

Q1. (2021)

a)

03.1			1	AO1 6.2.1.1
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b)

03.3	all 4 components connected in a series circuit	allow a cell instead of a battery allow an LED or LDR symbol instead of a lamp ignore the + sign on the battery symbol	1	AO3 6.2.1.1 6.2.2
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Q2. (2023)

a)

06.1	voltmeter symbol correct and connected across the resistors		1	AO1 6.2.1.3 6.2.1.1 6.2.1.4 RPA15
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b)

06.2	the total resistance must be less than $20\ \Omega$	allow the total resistance cannot be more than $20\ \Omega$	1	AO2
	because the total resistance of the resistors (in parallel) is less than the resistance of the smallest resistor	allow the total resistance of the resistors (in parallel) is less than either resistor	1	AO1 6.2.2 6.2.1.3 RPA15

Q3. (2024)

a)

01.1	the current in both lamps is the same		1	AO1 6.2.2
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b)

01.7	lamp X no longer emits light		1	AO3 6.2.2
	because the circuit is no longer complete	dependent on MP1 allow because there is no current	1	