

M.D. DEGREE EXAMINATION

BRANCH XXI – IMMUNOHAEMATOLOGY AND BLOOD TRANSFUSION

**PAPER IV – RECENT ADVANCES IN IMMUNO-HAEMATOLOGY AND
BLOOD TRANSFUSION**

Q.P.Code: 202099

Time: Three Hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 15 = 30)

1. Recent advances in pathogen reduction technology for blood.
2. Laboratory methods of nucleic acid testing and benefits.

II. Write notes on:

(10 x 7 = 70)

1. Next generation sequencing and its applications in transfusion practice.
2. Principle of Luminex platform and its applications.
3. Single nucleotide polymorphism.
4. Describe the strategy to set up a rare blood donor registry.
5. Impact of leukocytes in red cell units and strategies to reduce it.
6. Anti thrombin III.
7. Effect of transfusion on tumor cells and cancer.
8. Role of microparticles in thrombotic disorders.
9. Technology to improve bedside safety in transfusion.
10. Extra corporeal membrane oxygenation
