_____11. The direction for synthesis of DNA is
a. 5' → 3'.
b. 3' → 5'.
c. 5' → 5'.
d. 3' → 3'.
e. variable.

_____12. The genetic code is carried in the
a. DNA backbone.
b. sequence of bases.
c. arrangement of 5', 3' phosphodiester bonds.
d. Okazaki fragments.
e. histones.

_____13. The double helix structure of DNA was suggested as a result of X-ray diffraction data collected by
a. Hershey and Chase.
b. Griffith.
c. Avery, MacLeod, and McCarty.
d. Watson and Crick.
e. Franklin and Wilkens.

_____14. In one molecule of DNA one would expect the composition of the two strands to be
a. both either old or new.
b. both all new.
c. both partly new fragments and partly old parental fragments.
d. one old, one new.
e. unpredictable.

_____15. Chargaff's rules state or infer that
a. [A] = [T].
b. [G] = [C].
c. ratio of purines to pyrimidines = 1.
d. ratio of T to A = 1.
e. ratio of G to C = 1.

_____16. Deoxyribose and phosphate are joined in the DNA backbone by
a. one of four bases.
b. purines.
c. pyrimidines.
d. phosphodiester bonds.
e. the 1' carbon of the sugar.

_____17. The investigators credited with elucidating the structure of DNA are
a. Hershey and Chase.
b. Messelson and Stahl.
c. Avery, MacLeod, and McCarty.
d. Watson and Crick.
e. Franklin and Wilkens.