Students Names	ID#
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Communication Lab Report
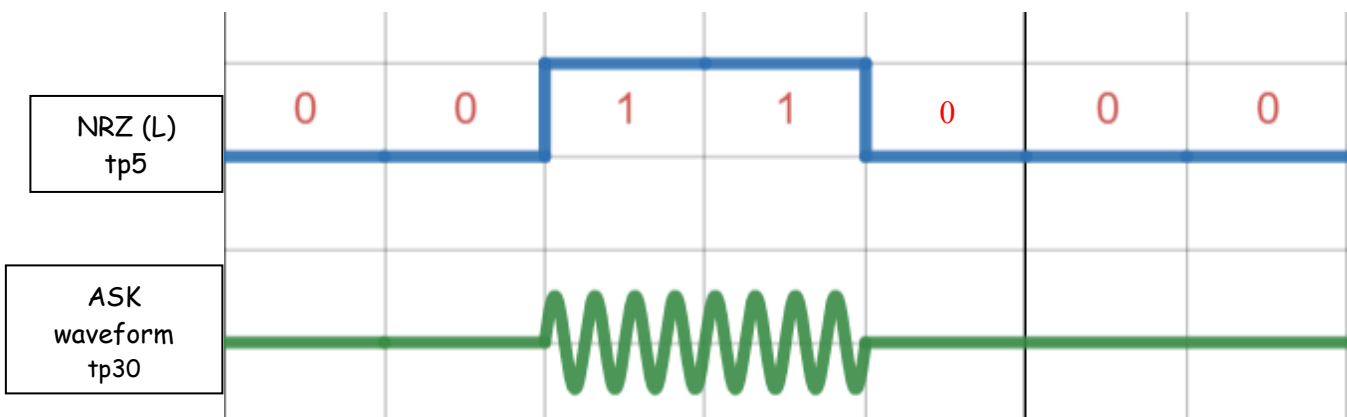Experiment eight
ASK/FSK
Modulation -Demodulation

Part (1-a): Amplitude Shift Keying Modulation

9- In MODICOM 5/1:

- Use your oscilloscope's CH1 to observe the Data Clock output at tp4.
- Use your oscilloscope's CH2 to observe the NRZ (L) waveform at tp5.

- Draw the two signals on the same graph.
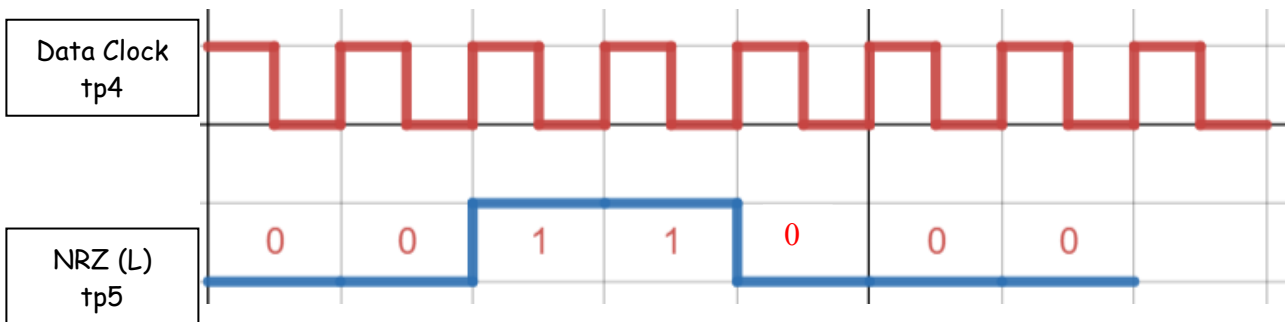
12- Draw the output waveform at tp30 and the NRZ (L) O/P tp5 on the same graph.

