

# L2 Biochemistry: 20 Questions

**Q1**

What is a sigma bond?

**Q2**

What arrangement does an  $sp^3$  hybridised orbital take?

**Q3**

Describe the structure of a pi-bond

**Q4**

Describe the bonding in ethyne

**Q5**

Describe a non-polar covalent bond

**Q6**

Describe a polar covalent bond

**Q7**

true/false: pi-bonds are stronger than sigma-bonds

**Q8**

Greater electron density results in stronger/weaker bonds

**Q9**

More S character in a bond results in:

**Q10**

Define protein

**Q11**

What direction a polypeptides written in?

**Q12**

Properties of peptide bonds:

**Q13**

Which bonds in polypeptides can rotate?

**Q14**

Why can't some bond angles be formed in a protein?

**Q15**

What type of amino acids are present in natural proteins?

**Q16**

Which amino acids are non-polar?

**Q17**

Which amino acids are polar and uncharged?

**Q18**

Which amino acids are polar and positively charged?

**Q19**

Which amino acids are polar and positively charged?

**Q20**

Draw all 20 side chains