Department of Food Science and Nutrition

Board of Studies Meeting

Academic Year: 2026-27

The minutes of the 22nd meeting of Board of Studies held on 26.10.2026 at 10.00 am.

Members Present:

S. No.	Name	Category
1.	Dr. D. Sridevi	Chairman
2.	Dr. Subbarao M. Gavaravarapu Scientist 'F & Head Dept. of Nutrition Information Communication & Health Education (Niche) ICMR - National Institute of Nutrition	University Nominee
3.	Dr. R. Radha Associate Professor Dept. of Food Service Management and Dietetics Avinashilingam University	Subject Expert
4.	Mrs. C. Vandhana Chief Dietitian Ramakrishna Hospitals Coimbatore – 641044	Industry Expert
5.	Mrs. Shobana Priya N Dietitian Progen Weight Management	Alumni
6.	Dr. Priya A	Member
7.	Ms. Anjali M	Member
8.	Dr. Jancy Rani D	Member
9.	Ms. M. Rakeshwari	Member
10.	Ms. G. Priyaalini	Member
11.	Ms. Kanishka B	Member
12.	Mrs. G. Latha	Member
13.	Dr. D. Radha Priya	Member
14.	Mrs. N. Kaviyasri	Member
15.	Dr. N. Kuppuchamy	Co-opted Member
16.	Dr. A. Hazel Verbina	Co-opted Member
17.	Dr. R. Ravikumar	Co-opted Member
18.	Dr. S. Gowri	Co-opted Member
19.	Ms. Poojasree M	Student Representative - UG
20.	Ms. Nivetha M	Student Representative - PG

The HoD and Chairman of the department of Food Science & Nutrition welcomed and introduced all the members and appreciated them for their continuous support and contribution for the development of academic standard and enrichment of the syllabus.

Further, Chairman informed the inability of the following members to attend the meeting and requested to grant leave of absence.

1. Dr. Suresh D Sakhare (Subject Expert)

After brief discussion the items of the agenda were taken one by one for discussion and the following resolutions were passed.

Item 22.1: *To review and approve the minutes of the previous meeting held on* ***06.04.2026.***

The chairman of the Board presented the minutes of the previous meeting held on **06.04.2026** and requested the members to approve. After brief discussion the following resolution was passed.

Resolution:

Resolved to approve the minutes of the previous meeting held on 06.04.2026

Item 22.2: *To consider and approve the syllabi for II semester for UG and PG students admitted during the academic year 2026-2027.*

The chairman presented the detailed scheme and regulation for the students admitted from the academic year 2026-27 for II semester. The members deliberated in detail about the modification required. After discussion it is unanimously decided to adopt the following changes.

Changes Made:

UG:

Course Code	Course	Reason
26FNU2CA	**Core:** Principles of Nutrition	Dr. Subbarao M. Gavaravarappu suggested to include in **Unit I-** concept of Food and Nutrition and Energy as it enables students to understand the biochemical and physiological mechanisms of energy metabolism, nutrient utilization.
26FNU2CB	**Core:** Human Physiology	Dr. Subbarao M. Gavaravarappu recommended rearranging the order of the units to ensure a more logical and systematic progression of the course content.

New Course UG:

Course Code	Existing Course	New Course	Reason
26FNU2CP	**Core Practical:** Nutrient Analysis	**Core Practical:** Physico-chemical Analysis of Food	Dr. Radha R Suggested to include the following: **Experiments Under DBT:** 1. Determination of Rancidity in Oil (Kries Test) 2. Determination of TSS by refractometer

PG:

Course Code	Course	Reason
26FNP2CA	**Core:** Macronutrients	Dr. Subbarao M. Gavaravarappu suggested to include in **Unit I -** Energy utilization in cells and Metabolism during starvation as it is significant in understanding metabolic adaptations, and the nutritional implications of energy deficiency for dietary management
26FNP2CB	**Core:** Human Anatomy and Physiology	Dr. Subbarao M. Gavaravarappu and Mrs. C. Vandhana suggested to include • **Unit-I-** An Overview of Plasmapheresis and Cardiac markers • **Unit-V-** outline on DEXA scan—in assessing bone mineral density and osteoporosis and Outline on Electroencephalogram these topics provide an understanding of modern clinical diagnostic techniques and their applications in disease diagnosis, assessment, and monitoring.

26FNP2CC	**Core:** Therapeutic Nutrition – Lifestyle Disorders	Dr. Subbarao M. Gavaravarappu and Mrs. C. Vandhana suggested including the following topics in the syllabus: • **Unit I:** Current Dietary Trends • **Unit II:** The FODMAP Diet • **Unit V:** Metabolic Dysfunction-Associated Steatotic Liver Disease (MASLD) and Exocrine Pancreatic Insufficiency (EPI) These inclusions aim to enhance students' understanding of current dietary practices and the nutritional management of gastrointestinal, liver, and pancreatic disorders.
26FNP2CP	**Core Practical:** Food Analytical Techniques	Dr. Radha suggested to include the following experiment as it enables the students to quantify free-radical scavenging capacity and evaluate the antioxidant potential of food matrices 1. Antioxidant Analysis by DPPH Method
26FNP2CQ	**Core Practical:** Therapeutic Nutrition – Lifestyle Disorders	Mrs. C. Vandhana Suggested to include the following concepts - Assessing requirement and planning diet for • FOD Map Diet • Metabolic Dysfunction associated steatotic liver diseases and Exocrine pancreatic insufficiency (EPI)
26FNP2DP	**DSE Practical:** Food Fermentation	Dr. Subbarao M. Gavaravarappu suggested to include the following experiments: 1. Preparation of a rice-water-based fermented probiotic beverage 2. Preparation of kvass – fruit, beet

After discussion the following resolution was passed.

Resolution: **Resolved to approve the above modification and adopt the revised syllabus for UG & PG students admitted for the academic year 2026-27.**

Item 22.3: *To consider and approve the syllabi for IV semester for the students admitted in UG and PG during the academic year 2025-2026.*

The chairman presented the detailed scheme and Regulation for the students admitted in UG and PG from the academic year 2025-2026 and syllabi for the IV semester. The members deliberated in detail about the modification required.

After discussion it is unanimously decided to adopt the following changes.

