

M. Sc. (Previous) Examination, 2001
BOTANY
Fourth Paper
(Plant Physiology and Biochemistry)

Time—Three Hours
Maximum Marks—100

Attempt **FIVE** questions,
selecting at least **TWO** questions from each section.
All questions carry equal marks.

SECTION A

1. Write notes on the following:
 - (a) Water Potential
 - (b) Difference between transpiration, evaporation and guttation.
2. Describe briefly role of micronutrient in plants.
3. Write notes on the following:
 - (a) Causes and removal of seed dormancy
 - (b) Red and Blue light signals.
4. Briefly describe role of hormones and phytochrome in. Physiology of flowering.
5. Write notes on the following:
 - (a) Cohesive theory of ascent of sap.
 - (b) Role of light in flowering.

SECTION B

6. Briefly describe nomenclature of enzymes and action of enzymes.
7. Briefly describe synthesis of amino acids reference to GS-GOGAT model.
8. What are photosystems? Briefly describe various components and functions of photosystems in the light of modern researches.
9. Give only graphical cycle of Krebs's cycle and fate of organic acids produced during the Krebs 's cycle.
10. Briefly discuss chemical structure, biosynthesis of abscisic acid (ABA) with special reference to role of Stress Physiology.