Department: Food & Nutrition

Session: 2019 (January – June)

Semester: 2nd Semester

NAME OF THE TEACHER	MONTH	PAPER TITLE	PAPER CODE	UNIT NO	THEORY	UNIT NO	PRACTICAL
Tamali Som	January	Human Physiology	FNTGCOR02	Animal Cell	2	Blood Group	9
J.S	January	Function of Cell	FNTGCOR02		-	Test	-
T.S	February	Function of Cell	FNTGCOR02		7	Blood Clotting	18
J.S	February	Nervous System	FNTGCOR02		4	BP Checking	6
T.S	March	Digestive System	FNTGCOR02		2	Slide Identification	9
J.S	March	Nervous System	FNTGCOR02		14	Heart Pulse Check	9
T.S	April	Digestive System	FNTGCOR02		4	Pulse Check	6
J.S	April	Heart Circulatory System	FNTGCOR02		15	Slide Identification	12
T.S	May	Structure of Digestive System	FNTGCOR02		3	Copy Checking	3
J.S	May	Muscle muscular System	FNTGCOR02		7	Copy Checking	3
T.S	June		FNTGCOR02		-		
J.S	June		FNTGCOR02		-		

Department: Food & Nutrition

Session: 2019 July – 2019 December

Course: B.sc General

Name of the Teacher	Month	Class (Gen)	Course & Paper Title	Paper Code	Unit No	Theory	Practical
Tamali Som	July	Sem III	Community Nutrition	FNTGCOR03	Community Dietician Role of Dietician	7	
					BMI Calculation		6
	July	Sem I				7	
	August	Sem III			International Organization	10	
		Sem III			Obesity Calculation , Clinical Assessment		21
	September	Sem III			International Agencies Role of WHO, FAO, CARE, UNICEF	9	
		Sem III			Diet Survey		22
	October	Sem III			UNICEF Function	1	
	November				Diet Survey & Field Visit		14
					Nutritional Assessment	7	

Academic Calendar
Department of Food and Nutrition (General)
2020, 1st, 3rd, 5th semester,CBCS

Semester/Year	Syllabus Module/ Unit	Teacher	Tentative Period of Completion
1st semester	**FNTGCOR01: FOOD AND NUTRITION** **1.Introduction to Food and Nutrition:** **Definition of Food, Nutrition, Nutrient, Nutritional status, Dietetics, Balance diet, Malnutrition, Energy (Unit of energy – Joule, Kilocalorie).** **2.Food and Nutrients:** **Carbohydrate, Protein, Fat, Vitamins and Minerals (calcium, phosphorus, sodium, potassium, iron, iodine, fluorine)- sources, classification, functions, deficiencies of these nutrients. Functions of water and dietary fibre.** **3. Five food groups:** **Basic 5 food groups: Types, composition, nutritional significance, role of cookery of cereals, pulses, milk & milk products, meat, fish, egg, vegetables & fruits, nuts, oil & sugar.** **4. Food Chemistry:** **Chemistry of carbohydrates, proteins and fats. Vitamins and minerals** **5. Nutrients Metabolism:** **Elementary idea of metabolism, enzymes and hormones- name and their important functions. Metabolism in brief (Glycolysis, Glycogenesis,**	 P.P D.D P.P D.Das D.D D.D P.P	 **October - November** **December -January** **November - December** **October - November** **February - March**

	Gluconeogenesis, Cori's cycle, Kreb's cycle, Deamination, Transamination. Role of hormones in carbohydrate metabolism. **6. Basic Metabolism Rate (B.M.R) B.M.R: Definition, factors affecting B.M.R. and Total Energy Requirement (Calculation** **7.Deficiency diseases: Deficiency diseases (Nutritional anaemia, PEM, IDD, VAD)- Aetiology, Prevalence, Clinical findings, Prevention & Treatment** **Internal Assessment will be Organized and Script Will be Checked By:** 1. Elementary idea of weights & measures. 2. Preparation of cereals, pulses, vegetable, egg, milk, fish, nuts dishes. 3. Planning and preparation of diet of an adult male/female. 4. Planning of a day's diet for pregnant & lactating mother. 5. Preparations of supplementary foods for infants **Internal Assessment will be Organized and Script Will be Checked By:**	D.Das D.Das **T.S** T.S	**October** **December - January** **October- March**
3rd Semester	**FNTGCOR03T: COMMUNITY, NUTRITION AND HEALTH ASSESSMENT (THEORY)** **1. Concept on Community Concept and types of Community. Concept of community nutrition, Community health, Factors affecting Community Health.** **2. Nutritional Assessment**	D.D	**July-August**

	Nutritional Assessment: Meaning, need, objectives and importance. Method of assessment of nutritional status – Anthropometry, Clinical, Biochemical, Dietary surveys, Vital health statistics.	D.D P.P	**October** **September - October**
	3. Concept of surveillance system **Elementary idea of health agencies - FAO, WHO, ICMR, ICDS, ICAR, CSIR, ANP, VHAI, NIN and CFTRI. Role of voluntary health organisation in the improvement of Community health.**	P.P	**August**
	4. Nutrition Intervention Programmes **Current National Nutrition Intervention Programmes in India- SNP, ANP, ICDS, Midday meal, NIDDCP, NPPNB, NNAPP.**	D.D	**August - September**
	5. Nutrition Education **Nutrition Education: Definition, objectives of nutrition education. Methods of imparting**	P.P	**July**
	Internal Assessment will be Organized and Script Will be Checked By:	T.S	
	FNTGCOR03P: COMMUNITY, NUTRITION AND HEALTH ASSESSMENT(PRACTICAL) 1. Anthropometric Measurement of infant - Height, weight, circumference of chest, mid - upper arm circumference. Calculation of BMI. 2. Clinical assessment and signs of nutrient deficiencies. 3. Diet survey by 24 hours recall method.	T.S	**September-January**
	4. Preparation of homemade ORS.	P.P	
	5. Preparation of low cost and medium cost school tiffin.	D.D D.Das	**December**