Changes Made:

UG

Course Code	Course	Reason
25FNU4CA	**Core:** Dietetics	Mrs. C. Vandhana Suggested to include the following concepts as it equips the students with competencies in clinical nutrition, metabolic risk assessment, and preventive dietary management of cardiometabolic and hepatic disorders. • **Unit I -** National Commission for Allied and Healthcare Professions (NCAHP) • **Unit IV -** Hypertriglyceridemia
25FNU4CB	**Core:** Perspective Psychology	Mrs. N. Shobana Priya suggested to include "Introduction to food eating behavior" in **Unit 5** as it is important to understand the physiological, psychological, sensory, cultural and socio-economic determinants of food choices.
25FNU4CP	**Core Practical:** Dietetics	Mrs. C. Vandhana suggested to include the following experiments **Experiments Under DBT:** 1. Planning and calculation of a gluten-free diet for celiac disease (malabsorption) using millets, rice and other gluten-free substitutes 2. Planning and calculation of a homemade enteral (tube feeding) formula using locally available foods

New Courses UG:

Course Code	Existing Course	New Course	Reason
25FNU5SP	SEC: Functional Foods	**SEC Practical:** Bakery and Confectionery	The course was introduced as it develops student's skills in formulation, processing, sensory evaluation, quality control and nutritional optimization of bakery and confectionery products

			Experiments Under DBT: 1. Development of value-added bakery and confectionery products 2. Preparation of vegan bakery products

New Courses PG:

Course Code	Existing Course	New Course	Reason
25FNP4DP	**DSE Practical:** Food Quality Control	**DSE Practical:** Food Fermentation and Quality Control	The course was introduced as it aids in developing practical skills in food fermentation, microbial quality assessment, food safety, and quality assurance of fermented products.
25FNP4DQ	**DSE Practical:** Nutrition in Health	**DSE Practical:** Clinical Diet Counseling	The course was introduced as it enhances skills in nutritional assessment, therapeutic diet planning and evidence-based clinical dietary counseling.

After discussion the following resolution was passed.

Resolution:

Resolved to approve the above modification and adopt the revised syllabus for UG & PG students admitted for the academic year 2025-26.

Item 22.4: *To consider and approve the syllabi for VI semester for the students admitted in UG during the academic year 2024-2025.*

The chairman presented the detailed scheme and Regulation for the students admitted in UG from the academic year 2024-2025 and syllabus for the VI semester. The members deliberated in detail about the modification required.

Changes Made:

UG:

Course Code	Course	Reason
24FNU6CA	**Core:** Community Nutrition	Dr. Subbarao M. Gavaravarappu suggested to include the following concepts in • **Unit 1** - ICMR-NIN Dietary Reference Intakes (DRIs): definition of EAR, AI and

		UL. Nutrient Reference Values (NRVs) for labeling as it enables students to assess nutrient adequacy and ensure intake safety, interpret nutrition labels • **Unit III** - TINP and ICDS (Saksham Anganwadi and POSHAN 2.0). POSHAN Abhiyaan: convergence across ministries and levels, Poshan Tracker. Anaemia Mukt Bharat (AMB) and PM POSHAN were included to gain scientific understanding of maternal and child nutrition interventions, intersectoral policy convergence and digital nutrition surveillance
24FNU6CP	**Core Practical:** Community Nutrition	The practical introduces to develop skills in assessing community nutritional status, identifying nutrition-related problems, and planning appropriate nutrition interventions.
24FNU6DE	**DSE:** Diet Counseling	Mrs. C. Vandhana recommended to include the concepts of teaching aids for diet counselling as it equips the students with the skills to communicate nutritional information effectively and enhance patient understanding

New Courses UG:

Course Code	Existing Course	New Course	Reason
26FNU6SA	**SEC:** Indigenous Foods	**SEC:** Indian Knowledge System on Foods	The course was introduced as it enhances understanding of traditional Indian food systems and their scientific relevance to nutrition, functional foods and sustainable dietary practices.
24FNU6DA	**DSE:** Food Handling and Storage	**DSE:** Food Waste and By-Product Utilization	The course was introduced as it develops expertise in converting food waste and by-products into value-added foods, promoting nutritional enhancement, resource efficiency and sustainable food processing.

After discussion it is unanimously decided to adopt the following changes.

Resolution:

Resolved to approve the above modification and adopt the revised syllabus for UG students admitted for the academic year 2024-25.

Item 22.5: *To consider and approve the panel of examiners for conducting of End Semester*

Practical's examination, Central Valuation and Question Paper Setting.

The chairman presented the detailed the panel of examiners for conducting of End Semester Practical's examination, Central Valuation and Question Paper Setting. The members deliberated in detail about the modification required. After discussion it is unanimously decided to adopt the following changes.

Resolution:

Resolved to retain the existing panel of 2024-25 batch without any Modification for the students admitted from the academic year 2026-27.

Finally, the Chairman thanked all the members for their cooperation and contribution in enriching the syllabus with active participation in the meeting and sought the same spirit in the future also. The meeting was closed with formal vote of thanks proposed by Dr. D. Sridevi, Head & Chairman – Food Science and Nutrition.

Date: 26.10.2026

(Dr. D. SRIDEVI)

BoS Chairman/HoD
Department of Food Science & Nutrition
Dr. N. G. P. Arts and Science College
Coimbatore – 641 048

ATTENDANCE OF THE TWENTY SECOND BOARD OF STUDIES MEETING

Faculty: Biosciences **Board:** Food Science and Nutrition

Date : 26.10.2026

Time : 10.00 a.m.

Venue : B1 Block, Room No. 1511

The following members were present for the Board of Studies meeting

S. No	Name	Designation	Attendance
1.	Dr. D. Sridevi Professor and Head	Chairman	PRESENT
2.	Dr. Subbarao M. Gavaravarapu Scientist 'F & Head Dept. of Nutrition Information Communication & Health Education (Niche) ICMR - National Institute of Nutrition	University Nominee	PRESENT
3.	Dr. R. Radha Associate Professor Dept. of Food Service Management and Dietetics Avinashilingam University	Subject Expert	PRESENT
4.	Dr. Suresh D Sakhare Sr. Principal Scientist & Head Dept. of Flour Milling and Baking Technology CFTRI	Subject Expert	ABSENT
5.	Mrs. C. Vandhana Chief Dietitian Ramakrishna Hospitals	Industrial Expert	PRESENT
6.	Mrs. Shobana Priya N Dietitian Progen Weight Management	Alumni	PRESENT
7.	Ms. M. Poojasree III B.Sc. FSN	Student Representatives	PRESENT
	Ms. M. Nivetha II M.Sc. FN		PRESENT

8.	Part I (Language I) Dr. N. Kuppuchamy Associate Professor and Head Department of Tamil	Co-opted Member	PRESENT
9.	Part II (Language II) Dr. A. Hazel Verbina Professor and Head Department of English	Co-opted Member	PRESENT
10.	Allied - IDC- Applied Chemistry Dr. R. Ravikumar Associate Professor and Head (i/c) Department of Chemistry	Co-opted Member	PRESENT
11.	Allied – IDC - Biochemistry Dr. S. Gowri Professor and Head Department of Chemistry	Co-opted Member	PRESENT
12.	Dr. Priya A Associate Professor	Internal Member	PRESENT
13.	Ms. Anjali M Assistant Professor	Internal Member	PRESENT
14.	Dr. D. Jancy Rani Assistant Professor	Internal Member	PRESENT
15.	Ms. M. Rakeshwari Assistant Professor	Internal Member	PRESENT
16.	Ms. G. Priyaalini Assistant Professor	Internal Member	PRESENT
17.	Ms. Kanishka B Assistant Professor	Internal Member	PRESENT
18.	Mrs. G. Latha Assistant Professor	Internal Member	PRESENT
19.	Dr. D. Radha Priya Assistant Professor	Internal Member	PRESENT
20.	Mrs. Kaviya Sri N Assistant Professor	Internal Member	PRESENT

