## PROCEDURE:

Connect 6V dc supply between ground and collector of the transistor. Observe correct polarity of the supply.

Observe correct polarity of the supply.

Feed sine wave form from function generator through C to the base Q1. 1.

2.

Feed sine wave form from the waveform.

Feed sine wave form from the waveform.

Connect CRO lead to monitor the waveform.

Connect CRO lead to monitor the waveform.

Connect other channel of CRO between collector and ground Q2 to observe output.

Connect other channel of CRO between positioning control of CRO by pressing. Connect CRO lead to mornion between collector and control of CRO by pressing of CRO between the help of positioning control of CRO by pressing of Adjust do reference level with the help of positioning control of a standard do not disturb this reference setting. 3. 4.

Adjust do reference level with the neith of position of C switch for both channels and do not disturb this reference setting. Adjust do reference level with a disturb trils location with offset control of function switch for both channels and do not disturb trils location with offset control of function and Release 0 button to monitor input wave form Release 0 button of other received of the trace and also release 0 button of other received or received 5. switch for both channels and input wave form wave form and Release 0 button to monitor input wave form and Release 0 button of other adjust the wave exactly at the middle of the trace and also release 0 button of other adjust the wave exactly at the monitor output square waveform. 6.

channel of C.R.O to monitor output square waveform. adjust the wave exactly square wavelong channel of C.R.O to monitor output square wavelong channel output squar 7.

appears.

With the help of X positioning control, move the trace to the vertical reference line.

With the help of X positioning control, move the trace to the trailing edge to note LTP. 8.

With the help of X positioning control, move the trace to the trailing edge to note LTP and record the UTP and further move the input waveform function as and record the UTP and further move the trade input waveform function generator.

Observe the output waveform by changing the input waveform function generator, amplitude, frequency and record correct 9. Observe the output waveform by changing the frequency and record corresponding Repeat 1 to 10 with varying input amplitude, frequency and record corresponding

10.

11. UTP and LTP.

## OBSERVATIONS AND WAVEFORMS:

Output waveform on a graph sheet.

SI. No.	Input Amplitude (V)	Input Frequency (Hz)	UTP	LTP
1				
2.	r v	a		
3.	* =			
4.	W W			
5. 6.		*		
7	¥		*	
8.				,

## **EXPERIMENT NO. 6**

OBJECTIVE: Operation of Schmitt Trigger and determination of UTP and LTP.

APPARATUS: Function generator, C.R.O, Rheostat, Connecting wires, Schmitt trigger - gircuit.

THEORY: The Schmitt Trigger Circuit utilizes two series coupled amplifiers for transforming a non-square wave input into a square wave output using regenerative feedback. The circuit is widely used for wave shaping. The input waveform is made to switch from an upper and a lower voltage level, i.e. UTP and LTP to generate a square wave.

