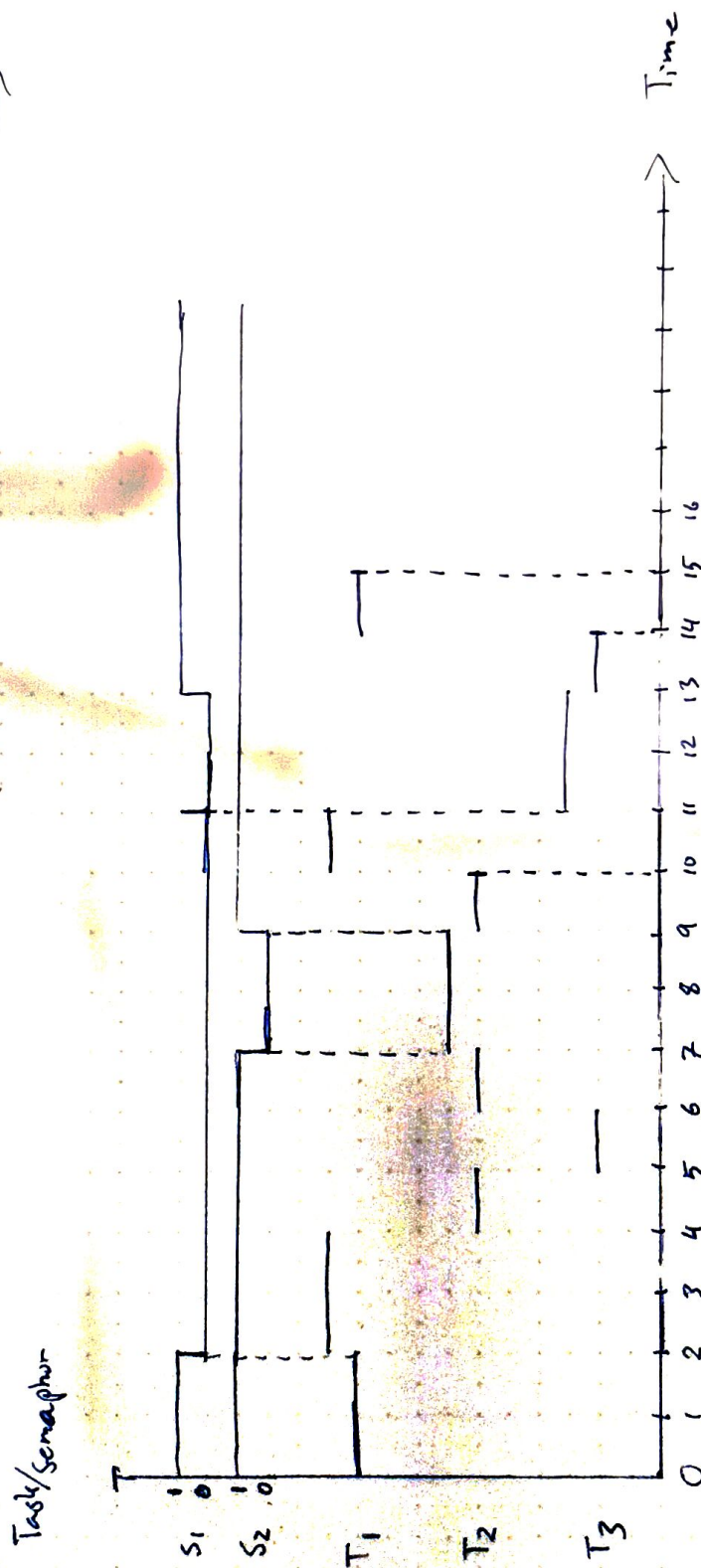


Question 17 Exam 2017

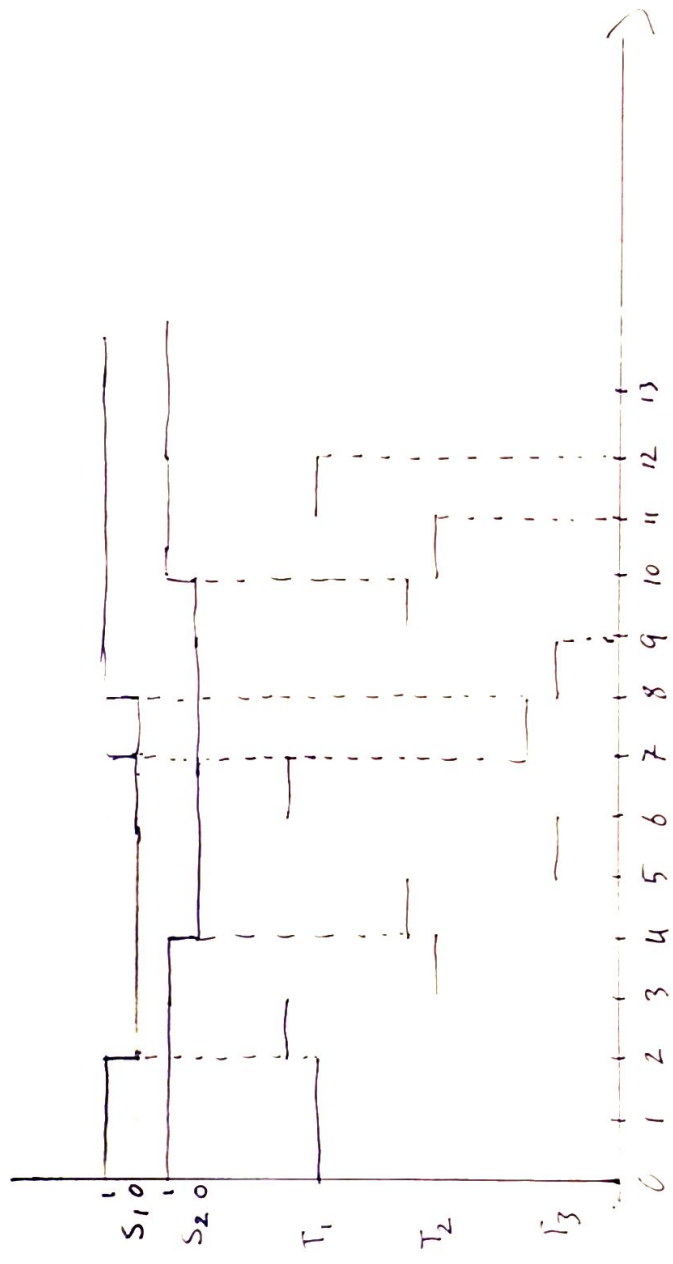
No Inheritance



Termination time

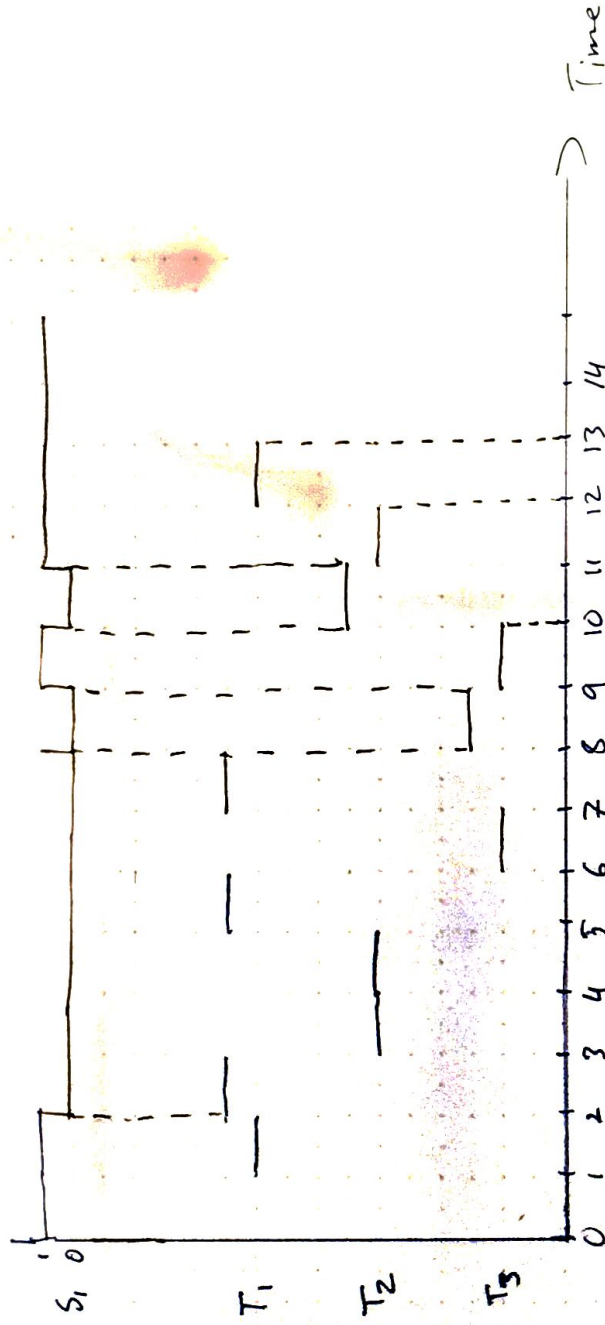
$$(T_1, T_2, T_3) = (15, 10, 14)$$

Inherit priority



$$(T_1, T_2, T_3) = (12, 11, 9)$$

Question 21 Exam 2015



