LAPT

LONDON ACADEMY OF PROFESSIONAL TRAINING

CERTIFICATE

Certificate in Veterinary Clinical Support and Laboratory Procedures

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LAPT — London Academy of Professional Training

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Reference PET-C06 • Petcare Centres

UKPRN 10067351 • Registered in England and Wales, company 4984798

4	61	482	400	60%	Lifetime
SUBJECTS	CHAPTERS	CLASSES	TOTAL MARKS	PASS MARK	VALIDITY

AT A GLANCE

REFERENCE	**PET-C06**
AWARD	**Certificate**
ASSESSMENT	**400 marks — 240 to pass (60%)**
PREREQUISITES	**None**
VALIDITY	**Lifetime**
AWARDING BODY	**LAPT — London Academy of Professional Training**

CURRICULUM

1

Clinical Support, Sample Handling and Laboratory Procedures

19 chapters · 122 classes **100 marks**

- **1 Introduction to Clinical Support Roles** — 5 classes
  - 1.1 Understanding the Role of a Clinical Support Technician
  - 1.2 Exploring Key Responsibilities in Veterinary Settings
  - 1.3 Familiarizing with Common Veterinary Support Tools
  - 1.4 Assisting in Basic Animal Care Procedures
  - 1.5 Navigating Ethical and Professional Standards in Clinical Support
- **2 Patient Handling and Care Procedures** — 5 classes
  - 2.1 Understanding Animal Body Language and Behavior
  - 2.2 Demonstrating Safe Handling Techniques for Small Animals
  - 2.3 Applying Restraint Methods for Large Animals
  - 2.4 Ensuring Patient Comfort and Stress Reduction Strategies
  - 2.5 Implementing Basic Care Procedures for Hospitalized Animals
- **3 Medical Equipment: Usage and Maintenance** — 5 classes
  - 3.1 Understanding Veterinary Medical Equipment
  - 3.2 Identifying Common Veterinary Tools
  - 3.3 Demonstrating Safe Equipment Handling
  - 3.4 Maintaining Sterilization and Cleanliness
  - 3.5 Troubleshooting and Basic Repairs
- **4 Supporting Veterinary Procedures** — 5 classes
  - 4.1 Understanding Veterinary Procedures: An Overview
  - 4.2 Identifying Instruments and Tools in Veterinary Practice
  - 4.3 Assisting with Physical Exams: Techniques and Protocols
  - 4.4 Safely Handling Animals During Procedures
  - 4.5 Recording and Communicating Observations Effectively
- **1 Understanding Veterinary Clinical Support Roles** — 6 classes
  - 1.1 Exploring Veterinary Clinical Support Roles
  - 1.2 Identifying Key Responsibilities in Veterinary Settings
  - 1.3 Assessing Animal Needs for Holistic Care
  - 1.4 Understanding Ethical and Legal Considerations
  - 1.5 Utilizing Communication Skills in Clinical Support
  - 1.6 Applying Clinical Support Skills in Veterinary Practice
- **2 Foundational Animal Anatomy & Physiology** — 6 classes
  - 2.1 Explore Basic Animal Cell Structures
  - 2.2 Understand Tissue Types and Functions
  - 2.3 Examine Major Organ Systems in Animals
  - 2.4 Identify Key Elements of Animal Physiology
  - 2.5 Analyze Comparative Anatomy Across Species
  - 2.6 Apply Anatomical Knowledge to Clinical Scenarios
- **3 Basics of Veterinary Diagnostic Procedures** — 6 classes
  - 3.1 Understanding the Role of Diagnostics in Veterinary Care
  - 3.2 Identifying Common Veterinary Diagnostic Tools
  - 3.3 Exploring Blood Sample Collection Techniques
  - 3.4 Analyzing Diagnostic Imaging Procedures
  - 3.5 Interpreting Laboratory Test Results in Veterinary Settings
  - 3.6 Applying Diagnostic Protocols in Clinical Practice
- **4 Safe Handling and Care of Veterinary Equipment** — 6 classes
  - 4.1 Understanding Veterinary Equipment Categories
  - 4.2 Identifying and Preventing Equipment Hazards
  - 4.3 Mastering Techniques for Safe Equipment Handling
  - 4.4 Implementing Sterilization and Cleaning Protocols
  - 4.5 Maintaining Equipment for Optimal Performance
  - 4.6 Applying Safety Standards in Veterinary Settings
- **5 Effective Communication and Record Keeping in Clinical Settings** — 6 classes
  - 5.1 Understanding the Basics of Clinical Communication
  - 5.2 Identifying Barriers to Effective Communication in Clinical Settings
  - 5.3 Applying Active Listening Techniques with Patients and Colleagues
