Unit 2

Lecture 2.5 Quiz

1) The two components that dictate the melting behavior of polymer crystals are those associated with:

a. The infinite crystal and the polymer nuclei.

b. The infinite crystal and the polymer unit cell.

c. The polymer nuclei and the polymer surface.

d. The infinite crystal and the polymer surface.

e. The polymer surface and the polymer nuclei.

2) The degree of undercooling represents:

a. The difference between the melting temperature of a polymer and the experimental temperature used.

b. The difference between the melting temperature and crystallization point of an infinite polymer crystal.

c. The difference between the melting temperature for an infinite polymer crystal and the observed melting temperature of the real polymer crystal.

d. The difference between the melting temperature and crystallization point of a real polymer crystal.

e. None of the above.

3) One of the key simplifying assumptions of the Gibbs-Thompson equation is that:

a. All polymers are infinite crystals.

b. The size of the crystal domain is ambiguous.

c. Crystals only form in monoclinic structures.

d. Crystals only form in triclinic structures.

e. The crystals grow in a plate-like geometry.