|  |  |
| --- | --- |
| Name: |  |
| Lab TA: |  |
| Lab Section: |  |

Attendance/Participation: (05)

Data/Graphs: (55)

Units: (10)

Analysis Questions: (30)

**Total:** (100)

**Experiment EO3: Capacitors**

Part I: Parallel Plate Capacitor

*Table 1*

|  |  |
| --- | --- |
| Capacitance with glass plate,  |  |
| Capacitance without glass plate,  |  |
| Dielectric constant, ** |  |

Part II: Capacitors in Parallel and in Series

*Table 2*

|  |  |
| --- | --- |
| Measured capacitance of 1 F capacitor |  |
| Measured capacitance of 1 F capacitor |  |
| Measured capacitance of 10 F capacitor |  |
| Measured capacitance of 10 F capacitor |  |

*Capacitors in Parallel*

*Table 3*

|  |  |
| --- | --- |
| *Ctot* for two capacitors connected in parallel |  |

*Capacitors in Series*

*Table 4*

|  |  |
| --- | --- |
| *Ctot* for two capacitors connected in series |  |

*Capacitors in Parallel and Series Combinations*

*Table 5*

|  |  |
| --- | --- |
| *Ctot* for combination of four capacitors |  |

*Paste a picture of your four capacitor combination below:*

**Analysis Questions**

*Answer the Analysis Questions in the space below.*