LAB REPORT

Electronics Lab II
(ELC 3910)

Experiment No.: 1

S. No:	**1 2**
F. No:	2 0 E L B 0 8 4
Name:	**YUSUF AHMED KHAN**

Object:

(a) **Positive Clipper**

(b) **Combinational Clipper**

(c) **Positive Clamper**

(d) **Diode Characteristics**

Also: Rectifier

Software used: PSpice

Date of performing the experiment: *07/09/2022*

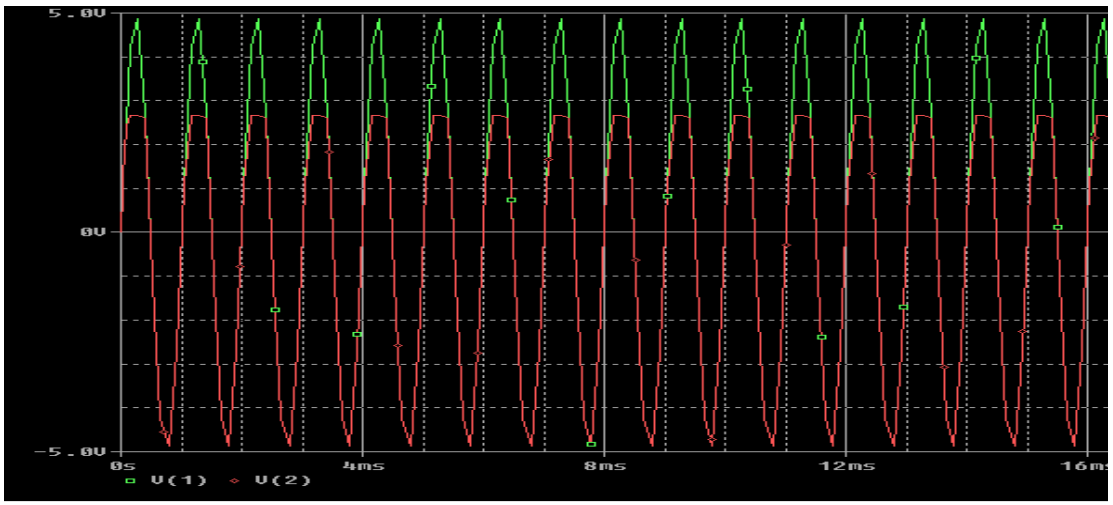
Date of report submission: *14/09/2022*

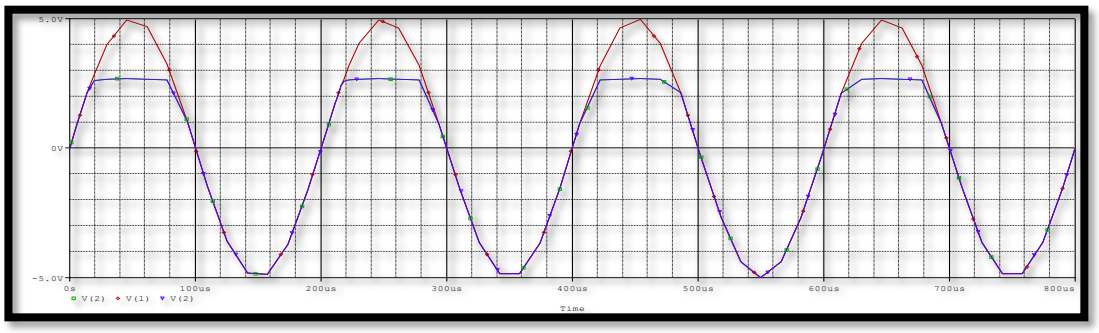
Snippets of

I. Code for part (a) [Positive Clipper]

```
*Yusuf Ahmed Khan_PART A
V1 1 0 SIN(0 5V 1KHZ)
R1 1 2 1K
DA 2 3 D1N914
VR 3 0 2V
.MODEL D1N914 D()
.TRAN 0MS 40MS
.PROBE
.END
```

