

1. During cellular respiration, the carbon dioxide produced is

- (a) absorbed
- (b) taken out
- (c) stored
- (d) consumed

Answer: (b)

2. Oxidative phosphorylation is the production of?

- (a) NADH in respiration
- (b) ATP in respiration
- (c) NADPH in photosynthesis
- (d) ATP in photosynthesis

Answer: (b)

3. What is the end product of glycolysis?

- (a) Fructose 1 – phosphate
- (b) Glucose 1 – phosphate
- (c) Pyruvic acid
- (d) Acetyl CoA

Answer: (c)

4. Before pyruvate enters the Krebs cycle, the connecting link between Krebs cycle and glycolysis is changed to

- (a) PEP
- (b) Oxaloacetate
- (c) Pyruvate
- (d) Acetyl CoA

Answer: (d)

5. Reduction of NADP⁺ to NADPH is seen in

- (a) Glycolysis
- (b) HMP
- (c) EMP (1988)
- (d) Calvin cycle

Answer: (b)

6. Pick the incorrect statement regarding Krebs cycle

- (a) cycle starts with condensation of acetyl group with pyruvic acid to produce citric acid

- (b) during the conversion of succinyl Co-A to succinic acid, synthesis of a molecule of GTP occurs
- (c) at a point, reduction of FAD^+ to FADH_2 occurs
- (d) the cycle has three points where reduction of NAD^+ to $\text{NADH} + \text{H}^+$ occurs

Answer: (a)

7. In the cellular respiration of one molecule of glucose, _____ of energy is conserved as 38 ATP molecules

- (a) 686 Kcal
- (b) 456 Kcal
- (c) 654 Kcal
- (d) 277 Kcal

Answer: (d)

8. Which of these yields the maximum number of ATP molecules and is the ultimate respiratory substrate

- (a) Amylose
- (b) Glucose
- (c) Ketogenic amino acid
- (d) Glycogen

Answer: (b)

9. The CH bond of food in cellular respiration is disintegrated through

- (a) metabolism
- (b) catalysis
- (c) oxidation
- (d) reduction

Answer: (c)

10. _____ is the incomplete oxidation of glucose into pyruvic acid involving many intermediate steps

- (a) Krebs cycle
- (b) HMS-pathway
- (c) Glycolysis
- (d) TCA-pathway

Answer: (c)