  - 5.4 Mastering Non-Verbal Communication Skills in Healthcare
  - 5.5 Implementing Accurate Record Keeping Practices
  - 5.6 Ensuring Confidentiality and Data Protection in Clinical Records
- **6 Animal Physical Therapy Assessment** — 6 classes
  - 6.1 Introduction to Animal Physical Therapy
  - 6.2 Understanding Animal Anatomy and Physiology
  - 6.3 Assessment Techniques for Animal Patients
- **1 Understanding Laboratory Safety and Regulations in Veterinary Practice** — 6 classes
  - 1.1 Comprehending Veterinary Laboratory Safety Fundamentals
  - 1.2 Identifying Common Laboratory Hazards in Veterinary Settings
  - 1.3 Understanding and Implementing PPE Protocols for Veterinary Labs
  - 1.4 Navigating Regulations and Compliance in Veterinary Laboratories
  - 1.5 Developing Risk Assessment Strategies for Veterinary Procedures
  - 1.6 Applying Emergency Procedures and Incident Handling in Lab Environments
- **2 Collection and Handling of Veterinary Samples** — 6 classes
  - 2.1 Understanding the Types of Veterinary Samples
  - 2.2 Mastering Sample Collection Techniques for Various Animals
  - 2.3 Ensuring Correct Labelling and Documentation of Samples
  - 2.4 Exploring Proper Sample Storage and Preservation Methods
  - 2.5 Handling Potential Contaminants and Ensuring Sample Integrity
  - 2.6 Applying Knowledge: Real-Life Scenarios in Sample Collection and Handling
- **3 Analytical Techniques in Veterinary Hematology** — 6 classes
  - 3.1 Explore Blood Collection Techniques in Veterinary Settings
  - 3.2 Understand Cell Counting and Identification Methods
  - 3.3 Apply Staining Techniques for Hematological Analysis
  - 3.4 Conduct Differential Blood Count Procedures
  - 3.5 Analyze Hematological Data for Diagnosis
  - 3.6 Utilize Quality Control in Hematology Labs
- **4 Microbiological Testing and Diagnostic Procedures** — 6 classes
  - 4.1 Understanding Microorganisms: Characteristics and Classification
  - 4.2 Preparing Samples: Techniques for Microbiological Investigation
  - 4.3 Culturing Methods: Growing Bacterial and Fungal Specimens
  - 4.4 Identifying Pathogens: Biochemical and Molecular Techniques
  - 4.5 Conducting Sensitivity Tests: Antibiotic and Antimicrobial Susceptibility
  - 4.6 Interpreting Results: Diagnostic Decision-Making in Clinical Microbiology
- **5 Advanced Biochemical and Molecular Laboratory Techniques** — 6 classes
  - 5.1 Understanding Biochemical and Molecular Lab Safety Protocols
  - 5.2 Mastering Use of Advanced Analytical Instruments
  - 5.3 Implementing Techniques for Protein and Nucleic Acid Isolation
  - 5.4 Conducting Advanced Spectroscopic and Chromatographic Analysis
  - 5.5 Applying Quantitative PCR for Molecular Diagnostics
  - 5.6 Analyzing Results and Troubleshooting Common Laboratory Issues
- **6 Equine Hoof Care Assessment** — 6 classes
  - 6.1 Introduction to Equine Hoof Anatomy
  - 6.2 Understanding Common Hoof Conditions
  - 6.3 Hoof Care Tools and Equipment
  - 6.4 Assessment Techniques for Hoof Health
  - 6.5 Developing a Hoof Care Plan
  - 6.6 Practical Hoof Care Assessment
- **17 Preparing Consulting Rooms and Clinical Areas** — 10 classes
  - 17.1 Layout of a Consulting Room
  - 17.2 Setting Out Instruments and Consumables
  - 17.3 Cleaning and Disinfecting Between Patients
  - 17.4 Preparing Examination Tables and Scales
  - 17.5 Setting Up Treatment Areas
  - 17.6 Checking Lighting and Power Supplies
  - 17.7 Restocking Rooms at Day End
  - 17.8 Waste Segregation in Clinical Areas
  - 17.9 Health and Safety Checks in Clinical Rooms
  - 17.10 Daily Clinical Room Checklist
- **18 Preparing Patients and Assisting in Procedures** — 10 classes
  - 18.1 Checking Patient Identity and Records
  - 18.2 Fasting and Preparation Instructions
  - 18.3 Positioning Patients for Examination
  - 18.4 Clipping and Cleaning Procedure Sites
  - 18.5 Preparing Dressings and Bandage Materials
  - 18.6 Passing Instruments to the Veterinarian
  - 18.7 Assisting With Wound Care and Suturing Support
  - 18.8 Assisting With Ear, Eye and Skin Procedures

