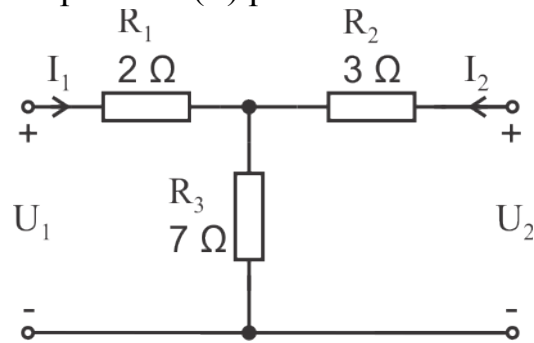
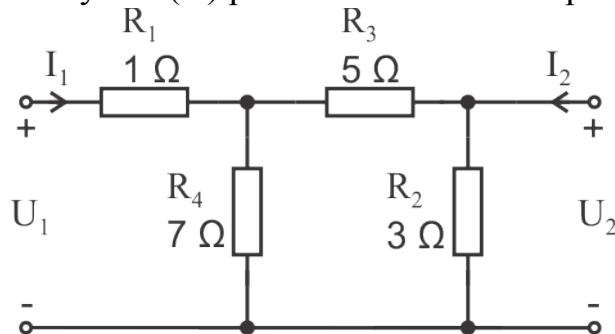


**HOMEWORK №4**

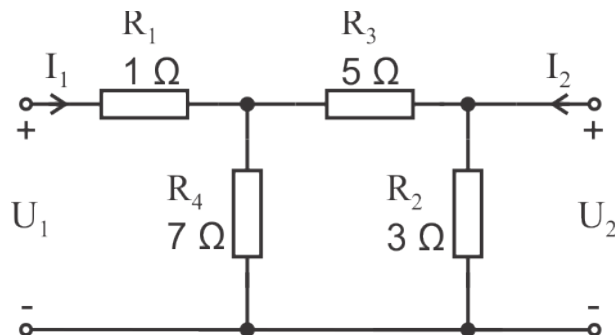
**Problem 1.** Obtain the impedance (Z) parameters of the two-port (5+5 points).



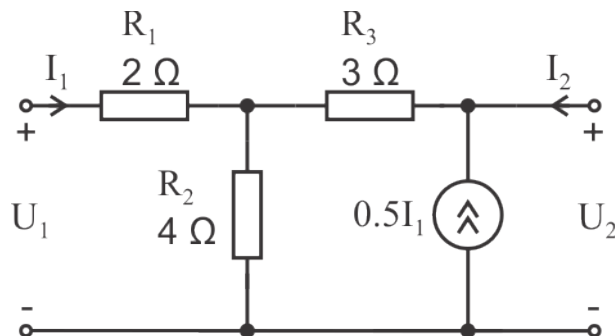
**Problem 2.** Obtain the hybrid (H) parameters of the two-port (5+5 points).



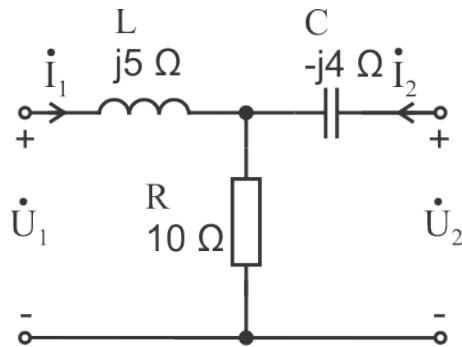
**Problem 3.** Obtain the transmission (A) parameters of the two-port (5+5 points).



**Problem 4.** Obtain the inverse hybrid (G) parameters of the two-port (5+5 points).

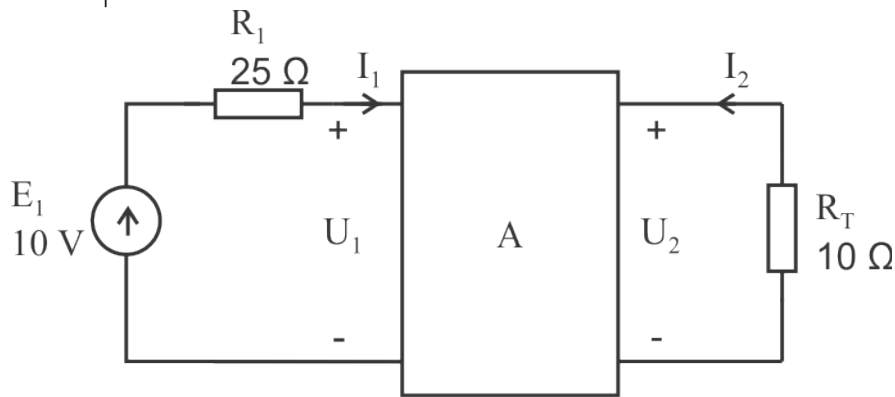


**Problem 5.** Obtain the transmission (A) parameters of the two-port (5+5 points).



**Problem 6.** Obtain the current and power of the load  $R_T$ , if the two-port is defined with its transmission parameters (5 points):

$$A = \begin{bmatrix} 0,5 & 10\Omega \\ 0,05S & 3 \end{bmatrix}$$



**Problem 7.** Obtain the current and power of the load  $R_T$ , if the two-port is defined with its hybrid parameters (5 points):

$$H = \begin{bmatrix} 50\Omega & 0,02 \\ 5 & 100mS \end{bmatrix}$$

