#### ACADEMIC PLAN

Department: Food and nutrition. Part-I. Session: 2015-2016

Teacher Name: Sreeparna Basu

Unit name	Paper &grou p	Sub unit name	Mont h	No. Of classe s
Law of conversation	I-gr.A.	Law of conversation	Sep	1
	Do	Chemical and physical changes	Sep	1
	Do	Mechanical mixture and chemical compounds	Sep	1
Common laboratory process	Do	Sedimentation, decantation, filtration	Sep	1
	Do	Solution, evaporation, boiling	Sep	1
	Do	Dessication, distillation, sublimation,	Sep	1
	Do	Fusion, ignition, crystallisation, efflorescence, deliquescence	Sep	2
Symbol	Do	Symbol,valency, formula	Sep	1
		Equation, naming of compounds	Sep	2
Acid-base- salt-solution	Do	Acid,base,salt,conjugate acids and conjugate bases	Sep	1
	Do	Classification of salts, hydrolysis of salts	Sep	1
	Do	pH,Buffer solution	Nov	1
	Do	Equivalent weight of acids,bases and salts, neutralization, acid-base indicators	Nov	2
	Do	Molar solution, Normal solution, Formal solution	Nov	1
Diffusion- osmosis	Do	Diffusion and osmosis,osmotic pressure, Isotonic solution-definitionand examples	Nov	2
Colloids	Do	Definition, types of colloidal systems, Important properties of colloidal sols, dialysis	Nov	3
Structure of	Do	Discovery of atomic nucleus,	Nov	2

atom		Rutherford's atomic model		
	Do	Concept of stationary orbit, Electronic arrangement of elements	Nov	2
	Do	Atomic number, isotopes	Nov	1
	Do	Electrovalent,covalent and coordinate-covalent bonds hydrogen bond	Nov	1
Chemistry of carbon compounds	Do	Classification of organic compounds based on structural characteristics and functional groups	Nov	1
	Do	Isomerism, concept of optical isomerism	Nov	1
	Do	General methods of preparation, properties and reactions of saturated and unsaturated hydrocarbons	Nov	2
	Do	Aliphatic monohydric alcohols,glycerol,aldehyde,keton es and fatty acids with nomenclature	Dec	3
Carbohydrate s-proteins- lipids	Do	Classification with example, nomenclature, study of important properties of glucose, fructose, sucrose, lactose and galactose	Dec	2
	Do	Classification with examples, composition, essential amino acids, general properties of protein	Dec	2
	Do	Definition, classification with examples, study of important properties of fats and oils, saponification value, lodine value	Dec	2
Unit	I-grB	C.G.S. &F.P.S. system	Dec	1
Mass and weight	Do	Measurement of mass and weight, common and spring balance	Jan	1
Motion of body	Do	Displacement, velocity, accelerated units	Jan	1
Gravity	Do	Acceleration due to gravity	Jan	1

Hydrostatics	Do	Pressure at a point, Archimedes principles, specific gravity	Jan	1
	Do	Viscosity, surface tension	Jan	1
Thermometry	Do		Jan	1
Calorimetry	Do		Jan	1
Heat	Do	Transmission of heat,thermoflask	Jan	1
Matter	Do	Types,change of state	Jan	1
		Pressure cooker, Ice machine	Jan	1
Statical electricity	Do	Friction,conductor and insulator	Jan	1
Primary cell	Do	Primary cell and storage cell	Jan	1
Electroplating	Do		Feb	
Potential	Do		Feb	2
Electricity and it's application	Do	Lamp,roster,geyser,iron,micro- oven	Feb	2
Refrigerator	Do		Feb	1
Electric fuse	Do		Feb	1