$$(T_1, T_2, T_3) = (13, 12, 10)$$

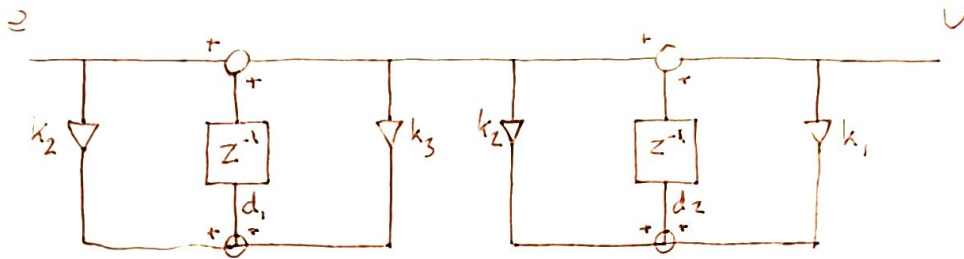
Question 21

Exam 2016

$$k_1 = 0,1$$

$$k_2 = -0,7$$

$$k_3 = 0,9$$



$$\frac{1 + k_2 \cdot z^{-1}}{1 - k_3 z^{-1}} \quad \frac{1 + k_2 z^{-1}}{1 - k_1 z^{-1}}$$

$$\frac{(1 + k_2 z^{-1})^2}{(1 - k_3 z^{-1})(1 - k_1 z^{-1})}$$