Part (1-b): Amplitude Shift Keying Demodulation

See the demodulation process, monitor the following waveforms and <u>draw the signal at each stage:</u>
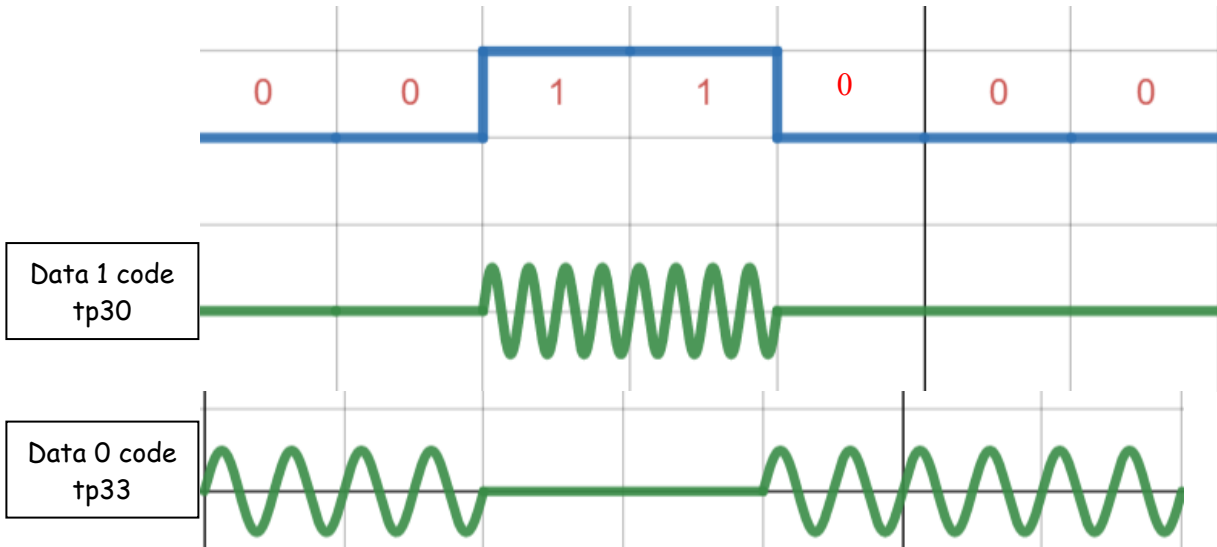
- STEP 1: The ASK Modulator Output tp30.
- STEP 2: The ASK Demodulator Output tp22.
- STEP 3: The LOW Pass Filter 1 Output tp24.
- STEP 4: The Comparator 1 Output tp33.
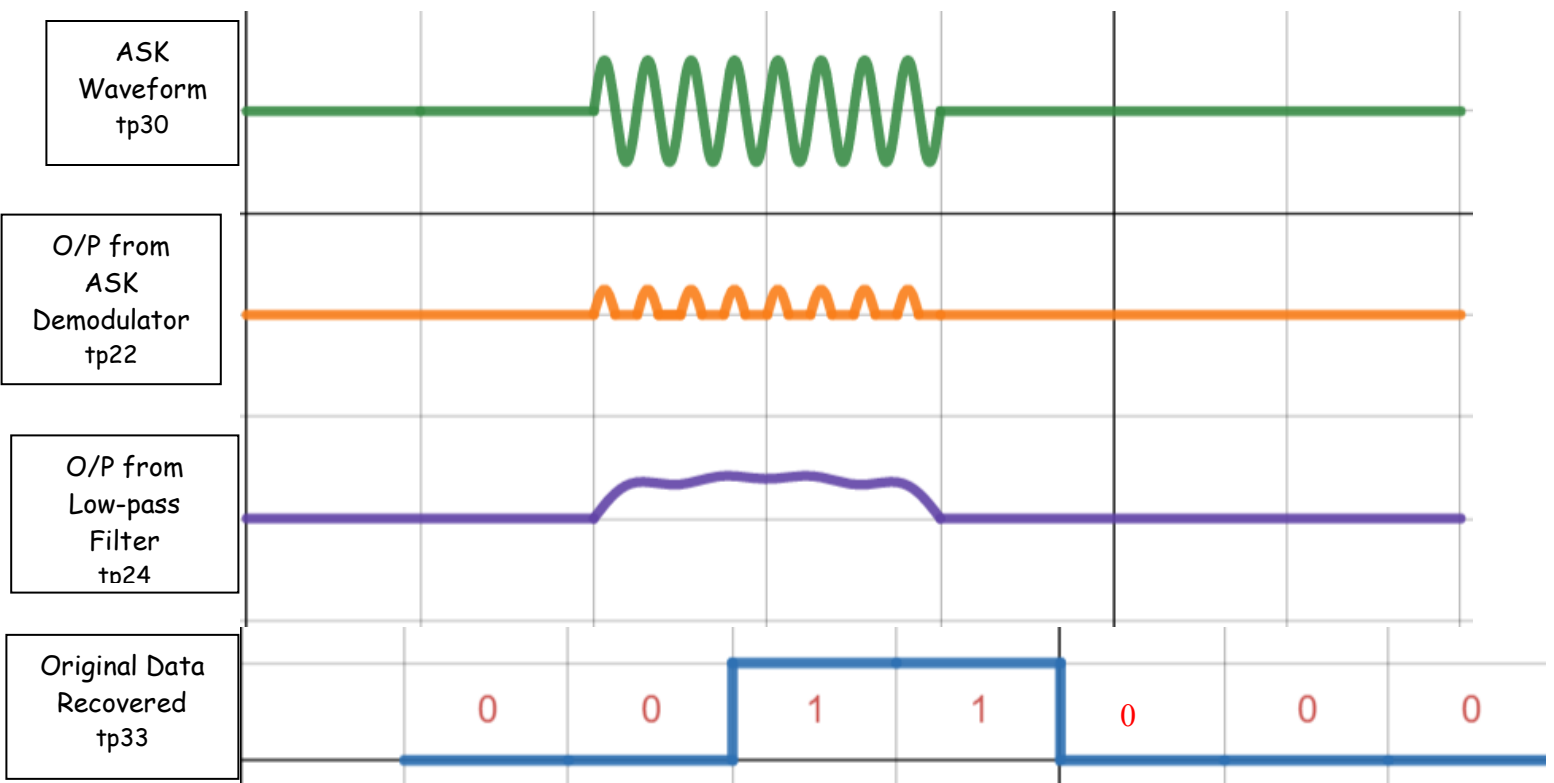
Part (2-a): Frequency Shift Keying Modulation