#### **ACADEMIC PLAN (Theoretical)**

Department : Food and nutrition. Part-II. Session: 2015-2016

Teacher name:sreeparnaBasu

<u>Unit name</u>	<u>Paper</u>	Sub unit name	<u>Month</u>	No. Of classes
Animal cell	<u>II</u>	Definition, structure and	Nov	3
		<u>function</u>		
<u>Tissue</u>	<u>II</u>	Epithelial tissue	<u>Nov</u>	<u>1</u>
	Do	Connective tissue	<u>Nov</u>	<u>2</u>
	Do	Nervous tissue	<u>Nov</u>	<u>1</u>
	Do	Muscular tissue	<u>Nov</u>	<u>1</u>
<u>Digestive</u> system	Do	Mouth,oesophagus, stomach	<u>Nov</u>	
	Do	Small intestine, large intestine	Nov	
	Do	<u>Liver,pancreas,liver,gall</u> <u>bladder</u>	Nov	<u>3</u>
	Do	Carbohydrate digestion	<u>Nov</u>	<u>2</u>
	Do	Protein digestion	<u>Nov</u>	<u>2</u>
	Do	Fat digestion	<u>Dec</u>	<u>2</u>
	Do	<u>Glycolysis</u>	<u>Dec</u>	<u>1</u>
	Do	<u>Glycogeneses</u>	<u>Dec</u>	<u>1</u>
	Do	<u>Neoglucogenesis</u>	<u>Dec</u>	<u>1</u>
	Do	Coris cycle	<u>Dec</u>	<u>1</u>
	Do	Kreb's cycle	<u>Dec</u>	<u>1</u>
	Do	<u>Deamination</u>	<u>Dec</u>	<u>1</u>
	Do	<u>Transamination</u>	<u>Dec</u>	1
	Do	Role of hormones in carbohydrate metabolism	<u>Dec</u>	<u>2</u>
Food- nutrition- energy	Do	Food, nutrition, nutrients	<u>Jan</u>	1
	Do	Nutritional status, dietetics, balanced diet	<u>Jan</u>	1

	Do	<u>Malnutrition</u>	<u>Jan</u>	1
	Do	<u>Energy</u>	<u>Jan</u>	<u>1</u>
<u>Nutrients</u>	Do	<u>Carbohydrate</u>	<u>Jan</u>	<u>2</u>
	Do	<u>Protein</u>	<u>Jan</u>	<u>2</u>
	Do	<u>Fat</u>	<u>Jan</u>	
	Do	<u>Vitamines</u>	<u>Jan</u>	3
	Do	<u>Minerals</u>	<u>Jan</u>	1 3 2
	Do	Essential fatty acids	<u>Jan</u>	<u>1</u>
	Do	Essential amino acids	<u>Jan</u>	<u>1</u> 1
	Do	Biological value of	<u>Jan</u>	<u>1</u>
		<u>protein, nitrogen</u>		
		<u>balance</u>		
	Do	Function of water and	<u>Jan</u>	<u>1</u>
		<u>fiber</u>		
Five food	Do	<u>Cereals,pulses</u>	<u>Feb</u>	<u>1</u>
<u>groups</u>				
	Do	<u>Milk</u>	<u>Feb</u>	<u>1</u>
	Do	Meat,fish	<u>Feb</u>	<u>1</u>
	Do	<u>Vegetables</u>	<u>Feb</u>	<u>1</u>
	Do	Eggs,nuts	<u>Feb</u>	<u>1</u>
	Do	<u>Oils,sugar</u>	<u>Feb</u>	<u>1</u>
<u>B.M.R.</u>	Do	Definition, factors	<u>Feb</u>	<u>2</u>
	Do	Total energy requirment	<u>Feb</u>	<u>1</u>
<u>Meal</u>	Do	Principles and	<u>Feb</u>	<u>1</u>
<u>planning</u>		<u>objectives</u>		
	Do	<u>Diet for infant</u>	<u>Feb</u>	<u>2</u>
	Do	Diet preschool child	<u>Mar</u>	<u>2</u>
	Do	<u>Diet school child</u>	<u>Mar</u>	<u>2</u>
	Do	Adult diet	<u>Mar</u>	<u>1</u>
	Do	Pregnancy diet	<u>Mar</u>	<u>2</u>
	Do	<u>Lactation diet</u>	<u>Mar</u>	<u>2</u>
<b>Therapeutic</b>	Do	<u>Diarrhoea</u>	<u>Mar</u>	
<u>diet</u>				
	Do	<u>Fever</u>	<u>Mar</u>	<u>1</u>
	Do	Obesity	<u>Mar</u>	1
	Do	<u>Diabetes</u>	<u>Mar</u>	<u>2</u>
	Do	<u>Heart disease</u>	<u>Mar</u>	<u>2</u> <u>2</u>
Food processing &	Do	Food spoliage		<u>2</u>

