BIOSTATISTICS AND COMPUTER APPLICATION

ISCED UNIT CODE: 0611 551 32A

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

Relationship to Occupational Standards

This unit addresses the Unit of Competency: Apply knowledge of biostatistics and computer application

UNIT DURATION: 50 Hours

Unit Description

This unit specifies the competencies required by an animal health and production technologist 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.

Summary of Learning Outcomes

By the end of this unit, the learner should be able to:

S/No	Learning Outcomes	Duration (Hours)
1.	Apply concept of statistical population and samples	20
2.	Apply knowledge of descriptive statistics	10
3.	Apply knowledge of probability	10
4.	Apply knowledge of normal distribution	15
Total		**80**

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcomes	Content	Suggested Assessment Methods
1. Apply concept of statistical population and	1.1. Definition of terms 1.1.1. Statistics 1.1.2. Population	• Practical • Project • Portfolio of evidence

samples	1.1.3. Samples	• Third party report

	1.2. Types of population
	1.3. Sampling methods
	   1.3.1. Stratified
	   1.3.2. Random
	   1.3.3. Snow bowling
	   1.3.4. Convenient
	1.4. Types of Variables
	1.5. Methods of data collection
		• Written assessment
		• Oral questioning

2. Apply knowledge of descriptive statistics	2.1. Descriptive statistics 2.2. Measures of central tendencies 2.3. Dispersion measures	• Practical • Project • Portfolio of evidence • Third party report • Written assessment • Oral questioning
3. Apply knowledge of probability	3.1. Probability terminologies 3.2. Types of probabilities 3.3. Statistical probabilities	• Practical • Project • Portfolio of evidence • Third party report • Written assessment • Oral questioning
4. Apply knowledge of normal distribution	4.1. Normal distribution terminologies 4.2. Normal distribution curves 4.3. Normal distribution curves variables	• Practical • Project • Portfolio of evidence • Third party report • Written assessment • Oral questioning

5. Apply computer application	5.1. Computer hardware
	    5.1.1. Hard disc
	    5.1.2. keyboard
	    5.1.3. C.p.u
	5.2. Computer software
	5.3. Computer software
		• Practical
		• Project
		• Portfolio of evidence
		• Third party report
		• Written assessment
		• Oral questioning

Suggested Methods of delivery

- Practical
- Projects
- Demonstrations
- Group discussion
- Direct instructions

Recommended Resources for 25 Trainees

S/No.	Category/Item	Description/ Specification	Quantity	Recommended Ratio (Item: Trainee)
1.	**Learning materials**			
2.	Projector		1	1:25
3.	Whiteboard/Smart board		1	1:25
4.	Desktop/computer		25	1:1
5.	Lecture/Theory room		1	1:25
6.	Library		1	1:25
7.	E-Library		1	1:25