

Exam. Code : 103205

Subject Code : 1395

B.A./B.Sc. 5th Semester

BOTANY

(Plant Physiology)

Paper—VA

Time Allowed—3 Hours]

[Maximum Marks—35

Note :— There are total NINE questions. All questions have 7 marks each. Question No. 1 is compulsory. Answer each in 3-4 lines. From remaining EIGHT questions, candidate is required to attempt any FOUR questions.

1. Write notes on :
 - (A) Vernalization
 - (B) Photoperiodism
 - (C) Phytochrome
 - (D) Mechanism of stomatal movement
 - (E) 'Ascent of Sap' in plants
 - (F) Short day plants and long day plants
 - (G) Biological clock. 1×7=7
2. Comment upon "Transpiration is a necessary evil". 7
3. Describe passive and active uptake of ions in plants. 7

4. Discuss the mechanism of mineral absorption by cytochrome pump hypothesis. 7
5. Distinguish between Photosystem I and II. 7
6. Write notes on :
- (A) Kranz anatomy 3
 - (B) Hatch slack cycle. 4
7. Differentiate between C_3 and C_4 plants. 7
8. Give a detailed account of Calvin cycle. 7
9. Discuss the role of :
- (A) Cytokinins in leaf senescence 3
 - (B) Auxins in apical dominance 2
 - (C) Abscisic acid in abscission. 2