

第 1~6 題為單選題，其餘為是非題或簡答題。請於試卷內之「非選擇題作答區」標明題號依序作答。

1. Infective Eimerian oocysts 1) contain 4 sporozoites, 每個 sporozoites 含 2 sporocysts, 2) contain 2 sporocysts, 每個 sporocyst 含 4 sporozoites, 3) contain 4 sporocysts, 每個 sporocyst 含 2 sporozoites, 4) contain 2 sporozoites, 每個 sporozoites 含 4 sporocysts (2.5 分) .
2. Which *schistosoma* species is zoonotic? 1) *Schistosoma japonicum*, 2) *Schistosoma bovis*, 3) *Schistosoma margrebowiei*, 4) *Schistosoma mansoni* (2.5 分) .
3. What's true about *Cryptosporidium*? 1) can be identified in the microvillous borders of enteric epithelial cells, 2) usually cause severe clinical diseases in immunocompetent animals, 3) oocysts can be easily observed on fecal slides, 4) can be effectively treated by clindamycin (2.5 分) .
4. What's the intermediate host of *Dirofilaria immitis*? 1) fly, 2) mosquito, 3) tick, 4) flea. (2.5 分)
5. What's the intermediate host of *Dipetalonema reconditum*? 1) fly, 2) mosquito, 3) tick, 4) flea. (2.5 分)
6. Which mite will live in hair follicles? 1) *Myobia*, 2) *Myocoptes*, 3) *Demodex*, 4) *Psoroptes*. (2.5 分)
7. What are the clinical signs/diseases caused by *Neospora caninum*? (5 分) List the names of two protozoa whose oocysts are the morphologically indistinguishable from those of *Neospora caninum* (5 分) .
8. Tyzzer's disease 的致病原菌為何 (genus & species) (2 分) ? Can infect mouse, rat and hamster (True or False) (2 分) ?
9. Lyme disease 的致病原菌為何 (genus & species) (2 分) ? Usually cause fatal disease (True or False) (2 分) ? Transmitted by the tick bite (True or False) (2 分) ?
10. (True or False) Chlamydia 是 obligate intracellular organisms (2 分) .
11. Proliferative bowel disease (or proliferative colitis) 的致病原菌為何 (genus & species) (2 分) ? This organism can infect pigs, ferrets, and hamsters, and can induce proliferative enteritis in these three animal species (True or False) (2 分) ?
12. Anthrax 的致病原菌為何 (genus & species) (2 分) ? This is a zoonotic disease (True or False) (2 分) ? Usually fatal for human, but not fatal for cattle and sheep (True or False) (2 分) ?
13. John's disease 的病原菌全名 (genus, species& subspecies name) (3 分) ?
14. 若有兩種抗體皆可辨識破傷風類毒素，但是只有一種抗體可辨識解離 (denatured) 後的破傷風類毒素蛋白，請說明可能的理由 (5 分) ?
15. 某一動物被診斷有多種細菌的感染，並發現其體液完全缺乏補體因子 C3，請問此動物可能缺乏哪些補體相關的免疫功能 (10 分) ?
16. 請列出三種黏膜淋巴組織 (mucosal-associated lymphoid tissue) 所在的器官，並例舉一疫苗來說明其如何利用黏膜免疫系統來預防病原的感染 (10 分) 。
17. 請簡述犬傳染性肝炎臨床病例大量減少的原因或理由 (5 分) 。
18. 請列出三種引起豬隻非化膿性腦膜腦炎的病毒；請就患豬的樣材採集、處理、檢測方法等設計流程，以建立快速區別診斷 (12 分) 。
19. 請設計監控口蹄疫病毒感染的診斷流程，並簡述需考慮的因素及理由 (8 分) 。