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PATHOLOGY PAPER-IV

Time: 3 hours Max. Marks: 100

PATH/D/19/32/IV

IMPORTANT INSTRUCTIONS

- This question paper consists of 10 questions divided into Part "A" and part "B", each part containing 5 questions.
- Answers to questions of part A and part B are to be strictly attempted in separate answer sheet(s)
 and the main + supplementary answer sheet(s) used for each part must be tagged separately.
- Answers to question(s) of Part A attempted in answer sheet(s) of part B or Vice versa shall not be evaluated.
- Answer sheets of Part A and Part B are not to be tagged together.
- Part A and Part B should be mentioned only on the covering page of the respective answer sheets.
- 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:

PART A

1.	Approach to the diagnosis of polycythemia.	10
2.	Genetic biomarkers in myeloid malignancies.	10
3.	a) Bone marrow failure syndromes.b) Role of immunophenotyping in the diagnosis of chronic lymphoproliferative disorders.	5+5
4.	a) Detection of minimal residual disease in multiple myeloma.b) External Quality Assurance in hematology.	5+5
5.	a) Non-hemolytic transfusion reactions.b) Prenatal diagnosis of hemoglobinopathies.	5+5