ST CLEMENTS UNIVERSITY HIGHER EDUCATION
SCHOOL - NIUE
IOY TECHNICAL COLLEGE

BAE 503 CONTROL SYSTEMS

Total = 100 marks
Each = 10 marks

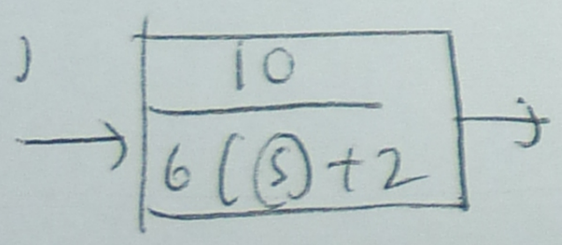
(1) A Thermal control process control has a transfer function $G = \frac{10}{(s)+2}$, compare system open loop and close Loop
Find unit step response.

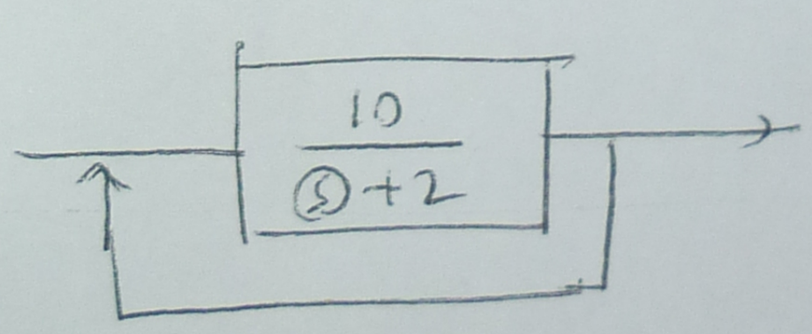
(2) what is sensitivity of control system?

(3) write the equation to calculate system sensistivity

(4) calculate S^{To}_{Kplant} & S^{Tc}_{Kplant} for the following

(a)

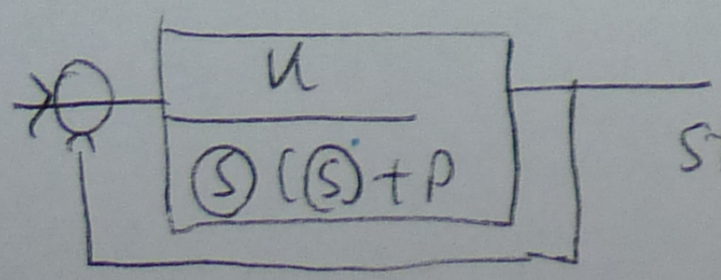




(5) what is steady state error of feedback system?

(6) Describe the followings
(a) Type (0) system (b) Type (1) system
(c) Type (2) system

(7)



select K & P values so that step response has POS{ 5% Ts = 4 se

(8) Explain disturbance signals in control system

(9) what is signal flow graph | (10) Explain stability.