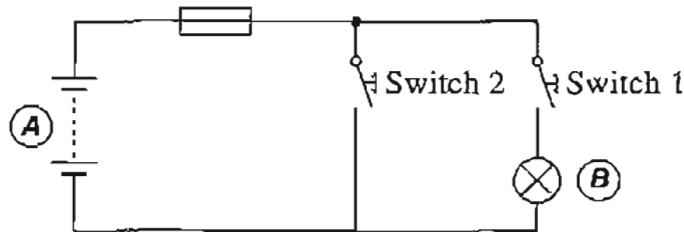


Electrotechnology

Section II (continued)

Question 19 (7 marks)

An electrical circuit is shown.



- (a) Identify the components (A) and (B).

		Component	
(i)	(A)	Multi-celled source of EMF eg battery	1
(ii)	(B)	light globe or illumination	1

- (b) Describe what will happen if Switch 1 is closed. 2

The light globe (figure B) will have current running through it as the series circuit is now closed (Active) meaning the light will turn on. ~~the~~ current stays the same however voltage changes after the light.

- (c) Describe what will happen if Switch 1 remains closed and Switch 2 is also closed. 3

The series circuit is then a parallel circuit. The current will split up into each arm of the circuit causing less to flow through the light resulting in it dimming. Voltage will stay the same however current changes through each arm.