Date: 26.10.2026

(Dr. D. Sridevi)

BoS Chairman/HoD
Department of Food Science & Nutrition
Dr. N. G. P. Arts and Science College
Coimbatore – 641 048

Syllabus Revision
B.Sc. Food Science and Nutrition (New Course)

Faculty: Bio-Sciences **Board:** Food Science and Nutrition
Semester: II
Course Code/ Name: 26FNU2CA / PRINCIPLES OF NUTRITION

Unit	Contents
I	**Concept of Food and Nutrition and Energy** **Introduction to Nutrition -** Definition of nutrition, nutrients, and health, functions of food, classification and types of nutrients. **Energy -** Definition of Kilocalories, Joule, energy value of foods, determination (Bomb calorimeter), physiological fuel values, SDA of foods, basal metabolic rate- definition, factors influencing BMR. Recommended Dietary Allowances for energy.
II	**Carbohydrates and Fats** **Carbohydrates-**Classification, functions, sources, digestion and absorption, RDA, Types of Fibre –Definition, types, sources and functions of dietary fibre, clinical manifestations of deficiency/ excess of carbohydrate and fibre. **Fats and Lipids-**Classification, functions, food sources, RDA, essential and non-essential fatty acids, clinical manifestations of deficiency/ excess of the fats.
III	**Proteins, Amino acids and Water balance** Protein-Classification, functions, food sources, digestion and absorption, requirement, clinical manifestations of deficiency/ excess of the protein, evaluation of protein quality. Amino acids- Classification and functions. **Water and electrolyte Balance** – Distribution of water and electrolytes, Functions, Requirements, Sources, water balance- overhydration and dehydration.
IV	**Vitamins** **Fat Soluble Vitamins-** Classification, Functions, dietary sources, and clinical manifestations of deficiency/ excess of the Vitamin A, D, E, K. **Water Soluble Vitamins-**Classification, Functions, dietary sources, and clinical manifestations of deficiency/ excess of thiamin, riboflavin, niacin, pyridoxine, folate, vitamin B12 and vitamin C.
V	**Macro and Micro Minerals** **Macro minerals** – Classification, Functions, dietary sources, and clinical manifestations of deficiency/ excess of Calcium, potassium, Phosphorous, Chlorine, Sulfur, Magnesium. **Micro minerals** – Functions, dietary sources, and clinical manifestations of deficiency/ excess of iron, zinc, selenium, copper, manganese.

PERCENTAGE OF SYLLABUS REVISED: 100%

COURSE FOCUSES ON:

✓	Skill Development		Entrepreneurial Development
✓	Employability		Gender Sensitization
	Intellectual Property Rights (IPR)		Innovations
	Social awareness / Environment		Constitutional Rights/Human Values/Ethics

Syllabus Revision
B.Sc. Food Science and Nutrition

Faculty: Bio-Sciences
Board: Food Science and Nutrition
Semester: II
Course Code/ Name: 26FNU2CB / HUMAN PHYSIOLOGY

Unit	Contents
I	**Digestive and Excretory System** Digestive system: structure and functions of digestive system and villi, digestion of carbohydrates, proteins and fats, Associated organs of digestion - liver and gall bladder, An overview of spleen. Excretory system – Structure and functions of kidney and Nephron, Mechanism of urine formation, composition of urine, Micturition.
II	**Sense organs and Reproductive system** Sense Organs: Structure and functions of Eye, Ear and Skin Reproductive system - Anatomy of Male and Female reproductive organs. Phases of menstrual cycle.
III	**Cell and Blood** Cell: Structure and functions, Tissues: Structure and functions of epithelial, connective, muscular and nervous tissue. Blood: Constituents of Blood- RBC, WBC and platelet's structure and its functions, blood clotting, and blood groups.
IV	**Respiratory system and Circulatory System** Respiratory system: Structure and functions of Respiratory system, Mechanism Inhalation and Exhalation, Exchange and Transportation of gases in the body. Heart - Structure and functions, Heart blood flow, cardiac cycle, Blood pressure-factors affecting the blood pressure
V	**Endocrinology and Central Nervous System** Endocrine glands- Structure and Functions, of pituitary, thyroid, parathyroid, adrenal, pancreas and pineal gland. Central nervous system - Structure and Functions of Brain, neuron, spinal cord. Reflex action and Reflex arc.

PERCENTAGE OF SYLLABUS REVISED: 100%

COURSE FOCUSES ON:

✓	Skill Development		Entrepreneurial Development
✓	Employability		Gender Sensitization
	Intellectual Property Rights (IPR)		Innovations
	Social awareness / Environment		Constitutional Rights/Human Values/Ethics

Syllabus Revision
B.Sc. Food
Science and Nutrition (New Course)

Faculty: Bio-Sciences **Board:** Food Science and Nutrition
Semester: II
Course Code/ Name: 26FNU2CP / PHYSICO-CHEMICAL ANALYSIS OF FOOD

Exp. No.	Content
1.	Determination of Physical Dimensions of Grains-Length, Breath, Thickness and Sphericity
2.	Determination of bulk density, true density and porosity of grains
3.	Determination of water absorption and oil absorption capacity of flour.
4.	Determination of swelling capacity of cereals and pulses.
5.	Determination of Gliadin and Glutenin of wheat flour
6.	Isolation of starch from given food sample
7.	Determination of foaming capacity and foam stability of egg white
8.	Determination of pectin content in foods
9.	Determination of moisture content of food samples by simple oven-drying method.
10.	Determination of ash content of the food sample.
11.	Determination of pH of food samples using pH paper or pH meter
12.	Determination of titratable acidity of fruit juices.
	Experiments Under DBT
1.	Determination of Rancidity in Oil (Kries Test)
2.	Determination of TSS by refractometer

PERCENTAGE OF SYLLABUS REVISED: 100%

COURSE FOCUSES ON:

✓	Skill Development	✓	Entrepreneurial Development
✓	Employability		Gender Sensitization
	Intellectual Property Rights (IPR)	✓	Innovations
	Social awareness / Environment		Constitutional Rights/Human Values/Ethics

Syllabus Revision
M.Sc. Food and Nutrition (New Course)

