



# RAN-2403001303011001

## B. Sc. Biotech. (Sem.-III) Examination November - 2025

### BT-MJ-301: Basics of Phytophysiology

**Time: 1 Hour ]**

**[ Total Marks: 25**

**સૂચના : / Instructions**

- (1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી.  
Fill up strictly the above details on your answer book
- (2) Figures to the right indicate full marks.
- (3) Draw neat and labelled diagrams wherever necessary.

Seat No.:

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Student's Signature

**Q.1. Define/Answer in short Any Five:**

**5**

- a) Give full form of CAM pathway.
- b) Who gave the cohesion-tension theory?
- c) Which macro-nutrient is constituent of nucleic acid ?
- d) Name the rich source of cytokinin.
- e) Which nutrient found in cell wall with Raffinose in plant.
- f) Write the first stable compound of C<sub>3</sub> cycle.

**Q.2. Attempt Any Two:**

**10**

- a) Describe: Process and significance of photorespiration
- b) Explain with diagram C<sub>4</sub> cycle
- c) Write short note on photosystem I & II

**Q.3. Attempt Any Two:**

**10**

- a) Describe Physiological role and applications of Ethylene.
- b) Explain Role & deficiency of Iron, Chlorine & Copper in plant.
- c) Define Ascent of Sap and Write Vital Theories.