# PHYS 111 HOMEWORK \#7 

## Due : 27 October 2016

All problems are taken from the text.

1. 18, p. 147
2. 22 , p. 147
3. 28 , p. 148
4. 34 , p. 148
5. 40, p. 149. First do this problem with symbols rather than numbers. The box has mass M, the pushing force has magnitude P acting at an angle $\theta$ below the horizontal. The coefficient of friction is $\mu$. Answer all parts a) through e) using these symbols. Then use the numbers given in the book and compute the numerical answers for all parts a) through e). ( 5 pts each part).
6. 46 , p. 149
7. 48 , p. 149
8. 56, p. 150
9. 57 , p. 150
