1) The utilization of block polymers in organic photovoltaic devices was motivated by the idea of forming which of the following?
   a. Bilayer Heterojunctions
   b. Bulk Heterojunctions
   c. Donor-Acceptor Bilayer Junctions
   d. Self-assembled Heterojunction
   **e. None of the Above**

2) For a coil-coil diblock copolymer that has a $\chi_N$ product that is relatively high, which of the following nanostructures would be predicted for a polymer volume fraction of 0.75.
   a. Spheres on a body-centered cubic lattice
   b. Spheres on a face-centered cubic lattice
   c. Lamellae
   **d. Hexagonally-packed cylinders**
   e. Bicontinuous gyroid

3) The additional parameters that must be considered for the phase degree of rod-coil diblock copolymers relative to coil-coil diblock copolymers are:
   a. The liquid crystalline transition temperature
   b. The size of the polymer crystallites
   c. The Maier-Saupé parameter
   d. The interaction parameter
   e. The molecular weight of the rod block
   f. The dimensionless block length ratio
   g. Both (a) and (d)
   h. Both (b) and (e)
   **i. Both (c) and (f)**
   j. Both (d) and (f)