

FINAL EXAM
JUNE 2014

NATIONAL BOARD OF EXAMINATIONS

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
b) Transfusion associated GVHD | 5+5 |
| 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
b) Molecular pathogenesis of β -thalassemia | 5+5 |
| 6. a) Pathogenesis and laboratory diagnosis of Paroxysmal Nocturnal Hemoglobinuria (PNH)
b) Pure red cell aplasia | 5+5 |
| 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
b) Hemovigilance | 5+5 |
| 9. a) Congenital morphological anomalies of leukocytes
b) Platelet function disorders | 5+5 |
| 10. a) N K cell lymphoma
b) Prognostic factors in acute lymphoblastic leukemia | 5+5 |