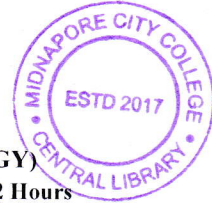


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M.Sc. Semester- IV Examination, 2026
MEDICAL LABORATORY TECHNOLOGY
 PAPER: MLT 402C

(ADVANCE HAEMATOLOGY & IMMUNO HAEMATOLOGY)

Full Marks: 40

Time: 2 Hours



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

GROUP-A

Answer any **FOUR** questions:**2×4=8**

1. What is D-dimer?
2. Write clinical application of CDPA1 in blood bank.?
3. Write the storage condition of RBC concentrate and cryoprecipitate for transfusion.
4. What are PT and aPTT?
5. Write the importance of minor cross match.
6. Why is EDTA preferred as an anticoagulant in automated cell counters?

GROUP-B

Answer any **FOUR** questions:**4×4=16**

7. Write the causes of HDN.
8. Describe the pathophysiology of thrombotic thrombocytopenic purpura (TTP).
9. Discuss about the TRALI and its management.
10. Explain the role of Virchow's Triad in thrombosis.
11. Describe the procedure for the Preparation of fresh frozen plasma.
12. Write criteria's for donor selection and rejection.

GROUP-C

Answer any **TWO** questions:**8×2=16**

13. Write about the different types of blood bags? Why manual Hb estimation is less accurate than automated methods? 4+4
14. What is Bombay blood group? What is Rh null? Write the significance of D u test? 3+3+2
15. Discuss about the transfusion reactions with example. Write the role of SAGM in blood bank. 4+4
16. Write down the working principle of Automated cell counter. Discuss about the ideal peripheral blood smear preparation. 4+4

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