



'সমানো মন্ত্র: সমিতি: সমানী'

UNIVERSITY OF NORTH BENGAL

B.Sc. Honours 3rd Semester Examination, 2023

CC5-PHYSIOLOGY

CIRCULATING BODY FLUIDS

Time Allotted: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

GROUP-A

1. Answer any **five** questions from the following: 1×5 = 5
- (a) Define Landsteiner's Law.
 - (b) Name the disease related to prolonged bleeding time.
 - (c) What do you mean by Packed Cell Volume (PCV)?
 - (d) Which plasma protein can pass through capillary endothelium?
 - (e) What are Human Leukocyte Antigens (HLA)?
 - (f) What is Fibrinolysis?
 - (g) Enumerate one major function of Iron in human body.
 - (h) Define Edema.
 - (i) What is purpura?
 - (j) What is thrombocytopenia?

GROUP-B

Answer any three questions from the following 5×3 = 15

2. Explain erythroblastosis foetalis briefly. 5
3. (a) What do you mean by cross matching? What are the importances of cross matching? 2½+2½
(b) Who is universal recipient and why?
4. (a) Define coagulation of blood. 2+3
(b) Which factors are involved in this process?
5. (a) What is Rh factor? 1+1+3
(b) What do you mean by arneth count?
(c) In what way Rh type blood grouping is different from ABO system?

6. (a) What are the structural and functional differences between RBC and WBC? 4+1
(b) Define ESR.

GROUP-C

Answer any two questions from the following

10×2 = 20

7. (a) Write in brief the morphological classification of anaemia. 5+5
(b) Describe the functions of plasma protein.
8. (a) What are the differences between adult haemoglobin and foetal haemoglobin? 3+3+2+2
(b) What are the functions of monocytes?
(c) How is haematocrit determined?
(d) Give the normal values of plasma proteins.
9. (a) Why blood does not clot during circulation? 3+3+2+2
(b) Classify the blood groups according Landsteiner's Law.
(c) Name the agglutinin (antigen) and agglutinin (antibody) present in ABO System.
(d) Who is universal donor and why?
10. Describe the structure of spleen and its function. 4+6

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