

071906T4AEN

AGRICULTURAL ENGINEERING LEVEL 6

ENG/OS/AGR/CR/03/6/A

Perform Produce Post Harvest Activities

March/April 2025



**TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION
COUNCIL (TVET CDACC)**

PRACTICAL ASSESSMENT

INSTRUCTIONS TO ASSESSOR

1. Assess the candidate as the practical progresses observing the critical areas
2. You are required to mark the practical as the candidate perform the tasks
3. You are required to take video clips at critical points
4. Ensure the candidate has a name tag and registration code at the back and front

OBSERVATION CHECKLIST

Candidate's Name & Registration Code			
Assessors Name & Registration Code			
Venue of Assessment			
Date of Assessment			
Items to be Evaluated: <i>Please award marks as appropriate. Give a brief comment on your observation.</i>	Marks Available	Marks Obtained	Comments
TASK 1: Received grains in store determined percentage content of foreign materials, Rotten, disease and discoloured (RDD) grains and Pest Damaged grains			
1. Wore PPEs as per the work place policy <ul style="list-style-type: none"> • overall • gum boots • disposable gloves <i>(Award 1 mark for each PPE donned maximum 3 marks)</i>	3		
2. Received the grains and carried the correct sampling. <ul style="list-style-type: none"> • Used the spear to prick the bag to extract samples from different points around the bag • Formed cone with the quarterly procedure • Achieved correct ratio 0.05% sampling amount - 200g (m1) <i>(Award 2 marks for each activity maximum 6 marks)</i>	2 2 2		
3. Determined foreign matter <ul style="list-style-type: none"> • Used the appropriate sieve size and/or hand picking. • Selected all the foreign matter retained on top of the sieve and add to that which passed through the 	1 1		

sieve. <ul style="list-style-type: none"> • Weighed the foreign matter (m2). • % Foreign matter = $m2 / m1 \times 100$ <i>(Award 1 mark for each activity maximum 4 marks)</i>	1 1		
4. Determined Pest damaged grains as per Standard Operation Procedures <ul style="list-style-type: none"> • Select all grains which are partially eaten (bored) by weevils, grain borers or other crawling pests (m2) • Select all rotten and diseased grains and weigh (m2). • weighed (m2). • % pest damaged grains = $m2 / m1 \times 100$ <i>(Award 1 mark for each correct activity maximum 3 marks)</i>	1 1 1		
5. Determined Rotten, diseased and discoloured (RDD) grains as per Standard Operation Procedures <ul style="list-style-type: none"> • Select all rotten and diseased grains (m2). • weighed (m2). % rotten and • diseased grains %RDD = $m2 / m1 \times 100$ <i>(Award 1 mark for each correct activity maximum 3 marks)</i>	1 1 1		
TASK 2: Received grains in store determined percentage content of foreign materials, Rotten, disease and discoloured (RDD) grains and Pest Damaged grains			
6. Used the UV light source in a dark environment to test Aflatoxin as per Standard Operation Procedures	3		
7. Indicated the results and made the right deduction (if green- yellow glow then grains	3		

<p>affected otherwise not)</p> <p><i>(Award 1 marks for each correct activity Maximum 3 marks)</i></p>			
<p>8. Estimated the percentage of grains affected as per Standard Operation Procedures Select all affected grains (m2). weighed (m2). $\% \text{ Affected grain} = m2/m1 \times 100$ (If more than 5% - reject <i>(Award 1 marks for each correct activity Maximum 3 marks)</i></p>	<p>1 1 1</p>		
<p>TASK 3: Determine the moisture content, dry and wet basis by oven dry method and make recommendation.</p>			
<p>9. Weighed a given sample and recorded as per Standard Operation Procedures <i>(Award 2 marks for each correct activity)</i></p>	2		
<p>10. Placed in oven for 2 hours or microwave for 2-3 minutes and timed as per Standard Operation Procedures <i>(Award 2 marks for each correct activity)</i></p>	2		
<p>11. Calculated moisture content wet basis as per Standard Operation Procedures <i>(Award 2 marks for each correct activity)</i></p>	2		
<p>12. Calculated moisture content dry basis as per Standard Operation Procedures <i>(Award 2 marks for each correct activity)</i></p>	2		
<p>13. Made the right recommendation either for storage or further drying as per Standard operation procedures <i>(Award 2 marks for each correct activity)</i></p>	2		
<p>14. Carried out disposal and returned tools and materials as per the workplace waste</p>	2		

management policy (Award 2 mark or zero for each, max 2)			
GRAND TOTAL	40		
ASSESSMENT OUTCOME			
<p>The candidate was found to be:</p> <p style="text-align: center;">Competent <input type="checkbox"/> Not yet Competent <input type="checkbox"/></p> <p>(Please tick as appropriate)</p> <p>(The candidate is competent if the candidate obtains at least 50%)</p>			
Feedback from the Candidate:			
Feedback to the Candidate:			
Candidate Signature		Date:	
_____		_____	
Assessor's Signature		Date	
_____		_____	