

**KALOJI NARAYANA RAO UNIVERSITY OF HEALTH SCIENCES
WARANGAL, TELANGANA STATE – 506 002**

M.D/ M.S DEGREE EXAMINATIONS: OCTOBER 2025

TRANSFUSION MEDICINE

PAPER – I

Time: 3 Hours

Max Marks: 100

Note: Answer all questions

Give Diagrammatic representation wherever necessary

Write an essay on the following:

10 X 10 = 100

1. Discuss the risk factors for iron deficiency in blood donors and various methods to assess iron status in blood donors. What are the strategies for mitigation of iron deficiency in blood donors?
2. Discuss the various red cell storage lesions. Strategies to reduced / prevent the red cell storage lesions
3. Discuss characteristics of antigens and blood group antibodies that influence immune response
4. Principle of coombs test. Discuss with relevant diagrams direct antiglobulin test (DAT) and various in-Vivo phenomenon associated with a positive DAT.
5. Define platelet refractoriness and discuss various causes of platelet refractoriness. How do you determine platelet refractoriness in a patient
6. Define febrile non haemolytic transfusion reaction (FNHTR). Describe the mechanisms / reasons for FNHTR. What are the adverse reaction associated with leukocyte reduction?
7. Enumerate the common organisms responsible for bacterial transmission from RBC concentrates and platelet concentrates. What are the various challenges associated with bacterial screening as compared to viral screening
8. Discuss the various pre-operative strategies of a patient blood management (PBM) program
9. Rejuvenation of red blood cells
10. Principles of the different modalities / techniques being used for apheresis. Discuss the various adverse effects associated with apheresis procedure