5th Semester	**FNTGDSE02T- FOOD SAFETY AND FOOD PROCESSING(THEORY)** **1. Food additive and food safety Concept of food safety, factors affecting food safety, Food additives-various types and their effects on health.** **2. Food spoilage Cereals, Pulses, Vegetables & Fruits, Milk & milk products, Fleshy foods, Fats & oils. Food borne infections & infestation.** **3. Food adulterants PFA definition of food adulteration, Common adulterants in food and their effects on health, Common household methods to detect adulterants in food.** **4. Food laws and regulatory authority Prevention of Food Adulteration (PFA) Act, Regulating authority-Codex Alimentarius, ISI, Agmark, Fruit Products Order (FPO), Meat Products Order (MPO), Bureau of Indian Standards (BIS), MMPO, FSSAI.** **5. Food Preservation Food Preservation – Definition, Objectives, Methods – main principle, procedure, common examples.** **6. Food adjuncts and preserved products Spices (Chilies, Turmeric, Garlic and Ginger), use and nutritional aspect. Jams, Jellies, Squashes–uses and nutritional aspects.** **Internal Assessment will be Organized and Script Will be Checked By:** FNTGDSE02P- FOOD SAFETY AND FOOD	T.S T.S T.S D.Das D.Das D.Das T.S	**September-October** **January -February** **July** **October - November** **November**

	PROCESSING(PRACAL) 1. Detection of common adulterant in food i) Khesari flour in besan ii) Vanaspati in Ghee/Butter iii) Dried papaya seeds in black pepper iv) Metanil yellow in turmeric or coloured sweet products. v) Artificially foreign matter in tea (dust/leaves). 2. Preparation of Jam, Jelly, Pickle and Sauce Internal Assessment will be Organized and Script Will be Checked By:	T.S T.S	

Academic Calendar
Department of Food and Nutrition (General)
2021, 1st, 3rd, 5th semester,CBCS

Semester/Year	Syllabus Module/ Unit	Teacher	Tentative Period of Completion
1st semester	**FNTGCOR01: FOOD AND NUTRITION**		
	1.Introduction to Food and Nutrition: Definition of Food, Nutrition, Nutrient, Nutritional status, Dietetics, Balance diet, Malnutrition, Energy (Unit of energy – Joule, Kilocalorie).	P.P	**November**
	2.Food and Nutrients: Carbohydrate, Protein, Fat, Vitamins and Minerals (calcium, phosphorus, sodium, potassium, iron, iodine, fluorine)- sources, classification, functions, deficiencies of these nutrients. Functions of water and dietary fibre.	P.P D.D	**December- January** **December- January**
	3. Five food groups: Basic 5 food groups: Types, composition, nutritional significance, role of cookery of cereals, pulses, milk & milk products, meat, fish, egg, vegetables & fruits, nuts, oil & sugar.	D.Das	**November**
	4. Food Chemistry: Chemistry of carbohydrates, proteins and fats. Vitamins and minerals	D.D	**October - November**
	5. Nutrients Metabolism: Elementary idea of metabolism, enzymes and hormones- name and their important functions. Metabolism in brief	D.D	**January - February**

	(Glycolysis, Glycogenesis, Gluconeogenesis, Cori's cycle, Kreb's cycle, Deamination, Transamination. Role of hormones in carbohydrate metabolism. **6. Basic Metabolism Rate (B.M.R) B.M.R: Definition, factors affecting B.M.R. and Total Energy Requirement (Calculation** **7.Deficiency diseases: Deficiency diseases (Nutritional anaemia, PEM, IDD, VAD)- Aetiology, Prevalence, Clinical findings, Prevention & Treatment** **Internal Assessment will be Organized and Script Will be Checked By:** 1. Elementary idea of weights & measures. 2. Preparation of cereals, pulses, vegetable, egg, milk, fish, nuts dishes. 3. Planning and preparation of diet of an adult male/female. 4. Planning of a day's diet for pregnant & lactating mother. 5. Preparations of supplementary foods for infants **Internal Assessment will be Organized and Script Will be Checked By:**	D.Das D.Das T.S	**November** **December** **November** **December** **February** **January**
3rd Semester	**FNTGCOR03T: COMMUNITY, NUTRITION AND HEALTH ASSESSMENT (THEORY)** **1. Concept on Community Concept and types of Community. Concept of community nutrition, Community health, Factors affecting Community Health.**	D.D	**September**

