

(Following Paper ID and Roll No. to be filled in your  
Answer Books)

Paper ID : 154652

Roll No. 

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**B.TECH.**

**Theory Examination (Semester-VIII) 2015-16**

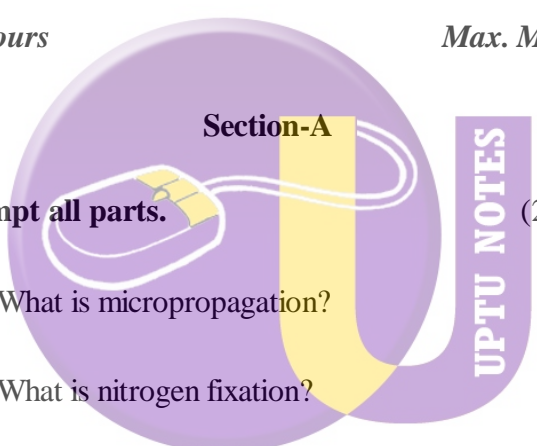
**PLANT BIOTECHNOLOGY**

*Time : 3 Hours*

*Max. Marks : 100*

**1. Attempt all parts.**

**(2×10 = 20)**

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- (a) What is micropropagation?
  - (b) What is nitrogen fixation?
  - (c) What do you mean by gene expression?
  - (d) What is microprojectiles?
  - (e) What is transgenic potato?
  - (f) What is co-integrate formation?

- (g) Give various stages that control gene expression.
- (h) What is cytoplasmic male sterility?
- (i) What is stress tolerance?
- (j) What are Transgenic plants?

### Section-B

#### 2. Attempt any five parts.

(10×5=50)

- (a) Explain Gynogenesis.
- (b) What do you mean by Molecular farming?
- (c) Explain applications of micropropagation.
- (d) Explain Plasmids of Agrobacterium.
- (e) What do you mean by colinearity analysis?
- (f) Explain crossing barriers.
- (g) Give brief idea about economic role of transgenic plants.
- (h) What do you mean by Genetic determinants of nodule formation?

## Section-C

**Attempt any two parts :**

**(15×2=30)**

3. Elaborate with examples for improved crop varieties through somaclonal variations in invitro cultures.
4. Explain chloroplast genetics and the extent of plasmid autonomy.
5. Explain cytology of cell.

