

系所組別：醫學檢驗生物技術學系

考試科目：微生物與免疫

考試日期：0307 · 節次：3

※ 考生請注意：本試題 可 不可 使用計算機

1. Antiviral treatments are increasingly demanded but available to only a few viral diseases. The reason for this is the fact that viral replication intimately depends on host cells that any drug that interferes significantly with viral replication, is likely to be toxic to the host. Please describe the mechanism of one kind of therapeutic compound which works as an anti-viral agent. (20 points)
2. What is the mechanism of vaccination? What is the role of an adjuvant in vaccination? What is the "herd immunity"? (20 points)
3. Please briefly describe the recognition strategy of pathogens by mammalian innate immune system, including recognition receptors (10 points) and signaling pathways (10 points).
4. Please describe the biochemical and immunological properties of class I and class II human leukocyte antigens (HLA) (20 points).
5. 炭疽桿菌是目前最常用來做為生物戰劑的細菌之一，請簡述其它可以用於生物戰劑的細菌或毒素? (8 points)
6. 人類的腸道含有非常多種微生物的存在，請簡答下列兩小題?
一公克的乾糞便大約含有多少隻細菌? (2 points)
糞便中的微生物主要以何者居多? (2 points)
7. 目前國內初生嬰兒常施打疫苗，請就下列兩項疫苗用以何種疾病之預防並簡述其成份以誘導抗體的產生? (8 points)
卡介苗
DPT