	2. Nutritional Assessment **Nutritional Assessment: Meaning, need, objectives and importance. Method of assessment of nutritional status – Anthropometry, Clinical, Biochemical, Dietary surveys, Vital health statistics.** **3. Concept of surveillance system** **Elementary idea of health agencies - FAO, WHO, ICMR, ICDS, ICAR, CSIR, ANP, VHAI, NIN and CFTRI. Role of voluntary health organisation in the improvement of Community health.** **4. Nutrition Intervention Programmes** **Current National Nutrition Intervention Programmes in India- SNP, ANP, ICDS, Midday meal, NIDDCP, NPPNB, NNAPP.** **5. Nutrition Education** **Nutrition Education: Definition, objectives of nutrition education. Methods of imparting** **Internal Assessment will be Organized and Script Will be Checked By:** FNTGCOR03P: COMMUNITY, NUTRITION AND HEALTH ASSESSMENT(PRACTICAL) 1. Anthropometric Measurement of infant - Height, weight, circumference of chest, mid - upper arm circumference. Calculation of BMI. 2. Clinical assessment and signs of nutrient deficiencies. 3. Diet survey by 24 hours recall method. 4. Preparation of homemade ORS. 5. Preparation of low cost and medium cost school tiffin.	P.P+ D.D D.D P.P D.D P.P T.S P.P D.D D.Das	**December -January** **December** **November** **October - November** **September- October** **September** **November** **December** **December**

5th Semester	**FNTGDSE02T- FOOD SAFETY AND FOOD PROCESSING(THEORY)** **1. Food additive and food safety** **Concept of food safety, factors affecting food safety, Food additives-various types and their effects on health.** **2. Food spoilage** **Cereals, Pulses, Vegetables & Fruits, Milk & milk products, Fleshy foods, Fats & oils. Food borne infections & infestation.** **3. Food adulterants** **PFA definition of food adulteration, Common adulterants in food and their effects on health, Common household methods to detect adulterants in food.** **4. Food laws and regulatory authority Prevention of Food Adulteration (PFA) Act, Regulating authority-Codex Alimentarius, ISI, Agmark, Fruit Products Order (FPO), Meat Products Order (MPO), Bureau of Indian Standards (BIS), MMPO, FSSAI.** **5. Food Preservation** **Food Preservation – Definition, Objectives, Methods – main principle, procedure, common examples.** **6. Food adjuncts and preserved products** **Spices (Chilies, Turmeric, Garlic and Ginger), use and nutritional aspect. Jams, Jellies, Squashes–uses and nutritional aspects.** **Internal Assessment will be Organized and Script Will be Checked By:** FNTGDSE02P- FOOD SAFETY AND FOOD	D.Das T.S D.Das D.Das D.Das	**September - November** **November- December** **September- October** **January** **January**

	PROCESSING(PRACAL) 1. Detection of common adulterant in food i) Khesari flour in besan ii) Vanaspati in Ghee/Butter iii) Dried papaya seeds in black pepper iv) Metanil yellow in turmeric or coloured sweet products. v) Artificially foreign matter in tea (dust/leaves). 2. Preparation of Jam, Jelly, Pickle and Sauce Internal Assessment will be Organized and Script Will be Checked By:	D.Das	**December**

Academic Calendar
Department of Food and Nutrition (General)
2021, 2nd, 4th, 6th semester,CBCS

Semester/Year	Syllabus Module/Unit	Teacher	Tentative Period of Completion
2nd Sem	**FNTGCOR02T: HUMAN BODY AND NUTRITION (THEORY)** 1. **Animal cell** **Animal cell: definition, structure and functions of different parts. Organelle**	D.D	March
	2. Blood and body Fluids: **Blood, composition, blood corpuscles, functions, blood groups and its importance in transfusion, hazards of mismatch blood transfusion. Rh factor, blood coagulation.** **Lymph: Composition and function.**	D.D	April
	3. Cardiovascular and Respiratory system Heart: Junctional tissues and functions. Cardiac cycle, cardiac output, blood pressure and its regulation. **Mechanism of respiration, Respiratory Centre. Respiratory regulation.**	D.D	July
	4. Digestive system and Digestion **Digestive system: Structures involved in digestive system (mouth, esophagus, stomach, small intestine, large intestine, liver pancreas, gallbladder), and their functions, composition of different digestive juices & their functions. Digestion and absorption of carbohydrate, protein and fat.**	P.P	May
	5. Excitable cells **Brief description about the mechanism of muscular contraction. Neuromuscular transmission.**	P.P	June

	6. Regulatory system **General idea about the Hormones in human body and their significance on nutrition. Brief idea about brain and spinal cord. somatic and autonomic control of body** **Internal Assessment will be Organized and Script Will be Checked By:** FNTGCOR02P: HUMAN BODY AND NUTRITION (PRACTICAL) 1. Determination of pulse rate in Resting condition and after exercise (30 beats/10 beats method) 2. Determination of blood pressure by Sphygmomanometer (Auscultatory method). 3. Identification of permanent sections (Blood cells, Stomach, Small intestine, large intestine, Liver, pancreas). 4. Determination of Bleeding Time (BT) and Clotting Time (CT). 5. Detection of Blood group (Slide method). **Internal Assessment will be Organized and Script Will be Checked By:**	P.P P.P P.P D.D D.D	
4 th sem	**FNTGCOR04T: DIETETICS (THEORY)** **1. Concept on Diet therapy** **Definition and objective of dietetics, Definition- diet therapy, Dieticians; principles and classification of the therapeutic diet. Responsibility of dieticians.** **2. RDA, Meal planning and Dietary guidelines** **RDA- Definition, Nutritional requirements (RDA), Principles and objectives of meal planning, Dietary guidelines of pregnant & lactating women, infants (Weaning, supplementary food), pre-school children & school children (School lunch**	T.S T.S	

