Example Questions: Anatomic Pathology Phase II Certifying Examination

These questions illustrate possible question styles and content examples for the Phase II Certifying Examination.
• Helpful information is on the ACVP website, including the Candidate Handbook
• The Phase II Certifying Examination consists of 300 equally weighted multiple-choice questions (3, 4 or 5 choices) administered in 3 sections of 100 questions each:

**Section 1:**
  • **Knowledge** – usually text only, can be single images or data tables

**Section 2:**
  • **Interpretation** – usually single images or data tables

**Section 3:**
  • **Microscopic** – single or multiple microscopic images

• Questions can be text only or can have images (gross and/or microscopic) and/or data tables

• Knowledge and skills tested in the microscopic section can include:
  • Ability to seek and find lesions
  • Pattern recognition
  • Use of appropriate terminology
  • Ability to justify diagnosis

• Unless otherwise informed, assume stain used for samples in microscopic images are Hematoxylin & Eosin (histology) or Wright-Giemsa (cytology & hematology).
Example Question 1

Section 1: Knowledge - text only

Thymomas are most likely to occur in which of these types of animals?

A. Ox
B. Goat
C. Horse
D. Alpaca

Answer: B
Example Question 2

Section 2: Interpretation - single image

The lesion shown is most likely to occur in which species?

A. Ox  
B. Goat  
C. Horse  
D. Alpaca

Answer: B
Example Question 3

Section 2: Interpretation - single image

Rat.

What is the most likely diagnosis?

A. Lipoma  
B. Testicular teratoma  
C. Mammary fibroadenoma  
D. Preputial sebaceous adenocarcinoma

Answer: C
Example Question 4
Section 2: Interpretation - single image

Tissue from a cow.

Which organ is most likely to be affected?

A. Lung  
B. Liver  
C. Kidney  
D. Uterus

Answer: D
Example Question 5

Section 2: Interpretation - single image, data table

Hemostatic data from a dog.

<table>
<thead>
<tr>
<th>Test</th>
<th>Units</th>
<th>Patient</th>
<th>Flag</th>
<th>Reference interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prothrombin time (PT)</td>
<td>seconds</td>
<td>&gt;120</td>
<td>H</td>
<td>7 - 10</td>
</tr>
<tr>
<td>Partial thromboplastin time (PTT)</td>
<td>seconds</td>
<td>&gt;120</td>
<td>H</td>
<td>12 - 18</td>
</tr>
<tr>
<td>Mucosal bleeding time</td>
<td>minutes</td>
<td>3</td>
<td></td>
<td>&lt; 4</td>
</tr>
<tr>
<td>Platelets</td>
<td>x $10^3/\mu$L</td>
<td>201</td>
<td></td>
<td>200 - 450</td>
</tr>
<tr>
<td>Fibrinogen-fibrin degradation products (FDPs)</td>
<td>$\mu g/mL$</td>
<td>4</td>
<td></td>
<td>&lt;5</td>
</tr>
<tr>
<td>Antithrombin III</td>
<td>%</td>
<td>99</td>
<td></td>
<td>90 - 120</td>
</tr>
</tbody>
</table>

Which condition is most likely?

A. Hemophilia A  
B. von Willebrand disease  
C. Anticoagulant rodenticide toxicosis  
D. Disseminated intravascular coagulation  

Answer: C
Example Question 6

Section 2: Interpretation - multiple images

Spleen from a dog.
Which immunomarker is most likely to be positive?

A. CD3  
B. CD20  
C. CD31  
D. Iba-1  

Answer:  B
Example Question 7

Section 3: Microscopic – single image, seek and find

Tissue from a cat with proteinuria.

The diagnostic lesion is in which box?

A. A  
B. B  
C. C

Answer: A
Example Question 8

Section 3: Microscopic – single image, seek and find, diagnostic features

Tissue from a cat.

The diagnostic lesion is in which box?

A. A
B. B
C. C
D. D

Answer: C
Example Question 9

Section 3: Microscopic – single image, pattern recognition, terminology

Intracranial mass from a cat.

What is the key diagnostic feature?

A. Pseudorosettes  
B. Antibasilar nuclei  
C. Serpiginous necrosis  
D. Microvascular proliferation

Answer: A
Example Question 10

Section 3: Microscopic – multiple images, pattern recognition, seek and find

Tissue from a pig.
What is the key diagnostic feature?

A. Turbinate atrophy  
B. Epithelial necrosis  
C. Intranuclear inclusions  
D. Botryoid cytoplasmic inclusions

Answer: C
Example Question 11

Section 3: Microscopic – single image, pattern recognition, terminology

Transmission electron micrograph of spinal cord from a Humboldt penguin (*Spheniscus humboldti*).

What are the structures denoted by arrows?

A. Mitochondria  
B. Viral particles  
C. Myelin figures

Answer:  C
Example Question 12

*Section 3: Microscopic – multiple images, terminology*

Tissue from a dog.
Which is the most appropriate description?

A. Sheets of neoplastic round cells
B. Streaming bundles of neoplastic cells
C. Neoplastic cells form acinar structures
D. Neoplastic cells arranged in nests and packets

Answer: D
Example Question 13

Section 3: Microscopic – multiple images, terminology

Tissue from a cat.
Which term is most appropriate for the lesion indicated by the arrow?

A. Flame figure
B. Caseating necrosis
C. Dystrophic mineralization
D. Splendore-Hoepli material

Answer: A