



PATHOLOGY
PAPER - IV

PATH/J/14/32/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 note on:

1. What are the various red cell indices measured by automated hematology analyzers? What is their role in evaluation of anemia? 5+5
2. Describe the ISTH criteria for diagnosis and laboratory investigations for diagnosis of anti-phospholipid syndrome (APLA). 5+5
3. a) Hematologic manifestations of HIV infection 5+5
b) Transfusion associated GVHD
4. Describe the clinicopathologic spectrum, immune response and laboratory diagnosis of Epstein Barr Virus infection. 3+3+4
5. a) Blast equivalents in diagnosis of acute leukemias 5+5
b) Molecular pathogenesis of β -thalassemia
6. a) Pathogenesis and laboratory diagnosis of Paroxysmal Nocturnal Hemoglobinuria (PNH) 5+5
b) Pure red cell aplasia
7. Enumerate chronic lymphoproliferative disorders. Discuss the role of morphology and immunophenotyping in diagnosing these cases. 3+7
8. a) Nucleic acid technology in blood donor screening 5+5
b) Hemovigilance
9. a) Congenital morphological anomalies of leukocytes 5+5
b) Platelet function disorders
10. a) N K cell lymphoma 5+5
b) Prognostic factors in acute lymphoblastic leukemia