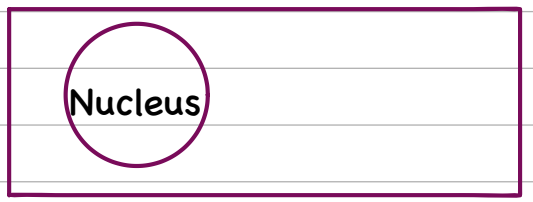
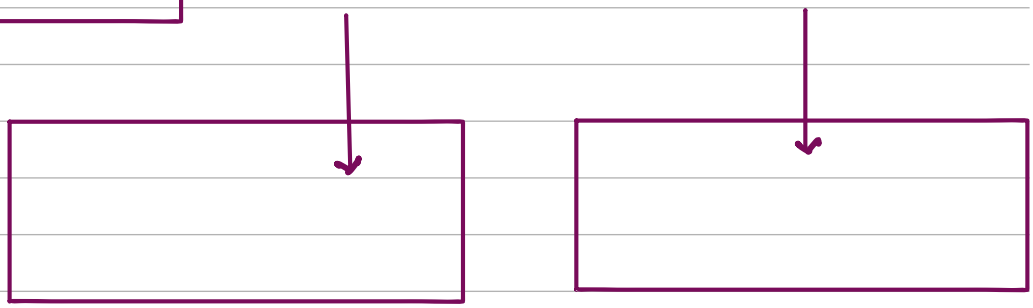
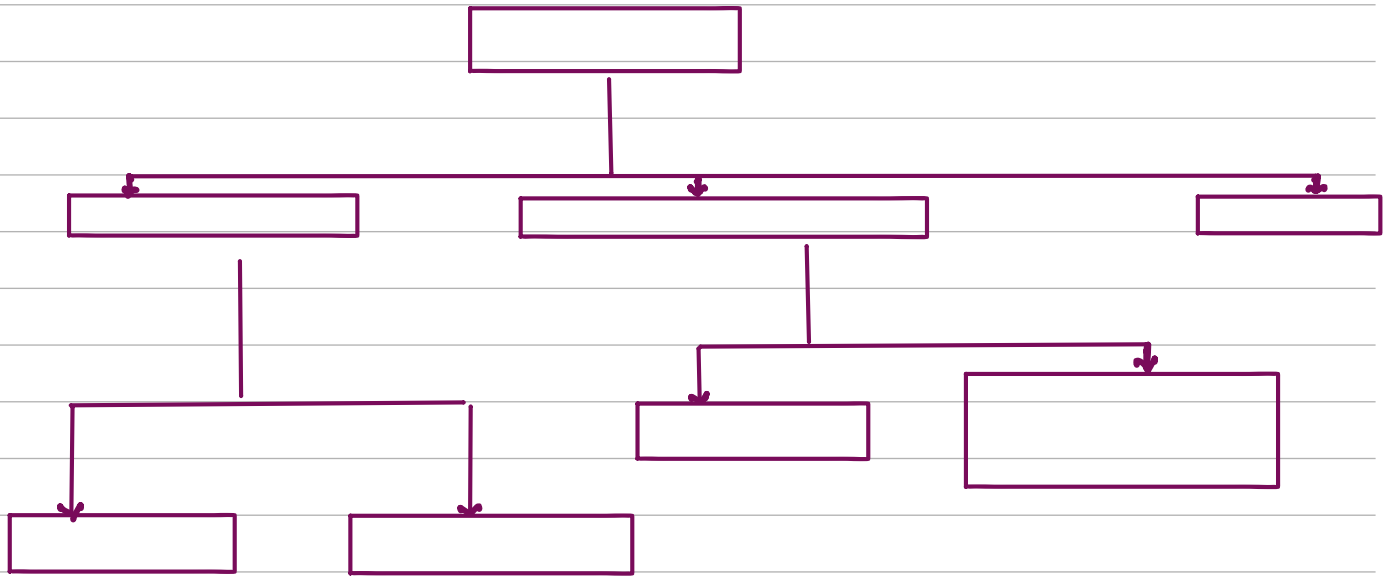
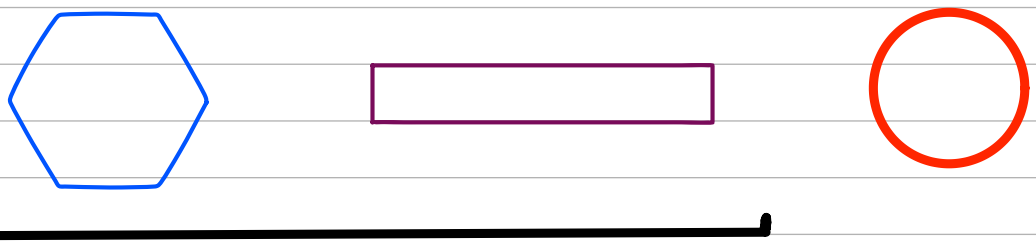
Chapter 25
Basics of nucleic acid







