Five-membered heterocycles with one heteroatom – pyrroles, furans and thiophenes – nomenclature, synthesis and applications. Five-membered heterocycles with two heteroatoms – imidazoles, pyrazoles, thiazoles, isothiazoles, oxazoles and isoxazoles – nomenclature, synthesis and applications.

Six-membered heterocycles with one heteroatom – pyridines – nomenclature, synthesis and applications. Six-membered heterocycles with two heteroatoms – pyridazines, pyrimidines and pyrazines – nomenclature, synthesis and applications.

Seven-membered heterocycles with one heteroatom – Azepines, oxepines and thiepins. Fused heterocycles – indoles, quinolines, isoquinolines, coumarines, benzofurans and purines.

**TEXT BOOKS / REFERENCES:**