

PROJECT 2**Measuring Current in a Parallel Circuit****25 marks****Planning:****5 marks**

1. An outline of the manner in which the project will be undertaken. 1 mark
2. Checklist completed for each planning stage. 2 marks
3. Outline in sequence. 2 marks

Implementation**5 marks**

1. All materials collected 1 mark
2. Correct measurements 1 mark
3. Correct assembly 2 marks
4. Test for functionality 1 mark

Report Table**5 marks**

- Correct headings 2 marks
- Accurate recordings 3 marks

Discussion**10 marks**

1. Yes/No 1 mark – Explanation - 4 marks (5 marks)

Explanation: Current flowing from batteries is shared by lamps 1, 2 and 3. Current from the battery splits into 3 parts and no current is lost./Total current is equal to the sum of the individual currents expressed in symbols $I_0 = I_1 + I_2 + I_3$

2. Yes/No 1 mark – Explanation - 4 marks (5 marks)

Explanation: The switches work independently for each constitutes a separate pathway for current (that is shared) Circuit for each lamp is separate.

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END OF PROJECT MARK SCHEME