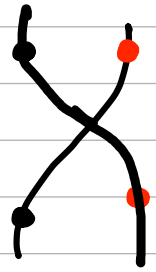




	N-Base + pentose Sugar	Nucleoside +PO4
Nitrogen base		
A G		
C U T		

★ Most abundant free nucleotide in body -

Differance between DNA & RNA

DNA	RNA
Structure - ……strand	Structure - ……strand
Mainly found at -	Mainly found at -
Purine -	Purine -
Pyrimidine	Pyrimidine -
 Purine Pyrimidine	 Purine Pyrimidine

Purine metabolism

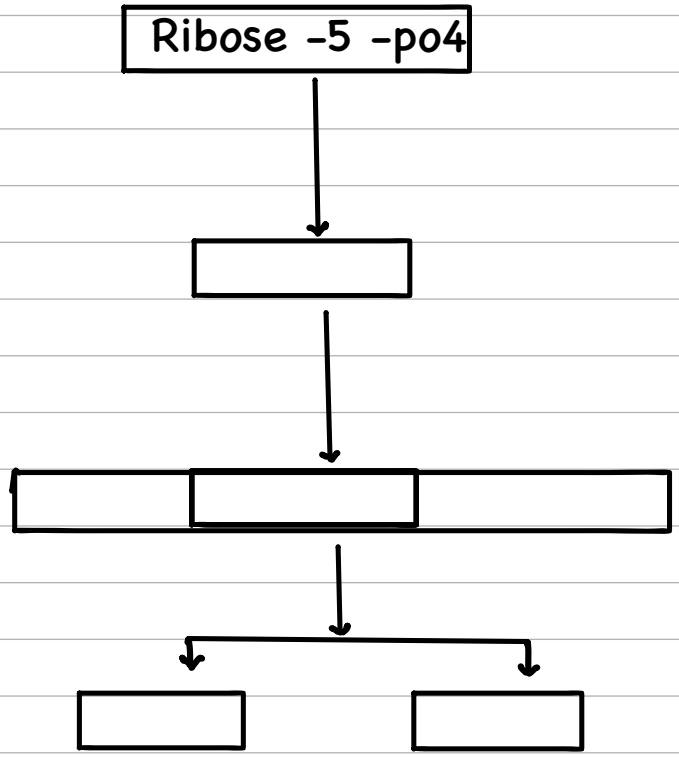
Purine synthesis

Major -

Minor-

Purine are made up of …… …… ……AA

Purine synthesis pathway



PRPP - phospho ribosylmpyro phosphate

IMP - ionosine mono phosphate

Pharma connection

PRPP glutamyl amido transferase inhibitor -

IMP dehydrogenase inhibitor -

Purine catabolism

Enzyme required - •

•

Deficiency of HGPRTase -

Deficiency of adenosine deamianse -

Also know 😎

☆ Purine catabolism ⟶ [ ] [ ]

☆ GOUT ⟶ […… uric acid]

