A/H/P NAS ASSIGNMENT – UNIT 4
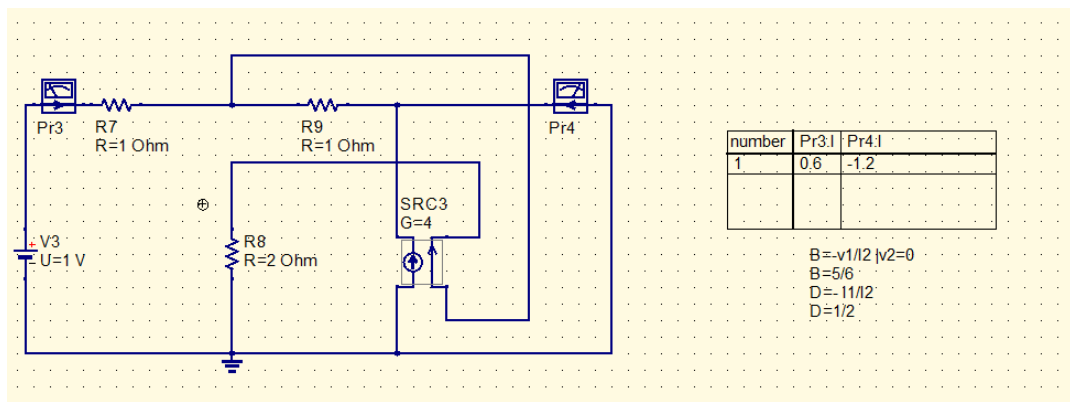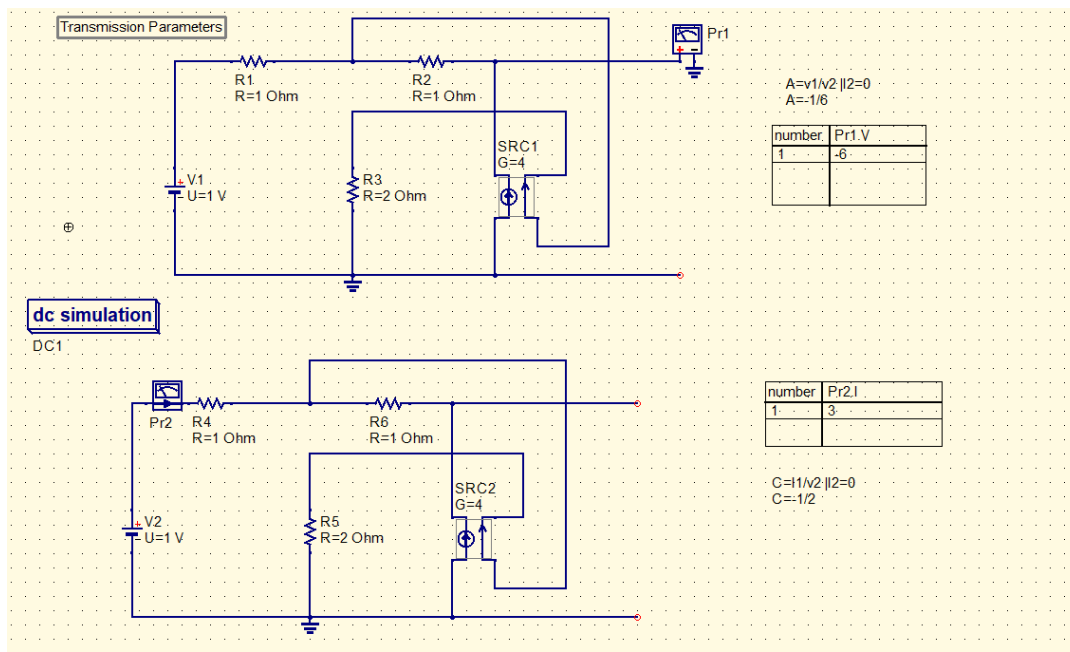
NAME: SOUMYADIPTO DE

