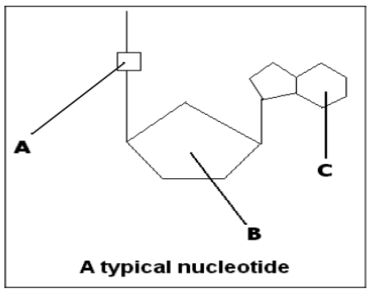
DNA & Protein Synthesis Exam

DO NOT WRITE ON EXAM

EXAM # _____ **VER. B**

Multiple choice

Directions: Answer the following questions based on the following diagram. (1pt. each)



A typical nucleotide

1. In the above item A refers to the _____
   a. Sugar molecule
   b. Phosphate group
   c. Nitrogenous base
   d. Hydrogen bond

2. In the above item B refers to the _____
   a. Sugar molecule
   b. Phosphate group
   c. Nitrogenous base
   d. Hydrogen bond

3. In the above item C refers to the _____
   a. Sugar molecule
   b. Phosphate group
   c. Nitrogenous base
   d. Hydrogen bond

4. The sugar molecule represented consists of _____ Carbons.
   a. 3
   b. 4
   c. 5
   d. 6

5. The above nucleotide is ___
   a. A purine
   b. An enzyme
   c. A pyramidine
   d. None of the above

6. The DNA molecule is in the shape of a(n) _____
   a. Single strand
   b. Alpha helix
   c. Beta-pleated sheet
   d. Double helix

7. The mRNA Molecule is in the shape of a(n) _____
   a. Single strand
   b. Alpha helix
   c. Beta-pleated sheet
   d. Double helix

8. The Backbone of the DNA molecule is made of which components of the nucleotide from the above diagram? _____
   a. A & B
   b. B & C
   c. A & C
   d. B only

9. The component which binds complimentarily according to base-pairing rules is item. _____
   a. A
   b. B
   c. C
   d. None of the above

10. According to base-pairing rules with DNA "A" bonds only to _____
    a. A
    b. C
    c. T
    d. U
    e. G