

P 1051 Final Exam Fall 2007

- 1 – C
- 2 – D
- 3 – B
- 4 – B
- 5 – A
- 6 – C
- 7 – B
- 8 – B
- 9 – D
- 10 – A

- 1 (a) 3.00 s
- 1 (b) 14.3 J
- 1 (c) 25.4°

- 2 (a) 3.33 rad
- 2 (b) 283 Hz

- 3 (a) 6.39×10^4 N/C up
- 3 (b) 0.192 N down

4 note: problem cannot be solved numerically without the missing figure and values of B and L.

- 4 (a) $I = Blv / R$
- 4 (b) $P = I^2 R$

- 5 (a) 1.00×10^{-5} T
- 5 (b) 8.00×10^{-5} N/m (repulsive)
- 5 (c) 8.00×10^{-5} N/m (repulsive)