

THE UNIVERSITY OF BURDWAN

B. Sc. Semester 3 (Honours) Theory Examination, 2021 (CBCS)

SUBJECT: PHYSIOLOGY

Paper: CC5 (Circulating Body Fluids)

Time: 2 Hours

Full Mark: 40

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

Examinees are instructed to submit the scanned copies/photographs of their answers' scripts within 30 minutes after the completion of examination

Answer any ***eight*** questions of the following:

8 x5 = 40

1. Brief explain the 3 stage model of erythropoiesis. What is the source of RBC in prenatal life?
2. Outline the biochemical mechanism of haem synthesis?
3. Mention the clinical significance of measurement of ESR. What are the factors causes variation of ESR?
4. Enlist the various blood group antigens and antibody. What is the significance of Rh?
5. Discuss the pathways of platelet activation and cellular interaction during blood homeostasis.
6. Compare the molecular basis of sickle cell anaemia and thalassaemia. Why are sickle cell anaemic patients resistant to malaria?
7. Mention the characteristics and function of globulin plasma proteins.
8. Briefly explain the dye dilution method of measurement of blood volume and mention its advantages
9. Outline histological structure of lymph capillary and mention its role in lymph formation. Distinguish leucopenia, and leukaemia.
10. Provide a brief concept about the various red blood cell indices used to detect abnormalities in RBCS.