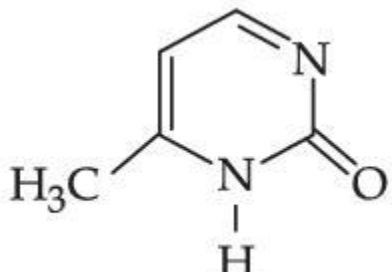
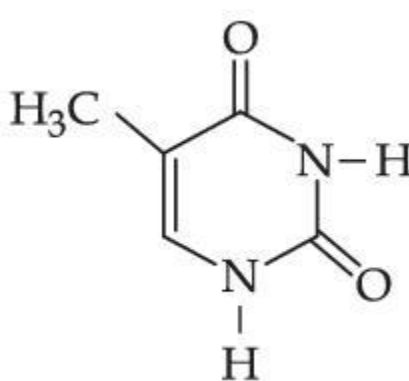
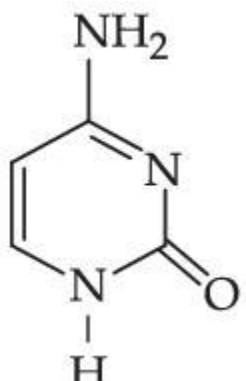
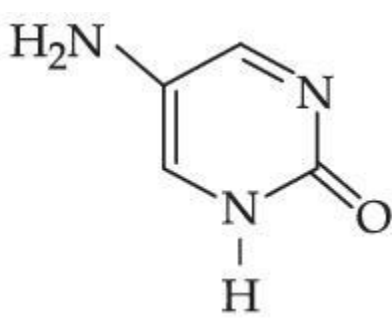


1. Which one of the following is the correct structure for cytosine?

- A. 
A pyrimidine ring with a methyl group (H₃C) at the 4-position, a carbonyl group (C=O) at the 2-position, and a hydrogen atom (H) on the nitrogen at the 1-position.
- B. 
A pyrimidine ring with a methyl group (H₃C) at the 4-position, carbonyl groups (C=O) at the 2 and 4 positions, and hydrogen atoms (H) on the nitrogens at the 1 and 3 positions.
- C. 
A pyrimidine ring with an amino group (NH₂) at the 4-position, a carbonyl group (C=O) at the 2-position, and a hydrogen atom (H) on the nitrogen at the 1-position.
- D. 
A pyrimidine ring with an amino group (H₂N) at the 4-position, a carbonyl group (C=O) at the 2-position, and a hydrogen atom (H) on the nitrogen at the 1-position.

Ans. C