

464. Assertion (A) : Carbohydrate is formed at the end of dark reaction in cytosol of mesophyll cells in chlorella
465. In C_4 plants the formation of $NADPH + H^+$ is observed during
 I) Cyclic photophosphorylation
 II) Non-cyclic photophosphorylation
 III) Dark reaction
 1) I and II are correct 2) II alone is correct
 3) III alone is correct 4) II and III are correct
466. The reactions are found in C_4 plant but not in C_3 plant during dark reaction
 I) Reduction of 4 - C - compound
 II) Reduction of 3 - C compound
 III) Decarboxylation of 4 - C - compound
 IV) Carboxylation of 5 - C compound
 1) I, III and IV are correct
 2) I and III are correct
 3) II and IV are correct
 4) I, II and IV are correct
467. The ratio of $NADPH + H^+$ used and ATP used for the net gain of one Fructose in photosynthesis of a C_4 plant in mesophyll cells, is
 1) 2 : 5 2) 1 : 2
 3) 2 : 3 4) 2 : 1
468. In PS-II which of the following will be in 1 : 1 ratio
 1) Chl a : Chl b in L.H.C
 2) Carotene : Xanthophyll
 3) Phycocyanin : Phycoerythrin
 4) L.H.C. reaction centre
469. Based on the path of the electron arrange the following in c order in non-electron transport
 I) Ferridoxin II) Plastoquinone
 III) P.S. – II IV) Plasto cyanin
 1) III, I, IV, II 2) III, II, IV, I
 3) IV, I, III, II 4) I, III, II, IV
470. How many Hydrogen ions are pumped into lumen from stroma in total when 4 water molecules undergo photolysis
 1) 14 2) 12 3) 16 4) 24
471. How many ATP and $NADPH + H^+$ molecules are formed during cyclic electron transport when a pair of electrons moves four times ?
 1) $4ATP + 2 NADPH + H^+$
 2) $2ATP + 4 NADPH + H^+$
 3) $2ATP + 2 NADPH + H^+$
 4) $4ATP + 0 NADPH + H^+$
472. Ratio between CO_2 molecules used and O_2 released during photosynthesis is
 1) 1 : 1 2) 1 : 2 3) 2 : 1 4) 6 : 1
473. A) High O_2 inhibits rate of photosynthesis
 R) O_2 helps in aerobic respiration
474. A) Proton concentration gradient is established across the membrane of Grana thylakoid
 R) High proton concentration occurs in stroma as H^+ ions move through $CF_0 - CF_1$
475. A) O_2 is not released during photosynthesis of chlorobium
 R) H_2S is the donor of hydrogen in sulphur bacterial photosynthesis
476. A) Hill reagent is oxidising agent
 R) Hill reagent is H_2 acceptor
477. The number of hydrogens in chlorophyll-b of LHC of PS II
 1) 8750 2) 9000
 3) 17750 4) 175
478. Assertion (A) : Rate of photosynthesis is more when red light of lower and higher wavelengths is used at a time than they are used separately
 Reason (R) : Electron transport is possible when two wavelengths are available but not when any one of them is used separately
479. Chlorophyll 'a' and Chl. 'b' differ from each other with respect to the number of these atoms
 A) Carbon B) Hydrogen
 C) Oxygen D) Nitrogen E) Magnesium
 1) B, C 2) B, D and E 3) A, B and C 4) C, D
480. Assimilatory power produced when 6 water molecules undergo hydrolysis during non-cyclic electron transport
 1) $6 ATP + 12 NADH + H^+$
 2) $12 ATP + 12 NADH + H^+$
 3) $12 ATP + 6 NADPH + H^+$
 4) $6 ATP + 6 NADPH + H^+$