

S.Y.B.SC. SEM – IV (2014 Course) : SUMMER - 2019
SUBJECT – BOTANY : PLANT PHYSIOLOGY (B - 42)

Day : Thursday
Date : 25/04/2019

S-2019-0987

Time : 03.00 PM TO 05.00 PM
Max. Marks : 40

N. B. :

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Draw neat and labelled diagram **WHEREVER** necessary.
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Q. 1 Attempt **ANY TWO** of the following: **(10)**

- a) Explain concept of photoperiodism and give its different types.
- b) Define transpiration and give its various types with an example.
- c) Explain mechanism of water absorption in plants.

Q. 2 Attempt **ANY TWO** of the following: **(10)**

- a) Explain structure of photosynthetic apparatus (chloroplast).
- b) Write Crassulacean Acid Metabolism in short.
- c) Explain mechanism of translocation of organic substances through phloem.

Q. 3 Attempt **ANY TWO** of the following: **(10)**

- a) Distinguish between diffusion and osmosis.
- b) Explain the process of ammonification and nitrification.
- c) Give an account of seed dormancy and its role in seed germination.

Q. 4 Attempt **ANY FIVE** of the following: **(10)**

- a) Explain in short biological nitrogen fixation.
- b) Give application cytokinins in horticulture.
- c) Give characters of C₄ plants.
- d) Write a note on antitranspirants.
- e) Define photosynthesis with an equation.
- f) Distinguish between macro and micro nutrients with an examples.
- g) Enlist plant growth hormones.

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