Question 1

Give three qualitatively different examples of the use of direct product spaces in QM. (Section 15.4 gives only two.)

Question 2

Spell out the difference in constructing the (CM-relative) S. equation from a) quantizing the classical (CM-relative) equation and b) reducing the S. (2-particle) equation to CM and relative coordinates. How are the conjugate momenta defined in each case?

Question 3

What does the term "entanglement" mean? Is it fair to say that "entangled" is synonymous to "correlated"? (Is there a way to be correlated without being entangled? Is there a way to be entangled without being correlated?) Give examples.

Question X

(TBA in C266 ESC at 12:05 p.m.)

Question Y

(TBA in C266 ESC at 12:05 p.m.)