microcytic anemias.
5. a) Minimal residual disease monitoring in CML. 5+5  
b) Secondary autoimmune hemolytic anemia.
6. a) Thrombin-activable Fibrinolysis Inhibitor (TAFI): An important contributor in the fibrinolytic system. 5+5  
b) Pathophysiology of bleeding in dengue virus infection: A Holistic view.
7. a) Hepcidin. 5+5  
b) Thalassemia Screening & Control Program.
8. a) Molecular pathology of germinal cell derived B cell lymphomas. 5+5  
b) Hemovigilance
9. a) Therapeutic indications of various blood component. 5+5  
b) Absolute indications of bone marrow trephine biopsy & their diagnostic value.
10. a) Quality control in hematology laboratory. 5+5  
b) Biomedical waste management in pathology laboratory.

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