Faculty: Bio-Sciences **Board:** Food Science and Nutrition
Semester: II
Course Code/ Name: 26FNP2CA / MACRONUTRIENTS

Unit	Contents
I	**Energy** **Energy -** Definition, Determination of energy requirement (Basal metabolism, physical activity and thermogenesis). Methods to calculate energy requirement, Factors influencing Total Energy Requirement. **Determination of Energy Value of Foods-** Direct and Indirect Calorimeter (principle, instrumentation and working). RDA, Sources, Energy utilization in cells (Energy release from carbohydrates, proteins and fats)- -Metabolism during starvation (Carbohydrate, protein, fat and mineral metabolism during starvation).
II	**Carbohydrates** **Carbohydrates-** Classification, digestion, absorption and utilization of carbohydrates, nutritional importance of carbohydrates, sources, Glycemic response to carbohydrates, energy balance. **Dietary Fiber-** Classification, Sources, requirement, characteristics of dietary and functional fibers, role of dietary fibre; resistant starch and fructooligosaccharides in various physiological disorders, Effect of over consumption of fiber).
III	**Protein and Amino acid** **Proteins–** Classification, functions, sources, Digestion, absorption and metabolism, Factors affecting protein utilization. Protein synthesis and turnover, protein deficiency malnutrition **Amino acids**-Classification, functions, Computation of protein requirements (Factorial method and balance study)- Evaluation of protein quality (PER, BV, DC, NPR, NPU and chemical score), complementary value of proteins
IV	**Lipids** Lipids- Classification, Functions, Composition of fat in food and body, digestion absorption, transport and storage, Transport of lipid in blood (lipoproteins). Essential Fatty Acids - Definition, types, sources and RDA, Functions, deficiency disorders of lipids and essential fatty acids, role of omega-3 and omega 6 fatty acids in physiological disorders.
V	**Water, Electrolytes Balance and Acid base Balance** Water- Distribution, Functions, requirement. Water balance - Regulation. Electrolyte Balance- electrolyte composition of body fluids and electrolyte balance, Disorders of Sodium and Potassium Balance. Acid Base Balance- The Control of Hydrogen Ion Concentration, Acid Base Buffers, Respiratory Regulation of pH, CO2 transport, Chloride Shift, Renal Regulation of pH.

PERCENTAGE OF SYLLABUS REVISED: 100%

COURSE FOCUSES ON:

✓	Skill Development		Entrepreneurial Development
✓	Employability		Gender Sensitization
	Intellectual Property Rights (IPR)		Innovations
	Social awareness / Environment		Constitutional Rights/Human Values/Ethics

Syllabus Revision
M.Sc. Food and Nutrition

Faculty: Bio-Sciences **Board:** Food Science and Nutrition
Semester: II
Course Code/ Name: 26FNP2CB / HUMAN ANATOMY AND PHYSIOLOGY

Unit	Contents
I	**Circulation** **Blood** – Component and structure of blood, blood vessel - structure and function. Hemopoiesis, Blood clotting factors and an overview of plasmapheresis. **Heart** - Structure of heart, cardiac cycle, cardiac output, cardiac markers. Blood pressure and factors affecting it.
II	**Immunology** Immunology- Types of immunity - Innate immunity and Acquired immunity, immune cells (T Cell and B Cell), Immune responses -Cell mediated and Humoral immunity, antigen - antibody reactions, Role of nutrition in immunity, and Inflammation
III	**Digestive and Endocrine system** **Digestive System**- Structure and function of digestive system, Regulation of gastric secretion, mechanical process and chemical process in digestion, associated organ for digestion (liver, gall bladder, bile and pancreas) in digestion, health. Role gut microbiota, Gut brain connection. **Endocrine glands-** Structure, Functions and hormones secreted by pituitary, thyroid, parathyroid, adrenal, Reproductive hormone (testes and ovaries).
IV	**Respiratory and Excretory system** **Respiratory System** – Structure, function and mechanism of respiration. Exchange and Transport of gases, Chloride Shift, Lung Volume and Capacity. **Excretory System**- Structure and function of Kidney, Nephron, process of urine formation, Normal and abnormal constituents of urine
V	**Muscular and Nervous system** **Muscular System-**Types of bone and bone tissue, changes in bone mass during ageing, outline on DEXA scan—in assessing bone mineral density and osteoporosis, Types-structure and functions of muscle. **Nervous System-**Structure and function of brain and spinal cord, neuron, Conduction of nerve impulse, Reflex action, Role of neurotransmitters; Outline on Electroencephalogram (EEG). **Circadian rhythm** - Circadian rhythm in human health.

PERCENTAGE OF SYLLABUS REVISED: 100%

COURSE FOCUSES ON:

✓	Skill Development		Entrepreneurial Development
✓	Employability		Gender Sensitization
	Intellectual Property Rights (IPR)		Innovations
	Social awareness / Environment		Constitutional Rights/Human Values/Ethics

NAAC COIMBATORE INDIA

Syllabus Revision
M.Sc. Food and Nutrition (New Course)

Faculty: Bio-Sciences
Board: Food Science and Nutrition
Semester: II
Course Code/ Name: 26FNP2CC / THERAPEUTIC NUTRITION – LIFESTYLE DISORDERS

Unit	Contents
I	**Introduction to Therapeutic Nutrition and Energy Imbalance** Definition and importance of therapeutic nutrition, Routine hospital diets, progressive modification of normal diets during fever, typhoid, tuberculosis and dengue. Energy balance; obesity and underweight: classification, causes, symptoms, BMI and waist circumference, fat cell theory, dietary management, introduction to metabolic syndrome.
II	**Diet for Gastrointestinal Disorders** Introduction, types, causes, symptoms and risk factors, relevant biochemical parameters, dietary management for dysphagia, esophagitis, hiatal hernia, gastro-esophageal reflux disease (GERD), gastritis, peptic ulcer, constipation, diarrhea, irritable bowel syndrome (IBS), inflammatory bowel disease, lactose intolerance and gluten intolerance.
III	**Dietary Management of Diabetes Mellitus** Introduction, types, causes, symptoms and risk factors of diabetes mellitus, basic diagnostic tests including oral glucose tolerance test (OGTT) and HbA1c, insulin sensitivity, acute and chronic complications, glycemic index and glycemic load, carbohydrate counting; food exchange list, dietary management.
IV	**Diet for Cardiovascular Disorders** Introduction, types, causes, symptoms and risk factors, dietary management of hypertension, hyperlipidemia and atherosclerosis, stroke, hypertriglyceridemia, relationship between diet and cardiovascular risk, principles of fat, sodium, potassium and fibre modification, heart-healthy food choices.
V	**Diet for Hepatobiliary and Pancreatic Disorders** Introduction, types, causes, symptoms and risk factors, relevant biochemical parameters, dietary management, including protein and fat modification for hepatitis, cirrhosis, hepatic coma, jaundice and fatty liver disease, biliary disorders including cholangitis, cholecystitis, cholelithiasis, choledocholithiasis and pancreatic disorders including pancreatitis.

