-Vout

for the following system if Rin =1 ohm and Rf= 1 ohm
.............- = and Vin =1 volt then Vout
(2 نقطة)

8 ○

2 ○

4 ○

1 ○

0.5 ○

Y1(s)*(A1S^2 + A2*S + A3) + A4Y2=0 then A1 is
(2 Points)

○ Kb

○ m2

◉ m1

○ f

○ k

Qi1

Qi3

Qi2

H1   R1   H2
V3

R2 V1 Qo2   R3 V2
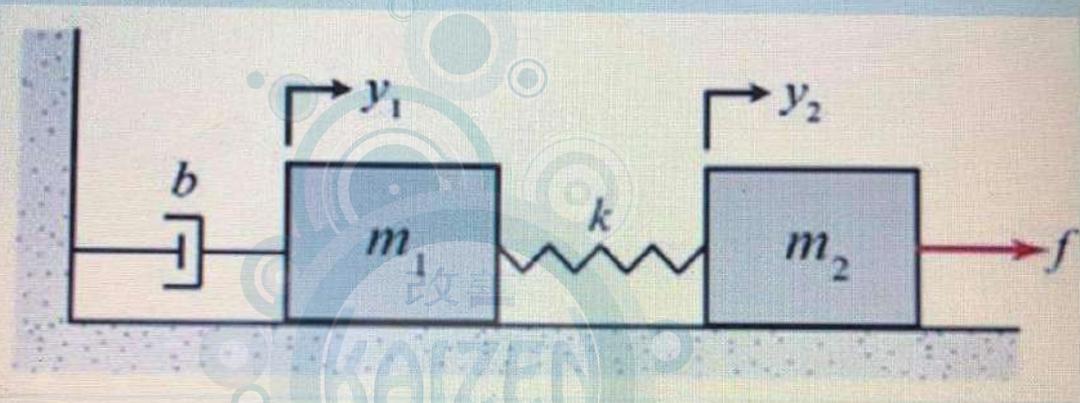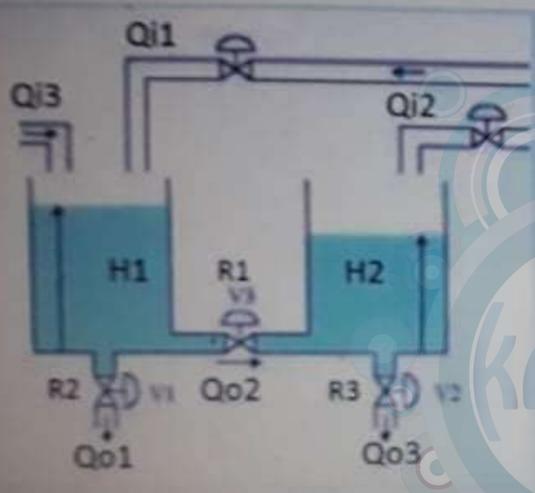
Qo1   Qo3

? =one equation for the system is C(dH1/dt1)

(نقطة 2)

Qi1+Qi3-Qo1-Qo2

Qi1+Qi3-Qo1-Qo2-Qo3

Qi1+Qo2i

E_s

R

C $+$ $-$ V_c

0.25- ○

4- ○

2- ○

1- ○

none ○

23
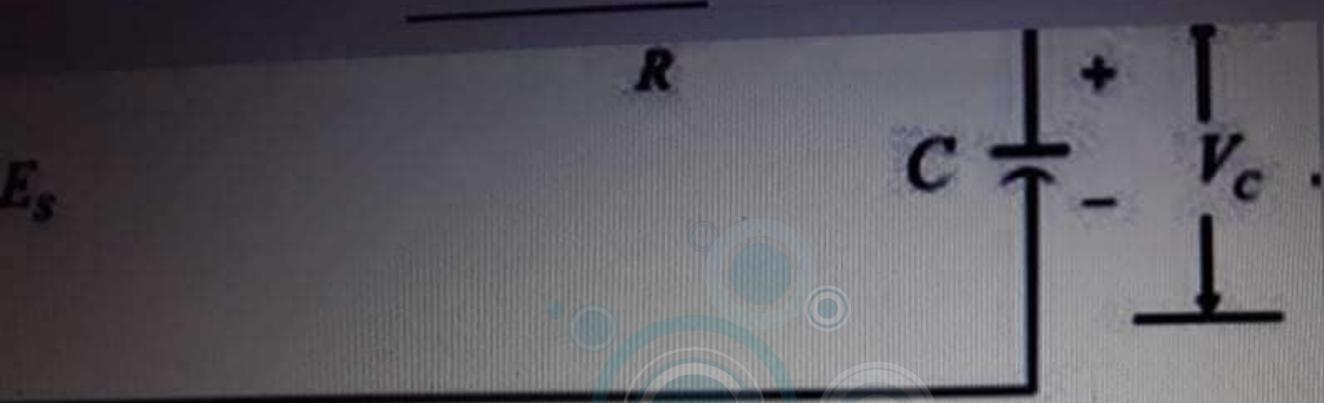
if G(s)= 10/(s^2 + 2s+10) the system is

