Enrollment No: _____ Exam Seat No:_____

C.U.SHAH UNIVERSITY

Summer Examination-2016

Subject Name : Plant Physiology

Subject Code : 4SC02PPH1/4LS02BOT1/4LS02BOT2 Branch: B.Sc(Microbiology)

Semester : 2 Date : 11/05/2016 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 plant physiology.	1
b)	Define DPD.	1
c)	Define OP.	1
d)	Define TP.	1
e)	Define Imbibition.	1
f)	What is the difference between osmosis and diffusion?	1
g)	Define plant ash.	1
h)	What is isotonic solution?	1
i)	Enlist various types of membranes.	1
j)	What is plasmolysis?	1
k)	Define Guttation.	1
l)	What is scranz anatomy?	1
m)	What is scotoactive stomata?	1
n)	Calculate OP of 10 molar sucrose solution	1

Attempt any four questions from Q-2 to Q-8

Q-2 Attempt all questions (14)

a) Enlist and explain various physical methods of water absorption(any two) **7**

b) Enlist and explain physical force theories of Asent of sap (any two) **14**

Q-3 Attempt all questions (14)

a) Explain mechanism of opening and closing of stomata by starch-sugar inter conversion theory. **7**

b) Define and explain photophosphorylation by non-cyclic method **7**

Q-4 Attempt all questions (14)

a) Explain mechanism of Translocation of solutes in detail. **14**

Q-5		**Attempt all questions**	**(14)**
	a)	Explain factors affecting photosynthesis in detail	**7**
	b)	Explain Active ion-uptake of mineral by plants.	**7**
Q-6		**Attempt all questions**	**(14)**
	a)	Explain factors affecting absorption of water by plants	**7**
	b)	Write comparison of PSI and PSII	**7**
Q-7		**Attempt all questions**	**(14)**
	a)	Explain factors affecting Transpiration in detail	**7**
	b)	Write comparison of C3 and C4 plants	**7**
Q-8		**Attempt all questions**	**(14)**
	a)	Explain Active absorption of water by plants in detail	**7**
	b)	Explain Passive absorption of water by plants in detail	**7**