

S.Y.B.SC. SEM – IV (2014 COURSE) : WINTER - 2017

SUBJECT – BOTANY : PLANT PHYSIOLOGY (B - 42)

Day : **Wednesday**
Date : **08/11/2017**

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

W-2017-0636

N. B. :

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Draw neat and labelled diagram **WHEREVER** necessary.

Q. 1 Attempt **ANY TWO** of the following: **(10)**

- a) What is growth? Describe different phases of growth.
- b) Define diffusion and explain Diffusion Pressure Deficit (DPD).
- c) What is transpiration? Give factors affecting transpiration.

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

- a) Explain various photosynthetic pigments with suitable examples.
- b) Give explanation with diagrammatic representation of TCA cycle.
- c) What is source-sink relationship? Explain.

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

- a) Explain process of active absorption in plants.
- b) What is biological nitrogen fixation? Explain with suitable examples.
- c) Give the practical application of Auxins.

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

- a) Explain Guttation.
- b) Define photosynthesis with an equation.
- c) Write R. Q. value of different substrates.
- d) Explain vernalization.
- e) Give uses of antritranspirants.
- f) Give uses of GA in horticulture.
- g) Define *nif* genes.

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