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**SV-485****M.Sc. 3rd Semester (NEW/ATKT)****Biotechnology Examination Nov./Dec., 2017****PLANT BIOTECHNOLOGY****Paper - III****Time Allowed : Three Hours]****[Maximum Marks : 85****Note : Attempt all questions.****Unit - I**

- Q.1. Explain in detail what do you understand by single cell protein. 17

**OR**

Write notes on:

- Double haploid production
- Tissue culture technique

**Unit - II**

- Q.2. Explain the techniques of meristem culture for production of virus free plant? 17

**OR**

Write notes on:

- Gene banks
- Somatic hybridization

**(2)****Unit - III**

- Q.3 Explain Agrobacterium : a natural tool for plant transformation. 17

**OR**

Explain the PCR based markers in plant genome analysis.

**Unit - IV**

- Q.4. Explain the production of secondary metabolites by plant cell culture. 17

**OR**

Write notes on:

- Biological control of pests and diseases in plants.
- Seed production techniques

**Unit - V**

- Q.5. Explain biological patent and its bioethical issues. 17

**OR**

What do you understand by socio economic impact and ecological consideration of GMO's.

**P.T.O.****YA17-863****YA17-863****SV485**