

Name of Faculty: <b>NEERU RANI</b>		
Discipline: <b>FOOD TECHNOLOGY</b>		
Semester: <b>3rd</b>		
Subject: <b>Food Chemistry and Nutrition</b>		
Lesson Plan Duration: <b>15 Weeks (July 2018-Nov. 2018)</b>		
<b>Work load (Theory/Practical) per week (in hours): Theory: 03, Practical: 02</b>		
<b>Week</b>	<b>Lecture day</b>	<b>Theory</b>
<b>1<sup>st</sup></b>	1	Introduction to Syllabus and Evaluation Scheme.
	2	Importance of food.
	3	Scope of food chemistry. Revision for unit 1.
	4	<b>Introduction to Laboratory and its equipments. (Practical)</b>
<b>2<sup>nd</sup></b>	5	Introduction to colloidal chemistry.
	6	Types of colloidal solutions.
	7	Role of colloidal chemistry in food production. Revision for unit 2.
	8	<b>Determination of moisture content of given sample. (Practical)</b>
<b>3<sup>rd</sup></b>	9	Introduction to different food groups (cereals & pulses, meat & fish & poultry).
	10	Milk & milk products, fats & oils, vegetables & fruits- their classification and importance.
	11	Sugar & jaggery, spices and condiments-their classification and importance.
	12	<b>Determination of protein in a given food sample. (Practical)</b>
<b>4<sup>th</sup></b>	13	Revision of unit 3 <sup>rd</sup> and structure of water molecule.
	14	Types of water.
	15	Properties of water.
	16	<b>Determination of carbohydrates in a given food sample (Practical)</b>
<b>5<sup>th</sup></b>	17	Introduction to water activity.
	18	Importance of $a_w$ . Revision of unit 4 <sup>th</sup> .
	19	Class test for unit 1 <sup>st</sup> to 4 <sup>th</sup> .
	20	<b>Determination of ash in a given food sample (Practical)</b>
<b>6<sup>th</sup></b>	21	Introduction to basic composition of Carbohydrates.
	22	Classification of carbohydrates and their sources.
	23	Nutritional importance of carbohydrates.
	24	<b>Determination of fat in a given food sample (Practical)</b>
<b>7<sup>th</sup></b>	25	Industrial importance of carbohydrates. And Revision for unit 5 <sup>th</sup> .
	26	Introduction to basic composition of Proteins.
	27	Classification of Proteins and their sources.
	28	<b>Determination of pH of a given sample (Practical).</b>
<b>8<sup>th</sup></b>	29	Nutritional importance of Proteins.

	30	Industrial importance of proteins and revision of unit 6 <sup>th</sup> .
	31	Class test for unit 5 <sup>th</sup> and 6 <sup>th</sup> .
	32	<b>Determination of acidity of given food sample (Practical)</b>
9 <sup>th</sup>	33	Introduction to basic composition of fats.
	34	Classification of fats and their sources.
	35	Nutritional importance of Fats.
	36	<b>Determination of total non reducing and reducing sugars (Practical)</b>
10 <sup>th</sup>	37	Industrial importance of fats and revision of unit 7 <sup>th</sup> .
	38	Introduction to minerals and their common functions and sources.
	39	Function and sources of minerals-calcium, iodine.
	40	<b>Determination of vitamin C in given food sample (Practical)</b>
11 <sup>th</sup>	41	Function and sources of minerals-zinc, iron, fluoride.
	42	Introduction to vitamins and their classification.
	43	Fat soluble Vitamins.
	44	<b>Determination of diastase enzyme activity. (Practical)</b>
12 <sup>th</sup>	45	Water-soluble vitamins.
	46	Effect of processing and storage on vitamins. Revision of unit 8 <sup>th</sup> .
	47	Deficiency disorders and requirement of different nutrients: Calcium, Iodine, vitamin-A, iron, protein and calorie or energy.
	48	<b>Identification of pigments in a given food sample (Practical)</b>
13 <sup>th</sup>	49	Revision of unit 9 <sup>th</sup> and Concept of Balanced Diet.
	50	Revision of unit 10 <sup>th</sup> and Importance and plant sources of pigments.
	51	Chlorophyll, Anthocyanin, carotenoids, lycopene.
	52	<b>Effect of Baking Soda in CO<sub>2</sub> production (Practical)</b>
14 <sup>th</sup>	53	Revision of unit 11 <sup>th</sup> and Definition of Enzymes.
	54	Mode of action of enzymes.
	55	Importance and sources of enzymes.
	56	<b>Detection of Saccharine in beverages (Practical)</b>
15 <sup>th</sup>	57	Nomenclature and classification of enzymes. Revision unit 12 <sup>th</sup> .
	58	Food additives – Definition.
	59	Important types of Food Additives. Revision unit 13 <sup>th</sup> .
	60	<b>Internal examination of students. (Practical)</b>