

Lesson plan of 2025-2026

(3rd SEMESTER FOOD TECHNOLOGY)

DISCIPLINE:FT	SEMESTER:3 rd	NAME OF THE TEACHING FACULTY: PTGF
SUBJECT:PHYSICAL CHEMISTRY	NO. OF DAYS/ PER WEEK CLASS ALLOTTED:3	SEMESTER FROM DATE:14/07/2025 to 15/11/2025 NO.OF WEEKS:15
WEEK	CLASS DAY	THEORY/PRACTICAL TOPICS
1 ST	1 ST 2 ND 3 RD 4 TH	Intermolecular forces in liquid. Vapour pressure and its effect on temperature and boiling point. Surface tension
2 ND	1 ST 2 ND 3 RD 4 TH	Viscosity and measurement of viscosity by Ostwald method. Refractive index, specific refraction, determination of refractive index
3 RD	1 ST 2 ND 3 RD 4 TH	Optical activity and measurement of optical activity. Solve simple problems based on physical properties of liquid.
4 TH	1 ST 2 ND 3 RD 4 TH	Solution and Types of solutions. Ways of expressing concentration. Solve numerical related to concentration.
5 TH	1 ST 2 ND 3 RD 4 TH	The solution of gases in gases. Henry's law and solve numerical related to it. Solutions of liquid in liquids. Solubility of partially miscible liquids
6 TH	1 ST 2 ND 3 RD 4 TH	Solubility of solid in liquid and equilibrium concept, solubility curve. Raoult's Law, ideal solution and explain the lowering of vapour pressure and its measurement. Concept of elevation of boiling point and depression of freezing point
7 TH	1 ST 2 ND 3 RD 4 TH	Osmosis and osmotic pressure with example. Function of semi permeable membrane. Osmotic pressure and isotonic solutions
8 TH	1 ST 2 ND 3 RD 4 TH	The theories of Osmosis. Reverse osmosis. The laws of osmotic pressure.

9 TH	1 ST 2 ND 3 RD 4 TH	Solve the Simple Problems. Relation between Vapour Pressure & Osmotic Pressure.
10 TH	1 ST 2 ND 3 RD 4 TH	Nernst's distribution law. Equilibrium constant from distribution coefficient. Extraction with a solvent, multiple extraction
11 TH	1 ST 2 ND 3 RD 4 TH	Concept of liquid-liquid chromatography. Applications of distribution law. Numerical based on distribution law.
12 TH	1 ST 2 ND 3 RD 4 TH	Colloids & types of colloidal systems. Characteristics of sols. The application of colloids.
13 TH	1 ST 2 ND 3 RD 4 TH	Methods of preparation of sols & purification of sols. The optical, kinetic and electrical properties of sols. Emulsion and types of emulsion.
14 TH	1 ST 2 ND 3 RD 4 TH	The role of Emulsifier. The preparation of Emulsions and their properties. Gel, type of gel, properties and application.
15 TH	1 ST 2 ND 3 RD 4 TH	Adsorption Compare absorption and adsorption Types of adsorption. Physical adsorption and Chemisorption. The application of adsorption The Ion- exchange adsorption and discuss its application.

