## 2009 HIGHER SCHOOL CERTIFICATE EXAMINATION

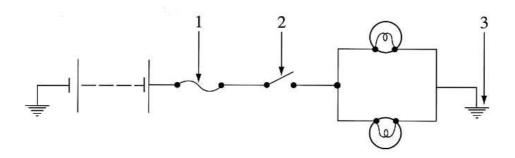
## Automotive

Section II (continued)

Que	stion 19 (7 marks)	
(a)	Why is it recommended that the earth lead be removed first and replaced last when disconnecting or connecting an automotive battery?  To stop a circuit tearforming between between and the battery which can result in electrocution.	1
(b)	What does CCA refer to in an automotive battery?	1

Question 19 continues on page 14

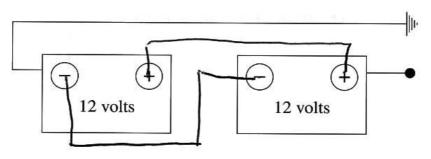
(c) This diagram shows some components in an electrical circuit.



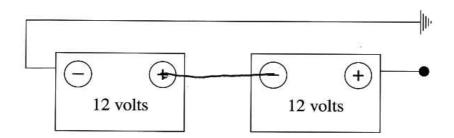
Complete the table naming and describing the function of each numbered component.

Component	Name	Function
1	resistan	pown current flow.
2	statch	turns the circuit on an off bastopping power flow
3	Ground.	Earths the cercuit.

(d) In the diagram below, draw lines to show how to connect the terminals to increase battery output voltage to 24 volts.



(e) In the diagram below, draw lines to show how to connect the terminals to maintain battery output voltage at 12 volts.



**End of Question 19** 

-14-

1

1

3