

Name of the Teacher- Mr.Pramod Shelar
Course Title- BO222: Plant Biotechnology

Class- S.Y.B.Sc.
Semester- II (2019-20)

No.	Topic	Method used	Allotted lectures	Required lectures
Dec.3 rd week	Introduction Concept, scope and interdisciplinary nature	BB	2	2
Jan.1 st and 2 nd week	Enzyme technology Introduction, properties Classification, application Production of amylase, protease, lipase Immobilization	BB & PP	7	1 2 2 2
Jan.2 nd Week and 3 rd week	Fermentation technology Liquid and solid state fermentations Principles of microbial growth Bioreactor types Media composition Industrial application Downstream processing	BB & PP	7	1 1 1 1 1 2
Dec.4 th and Jan 1 st week	Single cell protein Need of proteins in diet SCP from algae and fungi Economic implication, acceptability	BB & PP	5	1 2 1 1
Jan 1 st week and Jan 2 nd week	Environmental biotechnology Phytoremediation and methods Environmental sustainability	BB	6	5 1
Jan 3 rd week and Jan 4 th week	Basics of genetic engineering Structure of DNA Structure of gene Method of gene isolation Gene cloning	BB & PP	7	1 2 2 2
Feb.1 st and 2 nd week	Methods of gene transfer in plants Direct gene transfer Vector mediated gene transfer	BB & PP	8	4 5
Feb.3 rd week	Application of plant genetic engineering in crop improvement	BB & PP	4	4
Feb. 4 th week	Nano –biotechnology Concept, Applications in agriculture	BB & PP	2	1 1




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Head

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