

2019

B.Sc.

3rd Semester Examination

**PHYSIOLOGY (Honours)**

**Paper - C 5-T**

**(Circulating Body Fluids)**

Full Marks : 40

Time : 2 Hours

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

1. Answer any five questions from the following :

5×2=10

- (a) Differentiate between red and yellow bone marrow. 2
- (b) What is plasmapheresis ? 2
- (c) What is aplastic anaemia ? 2
- (d) Name the derived products of haemoglobin. 2
- (e) What is erythroblastosis foetalis ? 2

[ Turn Over ]

- (f) Differentiate between antigen and haptan. 2
- (g) What is Schilling Index ? 2
- (h) What is thrombocytopenia ? 2

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

4×5=20

- (a) Explain the immunological basis of blood group typing. 5
- (b) What is lymph ? Discuss its composition and function. 1+4
- (c) What is Aplastic Anemia ? State its symptoms and how can it be treated ? 2+1+2
- (d) What is Aquired Immunity? State the importance of vaccination. Name the cell types involved in humoral and cellular immunity. 2+2+1
- (e) Write down the functions of plasma proteins. Why blood is not coagulated in the body ? 3+2
- (f) Differentiate between Adult and Foetal haemoglobin. What is Haemoglobin S ? 3+2

3. Answer any *one* question :

1×10=10

- (a) Describe the stages of erythropoiesis with neat diagram highlighting the role of vitamins and folate. Discuss the hazards involved in blood transfusion. (4+2)+4
- (b) Discuss the process of blood coagulation mentioning its different factors. What is fibrinolysis? How does it occur? (4+2)+2+2
-