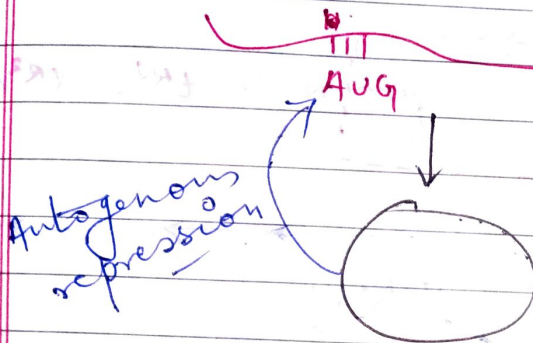


# Translational regulation

(i) mRNA Stability - More the stability of mRNA greater would be the chances of its translation.

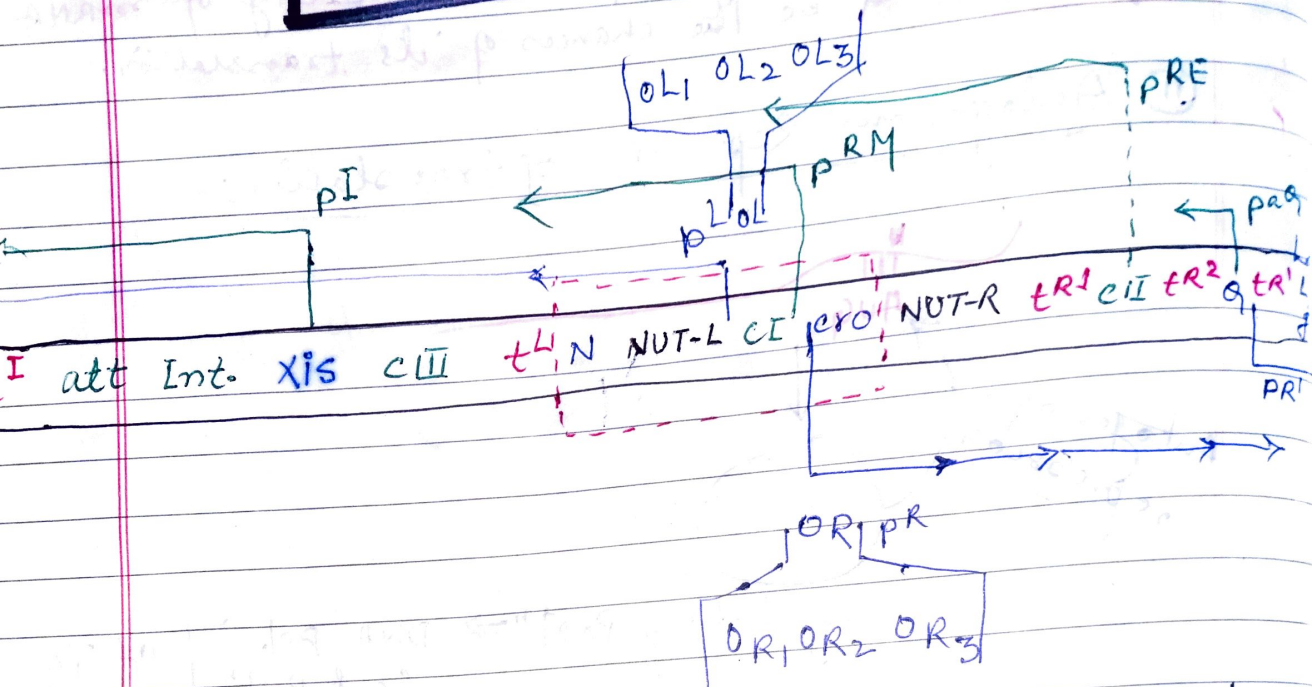
(ii) Autogenous Repression of translation :-



Regulatory Prot<sup>n</sup> ⇒ DNA Pol. } of T4  
Coat prot<sup>n</sup> } phage

(iii) Ribosome based regulation :- In phage infected E. coli, the production of some specific heat labile factors has been reported. These factors combined with the ribo. Bacterial ribosome & such ribosome now preferentially translate the phage mRNA.

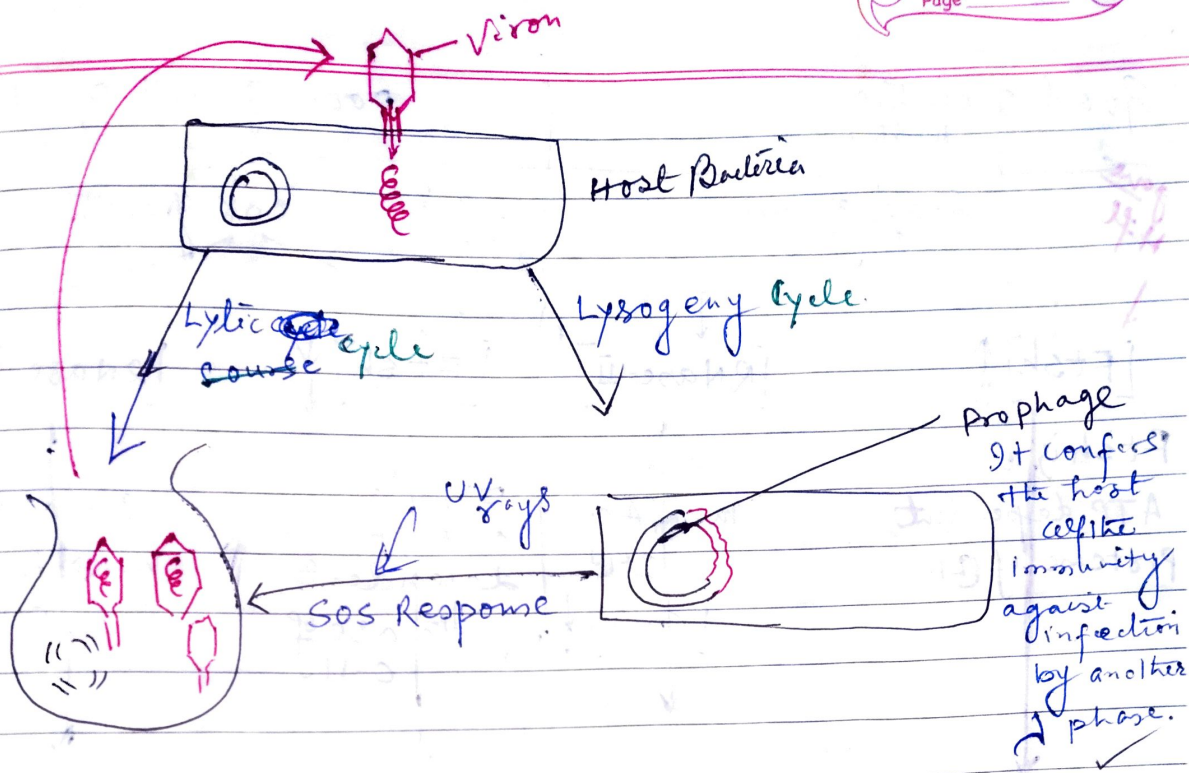
# 3. $\lambda$ -phage Regulation



- $pI, pRE, p_{\lambda g}$   $\Rightarrow$  Promoter for lysogeny establishment
- $pRM$   $\Rightarrow$  Promoter for lysogeny maintenance
- $pL, pR$   $\Rightarrow$  Early lytic promoters
- $pR'$   $\Rightarrow$  Late " "

Fig: Genetic Maps of transcription units with phage regulatory regions.





→ Actually the growth condition of host decides that infecting phage would enter into Lysogenic or Lytic cycle.

Phage

[Notes]