Reg. No.					



**BTH 502** 

# Third Semester M.Sc. Degree Examination, December 2018 BIOTECHNOLOGY (CBCS)

## **Plant Biotechnology**

Time: 3 Hours Max. Marks: 70

#### PART - A

Write short notes on any ten of the following (not exceeding 1 page each). (10×2=20)

- 1. a) RNA editing.
  - b) Somaclonal variation.
  - c) Synthetic seeds.
  - d) Secondary metabolites.
  - e) Callus culture.
  - f) Nif and nod genes.
  - g) Pharmacognosy.
  - h) Bioreactor.
  - i) Mitochondrial DNA.
  - j) Suspension cultures.
  - k) Transgenesis.

#### PART - B

Write explanatory notes on **any five** of the following (**not** exceeding **3** pages **each**).  $(5\times6=30)$ 

- 2. Biological oxidation in plants.
- 3. Seed development and seed storage proteins.
- 4. Plant derived vaccines.
- 5. Bt cotton.
- 6. Regulation of gene expression in seed germination.
- 7. Plantibodies.
- 8. GM food.

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### PART - C

Answer any two of the following (not exceeding 7 pages each). (2×10=20)

- 9. Explain plant breeding mechanisms with various steps and add a note on its importance.
- 10. Discuss regulation of gene expression in floral and leaf development.
- 11. Explain methods of plant tissue preservation and their applications.
- 12. Discuss development of transgenic plants for bacterial and fungal resistance.