SRN: PES1UG21EC288
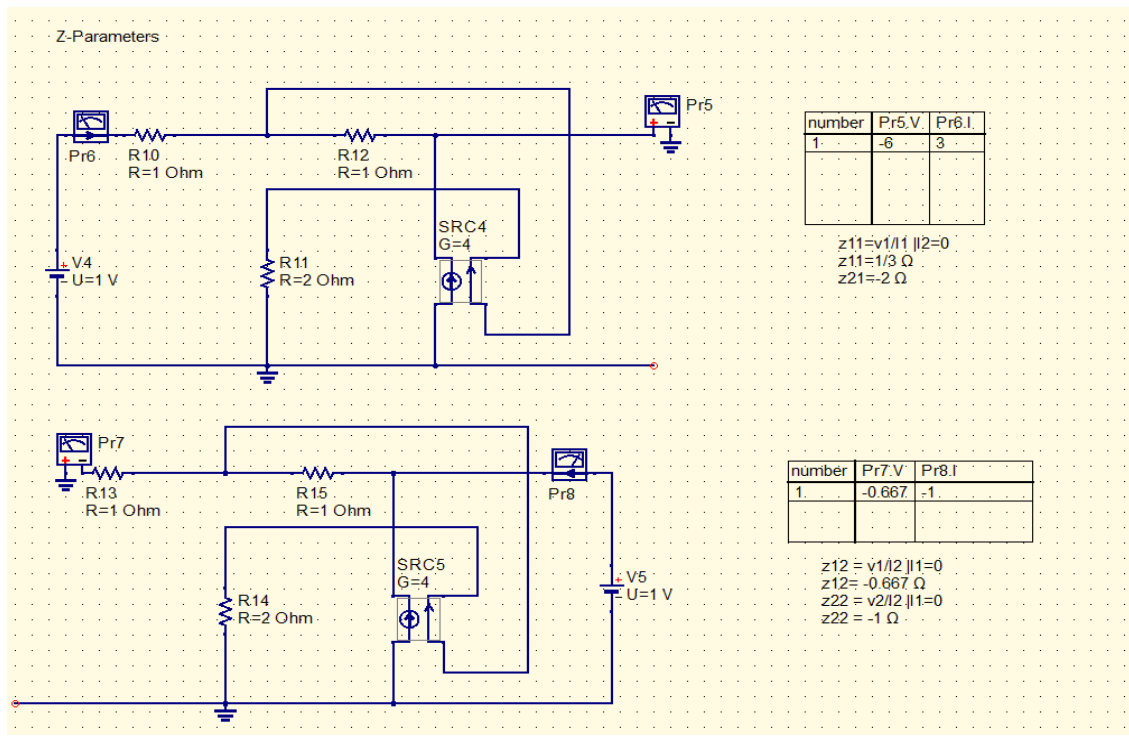
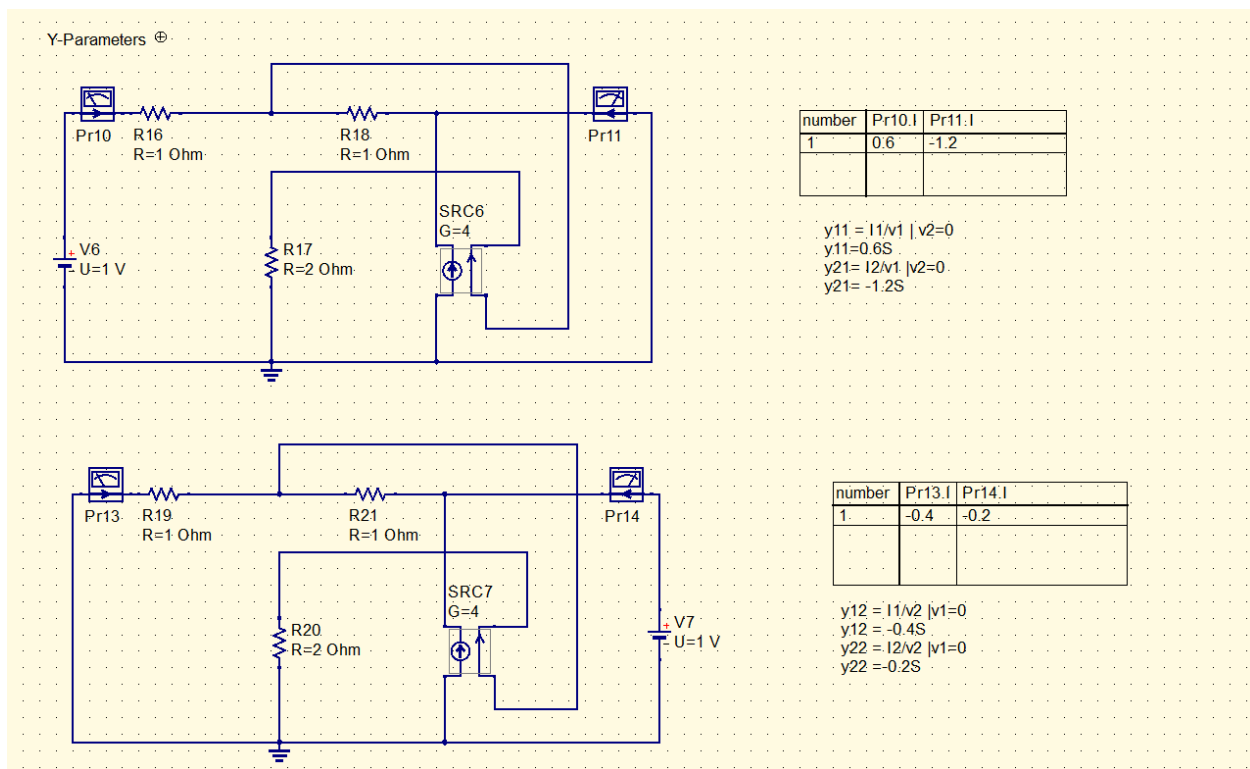2ND YEAR, SEMESTER -3

