

[LQ 190]

AUGUST 2020  
(MAY 2020 SESSION)

Sub. Code: 3014

**M.D. DEGREE EXAMINATION**

**BRANCH XXI – IMMUNOHAEMATOLOGY AND BLOOD TRANSFUSION**

**PAPER IV – RECENT ADVANCES IN TECHNOLOGY**

*Q.P. Code: 203014*

**Time: Three Hours**

**Maximum: 100 Marks**

**I. Essay Questions:**

**(2 x 15 = 30)**

1. a. Indications and principle of extra corporeal photopheresis.  
b. Discuss its efficacy in the treatment of graft-versus-host disease.
2. a. Various methods of bacterial detection and pathogen inactivation in blood components.  
b. Various technologies under development to lengthen the storage life in platelet concentrates.

**II. Short notes:**

**(10 x 7 = 70)**

1. COVID-19 and blood safety.
2. Cytapheresis: indications and techniques.
3. a. What is pegylated G-CSF?  
b. What are other pegylated products used in hematology?
4. Application of “LEAN” concept in transfusion medicine.
5. Nested polymerase chain reaction.
6. Biotin-labeled platelets.
7. Rejuvenated RBCs.
8. Monocyte monolayer assay.
9. Blood Group phenotyping by (Nitrocellulose based – LFT) lateral flow technique.
10. Stem cell therapy in HIV patients.

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