PERCENTAGE OF SYLLABUS REVISED: 100%

COURSE FOCUSES ON:

✓	Skill Development	✓	Entrepreneurial Development
✓	Employability		Gender Sensitization
	Intellectual Property Rights (IPR)		Innovations
	Social awareness / Environment		Constitutional Rights/Human Values/Ethics

Syllabus Revision
M.Sc. Food Science and Nutrition (New Course)

Faculty: Bio-Sciences **Board:** Food Science and Nutrition
Semester: II
Course Code/ Name: 26FNP2CQ/ THERAPEUTIC NUTRITION – LIFESTYLE DISORDERS

Exp. No.	Contents
1	Clinical case study evaluation and routine biochemical laboratory markers.
2	Assessing requirements and planning diet for fever and infections – typhoid, tuberculosis and dengue.
3	Assessing requirements and planning diet for obesity with hypertension.
4	Assessing requirements and planning diet for underweight and metabolic syndrome.
5	Assessing requirements and planning diet for upper gastrointestinal disorders – gastritis and peptic ulcer with hernia.
6	Assessing requirements and planning diet for lower gastrointestinal disorders – IBS (FODMAP Diet).
7	Assessing requirements and planning diet for Type I Diabetes Mellitus.
8	Assessing requirements and planning diet for Type II Diabetes Mellitus with stroke using diabetic food exchange list.
9	Assessing requirements and planning a DASH diet for hypertension.
10	Assessing requirements and planning diet for atherosclerosis and congestive heart failure.
11	Assessing requirements and planning diet for liver disorders – hepatitis and metabolic dysfunction associated steatotic liver disease (MASLD).
12	Assessing requirements and planning diet for biliary and pancreatic disorders – cholecystitis, pancreatitis and exocrine pancreatic insufficiency (EPI).

PERCENTAGE OF SYLLABUS REVISED: 100%

COURSE FOCUSES ON:

✓	Skill Development	✓	Entrepreneurial Development
✓	Employability		Gender Sensitization
	Intellectual Property Rights (IPR)		Innovations
	Social awareness / Environment		Constitutional Rights/Human Values/Ethics

Syllabus Revision – Practical Course
M.Sc. Food and Nutrition

Faculty: Bio-Sciences **Board:** Food Science and Nutrition
Semester: II Semester
Course Code/ Name: 26FNP2CQ / FOOD ANALYTICAL TECHNIQUES

Exp. No.	Existing	Changes
1.	Determination of Amylose	
2.	~~Estimation of amino acid by Sorenson's Formaldehyde Titration method~~	Determination of antioxidant activity by DPPH method
3.	Determination of Iodine number and peroxide value of oil	
4.	Determination of Saponification Number and Acid Number	
5.	Different Extraction methods in plant sample	
6.	Estimation of total phenol content present in fresh fruits	
7.	Determination of Flavonoids content	
8.	Estimation of curcumin in turmeric	
9.	Estimation of capsaicin in calorimetric method	
10.	Determination of Tannin content	
11.	Determination of trypsin inhibitor in pulses	
12.	~~Determination of phytic acid in millets~~	Estimation of chlorophyll in plant sample

PERCENTAGE OF SYLLABUS REVISED: 20%

COURSE FOCUSES ON:

✓	Skill Development	✓	Entrepreneurial Development
✓	Employability		Gender Sensitization
	Intellectual Property Rights (IPR)	✓	Innovations
✓	Social awareness / Environment		Constitutional Rights/Human Values/Ethics

Syllabus Revision – Practical Course
M.Sc. Food and Nutrition (New Course)

Faculty: Bio-Sciences **Board:** Food Science and Nutrition
Semester: II
Course Code/Name: 26FNP2DP/FOOD FERMENTATION

Exp. No.	Content
1.	Demonstration of fermentation principles using yeast and sugar
2.	Preparation of cheese, yogurt and shrikhand
3.	Preparation of dhokla
4.	Preparation of breads
5.	Preparation of sauerkraut and kimchi
6.	Preparation of fermented pickled cucumber
7.	Preparation of a rice-water-based fermented probiotic beverage
8.	Preparation of kombucha
9.	Preparation of kvass – fruit, beet
10.	Preparation of vinegar – honey, coconut, chilly
11.	Preparation of wine – grape, pineapple
12.	Preparation of fermented sausage

PERCENTAGE OF SYLLABUS REVISED: 100 %

COURSE FOCUSES ON:

✓	Skill Development	✓	Entrepreneurial Development
✓	Employability		Gender Sensitization
	Intellectual Property Rights (IPR)	✓	Innovations
	Social awareness / Environment		Constitutional Rights/Human Values/Ethics

Syllabus Revision
B.Sc. Food Science and Nutrition (New Course)

Faculty: Bio-Sciences **Board:** Food Science and Nutrition
Semester: IV
Course Code/ Name: 25FNU4CA/ DIETETICS

Unit	Contents
I	**Fundamentals of Diet Therapy and Special Feeding Methods** Definition, objectives and principles of diet therapy. Role and responsibilities of dietitians in hospital and community settings. Professional ethics and National Commission for Allied and Healthcare Professions. Routine hospital diets, Special Feeding Methods: Introduction to enteral and parenteral nutrition
II	**Diet Therapy for Weight Management and Febrile Conditions** Obesity- Aetiology, theories, grades, complications, principles of diet and dietary management. Underweight- Classification, aetiology, principles of diet and dietary guidelines. Diet in Febrile Conditions: Development of fever, Introduction, causes, symptoms, principles of diet, and dietary management for typhoid, influenza, malaria, and tuberculosis
III	**Diet Therapy for Gastrointestinal Disorders** Gastro oesophageal reflux disease (GERD), peptic ulcer, dumping syndrome, constipation, diarrhoea, malabsorption (steatorrhoea and celiac disease), inflammatory bowel diseases and irritable bowel syndrome - causes, symptoms, principles of diet and dietary management
IV	**Diet Therapy for Diabetes Mellitus** Definition, types, causes, symptoms, diagnosis, acute and chronic complications, food exchange lists. Glycemic index, Glycemic load, factors influencing the glycemic index, principles of diet, dietary management and guidelines
V	**Diet Therapy for Inborn Errors of Metabolism and Critical care conditions** Phenylketonuria, galactosaemia, fructosuria and fructose-1,6, biphosphatase deficiency: causes, symptoms and dietary management. Critical care conditions: Injury, Burns and Trauma- Types and classification of injuries and burns. Metabolic and nutritional changes. Increased nutritional requirements, nutritional support and dietary management during recovery