II. Plot for part (a) [Positive Clipper] (Input & Output response)



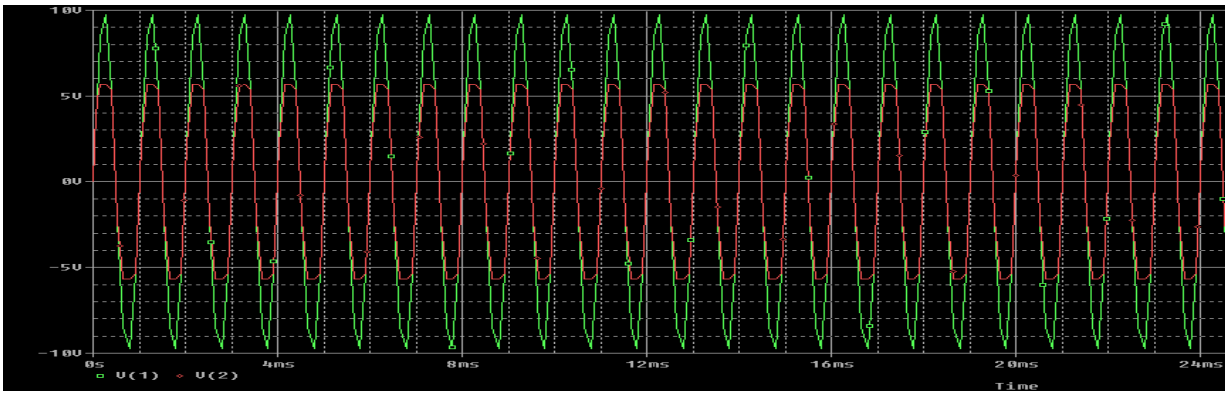


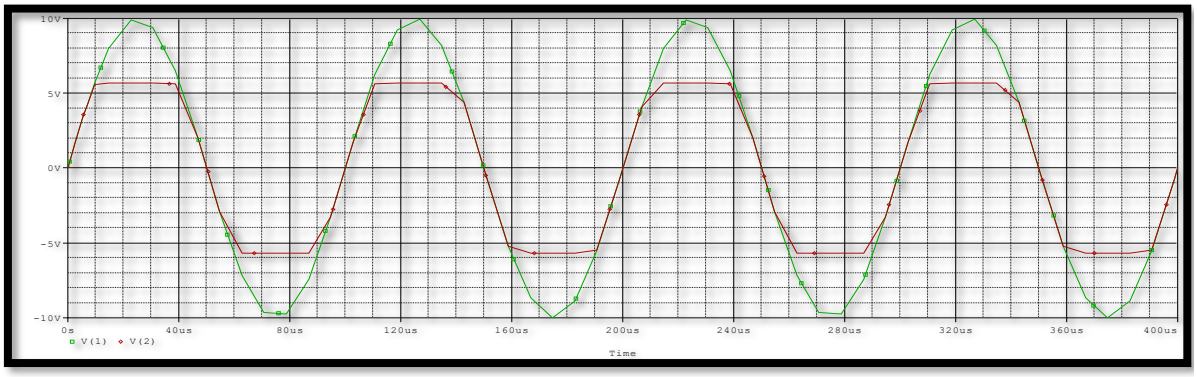
Snippets of

I. Code for part (b) [Combinational Clipper]

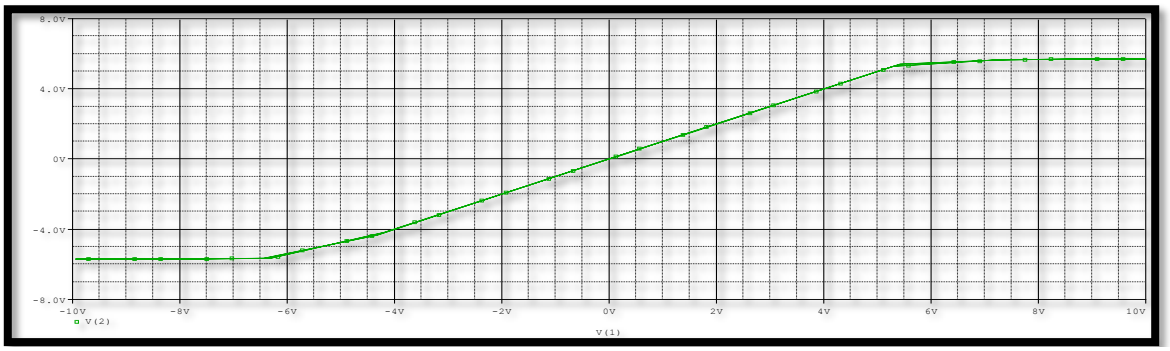
```
*Yusuf Ahmed Khan_PART B
V1 1 0 SIN(0 10V 1KHZ)
R1 1 2 1K
DA 2 3 D1N914
DB 4 2 D1N914
VR 3 0 5V
VP 0 4 5V
.MODEL D1N914 D()
.TRAN 0MS 40MS
.PROBE
.END
```

