



**All questions are to be answered**

#	Question	Marks
1	List Examples of Cytogenetic Disorders Involving Sex Chromosomes. Describe features of one of them.	9
2	Describe the biologic effects of ionizing radiation and highlight main determinants of these effects.	9
3	List examples of Oncogenic DNA Viruses, and Explain the manner of inducing tumor formation of one of them	9
4	Explain How cancer cells succeed in EVASION OF IMMUNE SURVEILLANCE.	9
5	Illustrate how to use immunohistochemistry to differentiate small round cell tumors.	9
6	Altered cell metabolism has been added as a new hallmark of cancer; determine the role of metabolic reprogramming in carcinogenesis.	9
7	Demonstrate the features of high quality cytology smears. And what are the stains and special methods may be applied to the material on aspirate smear slides?	9
8	As regards <u>Histochemical stains</u> , Give two examples & application of the following: a) Stains for connective tissue b) Stains for carbohydrates	9
9	Demonstrate the ground rules for quality application of IMMUNOHISTOCHEMISTRY IN SURGICAL PATHOLOGY	9
10	Mention pathogenesis and clinical manifestations of cystic fibrosis and illustrate how to diagnosis it.	9

*Good Luck,,*

Examination for master degree in pathology (first final semester , practical )

Course Title: PATH 8001

Time Allowed: 3 hours



Total Assessment Marks: 45

Tanta University  
Faculty of Medicine  
Department of: Pathology

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Questions	Marks
1. mention the causes of cell injury	10
2. mention the cause of inflammation	10
3. what is the sequential steps of phagocytosis	10
4. what is heparin –induced thrombocytopenia syndrome	10
5. mention the factors that influence development of infarction	10
6. mention general features of autoimmune diseases	10
7. mention the genetic factors causes of SEL	10
8. write in brief about pathogenesis and classification of amyloidosis	10
9. explain the pathogenesis of edema	10

Good luck