

2025

M.Sc. 1st Semester Examination

MEDICAL LABORATORY TECHNOLOGY

Paper : MLTC401X0

[Haematology]



Full Marks : 25

Time : One Hour

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Group - A

Answer any *two* questions : $2 \times 2 = 4$

1. What do you mean by plasma cell myeloma?
- ✓ 2. What is MDS?
3. Which type of leukaemia is very common for children?
Write two features of this leukaemia.
- ✓ 4. What do you mean by tactoid formation?

Group - B

Answer any *two* questions : $4 \times 2 = 8$

- ✓ 5. What caused Methamoglobinemia? What do you mean
by hydrops fetalis? $2+2$

P.T.O.

6. Write about the tertiary and quaternary structure of Hb.

7. What do you mean by leukopenia? Why high level of Haemoglobin is found in the individuals living in high altitude? 2+2

8. Write a short note on hairy cell Leukemia.



Group - C

Answer any *one* question : 8×1=8

9. Briefly describe the role of erythropoietin in the regulation of erythropoiesis mentioning its source. Describe the role of biosynthetic process of haemoglobin with a suitable diagram. 4+4

10. Describe the molecular basis of pathophysiology of sickle cell anaemia. Discuss the significance of each red cell indices in each of the different types of anaemia separately. 4+4

Internal Assessment : 5 marks