13- Use your oscilloscope to compare the ASK waveforms (on the same graph) at:

- Modulator 1 output tp30 this is the data 1 code
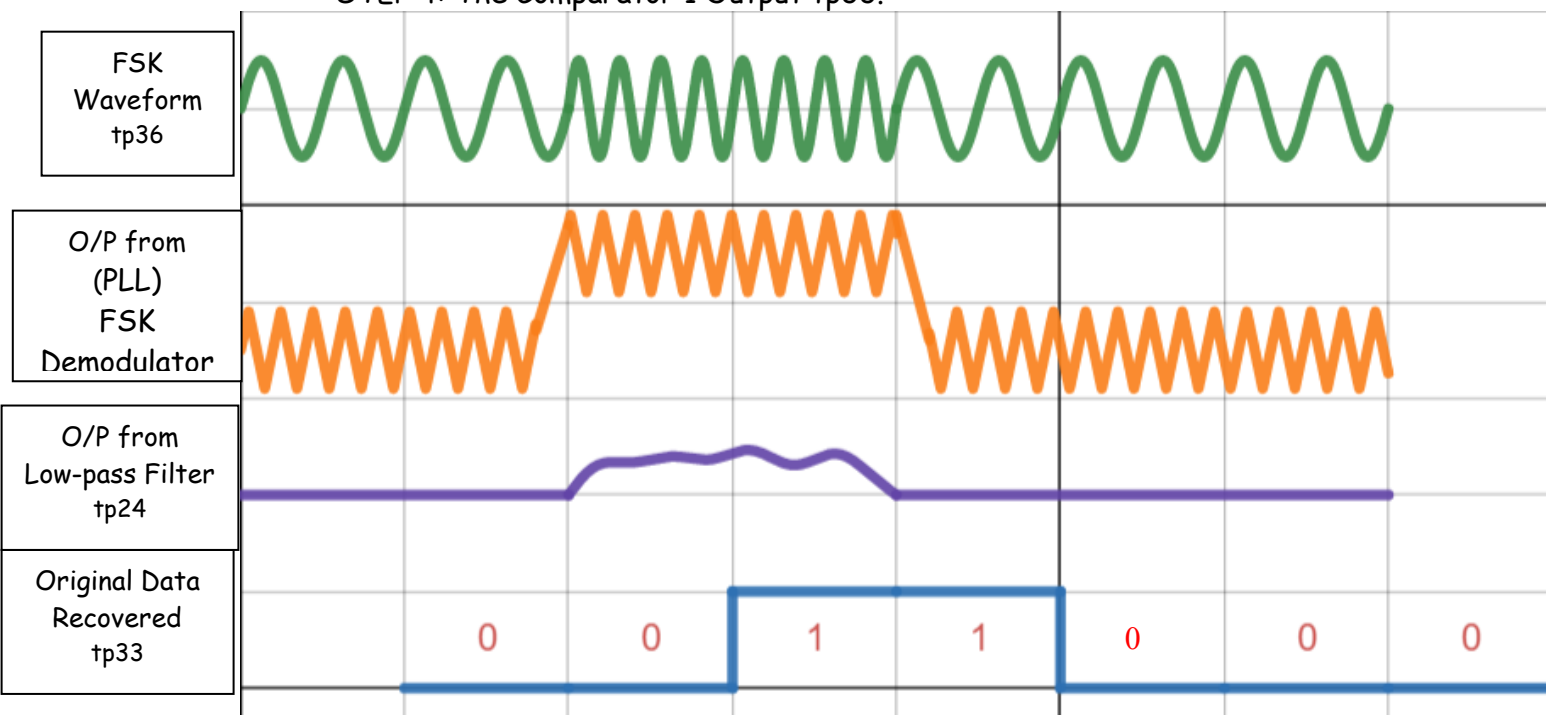- Modulator 2 output tp33 this is the data 0 code