2 **Veterinary Pharmacology and Medicines Handling** 14 chapters · 120 classes **100 marks**

- **1 Fundamentals of Veterinary Pharmacology** — 6 classes
  - 1.1 Understanding Drug Mechanisms in Veterinary Medicine
  - 1.2 Identifying Common Veterinary Drug Classes
  - 1.3 Exploring Pharmacokinetics in Animals
  - 1.4 Analyzing Pharmacodynamics: Effects on Animal Physiology
  - 1.5 Investigating Drug Safety and Adverse Reactions in Animals
  - 1.6 Applying Therapeutic Drug Monitoring in Veterinary Practice
- **2 Pharmacokinetics and Pharmacodynamics in Animals** — 6 classes
  - 2.1 Understanding Pharmacokinetics: Exploring Drug Absorption and Distribution in Animals
  - 2.2 Examining Metabolism: Pathways and Factors Affecting Drug Breakdown in Animals
  - 2.3 Investigating Excretion: Mechanisms of Drug Elimination in Animal Physiology
  - 2.4 Analyzing Pharmacodynamics: Mechanisms of Drug Action and Response in Animal Systems
  - 2.5 Evaluating Dose-Response Relationships: Understanding Drug Efficacy and Potency in Animals
  - 2.6 Applying concepts: Case Studies in Veterinary Pharmacokinetics and Pharmacodynamics
- **3 Drug Administration Techniques in Veterinary Practice** — 6 classes
  - 3.1 Understanding Drug Administration Routes
  - 3.2 Preparing and Measuring Veterinary Medications
  - 3.3 Mastering Oral Administration Techniques
  - 3.4 Applying Injectable Administration Procedures
  - 3.5 Safely Administering Topical Medications
  - 3.6 Evaluating Drug Administration Outcomes in Animals
- **4 Clinical Applications of Veterinary Pharmaceuticals** — 6 classes
  - 4.1 Introduction to Veterinary Pharmaceuticals
  - 4.2 Understanding Pharmacokinetics in Animals
  - 4.3 Exploring Pharmacodynamics for Effective Treatment
  - 4.4 Analyzing Drug Interactions in Veterinary Practice
  - 4.5 Evaluating Dosage and Administration in Animals
  - 4.6 Applying Ethical Considerations in Veterinary Pharmacology
- **5 Emerging Trends in Veterinary Pharmacology** — 6 classes
  - 5.1 Understanding Veterinary Pharmacokinetics in Emerging Treatments
  - 5.2 Exploring New Drug Classes in Veterinary Medicine
  - 5.3 Evaluating Advances in Veterinary Drug Delivery Systems
  - 5.4 Analyzing the Impact of Pharmacogenomics on Animal Treatment Plans
  - 5.5 Investigating the Role of Biologics in Veterinary Practice
  - 5.6 Applying Innovative Therapies in Veterinary Pharmacology
- **6 Medicine Laws, Classes and Prescription Rules** — 10 classes
  - 6.1 Why Medicine Law Protects Animals
  - 6.2 Classes of Veterinary Medicines
  - 6.3 Prescription-Only and Over-the-Counter Products
  - 6.4 Indian Drugs and Cosmetics Act Overview
  - 6.5 Role of the Veterinarian and Registered Pharmacist
  - 6.6 Limits of Support Staff Duties
  - 6.7 Controlled Drugs Awareness
  - 6.8 Cascade Use and Off-Label Awareness
  - 6.9 Professional Responsibility and Ethics
  - 6.10 Reporting Breaches and Concerns
- **7 Storage, Labelling and Handover of Medicines** — 10 classes
  - 7.1 Storage Temperatures and Cold Chain
  - 7.2 Secure Storage and Access Control
  - 7.3 Reading Medicine Labels and Strengths
  - 7.4 Checking Expiry and Batch Numbers
  - 7.5 Labelling Dispensed Medicines Correctly