preservation				
	Do	Food borne infection	<u>Apr</u>	<u>2</u>
		and infestation		
	Do	Different methods of	Apr	<u>3</u>
		cooking and food	_	
		<u>preservation</u>		
Diet survey	Do	Elementary idea	<u>Apr</u>	<u>2</u>

ACADEMIC PLAN(practical)

Department : Food and nutrition. Part-II. Session: 2015-2016

Teacher name: Sreeparna Basu

Unit name	Paper &	Sub unit	<u>Month</u>	<u>Session</u>
	group	<u>name</u>		
Fitting of	III-gr A	Solution,	Nov	<u>1</u>
<u>apparatus</u>		<u>filtration</u>		
	Do	<u>Distillation</u>	Nov	<u>1</u>
		<u>and</u>		
		crystallisation		
<u>Titration</u>	Do	<u>Bases</u>	<u>Nov</u>	<u>2</u>
	Do	<u>Acids</u>	Nov	<u>2</u>
	Do	Hardness of	Nov	<u>1</u>
		<u>water</u>		
	Do	Estimation of	Dec	<u>2</u>
		glucose		
Chemical	Do	Starch and	<u>Dec</u>	1

<u>tests</u>		<u>dextrin</u>		
	Do	<u>Glucose</u>	<u>Dec</u>	<u>1</u>
	Do	Cane sugar and lactose	<u>Dec</u>	1
<u>Qualitative</u>	Do	Milk and egg	<u>Jan</u>	2
<u>tests</u>		<u>protein</u>	lon	2
	Do	<u>Calcium</u> <u>phosphorus</u>	<u>Jan</u>	<u>2</u>
		and iron in		
		food stuff		
<u>Balance</u>	III-gr B		<u>Jan</u>	<u>1</u>
Specific gravity	Do	Solid	<u>Feb</u>	<u>1</u> <u>2</u>
	Do	<u>Liquid</u>	<u>Feb</u>	2
		Liquid by	Feb	<u>2</u> <u>2</u>
		<u>specific</u>		
		gravity bottle		
<u>Barometer</u>	Do		<u>Feb</u>	<u>1</u>
<u>Thermometer</u>	Do		<u>Feb</u>	<u>2</u>
Electric fuses	Do		<u>Feb</u>	<u>1</u>
Weight- measure	III-gr C		<u>Mar</u>	1
Preparation	Do	<u>Cereals,</u> <u>pulses</u> <u>Vegetables</u>	<u>Mar</u>	<u>2</u>
	Do	Egg,milk	<u>Mar</u>	<u>2</u>
	Do	<u>Fish,nuts</u>	<u>Mar</u>	<u>2</u> 2
Planning and preparation of diet	Do	<u>Pregnancy</u>		<u>2</u>
	Do	<u>Lactation</u>	<u>Apr</u>	<u>2</u>
<u>ORS</u>	Do		<u>Apr</u>	<u>1</u>
<u>Demonstration</u>	Do	<u>Jam,jelly</u>	<u>Apr</u>	<u>1</u>
	Do	<u>Squash</u>	<u>Apr</u>	<u>1</u>
	Do	<u>Pickles</u>	<u>Apr</u>	<u>1</u> <u>2</u>
Preparation of school tiffin	Do		<u>Apr</u>	<u>2</u>
<u>Diet survey</u>	Do		<u>Apr</u>	<u>2</u>

