EXPERIMENT NO- 4 (A)

CLIPPER CIRCUIT

AIM OF THE EXPERIMENT:- To observe, trace & measure the effect on the output waveforms of different Clipper circuit.

APPARATUS REQUIRED:-

1. Transistor Power supply (TPS)
2. Audio signal generator/Function generator
3. CRO

COMPONENTS REQUIRED:-

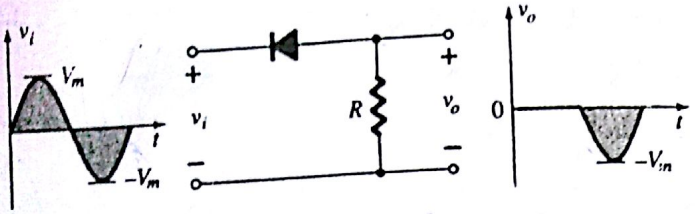
1. Diode(IN4007)
2. Resistor(1K Ohm)
3. DC supply(1.5v)

PROCEDURE:-

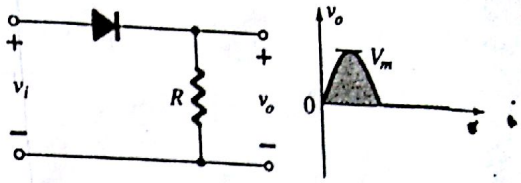
Make connection as per the circuit diagram shown. Trace and measure the output voltage using CRO by applying $10V_{p\text{-}p}$ sine wave from Audio generator/ FG as input.

Simple Series Clippers (Ideal Diodes)

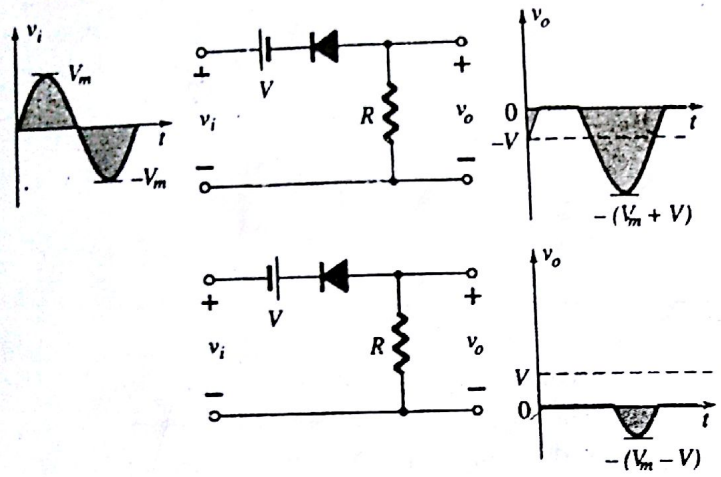
POSITIVE

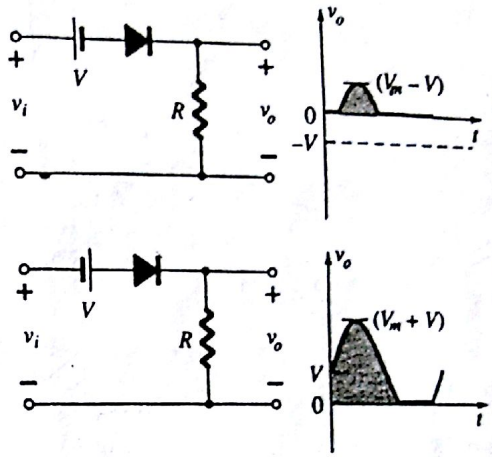


NEGATIVE

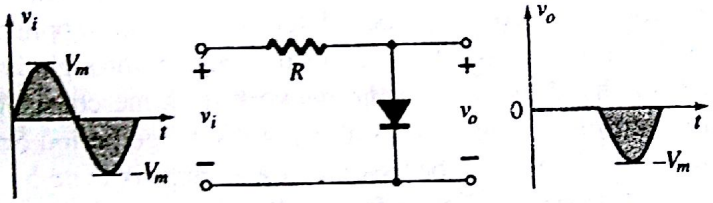


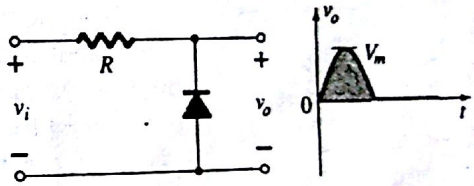
Biased Series Clippers (Ideal Diodes)



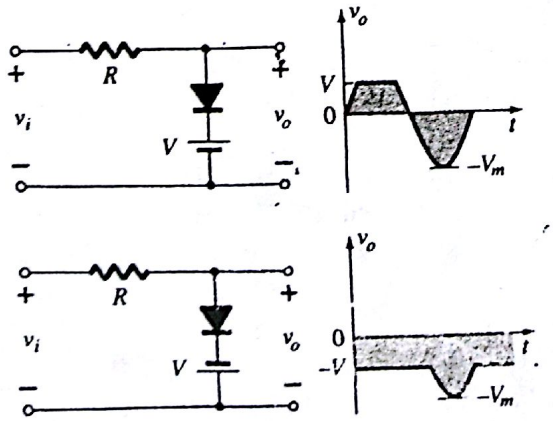


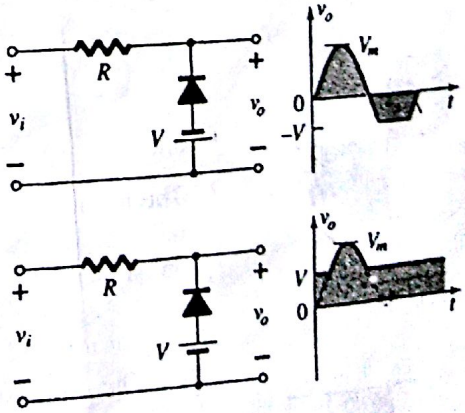
Simple Parallel Clippers (Ideal Diodes)