  - 7.6 Counting Tablets and Measuring Liquids
  - 7.7 Checking Medicine Against the Prescription
  - 7.8 Giving Clear Instructions to Owners
  - 7.9 Recording Medicines Supplied
  - 7.10 Returns and Disposal of Unused Medicines
- **8 Dose Calculation and Measurement Basics** — 10 classes
  - 8.1 Units of Weight and Volume
  - 8.2 Converting Between Units
  - 8.3 Weighing Patients Accurately
  - 8.4 Calculating Dose by Body Weight
  - 8.5 Working Out Tablet Numbers per Dose
  - 8.6 Liquid Concentrations and Volumes
  - 8.7 Dosing Intervals and Daily Totals
  - 8.8 Checking Calculations With a Second Person
  - 8.9 Common Calculation Errors
  - 8.10 Practice With Realistic Clinic Examples
- **9 Administering Oral and Topical Medicines** — 10 classes
  - 9.1 Routes of Administration
  - 9.2 Giving Tablets to Dogs and Cats
  - 9.3 Giving Liquid Medicines Safely
  - 9.4 Applying Spot-On and Topical Products
  - 9.5 Eye and Ear Medication Techniques
  - 9.6 Wearing Protective Equipment
  - 9.7 Handling Hazardous Medicines
  - 9.8 Recording Each Dose Given
  - 9.9 Spotting Refusal and Vomiting After Dosing
  - 9.10 Teaching Owners to Medicate at Home
- **10 Injections, Sharps and Needle Safety** — 10 classes
  - 10.1 Types of Syringes and Needles
  - 10.2 Preparing Injections Under Direction
  - 10.3 Subcutaneous and Intramuscular Awareness
  - 10.4 Aseptic Preparation of Injectables
  - 10.5 Vaccine Handling and Cold Storage
  - 10.6 Preventing Needle-Stick Injuries
  - 10.7 Sharps Bin Use and Disposal
  - 10.8 First Response to a Needle-Stick
  - 10.9 Recording Injections and Vaccines Given
  - 10.10 Support Role Boundaries for Injections
- **11 Fluid Therapy Support and Monitoring** — 10 classes
  - 11.1 Why Animals Need Fluid Therapy
  - 11.2 Types of Fluids Used in Clinics
  - 11.3 Checking Fluid Bags and Giving Sets
  - 11.4 Preparing Drip Equipment Under Direction
  - 11.5 Calculating Drip Rates With a Nurse
  - 11.6 Caring for Catheter Sites
  - 11.7 Monitoring Hydration and Overload Signs
  - 11.8 Recording Fluids Given
  - 11.9 Responding When a Drip Stops
  - 11.10 Cleaning and Disposal After Fluid Therapy
- **12 Vaccines, Parasite Control and Preventive Products** — 10 classes
  - 12.1 Core and Non-Core Vaccines for Dogs and Cats
  - 12.2 Vaccination Schedules and Boosters
  - 12.3 Rabies Vaccination Rules in India
  - 12.4 Vaccine Certificates and Records
  - 12.5 Flea and Tick Control Products
  - 12.6 Worming Products and Schedules
  - 12.7 Safe Use of Parasite Products Around Cats
  - 12.8 Giving Owners Product Advice Within Limits
  - 12.9 Reporting Poor Responses
  - 12.10 Preventive Care Reminder Systems
- **13 Adverse Reactions, Poisoning and Reporting** — 10 classes
  - 13.1 Recognising Allergic Reactions to Medicines
  - 13.2 Common Side Effects of Medicines
  - 13.3 Human Medicines Dangerous to Pets
  - 13.4 Household Poisons in India
  - 13.5 Responding to Suspected Poisoning
  - 13.6 Informing the Veterinarian Immediately
  - 13.7 Recording Reactions in Patient Notes
  - 13.8 Reporting Adverse Events to Authorities
  - 13.9 Antimicrobial Resistance Awareness
  - 13.10 Learning From Medication Errors
- **14 Medicine Stock Control and Practice Pharmacy Records** — 10

