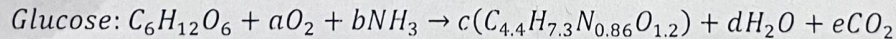
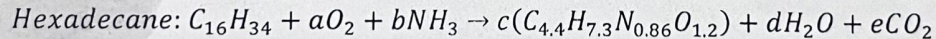


BT-303 (Biochemical Engineering)

Quiz-1

Q1: Assume that experimental measurements for a certain organism have shown that cells can convert two-thirds (wt/wt) of the substrate carbon (alkane or glucose) to biomass.

(a) Calculate the stoichiometric coefficients for the following biological reactions:



(b) Calculate the yield coefficients $Y_{X/S}$ and Y_{X/O_2} for both reactions. Comment on the differences.

Marks: 6+4