

Roll No.

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M.Tech. (Bio Tech) (2018 Batch) (Sem.-2)**PLANT MOLECULAR FARMING****Subject Code : MTBT-206-18****M.Code : 76051****Time : 3 Hrs.****Max. Marks : 60****INSTRUCTIONS TO CANDIDATES :**

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries TWELVE marks.

- 1) Define "*Plant Molecular Farming*". Describe important milestones during its development. Also discuss its relevance to our society.
- 2) Describe latest trends in the development of transgenic plants.
- 3) Write illustrated notes on :
 - a) Plant cell-suspension cultures.
 - b) Optimizing expression and stability of recombinant proteins in plant based expression systems.
- 4) What are important factors that influence transgene expression in plant production systems?
- 5) Describe various strategies used to produce biodegradable plastics in plants.
- 6) Explain various methods of producing amylase free starch and mono-unsaturated fatty acids using molecular farming approach.
- 7) Discuss using suitable examples :
 - a) Production of subunit vaccines.
 - b) Biopharmaceuticals in plants.
- 8)
 - a) Why is chloroplast considered for high level expression of transgenes?
 - b) Briefly discuss the economic aspects of plant molecular farming.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.