

# Mi Universidad

## Ensayo

*Nombre del Alumno: Cristian Yahir Santis Diaz*

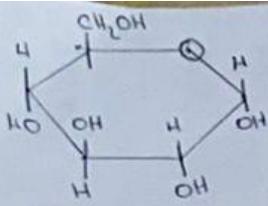
*Nombre del tema: Dibujo Glucosa*

*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

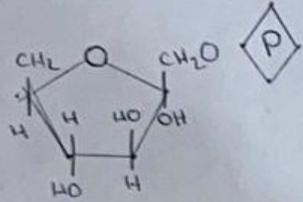


②

③



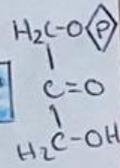
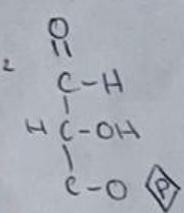
Reactions ④ and ⑤  
Cleavage of 1 six-carbon sugar phosphate to 2 three-carbon phosphates



Fructose 1,6-bisphosphate

Glyceraldehyde 3-phosphate

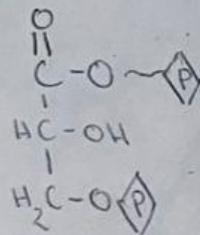
Dihydroxyacetone Phosphate



Energy Generation phase

⑥

2 NADH and a super-high-energy compound



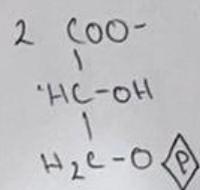
1,3-Bisphosphoglycerate

⑦

Reaction ⑦  
Substrate-level Phosphorylation  
2 ATPs generated



3-Phosphoglycerate



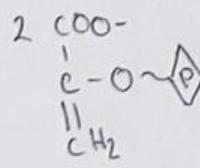
⑧

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