PERCENTAGE OF SYLLABUS REVISED: 100%

COURSE FOCUSES ON:

✓	Skill Development	✓	Entrepreneurial Development
✓	Employability		Gender Sensitization
	Intellectual Property Rights (IPR)		Innovations
	Social awareness / Environment		Constitutional Rights/Human Values/Ethics

Syllabus Revision
B.Sc. Food Science and Nutrition

Faculty: Bio-Sciences **Board:** Food Science and Nutrition
Semester: VI
Course Code / Name: 25FNU4CB / PERSPECTIVE PSYCHOLOGY

Unit	Existing	Changes
I	**Introduction to Psychology** Psychology as a Science, Methods in Psychology Experimental Methods, Systematic Observation, Clinical method. Disciplines of Psychology. Early Schools of Psychology- Structuralism, Gestalt Psychology, Functionalism, Behaviorism, Psychoanalysis. Modern Perspectives - Behavioral, Biological, Cognitive, Social, Developmental, Humanistic, Psychoanalytic.	-
II	**Attitudes** Attitude -Meaning, Types of Attitudes, How Attitude Develop, Importance of Attitudes, Improving Attitude, Developing Positive Attitudes, attitude and behavior. Communication Channels - Communication Barriers, Communication Openers, Communication Styles.	-
III	**Self-Motivation** Self-Motivation - Meaning, Importance of Self-Motivation, Activities for Self-Motivation. Critical Thinking - Definition - Case study for Critical Thinking. Self-Management -Meaning, Efficient Work Habits, Stress Management. Self Esteem- Meaning, Knowing Oneself and Accepting Oneself. Self Enhancement- Meaning, Plan to Improve-Actively Working to Improve Oneself.	-
IV	**Personality** Definition, Nature of Personality, Characteristics of Personality, elements of Personality, Types of Personality, methods of measuring personality, Importance of Personality, Techniques to Improve Personality. Basic Theories of Personality-Albert Bandura Theory, Sigmund Freud's Psychoanalytic Theory, Charles Horton Cooley Laws and George Herbert Mead Theory.	-
V	**Health Psychology** Health Psychology - Definition, Mind-Body Relationship, Biopsychosocial Model, Health Behavior Meaning, Barriers to Modify Poor Health Behaviors. Cognitive Behavioral Therapy (CBT) in Nutrition. Transtheoretical Model of Behavior Change, Functions of Health Psychologists, Application of Health Psychology in Nutritional Counseling	Introduction to eating behavior-Biological, sensory influences, Psychological, Social, cultural and environmental influences, eating patterns and body image, eating disorders - anorexia nervosa, bulimia nervosa, binge-eating disorder

PERCENTAGE OF SYLLABUS REVISED:13%

COURSE FOCUSES ON:

✓	Skill Development		Entrepreneurial Development
✓	Employability		Gender Sensitization
	Intellectual Property Rights (IPR)		Innovations
	Social awareness / Environment		Constitutional Rights/Human Values/Ethics

Syllabus Revision
B.Sc. Food Science and Nutrition (New Course)

Faculty: Bio-Sciences **Board:** Food Science and Nutrition
Semester: IV
Course Code/ Name: 25FNU4CP/ DIETETICS

Exp. No.	Contents
1	**Routine Hospital Diets–I** **Experiment:** Planning and calculation of the nutritive value of clear liquid, full fluid and soft diets using food exchange lists.
2	**Routine Hospital Diets–II** **Experiment:** Planning and calculation of the nutritive value of bland, pureed and regular diets using food exchange lists.
3	**Underweight** **Experiment:** Assessment of dietary needs, planning of a diet for underweight and calculation of energy and nutrients.
4	**Overweight and Obesity** **Experiment:** Planning of a diet for overweight and obesity and calculation of energy and nutrients.
5	**Febrile Conditions** **Experiment:** Planning and calculation of diet for typhoid and tuberculosis.
6	**Gastrointestinal disorders –I** **Experiment:** Planning and calculation of diet for diarrhea, constipation, and IBS
7	**Gastrointestinal disorders–II** **Experiment:** Planning and calculation of diet for GERD and peptic ulcer.
8	**Diabetes Mellitus** **Experiment:** Planning and calculation of diet for type 1 and type 2 using GI, GL and carbohydrate counting
9	**Diabetes Mellitus** **Experiment:** Planning and calculation of diet for gestational diabetes mellitus using GI, GL and carbohydrate counting.
10	**Inborn Errors of Metabolism** **Experiment:** Planning and calculation of specialized diets for phenylketonuria and galactosemic
11	**Injury and trauma** **Experiment:** Assessment of nutritional requirements and planning and calculation of diets for patients with Injury and trauma
12	**Burns** **Experiment:** Assessment of nutritional requirements and planning and calculation of diets for patients with burns.
	EXPERIMENTS UNDER DBT
13	**Malabsorption** **Experiment:** Planning and calculation of a gluten-free diet for celiac disease (malabsorption) using millets, rice and other gluten-free substitutes
14	**Tube Feeding** **Experiment:** Planning and calculation of a homemade enteral (tube feeding) formula using locally available foods

PERCENTAGE OF SYLLABUS REVISED: 100%

COURSE FOCUSES ON:

✓	Skill Development	✓	Entrepreneurial Development
✓	Employability		Gender Sensitization
	Intellectual Property Rights (IPR)	✓	Innovations
	Social awareness / Environment		Constitutional Rights/Human Values/Ethics

Syllabus Revision
B.Sc. Food Science and Nutrition (New Course)

Faculty: Bio-Sciences **Board:** Food Science and Nutrition
Semester: IV
Course Code/ Name: 25FNU4SP / BAKERY AND CONFECTIONERY

S.No.	Contents
1	Preparation of biscuits and cookies
2	Preparation of different types of cakes: sponge cake and angel cake
3	Preparation of different types of cakes: chiffon cake and genoise cake
4	Preparation of muffins and cupcakes
5	Preparation of bread and rusk
6	Preparation of doughnut and pizza
7	Preparation of chocolates
8	Preparation of candies and toffee
9	Preparation of hot and cold puddings
10	Preparation of marshmallows and marzipan
11	Preparation of jelly and jujubes
12	Preparation of dessert toppings and sauces for bakery and dessert applications
	Experiments Under DBT
1	Development of value-added bakery and confectionery products
2	Preparation of vegan bakery products

PERCENTAGE OF SYLLABUS REVISED: 100%

COURSE FOCUSES ON:

✓	Skill Development	✓	Entrepreneurial Development
✓	Employability		Gender Sensitization
	Intellectual Property Rights (IPR)	✓	Innovations
	Social awareness / Environment		Constitutional Rights/Human Values/Ethics

Syllabus Revision
M.Sc. Food and Nutrition (New Course)