Signature of Faculty

Anima Mishra
11-7-25
Signature of HOD

Academic Co-ordinator

**(3rd SEMESTER FOOD
TECHNOLOGY)**

DISCIPLINE:FT	SEMESTER:3rd	NAME OF THE TEACHING FACULTY: MS. ANIMA MISHRA
SUBJECT:FRUITS & VEGETABLE TECHNOLOGY	NO. OF DAYS/ PER WEEK CLASS ALLOTTED:4	SEMESTER FROM DATE:14/07/2025 to 15/11/2025 NO. OF WEEKS:15
WEEK	CLASS DAY	THEORY/PRACTICAL TOPICS
1 ST	1 ST 2 ND 3 RD 4 TH	Classification & Nutritive value of fruits & vegetables
2 ND	1 ST 2 ND 3 RD 4 TH	Transpiration, respiration, ripening and their effects Harvesting & processing of fruits & vegetables
3 RD	1 ST 2 ND 3 RD 4 TH	Microbiology of fresh fruits and vegetables
4 TH	1 ST 2 ND 3 RD 4 TH	Spoilage and its control
5 TH	1 ST 2 ND 3 RD 4 TH	Principles and methods of storage-cold storage, atmosphere storage, gas storage, hypobaric storage, pre-cooling, radiation, waving etc
6 TH	1 ST 2 ND 3 RD 4 TH	Processing of vegetables: Potato chips, French fries, frozen patties, sweet potato chips, flakes, Tomato -juice, puree, sauce, ketchup, chutney. Mushroom-freeze drying, pickles, dehydration
7 TH	1 ST 2 ND 3 RD 4 TH	Processing of fruits: Jam, Jelly, squash, marmalade, pickles, vinegar
8 TH	1 ST 2 ND 3 RD 4 TH	Study the effect of processing on the nutritive value of fruits and vegetables
9 TH	1 ST 2 ND 3 RD 4 TH	Preserve fruits and vegetables by heat, chemicals, sugar, salt, fermentation, drying
10 TH	1 ST 2 ND 3 RD 4 TH	Preserve fruits and vegetables by heat, chemicals, sugar, salt, fermentation, drying
11 TH	1 ST 2 ND 3 RD 4 TH	Definition of Fermented foods

12 TH	1 ST 2 ND 3 RD 4 TH	Pickling and curing of foods
13 TH	1 ST 2 ND 3 RD 4 TH	Classification Processing of spice and condiment products
14 TH	1 ST 2 ND 3 RD 4 TH	Adulteration of spices.
15 TH	1 ST 2 ND 3 RD 4 TH	Processing tea, coffee, and cocoa and their products Processing of fruit juices.

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**(3rd SEMESTER FOOD
TECHNOLOGY)**

DISCIPLINE:FT	SEMESTER:3rd	NAME OF THE TEACHING FACULTY: MS. ANIMA MISHRA
SUBJECT:FOOD & NUTRITION	NO. OF DAYS/ PER WEEK CLASS ALLOTTED:4	SEMESTER FROM DATE:14/07/2025 to 15/11/2025 NO. OF WEEKS:15
WEEK	CLASS DAY	THEORY/PRACTICAL TOPICS
1 ST	1 ST 2 ND 3 RD 4 TH	Introduction to food and nutrients Functions of foods. Basic food groups.
2 ND	1 ST 2 ND 3 RD 4 TH	Energy metabolism Specific Dynamic action. Nutritive value of foods
3 RD	1 ST 2 ND 3 RD 4 TH	Calorific value of foods. Recommended dietary allowances for Indians.
4 TH	1 ST 2 ND 3 RD 4 TH	Developing good eating habits. Food misinformation.
5 TH	1 ST 2 ND 3 RD 4 TH	Menu planning for the family.
6 TH	1 ST 2 ND 3 RD 4 TH	Menu planning for hospital settings.
7 TH	1 ST 2 ND 3 RD 4 TH	Balanced diet. Diets during a normal life cycle.
8 TH	1 ST 2 ND 3 RD 4 TH	Nutrition during pregnancy. Nutrition during lactation.
9 TH	1 ST 2 ND 3 RD 4 TH	Nutrition from infancy to adolescence. Ways of measuring growth.
10 TH	1 ST 2 ND 3 RD 4 TH	Nutritional assessment of a community.
11 TH	1 ST 2 ND 3 RD 4 TH	Methods of assessment of nutritional status.

12 TH	1 ST 2 ND 3 RD 4 TH	Nutrition surveys. Diet surveys.
13 TH	1 ST 2 ND 3 RD 4 TH	Causes and consequences of malnutrition in India. Protein Energy Malnutrition.
14 TH	1 ST 2 ND 3 RD 4 TH	Vitamin Deficiency. Deficiency of minerals.
15 TH	1 ST 2 ND 3 RD 4 TH	Current Nutrition programme in India. Food fortification, food enrichment, food restoration

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(3rd SEMESTER FOOD TECHNOLOGY)