↓

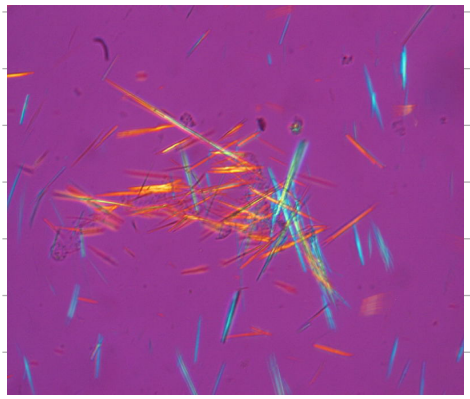
[Deposite in …… - M/C-] [ ]

↓

[risk factor -
C/f -]

↓

Investigation - S. Uric acid level ……

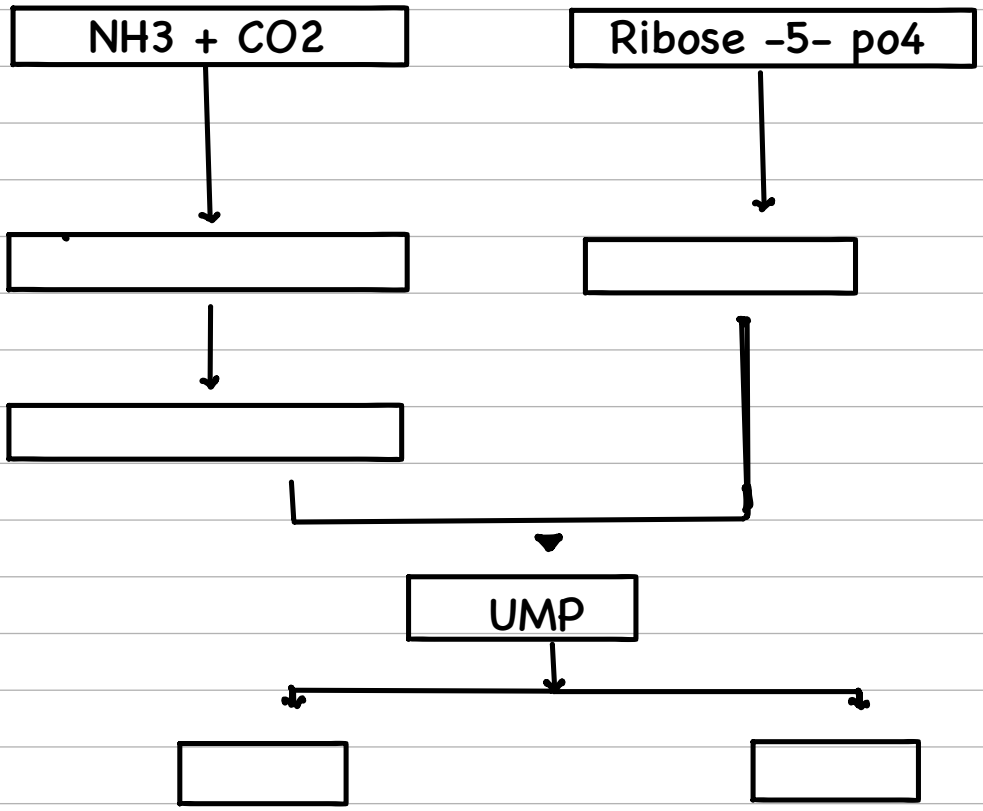




Rx - For acute attack - DOC
- For chronic Gout -DOC -
For refractory Gout - DOC-

Pyrimidine metabolism

Pyrimidine synthesis



Q - which DNA is more thermostable

☆ RLS for pyrimidine synthesis -

☆ 1st pyrimidine nucleotide to be synthesized -

Pyrimidine catabolism -

Summary

a) RLS of purine synthesis
b) RLS of pyrimidine synthesis
c) 1st purine nucleotide to be made
d) 1st pyrimidine nucleotide to be made
e) DOC acute attack of GOUT
f) RLS of urea cycle

1) CPS -1
2) IMP
3) UMP
4) naproxen
5) CPS 2
6) PRPP GAT

a……b……c……d……e……f……