THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[DM 0822] AUGUST 2022 Sub. Code :1401

D.M. – CLINICAL HAEMATOLOGY

Paper I – BASIC SCIENCES - STRUCTURE AND FUNCTION OF THE HEMOPOIETIC SYSTEM MOLECLULAR BIOLOGY AND GENETIC ASPECTS OF HAEMOPOIESIS

Q.P. Code: 161401

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Describe the molecular basis of haemoglobin switching after birth and its possible manipulation for treatment of major haemoglobin disorders.

2. Discuss B cell differentiation and immunoglobulin gene arrangement in normal cells. Mention some of the aberrations in this process in diseases.

II. Write notes on: **(10 x 7 = 70)**

1. Granulocyte macrophage colony stimulating factor.
2. CD34 and its significance.
3. Platelet adhesion.
4. Natural anticoagulants.
5. CD3 T cell receptor.
6. The red cell membrane.
7. Von Willebrand factor.
8. TNF alpha.
9. Immunoglobulin M.
10. Gamma delta T cells.

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