Seat	N۰		

a) Chloroplast

b) Mitochondria

11. The _

Enrollment No:____

PARUL UNIVERSITY

COLLEGE OF AGRICULTURE

B.Sc. (Hons.) Agriculture Winter 2018-19 Examination

Semester: 2 Date:20/12/2018

Subject Code: 20110155 Subject Name: Fundamentals of Crop Physiology	Total Marks: 50	Total Marks: 50	
Instructions			
1. All questions are compulsory.			
2. Figures to the right indicate full marks.			
3. Make suitable assumptions wherever necessary.			
4. Start new question on new page.			
Q.1 Do as Directed.			
A. Fill in the blanks. (Each of 0.5 marks)		05)	
1. NADPH ₂ is generated through			
2. A pigment which absorbs red and far			
3. The core metal of chlorophyll is			
	is used for causing defoliation of forest trees		
5. A plant hormone used for inducing morphog			
6. When water enters in roots due to diffusion,			
7. What will be the number of Calvin cycles to			
8. The law of limiting factors' was proposed by			
9. The site of dark reaction of photosynthesis is			
10. When a cell is fully turgid, which of the fo		4.00	
B. Multiple choice type questions. (Each of 0.5 m		10)	
1. Thecontrol the opening and closi			
a) Guard cells	c) Mitochondria cells		
b) Chloroplast cells	d) None of the above		
2. PS I system absorb wavelength.	\ 650		
a) 680 nm	c) 650 nm		
b) 700 nm	d) 720 nm		
	For essentiality of a mineral in the nutrient of a plant.		
a) Robert Hook	c) Arnon and Stout		
b) Kelvin	d) None of the above		
4. Discolouration of leaves takesplace, green con pigments.	lour changes to purpple colour due to presence of		
a) Anthocyanine	c) Xanthophyll		
b) Chlorophyll	d) None of the above		
5. The nutrient elements which are required comp	· · · · · · · · · · · · · · · · · · ·		
as nutrients.	. , ,		
a) Macro	c) Micro		
b) Solid	d) Liquid		
6. By which action a seed coat becomes permea	able, to water		
a) Scarification	c) Enforced action		
b) Stratification	d) None		
7. The movement of ions against the concentration	ion gradient will be		
a) Active	c) None		
b) Passive	d) Both		
8. Which hormone breaks dormancy of potato to			
a) Thiourea	c) Abscissic acid		
b) Auxins	d) None		
9. Hormone responsible for senescence is			
a) Thiourea	c) Abscissic acid		
b) Auxins	d) None		
10. Which of the following prevents the fall of t			
a) NAA	c) ethylene		
b)GA	d) Cytokinines		

__in green plants constitutes the photosynthetic apparatus.

c) Cytoplasm

d) Endoplasmic reticulum

	12. The two pigment systems I and II are interconn	nected by a protein complex called	
	a) Plastocyanin	c) Plastoquinone	
	b) Cytochrome b6–f complex	d) Ferredoxin,	
	13are the basic unit of life.		
	a) Carbohydrates	c) Cells	
	b) Lipids	d) Protein	
	14is known as Power house of cell.		
	a) Chloroplast	c) Cytoplasm	
	b) Mitochondria	d) Endoplasmic reticulum	
	15 is the process by which energy in	•	
	a) Transpiration	c) Osmosis	
	b) Respiration	d) Diffusion	
	16. ABA is involved in		
	a) Fruiting	c) Dormancy inducing	
	b) Flowering	d) Cell division	
	17. In soil, water available for plants is		
	a) Gravitational water	c) Soil water	
	b) Capillary water	d) None	
	18. The first step for initiation of photosynthesis w		
	a) Absorption of CO2	c) Excitement of electrons	
	b) Photolysis	d) None	
	19. Plants take zinc in the form of		
	a) Zn	c) ZnO	
	b) ZnSO4	d) None	
	20. Which is the first C0 ₂ acceptor enzyme in C ₄ I	PLANTS	
	a) Ribulose 1,3-biphophate	c) PGA	
	b) OAA	d) None	
Q.2	Do as Directed.		
A.	Define the following. (Any five)		(05)
	1. Passive absorption		
	2. Photosynthesis		
	3. Respiration		
	4. Photorespiration		
	5. Photolysis of water		
	6. Transpiration		
	7. Guttation		
В.	Answer the following. (Any Five)		(05)
	1. Endosmosis		
	2. Exosmosis		
	3. Deplasmosmolysis		
	4. Respiration quotient		
	5. Evaporation		
	6. Senescence		
	7. Abscission		
Q.3	Write short notes. (Any five)		(10)
	1. Explain the function, deficiency symptoms and	l corrective measures of phosphorus in plants.	
	2. Explain the function, deficiency symptoms and		
	3. Explain the difference between cyclic and non-	-cyclic process of photosynthesis.	
	4. Explain the mechanism of water absorption.		
	5. Write down the difference between the c3 and	C4 cycle in plants.	
	6. Write down Physiological changes in plants du	ring maturation.	
Q.4	Attempt any Three/Long Questions/Example		(15)
-	1. Explain the function, deficiency symptoms and	l corrective measures of nitrogen in plants.	
	2. Explain the glycolysis process in plants.	- •	
	3. Explain the electron transport chain in plants.		
	4. Explain the Kreb's cycle process in plants.		