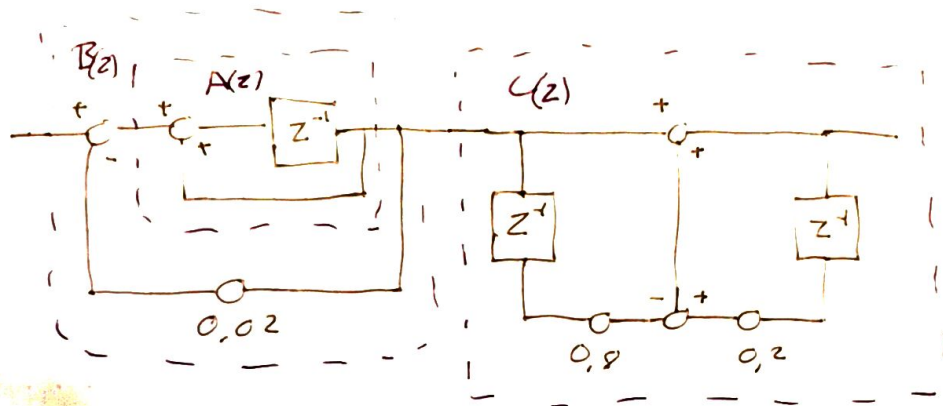
$$\Downarrow$$

$$\frac{z^2 - 1.4z + 0.49}{z^2 - z + 0.09}$$

Q4

0.5 h AD

Q5



$$A(z) = \frac{z^{-1}}{1 - z^{-1}}$$

$$B(z) = \frac{A(z)}{1 + A(z) \cdot 0.02}$$

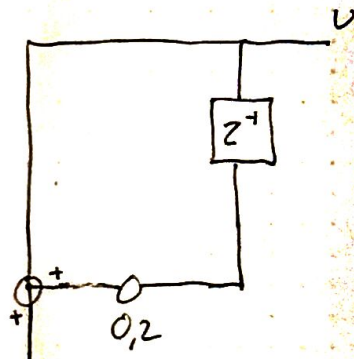
$$C(z) = \frac{1 - 0.8z^{-1}}{1 - 0.2z^{-1}}$$

