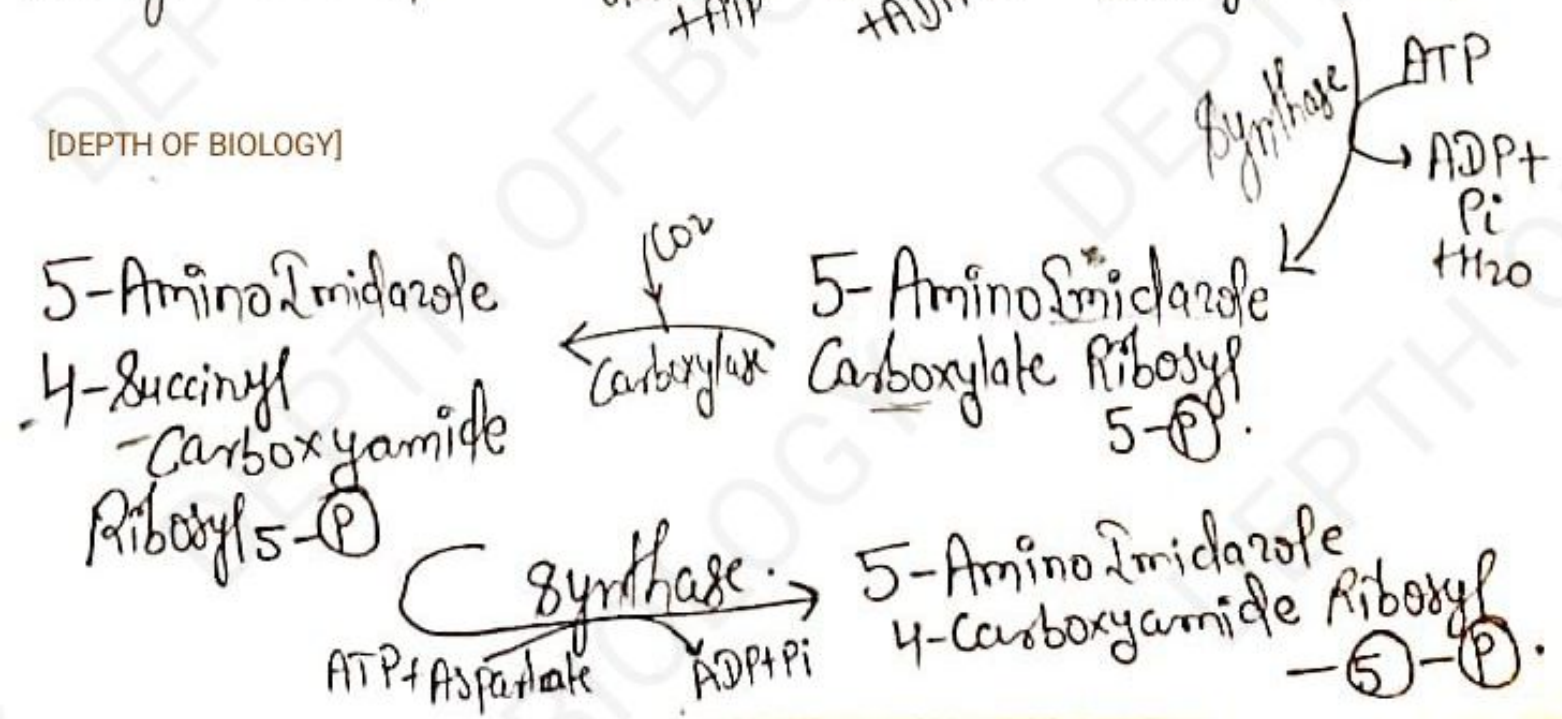
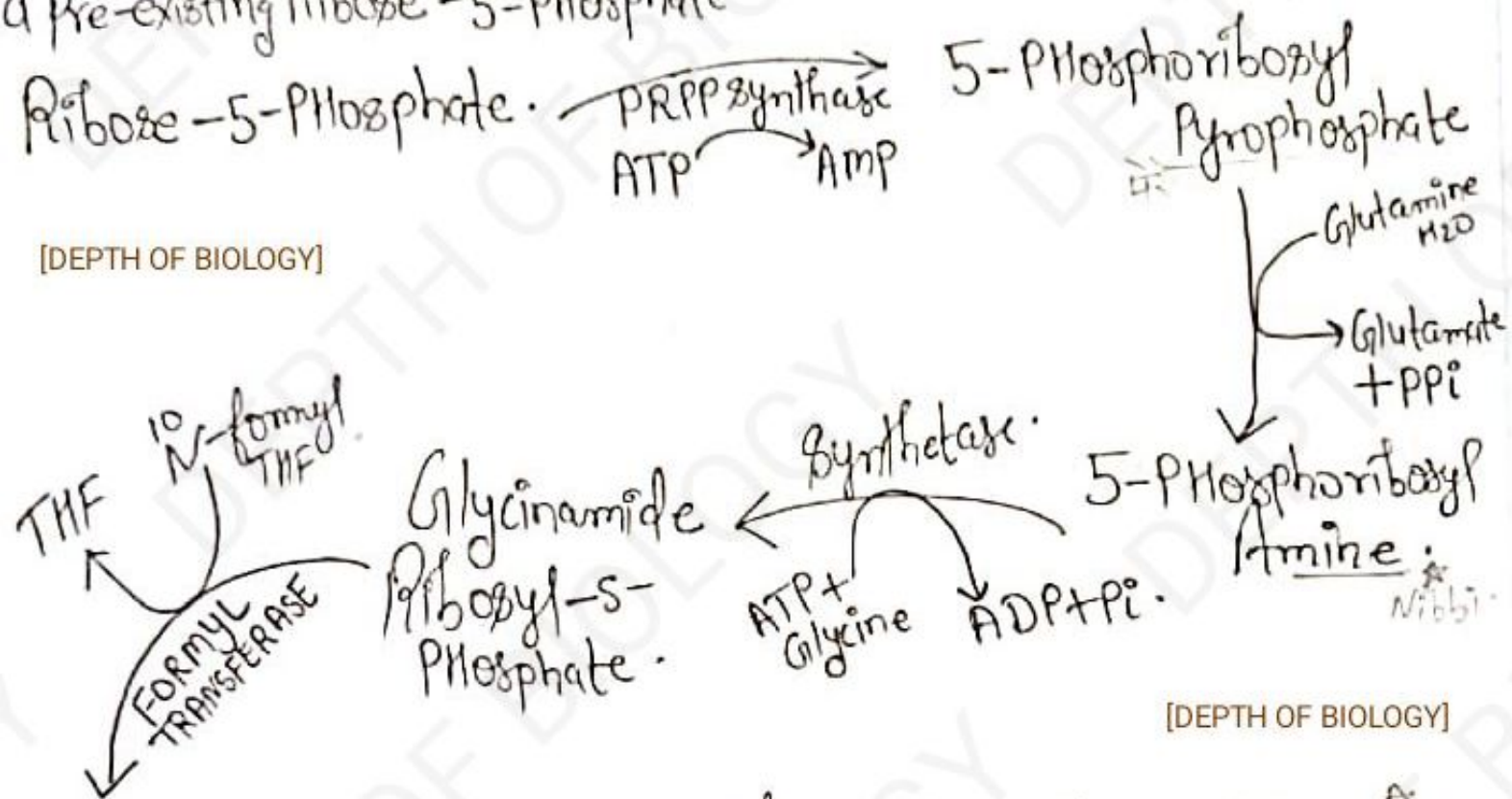