	programme), **adult males and females, old age people.** **3. Hospital diet** **Hospital diet: regular, soft, fluid, special feeding methods- advantages, disadvantages** **4. Dietary management of different diseases.** **Dietary management in Gastro intestinal diseases (diarrhea, constipation, gastritis, peptic ulcer & flatulence), Fever (short term), Diabetes mellitus (Type II - NIDDM), heart diseases (hypertension, atherosclerosis, hyperlipidemia), Liver diseases (infective hepatitis, cirrhosis of liver), Gout, Obesity (including assessment indices), Underweight.** **5. Food Allergy** **Food allergy- Definition, sources, symptoms, diagnosis, treatment, food intolerance.** **Internal Assessment will be Organized and Script Will be Checked By:** FNTGCOR04P: DIETETICS(PRACTICAL) 1. Planning and Preparation of fluid diet, soft and solid diet. 2. Planning & preparation of a day's diet for the following conditions: Peptic ulcer, Fever, Hypertension, Diabetes mellitus (Type II NIDDM), Hepatitis, Obesity. **Internal Assessment will be Organized and Script Will be Checked By:**	T.S T.S T.S T.S	
4th Sem (SEC Paper)	**FNTSSEC02M: FIELD STUDY IN CLINICAL /COMMUNITY SETTING** Introduction to clinical nutrition, clinical conditions requiring dietary intervention, role of		

	dietitian in hospitals/clinics, staff training, RD –requirements, procedure, functioning. 1. Visit to an ongoing program in ICDS: one rural, one urban. (eg. mahilamandal meeting or nutrition week celebration. 2. Visit to a health Centre (ANC clinic run by Government health department and observe quality of counseling imparted to pregnant women (especially awareness of anemia, importance of IFA). 3. To visit an NGO either rural or urban and observe one intervention program implemented for 59 women, school children or adolescence (For all the above observation appropriate observation check lists will be made and used) 4. Visit to old age home/Nutrition Rehabilitation Centre/slum area and prepare report on nutritional status /health concern(at least 10 case studies to be done) 5. Internship in any hospital/nursing home -case study of diseases. **Internal Practical Exam:**	D.D P.P T.S	
6 th Sem	**FNTGDSE03T-FOOD COMMODITIES(THEORY)** **1. Perishable Food Commodities Milk, Meat, Fish, Egg and Poultry- Introduction, composition, types, processing, products, uses in Indian cookery.** **2. Semi Perishable Food Commodities** **Fruits and Vegetable, Fats and Oils- Introduction, composition, types, processing, products, uses in Indian Cookery.** **3. Non-Perishable Food Commodities. Cereals, Pulses, Legumes, Oil seeds and spices- Introduction, composition, types, processing, products, uses in Indian cookery.** **4. Beverages Tea; Coffee.**	D.Das D.Das D.Das	February March April

	Chocolate and Cocoa Powder-Processing, cost and nutritional aspects, other beverages-Aerated beverages, juices. **Internal Assessment will be Organized and Script Will be Checked By:** FNTGDSE03P-FOOD COMMODITIES(PRACTICAL) Project formulation and presentation of project in a seminar (especially on the market survey of food commodities). **Internal Assessment will be Organized and Script Will be Checked By:**	D.Das D.Das D.Das D.Das	May

Academic Calendar
Department of Food and Nutrition (General)
2022, 2nd, 4th, 6th semester,CBCS

Semester/ Year	Syllabus Module/Unit	Teacher	Tentative Period of Completion
2nd Sem	**FNTGCOR02T: HUMAN BODY AND NUTRITION (THEORY)** 1. **Animal cell** **Animal cell: definition, structure and functions of different parts. Organelle**	D.D	March
	2. Blood and body Fluids: Blood, composition, blood corpuscles, functions, blood groups and its importance in transfusion, hazards of mismatch blood transfusion. Rh factor, blood coagulation. Lymph: Composition and function.	D.D	April
	3. Cardiovascular and Respiratory system Heart: Junctionl tissues and functions. Cardiac cycle, cardiac output, blood pressure and its regulation. Mechanism of respiration, Respiratory centre. Respiratory regulation.	D.D	April
	4. Digestive system and Digestion **Digestive system: Structures involved in digestive system (mouth,oesophagus, stomach, small intestine, large intestine,liver pancreas,gallbladder), and their functions,composition of different digestive juices & their functions. Digestion and absorption of carbohydrate, protein and fat.**	P.P	March

