PATHOLOGY
PAPER – IV

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) Blood cell substitutes.  
   b) Immunological complications of transfusion.  

2. a) Neonatal sepsis – haematological and flow cytometric evaluation.  
   b) Algorithm of diagnostic approach for purpuric bleeding.

3. Trephine biopsy:  
   a) Indications.  
   b) Fixation and processing technique.  
   c) Role of special stains and immunohistochemical markers.  
   d) Reporting format.

4. a) Thromboelastography – uses & technique.  
   b) Monoclonal Gammopathy of uncertain significance: diagnostic features.

5. a) Large granular lymphocytic leukemia: diagnostic features and molecular changes.  
   b) Peripheral blood and bone marrow findings in myelodysplastic syndromes.

6. a) Anemia of chronic disorders: definition and laboratory evaluation.  
   b) Fluorescent staining patterns of antinuclear antibodies and their diagnostic significance.

7. a) Screening for thalassemia syndromes.  
   b) Chediak Higashi Syndrome.

8. a) Acute Megakaryoblastic Leukemia.  
   b) Congenital dyserythropoietic anemias

9. a) Bernard Soulier Syndrome: Clinical features & lab diagnosis.  
   b) Quality Control in automated haematology analyzers.

10. a) Hematopoietic Growth factors and their applications.  
    b) Cryoprecipitates.

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