

Assignment-5

Date:28.04.25

Dept. Of Engineering Design

Indian Institute of Technology Madras

1. Design a device that can perform high-throughput single-cell opto-electroporation/photo-electroporation.

[You need to provide complete device schematic design with proper dimensions, working mechanism of the device, fabrication process steps of your device, and expected results.]

[The assignment report should not exceed more than two pages]

[Hints: In this device you need to use light/laser energy source as well as electrical energy, by which you can deliver drugs/molecules to more than a million of single-cell within a very short time]