Give an account on:

1. B regulatory cells: origin, markers, functions and role in health and diseases   40 marks

2. Celluler and moleculer mechanisms of autoimmune diseases   35 marks

Mention:

1. Five of immune receptor families: discuss one of them briefly   40 marks

2. Subsets of CD4 effector T cells, differentiation and functions   35 marks

Discuss:

1. Tumour antigens   40 marks

2. Natural killer cells : functions, receptors and mechanism of action   35 marks

Department Chairman	Examiners
Prof. Amany Abou EL-Enein	Prof. Mohammed Sweillam Prof. Gihan Attia

Tanta University
Faculty of Medicine
Department of Clinical Pathology

All questions should be answered

I. Give an account on:

1- Pathogenesis and Laboratory Diagnosis of Immune Hemolytic Anemia. (30marks)

2- Molecular Pathogenesis of Acquired Aplastic Anemia (25marks)

3- Laboratory features and prognostic factors in Chronic Lymphocytic Leukemia. (30marks)

4- Disseminated Intravascular Coagulation: Etiology, Pathogenesis and Laboratory features. (30marks)

5- Compatibility test (10marks)

6- Advantages of Autologous transfusion (10marks)

II. Discuss the Following

1- Diagnostic methods used to study neoplastic hematopoietic cells (30marks)

2- Revised WHO classification of myelodysplastic syndromes and myeloproliferative neoplasms (30marks)

III. How to evaluate a case of thrombocytopenia (30marks)

Good Luck

Examination for (MD Clinical Pathology-2013)
Course Title: (Clinical Chemistry)
Date: 20/04/2022
Time Allowed: 3.0 hours
Total marks: 100 marks

Tanta University
Faculty of Medicine
Department of Clinical Pathology

All questions must be answered:

Q1	**Give an account on:**	
	a-Urinary biomarkers in the assessment of early diabetic nephropathy	10
	b-Liver disorders in pregnancy	10
Q2	**Mention:**	
	a-Novel biomarkers for predicting type 2 diabetes development	15
	b-Cholinesterases: types, clinical significance and methods of detection	15
	c-Synovial fluid analysis and interpretation	10
Q3	**Discuss** laboratory evaluation of hirsute female patient	10
Q4	**Describe in brief:**	
	a-Variables affecting select chemistry analytes	10
	b-Potentiometry: principle, types and laboratory applications	10
	c-Blood gas analysis quality assurance cycle	10

رئيس القسم
أ.د/ أماني أبو العينين