

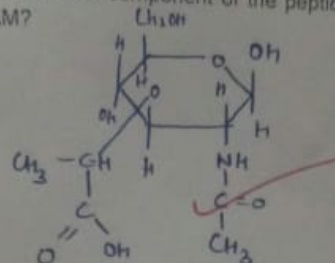
NAME:

Abhinav

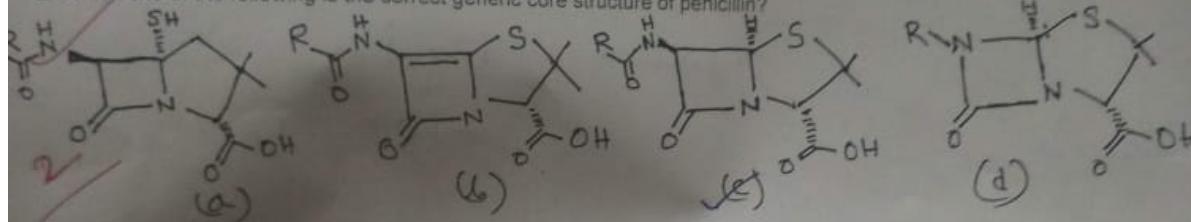
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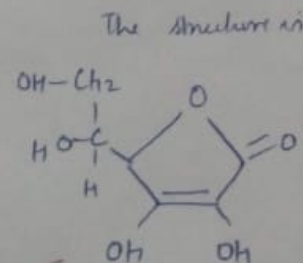
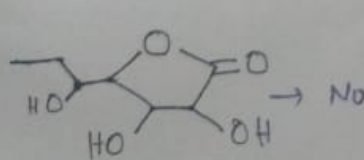
1. N-Acetylmuramic acid (NAM) is a critical component of the peptidoglycan layer of Gram-positive bacterial cell walls. Draw the chemical structure of NAM?



2. Which one of the following is the correct generic core structure of penicillin?



3. Hydroxyproline [(2S,4R)-4-hydroxyproline] is one of the major components of collagen and produced by hydroxylation of proline by the enzyme prolyl hydroxylase. Draw the structure of hydroxyproline.



4. Proline hydroxylation requires L-ascorbic acid (vitamin C). Is the following structure of ascorbic acid correct? If not, draw the correct structure.