3

Anaesthesia, Surgical Theatre and Recovery Support

14 chapters · 120 classes · 100 marks

- **1 Fundamentals of Veterinary Anaesthesia** — 6 classes
  - 1.1 Understanding the Principles of Veterinary Anaesthesia
  - 1.2 Identifying and Selecting Anaesthetic Agents
  - 1.3 Monitoring Anaesthetic Depth and Patient Vital Signs
  - 1.4 Managing Anaesthetic Equipment and Machinery
  - 1.5 Administering Analgesia: Techniques and Protocols
  - 1.6 Ensuring Recovery: Post-Anaesthetic Care and Complications
- **2 Pharmacology of Anaesthetic and Analgesic Agents** — 6 classes
  - 2.1 Understanding the Basics of Anaesthetic Agents
  - 2.2 Exploring Pharmacokinetics and Pharmacodynamics
  - 2.3 Identifying Different Classes of Anaesthetics
  - 2.4 Investigating Analgesic Agent Mechanisms
  - 2.5 Evaluating Drug Interactions in Anaesthesia
  - 2.6 Applying Dosage Calculations for Safe Administration
- **3 Monitoring and Managing Anaesthesia** — 6 classes
  - 3.1 Understanding Anaesthetic Agents and Their Effects
  - 3.2 Preparing and Calibrating Monitoring Equipment
  - 3.3 Interpreting Vital Signs During Anaesthesia
  - 3.4 Implementing Analgesia Protocols
  - 3.5 Responding to Anaesthetic Emergencies
  - 3.6 Evaluating Patient Recovery and Follow-up Care
- **4 Anaesthesia in Special Cases and Species** — 6 classes
  - 4.1 Understanding Anaesthesia in Geriatric Patients
  - 4.2 Managing Anaesthesia in Pediatric Cases
  - 4.3 Adapting Anaesthetic Techniques for Exotic Animal Species
  - 4.4 Administering Anaesthesia for Pregnant and Lactating Animals
  - 4.5 Evaluating Risks and Adjustments in Obese Patients
  - 4.6 Tailoring Analgesic Approaches for Different Species
- **5 Pain Assessment and Postoperative Analgesia** — 6 classes
  - 5.1 Understanding Pain Pathways and Responses
  - 5.2 Identifying and Evaluating Pain in Patients
  - 5.3 Implementing Pain Assessment Tools and Techniques
  - 5.4 Exploring Pharmacological Interventions for Postoperative Pain
  - 5.5 Utilizing Non-Pharmacological Pain Management Strategies
  - 5.6 Creating Personalized Postoperative Analgesic Plans
- **6 Surgical Theatre Environment and Zoning** — 10 classes
  - 6.1 Layout and Zones of a Veterinary Theatre
  - 6.2 Theatre Dress Code and Movement Rules
  - 6.3 Cleaning and Disinfecting the Theatre
  - 6.4 Ventilation, Lighting and Temperature
  - 6.5 Preparing Operating Tables and Heat Support
  - 6.6 Checking Suction and Electrosurgery Equipment
  - 6.7 Managing Theatre Traffic and Visitors
  - 6.8 Waste and Sharps Control in Theatre
  - 6.9 Theatre Safety and Fire Precautions
  - 6.10 Daily Theatre Readiness Checklist
- **7 Sterilisation, Instrument Care and Aseptic Technique** — 10 classes
  - 7.1 Principles of Asepsis
  - 7.2 Cleaning Used Instruments
  - 7.3 Types of Surgical Instruments
  - 7.4 Packing Instruments for Sterilisation
  - 7.5 Autoclave Operation and Cycle Records
  - 7.6 Sterility Indicators and Checks
  - 7.7 Storing Sterile Packs
  - 7.8 Opening Sterile Packs Without Contamination
  - 7.9 Surgical Scrubbing, Gowning and Gloving
  - 7.10 Handling Breaches of Sterility