	5. Excitable cells **Brief description about the mechanism of muscular contraction.Neuromuscular transmission.** **6. Regulatory system** **General idea about the Hormones in human body and their significance on nutrition.** **Brief idea about brain and spinal cord. somatic and autonomic control of body** **Internal Assessment will be Organized and Script Will be Checked By:** FNTGCOR02P: HUMAN BODY AND NUTRITION (PRACTICAL) 1. Determination of pulse rate in Resting condition and after exercise (30 beats/10 beats method) 2. Determination of blood pressure by Sphygmomanometer (Auscultatory method). 3. Identification of permanent sections (Blood cells, Stomach, Small intestine, large intestine, Liver, pancreas). 4. Determination of Bleeding Time (BT) and Clotting Time (CT). 5. Detection of Blood group (Slide method). **Internal Assessment will be Organized and Script Will be Checked By:**	P.P P.P P.P P.P D.D D.D P.P	April June - July March - April May April June
4 th sem	**FNTGCOR04T:DIETETICS (THEORY)** **1. Concept on Diet therapy** **Definition and objective of**	T.S	March

	dietetics, Definition- diet therapy, Dieticians;principles and classification of the therapeutic diet. Responsibility of dieticians. **2. RDA, Meal planning and Dietary guidelines** **RDA- Definition, Nutritional requirements (RDA), Principles and objectives of meal planning, Dietary guidelines of pregnant & lactating women, infants(Weaning,supplementary food), pre-school children & school children(School lunch programme), adult males and females, old age people.** **3. Hospital diet** **Hospital diet: regular, soft, fluid, special feeding methods- advantages, disadvantages** **4. Dietary management of different diseases.** **Dietary management in Gastro intestinal diseases (diarrhoea, constipation, gastritis, peptic ulcer & flatulence), Fever (short term), Diabetes mellitus (Type II - NIDDM), Heart diseases (hypertension,atherosclerosis, hyperlipidaemia), Liver diseases (infective hepatitis, cirrhosis of liver), Gout, Obesity (including assessment indices), Underweight.** **5. Food Allergy** **Food allergy- Definition, sources, symptoms, diagnosis, treatment, food intolerance.** **Internal Assessment will be**	T.S T.S T.S T.S	April May April June May

	Organized and Script Will be Checked By: FNTGCOR04P:DIETETICS(PRACTICAL) 1. Planning and Preparation of fluid diet, soft and solid diet. 2. Planning & preparation of a day's diet for the following conditions: Peptic ulcer, Fever, Hypertension, Diabetes mellitus (Type II NIDDM), Hepatitis, Obesity. **Internal Assessment will be Organized and Script Will be Checked By:**	T.S T.S	April- June
4th Sem (SEC Paper)	**FNTSSEC02M: FIELD STUDY IN CLINICAL /COMMUNITY SETTING** Introduction to clinical nutrition, clinical conditions requiring dietary intervention, role of dietitian in hospitals/clinics, staff training, RD –requirements, procedure, functioning. 1. Visit to an ongoing program in ICDS: one rural, one urban. (eg. mahilamandal meeting or nutrition week celebration . 2. Visit to a health centre (ANC clinic run by Government health department and observe quality of counseling imparted to pregnant women (especially awareness of anemia, importance of IFA). 3. To visit an NGO either rural or urban and observe one intervention program implemented for 59 women, school children or adolescence (For all the above observation appropriate observation check lists will be made and used) 4. Visit to old age	D.D	April July

	home/Nutrition Rehabilitation Centre/slum area and prepare report on nutritional status /health concern(at least 10 case studies to be done) 5. Internship in any hospital/nursing home -case study of diseases. **Internal Practical Exam:**	P.P T.S	April- May June
6 th Sem	**FNTGDSE03T-FOOD COMMODITIES(THEORY)** **1. Perishable Food Commodities** **Milk, Meat, Fish, Egg and Poultry- Introduction, composition, types, processing, products, uses in Indian cookery.** **2. Semi Perishable Food Commodities** **Fruits and Vegetable, Fats and Oils- Introduction, composition, types, processing, products, uses in Indian Cookery.** **3. Non Perishable Food Commodities.Cereals, Pulses, Legumes, Oil seeds and spices-Introduction,composition, types, processing, products, uses in Indian cookery.** **4. Beverages Tea; Coffee. Chocolate and Cocoa Powder-Processing, cost and nutritional aspects, other beverages-Aerated beverages, juices.** **Internal Assessment will be Organized and Script Will be Checked By:** FNTGDSE03P-FOOD COMMODITIES(PRACTICAL) Project formulation and	D.Das D.Das D.Das D.Das D. Das	February - March March April May

	presentation of project in a seminar (especially on the market survey of food commodities). **Internal Assessment will be Organized and Script Will be Checked By:**	D.Das D.Das	March - June

Academic Calendar
Department of Food and Nutrition (General)
2023, 2nd, 4th, 6th semester,CBCS

Semester/ Year	Syllabus Module/Unit	Teacher	Tentative Period of Completion
2nd Sem	**FNTGCOR02T: HUMAN BODY AND NUTRITION (THEORY)** 1. **Animal cell** **Animal cell: definition, structure and functions of different parts. Organelle**	D.D	April
	2. Blood and body Fluids: Blood, composition, blood corpuscles, functions, blood groups and its importance in transfusion, hazards of mismatch blood transfusion. Rh factor, blood coagulation. Lymph: Composition and function.	D.D	May
	3. Cardiovascular and Respiratory system Heart: Junctionl tissues and functions. Cardiac cycle, cardiac output, blood pressure and its regulation. Mechanism of respiration, Respiratory centre. Respiratory regulation.	D.D	June- July
	4. Digestive system and Digestion **Digestive system: Structures involved in digestive system (mouth,oesophagus, stomach, small intestine, large intestine,liver pancreas,gallbladder), and their functions,composition of different digestive juices & their functions. Digestion and absorption of carbohydrate, protein and fat.**	P.P	April