SECTION: F

TRANSMISSION PARAMETERS:

Z-PARAMETERS:

Z-Parameters

Pr5

Pr6 R10
     R=1 Ohm

     R12
     R=1 Ohm

SRC4
G=4

V4
U=1 V

R11
R=2 Ohm

number	Pr5.V	Pr6.I
1	-6	3

$z11=v1/I1\ |I2=0$
$z11=1/3\ \Omega$
$z21=-2\ \Omega$

Pr7

R13   R15   Pr8
R=1 Ohm   R=1 Ohm

SRC5
G=4

R14
R=2 Ohm

V5
U=1 V

number	Pr7.V	Pr8.I
1	-0.667	-1

$z12 = v1/I2\ |I1=0$
$z12= -0.667\ \Omega$
$z22 = v2/I2\ |I1=0$
$z22 = -1\ \Omega$

Y PARAMETERS:

Y-Parameters ⊕

Pr10 R16   R18   Pr11
      R=1 Ohm   R=1 Ohm

SRC6
G=4

V6
U=1 V

R17
R=2 Ohm

number	Pr10.I	Pr11.I
1	0.6	-1.2

$y11 = I1/v1\ |\ v2=0$
$y11=0.6S$
$y21= I2/v1\ |v2=0$
$y21= -1.2S$

Pr13 R19   R21   Pr14
      R=1 Ohm   R=1 Ohm

SRC7
G=4

R20
R=2 Ohm

V7
U=1 V

number	Pr13.I	Pr14.I
1	-0.4	-0.2

$y12 = I1/v2\ |v1=0$
$y12 = -0.4S$
$y22 = I2/v2\ |v1=0$
$y22 =-0.2S$

HYBRID PARAMETERS:

Hybrid h -Parameters

number	Pr15.I	Pr16.I
1	0.6	-1.2

h11 =v1/I1 |v2=0
h11=5/3 Ω
h21 =I2/I1 |v2=0
h21 = -2

Pr15 — R22 R=1 Ohm — R24 R=1 Ohm — **Pr16**

SRC8 G=4

V8 U=1 V

R23 R=2 Ohm

Pr19 — R25 R=1 Ohm — R27 R=1 Ohm — Pr18

R26 R=2 Ohm

SRC9 G=4

V9 U=1 V

number	Pr18.I	Pr19.V
1	-1	0.667

h12 =v1/v2 |I1=0
h12 = 2/3
h22 =I2/v2 |I1=0
h22 =-1S