

Lesson Plan

Name of the Faculty : Dr. Ram Kumar Pundir
Discipline : Biotechnology Engineering
Semester : 6th
Subject : Food Biotechnology (BTE-308A)
Lesson Plan Duration : 14 Weeks (From Feb, 2021 to Jun, 2021)

**Work Load(Lecture/Practical) per week(in hours): 03

Week	Theory	
	Lecture Day	Topic(including assignment /test)
1 st	1 st	Introduction to human nutrition
	2 nd	-do-
	3 rd	Basal Metabolic Rate
2 nd	4 th	Food as substrate for microorganisms
	5 th	Classification of foods
	6 th	Significance of fermentation.
3 rd	7 th	Industrially Important fermented foods and beverages
	8 th	-do-
	9 th	-do-
4 th	10 th	Assignment 1/Test 1 of Unit I
	11 th	Novel Food and Food Ingredients: Low calorie sweeteners
		Food Supplements
	12 th	Food colorings
5 th	13 th	Probiotics: Recombinant Probiotics
	14 th	-do-
	15 th	Nutraceuticals: Sources, Types, Significance
6 th	16 th	-do-
	17 th	Role of Nutraceuticals in prevention and control of diseases
	18 th	-do-
7 th	19 th	Factors affecting spoilage- Intrinsic and extrinsic factors affecting microbial growth in foods: Intrinsic factors
	20 th	-do-
	21 st	Intrinsic factors affecting microbial growth in foods
8 th	22 nd	-do-
		Assignment 2/Test 2 of Unit II and III
	23 rd	Methods of food preservation- Thermal processing, Cold preservation
	24 th	-do-
9 th	25 th	Chemical preservatives and food dehydration
	26 th	-do-
	27 th	Use of Radiations for food preservation
10 th	28 th	Monitoring of food quality – HACCP
	29 th	-do-
	30 th	Packaging of Food: Need for packaging, requirements for packaging
11 th	31 st	Containers for packaging (glass, metal, plastics and aluminium foil).
	32 nd	Types of Packaging- Primary, Secondary and Tertiary

	33 rd	-do-
12 th	34 th	Flexible Packaging, Biodegradable Packaging.
	35 th	Assignment 3/Test 3 of Unit III and IV
	36 th	Revision
13 th	37 th	Revision
		Revision
	38 th	Revision
	39 th	Revision
14 th	40 th	Revision
	41 st	Revision
	42 nd	Revision

Teacher's Sign.