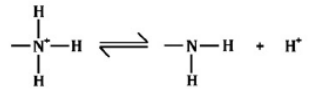
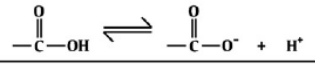
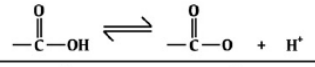
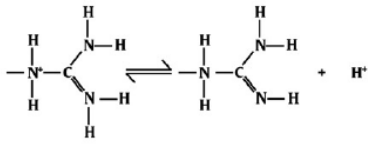
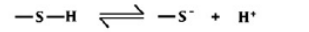
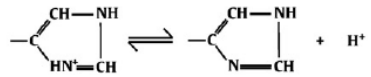
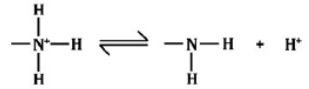
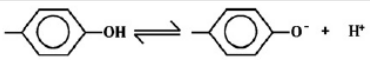
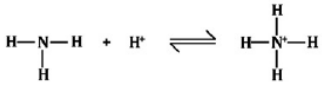
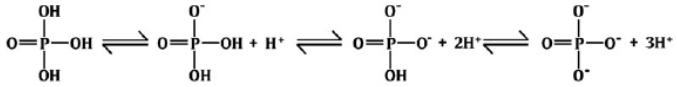
Table 1
Common pH dependent molecules in biology. Common weak acids and weak-bases in a cell are listed. Note that for amino acid side chains or termini the pK_a values given are those of free amino acids. These values can change drastically when incorporated into a protein depending on the structure of the protein and its surroundings.

protein residues		**pK_a**
amino-terminus		8.0
carboxyl-terminus		3.1
aspartic/glutamic acid		4.4
arginine		12.0
cysteine		8.5
histidine		6.5
lysine		10.0
tyrosine		10.0
metabolites		
ammonium		9.2
phosphate		2.1, 7.2, 12.7