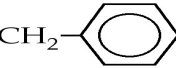
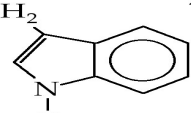
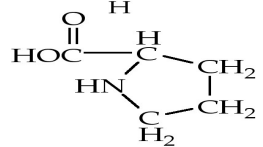
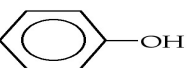

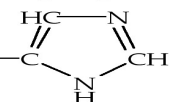


AMINO ACIDS

G (side chain)	Name	Three Letter Symbol	pI
----H	Glycine	Gly	5.97
---CH ₃	Alanine	Ala	6.00
----CH(CH ₃) ₂	Valine *	Val	5.96
----CH ₂ CH(CH ₃) ₂	Leucine *	Leu	5.98
---CH(CH ₃)CH ₂ CH ₃	Isoleucine *	Ile	6.02
---CH ₂ - 	Phenylalanine *	Phe	5.48
---CH ₂ - 	Tryptophan *	Trp	5.89
 (complete structure) Proline	Pro	Pro	6.30
----CH ₂ OH	Serine	Ser	5.68
---CHOH CH ₃	Threonine *	Thr	5.64
---CH ₂ - 	Tyrosine	Tyr	5.66
----CH ₂ CO ₂ H	Aspartic acid	Asp	2.77
----CH ₂ CH ₂ CO ₂ H	Glutamic acid	Glu	3.22
----CH ₂ CONH ₂	Asparagine	Asn	5.41
----CH ₂ CH ₂ CONH ₂	Glutamine	Gln	5.65
----CH ₂ CH ₂ CH ₂ CH ₂ NH ₂	Lysine *	Lys	9.74
----CH ₂ CH ₂ CH ₂ NH- 	Arginine	Arg	10.76
---CH ₂ - 	Histidine *	His	7.59
----CH ₂ S-H	Cysteine	Cys	5.07
----CH ₂ CH ₂ SCH ₃	Methionine *	Met	5.74

*ESSENTIAL
Amino Acids