

B.Sc. Semester III (Honours) Examination, 2021-22

PHYSIOLOGY

Course ID: 32511

Course Code: SH/PHY/301/C-5(T)

Course Title: Circulating Body Fluids

Time: 1 Hour 15 Minutes

Full Marks: 25

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 of the following: 1×5=5

- (a) What is Arneith Count? Mention its significance.
- (b) Differentiate between HbF and HbA.
- (c) Why myoglobin has greater affinity for O₂ than haemoglobin?
- (d) What is thalassemia?
- (e) What is platelet plug?
- (f) Mention the role of vitamin K in clotting.
- (g) What is D-antigen?
- (h) Mention the function of mast cell.

2. Answer any two questions of the following: 5×2=10

- (a) Describe the hazards of blood transfusion. How is blood stored in blood bank? 3+2
- (b) Briefly describe different types of anaemia. 5
- (c) Explain the formation, composition and functions of lymph. 1+2+2
- (d) State the role of immunoglobulins in immunity. What are memory T cells? 4+1

3. Answer any one question of the following: 10×1=10

- (a) Define erythropoiesis. Describe the stages and factors influencing erythropoiesis. 2+4+4
- (b) Describe the steps of biosynthesis of haem by mentioning the role of enzymes. 8+2