ACVP

AMERICAN COLLEGE OF VETERINARY PATHOLOGISTS

Example Questions:

Phase I Certifying Examination

The Phase I Certifying Examination consists of 100 equally weighted multiple choice questions with 3, 4 or 5 choices covering aspects of veterinary general pathology. The example questions below illustrate styles and content. The majority of questions are text only but some include images.

Additional helpful information is on the ACVP website, including the Candidate Handbook.

Example Question 1

Which morphologic feature characterizes autophagy?

A. Organelle swelling
B. Nuclear fragmentation
C. Pericellular neutrophils
D. Cytoplasmic membranous whorls

Answer: **D**

Example Question 2

In which tissue would mitochondrial dysfunction most likely manifest?

A. Brain
B. Spleen
C. Tendon
D. Thyroid gland

Answer: **A**

Example Question 3

Which is a key cytokine during the fibrosing stage of diffuse alveolar damage?

A. IL-1β
B. TGF-β
C. CXCL1
D. TNF-α

Answer: **B**

Example Question 4

Which caspase cleaves IL-1 during canonical pyroptosis?

A. 1
B. 3
C. 8
D. 9

Answer: **A**

Example Question 5

What is the mechanism of action for *Staphylococcus aureus* alpha-toxin?

A. Enzymatic lysis
B. Pore formation
C. Dysfunction of ion pumps
D. Inhibition of protein synthesis

Answer: **B**

Example Question 6

Which platelet receptor binds to fibrinogen to result in platelet aggregation?

A. GPIb
B. GP1a-IIa
C. GPIIb-IIIa

Answer: **C**

Example Question 7

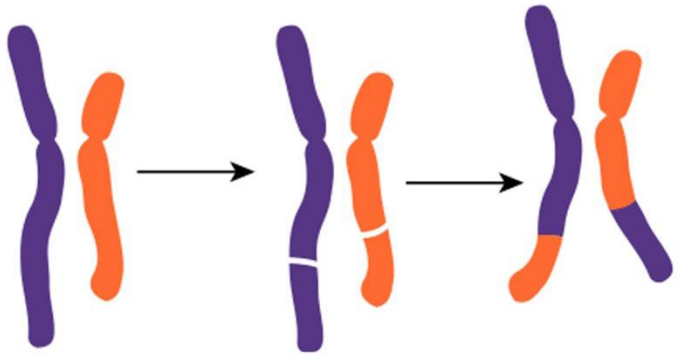
Activation of the protein C/protein S complex inhibits which of these coagulation factors?

A. Va
B. IXa
C. Xa
D. XIIa

Answer: A

Example Question 8

What chromosomal abnormality is illustrated in this image?



A. Pericentric inversion
B. Paracentric inversion
C. Centric fusion translocation
D. Balanced reciprocal translocation

Answer: **D**

Example Question 9

What is the mechanism for genomic imprinting?

A. Translocation
B. Point mutation
C. Paracentric inversion
D. Epigenetic modification

Answer: **D**

Example Question 10

What transcription factor is sequestered by e-cadherin in contact inhibition?

A. Notch
B. β-catenin
C. Adenomatous polyposis coli (APC)
D. Signal transducer and activator of transcription (STAT)

Answer: **B**

Example Question 11

Activation of BAX by p53 leads to which cell fate?

A. Survival
B. Apoptosis
C. Malignancy
D. Senescence

Answer: **B**

Example Question 12

What is an advantage of using polyclonal antibodies over monoclonal antibodies in immunohisto(cyto)chemistry?

A. Lower avidity
B. Higher affinity
C. Higher specificity
D. Lower batch variation

Answer: **B**