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Y—54—2019

FACULTY OF SCIENCE

B.Sc. (Fifth Semester) (Backlog) EXAMINATION

OCTOBER/NOVEMBER, 2019

(CBCS Pattern)

BOTANY

Paper XII

(Plant Physiology)

(Thursday, 17-10-2019)

Time : 10.00 a.m. to 12.00 noon

Time—2 Hours

Maximum Marks—40

N.B. :— (i) Attempt All questions.

(ii) All questions carry equal marks.

1. Attempt any *four* of the following (Each of 2 marks) : 8
 - (a) Osmosis
 - (b) Types of Transpiration
 - (c) Role of potassium
 - (d) Role of Ethylene
 - (e) Vernalization
 - (f) Biological functions of Tannins.
2. Attempt any *two* of the following (Each of 4 marks) : 8
 - (a) Describe the process of Diffusion and plasmolysis.
 - (b) Define transpiration. Add a note on opening and closing of stomata.
 - (c) What is mineral salt absorption ? Explain carrier concept theory.
3. Attempt any *one* of the following (Each of 8 marks) : 8
 - (a) What are plant movements ? Explain in detail Tropic movements.
 - (b) What is Ascent of sap ? Describe transpiration pull theory.

P.T.O.

4. Attempt any *two* of the following (Each of 04 marks) : 8
- (a) Define photoperiodism. Note on LDP, SDP and Day neutral plants.
 - (b) Application of Gibberellins.
 - (c) α , β -helix of proteins.
5. Attempt any *one* of the following (Each of 8 marks) : 8
- (a) What is seed dormancy ? Add a note on causes of seed dormancy.
 - (b) What are carbohydrates ? Explain biological functions of starch and cellulose.