	5. Excitable cells **Brief description about the mechanism of muscular contraction.Neuromuscular transmission.** **6. Regulatory system** **General idea about the Hormones in human body and their significance on nutrition.** **Brief idea about brain and spinal cord. somatic and autonomic control of body** **Internal Assessment will be Organized and Script Will be Checked By:** FNTGCOR02P: HUMAN BODY AND NUTRITION (PRACTICAL) 1. Determination of pulse rate in Resting condition and after exercise (30 beats/10 beats method) 2. Determination of blood pressure by Sphygmomanometer (Auscultatory method). 3. Identification of permanent sections (Blood cells, Stomach, Small intestine, large intestine, Liver, pancreas). 4. Determination of Bleeding Time (BT) and Clotting Time (CT). 5. Detection of Blood group (Slide method). **Internal Assessment will be Organized and Script Will be Checked By:**	P.P P.P P.P P.P P.P D.D D.D D.D	June July May May-June May June
4 th sem	**FNTGCOR04T:DIETETICS (THEORY)** **1. Concept on Diet therapy** **Definition and objective of**	T.S	March

	dietetics, Definition- diet therapy, Dieticians;principles and classification of the therapeutic diet. Responsibility of dieticians.		March- April
	2. RDA, Meal planning and Dietary guidelines RDA- Definition, Nutritional requirements (RDA), Principles and objectives of meal planning, Dietary guidelines of pregnant & lactating women, infants(Weaning,supplementary food), pre-school children & school children(School lunch programme), adult males and females, old age people.	T.S	April
	3. Hospital diet Hospital diet: regular, soft, fluid, special feeding methods- advantages, disadvantages	T.S	April
	4. Dietary management of different diseases. Dietary management in Gastro intestinal diseases (diarrhoea, constipation, gastritis, peptic ulcer & flatulence), Fever (short term), Diabetes mellitus (Type II - NIDDM), Heart diseases (hypertension,atherosclerosis, hyperlipidaemia), Liver diseases (infective hepatitis, cirrhosis of liver), Gout, Obesity (including assessment indices), Underweight.	T.S	May
	5. Food Allergy Food allergy- Definition, sources, symptoms, diagnosis, treatment, food intolerance.	T.S	June
	Internal Assessment will be		

	Organized and Script Will be Checked By: FNTGCOR04P:DIETETICS(PRACTICAL) 1. Planning and Preparation of fluid diet, soft and solid diet. 2. Planning & preparation of a day's diet for the following conditions: Peptic ulcer, Fever, Hypertension, Diabetes mellitus (Type II NIDDM), Hepatitis, Obesity. **Internal Assessment will be Organized and Script Will be Checked By:**	T.S T.S	March- June
4th Sem (SEC Paper)	**FNTSSEC02M: FIELD STUDY IN CLINICAL /COMMUNITY SETTING** Introduction to clinical nutrition, clinical conditions requiring dietary intervention, role of dietitian in hospitals/clinics, staff training, RD –requirements, procedure, functioning. 1. Visit to an ongoing program in ICDS: one rural, one urban. (eg. mahilamandal meeting or nutrition week celebration . 2. Visit to a health centre (ANC clinic run by Government health department and observe quality of counseling imparted to pregnant women (especially awareness of anemia, importance of IFA). 3. To visit an NGO either rural or urban and observe one intervention program implemented for 59 women, school children or adolescence (For all the above observation appropriate observation check lists will be made and used) 4. Visit to old age	D.D	March-May

	home/Nutrition Rehabilitation Centre/slum area and prepare report on nutritional status /health concern(at least 10 case studies to be done) 5. Internship in any hospital/nursing home -case study of diseases. **Internal Practical Exam:**	T.S	March-May
6 th Sem	**FNTGDSE03T-FOOD COMMODITIES(THEORY)** **1. Perishable Food Commodities** **Milk, Meat, Fish, Egg and Poultry- Introduction, composition, types, processing, products, uses in Indian cookery.** **2. Semi Perishable Food Commodities** **Fruits and Vegetable, Fats and Oils- Introduction, composition, types, processing, products, uses in Indian Cookery.** **3. Non Perishable Food Commodities.Cereals, Pulses, Legumes, Oil seeds and spices-Introduction,composition, types, processing, products, uses in Indian cookery.** **4. Beverages Tea; Coffee. Chocolate and Cocoa Powder-Processing, cost and nutritional aspects, other beverages-Aerated beverages, juices.** **Internal Assessment will be Organized and Script Will be Checked By:** FNTGDSE03P-FOOD COMMODITIES(PRACTICAL) Project formulation and	D.Das D.Das D.Das D.Das D.Das	March April May June

	presentation of project in a seminar (especially on the market survey of food commodities). **Internal Assessment will be Organized and Script Will be Checked By:**	D.Das D.Das	March -May