#### **ACADEMIC PLAN (Theoretical)**

Department: Food and nutrition. Part-III Session: 2015-2016

Teacher name: Sreeparna Basu

<u>Unit name</u>	<u>Paper</u>	Sub unit name	<u>Month</u>	No.of
	<u>and</u>			<u>classes</u>
	group			
<u>Community</u>	<u>IV-grA</u>	<u>Mortality</u>	<u>Nov</u>	<u>2</u>
<u>health</u>				
	Do	<u>Morbidity</u>	<u>Nov</u>	<u>2</u> <u>1</u>
	Do	Role of health	<u>Nov</u>	<u>1</u>
		<u>workers</u>		
	Do	<u>FAO,ICMR</u>	<u>Nov</u>	<u>1</u>
	Do	<u>WHO,ICDS</u>	<u>Nov</u>	<u>1</u>
	Do	ICAR,CSIR	<u>Nov</u>	<u>1</u>
	Do	<u>ANP,VHAI</u>	<u>Nov</u>	<u>1</u>
	Do	NIN,CFTRI	<u>Nov</u>	<u>1</u>
<u>Kitchen</u>	Do	<u>Layout</u>	<u>Nov</u>	<u>1</u>
	Do	Pest control	<u>Nov</u>	<u>1</u>
<u>Personal</u>	Do		Nov	<u>1</u> <u>2</u>
hygiene of				
<u>food handler</u>				
<u>Food</u>	Do	Sources and	<u>Dec</u>	<u>2</u>
contamination		<u>transmission</u>		
	Do	Food toxins	<u>Dec</u>	<u>1</u>
	Do	<u>Aflatoxin</u>	<u>Dec</u>	<u>1</u>
	Do	Lead,cadmium, zinc	<u>Dec</u>	<u>2</u>
		<u>poisoning</u>		
<u>Water</u>	Do	<u>Prevention</u>	<u>Dec</u>	<u>1</u>
contamination				
	Do	Methods of water	<u>Dec</u>	<u>2</u>
		<u>purification</u>		
	Do	Water born diseases	<u>Dec</u>	<u>2</u>

	Do	Diarrhea, dysentry	<u>Dec</u>	<u>1</u>
	Do	<u>Typhoid</u>	<u>Jan</u>	<u>1</u>
	Do	<u>Hepatitis</u>	<u>Jan</u>	<u>1</u>
Food	Do	<u>Definition</u>	<u>Jan</u>	<u>1</u>
<u>additives</u>				
	Do	<u>Classification</u>	<u>Jan</u>	<u>1</u>
	Do	Health hazards	<u>Jan</u>	<u>1</u>
	Do	Food adulteration	<u>Jan</u>	<u>1</u>
<u>Fermentation</u>	Do	<u>Definition,</u>	<u>Jan</u>	<u>1</u>
		<u>advantages</u>		
	Do	Yogurt,cheese	<u>Jan</u>	<u>2</u>
	Do	<u>Vinegar</u>	<u>Jan</u>	<u>1</u>
	Do	Fermented pickles	<u>Jan</u>	<u>1</u>
<u>Spices</u>	Do	<u>Functions</u>	<u>Jan</u>	<u>1</u>
	Do	Turmaric,cumin	<u>Jan</u>	<u>1</u>
	Do	Corriander,fenugreek	<u>Jan</u>	<u>1</u>
	Do	Black pepper, chilli,	<u>Feb</u>	<u>1</u>
		<u>ajawan</u>		

ACADEMIC PLAN (Practical)

Department: Food and nutrition. Part-IV. Session: 2015-2016

Teacher name: Sreeparna Basu

<u>Unit name</u>	Paper/group	Sub Unit	<u>Month</u>	No.of
		<u>Name</u>		<u>classes</u>

Visit of ideal kitchen	<u>IV-gr B</u>	<u>Hepatitis</u>	<u>Feb</u>	<u>3</u>
Therapeutic diet preparation	<u>Do</u>	Hypertension	<u>Feb</u>	<u>3</u>
	<u>Do</u>	<u>Diabetes</u>	<u>Feb</u>	<u>3</u>
	Do	Obesity	Feb	3
Determination of blood pressure	<u>Do</u>		<u>Mar</u>	2
Determination of haemoglobin percentage	<u>Do</u>		<u>Mar</u>	<u>3</u>
			<u>Mar</u>	