題號: 280 國立臺灣大學113學年度碩士班招生考試試題

科目:小動物疾病學

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## ※ 注意:請於試卷內之「非選擇題作答區」依序作答,並應註明作答之大題及小題題號。

- 1. A dog under volatile anaesthesia is showing the following signs:
  - Open eyelids with no palpebral reflex
  - Slight ventrolateral rotation of the eye
  - Constricted pupils
  - Absent pedal reflex
  - Low respiratory rate
  - Normal heart rate

What is the depth of anaesthesia in this dog (4 %)?

- A. A light plane of anaesthesia but of sufficient depth for non-painful procedures
- B. An adequate plane of anaesthesia for surgery
- C. Anaesthetic overdose the dog is close to death
- D. Too deep plane of anaesthesia, resulting in physiological disturbance
- E. Too light plane of anaesthesia, even for a non-invasive procedure
- 2. A 3-year old, DHS cat presents with laboured breathing. The respiratory rate is 46 breaths per minute and the respiratory pattern is shallow with no expiratory pause. No abnormal lung sounds are heart and the lung sounds are quiet. The heart rate is 220 beats per minute with a slightly irregular gallop rhythm. It is thought that a murmur may be present, but the heart is difficult to hear.

What is the most appropriate immediate action to take in this case (4 %)?

- A. Obtain a thoracic radiograph
- B. Obtain blood for routine haematology and serum biochemistry
- C. Obtain urine by cystocentesis
- D. Perform echocardiography
- E. Perform needle thoracocentesis
- 3. Which of the following structures is most commonly involved in a traumatic diaphragmatic hernia in
  - A. Left lobe of the liver
  - B. Spleen
  - C. Stomach
  - D. Small intestine
  - E. Right cranial lung lobe
- 4. When performing ventral midline coeliotomy in a male dog, following para-preputial incision, which blood vessel should you ligate/cauterize(2 %)?
- 5. Mrs. Hsiao brings in her 5-year-old Boxer, Bella, who has a raised, ulcerated mass on her skin. After examination and biopsy, you confirm a diagnosis of a mast cell tumor. Discuss the principles of oncologic surgery in small animals, with a specific focus on mast cell tumors. Include factors influencing the surgical approach for mast cell tumor removal in Bella's case, and post-operative monitoring considerations for mast cell tumor patients.(2 %)

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6. Mr. Lai brings his 8-year-old intact male Labrador Retriever, Max, to your clinic with a history of recurrent urinary tract infections and difficulty urinating. After thorough diagnostics, you diagnose Max with prostatic disease. Discuss the common techniques used in small animal prostate surgery, including indications, pre-operative considerations specific to Max's case, and potential complications associated with these procedures (4 %). Additionally, discuss the importance of surgical asepsis in the prostate surgery for Max. Outline the protocols to maintain a sterile surgical field during the prostate surgery (2 %).

- 7. Which of the following statements is false regarding the anti-glaucoma eyedrop β-adrenergic antagonist (β-blocker) used in small animals (4 %)?
  - A. May cause miosis in treated feline eyes;
  - B. May reduce heart rate and cardiac output in animals;
  - C. Less effective in lowering IOP than carbonic anhydrase inhibitor (CAI), and can be synergistic with CAI;
  - D. Lowering intraocular pressure (IOP) is mainly achieved by promoting outflow of aqueous humor.
- 8. A 5-year-old male intact Border collie was hit by a car yesterday. Radiographs showed L7 vertebral body fracture leading to severe L7/S1 subluxation. The dog presented with very severe neurological deficits. Please predict the findings of the following neurological examinations (4%).
  - A. Patellar reflex
  - B. Withdrawal reflex in the pelvic limbs
  - C. Anal reflex
  - D. Pain sensation tested at the digits
  - E. Pain sensation tested at the inner thigh region
  - F. Bladder tone and sphincter tone (findings when palpating the bladder)
  - G. Ambulation status (can the dog stand up and walk?)
  - H. Tail tone
- 9. Before tibial plateau leveling osteotomy surgery, a detailed surgical plan is crucial to level the tial plateau precisely and reduce complications. Please describe and provide illustrations for the imaging assessments that should be conducted, and explain which anatomical positions are used for measuring specific parameters (7 %).
- 10. Please describe the procedural steps of percutaneous endoscopic gastrostomy tube placement and the limitations and contraindications associated with this method (7 %).
- 11. 請簡述皮膚的血液循環在皮膚受傷後的自行癒合(second intension healing)、皮瓣 (skin flap),以及皮膚移植(skin graft)上,所扮演的角色 (4 %)。
- 12. 請簡述血管環異常(Vascular ring anomalies)如何影響動物的食道吞嚥功能 (2%)。
- 13. 犬隻鉤端螺旋體可能出現的臨床症狀、診斷方法及治療建議 (10%)?
- 14. 請就小動物腫瘤免疫治療原理,加以說明 (5%)。

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15. 請說明化療藥物可能產生之副作用及處置方法,加以說明(5%)。

- 16. Please describe the production and actions of erythropoietin (10 %).
- 17. Please make a description about the pathophysiology and clinical findings of hypokalemia in cats with chronic kidney disease (10 %).
- 18. What are the general therapeutic principles for the gastrointestinal disorders (10 %)?