

**1. a)**  $I_{CQ1} = I_{CQ2} = 2,79 \text{ mA}$

$U_{CEQ1} = 12,8 \text{ V}$

$U_{CEQ2} = 10,1 \text{ V}$

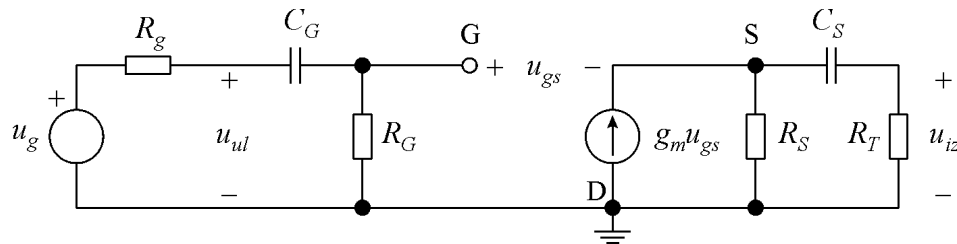
**b)**  $i_{iz} = 650 \sin \omega t \text{ } \mu\text{A}$

**2. a)**  $U_{GSQ} = -3 \text{ V}$

$I_{DQ} = 3 \text{ mA}$

$U_{GSQ} = 9 \text{ V}$

**b)**



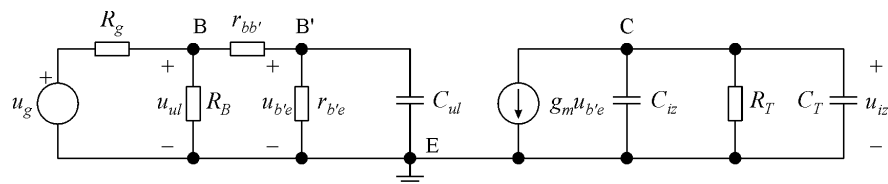
**c)**  $A_{Vg0} = 0,615$

**d)**  $f_d = \frac{\omega_d}{2\pi} = \frac{115}{2\pi} = 18,3 \text{ Hz}$

**3. a)**  $I_{CQ} = 1,3 \text{ mA}$

$U_{CEQ} = 6,15 \text{ V}$

**b)**



**c)**  $A_{Vg0} = 161$

**d)**  $f_g = \frac{\omega_g}{2\pi} = \frac{5,03 \cdot 10^6}{2\pi} = 800 \text{ kHz}$

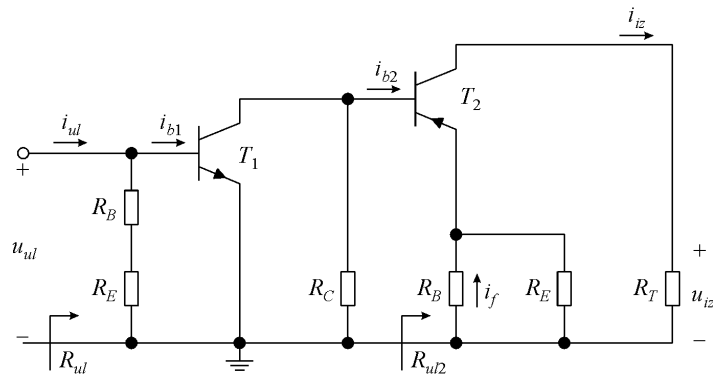
**4. a)**  $I_{CQ1} = 3,43 \text{ mA}$

$U_{CEQ1} = 5,14 \text{ V}$

$-U_{CEQ2} = 4,30 \text{ V}$

$-I_{CQ2} = 3,08 \text{ mA}$

**b)** Povratna veza – strujna-paralelna – A-grana



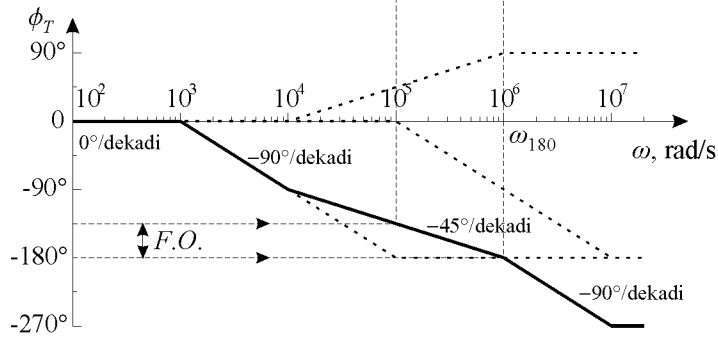
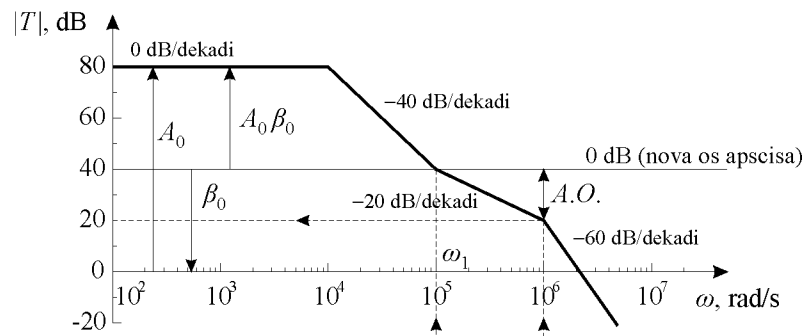
**c)**  $A_I = 98,5$

**d)**  $\beta = \frac{1}{76}$

**e)**  $A_{If} = 42,9$

$A_{Vf} = 67,9$

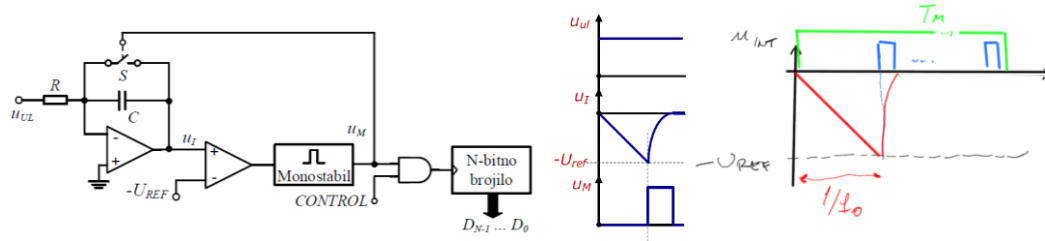
**5.**



$\beta_0 = 0,01$

A.O. = -20 dB

6. a)



b) 214 implusa

c) 0,133 % ili 0,134%

d) 231 impuls