

Q 12

A heater coil is cut into two equal parts and only one part is now used in the heater. The heat generated will now be

- (a) four times
(c) halved

- (b) doubled
(d) one fourth

[2005]

$$(b) H = \frac{V^2 t}{R}$$

$$\text{Resistance of half the coil} = \frac{R}{2}$$

\therefore As R reduces to half, ' H ' will be doubled.