Assignments

* Role of GMOs in agricultural biotechnology.
* Plant tissue culture as a technique for the production of pharmaceutically important proteins.
* Shoot tip culture for raising virus free plants.
* Molecular biology and its impact on plant tissue culture.
* *Agrobacterium* as the nature’s genetic engineer.
* Molecular markers and their role in Agricultural biotechnology.
* Variants of PCR and their applications.
* Comparision of vector based and vectorless approaches for gene delivery.
* Roles of organizations in monitoring genetic engineering practices- An approach to biosafety.
* Branches of Plant biotechnology and the scopes offered by them.
* Mention the steps and techniques that you would use to genetically engineer a specific plant species for conferring resistance to a biotic stress.
* Present a case study on the metabolic engineering of a specific plant metabolic pathway for the production of a pharmaceutically important compound.
* Evaluate the benefits and drawbacks of GM crops from environmental, social and economic perspective.