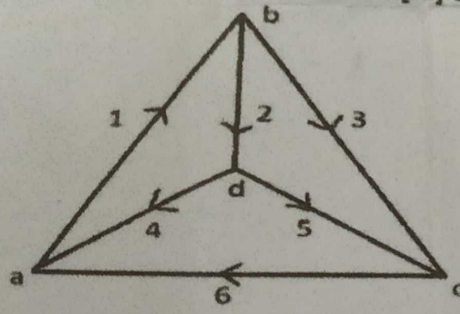
FIRST SESSIONAL , NETWORK THEORY , ECE 3RD SEM (A & B)

Time: 1 Hr M.Marks:15

Q1: Derive the expression of current i(t) in a series RL circuit with input voltage source V. switch is closed at t=0. [4]

Q2: In a series RL circuit R=2 Ω, L= 10 H, V=10 v , Find i(t) after : (a) t = 5 sec (b) steady state value. Assume switch is closed at t=0. [4]

Q3: Find the complete incidence matrix [Ai] of the following graph : [3]



Q4: Draw the Graph with nodes 1,2,3 and branches a,b,c,d,e,f and following complete Incidence matrix [Ai]:[4]

	a	b	c	d	e	f
1	0	-1	+1	0	+1	-1
2	-1	0	-1	+1	0	+1
3	+1	+1	0	-1	-1	0