

**PATHOLOGY**

PAPER – IV

PATH/D/15/32/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 notes on:**

1.	a) Blood cell substitutes.	5
	b) Immunological complications of transfusion.	5
2.	a) Neonatal sepsis – haematological and flow cytometric evaluation.	5
	b) Algorithm of diagnostic approach for purpuric bleeding.	5
3.	Trephine biopsy:	
	a) Indications.	2
	b) Fixation and processing technique.	2
	c) Role of special stains and immunohistochemical markers.	3
	d) Reporting format.	3
4.	a) Thromboelastography – uses & technique.	2+3
	b) Monoclonal Gammopathy of uncertain significance: diagnostic features.	5
5.	a) Large granular lymphocytic leukemia: diagnostic features and molecular changes.	5
	b) Peripheral blood and bone marrow findings in myelodysplastic syndromes.	5
6.	a) Anemia of chronic disorders: definition and laboratory evaluation.	1+4
	b) Fluorescent staining patterns of antinuclear antibodies and their diagnostic significance.	5
7.	a) Screening for thalassemia syndromes.	5
	b) Chediak Higashi Syndrome.	5
8.	a) Acute Megakaryoblastic Leukemia.	5
	b) Congenital dyserythropoietic anemias	5
9.	a) Bernard Soulier Syndrome: Clinical features & lab diagnosis.	2+3
	b) Quality Control in automated haematology analyzers.	5
10.	a) Hematopoietic Growth factors and their applications.	5
	b) Cryoprecipitates.	5

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