ELANCO

# Veterinary Medical Applications

CERTIFICATION

## CERTIFICATION BLUEPRINT

## CERTIFICATION EXAM OVERVIEW

The Elanco Veterinary Medical Applications Certification confirms that individuals have the essential knowledge and skills for the veterinary science field. The certification exam, hosted on the iCEV Testing Platform, consists of 100 questions. It evaluates understanding of anatomy and physiology, veterinary terms and terminology, animal welfare and behavior, and veterinary medical practices. The exam must be proctored in a controlled environment. Proctoring guidelines can be found at www.icevonline.com/proctoring-guidelines.

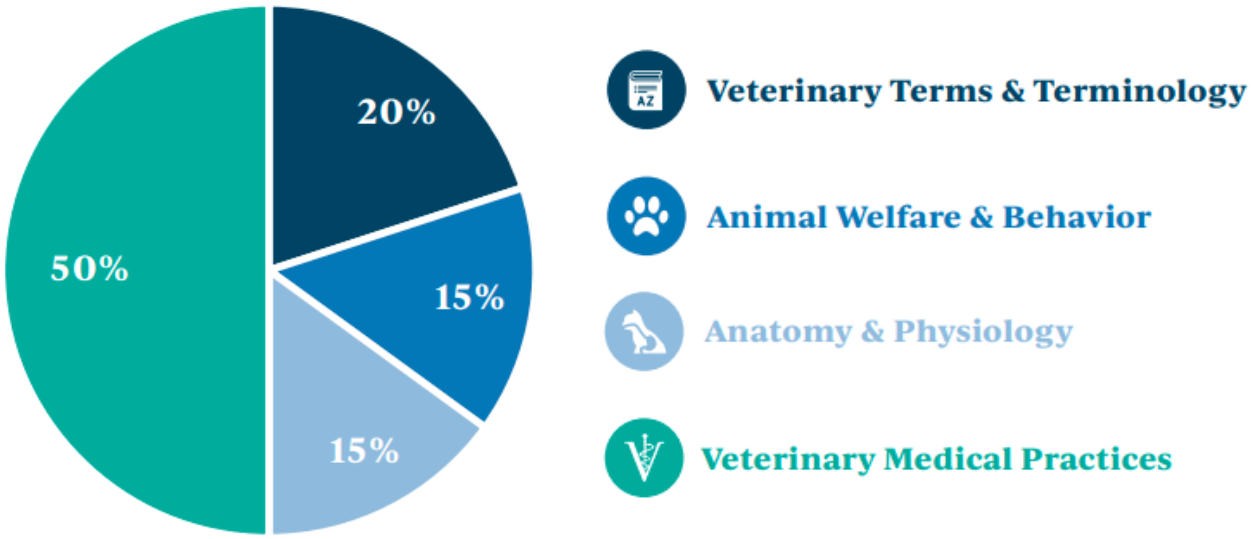
More information about the certification and testing platform can be found at https://www.icevonline.com/vet-med.

## ABOUT ELANCO

Elanco is a global animal health company that develops products and knowledge services to prevent and treat disease in food animals and pets in more than 90 countries. Elanco rigorously innovates to improve the health of animals and benefit customers, while fostering an inclusive, cause-driven culture for more than 5,800 employees. Elanco is driven by their vision of food and companionship enriching life – all to advance the health of animals, people and the planet.

Learn more at: https://www.elanco.com/en-us/careers/faqs.

## INDUSTRY STANDARDS OVERVIEW



# LEARNING OBJECTIVES & INDUSTRY STANDARDS

## 1. Veterinary Terms & Terminology

### 1.1 Veterinary Medical Terms & Terminology

1.1.1 To communicate the importance of medical terminology, evaluate medical terms, discover their meanings and demonstrate the ability to use terms correctly

1.1.2 To learn each of the body systems found in animals as well as the purpose and function of each

1.1.3 To identify clinical terminology, abbreviations and symbols relating to the diagnosis, pathology and treatment of animals

### 1.2 Common Veterinary Medical Equipment

1.2.1 To develop skills involving the use of electronic technology, imaging equipment and instruments found in a veterinary hospital

1.2.2. To explain the care, maintenance, safety and use of equipment and instruments found in a veterinary hospital

## 2. Animal Welfare & Behavior

### 2.1 Animals & Society

2.1.1 To identify various animal types and their roles in society

2.1.2 To understand the difference between animal rights and animal welfare

2.1.3 To identify and interpret laws which have been put into effect for the protection of animals

### 2.2 Animals in Research

2.2.1 To examine the role of animals in research

2.2.2 To discover the benefits different species have provided to humans through research

2.2.3 To analyze the policies, laws and regulations concerning animal research

2.2.4 To identify animal research supporters, founders and activists

### 2.3 Veterinary Laws & Ethics

2.3.1 To identify trends and issues in veterinary medicine

2.3.2 To understand laws and regulations which affect veterinary medicine

2.3.3 To recognize the importance of veterinary responsibility

### 2.4 Animal Behavior

2.4.1 To assess the importance of studying animal behavior in ethology

2.4.2 To analyze the factors affecting animal behavior

2.4.3 To describe the importance animal behavior has on human psychology and social sciences

## 3. Anatomy & Physiology

### 3.1 Basic Canine & Feline Anatomy

3.1.1 To examine canine and feline body systems and understand their functions in relation to the animal
3.1.2 To classify different organs in the body systems and explain their importance in allowing the body to do work
3.1.3 To compare the role of the skeletal system in humans to that of felines and canines

