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

Attendance/Participation: (05)

Data/Graphs: (55)

Units: (10)

Analysis Questions: (30)

**Total:** (100)

**Experiment EO6: Changing Magnetic Fields and Electrical Currents**

Part I: Faraday’s Law Simulation

|  |  |
| --- | --- |
|  | Explain what happens, noting the sign and relative magnitude of the meter, when: |
| You move the N pole of the magnet slowly into the larger coil. |  |
| You move the N pole of the magnet quickly into the larger coil. |  |
| You pull the magnet away from the larger coil. |  |
| You stop the magnet in the middle of the coil. |  |
| You move the N pole of the magnet quickly into the smaller coil. |  |
| You switch the magnet direction and move the S pole of the magnet quickly into the larger coil. |  |

Part II: Induce a Current in a Real Wire

|  |  |
| --- | --- |
| Maximum current for 4 coils. |  |

|  |  |
| --- | --- |
| Maximum current for 2 coils |  |

**Analysis Questions**

*Answer the Analysis Questions in the space below.*