One equation describing the system is

$$Y1(s)*(A1S\wedge2 + A2*S + A3) + A4Y2=0 \quad \text{then A2 is}$$

(علامة 2)

:f R =2 Mohms and C=2MicroF   then the pole is

(2 نقطة)

Switch S

E_s

R

改善

KAIZEN

TEAM

C

+

−

V_c

0.25
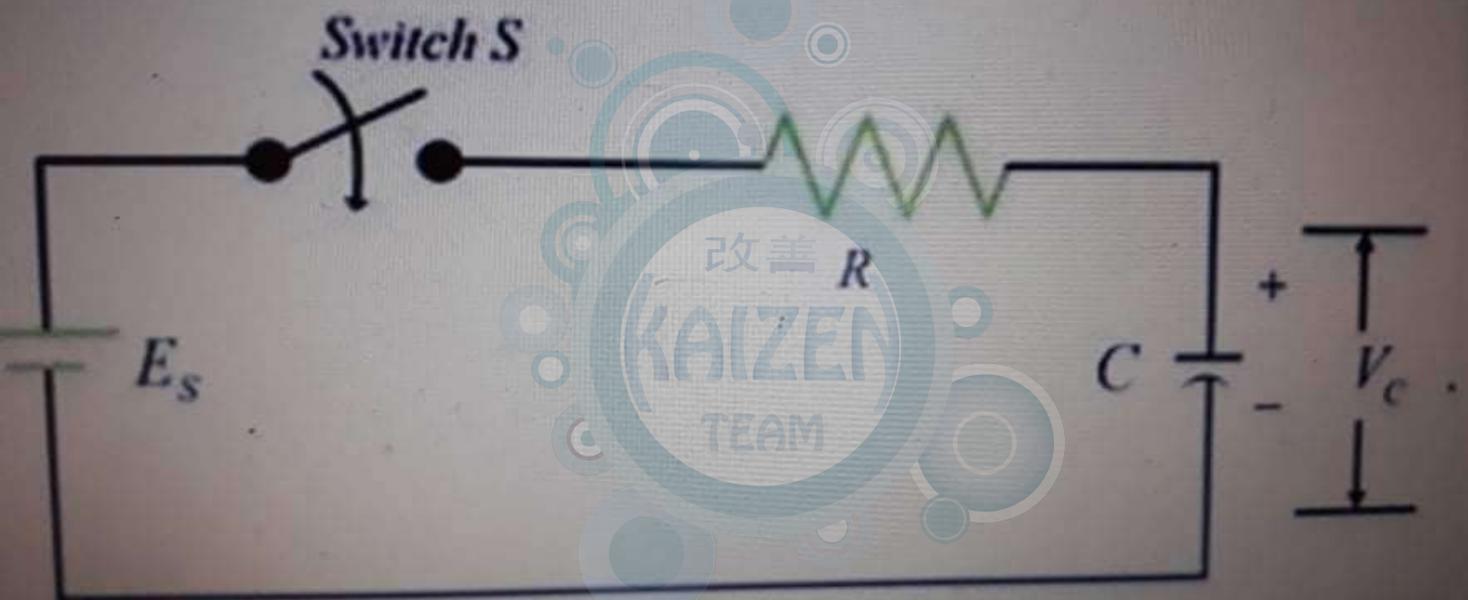
7

A first order with a negative damping ratio is
(2 نقطة)

it does not exist ◯

dis-order ◯

stable ◯

unstable ⦿

non of the above ◯

8

First order cannot be characterised by
(2 نقطة)

