



Mi Universidad

Ensayo

Nombre del Alumno: Cristian Yahir Santis Diaz

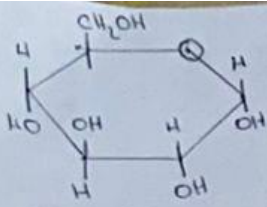
Nombre del tema: Dibujo Glucosa

Parcial: 4

Nombre de la Materia: Bioquímica

Nombre del profesor: Ing Abel Estrada Dichi

Cuatrimestre: 1°



Glucose

Reactions ①-③
Activation by phosphorylation
2 ATPs invested

①

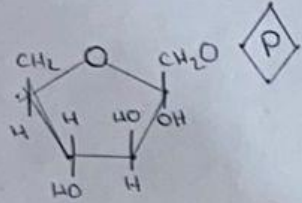


②

③



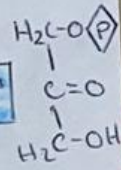
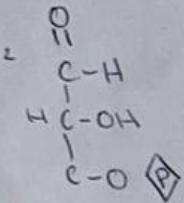
Reactions ④ and ⑤
Cleavage of 1 six-carbon sugar phosphate to 2 three-carbon phosphates



Fructose 1,6-bisphosphate

Glyceraldehyde 3-phosphate

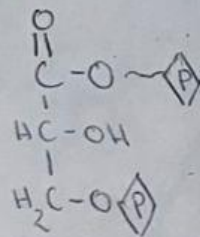
Dihydroxyacetone Phosphate



Energy Generation phase

⑥

Reaction ⑥
Generation of 2 NADH and a super-high-energy compound



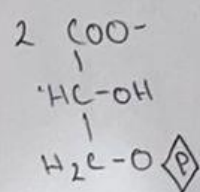
1,3-Bisphosphoglycerate

⑦

Reaction ⑦
Substrate-level Phosphorylation
2 ATPs generated



3-Phosphoglycerate



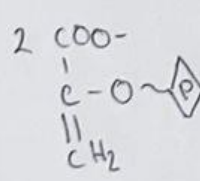
⑧

Reactions ⑧ and ⑨
Generation of a super-high-energy compound (and water)

⑨



Phosphoenolpyruvate



⑩

Reaction ⑩
Substrate-level Phosphorylation
2 ATPs generated



Pyruvate