Biosynthesis of Purines.

① De-Novo Synthesis $\Rightarrow$ (Takes place in Liver) ~~BRAIN~~
 * Purines are not synthesized as such, but they are built upon a pre-existing Ribose-5-Phosphate.



5-Aminoimidazole
4-Carboxamide
ribosyl-5-P

Adenylosuccinate
Lyase.

5-Formamino
Imidazole 4-
Carboxamide
Ribosyl-5-P.

[DEPTH OF BIOLOGY]

(Inosine Mono
phosphate) I.M.P

Formyl
Transferase.

[DEPTH OF BIOLOGY]

Imp
Dehydrogenase

Adenylosuccinate
Synthase

XMP

Adenyl
Succinate.

(Xanthine MonoP)

Adenyl
Succinate

GMP Synthase.

AMP.

GMP.

[DEPTH OF BIOLOGY]

II (b) SALVAGE
Pathway. (Brain
RBC)

⇒ This process req. less energy
as compared to De-Novo.

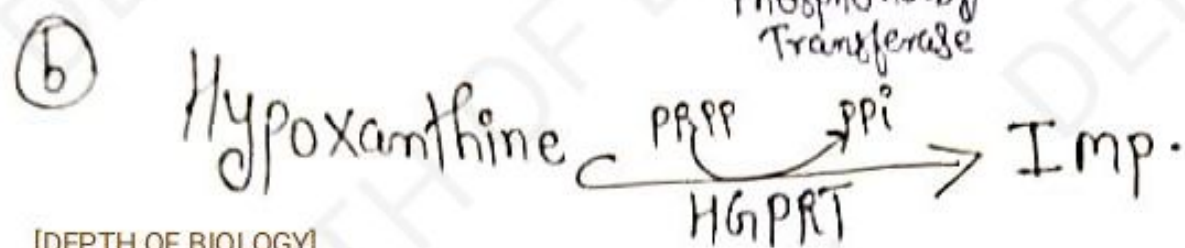
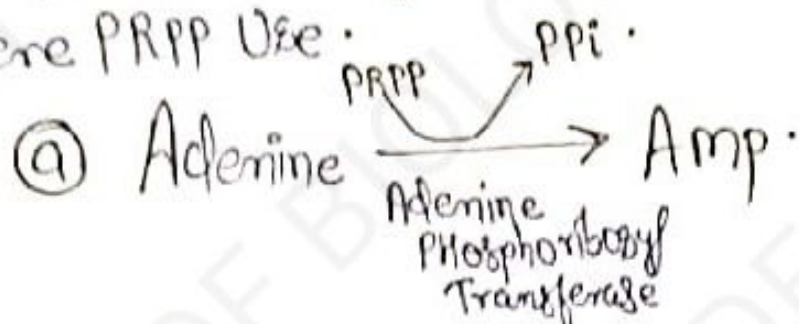
[DEPTH OF BIOLOGY]

Carried Out by 2-Routes.

