# **Moderation Report**

## Electronics and Advanced Technologies Level 3 - Moderation Report 2024

### Moderation Details for Calibration - Sample 1

Sample 1 - Identify each criterion being moderated (including elements, if selected)	Criterion 6
Sample 1 - What rating/s has the group assigned this sample?	A
Sample 1 - What evidence supports the rating/s the group has assigned?	<b>Basic circuit construction and understanding:</b> The student demonstrates a basic ability to construct a simple circuit (Question 1) and shows some understanding of circuit components and their functions.
	<b>Partial understanding of system functions:</b> The student partially completes basic IPO diagrams to represent system functions (Question 2).
	<b>Safety awareness:</b> The student shows some awareness of safety procedures in an electronics lab (Question 3).
	<b>Basic circuit analysis:</b> The student can perform basic calculations related to voltage, current, and resistance in simple circuits (Questions 4 and 5).
	<b>Partial understanding of Zener diodes:</b> The student demonstrates a partial understanding of Zener diodes and their characteristics (Question 6).
	<b>Application of transistor circuits:</b> The student shows a basic understanding of transistor circuits and their applications (Questions 7, 8, and 9).
Sample 1 - What evidence would be	<b>More complex circuit analysis:</b> The student should be able to analyse more complex circuits with multiple components and configurations.
required to assign a higher rating/s?	<b>Detailed understanding of electronic components:</b> The student should demonstrate a deeper understanding of various electronic components, including their characteristics, applications, and limitations.
	Accurate circuit diagrams: The student should be able to draw accurate and complete circuit diagrams, including all necessary components and connections.
	Problem-solving and troubleshooting: The student should be able to





identify and troubleshoot problems in electronic circuits, providing logical explanations and solutions.

**Clear and concise explanations:** The student should be able to explain electronic concepts and principles clearly and concisely, demonstrating a strong understanding of the subject matter.

Sample 1 - Summary of group consensus to element level, with comments (if applicable).

Sample 1 - What actions

teachers to help the

rating/s?

student attain a higher

would you recommend for

**Deepen understanding of electronic components**: The teacher could help the student develop a deeper understanding of various electronic components, including their characteristics, applications, and limitations. This could involve hands-on activities, demonstrations, or research projects.

**Improve circuit diagram drawing skills**: The teacher could provide guidance and feedback on drawing accurate and complete circuit diagrams. This could involve using templates, providing examples, or using online tools to create diagrams.

**Develop problem-solving and troubleshooting skills**: The teacher could create opportunities for the student to identify and troubleshoot problems in electronic circuits. This could involve providing scenarios or challenges that require critical thinking and problem-solving skills.

**Enhance communication skills**: The teacher could encourage the student to explain electronic concepts and principles clearly and concisely. This could involve presentations, discussions, or written assignments.

### Moderation Details for Calibration - Sample 2

Sample 2 - Identify each criterion being moderated (including elements, if selected)	Criterion 6
Sample 2 - What rating/s has the group assigned this sample?	C
Sample 2 - What evidence supports the rating/s the group has assigned?	<ul> <li>Basic circuit construction and understanding: The student demonstrates the ability to construct a basic circuit (Question 1) and shows understanding of circuit components and their functions.</li> <li>Understanding of system functions: The student can create basic IPO diagrams to represent system functions (Question 2).</li> <li>Safety awareness: The student shows awareness of safety procedures in an electronics lab (Question 3).</li> <li>Basic circuit analysis: The student can perform calculations related to voltage, current, and resistance in simple circuits (Questions 4 and 5).</li> <li>Understanding of Zener diodes: The student demonstrates some understanding of Zener diodes and their characteristics (Question 6).</li> <li>Application of transistor circuits: The student shows basic</li> </ul>

		understanding of transistor circuits and their applications (Questions 7, 8, and 9).
	Sample 2 - What evidence would be required to assign a higher rating/s?	<b>More complex circuit analysis:</b> The student should be able to analyse more complex circuits with multiple components and configurations.
		<b>Detailed understanding of electronic components:</b> The student should demonstrate a deeper understanding of various electronic components, including their characteristics, applications, and limitations.
		Accurate circuit diagrams: The student should be able to draw accurate and complete circuit diagrams, including all necessary components and connections.
		<b>Problem-solving and troubleshooting:</b> The student should be able to identify and troubleshoot problems in electronic circuits, providing logical explanations and solutions.
		<b>Clear and concise explanations:</b> The student should be able to explain electronic concepts and principles clearly and concisely, demonstrating a strong understanding of the subject matter.
	Sample 2 - Summary of group consensus to element level, with comments (if applicable).	
	Sample 2 - What actions would you recommend for teachers to help the student attain a higher rating/s?	<b>Provide more opportunities to practice circuit analysis</b> : The student could benefit from analysing more complex circuits with multiple components and configurations. This could involve providing additional practice problems, working through examples together, or using circuit simulation software to explore different scenarios.
Planning for next moderation meeting - Statewide Samples		
	For all courses, please nominate the criteria and elements (if desired) for moderation.	Criterion 8
	State the name of the person who will be providing the samples for moderation	Nigel Baptist
	Sharing Resources	
	Please record any links to or details of resources	N/A

that were shared or describe any assessment strategies that were discussed.

#### **Course Feedback**

Please provide any additional feedback on aspects of the course for future consideration.

**Content Feedback** 

Criteria / Element Feedback

Other Feedback