

071906T4AEN

AGRICULTURAL ENGINEERING LEVEL 6

ENG/OS/AGR/CR/01/6/A

Operate Agricultural and Related Production Machinery and Equipment

Nov/Dec 2024



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

PRACTICAL ASSESSMENT

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 |
| 1. Worn personal protective equipment. (overall, gloves, safety boots) (Award 1 mark each) | 3 | | |
| 2. Assembled tools, material and equipment (Award 1 mark for each set) | 2 | | |
| 3. Carried out general inspection on the | | | |

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| <p>equipment to check the condition of the machine.</p> <ul style="list-style-type: none"> • Seed hopper • Seed tubes. • Seed metering device <p><i>(Award 1 mark each)</i></p> | 3 | | |
| <p>4. Carried out lubrication on the sprockets and bearings.</p> <p><i>(Award 1 mark for identification of sprockets, bearings and appropriate use of greasing gun)</i></p> | 3 | | |
| <p>5. Tightened loose bolts and nuts</p> <p><i>(Award 1 mark each)</i></p> | 2 | | |
| <p>6. Determined the planter width, W</p> <p><i>(Award 2 marks)</i></p> | 2 | | |
| <p>7. Measured the length of a strip necessary to cover $\frac{1}{10}$ hectare.</p> <p><i>(Award 2 marks)</i></p> | 2 | | |
| <p>8. Measured the diameter of the wheel using a tape measure and calculated the circumference</p> <p><i>(Award 1 mark for measuring, 1 mark for calculating and 1 mark for accuracy)</i></p> | 3 | | |
| <p>9. Determined the number of revolutions, N, the ground wheel has to make to cover the length, L.</p> <p><i>(Award 1 mark for calculation and 1 mark for accuracy)</i></p> | 2 | | |
| <p>10. Raised the seed drill in such a way that the ground wheels turn freely.</p> | 2 | | |

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|--|-----------|--|--|
| (Award 1 mark for correct use of tools and 1 mark for raising the seed drill) | | | |
| 11. Made a mark on the ground wheel and a corresponding mark at a convenient place on the body of the drill to help in counting the revolutions of the drive wheel. (Award 1 mark for each) | 2 | | |
| 12. Put selected seeds in the hopper and placed containers to collect seeds being discharged (Award 1 mark each) | 2 | | |
| 13. Rotated the wheel and counted N revolutions (Award 1 mark each) | 2 | | |
| 14. Weighed the quantity of seeds dropped from seed drill (Award 1 mark) | 1 | | |
| 15. Calculated the seed rate in kg/ha. (Award 1 mark for each step) | 3 | | |
| 16. Wrote two recommendations of necessary adjustments for the desired seed rate. (Award 1 mark for each) | 2 | | |
| 17. Observed safety precautions (Award 2 marks) | 2 | | |
| 18. Cleaned the working area, tools and equipment (Award 2 marks) | 2 | | |
| Total marks | 40 | | |

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| 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><i>(Please tick as appropriate)</i></p> <p><i>(The candidate is competent if the candidate obtains at least 50%)</i></p> | |
| Feedback from the Candidate: | |
| Feedback to the Candidate: | |
| Candidate Signature _____ | Date: _____ |
| Assessor's Signature _____ | Date _____ |