- **8 Preparing Patients for Surgery** — 10 classes
  - 8.1 Checking Patient Identity and Consent Forms
  - 8.2 Confirming Fasting and Pre-Operative Notes
  - 8.3 Weighing and Recording Patient Details
  - 8.4 Pre-Operative Toileting and Comfort
  - 8.5 Clipping and Skin Preparation
  - 8.6 Positioning Patients on the Table
  - 8.7 Protecting Eyes, Limbs and Pressure Points
  - 8.8 Maintaining Body Temperature
  - 8.9 Transferring Patients to Theatre
  - 8.10 Pre-Operative Checklist Sign-Off
- **9 Preparing Anaesthetic and Sedation Equipment** — 10 classes
  - 9.1 Parts of an Anaesthetic Machine
  - 9.2 Breathing Circuits and Their Uses
  - 9.3 Checking Oxygen Supply and Gas Cylinders
  - 9.4 Testing Machines for Leaks
  - 9.5 Preparing Endotracheal Tubes and Laryngoscopes
  - 9.6 Preparing Monitoring Equipment
  - 9.7 Drawing Up Drugs Under Direction
  - 9.8 Labelling Syringes Correctly
  - 9.9 Emergency Drugs and Equipment Readiness
  - 9.10 Cleaning Anaesthetic Equipment After Use
- **10 Preparing Patients for Anaesthesia and Sedation** — 10 classes
  - 10.1 Pre-Anaesthetic Assessment Support
  - 10.2 Recording Weight and Vital Signs
  - 10.3 Fasting and Medication Checks
  - 10.4 Fitting Intravenous Catheters Under Direction
  - 10.5 Observing Patients After Pre-Medication
  - 10.6 Calm Handling During Induction
  - 10.7 Positioning for Intubation Assistance
  - 10.8 Special Care for Brachycephalic Breeds
  - 10.9 Care for Very Young and Elderly Patients
  - 10.10 Recording Pre-Anaesthetic Information
- **11 Assisting With Anaesthesia and Monitoring Records** — 10 classes
  - 11.1 Roles of the Anaesthetist and the Assistant
  - 11.2 Assisting With Induction and Intubation
  - 11.3 Observing Heart Rate and Breathing
  - 11.4 Using Pulse Oximeters and Monitors
  - 11.5 Reading Blood Pressure and Temperature Trends
  - 11.6 Keeping the Anaesthetic Record Accurately
  - 11.7 Recognising Signs of Anaesthetic Depth Changes
  - 11.8 Alerting the Veterinarian to Problems
  - 11.9 Responding Under Direction to Emergencies
  - 11.10 Safe Waste Anaesthetic Gas Control
- **12 General Theatre Assistant Duties** — 10 classes
  - 12.1 Role of the Circulating Assistant
  - 12.2 Opening Packs and Supplying Items
  - 12.3 Counting Swabs and Instruments
  - 12.4 Handling Surgical Specimens
  - 12.5 Operating Lights and Equipment on Request
  - 12.6 Assisting With Positioning and Draping
  - 12.7 Maintaining Communication During Surgery
  - 12.8 Keeping Theatre Records
  - 12.9 Clearing and Resetting Between Cases
  - 12.10 Reporting Equipment Faults
- **13 Scrubbed Nurse Support During Surgery** — 10 classes
  - 13.1 Role of the Scrubbed Assistant
  - 13.2 Setting Up the Instrument Trolley
  - 13.3 Draping the Patient
  - 13.4 Passing Instruments Correctly
  - 13.5 Handling Sharps in the Sterile Field
  - 13.6 Keeping Swab and Instrument Counts
  - 13.7 Suction, Retraction and Wound Irrigation Support
  - 13.8 Closing Counts Before Wound Closure
  - 13.9 Applying Dressings Under Direction
  - 13.10 Breakdown and Handover After Surgery
- **14 Recovery Nursing and Post-Operative Care** — 10 classes