Results for the flat plate

Mass of water (kg)	Time (s)	Δx (mm)
7.5	14.27	75

The theoretical jet force in N is:

Answer: 3.51

Question 4

Not yet
answered

Marked out of
1.00

Flag
question

The experimental jet force in N is:

Answer:

4
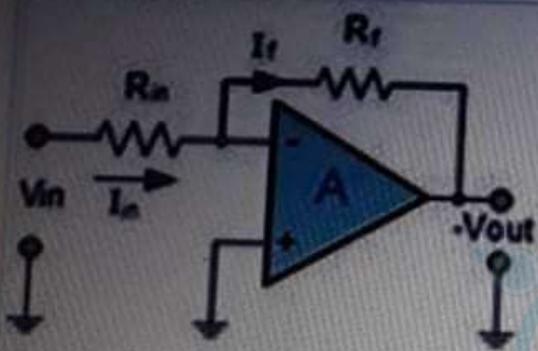
for the following system if Rin =1 ohm and Rf= 2 ohm
............- = and Vin =1 volt then Vout

(2 نقطة)

0.5 ○

4 ○

8 ○

1 ○

k

m_2 → f

m2 ○

Kb ○

f ○

k ○

m1 ○
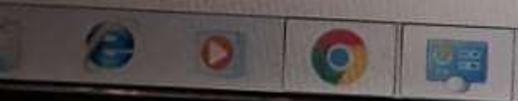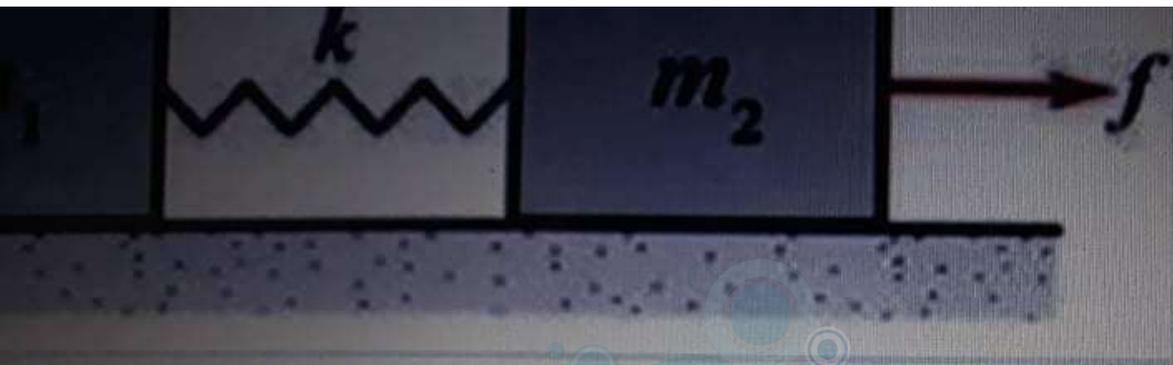
11

One equation describing the system is

Y1(s)*(A1S^2 + A2*S + A3) + A4Y2=0   then A1 is

(2 نقطة)

critically damped ⭘

17

The Laplace inverse for 2/(s^2 + 2s + 10) is

(2 نقطة)

exp(-t)sin(2t)(3/2) ⭘

exp(-3t)cos(2t)(2/3) ⭘

exp(-t)sin(2t)(2/3) ⭘

none ⭘

exp(-3t)sin(2t)(2/3) ⭘

18

One equation describing the system is

Qi1

Qi3

Qi2

H1   R1   H2
      V3

R2 ⊠ V1 Qo2   R3 ⊠ V2

Qo1   Qo3
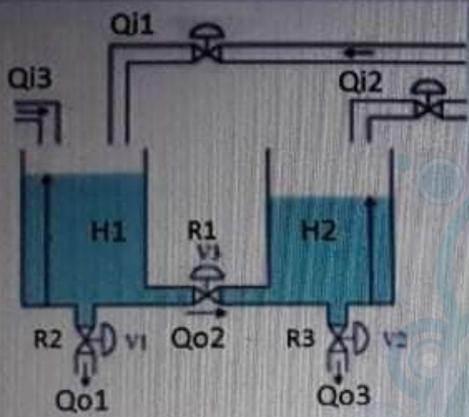
One equation for the system A1H1 +A2H2=Qo2 the A1 is
(2 نقطة)

