

**M.Sc. 2nd Semester Examination, 2023**  
**(Supplementary Examination)**

**BIO-MEDICAL LABORATORY SCIENCE**  
**AND MANAGEMENT**

*(Haematology and Transfusion Science)*

**PAPER – BML-202(Old)**

*Full Marks : 50*

*Time : 2 hours*

*The figures in the right hand margin indicate marks*

*Candidates are required to give their answers in their own words as far as practicable*

**GROUP – A**

**Answer any four of the following :            2 × 4**

- 1. What is poikilocytosis ?**
- 2. What is Rh-typing ?**
- 3. Write the importance of blood bank.**

4. What is erythroblastosis foetalis ?
5. Write any two complications due to mismatched blood transfusion.
6. Define immunohaematology.

**GROUP – B**

Answer any **four** questions : 4 × 4

7. Write the strategies adopted to reduce the possibility of blood transfusion linked transmitted infections. 4
8. Discuss the different types of blood collection bag and preservatives used in blood bank. 4
9. State the basic mechanism of blood coagulation. 4
10. Write short notes (any *two*) : 2 × 2
  - (a) Haemoglobinopathies
  - (b) Haemoglobin
  - (c) Anticoagulant
  - (d) Leucopoiesis

11. Write the different steps of erythropoiesis. 4
12. State the function of plasma protein. 4

GROUP – C

Answer any two of the following : 8 × 2

13. Discuss in brief the basic steps of blood component separation in blood bank and use of each component. 5 + 3
14. Write the principle and discuss the procedure of FACS for isolation of leucocytes. 2 + 6
15. Discuss the symptoms of blood cancer. How will you diagnose it? 3 + 5
16. Discuss the interconversion between 'T' and 'R' forms of haemoglobin. State briefly the sucrose lysis test for PNH detection. 4 + 4

[ Internal Assessment – 10 Marks ]

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