

**M.D. DEGREE EXAMINATION****BRANCH XXI – IMMUNOHAEMATOLOGY AND BLOOD TRANSFUSION****PAPER III – BLOOD DONOR ORGANISATION AND MANAGEMENT,  
TECHNOLOGY OF COMPONENTS AND CLINICAL HAEMOTHERAPY***Q.P.Code: 202098***Time: Three Hours****Maximum: 100 Marks****I. Elaborate on:****(2 x 15 = 30)**

1. Discuss the appropriate investigations and suggested management in a 56 year old male, who has undergone urgent coronary bypass graft surgery following a failed coronary arterial stent procedure and has uncontrollable haemorrhage post bypass? He has received streptokinase and the antiplatelet agents Abciximab (IIb IIIa inhibitor) and clopidogrel over the preceding 6 hours.
2. A 22 year old medical student has been donating blood once a year for the past 3 years. No problems were encountered for the first two donations. However, on the third donation, the donated unit was found to be anti-HIV reactive.
  - a) As the person in charge of the Blood Transfusion Center, how would you manage the situation?
  - b) What actions can be taken to prevent the re- occurrence of this situation?

**II. Write notes on:****(10 x 7 = 70)**

1. Massive blood loss in a hospital setting.
2. Design an emergency blood management plan for your hospital to be activated when outbreak of Dengue has reduced 50% stocks in the blood bank?
3. Advice to a medical doctor who is scheduled for elective knee replacement surgery insisting that he should receive blood only from his wife or children?
4. “Uncrossmatched” red cell units.
5. Most suitable blood component to be used in Preterm neonate, delivered at 32 week of gestation requiring top-up red cell transfusion.
6. Most suitable blood component to be used in 32-year old man with relapsed acute myeloid leukemia on FLAG-IDA (fludarabine, cytosine arabinoside, G-CSF, idarubicin) chemotherapy regime requiring platelet and red cell support.
7. Most suitable blood component to be used in 25-year old woman with thrombotic thrombocytopenic purpura (TTP) requiring intensive therapeutic plasma exchange.
8. Advice a 35-year-old Bengali labourer who comes to donate blood? He could not fill in the donation form and you are unable to counsel him because of language barrier.
9. Advice a 32-year-old regular blood donor has donated whole blood five weeks ago and wants to donate platelets on this occasion.
10. Haemorrhagic disease of the newborn.

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