ONWUEGBUNAM CHIAMAKA LAURA

17/SCI03/012

BCH 312 ASSIGNMENT

1.

a) cell division

b) synthesis and replication of DNA

c) active transport

d) muscle cell contractions

e) blood circulation

f) endocytosis

g) respiration

h) transmission of nerve impulses

2.

a) The first law of thermodynamics, also known as Law of Conservation of Energy, states that energy can neither be created nor destroyed; energy can only be transferred or changed from one form to another. For example, turning on a light would seem to produce energy; however, it is electrical energy that is converted.

b)The second law of thermodynamics says that the entropy of any isolated system always increases. Isolated systems spontaneously evolve towards thermal equilibrium—the state of maximum entropy of the system. More simply put: the entropy of the universe (the ultimate isolated system) only increases and never decreases.

A simple way to think of the second law of thermodynamics is that a room, if not cleaned and tidied, will invariably become more messy and disorderly with time – regardless of how careful one is to keep it clean. When the room is cleaned, its entropy decreases, but the effort to clean it has resulted in an increase in entropy outside the room that exceeds the entropy lost.