

Instruction Sheet for the Candidate

Qualification	Agricultural Machinery Operator (Level -3)
Competency Standard	Construct electrical circuits and test its parameters by using electrical measuring instruments
Purpose of Assessment	Formative Assessment
Candidate Details	Name_____ Registration/Roll Number_____
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within 03 Hrs. time frame (for practical demonstration & assessment):</p> <ul style="list-style-type: none"> • Prepare series circuit • Prepare parallel circuit • Measure the voltage & Resistance • Identify Various Diodes • Identify Resistors in circuit • Identify Various types of Sensors
Time: 03 Hrs.	During a practical assessment, under observation by an assessor, you are required to
Minimum Evidence Required	<p>Prepare series circuit</p> <ol style="list-style-type: none"> 1. .Draw the circuit on the board 2. .Attach the bulb and holder according to drawing 3. Connect the wire with holder 4. Attach the circuit with battery <p>Prepare parallel circuit</p> <ol style="list-style-type: none"> 1. Draw the circuit on the board 2. Attach the bulb and holder according to drawing 3. Connect the wire with holder 4. Attach the circuit with battery <p>Measure the voltage & Resistance</p> <ol style="list-style-type: none"> 1. Select the multimeter and adjust the knob on voltage 2. Attach the probe with circuit and measure the voltage 3. Select the multimeter and adjust the knob on ohm 4. Attach the probe with circuit and measure the resistance

	<p>Identify Various Diodes</p> <ol style="list-style-type: none"> 1. Identify the Diodes 2. Identify its types & polarities <p>. Identify Resistors in circuit</p> <ol style="list-style-type: none"> 1. Identify the Resistor & its types 2. Recognize Coding & Color coding of resistor 3. Design series & Parallel circuit of Resistor 4. Use formulae for Series & parallel circuit of resistors <p>Identify Various types of Sensors</p> <ol style="list-style-type: none"> 1. Identify temperature sensors. 2. Identify sound sensors. 3. Identify proximity sensors. 4. Identify pressure sensors. 5. Identify light sensors. 6. Identify position sensors. 7. Identify voltage sensors. 8. Identify current sensors. 9. Identify the vision sensors. 10. Identify infrared (IR) sensors. 11. Identify power requirement for each sensor
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Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	Construct electrical circuits and test its parameters by using electrical measuring instruments
Competency Standard	Agricultural Machinery operator (Level -3)
Purpose of Assessment	Formative Assessment
Assessment Task	<ul style="list-style-type: none"> • Prepare series circuit • Prepare parallel circuit • Measure the voltage & Resistance • Identify Various Diodes • Identify Resistors in circuit • Identify Various types of Sensors

I can.....

Performance Criteria	Yes	No
1. Draw the circuit on the board	<input type="checkbox"/>	<input type="checkbox"/>
2. .Attach the bulb and holder according to drawing	<input type="checkbox"/>	<input type="checkbox"/>
3. Connect the wire with holder	<input type="checkbox"/>	<input type="checkbox"/>
4. Attach the circuit with battery	<input type="checkbox"/>	<input type="checkbox"/>
5. Select the multimeter and adjust the knob on voltage	<input type="checkbox"/>	<input type="checkbox"/>
6. Attach the probe with circuit and measure the voltage	<input type="checkbox"/>	<input type="checkbox"/>
7. Identify the Diodes	<input type="checkbox"/>	<input type="checkbox"/>
8. Recognize Coding &Color coding of resistor	<input type="checkbox"/>	<input type="checkbox"/>
9. Design series & Parallel circuit of Resistor	<input type="checkbox"/>	<input type="checkbox"/>
10. Use formulae for Series & parallel circuit of resistors	<input type="checkbox"/>	<input type="checkbox"/>
11. Identify temperature sensors	<input type="checkbox"/>	<input type="checkbox"/>

12. Identify sound sensors.	<input type="text"/>	<input type="text"/>
13. Identify proximity sensors.	<input type="text"/>	<input type="text"/>
14. Identify pressure sensors	<input type="text"/>	<input type="text"/>
15. Identify light sensors.	<input type="text"/>	<input type="text"/>
16. Identify position sensors.	<input type="text"/>	<input type="text"/>
17. Identify the vision sensors	<input type="text"/>	<input type="text"/>
18. Identify infrared (IR) sensors.	<input type="text"/>	<input type="text"/>
19. Identify power requirement for each sensor	<input type="text"/>	<input type="text"/>

Candidate's Signature_____ Assessor's Signature_____

Date: _____

Assessors Judgment Guide

Qualification	Construct electrical circuits and test its parameters by using electrical measuring instruments
Competency Standard	Agricultural Machinery Operator (Level -3)
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> </div> Name of the Assessor _____ Assessor's code: _____ Signature: _____

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment		✓					
Other Requirement							

Observation Checklist

Assessment Task		<ul style="list-style-type: none">• Prepare series circuit• Prepare parallel circuit• Measure the voltage & Resistance• Identify Various Diodes• Identify Resistors in circuit• Identify Various types of Sensors		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Draw the circuit on the board			
2.	.Attach the bulb and holder according to drawing			
3.	Connect the wire with holder			
4.	Attach the circuit with battery			
5.	Select the millimeter and adjust the knob on voltage			
6.	Attach the probe with circuit and measure the voltage			
7.	Identify the Diodes			
8.	Recognize Coding &Color coding of resistor			
9.	Design series & Parallel circuit of Resistor			
10.	Use formulae for Series & parallel circuit of resistors			
11.	Identify temperature sensors			
12.	Identify sound sensors.			
13.	Identify proximity sensors.			
14.	Identify pressure sensors			
15.	Identify light sensors.			
16.	Identify position sensors.			
17.	Identify the vision sensors			

18.	Identify infrared (IR) sensors.			
19.	Identify power requirement for each sensor			
20.	Draw the circuit on the board			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		

Knowledge Assessment

Qualification	Agriculture Machinery Operator (Level -3)
Competency Standard	Construct electrical circuits and test its parameters by using electrical measuring instruments
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Candidate Signature: _____
Assessment Outcome	<div style="display: flex; justify-content: space-around; align-items: center;"> COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> </div> Name of the Assessor: _____ Assessor's code: _____ Signature of the Assessor: _____

Candidate's response is not required to be identical, but similar concepts and/or keywords must be used. Oral questioning may be used to clarify candidate understanding of topic and its application.

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		Satisfactory	Not Satisfactory
1.	Name Basic electric and electronics components		
2.	Steps included in basic electric operations		

3.	4. Enlist three various types of sensors used in agricultural machines?		

Feedback to the Candidate	
Candidate's Signature_____	Assessor's Signature _____