Department of Food and Nutrition (General)
2023, 1st, 3rd, 5th semester,CBCS

Semester/Year	Syllabus Module/Unit	Teacher	Tentative Period of Completion
1st semester (NEP 2020)	**Core Course (DS)** **FNTGMA01T: Elementary Food and Nutrition** **1.Introduction to Food and Nutrition: Definition of Food, Nutrition, Nutrient, Dietetics, Balance diet, Malnutrition, Energy, BMR.** **2. Food and Nutrients: Carbohydrate, Protein, Fat, Vitamins and Minerals(Calcium, Phosphorus, Sodium, Potassium, Iron, Iodine)- Sources, Classification, Chemistry, Functions, Deficiencies of the nutrients, Functions of water and dietary fibre.** **3.Food Groups: Basic food groups: Types, Composition, Nutritional Significance, Role of Cookery of cereals, Pulses, milk and milk products, meat, fish, egg, vegetables and fruits, nuts, oil and Sugar.** **4.Deficiency Diseases: Elementary idea about deficiency diseases related to food and Nutrition.** **Practical:** **1. Elementary idea of weight and measures.** **2. Preparation of dishes from different food Groups.** **3. Planning and preparation of diet for an adult female and male.**	D.D D.Das D.D D.D D.Das D.Das T.S	**December** **December** **September** **October** **November-December.** **August-December**

		T.S	
	FNTGCOR03T: COMMUNITY, NUTRITION AND HEALTH ASSESSMENT (THEORY) **1. Concept on Community** **Concept and types of Community. Concept of community nutrition, Community health, Factors affecting Community Health.** **2. Nutritional Assessment** **Nutritional Assessment: Meaning, need, objectives and importance. Method of assessment of nutritional status – Anthropometry, Clinical, Biochemical, Dietary surveys,** **Vital health statistics.** **3. Concept of surveillance system** **Elementary idea of health agencies - FAO, WHO, ICMR, ICDS, ICAR, CSIR, ANP,** **VHAI, NIN and CFTRI. Role of voluntary health organisation in the improvement of Community health.** **4. Nutrition Intervention Programmes** **Current National Nutrition Intervention Programmes in India- SNP, ANP, ICDS, Midday meal, NIDDCP, NPPNB, NNAPP.** **5. Nutrition Education** **Nutrition Education: Definition, objectives of nutrition education. Methods of imparting**	D.D T.S D.D D.Das D.Das D.Das D.D	**October** **October** **November - December** **November - December** **December - January** **October**

	Internal Assessment will be Organized and Script Will be Checked By: FNTGCOR03P: COMMUNITY, NUTRITION AND HEALTH ASSESSMENT(PRACTICAL) 1. Anthropometric Measurement of infant - Height, weight, circumference of chest, mid - upper arm circumference. Calculation of BMI. 2. Clinical assessment and signs of nutrient deficiencies. 3. Diet survey by 24 hours recall method. 4. Preparation of homemade ORS. 5. Preparation of low cost and medium cost school tiffin.	T.S T.S T.S D.D D.Das	 **October - November** **January** **January** **January**
	FNTGDSE02T- FOOD SAFETY AND FOOD PROCESSING(THEORY) **1. Food additive and food safety** **Concept of food safety, factors affecting food safety, Food additives- various types and their effects on health.** **2. Food spoilage** **Cereals, Pulses, Vegetables & Fruits, Milk & milk products, Fleshy foods, Fats & oils. Food borne infections & infestation.** **3. Food adulterants** **PFA definition of food adulteration, Common adulterants in food and their effects on health, Common household methods to detect adulterants in food.** **4. Food laws and regulatory authority** **Prevention of Food**	D.Das T.S T.S D.Das	**December** **November** **November** **November**

	Adulteration (PFA) Act, Regulating authority-Codex Alimentarius, ISI, Agmark, Fruit Products Order (FPO), Meat Products Order (MPO), Bureau of Indian Standards (BIS), MMPO, FSSAI.	D.Das	**October**
	5. Food Preservation **Food Preservation – Definition, Objectives, Methods – main principle, procedure, common examples.**	D.Das	**December**
	6. Food adjuncts and preserved products **Spices (Chilies, Turmeric, Garlic and Ginger), use and nutritional aspect. Jams, Jellies, Squashes–uses and nutritional aspects.**		
	Internal Assessment will be Organized and Script Will be Checked By:	D.Das	
	FNTGDSE02P- FOOD SAFETY AND FOOD PROCESSING(PRACAL)		**October - December**
	1. Detection of common adulterant in food i) Khesari flour in besan ii) Vanaspati in Ghee/Butter iii) Dried papaya seeds in black pepper iv) Metanil yellow in turmeric or coloured sweet products. v) Artificially foreign matter in tea (dust/leaves).	D.Das	
	2. Preparation of Jam, Jelly, Pickle and Sauce		
	Internal Assessment will be Organized and Script Will be Checked By:	D.Das	

DEPARTMENT: FOOD & NUTRITION

SESSION: 2018-2019

YEAR: 2ND YEAR

Teacher	Month	Paper Title	Paper Code	Unit No	Theory	Practical
T.S	July		Cell		7	
				Cooking Weight Method		13
T.S	August			Digestive System	18	
				Cooking Practical		9
T.S	September			Heart	12	
				Cooking Cereals		6
T.S	October			Blood	6	
				Pulses		3
T.S	November			Disease PEM	8	
				Egg Milk		6
T.S	December			Blood Function	6	
				Cooking Practical with Nuts		3
T.S	January			Lungs	3	
T.S	February				3	
				Revision		3
T.S	March			Theory Revision	9	
T.S	April			Theory Revision	2	

