## 2009 HIGHER SCHOOL CERTIFICATE EXAMINATION Automotive

## Section II (continued)

## Question 19 (7 marks)

(a) Why is it recommended that the earth lead be removed first and replaced last 1 when disconnecting or connecting an automotive battery?

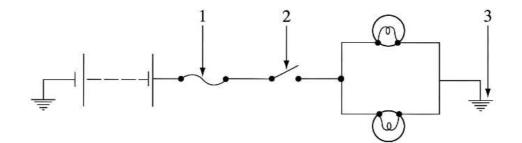
So you don't shot curant it and to precent only spares that may .....

(b) What does CCA refer to in an automotive battery? <u>COLL Cranking Amps has much draw</u> <u>He battery can give</u>.

Question 19 continues on page 14

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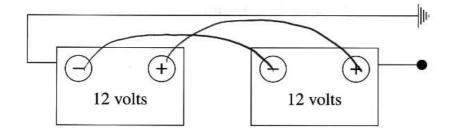
(c) This diagram shows some components in an electrical circuit.



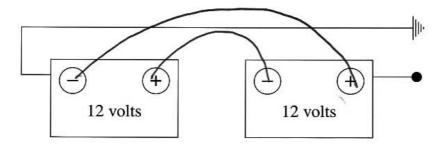
Complete the table naming and describing the function of each numbered component.

| Component | Name        | Function                       |
|-----------|-------------|--------------------------------|
| 1         | Fuse        | to present to much current the |
| 2         | Open Switch | to open and dose the circuit.  |
| 3         |             |                                |

(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** 

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