4 **Diagnostic Imaging Support** 14 chapters · 120 classes **100 marks**

- **1 Fundamentals of Veterinary Radiology** — 6 classes
  - 1.1 Understanding the Basics of Veterinary Radiology
  - 1.2 Identifying Common Equipment in Veterinary Radiology
  - 1.3 Learning Radiation Safety and Protection Procedures
  - 1.4 Positioning Techniques for Accurate Radiographic Imaging
  - 1.5 Analyzing Normal versus Abnormal Radiographic Findings
  - 1.6 Applying Radiology Techniques to Diagnostic Procedures
- **2 Understanding Diagnostic Imaging Techniques** — 6 classes
  - 2.1 Explore the Fundamentals of Diagnostic Imaging
  - 2.2 Understand X-Ray Imaging Principles and Safety
  - 2.3 Identify Applications and Limitations of Ultrasound
  - 2.4 Learn the Basics of CT and MRI Technology
  - 2.5 Discover the Uses of Nuclear Medicine in Diagnostics
  - 2.6 Apply Imaging Techniques to Clinical Case Studies
- **3 Radiographic Anatomy and Interpretation** — 6 classes
  - 3.1 Understanding Radiographic Anatomy: Key Structures and Landmarks
  - 3.2 Identifying Normal Variations in Radiographic Images
  - 3.3 Analyzing Common Pathologies in Radiographic Imaging
  - 3.4 Techniques for Enhanced Image Interpretation
  - 3.5 Applying Systematic Approaches in Radiographic Evaluation
  - 3.6 Interpreting Complex Cases: Integrated Diagnostic Strategies
- **4 Advanced Imaging Procedures and Protocols** — 6 classes
  - 4.1 Understanding Advanced Imaging Modalities
  - 4.2 Interpreting Complex Radiographic Images
  - 4.3 Ensuring Safety in Advanced Imaging Procedures
  - 4.4 Mastering Protocols for Specialized Imaging
  - 4.5 Analyzing Case Studies of Rare Imaging Findings
  - 4.6 Implementing Protocols in Clinical Practice
- **5 Quality Control and Image Analysis in Clinical Practice** — 6 classes
  - 5.1 Understanding Quality Standards in Radiology
  - 5.2 Identifying Common Imaging Artifacts
  - 5.3 Implementing Quality Control Measures
  - 5.4 Analyzing Image Clarity and Resolution
  - 5.5 Interpreting Diagnostic Imaging Results
  - 5.6 Applying Quality Improvement Strategies in Imaging
- **6 Radiation Safety and Regulatory Requirements** — 10 classes
  - 6.1 How X-Rays Affect the Body
  - 6.2 Principles of Time, Distance and Shielding
  - 6.3 Indian Atomic Energy Regulatory Rules for Radiography
  - 6.4 Controlled Areas and Warning Signs
  - 6.5 Lead Aprons, Gloves and Thyroid Shields
  - 6.6 Personal Dose Monitoring Badges
  - 6.7 Pregnancy and Staff Radiation Policy
  - 6.8 Radiation Incident Response
  - 6.9 Equipment Registration and Inspection Records
  - 6.10 Safety Culture in the Imaging Room
- **7 Preparing Imaging Equipment and Materials** — 10 classes
  - 7.1 Components of an X-Ray Unit
  - 7.2 Digital Versus Film Radiography
  - 7.3 Checking Exposure Settings Under Direction
  - 7.4 Preparing Cassettes and Detectors
  - 7.5 Using Grids, Markers and Positioning Aids
  - 7.6 Cleaning Imaging Equipment
  - 7.7 Daily Equipment Safety Checks
  - 7.8 Reporting and Logging Equipment Faults
  - 7.9 Stocking Imaging Consumables
