

Assignment-4

Date:10.04.25

Dept. Of Engineering Design

Indian Institute of Technology Madras

1. Design a device that can perform high throughput single-cell photoporation/optoporation.

[You need to provide a complete device schematic design with proper dimensions, the 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 a light/laser energy source, by which you can deliver drugs/molecules in more than a million of single-cell within a very short time]