APPLY KNOWLEDGE OF BIOSTATISTICS AND COMPUTER APPLICATION

UNIT CODE: 0542 441 26A

TVET CDACC UNIT CODE: HE/OS/AHP/CC/07/5/MA

UNIT DESCRIPTION

This unit specifies the competencies required by an animal health technician to apply knowledge biostatistics and computer applications. It involves applying concept of statistical population and samples, knowledge of descriptive statistics, probability, normal distribution curves and computer applications.

ELEMENTS AND PERFORMANCE CRITERIA

ELEMENT These describe the key outcomes which make up workplace function	PERFORMANCE CRITERIA These are assessable statements which specify the required level of performance for each of the elements *(Bold and italicized terms are elaborated in the range)*
1. Apply concept of statistical population and samples	1.1 Types of population are identified and applied according to the workplace requirements. 1.2 Sampling methods knowledge is applied as per work procedure 1.3 Variables knowledge in sampling is applied as per work requirement 1.4 Methods of data collection are applied as per work requirement
2. Apply knowledge of descriptive statistics	2.1 Descriptive statistics are applied as per work requirement 2.2 Measures of central tendencies are applied as per work requirement 2.3 Dispersion measure knowledge is applied as per work requirement
3. Apply knowledge of probability	3.1 Types of probabilities are identified and applied according to the workplace requirements. 3.2 Probability terminologies knowledge is applied as per work

	procedure
	3.3 Statistical probabilities are computed as per work requirement
4. Apply knowledge of normal distribution	4.1 Normal distribution terminologies knowledge is applied as per work requirement
	4.2 Normal distribution curves are drawn as per work procedure
	4.3 Statistical normal distribution curve variables are calculated as per work procedure
5. Apply computer application	5.1 Computer hardware is applied as per job requirements.
	5.2 Computer software is applied as per work requirements.
	5.3 Computer application knowledge is applied as per job requirement

RANGE

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

Variable	Range
1. Sampling methods include but not limited to:	● Stratified ● Random ● Snowbowling ● Convenient

REQUIRED KNOWLEDGE AND SKILLS

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

Required skills

The individual needs to demonstrate the following skills:

● Communication skills
● ICT skills

- Critical thinking skills

Required knowledge

The individual needs to demonstrate knowledge of:

- Basic mathematics

EVIDENCE GUIDE

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

1. Critical aspects of competency	Assessment requires evidence that the candidate:
	1.1. Identified and applied types of population according to the workplace requirements.
	1.2. Applied sampling methods knowledge as per work procedure
	1.3. Applied variables knowledge in sampling as per work requirement
	1.4. Applied methods of data collection as per work requirement
	1.5. Applied descriptive statistics as per work requirement
	1.6. Applied measures of central tendencies as per work requirement
	1.7. Applied dispersion measure knowledge as per work requirement
	1.8. Identified and applied types of probabilities according to the workplace requirements.
	1.9. Computed statistical probabilities as per work requirement
	1.10. Drew normal distribution curves as per work procedure
	1.11. Applied computer application knowledge as per job requirement
	1.12. Operated computer devices as per workplace policies and regulations.
	1.13. Solved tasks using the office suite as per workplace policies and regulations.

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 may be assessed through: ● Practical ● Project ● Written tests ● Third party report ● Portfolio of evidence ● Oral questions
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 and workplace job role is recommended.