

C.U.SHAH UNIVERSITY

Winter Examination-2015

Subject Name :Plant physiology

Subject Code : 4LS02BOT1/4LS02BOT2 **Branch :** B.Sc(Microbiology,Biotechnology)

Semester :2 **Date :21/11/2015**

Time : 10:30 To 1:30

Marks :70

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

-
- Q-1** **Attempt the following questions:** **(14)**
- a) Define: Aerobic respiration 1
 - b) Define: ascent of Sap. 1
 - c) Define: Transpiration. 1
 - d) Define: osmotic pressure. 1
 - e) What is photosynthesis. 1
 - f) What are Micorhizae. 1
 - g) Define guttation. 1

 - h) Define: Plasmolysis. 1
 - i) What is aerobic respiration. 1
 - j) Write the differences between Aerobic respiration and anaerobic respiration. 1
 - k) Write equation of oxygen production in plant respiration. 1

 - l) Write down equation of photosynthesis. 1
 - m) State Ion exchange process in mineral uptake. 1
 - n) Write full name of CAM and TCA. 1
- Q-2** **Attempt all questions** **(14)**
- A Explain Stomata with structure. 7
 - B Write note on Transpiration. 7
- Q-3** **Attempt all questions** **(14)**
- A Explain water absorption by root from soil. 7
 - B Explain path of movement of sap and also give evidence. 7



Q-4	Attempt all questions	(14)
A	Explain Chlorophylls and Phycobillins in detail.	7
B	Explain mechanism of phloem transport.	7
Q-5	Attempt all questions	(14)
	Write note on factors affecting photosynthesis	7
	Explain Light reaction I and II of photosynthesis.	7
Q-6	Attempt all questions	(14)
	Explain CAM cycle in detail	7
	Write a note TCA cycle.	7
Q-7	Attempt all questions	(14)
	. Explain Macro and microelements in detail.	7
	Explain alcoholic and lactic acid fermentation.	7
Q-8	Attempt all questions	(14)
	Explain active carrier concept and Ion exchange in mineral uptake.	7
	Explain Calvin cycle in detail.	7

