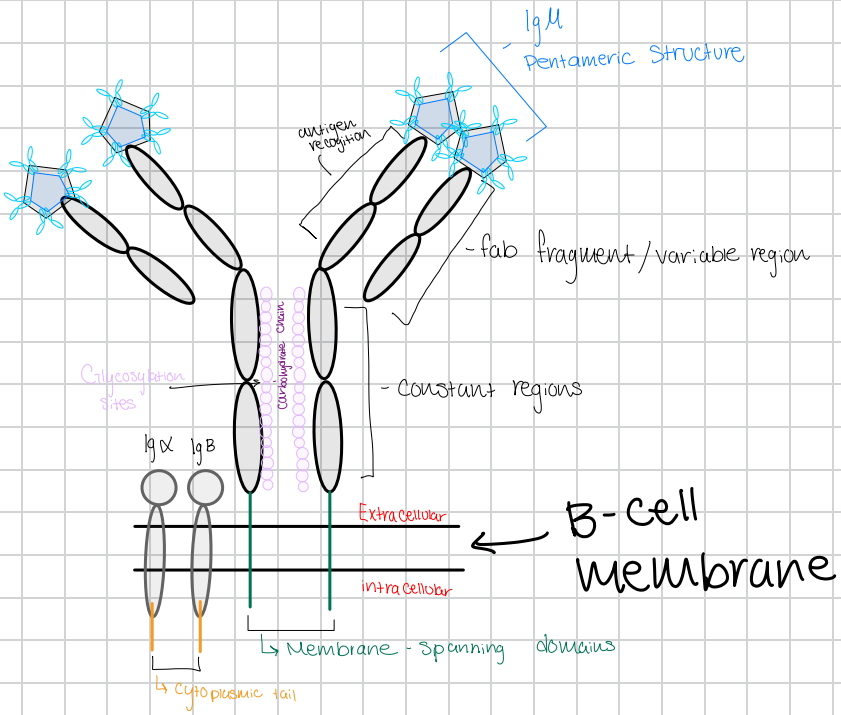
Draw IgM

Due: Sunday Febuary 2

IgM B-Cell receptor (membrane-embedded IgM)



Paragraph

The membrane-bound IgM B-Cell Receptor (BCR) has a complex structure which has 5 IgM antibody subunits that form a pentamer. Each subunit contains an antigen-binding fragment with the variable regions tailored to interact with various antigens, while the constant regions provide structural stability. A transmembrane domain anchors the receptor within the B-cell membrane, distinguishing it fro the soluble IgM pentamer that circulates in bloodstream. Glycosylation sites within the IgM BCR enhane functionality and stabili-y which aids in molecular interactions. The cytoplasmic tail allows for critical signaling which is essential for B-cell activation. Lastly, the membrane-spanning domain and cytoplasmic tails are designed for immune response, hence reinforcing their role in B-cell activation and activation for immune responses.