

# **General Certificate of Secondary Education**

## Science Double Award Modular 3468

Physics A 3453

**Module 10: Electricity** 

Module Test Answer Keys

March 2007 examination series

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

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## **Electricity: Foundation Tier**

Question No.	KEY
One	1 – resistor 2 – variable resistor 3 – cell 4 – battery
Two	1 – insulates the plug 2 – connects metal case of appliance to earth 3 – wire inside melts if current is too high 4 – holds the cable firmly
Three	1 – potential difference 2 – resistance 3 – current 4 – power
Four	1 – moves to the left 2 – points to 0 3 – moves further 4 – moves to the right
Five	1 – thermistor
rive	2 – LDR 3 – filament lamp 4 – diode
Six	P S
Seven	G has the same frequency as H H has the same peak voltage as J
Eight	8.1 - A, 8.2 - A, 8.3 - A, 8.4 - B
Nine	9.1 - C, 9.2 - B, 9.3 - C, 9.4 - A
Ten	10.1 – B, 10.2 – D, 10.3 – B, 10.4 – C

### **Electricity: Higher Tier**

0	
Question No.	KEY
One	1 – thermistor
One	2 – LDR
	3 – filament lamp
	4 – diode
Two	1 - 0.40  amps
TWO	2 – 0.80 amps
	3 – 0.20 amps
	4 – 0.13 amps
Three	G has the same frequency as H
	H has the same peak voltage as J
Four	the current is directly proportional to potential difference
	the resistance remains constant
Five	5.1 – A, 5.2 – A, 5.3 – A, 5.4 – B
Six	6.1 - C, 6.2 - B, 6.3 - C, 6.4 - A
Seven	7.1 – B, 7.2 – D, 7.3 – B, 7.4 – C
Eight	8.1 - D, 8.2 - B, 8.3 - A, 8.4 - C
Nine	9.1 – B, 9.2 – C, 9.3 – B, 9.4 – D
Ten	10.1 - B, 10.2 - D, 10.3 - A, 10.4 - C