



RAN-2303080403030005

M. Sc. (Sem. - III) Examination October - 2025

Botany - 3003 - Stress Physiology and Plant Microbiome Interaction

Time: 3 Hours]

[Total Marks: 70

સૂચના : / Instructions

- (1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the above details on your answer book.
- (2) All the questions are compulsory.
- (3) Digits to the right side indicates full marks of the question.
- (4) Draw neat and labeled diagrams if necessary.

Seat No.:

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Student's Signature

- Q. 1. Attempt ANY ONE of the following: (16)**
- A. Write a detailed note on "plant stress".
 - B. Describe the stress-sensing mechanism in plants.
- Q. 2. Attempt ANY TWO of the following: (18)**
- A. Hyper accumulation
 - B. ABA as Stress Hormone
 - C. ROS Scavenging
- Q. 3. Attempt ANY TWO of the following: (18)**
- A. Ozone and UV-Induced PCD
 - B. Biofertilizers
 - C. Heat Shock Proteins
- Q. 4. Attempt ANY TWO of the following: (18)**
- A. Metal toxicity
 - B. Microbial regulation of the Nitrogen cycle
 - C. Phosphate solubilizers