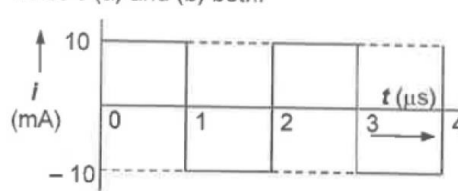
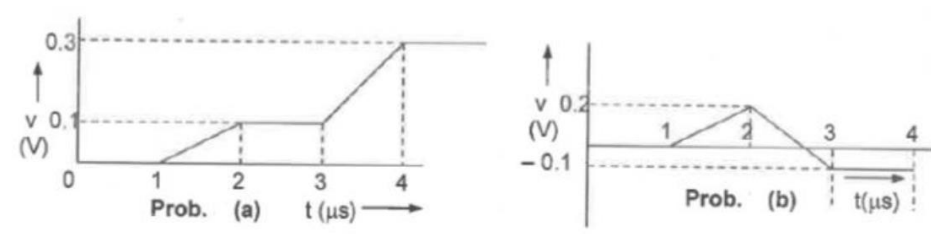


## Answers of Assignment 3 and 5

Q. No.	Answers (Assignment-3)
7	$V_x = 10.83 \text{ V}$
9	$I_2 = 1.3 \text{ A}$ , $P(1\text{A}) = 60 \text{ W}$ , $P(200\Omega) = 18 \text{ W}$ , $P(100\text{V}) = -130 \text{ W}$ , $P(50\Omega) = 32 \text{ W}$ , $P(0.5\text{A}) = 20\text{W}$
25	33.06 micro Watt
40	$V_{th} = 75 \text{ V}$ , $R_{th} = 12.5 \Omega$ , b. $72 \text{ W}$ , c. $112.5 \text{ W}$
42	a. $V_{th} = 120 \text{ V}$ , $R_{th} = 10 \Omega$ , b. $I_N = 12 \text{ A}$ , $R_N = 10 \Omega$ , c. $v_1 = 49.41 \text{ V}$ , d. $7.059 \text{ V}$
61	$R_L = 15.8 \Omega$ , $6.329 \text{ W}$
63	$V_{th} = 65 \text{ V}$ , $R_{th} = 15 \Omega$ , b. $P_{max} = 70.42 \text{ W}$
Q. No.	Assignment-5
1	<p>Ans. 1 (a) and (b) both:</p> 
2	
3	$R_1 = 2 \text{ k-}\Omega$ , $R_2 = 6 \text{ k-}\Omega$
4	$i(3\mu\text{s}) = 2 \text{ mA}$ , $i(6\mu\text{s}) = 0 \text{ mA}$
5	a. $V_c = 425 \text{ mV}$ , $P(40 \Omega) = 14.98 \text{ W}$ . $V_c = 1.2 \text{ V}$ , $P(40 \Omega) = 0 \text{ W}$ .
6	a. $V(L) = 0$ , $i(L) = i_s = 1 \text{ mA}$ , $V(L) = 0$ , $i(L) = i_s = 1 \text{ mA}$ ,
7	$I = 3\text{mA}$ , $v = 60 \text{ V}$