  - 7.10 Disposal of Chemicals and Old Film
- **8 Preparing Patients for Imaging** — 10 classes
  - 8.1 Checking Patient Identity and Request Forms
  - 8.2 Explaining the Procedure to Owners
  - 8.3 Removing Collars, Bandages and Metal Items
  - 8.4 Fasting and Preparation Needs
  - 8.5 Handling Fractures and Painful Patients
  - 8.6 Calming Anxious Animals
  - 8.7 Using Sedation Support Under Direction
  - 8.8 Monitoring Patients During Imaging
  - 8.9 Protecting Handlers and Owners
  - 8.10 Recording Patient Details on the Image
- **9 Positioning Dogs and Cats for Radiographs** — 10 classes
  - 9.1 Standard Views and Their Purpose
  - 9.2 Lateral and Dorsoventral Positions
  - 9.3 Radiographing the Chest
  - 9.4 Radiographing the Abdomen
  - 9.5 Radiographing Limbs and Joints
  - 9.6 Radiographing the Spine and Skull
  - 9.7 Using Sandbags, Troughs and Ties
  - 9.8 Marking Left and Right Correctly
  - 9.9 Collimating to the Area of Interest
  - 9.10 Keeping Staff Out of the Primary Beam
- **10 Producing Quality Radiographs** — 10 classes
  - 10.1 Features of a Diagnostic Image
  - 10.2 Exposure Factors and Their Effects
  - 10.3 Spotting Underexposure and Overexposure
  - 10.4 Motion Blur and Positioning Errors
  - 10.5 Checking Image Labels and Markers
  - 10.6 Repeat Exposures and Dose Reduction
  - 10.7 Image Processing and Adjustments
  - 10.8 Quality Checks Before Reporting
  - 10.9 Keeping a Repeat Rate Log
  - 10.10 Presenting Images to the Veterinarian
- **11 Ultrasound and Other Imaging Support** — 10 classes
  - 11.1 Principles of Ultrasound
  - 11.2 Preparing Patients for Ultrasound Scans
  - 11.3 Clipping and Applying Gel
  - 11.4 Supporting the Operator During Scans
  - 11.5 Care of Probes and Machines
  - 11.6 Awareness of CT and MRI in Animals
  - 11.7 Awareness of Endoscopy Support
  - 11.8 Anaesthesia Needs for Advanced Imaging
  - 11.9 Referral Centres and Transfers
  - 11.10 Owner Information About Imaging
- **12 Digital Image Storage and Record Keeping** — 10 classes
  - 12.1 Patient Image Records and Identification
  - 12.2 Storing Images in Picture Archive Systems
  - 12.3 Naming and Filing Conventions
  - 12.4 Backing Up Image Data
  - 12.5 Sending Images to Referral Practices
  - 12.6 Protecting Client and Patient Data
  - 12.7 Retention Periods for Images
  - 12.8 Handling Image Requests From Owners
  - 12.9 Audit Trails and Access Control
  - 12.10 Dealing With Lost or Corrupted Files
- **13 Imaging Room Workflow and Emergency Cases** — 10 classes
  - 13.1 Planning the Imaging List for the Day
  - 13.2 Prioritising Emergency Cases
  - 13.3 Setting Up Quickly for Trauma Patients
  - 13.4 Working Safely With Unstable Patients
  - 13.5 Teamwork During Imaging
  - 13.6 Communication With Veterinarians and Nurses
  - 13.7 Managing Owner Waiting and Updates
  - 13.8 Cleaning and Resetting Between Patients
  - 13.9 Handover of Results and Images
  - 13.10 Reviewing Workflow for Improvement
- **14 Equipment Maintenance and Quality Assurance** — 10 classes

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