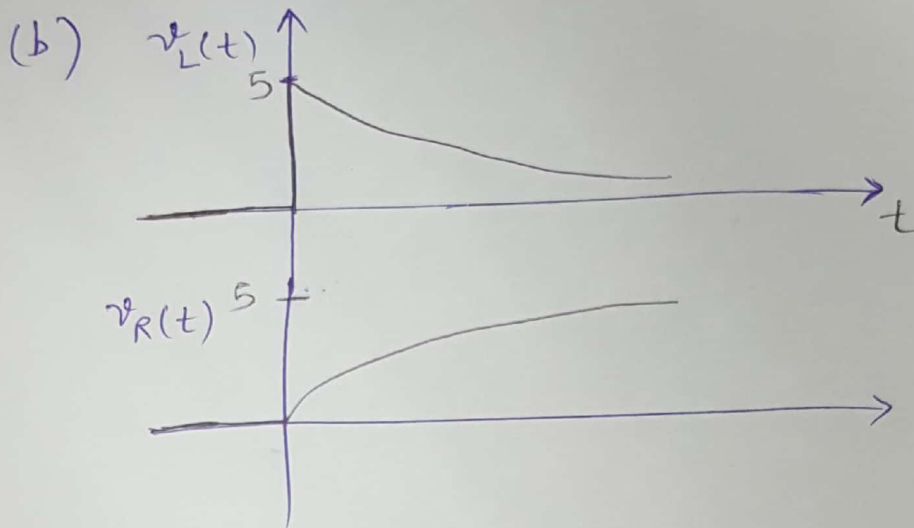
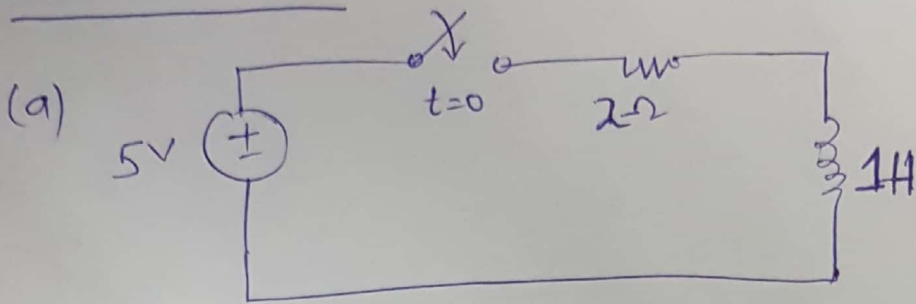


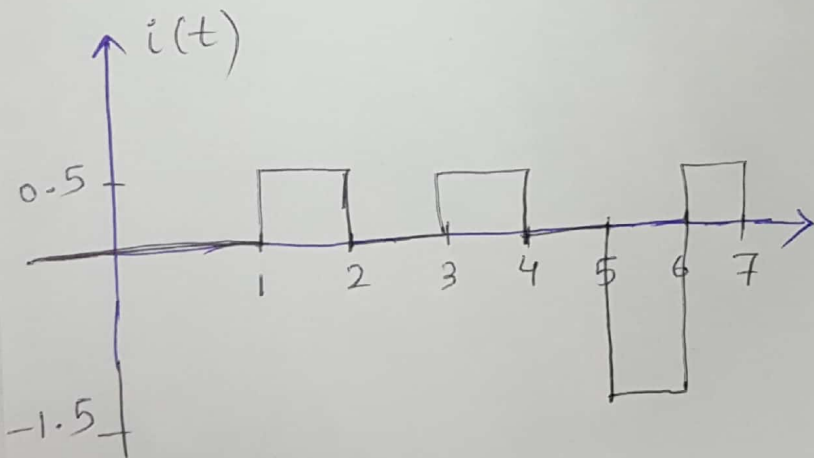
Quiz 02 Section 01 Solutions

Question 01



Question 02

$$i = C \frac{dv_c}{dt} = 0.5 \frac{dv_c}{dt} = \begin{cases} 0 & t \leq 0 \\ 0.5 \times 1 & 1 \leq t \leq 2 \\ 0 & 2 \leq t \leq 3 \\ 0.5 \times 1 & 3 \leq t \leq 4 \\ 0 & 4 \leq t \leq 5 \\ 0.5 \times -3 = -1.5 & 5 \leq t \leq 6 \\ 0.5 & 6 \leq t \leq 7 \\ 0 & 7 \leq t \end{cases}$$



$$w = \frac{1}{2} C v^2 = \frac{1}{2} (0.5) (1) \quad \text{at } t = 2$$

$$= 1 \text{ Joule}$$