① Synthesis from free Purine. $\Rightarrow$

★ (P) Group + Ribose Sugar.

★ And Here PRPP Use.



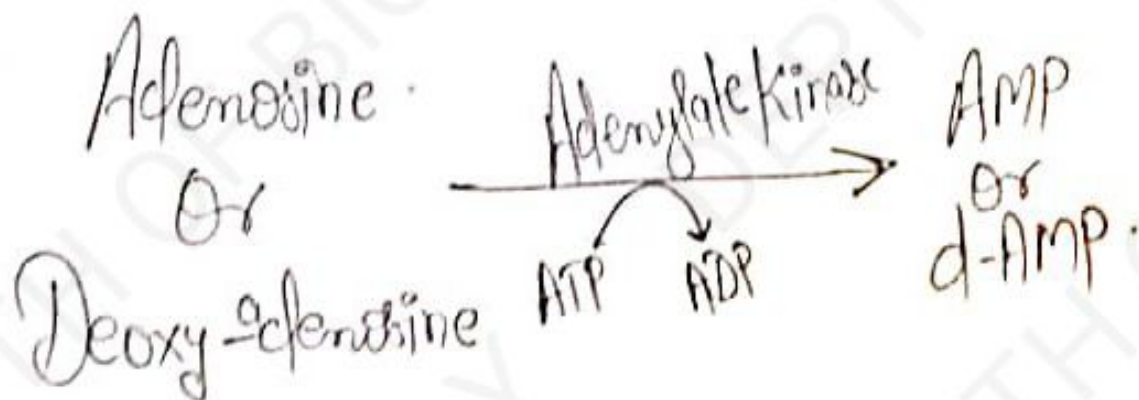
[DEPTH OF BIOLOGY]



② Synthesis from Purine Nucleoside. $\Rightarrow$

[DEPTH OF BIOLOGY]

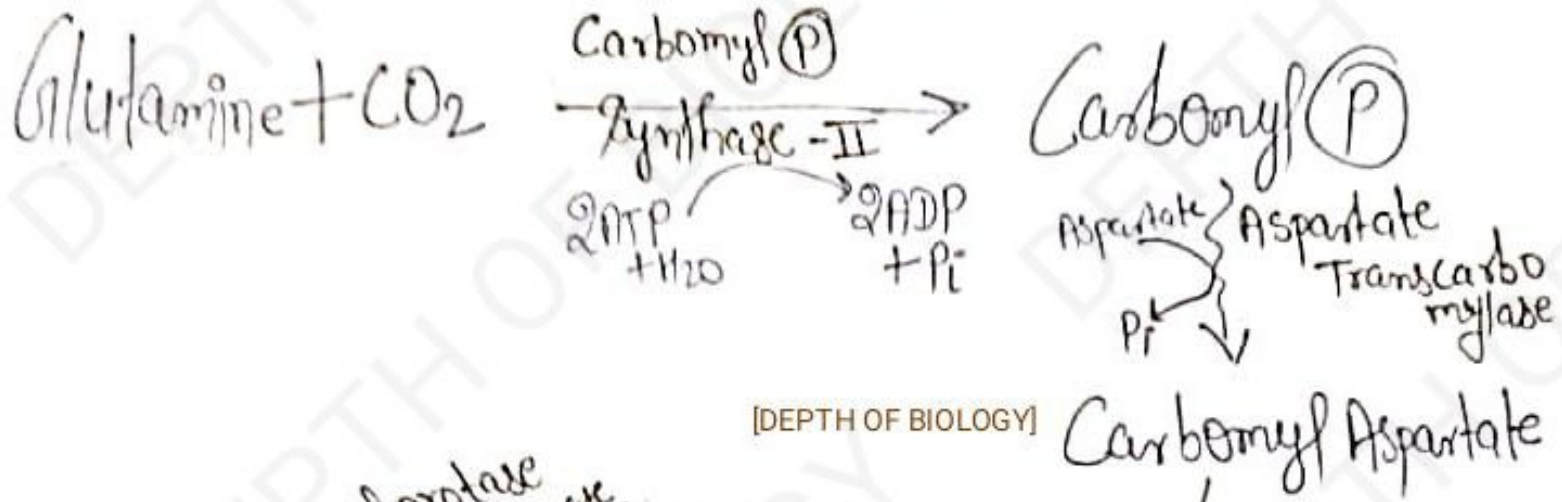
★ Phosphorylation of Purine Nucleoside takes place.



Biosynthesis of Pyrimidines.

[Cytoplasm].

[DEPTH OF BIOLOGY]



[DEPTH OF BIOLOGY]