

APPLY KNOWLEDGE OF CLINICAL PATHOLOGY

UNIT CODE: 0912 541 29A

TVET CDACC UNIT CODE: HE/OS/AHP/CC/19/6/MA

UNIT DESCRIPTION

This unit specifies the competencies required to apply clinical pathological techniques in animal health. It involves applying knowledge of clinical pathology and principles of hematology, collecting and processing animal blood and urine sample and applying knowledge of clinical chemistry.

ELEMENTS AND PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA
These describe the key outcomes which make up workplace function (to be stated in active)	These are assessable statements which specify the required level of performance for each of the elements (to be stated in the passive voice) <i>Bold and italicized terms are elaborated in the Range</i>
1. Apply knowledge of clinical pathology and principles of hematology	1.1 <i>Clinical pathology procedures</i> are carried out as per work procedure 1.2 Erythrocyte structures and their inclusions knowledge is applied as per work requirement 1.3 Erythrocyte destruction processes are managed as per work requirement 1.4 Leukocyte structures knowledge is applied as per work requirement
2. Collect and process animal blood sample	2.1 <i>Venipuncture sites</i> in different animal species are identified and located as per work procedure 2.2 Blood sample is collected as per work procedure 2.3 Blood sample is handled as per work procedure 2.4 Blood sample is processed as per work procedure
3. Collect and process animal urine sample	3.1. Urine sample collection methods are identified as per work procedure 3.2. Urine sample is collected as per animal welfare

	guidelines and work procedure 3.3. Urine sample is handled as per work procedure 3.4. Urine sample is processed as per work procedure
4. Apply knowledge of clinical chemistry	4.1 Liver and kidney functions knowledge is applied as per work requirement 4.2 Liver and kidney function tests knowledge is applied as per work requirement 4.3 Cerebrospinal fluid knowledge is applied as per work requirement 4.4 Acid base balance knowledge is applied as per work requirement

RANGE

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

VARIABLE	RANGE
1. Clinical pathology procedures may include but not limited to	● Hematology ● Urinalysis ● Kidney function test ● Liver function test
2. Venipuncture sites may include but not limited to	● Jugular vein ● Femoral vein ● Coccygeal vein ● Ear vein ● Milk vein

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit of competency.

Required Skills

The individual needs to demonstrate the following skills:

- Surgical
- Communication
- Report-writing
- Computer
- Time management
- Problem-solving
- Decision-making

Required Knowledge

The individual needs to demonstrate knowledge of:

- Anatomy and physiology
- General pathology
- Clinical pathology

EVIDENCE GUIDE

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

1. Critical Aspects of Competency	Assessment requires evidence that the candidate: 1.1 Carried out clinical pathology procedures are carried out as per work procedure 1.2 Applied knowledge of erythrocyte structures and their inclusions as per work requirement 1.3 Managed erythrocyte destruction processes are managed as per work requirement 1.4 Applied leukocyte structures knowledge is applied as per work requirement 1.5 Collected blood sample as per work procedure 1.6 Processed blood sample as per work procedure 1.7 Collected urine sample per animal welfare guidelines and work procedure 1.8 Processed urine sample as per work procedure
2. Resource Implications	The following resources must be provided: 2.1 Appropriately simulated environment where assessment can take place 2.2 Access to relevant work environment

	2.3 Resources relevant to the proposed activities or tasks
3. Methods of Assessment	Competency in this unit may be assessed through: 3.1. Oral 3.2. Written 3.3. Observation 3.4. Case study 3.5. Third party report
4. Context of Assessment	Competency may be assessed in a: Workplace or simulated workplace
5. Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.