

No.	Course Information	
1.	Unit name:	Plant Biotechnology
2.	Code:	BioT 41062
3.	Classification:	Core subject
4.	Credit value:	3.5
5.	Semester/Year Offered:	1/4
6.	Pre-requisite:	BioT 21061& BioT 22061
7.	Mode of delivery:	Presentations, Lectures
8.	Assessment system and breakdown of marks:	Practical
	Tutorial	20%
	Mid-term exam	40%
	Final exam	40%
9.	Academic staff teaching unit:	Department of Biotechnology
10.	<p>Course outcome of unit: After completion of this course, students will be able to</p> <ol style="list-style-type: none"> <li>1. Understand the basic knowledge of plant biotechnology</li> <li>2. Examine the relationship between science and biotechnology</li> <li>3. to select the nutrition and media used in plant tissue culture</li> <li>4. to define the tissue culture and plant tissue culture</li> <li>5. to know about the protoplast culture</li> <li>6. to understand the transgenic plants</li> <li>7. to apply the plant tissue culture</li> </ol>	
11.	<p>Synopsis of unit: The plant biotechnology is the application of biotechnology for rapid multiplication, to mass production, (true-to-type) plant of uniform, for genetic improvement, to shorten the bearing maturity period. In grow-out culture system, plant sample and media preparation are very important. Plant biotechnology is used to produce the commercial products to the plant breeder.</p>	
12.	<p>Topics</p> <ol style="list-style-type: none"> <li>1. Requirements for tissue culture facility</li> <li>2. Nutrition, Media and Characteristics of Plant Cell and tissue cultures</li> <li>3. Production of Isogenic lines; Basic technical Aspects of Andogenesis</li> </ol>	
13.	<p>Main reference:</p> <ul style="list-style-type: none"> <li>• Plant Biotechnology; <b>Gamborg. O. L</b>, Nutrition, media and characteristics of plant cell and tissue culture</li> </ul>	
14.	<p>Additional references:</p> <ul style="list-style-type: none"> <li>• Plant Biotechnology; <b>Street, H.E.</b> (ed), In “Plant Tissue and Cell Culture”, Blackwell Scientific Publ., London(1973)</li> </ul>	