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Food Biotechnology (BT311)	3	1	0	NIL

Course Objectives:

To impart a broad understanding of food technology, industrial food production and product regulations.

Course Outcomes:	
1.	To understand food biotechnology, the scope of food biotechnology and its tools for trade.
2.	To master recombinant proteins and their biological roles.
3.	To elucidate the application of plant biotechnology in food.
4.	To understand cell culture and Food (Brewing, dairy biotechnology, food additives) in Diagnostic Systems.
5.	To apprehend a biotechnological approach for exploiting food and industrially important microorganisms, Bio Gas Plant.

S. No.	Contents	Contact Hours
1	Scope of Food Biotechnology (What is the difference between food technology and food biotechnology?) Tools of the Trade (How biotechnology techniques relate to food?)	**8**
2	Recombinant Proteins (Production and applications in food), Biological Role of DNA in cell metabolism, Cell and tissue culture, Secondary metabolites synthesis .	**7**
3	Plant biotechnology in foods (Application to food production, food industries, pharmaceuticals, and agriculture)	**9**
4	Cell Culture and Food (Brewing, dairy biotechnology, food additives), Diagnostic Systems (How and Why and application in food) Industrial Cell culture (Downstream processing Ethics and safety of food biotechnology products Regulations of food biotechnology	**9**
5	Biotechnological Approach for the exploitation of food and industrially important microorganism, Bio Gas Plant	**9**
	Total	**42**

Books: -

S. No.	Name of Authors /Books / Publishers
1.	Advances in Biotechnology Vol.1, (Scientific and Engineering principles). Murray Moo-Young,C.W. gambell and C.Vezina