R1/1 ○

R2/1 ○

R3/1 ○

6

C/R is for the system
(2 نقطة)

$$R(s) \quad \xrightarrow{+\atop-} \otimes \longrightarrow \boxed{K} \longrightarrow \boxed{\dfrac{1}{s+5}} \longrightarrow \boxed{\dfrac{1}{s+1}} \quad C(s)$$

$$\boxed{\dfrac{1}{5}}$$

((5s + 25 + K) (s+1)) /5

25
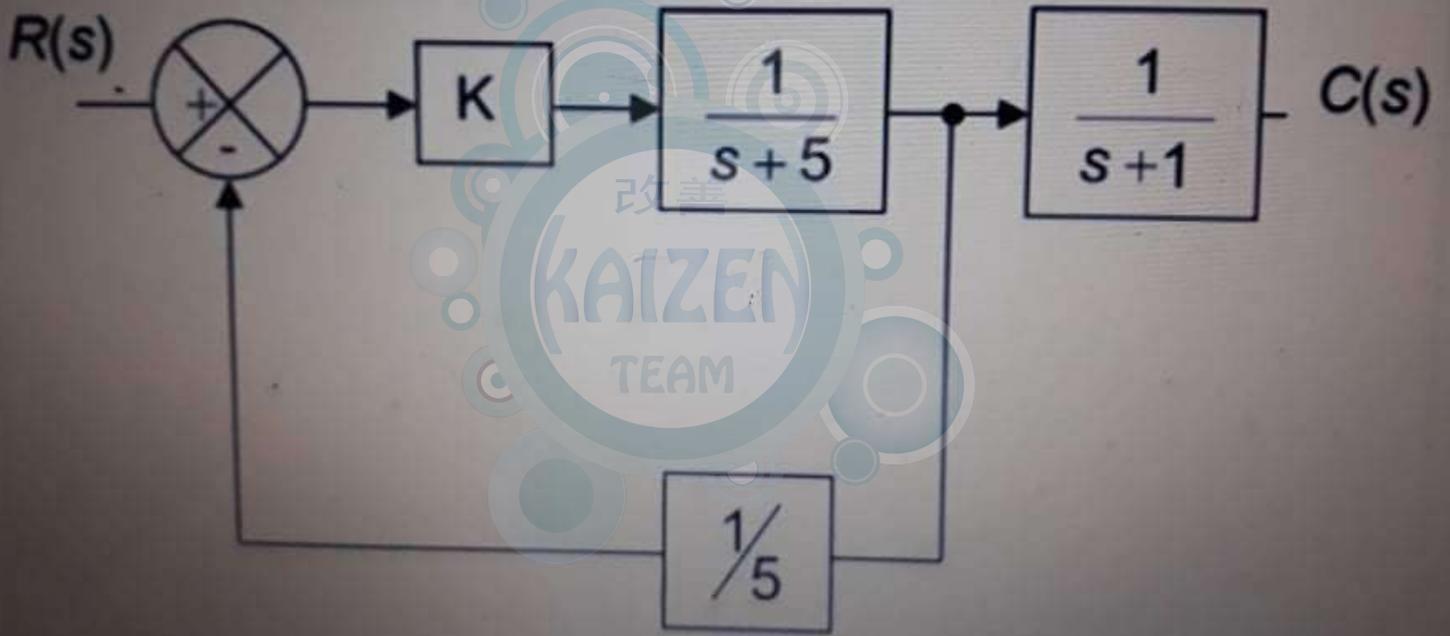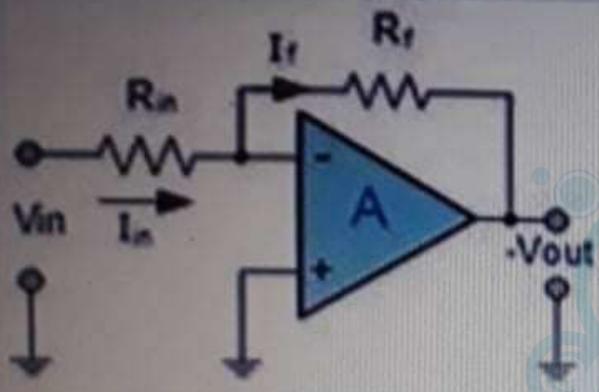
for the following system if Rin =1 ohm and Rf= 8 ohm
............- = and Vin =1 volt then Vout
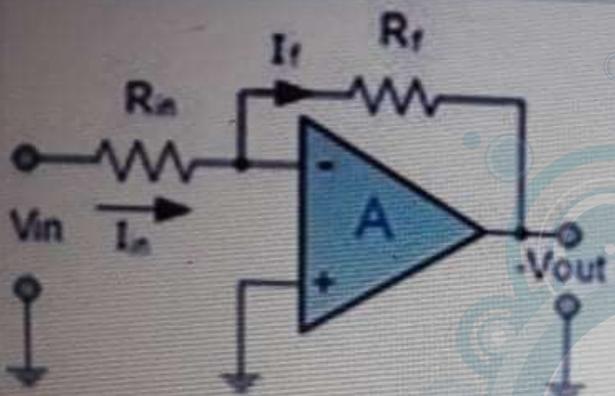
(نقطة 2)

