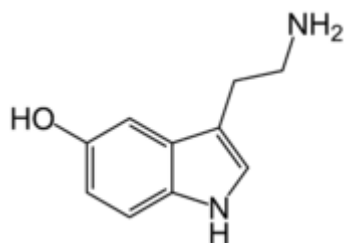
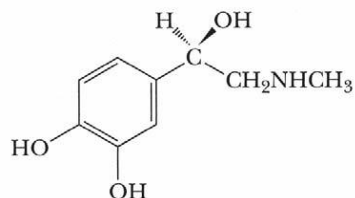


Aromaticità

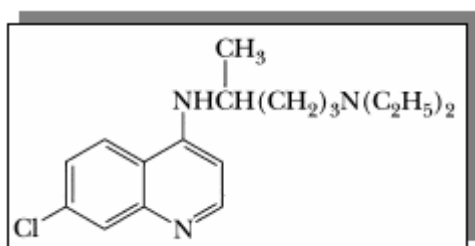
1) Nelle strutture qui di seguito riportate identificare i cicli ed eterocicli aromatici e assegnare loro il nome



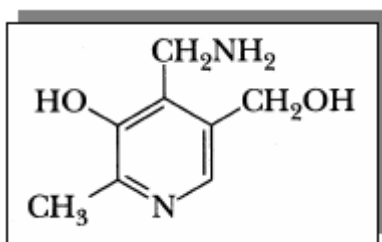
Serotonina (neuromediatore)



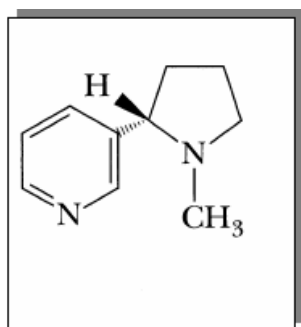
Adrenalina (neuromediatore)



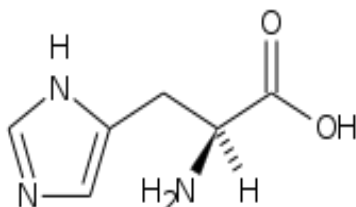
Clorochina (antimalarico)



Vitamina B6

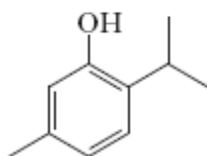


Nicotina (alcaloide)

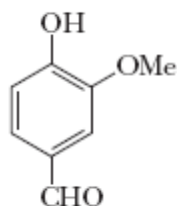


Istidina (amminoacido)

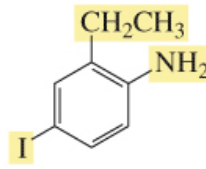
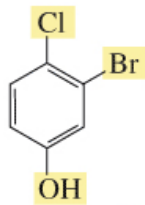
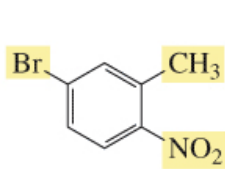
2) Assegnare il nome IUPAC alle molecole che seguono (timolo: sostanza presente in varie specie vegetali e dotata di proprietà antisettiche e balsamiche).



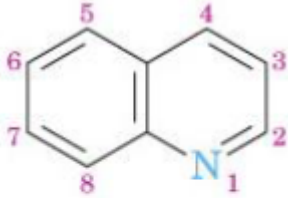
Timolo



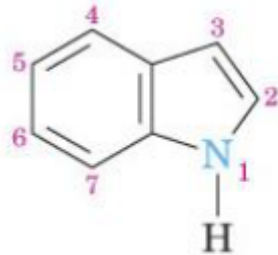
Vanillina



3) Indolo e chinolina sono eterocicli benzocondensati. Indicare se sono aromatici e spiegare i motivi strutturali ed elettronici. Sono dotati di reattività basica?

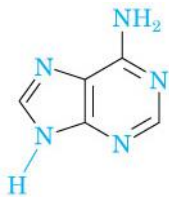


Chinolina

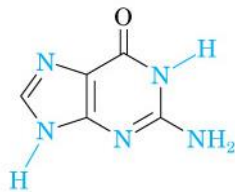


Indolo

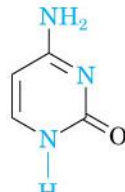
4) Analizzare le strutture delle basi azotate che sono elementi costitutivi degli acidi nucleici: identificare eventuali anelli aromatici e spiegare



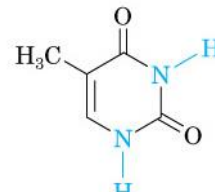
Adenina (A)
DNA
RNA



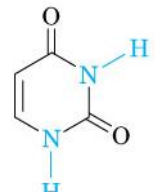
Guanina (G)
DNA
RNA



Citosina (C)
DNA
RNA



Timina (T)
DNA



Uracile (U)
RNA

5) Anisolo e acido benzoico possono subire nitrurazione (sostituzione elettrofila aromatica). Quale dei due composti reagirà più velocemente? Perché? Quali saranno i prodotti dei due casi?