

Rajiv Gandhi University of Health Sciences

MD Degree Examination - MAY-2019

[Time: 3 Hours]

[Max. Marks: 100]

TRANSFUSION MEDICINE

Blood donor organization, Technology of components, clinical hemotherapy

PAPER – III

Q.P. CODE: 9187

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

Answer All The Questions

10 X 10 = 100 Marks

1. Discuss the steps to set up blood component and apheresis facilities for a tertiary care new 500 bed facility.
2. A 22 year old college student has been donating blood once a year for the past 3 years. No problem were encountered for the first two donation. However, on the third donation, the donated unit was found to be anti-HIV reactive.
3. Discuss various aspects required to set up a good quality management system in a transfusion service.
4. Describe various bacteria that can contaminate blood and its components. Discuss the strategies for prevention of bacterial contamination in blood supply. Add a note on the rapid platelet bacterial contamination detection technologies.
5. Write in detail the transfusion support and management in ABO incompatible solid organ transplant? Strategies to avoid empiric blood product administration in liver transplant surgery.
6. Evaluate the risk and benefits of blood salvage techniques during massive transfusion.
7. Therapeutic plasma exchange-Principle and indications.
8. Discuss the role of Hospital transfusion committee for safe and appropriate use of blood.
9. A preterm infant presented with jaundice and anemia. Paediatrician has planned for exchange transfusion. Give the guidelines suggested for exchange transfusion for haemolytic disease of preterm infant within 12 hours of birth, What would be the ideal blood group of choice? Explain further other aspects of exchange transfusion in such neonates.
10. Random donor platelet concentrate was prepared and stored in platelet agitator cum incubator. On the 3rd day of storage, swirling movement was found to be absent.
 - i. What is the significance of this finding?
 - ii. What corrective action should be taken in future?
 - iii. What records will you check?
 - iv. What is the mechanism of swirling?
 - v. Enumerate quality control tests for platelet concentrate.

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