2 ○

4 ○

for the following system if Rin =1 ohm and Rf= 1 ohm
................- = and Vin =1 volt then Vout

(علامة 2)

$Qi1+Qi3-Qo1-Q02$ ◯

$Qi1+Qi3-Qo1-Q02-Q03$ ◯

$Qi1+Q021$ ◯

$Qi1+Qi2+Qo1$ ◯

none ◯

Question
(2 Points)
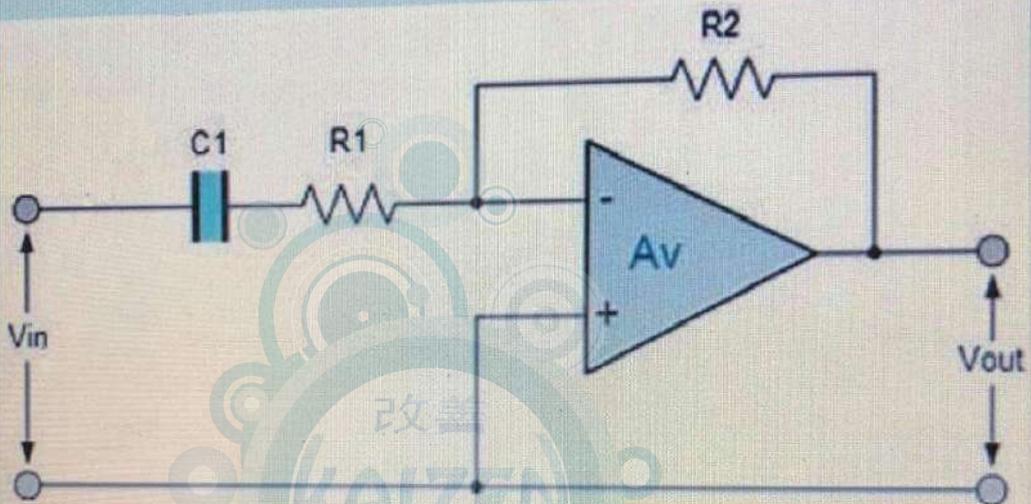
- ☐ -R2R1/(R1C1s+1)

- ☐ -R1R2/(R1R2Cs+1)

- ☐ -R1/(R2Cs+1)

- ⦿ -R2/(R1C1s+1)

8

First order cannot be characterised by

(2 نقطة)

Settling time ⃝

steady state error ⃝

Rise time ⃝

Peak time ⃝

None of the above ⃝

9

frequency = 2 then the settling time is

(2 نقطة)

((12/(s+1)) + ((s+1)/2) +1)/ 2- ○

((12/(s+1)) - ((s+1)/2) -1)/ 2- ○

none ○

(1- (2/(s+1)) - (12/(s+1))) / ((s+1)/12) ○

(1+ (2/(s+1)) + (12/(s+1))) / ((s+1)/12) ○

12