

2022

## 3rd Semester Examination

## PHYSIOLOGY (Honours)

Paper : C 5-T

(Circulating Body Fluids)

[CBCS]



Full Marks : 40

Time : Two Hours

*The figures in the margin indicate full marks.  
Candidates are required to give their answers  
in their own words as far as practicable.*

A. Answer any *five* questions from the following :  $2 \times 5 = 10$

1. What are normocytic and microcytic anemia? 1+1
2. What is PCV? Mention its normal value. 1+1
3. Differentiate between red and yellow bone marrow. 2
4. What is Schilling Index? 2
5. Define polycythemia vera and leucopenia. 1+1
6. Differentiate between natural and synthetic anticoagulant with example. 1+1
7. What is hemosiderosis? State the function of transferrin. 1+1
8. What is meant by Hemoglobin Bart Syndrome? 2

P.T.O.

B. Answer any *four* questions from the following :

5×4=20

9. What is the immunological basis of blood grouping?  
What is Bombay blood group? 4+1

10. State the factors regulating erythropoiesis. 5

11. What is lymph? State its function and composition. 1+(2+2)

12. What is hypersensitivity reaction? Define acquired immunity. 3+2

13. Discuss the method of body fluid volume determination by Indicator-Dilution principle. What is extracellular edema? State the causes of extracellular edema. 3+2

14. State the functions of plasma proteins. What is plasma pheresis? 3+2

C. Answer any *one* question from the following : 10×1=10

15. Discuss the molecular basis of platelet plug formation. Write a note on fibrinolysis. Discuss the steps of intrinsic blood coagulation pathway.

3+3+4

16. Write down the sequential biochemical steps of heme synthesis. What are the hazards of blood transfusion? Write a note on method of blood preservation in blood banks. 4+3+3