DISCIPLINE:FT	SEMESTER:3rd	NAME OF THE TEACHING FACULTY:MS. SRIYA SUMAN PATRA
SUBJECT:FLUID MECHANICS AND HEAT TRANSFER	NO. OF DAYS/ PER WEEK CLASS ALLOTTED:4	SEMESTER FROM DATE:14/07/2025 to 15/11/2025 NO. OF WEEKS:15
WEEK	CLASS DAY	THEORY/PRACTICAL TOPICS
1ST	1ST 2ND 3RD 4TH	1.0 INTRODUCTION TO FLUID STATICS 1.1 Classify fluid 1.2 Properties of fluid
2ND	1ST 2ND 3RD 4TH	1.3 Newton's Law of viscosity 1.4 Differentiate Newtonian & Non-Newtonian fluid
3RD	1ST 2ND 3RD 4TH	1.5 Derive an equation of pressure head. 2.0 FLUID FLOW PHENOMENA AND FLUIDISATION 2.1 Types of flow
4TH	1ST 2ND 3RD 4TH	2.2. Reynolds's experiment 2.3 Mechanism of fluid flow in pipes 2.4 Derived Bernoulli's theorem
5TH	1ST 2ND 3RD 4TH	2.5 Friction factor and estimate friction loss in pipes 2.6 Fluidisation 2.7 Pressure drop equation in fluidised bed. 2.8 Fluid flow characteristic in packed bed.
6TH	1ST 2ND 3RD 4TH	3.0 FLOW MEASUREMENT AND TRANSPORTATION OF FLUID 3.1 Flow measurement and Transportation of fluid. 3.2 Fluid flow through orifice meter, venturi meter and derive an expression for flow measurement, solve simple problems on it.
7TH	1ST 2ND 3RD 4TH	3.3 Construction and working of rotameter. 3.4 Differentiate pipe and tube. 3.5 Standard pipe fittings
8TH	1ST 2ND 3RD 4TH	3.6 Construction and operation of different types of valves. 3.7 Classify pumps. 3.8 Construction and operation of centrifugal pump. 4.0 CONDUCTION 4.1 Heat loss concept in conduction.
9TH	1ST 2ND 3RD 4TH	4.2 Steady state and unsteady state conduction. 4.3 Fourier's law of conduction. 4.4 Derive an equation of heat flow in a composite wall and a cylinder. 4.5 Optimum thickness of insulation. 4.6 Solve problems on conduction.
10TH	1ST 2ND 3RD 4TH	5.1 Classify convection 5.2 Heat flow phenomenon in convection 5.3 Derive equation of individual and overall heat transfer co-efficient.

11TH	1ST 2ND 3RD 4TH	5.4 Different dimensionless no. used in convection and discuss different empirical equation on heat flow by convection. 5.5 Parallel, co-current and counter current flow. 5.6 Log mean temperature difference.
12TH	1ST 2ND 3RD 4TH	6.0 HEAT EXCHANGERS AND EVAPORATORS 6.1 Classify heat exchanger. 6.2 Construction and working of single pass, and multipass, shell and tube heat exchangers.
13TH	1ST 2ND 3RD 4TH	6.3 Energy balance for shell and tube heat exchanger and solve problems. 6.4 Classify evaporator
14TH	1ST 2ND 3RD 4TH	6.5 Construction and operation of different types of evaporators
15TH	1ST 2ND 3RD 4TH	6.6 Solve simple material balance and energy balance problems

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**(3rd SEMESTER FOOD
TECHNOLOGY)**

