

## MDCAT Biology Chapter 2 Bio-energetic Online Test

Sr	Questions	Answers Choice
1	PEP is converted to ____ by removal of phosphate	A. Enol pyruvate B. Pyruvate C. Glyceraldehyde D. 3PG
2	Which of the following occurs in the first step of payoff phase during glycolysis	A. Reduction of 1 NAD B. Oxidation of 2 NAD C. Reduction of 2 NAD D. Oxidation of 1 NAD
3	In glycolysis 2PG is converted to PEP by	A. Dehydration B. Decarboxylation C. Phosphorylation D. Oxidation
4	Oxidative phase of glycolysis starts with the dehydrogenation of	A. G3P B. DHAP C. Both D. NADH
5	First step of preparatory phase of glycolysis is	A. Dehydration B. Decarboxylation C. Phosphorylation D. Oxidation
6	How much energy present in chemical bonds of glucose converted into ATP	A. 1% B. 2% C. 5% D. 10%
7	Which of the following is correct direction showing the pumping of protons in chemiosmosis	A. From stroma to lumen in chloroplast B. From matrix to intermembrane space in mitochondria C. From intermembrane space to matrix in mitochondria D. Both A and B
8	The most abundant protein in nature is	A. RuBP B. Rubisco C. Ribulose biphosphate carboxylase D. Both B and C
9	How many NADPH are required for the synthesis of one molecule of glucose	A. 3 B. 6 C. 12 D. 18
10	Very first product formed from carbon fixation in a calvin cycle	A. Unstable 3C compound B. Unstable 6 Carbon compound C. Stable 3C compound D. Stable 6C compound
11	Number of ATPs required to phosphorylate RuP molecules in calvin cycle	A. 3 B. 5 C. 6 D. 9
12	Which of the following is a CO <sub>2</sub> acceptor	A. Rubisco B. Water C. RuBP D. Citrate
13	Splitting of water in sunlight is called	A. Lysis B. Photolysis C. Condensation D. Hydrolysis

A. ADP is hydrolyzed and NADP is

14	What happens in the light phase of photosynthesis?	oxidized B. ATP is synthesized by photophosphorylation and NADP is reduced C. ATP is hydrolyzed and NADPH is oxidized D. ADP is hydrolyzed and NADP is reduced
15	Light dependent reaction takes place in ____ of chloroplasts	A. Stroma B. Envelope C. Thylakoids D. Lumen
16	Components of electron transport chain that works in Z-scheme are located	A. In stroma B. In thylakoid membranes C. In lumen of thylakoids D. Outside thylakoids
17	What actually happens in light dependent reaction	A. ATP synthesis, oxidation of NADP B. ATP hydrolysis, oxidation of NADP C. ATP synthesis, reduction of NADP D. ATP hydrolysis, reduction of NADP
18	Which of the following is not absent in cyclic electron flow	A. Photolysis B. Phosphorylation C. NADP reductase D. PS II
19	Which of the following is not formed during non cyclic phosphorylation	A. ATP B. NADPH C. Oxygen D. G3P
20	Iron containing proteins which act as carriers in ETC	A. Plastoquinine B. Cyt. complex C. Plastocyanin D. None