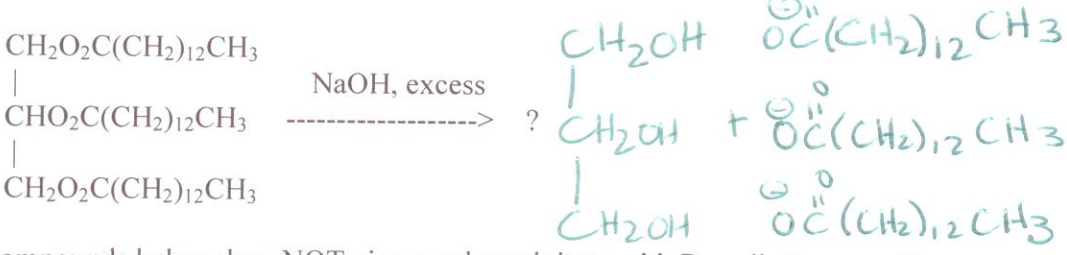
Name KEY Biochem/Polymer Quiz (Sample B)

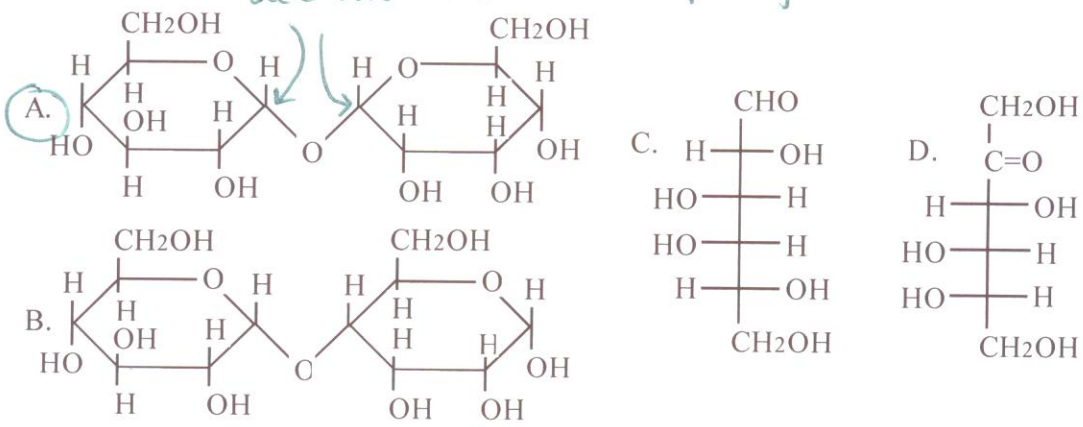
Organic Chemistry 2220 Answer All Questions

1. Complete the following equation. Give all organic products.

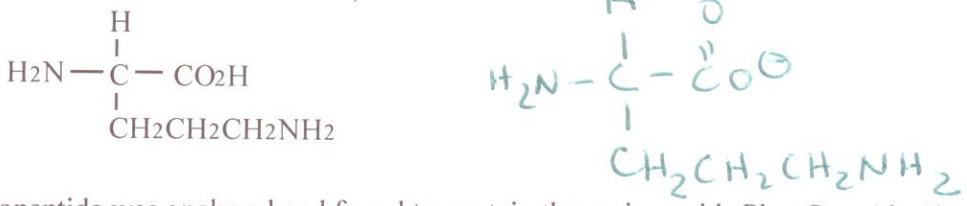


2. Which of the compounds below does NOT give a red precipitate with Benedict's reagent?

acetals not reducing sugar



3. What is the structure of the amino acid shown at a pH of 12? The pKa's are 2.2 (COOH), 9.0 (NH_2), and 10.5 (side chain NH_2).



4. An oligopeptide was analyzed and found to contain the amino acids Phe, Cys, Ala, Ile, Asp, Trp, Thr, and Arg. N-terminal analysis identified Phe, and C-terminal analysis gave Ile. The fragments Arg-Ala-Ile, Cys-Asp-Arg, and Trp-Thr-Cys were identified after partial hydrolysis. What is the amino acid sequence of this peptide?

Phe-Trp-Thr-Cys-Asp-Arg-Ala-Ile

5. Give the general structure of a block copolymer using monomers A and B

—AAAAA BBBBBBB AAAA BBBBBBA AAAAAA —