Faculty: Bio-Sciences **Board:** Food Science and Nutrition
Semester: IV
Course Code/ Name: 25FNP4DP / FOOD FERMENTATION AND QUALITY CONTROL

Exp. No.	Content
1.	Principles of fermentation and its role in food preservation (Types of fermentation – lactic acid, alcoholic, acetic acid and mold, role of acid, alcohol and microbial antagonism in preservation
2.	Implementation of hygienic protocols during the preparation of fermented foods
3.	Preparation of fermented vegetable pickles and quality analysis of lactic acid fermentation products – Sauerkraut, Kimchi (Fermentation time, pH, salt concentration, TSS, weight loss, sensory evaluation
4.	Preparation of fruit wine and quality analysis of yeast fermentation product (Fermentation time, TSS, pH, titratable acidity, alcohol content and sensory evaluation)
5.	Preparation of Tempeh and quality evaluation of mold fermented food (Fermentation time, pH, moisture, texture and sensory evaluation)
6.	Preparation of Kombucha and evaluation of physicochemical changes during acetic acid fermentation (Record fermentation time, pH, TSS, titratable acidity, sensory score)
7.	Determination of fermentation kinetics in Idli batter (Measure pH/acidity at 0, 4, 8, 12 and 24 hours; plot fermentation time vs pH/acidity)
8.	Determine the effect of fermentation time on anti-nutritional content (phytate and tannin) of ragi ambali (Fermentation time, qualitative test)
9.	Shelf-life analysis of formulated products under controlled and open environments (Refrigeration and ambient (covered, open) storage – visual examination, pH, titratable acidity, weight, sensory evaluation/microbiological testing)
10.	Simulation of Clean-In-Place (CIP) procedures and assessment of cleaning efficiency
11.	Preparation of documentation for GMP, TQM, and ISO quality systems
12.	Development and documentation of a HACCP plan for a selected food product

PERCENTAGE OF SYLLABUS REVISED: 100%

COURSE FOCUSES ON:

✓	Skill Development	✓	Entrepreneurial Development
✓	Employability		Gender Sensitization
	Intellectual Property Rights (IPR)	✓	Innovations
✓	Social awareness / Environment		Constitutional Rights/Human Values/Ethics

Syllabus Revision – Practical Course (New Course)
M.Sc. Food and Nutrition

Faculty: Bio-Sciences **Board:** Food and Nutrition
Semester: IV
Course Code/Name: 25FNP4DQ / CLINICAL DIET COUNSELING

Exp. No.	Existing
1.	Anthropometric assessment of Adults and Elderly. Body composition measurements. WHO Child Growth Standard Analysis and interpretation using WHO Anthro and Anthroplus software.
2.	Biochemical assessment – tabulation, interpretation and report writing of biochemical parameters.
3.	Clinical nutritional screening and assessment using MUST Tool and Subjective Global Assessment (SGA).
4.	Medical History and Physical Examination. Assessment of Energy Expenditure and Energy Requirements for disease conditions.
5.	Dietary assessment using the 24-hour dietary recall for three days and assessment of food consumption patterns.
6.	Diet planning using the concept of portions and portion control and My Plate for the day based on ICMR - NIN (2024) recommendations for different life stages.
7.	Demonstration of diet counselling using a clinical case - Stage I: Problem exploration and clarification.
8.	Demonstration of diet counselling using a clinical case - Stage II: Developing new perspectives and setting goals.
9.	Demonstration of diet counselling using a clinical case - Stage III: Implementation, follow-up, and evaluation.
10.	Preparation of nutrition education materials, such as e-posters and e-pamphlets, for selected clinical cases.
11.	Demonstration of nutrition education and counselling for diabetes during the initial and follow-up visits.
12.	Application of online tools, including Ntuitive Calculator and Diet Cal, for dietary assessment and diet planning.

PERCENTAGE OF SYLLABUS REVISED: 100 %

COURSE FOCUSES ON:

✓	Skill Development	✓	Entrepreneurial Development
✓	Employability		Gender Sensitization
	Intellectual Property Rights (IPR)	✓	Innovations
✓	Social awareness / Environment		Constitutional Rights/Human Values/Ethics

Syllabus Revision
B.Sc. Food Science and Nutrition (New Course)

Faculty: Bio-Sciences **Board:** Food Science and Nutrition
Semester: VI
Course Code/ Name: 24FNU6CA / COMMUNITY NUTRITION

Unit	Contents
I	**Introduction to Community Nutrition and Malnutrition** Community nutrition: definition, scope, objectives. Roles and responsibilities of community nutritionists. Classification of malnutrition: chronic under-nutrition (stunting), Protein-Energy Malnutrition (PEM), acute malnutrition (MAM and SAM). Micronutrient malnutrition, double and triple burden of malnutrition. ICMR-NIN Dietary Reference Intakes (DRIs): definition of EAR, AI, and UL. Nutrient Reference Values (NRVs) for labeling.
II	**Nutritional Status and its Assessment** Concept of nutritional status of individuals and populations; determinants: biological, sociocultural, environmental and economic. Nutrition indicators and non-nutritional indicators (vital statistics, socioeconomic). Assessment methods: anthropometry (weight, height, BMI, MUAC, growth charts, z-scores), clinical signs, biochemical indicators, dietary assessment.
III	**Health Systems, Food Security, Intervention Approaches and Programmes** Health care delivery system in India - its role in delivering nutrition services. Food and nutrition security – current challenges in India. Approaches for improving nutritional status and health: (a) short-term (supplementation program, treatment of malnutrition), (b) medium-term (fortification, nutrition education, feeding programmes) and (c) long-term (dietary diversification). National programmes: TINP and ICDS (Saksham Anganwadi and POSHAN 2.0). POSHAN Abhiyaan: convergence across ministries and levels, Poshan Tracker. Anemia Mukt Bharat (AMB) and PM POSHAN.
IV	**Nutrition as a Developmental Priority and Life-Cycle Nutrition** Demographic transition. Nutrition and the SDGs – An overview. Preconception nutrition - importance. First 1000 days (optimal infant and young child feeding). WHO targets for maternal, infant and young child nutrition – an overview. Foetal origins of non-communicable diseases and the Developmental Origins of Health and Disease (DOHaD). Ageing and nutrition in India: LASI – An overview.
V	**Nutritional Surveillance and Programme Planning** Nutritional surveillance: definition, purpose and types for different situations. Data sources in India (origin, objectives, importance and their use in community nutrition): NFHS, CNNS, MICS, HCES. Long-term nutrition monitoring, evaluation of programme impact, timely warning and intervention systems. Programme planning cycle: needs assessment, designing a nutrition education programme, implementation, monitoring and evaluation.

