## 2009 HIGHER SCHOOL CERTIFICATE EXAMINATION

## Automotive

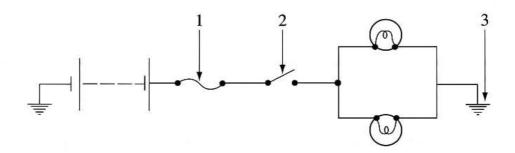
Section II (continued)

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?	1
	To prevent sperking which could cause the battery to explode	
	-12 - 3 N - 1 DOM - 2 DOM - 3	, and
(b)	What does CCA refer to in an automotive battery?	1
	Cold Crarking Amperage	

Question 19 continues on page 14

## Question 19 (continued)

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

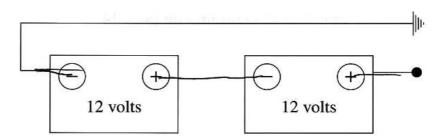


3

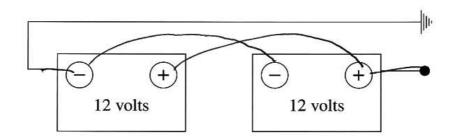
Complete the table naming and describing the function of each numbered component.

Component	Name	Function
1	Fuse	Profect against too much current
2	Suisch	to open and close the circuit
3	bathery	to provide power to the circ

(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**