2024-25 Sem-II EE Dept., IITK

## ESC201 Introduction to Electronics Lab Demonstration Videos Lab 1: Familiarization with Laboratory Instruments

Operation of Digital Storage Oscilloscope (DSO):

For ESC201 Lab 1, you must watch the following videos (total watch time is 42 minutes).

- 1. Displaying Waveforms and Scaling 10 minutes
- 2. <u>Basic Triggering of the Display</u> 6 minutes
- 3. Manual Measurement using Cursor 8 minutes
- 4. Automatic Parameter Measurement 8 minutes
- 5. More about Triggering 8 minutes
- 6. Math Operation on Waveform (4:18 to 5:43) 2 minutes

[For interested students who are willing to spend more time and want to know more about the DSO operation, you may refer to the following YouTube Playlist on the web:

'Oscilloscopes 101 for Engineering Students' by Keysight Hands-On Channel on YouTube.]

For other lab instruments and components: a DC Power Supply (an older model), a Function Generator (FG), Breadboard, and Digital Multi-Meter (DMM)

You can watch some old demos of ESC Lab here (total watch time is 10 minutes).