



The Royal College of **Pathologists**

Pathology: the science behind the cure

## **Part 1 examination**

### **Veterinary Pathology: First paper**

### **General / Mechanistic Pathology**

### **Sample paper**

**Time allowed: 3 hours**

### **Section 1 - essay questions**

***Candidates must answer THREE essay questions ONLY.***

Each question is worth 20% of the total marks available. You are advised to spend approximately 40 minutes on each essay answer.

1. Compare and contrast the process of healing in the liver and lung.
2. Discuss the processes of cellular degeneration and cell death as they occur in the domestic species.
3. Write an essay on lymphocytes in health and disease.
4. Describe the process of neoplastic metastasis, illustrating your answer with specific examples from the domestic species.
5. Write an essay on mediator substances in the acute inflammatory reaction, using examples.

**Please turn over for Short Notes questions**

## Section 2 - short notes questions

**Candidates must answer FOUR short notes questions ONLY.**

Each question is worth 10% of the total marks available. You are advised to spend approximately 15 minutes on each **short notes** answer.

1. Write short notes on each of the following:
  - a) Fibroblasts in inflammatory reactions.
  - b) Mast cells and their functions.
  - c) Growth factors.
  
2. Write short notes on each of each of the following:
  - a) In situ hybridisation.
  - b) Polymerase chain reaction.
  - c) Western blotting.
  
3. Write short notes on the patterns of tissue reaction associated with the following:
  - a) Silica particles.
  - b) Staphylococcal organisms.
  - c) Fungal infections.
  
4. Write short notes on the pathological aspects of THREE of the following:
  - a) Amyloidosis.
  - b) Pigments in tissues.
  - c) Fatty change in organs.
  - d) Calcification in soft tissues.
  
5. Write short notes on THREE of the following:
  - a) Toll-like receptors.
  - b) Oncogenes.
  - c) T-cell sub-types and their functions.
  - d) Cellular adhesion molecules.



The Royal College of Pathologists

Pathology: the science behind the cure

## Part 1 examination

### Veterinary Pathology: Second paper

#### Species Group Pathology

#### Sample paper \*

\* This example is a Small Domestic Animals option paper. Other species sub-groups are Large Domestic Animals (Farmed Ruminants with pig or horse options); Laboratory Animals; Avians; Fish.

**Time allowed: 3 hours**

#### Section 1 - essay questions

***Candidates must answer THREE essay questions ONLY.***

Each question is worth 20% of the total marks available. You are advised to spend approximately 40 minutes on each essay answer.

1. Discuss the disease processes that may result in hypercalcaemia in the dog and comment on the pathological changes (macro. and microscopic) expected in this condition.
2. Write an essay on infectious respiratory diseases of the domestic cat.
3. Compare and contrast the neoplasms that may occur in the alimentary system (excluding the mouth) of the dog and cat.
4. Discuss the approach to the investigation of sudden death in the dog.
5. Write an essay on the pathological aspects of cardiac disease in the cat.

**Please turn over for Short Notes questions**

## Section 2 - short notes questions

**Candidates must answer FOUR short notes questions ONLY.**

Each question is worth 10% of the total marks available. You are advised to spend approximately 15 minutes on each **short notes** answer.

1. Write short notes on each of the following:
  - a) Glomerulopathy in the dog.
  - b) Copper storage disease in the dog.
  - c) Canine Leishmaniasis.
  
2. Write short notes on each of the following:
  - a) Toxoplasmosis in the cat.
  - b) Hepatopathy of the geriatric cat.
  - c) Borna disease in the cat.
  
3. Write short notes on THREE of the following:
  - a) Portosystemic shunt syndrome in the dog.
  - b) Systemic lupus erythematosus in dogs.
  - c) Chemoreceptor tumours in dogs.
  - d) Pancreatitis in the dog.
  
4. Write short notes on each of the following:
  - a) Cowpox infection in the cat.
  - b) Neoplasia of the central nervous system of cats.
  - c) Endocrinopathy in the adult cat.
  
5. Write short notes on THREE of the following:
  - a) Lymes disease in dogs.
  - b) Immunodeficiency virus infection in the cat.
  - c) Arthropathy in adult dogs.
  - d) Feline spongiform encephalopathy.