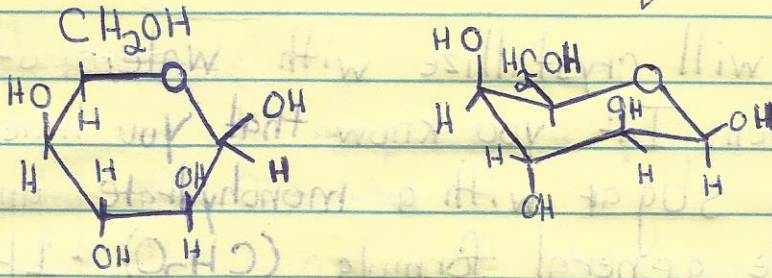


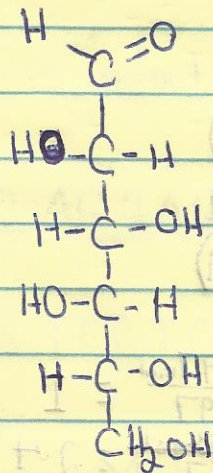
Ch. 7, 8, 9 Review Assignment

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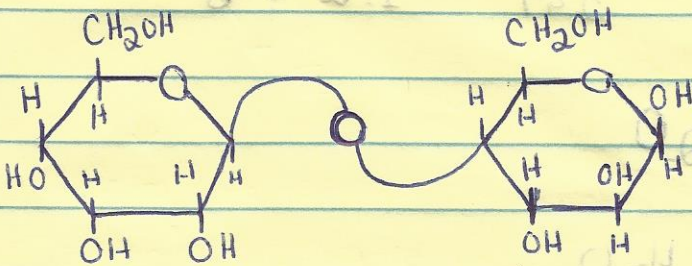
1)



β-D-Idose



2)



D-Allose

D-Arrose

$\text{Al}(\beta 1-4)\text{Ar}$

3) Some sugars will crystallize with waters of crystallization. If you know that you have crystallize a sugar with a monohydrate and are given the general formula $(CH_2O)_n \cdot 1H_2O$ then determine the molecular formula for the following.

MW 168.14 g/mol

%C 35.71 (12.01)

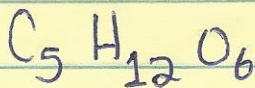
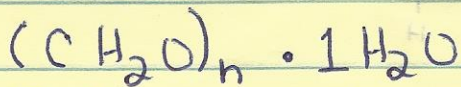
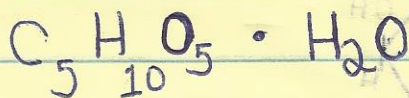
%H 7.19 (1.008)

%O 57.09 (15.999)

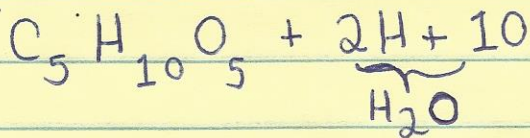
$$35.71 \text{ g C} \times \frac{\text{mol}}{12.01 \text{ g}} = \frac{2.97 \text{ mol}}{2.97} = 1 = 5$$

$$7.19 \text{ g H} \times \frac{\text{mol}}{1.008 \text{ g}} = \frac{7.13 \text{ mol}}{2.97} = 2.4 = 12$$

$$57.09 \text{ g O} \times \frac{\text{mol}}{15.999 \text{ g}} = \frac{3.57 \text{ mol}}{2.97} = 1.2 = 6$$



n = 5



4) ~~5'-GATATC~~

You want to express a ~~gene~~ gene in a bacterial vector. ~~Ba-Shine-Da~~

a. Write the sequence of the complementary strand

b. What is the ~~sequence~~ ^{peptide} protein sequence that will be obtained?

Recall ATG is start codon.

5'-GATATC AGGAGGT ATG TTT CCT TAA GATATC-3'

3'-CTATAGT CCTCCATACA AAGGA ATTCTATAG-5'

Peptide Sequence: MFP