

Testname: PHY 2048 MIDTERM EXAM

Part I

1. C
2. C
3. C
4. B
5. B
6. D
7. B

Part II

1. 2.26 rev/min
2. 9819
3. (a) 7100 N and (b) 6.3×10^{-4} s
4. (a) 0 N, (b) 10 N, (c) 20 N, and (d) 29.4 N
5. Gravity = 216 N, normal force = 186.7 N, force of kinetic friction = 107.8 N
6. 70.1 N

Part III

1. 2.1
2. A. 50 m or 227 m, B. 63 m/s
3. 0.392 m/s^2 .