Indian Institute of Technology Hyderabad

Electrical Engineering

Indian Institute of Technology Hyd

Analog Electronics

March 9, 2024

Deadline: 16 March 2024 | *Assignment # 4* | Maximum Marks: TBD

Instructions:

1. Use LT spice software.

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1. Design the following in LT Spice:
   a. A RC phase shift oscillator (3 stage) for 50 kHz sin wave signal output.
   b. A Wien bridge oscillator for 50 kHz sin wave signal output.
   c. A Square wave generator for a fundamental frequency of 10 kHz signal output. Use an integrator and convert the square wave signal into tringular wave.
   d. A Square wave generator for a fundamental frequency of 10 kHz signal output. Use an integrator and convert the square wave signal a sawtooth wave with rise time = 1/2 fall time.
   e. Design a schimitt trigger circuit and show the hesteresis curve with Vth (+ and -ve) = +- 200mV

Student's roll number: Ended here