



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Sub: Biological Sciences

Class: XI

Date: 23.11.2020

Plant respiration: Glycolysis

F.M:15

WORKSHEET – 53

(1x15=15)

i) Glycolysis is also called-

- (1) Krebs's Cycle **(2) EMP Pathway** (3) Citric Acid Cycle (4) All of these

ii) Net gain of ATP in Glycolysis is

- (1) **8** (2) 4 (3) 2 (4) 10

iii) The enzyme that converts Glucose to Glucose 6 – Phosphate is-

- (1) Phosphoglucosomerase **(2) Hexokinase** (3) Aldolase (4) Enolase

iv) Glucose- 6 – Phosphate to Fructose -6-phosphate is _____ reaction.

- (1) Phosphorylation **(2) Isomerisation** (3) Oxidation (4) Oxidative phosphorylation

v) Fructose 1,6- bisphosphate is broken down into

- (1) Dihydroxyacetone phosphate (2) 3- Phosphoglyceraldehyde (3) Both (1) and (2)
(4) 3 – Phosphoglyceric Acid

vi) Which of the following steps require ATP?

- (1) **Fructose -6-phosphate to Fructose 1,6- bisphosphate** (2) Glucose- 6 – Phosphate to Fructose -6-phosphate (3) 3- Phosphoglyceraldehyde to 1,3 – Bisphosphoglyceric Acid
(4) All of these

vii) Which of the following is not a reversible reaction?

- (1) **Glucose to Glucose 6 – Phosphate** (2) Glucose- 6 – Phosphate to Fructose -6-phosphate
(3) 3- Phosphoglyceraldehyde to 1,3 – Bisphosphoglyceric Acid
(4) 1,3 – Bisphosphoglyceric Acid to 3- Phosphoglyceric Acid

viii) Phosphoglyceromutase acts between

- (1) 1,3 – Bisphosphoglyceric Acid to 3- Phosphoglyceric Acid **(2) 3- Phosphoglyceric Acid to 2- Phosphoglyceric Acid** (3) Glucose- 6 – Phosphate to Fructose -6-phosphate
(4) All of these

ix) Dehydration takes place between -

- (1) 3- Phosphoglyceric Acid to 2- Phosphoglyceric Acid **(2) 2- Phosphoglyceric Acid to 2- Phosphoenol Pyruvic Acid** (3) 2- Phosphoenol Pyruvic Acid to Pyruvic Acid (4) 1,3 – Bisphosphoglyceric Acid to 3- Phosphoglyceric Acid

x) 1 molecule of Glucose gives _____ molecules of Pyruvic Acid

- (1) 1 (2) 3 **(3) 2** (4) 4

xi) The total number of ATP molecules formed in Glycolysis is

- (1) 2 (2) 6 (3) 8 **(4) 10**

xii) NADH is formed between

- (1) 2- Phosphoenol Pyruvic Acid to Pyruvic Acid **(2) 3- Phosphoglyceraldehyde to 1,3 – Bisphosphoglyceric Acid** (3) 3- Phosphoglyceric Acid to 2- Phosphoglyceric Acid
(4) Glucose- 6 – Phosphate to Fructose -6-phosphate

xiii) The number of steps where phosphorylation takes place in Glycolysis is

- (1) 1 **(2) 3** (3) 5 (4) 7

xiv) The number of isomerisations between Glucose to Pyruvic acid is

- (1) 1 (2) 2 (3) 3 **(4) 4**

xv) ATP is an allosteric inhibitor of

- (1) Aldolase **(2) Phosphofructokinase** (3) Enolase (4) Hexokinase

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