

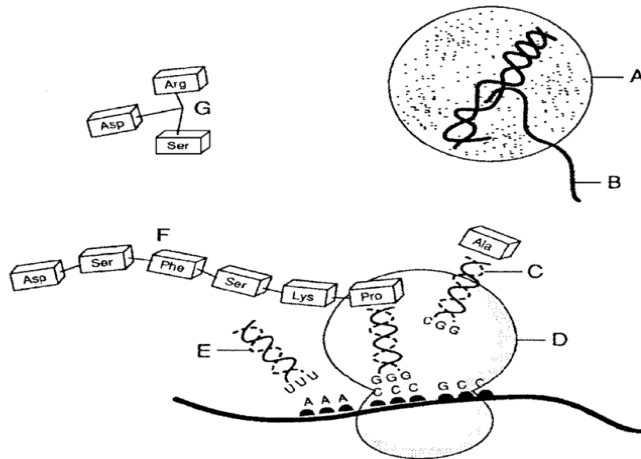
## TAKS Practice Questions--DNA

### Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

**Directions:** Use the diagram to answer the following questions.

#### Protein Synthesis



- \_\_\_ 1. What process is taking place in the structure labeled A in the diagram?
  - a. Transcription of mRNA
  - b. Translation of mRNA
  - c. Replication of mRNA
  - d. Mutation of mRNA
- \_\_\_ 2. In the illustration, information from mRNA is used to produce proteins. What is this process called?
  - a. Transcription
  - b. Translation
  - c. Replication
  - d. Gene regulation
- \_\_\_ 3. What does messenger RNA do during protein synthesis?
  - a. Copies the coded message from the DNA and carries it into the cytoplasm
  - b. Copies the coded message from the DNA and carries it into the nucleus
  - c. Carries amino acids and adds them to the growing protein
  - d. Copies the coded message from the protein and carries it into the nucleus
- \_\_\_ 4. Sickle-cell anemia is a disorder resulting from a mutation that leads to the production of an abnormal protein. Which component of the DNA molecule provides instructions for the production of the protein?
  - a. The phosphate groups
  - b. The sugar molecules
  - c. The sequence of nitrogen bases
  - d. The bonds that hold the sugars to the Bases
- \_\_\_ 5. Which of the following does ribonucleic acid, but not deoxyribonucleic acid, contain?
  - I. Ribose
  - II. Phosphate group