



Electromagnetism 3

Problem Set 4

Magnetostatics, Faraday's Law, Quasi-Static Fields

Department of Physics, Sharif University of Technology.

Due Date: 26th November 2024

1 Biot-Savart versus Ampere

Problem 10.13 of Zangwill 2013.

2 Lamb's Formula

Problem 10.24 of Zangwill 2013.

3 Toroidal and Poloidal Magnetic Field

Problem 10.25 of Zangwill 2013.

4 Two interesting Problem

Problems 5.1 and 5.29 of Jackson 1999.

5 Vector Potential

Problems 5.8 and 5.10 of Jackson 1999.

6 An insulated Coil around a Sphere

Problems 5.35 of Jackson 1999.