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SEAT No. :

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M.Sc. - II

BOTANY

BO-4.44 : Plant Physiology

(2008 Pattern) (Semester-IV) (Special Paper-II)

Time : 3 Hours]

[Max. Marks : 80

Instructions to the candidates:

- 1) Answer any FIVE questions, selecting at least TWO questions from each section.
- 2) Answer to the two sections should be written in separate answer book.
- 3) All questions carry equal marks.
- 4) Neat diagrams must be drawn wherever necessary.

SECTION-I

Q1) Write on photoperiodism and give its significance in flowering.

Q2) a) Explain the effect of fungal infection on plant metabolism.

b) Comment on degradation of Carotenoids.

Q3) a) Write on effect of global warming on plant metabolism.

b) Describe the pigment organization in thylakoid membrane.

Q4) Write short notes on Any TWO of following:

a) Defense chemicals.

b) Recent research in crop physiology in India.

c) Bt-Tomato.

P.T.O.

SECTION-II

Q5) Write on biosynthesis of Chlorophyll and Carotenoids.

Q6) a) Comment on effect of elevated level of CO₂ on crop yields.

b) Explain the electron transport mechanism.

Q7) a) Comment on effect of global warming on crop yield.

b) Describe the effect of allelochemicals on soil health.

Q8) Write short notes on Any Two:

a) Resistance (R) - genes.

b) Photoreceptors.

c) Phytochromes.