14- Use your oscilloscope to compare the NRZ (L) input tp5 with the Summing Amplifier output tp36 to see a complete FSK transmitter. Draw the two signals on the same graph.
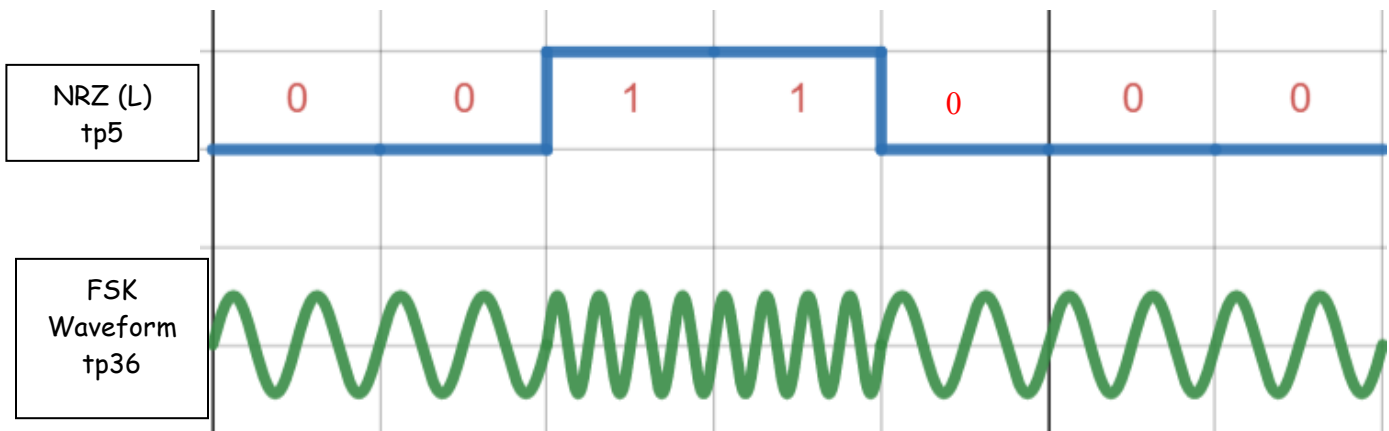
Part (2-b): Frequency Shift Keying Demodulation

1 - To see the demodulation process, monitor the following waveforms and <u>draw the signal at each stage:</u>

- STEP 1: The FSK Modulator Output tp30.
- STEP 2: The PLL Output tp17.
- STEP 3: The LOW Pass Filter 1 Output tp24.
- STEP 4: The Comparator 1 Output tp33.

FSK Waveform tp36	
O/P from (PLL) FSK Demodulator	
O/P from Low-pass Filter tp24	
Original Data Recovered tp33	0 0 1 1 0 0 0

- The reconstructed signal is delayed