

C.U.SHAH UNIVERSITY
Summer Examination-2018

Subject Name: Plant Physiology

Subject Code: 4SC02PPH1

Branch: B.Sc. (Microbiology)

Semester: 2

Date : 04/05/2018

Time : 10:30 To 01:30

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.
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Q-1 Attempt the following questions: (1x14=14)

- a) In plants water evaporates through stomata. True/False
- b) Glycolysis occurs in.....(cytoplasm/mitochondris/GC)
- c) Define: Transpiration.
- d) Write full form of NADPH.
- e) Wilting takes place due to loss ofin plants. (water/ carbon/nitrogen)
- f) The pentose phosphate pathway is a metabolic pathway parallel to glycolysis.
True/False
- g) What are micronutrients?
- h) Write full form of ATP.
- i) Guttation is the process of secreting water droplets from the pores of some vascular plants. True/False
- j) Thylakoids are present in.....
- k) What is the sight of electron transport chain?
- l) Write full form RQ
- m) What is the function of phloem?
- n) Bundle sheath cells contain chloroplasts. True/False

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

Q-2 Attempt all questions

- a) What Plasmolysis? Explain it with suitable examples. **7**
- b) What is anaerobic respiration? Explain it with suitable example. **7**

Q-3 Write short notes on-

- a. Photosynthetic pigments **7**
- b. Fermentation **7**



- Q-4** **Attempt all questions**
- a. What is respiration? Explain difference between aerobic and anaerobic respiration. 7
- b. What is absorption of water? Explain it with suitable example. 7
- Q-5** **Attempt all questions**
- a. What are Hydathodes? Explain their structure and functions. 7
- b. Explain the ultrastructure of chloroplast with suitable diagram. 7
- Q-6** **Write short notes on-**
- a. Krebs cycle 7
- b. Stomata 7
- Q-7** **Attempt all questions**
- a. What is photosynthesis? Explain the calvin cycle. 7
- b. Explain the structure of mitochondria with suitable diagram. 7
- Q-8** What is Transpiration? Explain various factors affecting it in plants. (4+10)