PERCENTAGE OF SYLLABUS REVISED: 100%

COURSE FOCUSES ON:

✓	Skill Development		Entrepreneurial Development
✓	Employability		Gender Sensitization
	Intellectual Property Rights (IPR)		Innovations
✓	Social awareness / Environment		Constitutional Rights/Human Values/Ethics

Syllabus Revision
B.Sc. Food Science and Nutrition (New Course)

Faculty: Bio-Sciences **Board:** Food Science and Nutrition
Semester: VI
Course Code/ Name: 24FNU6DA / FOOD WASTE AND BY-PRODUCT UTILIZATION

Unit	Contents
I	**Food industry waste management** Food waste: classification and properties, origin of food waste, Food loss vs food waste, disposal and recycling in the context of change in the agricultural industry and emerging nutritional trends, Possible mitigation measures for food processing wastes. Impact of waste disposal on environment and human health
II	**Cereals, pulses and sugar processing by-products** Rice Processing Industries - Rice bran - Protein extraction method, rice hull and rice bran fiber. Soyabean - Major Soybean by-products, tofu whey and its uses, source of various enzymes and applications of important soybean products. Sugar Processing Industries By-Products flavourings and aromas, agglomerated product production from bagasse.
III	**Fruit, vegetable waste Valorization and dietary fiber** Fruit - Phenolic compounds as functional foods, fruit by-products sources and value-added products from fruit by-products. Vegetable - Valorization of vegetable wastes, reasons and overall prevention of wastes, loss quantification of vegetables after harvest. Dietary fiber from cereals, legumes, fruits and vegetables, utilization of dietary fiber in different food industries.
IV	**Dairy by-products and pre - biotics** Dairy-By-products from the dairy processing industries and advances in milk fractionation for value addition - Milk proteins classification, milk fats, milk carbohydrates and milk oligosaccharides. Prebiotics from food processing by-products, oligosaccharides and polysaccharides from food processing and agricultural by-products.
V	**Meat, poultry and seafood** Meat By-Products and wastes generated during meat, beef and pork processing waste collagen, gelatin. Poultry Proteins and peptides derived from chicken processing by- products and waste, Valorization of egg waste. Seafood processing By-Products, bio medicals fish protein hydrolysate, peptides.

PERCENTAGE OF SYLLABUS REVISED: 100%

COURSE FOCUSES ON:

✓	Skill Development	✓	Entrepreneurial Development
✓	Employability		Gender Sensitization
	Intellectual Property Rights (IPR)	✓	Innovations
	Social awareness / Environment		Constitutional Rights/Human Values/Ethics

Syllabus Revision

B.Sc. Food Science and Nutrition

Faculty: Bio-Sciences **Board:** Food Science and Nutrition

Semester: VI

Course Code/ Name: 24FNU6DE / DIET COUNSELLING

Unit	Contents
I	**Introduction to Diet Counseling** Meaning, objectives and types of diet counselling. Qualities and responsibilities of a diet counsellor. Verbal and non-verbal communication, active listening, empathy and building rapport with clients.
II	**Counselling Skills and Behavior Change** Stages of behavior change and basic motivational interviewing skills. Setting SMART dietary goals and encouraging healthy habits. Considering culture, food preferences, family support and economic conditions during counselling.
III	**Nutrition Assessment and Documentation** Collecting dietary, health, lifestyle and anthropometric information. Identifying nutrition problems and preparing simple nutrition goals. Introduction to PES statements, ADIME notes, follow-up and evaluation through case studies.
IV	**Counselling through the Life Cycle and Diseases** Diet counselling for pregnant and lactating women, children, adolescents, adults and older adults. Basic counselling for obesity, diabetes, hypertension, heart disease, kidney disorders and gastrointestinal conditions. Healthy eating and lifestyle guidance for disease prevention.
V	**Teaching Aids and Evaluation** Use of charts, posters, food models, plate models, leaflets and digital tools in nutrition education. Individual and group counselling, meal planning and portion-size demonstration. Assessing counselling effectiveness through feedback and follow-up.

PERCENTAGE OF SYLLABUS REVISED: 100%

COURSE FOCUSES ON:

✓	Skill Development		Entrepreneurial Development
✓	Employability		Gender Sensitization
	Intellectual Property Rights (IPR)		Innovations
	Social awareness / Environment		Constitutional Rights/Human Values/Ethics

Syllabus Revision
B.Sc. Food Science and Nutrition (New Course)

Faculty: Bio-Sciences **Board:** Food Science and Nutrition
Semester: VI
Course Code/ Name: 24FNU6CP/ COMMUNITY NUTRITION

No.	Contents
1	ICDS (Anganwadi) and Mid-Day Meal programme – visit, observation and situational report.
2	Visit to Urban PHC, Rural Health Centre and Sub-Centre – services and nutrition records.
3	Local event calendar for the past three years; surveillance data (NFHS, DLHS) for pregnant women, lactating women, children under 5 years and adults.
4	Socio-economic status (Kuppuswamy scale – LIG, MIG, HIG) and morbidity profile of the last 15 days with ICD-11 (10 subjects/student).
5	Anthropometry – infants and preschoolers: length, height, weight, head, chest and mid-arm circumference; adults: height, weight, waist, hip, waist-hip ratio and BMI (WHO and Asia-Pacific cut-offs).
6	Comparison with norms – weight-for-age, height-for-age, weight-for-height and BMI; plotting and interpretation of growth charts of infants and preschoolers; WHO Anthro and AnthroPlus.
7	Clinical signs of common nutritional disorders – anaemia, B-complex deficiencies, vitamin A deficiency, IDD, SAM/MAM, vitamin C and zinc.
8	Food and nutrient intake – 24-hour recall, food diary and food frequency questionnaire (10 subjects/student).
9	Dietary data analysis – comparison with RDA (ICMR-NIN, 2024), consumption units and Dietary Diversity Score.
10	Development of a nutrition education tool to assess Knowledge, Attitude and Practices (KAP).
11	Extension methods in the community – Nutritional Assessment, interpersonal (home visits, interviews), mass media (charts, posters/e-posters, models, videos, reels, magazines, role play, exhibitions), traditional media (folk music, dance, puppetry); development of 5-10 messages for rural mothers using ICT tools.
12	Group mini project – survey of one major nutritional problem in a vulnerable group in a community setting and suggested strategies to tackle it.
	Experiments Under DBT
1	Demonstration of a low-cost recipe for pregnant and lactating mothers& ICDS workers
2	Planning of a skill development programme for a group of household women – kitchen garden / nutrition garden / Micro green cultivation

PERCENTAGE OF SYLLABUS REVISED: 100%

COURSE FOCUSES ON:

✓	Skill Development	✓	Entrepreneurial Development
✓	Employability		Gender Sensitization
	Intellectual Property Rights (IPR)	✓	Innovations
	Social awareness / Environment		Constitutional Rights/Human Values/Ethics