## PHY 5669 : Quantum Field Theory B, Spring 2016

February  $2^{nd}$ , 2016 Assignment # 2 (due Tuesday February  $16^{th}$ , 2016)

- 1. Using the functional integral formalism calculate the four-point function for a quantum scalar real field (see Eq.(9.41) of your text book). Show explicitly how you proceed in the calculation.
- 2. Problem 9.1 of Peskin and Schroeder's book.