II. Plot for part (b) [Combinational Clipper] (Input & Output response)





Transfer Characteristics

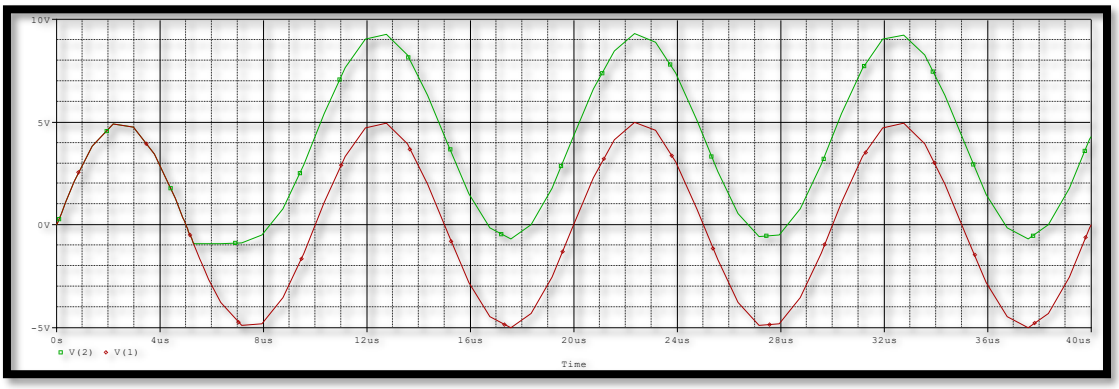


Snippets of

I. Code for part (c) [Positive Clamper]

```
*Yusuf Ahmed Khan_PART C
V1 1 0 SIN(0 5V 1KHZ)
C1 1 2 10UF
R1 2 0 1K
DA 0 2 D1N914
.MODEL D1N914 D()
.TRAN 0MS 40MS
.PROBE
.END
```

II. Plot for part (c) [Positive Clamper] (Input & Output response)



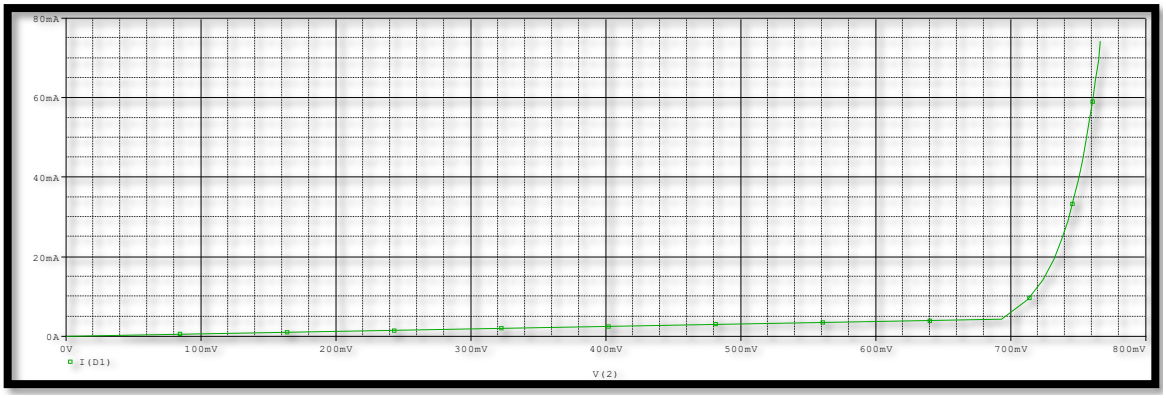
Snippets of

I. Code for part (d) [Diode Characteristics]

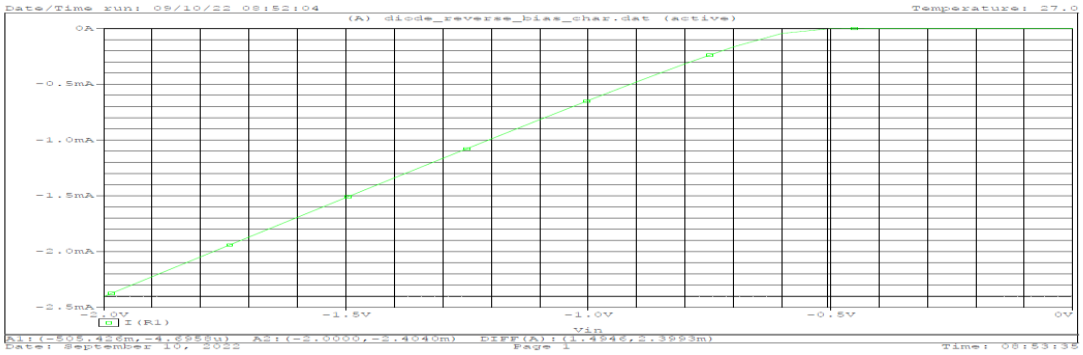
```
*Yusuf_Ahmed_Khan_part(d)_DIODE
V 1 0 0V
R1 1 2 1K
D1 2 0 D1N914
.MODEL D1N914 D()
.DC V 0V 75V 5V
.probe
.end
```

II. Plot for part (d) [Diode Characteristics] [I-V Characteristics]

Forward Bias



Reverse Bias



Additional (for practice) >> Rectifier

Code:

```
*Yusuf Ahmed Khan RECTIFIER
V1  1  0  SIN(0 5V 500HZ)
R1  1  2  1K
DA  2  0  D1N914
.MODEL D1N914 D()
.TRAN 0.1MS 40MS
.PROBE
.END
```

Plot (Input & Output response)