

Class: XIth
Date:
Subject: BIOLOGY
DPP No.: 3

	. -	Photosynthe	_	D		
1.	Etiolation in plants is caused when they a) Are grown in dark c) Are grown in intense light		b) Have mineral deficiency d) Are grown in blue light			
2.	Dichlorophenyl dimethylurea inhibits a) PS-I c) Chloroplast functioning		b) PS-II d) Oxidative phosphorylation			
3.	Photosynthetic pigments in a) Photoglobin b) I	n chloroplast are em Matrix	bedded in the n c) Thylakoid	nembrane of d) Mitochondria		
4.	Pigments can be separated a) ELISA test c) Centrifugation	from leaf by	b) RIA test d) Paper chror	natography		
5.	In which of the following, oxygen does not evolve during photosynthesis? a) Photosynthetic red algae b) Photosynthetic green algae c) Photosynthetic blue-green algae d) Photosynthesis bacteria					
6.	Who proved that the organic matter is synthesised from carbon dioxide and water during the photosynthesis? a) Liebig b) Priestley c) Ingen Housz d) Von Mayer					
7.	In PS-II the reaction cent a) an absorption peak at 70 called P ₇₀₀	tre chlorophyll- $lpha$ has 0 nm hence, is	regard to the light reaction of photosynthesis? In PS-I the reaction centre chlorophyll- α has b) an absorption maxima at 680 nm and is called P_{680} d) Photosynthems-I and II are involved in Z scheme			

- 8. In Calvin cycle, the first product identified was
 - a) 3-phosphoglyceric acid

b) 2-phosphoglyceric acid

c) 1-phosphoglyceric acid

- d) 4-phosphoglyceric acid
- 9. I. Water is oxidised in PS-I not in PS-II
 - II. Light is needed for both PS-I and PS-II
 - III. Due to photolysis of water, formation of ATP and NADPH occurs
 - IV. Production of NADPH and H⁺ is associated with PS-II not PS-I

Identify the true statement and select the correct option

- a) I and II
- b) II and III
- c) I and IV
- d) II and IV

- 10. PS-I is located on the
 - a) Non-appressed part of a grana thylakoids
- b) Stroma thylakoids
- c) Appressed part of grana thylakoids
- d) Both (a) and (b)

- 11. I. Chlorophyll-*a*
 - II. Chlorophyll-b
 - III. Anthocyanin

Select the correct option regarding water soluble pigment

- a) I and II
- b) Only II
- c) Only II
- d) I and II
- 12. C₄-plant minimises the photorespiration because C₄-plants
 - a) Use PEPcase to initiate CO₂ fixation
- b) Do not carry out the Calvin cycle in low CO₂ level

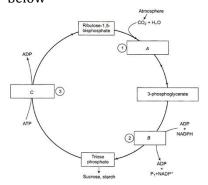
c) Exclude Calvin cycle

- d) Show photorespiration
- 13. In the process of photosynthesis, water molecule breaks during
 - a) Red drop

b) Photolysis

c) Phosphorylation

- d) Carbon assimilation
- 14. Identify A, B and C in the given figure, and choose the correct option from the set (A-C) given below



- a) A-Reduction, B-Carboxylation, C-Regeneration
- b) A-Reduction, B-Regeneration, C-Carboxylation

	c) A-Carboxylation, B-Reduction, C-Regeneration d) A-Carboxylation, B-Regeneration, C-Reduction						
15.	In grana of chloroplast, the reaction ADP + P_i = ATP during day shows						
	a) Oxidative phosphorylation		b) Photophosphorylation				
	c) Substrate level phosphorylation		d) Dephosphorylation				
16.	Very strong light has a direct inhibiting effect on photosynthesis, which is known as						
	a) Solarization b) E	tiolaration	c) Chlorosis	d) Defoliation			
17.	What is the effect of high CO ₂ concentration and higher values of ATP/ADP ratio?						
	a) Rate of Calvin cycle increased		b) Rate of Kreb cycle decreased				
	c) Rate of glycolate cycle decreased		d) All of the above				
18.	pH of thylakoid lumen during photosynthesis is						
	a) Basic		b) Neutral				
	c) Acidic		d) Depends on H ⁺ concentration				
	,		, 1				
19.	Head portion of the chlorop	hyll is calledA	Tail portion of the chlor	rophyll is calledB			
	Fill in the with respect to A, B and tick the appropriate option						
	a) A-phytol, B-porphyrin		b) A-porphyrin, B-phyt	ol			
	c) A-pyrrole ring, B-phytol		d) A-porphyrin, B-pyrr				
	, ,,			J			
20.	Members of family-Crassulaceae perform						
	a) C ₃ -photosynthesis b) C	<mark>AM-</mark> photosynthesis	c) C ₄ -photosynthesis	d) All of these			