$$B(z) \cdot C(z), z=1$$

Q6

Same as Q5

Q7



$$= \frac{1}{1 - 0.2z^{-1}}$$

$$k_1 = 4,8 \quad k_2 = 0,2 \quad k_3 = 2,0$$

$$e = in$$

$$f = e - d_1$$

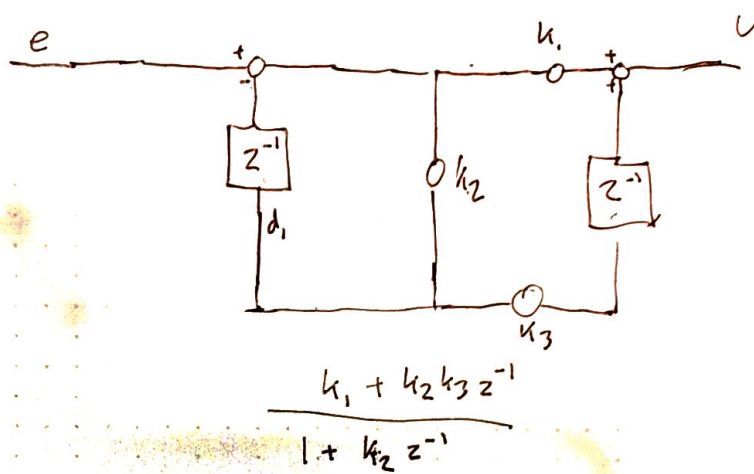
$$v = f \cdot k_1 + d_2$$

$$out(v)$$

$$int_g = int_f + f$$

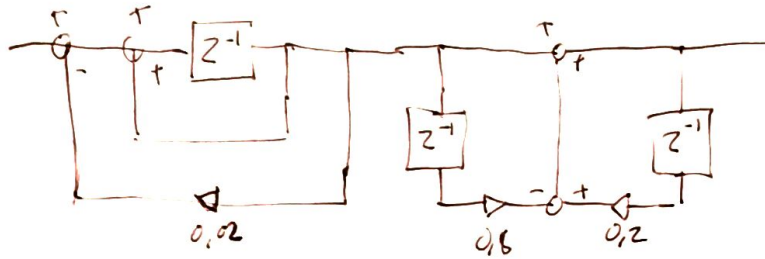
$$d_1 = k_2 \cdot int_g$$

$$d_2 = k_3 \cdot d_1$$



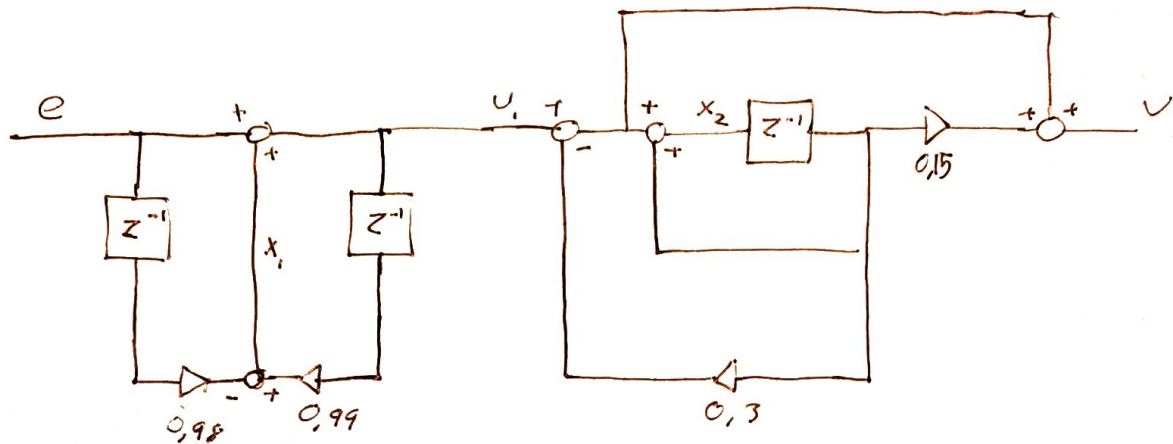
Q4 0,5 hAO

Q5



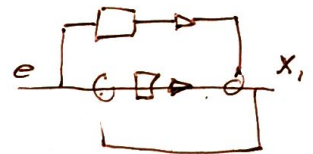
$$\frac{z^{-1}}{1 - z^{-1} - 0,02}$$

$$\frac{1 - 0,8z^{-1}}{1 - 0,2z^{-1}}$$

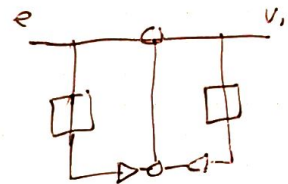


Q 10

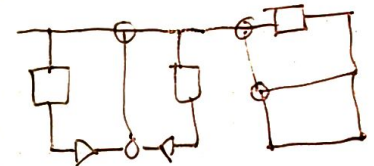
$$x_{1s} = \frac{(1 \cdot 0.99z^{-1} - 0.98z^{-1})}{1 - 0.99z^{-1}}, \quad z=1 \Rightarrow \underline{1}$$



$$Q11 \quad u_{1s} = \frac{1 - 0.98z^{-1}}{1 - 0.99z^{-1}}, \quad z=1 \Rightarrow \underline{2}$$



$$Q12 \quad x_{2s} = u_{1s} \times \frac{z^{-1}}{1 - z^{-1} + 0.3}, \quad z=1 \Rightarrow \underline{6.667}$$



Q13 always 1

Q14 ?