8 **(a)** Define *capacitance*.

....

....[1]

(b) (i) One use of a capacitor is for the storage of electrical energy.
Briefly explain how a capacitor stores energy.

....

....

....[2]

(ii) Calculate the change in the energy stored in a capacitor of capacitance 1200 µF when the potential difference across the capacitor changes from 50 V to 15 V.

energy change = ... J [3]