



**Dr. Bhimrao Ambedkar University Agra**  
**Department of Botany**  
**School of Life Sciences, Khandari Campus**

**Value Added Course**

<b>Course name</b>	<b>SCOPE OF PLANT TISSUE CULTURE</b>
<b>Course Code</b>	<b>BOT -VAC-02</b>
<b>Duration</b>	<b>30 hrs</b>
<b>Course Coordinator</b>	<b>Dr. R.K. Agnihotri ( Professor)</b>
<b>Organized by</b>	<b>Department of Botany, School of Life Sciences, Khandari Campus Agra</b>

**Program Specific Outcomes (PSO):**

On completion of the course students will be able to:

- Propagate plants using in vitro techniques.
- Will be able to apply this technique for research in various areas.
- Skills required for employability in industry involved in mass propagation of disease free plants using this technique.

**Course outcome (CO):**

On completion of the course the student will be able to

- Propagate plants through tissue culture.
- Produce synthetic seeds and their conservation for future.

**Course content:**

**Unit I** – History, Scope and types of tissue culture, sterilization techniques, media preparation.

**Unit II** – Plant hormones and its use in tissue culture. Synthetic seed production and its uses.

**Unit III** - Micropropagation of explant and study of hardening stages.

**Unit IV** - Lab visit and report writing.

Books: Plant Tissue Culture by H.S.Chawla

, Application of Plant Tissue Culture, By Aditi Raj