

※ 考生請注意：本試題不可使用計算機。請於答案卷(卡)作答，於本試題紙上作答者，不予計分。

10% each question

1. What are the common and distinct features in the three different complement pathways?
2. Define MHC polymorphism and MHC restriction.
3. How is antibody (immunoglobulin) diversity generated (in order to bind specific antigen)? Among these above mentioned mechanisms, which one of them is NOT involved in generating the T cell receptor (TCR) diversity?
4. Describe the process and molecules (complement components, cytokines, chemokines, and adhesion molecules) in the inflammatory response.
5. Briefly describe what you know about Treg, Th17, Th1 and Th2 cells and their balance.
6. What are the possible mechanisms of how tumors evade immunosurveillance?
7. Please describe how to achieve immunological tolerance in our body.
8. Please discuss how bacteria evade host innate immune recognition and adaptive immunity.
9. Please discuss how viruses evade host innate immune recognition and adaptive immunity.
10. List and briefly describe Type I, II, III and IV hypersensitivity reactions.