Biased Parallel Clippers (Ideal Diodes)





EXPERIMENT NO- 4 (B)

CLAMPER CIRCUIT

AIM OF THE EXPERIMENT:- To observe, trace & measure the effect on the output waveforms of the different Clamper circuit.

APPARATUS REQUIRED:-

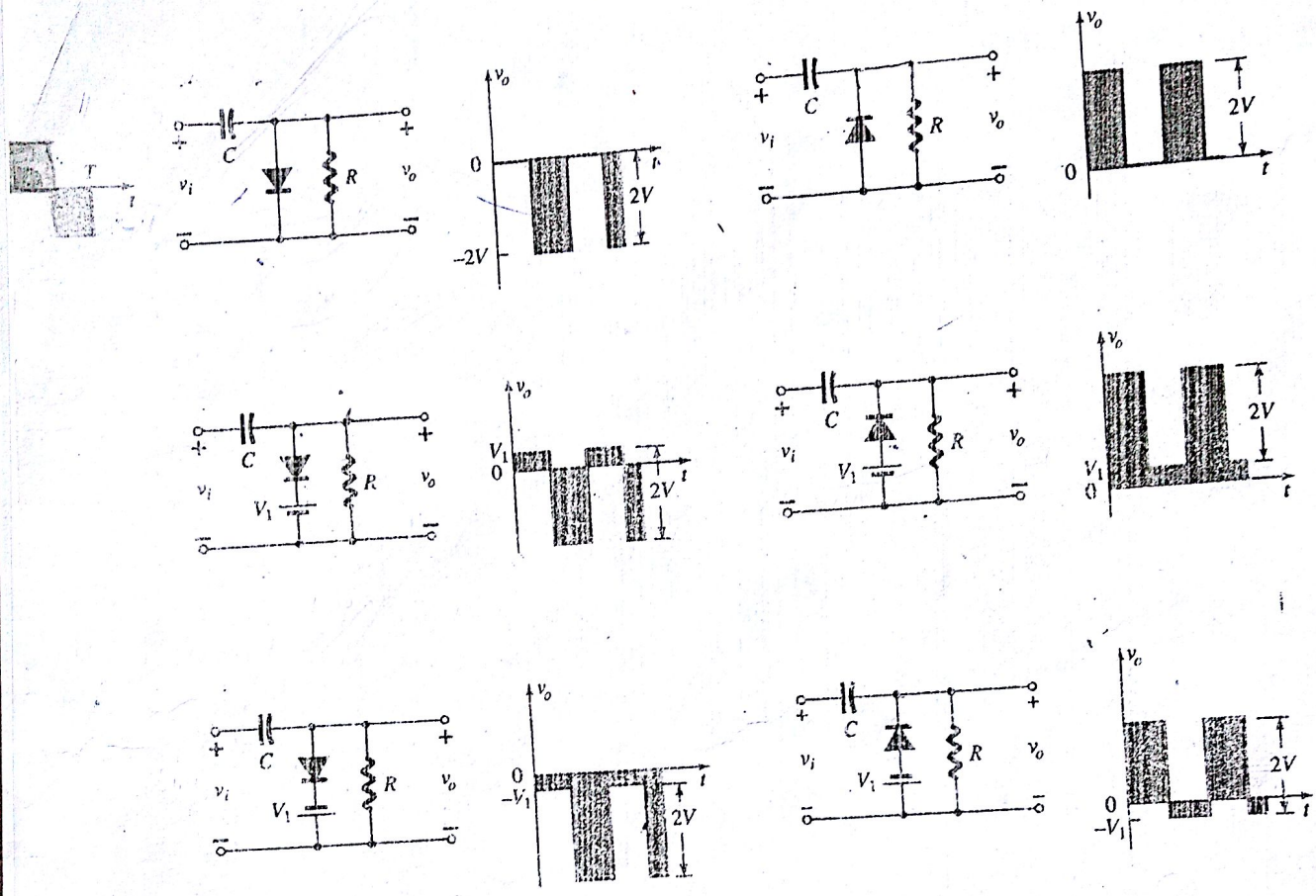
1. Transistor Power supply (TPS)
2. Audio signal generator/ Function Generator
3. CRO

COMPONENTS REQUIRED:-

1. Diode(IN4007)
2. Capacitor(0.1 microfarad)
3. Resistor (100K Ohm)
4. DC supply

PROCEDURE:-

Make connection as per the circuit diagram shown. Trace and measure the output voltage using CRO by applying $10V_{p\text{-}p}$ square wave from Audio generator / FG as input.



2.105 Clamping circuits with ideal diodes ($5\tau = 5RC \gg T/2$)