### 3.2 External Anatomy of Livestock: Terms & Terminology

3.2.1 To identify the external anatomy of livestock species
3.2.2 To analyze the functions of the external anatomy of livestock species
3.2.3 To compare the external anatomy of livestock species

### 3.3 Circulatory & Respiratory Systems

3.3.1 To identify basic structures of both systems
3.3.2 To understand basic functions of the organs in both systems
3.3.3 To understand processes associated with circulation and respiration

### 3.4 Digestive System

3.4.1 To understand basic functions of organs in the digestive systems
3.4.2 To understand the different types of digestive systems
3.4.3 To identify basic structures associated with the digestive tract

### 3.5 Endocrine, Immune & Integumentary Systems

3.5.1 To understand the basic functions of the endocrine, immune and integumentary systems
3.5.2 To understand the different types of the endocrine, immune and integumentary systems
3.5.3 To identify basic structures associated with the endocrine, immune and integumentary systems

### 3.6 Nervous, Skeletal & Muscular Systems

3.6.1 To understand the basic functions of the nervous, skeletal and muscular systems
3.6.2 To understand the different types of the nervous, skeletal and muscular systems
3.6.3 To identify basic structures associated with the nervous, skeletal and muscular systems

## 4. Veterinary Medical Practices

### 4.1 Veterinary Medical Practices: Animal Handing & Identification

4.1.1 To identify correct handling protocols and discuss the relevance to veterinary medical staff
4.1.2 To demonstrate appropriate animal handling and explain a variety of animal behavioral situations
4.1.3 To explain animal identification for a variety of animals and identify their uses and importance

## 4.2 Veterinary Medical Practices: Vital Signs

4.2.1 To learn to identify anatomical sites for measuring vital signs
4.2.2 To learn vital sign ranges for various animal species
4.2.3 To understand the importance of vital signs

## 4.3 Veterinary Medical Practices: Blood Samples

4.3.1 To identify anatomical sites for blood sampling
4.3.2 To learn how to collect blood samples from various animal species

## 4.4 Veterinary Medical Practices: Injections

4.4.1 To identify injection methods
4.4.2 To identify appropriate anatomical injection sites on various animal species
4.4.3 To administer medication with the selection of appropriate equipment

## 4.5 Mathematical Applications in Veterinary Science

4.5.1 To understand how to add, subtract, multiple and divide whole numbers, fractions and decimals
4.5.2 To apply mathematical skills needed for accurate client assessment such as measurement, conversion and data analysis
4.5.3 To find solutions for percentages, averages and conversions
4.5.4 To perform scientific calculations to determine weight, volume, linear measurements and chemical concentrations
4.5.5 To solve word problems using ratios and dimensional analysis
4.5.6 To interpret data using tables, charts and graphs

## 4.6 Veterinary Medical Practices: Clinical Examinations

4.6.1 To describe the characteristics and signs of a healthy animal
4.6.2 To explain the procedures of physical examinations
4.6.3 To recognize examples of abnormalities and relate them to the associated problems and illnesses
4.6.4 To explain the regional approach to assess an animal's health

## 4.7 Veterinary Medical Practices: Laboratory Procedures

4.7.1 To describe tests and explain the importance of proper laboratory procedures
4.7.2 To demonstrate the procedures used in collecting, handling, preparing and examining fecal, blood and urine specimens
4.7.3 To discuss normal and abnormal results obtained in complete blood counts
4.7.4 To explain sensitivity testing and how to read test results
4.7.5 To prepare microscope slides, preserve specimens, and perform common laboratory tests including fecal flotation, microfilaria smear, packed cell volume

## 4.8 Veterinary Medical Practices: Hospital Procedures

4.8.1 To explain appropriate hospital procedures and recognize individual clinic protocol

4.8.2 To discuss emergency protocols and describe first aid for small and large animals; included cardiopulmonary resuscitation, control of bleeding and treatment for shock

4.8.3 To demonstrate animal care skills such as administering medications, nail trimming, bathing, grooming, ear cleaning, expressing anal sacs, dental prophylaxis and enema administration

4.8.4 To demonstrate therapeutic care such as patient observation, maintaining and administering fluids, applying bandages, caring for open wounds and managing hydrotherapy and physical therapy

4.8.5 To describe skills involved in the reproductive and genetic evaluation of animals

## 4.9 Veterinary Medical Practices: Surgical Procedures

4.9.1 To explain the protocol for pre-surgical and post-surgical care of a patient

4.9.2 To describe methods used in the sterilization and preparation of small and large animal surgery packs

4.9.3 To review skills involved in patient and surgical room preparation

4.9.4 To describe surgical skills for castration, spaying, neutering, dehorning and docking

## 4.10 Veterinary Medical Practices: Pharmacology

4.10.1 To identify medications according to their classification, form, routes and methods of administration

4.10.2 To explain handling and distribution, protocol, and laws for controlled substances

4.10.3 To calculate dosage using factors such as concentration of drug, weight of animal and required dosage

4.10.4 To complete a prescription label with identifies required by the U.S. Food and Drug Administration (FDA)