RISHI BANKIM CHANDRA COLLEGE FOR WOMEN

DEPARTMENT: FOOD AND NUTRITION

SESSION: 2023-2024

2024 EVEN (2ND ,4TH, 6TH) SEMESTER

Semester/ Year	Syllabus Module/ Unit	Teacher	Tentative Date of Completion
NEP 2nd Semester	**FNTMIN202T: ELEMENTS OF HUMAN HEALTH -1 (THEORY)** **1. Introduction to Human Health**	P.P	July
	2. Chemistry and Functions of Nutrients; Deficiency Diseases: Elementary idea on deficiency conditions related to food and nutrition	D.D	July
	3. Elementary Cell Biology: Animal cell: definition, structure and functions of different parts. Organelles	D.D	3rd week of July
	4. Digestive system and Digestion **Digestive system: elementary anatomy, and microanatomy of different parts of digestive system and its associated glands, and their functions. Composition of different digestive juices and their functions. Digestion and absorption of carbohydrate, protein and fat.**	P.P	June
	5. Metabolism: Elementary Idea, BMR- definition, factors affecting; SDA; Enzymes- concept, properties	P.P	June-July
	6. Blood and body Fluids: Blood, composition, blood corpuscles, functions, blood groups and its importance in transfusion, hazards of mismatch blood transfusion. Rh factor, blood coagulation. Lymph: Composition and function. Elementary idea on immune functions; allergy with special reference to food allergens. Immunization: Importance and Immunization schedule.	D.D	July
	PRACTICAL **1. Determination of Bleeding Time (BT) and Clotting Time (CT).**	D.D	May
	2. Detection of Blood group (Slide method).	D.D	July
	3. Identification of permanent sections (blood cells, stomach, small intestine, large intestine, liver, pancreas).	P.P	June-July

	Internal Assessment will be Organized and Script Will be Checked By:	P.P	
4TH Semester	**FNTGCOR04T:DIETETICS (THEORY)** **1. Concept on Diet therapy** **Definition and objective of dietetics, Definition- diet therapy, Dieticians; Principles and classification of the therapeutic diet. Responsibility of dieticians.** **2. RDA, Meal planning and Dietary guidelines** **RDA- Definition, Nutritional requirements (RDA), Principles and objectives of meal planning, Dietary guidelines of pregnant & lactating women, infants (Weaning, supplementary food), pre-school children & school children (School lunch programme),** **adult males and females, old age people.** **3. Hospital diet** **Hospital diet: regular, soft, fluid, special feeding methods- advantages, disadvantages** **4. Dietary management of different diseases.** **Dietary management in Gastro intestinal diseases (diarrhoea, constipation, gastritis, peptic ulcer & flatulence), Fever (short term), Diabetes mellitus (Type II - NIDDM), heart diseases (hypertension, atherosclerosis, hyperlipidaemia), Liver diseases (infective hepatitis, cirrhosis of liver), Gout, Obesity (including assessment indices), Underweight.** **5. Food Allergy** **Food allergy- Definition, sources, symptoms, diagnosis, treatment, food intolerance.** **Internal Assessment will be Organized and Script Will be Checked By:** **FNTGCOR04P:DIETETICS(PRACTICAL)** **1. Planning and Preparation of fluid diet, soft and solid diet.** **2. Planning & preparation of a day's**	T.S T.S T.S T.S T.S T.S	March April March May July March - June

	diet for the following conditions: Peptic ulcer, Fever, Hypertension, Diabetes mellitus (Type II NIDDM), Hepatitis, Obesity. **Internal Assessment will be Organized and Script Will be Checked By:**	T.S	
4th Semester	**FNTSSEC02M: FIELD STUDY IN CLINICAL /COMMUNITY SETTING** **Introduction to clinical nutrition, clinical conditions requiring dietary intervention, role of dietitian in hospitals/clinics, staff training, RD –requirements, procedure, functioning.** **1. Visit to an ongoing program in ICDS: one rural, one urban. (eg. mahilamandal meeting or nutrition week celebration .** **2. Visit to a health centre (ANC clinic run by Government health department and observe quality of counseling imparted to pregnant women (especially awareness of anemia, importance of IFA).** **3. To visit an NGO either rural or urban and observe one intervention program implemented for 59 women, school children or adolescence (For all the above observation appropriate observation check lists will be made and used)** **4. Visit to old age home/Nutrition Rehabilitation Centre/slum area and prepare report on nutritional status /health concern(at least 10 case studies to be done)** **5. Internship in any hospital/nursing home -case study of diseases**. **Internal Practical Exam:**	D.D P.P	July June
6th Semester	**FNTGDSE03T-FOOD COMMODITIES(THEORY)** **1. Perishable Food Commodities Milk, Meat, Fish, Egg and Poultry- Introduction, composition, types, processing, products, uses in Indian cookery.** **2. Semi Perishable Food Commodities Fruits and Vegetable, Fats and Oils- Introduction, composition, types, processing, products, uses in Indian**	D.Das D.Das	March March

	Cookery. **3. Non-Perishable Food Commodities. Cereals, Pulses, Legumes, Oil seeds and spices- Introduction, composition, types, processing, products, uses in Indian cookery.** **4. Beverages Tea; Coffee. Chocolate and Cocoa Powder-Processing, cost and nutritional aspects, other beverages-Aerated beverages, juices.** **Internal Assessment will be Organized and Script Will be Checked By:** **FNTGDSE03P-FOOD COMMODITIES(PRACTICAL)** **Project formulation and presentation of project in a seminar (especially on the market survey of food commodities).** **Internal Assessment will be Organized and Script Will be Checked By:**	D.Das D.Das D.Das D.Das D.Das	April April-June March-June