DISCIPLINE:FT	SEMESTER:3rd	NAME OF THE TEACHING FACULTY: MS. SRIYA SUMAN PATRO
SUBJECT:FOOD ENGG. -1	NO. OF DAYS/ PER WEEK CLASS ALLOTTED:4	SEMESTER FROM DATE:14/07/2025 to 15/11/2025 NO. OF WEEKS:15
WEEK	CLASS DAY	THEORY/PRACTICAL TOPICS
1 ST	1 ST 2 ND 3 RD 4 TH	General introduction to food technology Principles of food preservation Methods of food preservation
2 ND	1 ST 2 ND 3 RD 4 TH	Effect of Heat on Micro-organisms Thermal Death Time (TDT) Curve Environmental factors
3 RD	1 ST 2 ND 3 RD 4 TH	Canning Pasteurization & Sterilization
4 TH	1 ST 2 ND 3 RD 4 TH	Effect of cold on micro-organism
5 TH	1 ST 2 ND 3 RD 4 TH	Types of cold preservation Study & construction of cold storage
6 TH	1 ST 2 ND 3 RD 4 TH	Advantages of drying and drying rate Changes during drying Methods of drying
7 TH	1 ST 2 ND 3 RD 4 TH	Intermediate moisture foods Methods of concentration
8 TH	1 ST 2 ND 3 RD 4 TH	Fermentation & benefits of fermentation Microbial activities in foods
9 TH	1 ST 2 ND 3 RD 4 TH	Control of fermentation in foods
10 TH	1 ST 2 ND 3 RD 4 TH	Kinds of ionising radiations
11 TH	1 ST 2 ND 3 RD 4 TH	Radiations effects. Uses of radiations

12 TH	1 ST 2 ND 3 RD 4 TH	Classification of food preservatives(class 1 and 2) Salt: Mechanism of action, food pickling and curing
13 TH	1 ST 2 ND 3 RD 4 TH	Sugar: Types, uses and mechanism of action against micro- organisms Chemical preservatives: importance and mechanism of action of benzoic acid, KMS, Sodium benzoate
14 TH	1 ST 2 ND 3 RD 4 TH	Introduction to Food packaging Importance and function of food packaging.
15 TH	1 ST 2 ND 3 RD 4 TH	Study types of rigid and flexible packaging

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**Lesson plan of
2025-2026**

**(5th SEMESTER
FOOD TECHNOLOGY)**

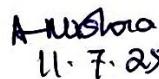
DISCIPLINE:FT	SEMESTER:5th	NAME OF THE TEACHING FACULTY: PTGF (Miss Ashrita Nayak)
SUBJECT:ENTREPRENEURSHIP and MANAGEMENT & SMART TECHNOLOGY (Common to All Branches)	NO. OF DAYS/ PER WEEK CLASS ALLOTTED:4	SEMESTER FROM DATE: 14.07.25 TO 15.11.25 NO. OF WEEKS: 15
WEEK	CLASS DAY	THEORY/PRACTICAL TOPICS
1 ST	1 ST 2 ND 3 RD 4 TH	Entrepreneurship · Concept /Meaning of Entrepreneurship · Need of Entrepreneurship · Characteristics, Qualities and Types of entrepreneur, Functions · Barriers in entrepreneurship · Entrepreneurs vrs. Manager
2 ND	1 ST 2 ND 3 RD 4 TH	Forms of Business Ownership: Sole proprietorship, partnership forms and others · Types of Industries, Concept of Start-ups · Entrepreneurial support agencies at National, State, District Level(Sources): DIC, NSIC, OSIC, SIDBI, NABARD, Commercial Banks, KVIC etc.
3 RD	1 ST 2 ND 3 RD 4 TH	· Technology Business Incubators (TBI) and Science and Technology Entrepreneur Parks 2. Market Survey and Opportunity Identification (Business Planning) · Business Planning · SSI, Ancillary Units, Tiny Units, ·
4 TH	1 ST 2 ND 3 RD 4 TH	Service sector Units · Time schedule Plan, Agencies to be contacted for Project Implementation Assessment of Demand and supply and Potential areas of Growth · Identifying Business Opportunity · Final Product selection
5 TH	1 ST 2 ND 3 RD 4 TH	3. Project report Preparation · Preliminary project report Detailed project report, Techno economic Feasibility · Project Viability

6TH			<p>4. Management Principles</p> <ul style="list-style-type: none"> · Definitions of management · Principles of management · Functions of management (planning, organising, staffing, directing and controlling etc.) <p>Level of Management in an Organisation</p> <p>5. Functional Areas of Management</p> <p>a) Production management</p> <ul style="list-style-type: none"> · Functions, Activities · Productivity · Quality control · Production Planning and control <p>b) Inventory Management</p> <ul style="list-style-type: none"> · Need for Inventory management
7TH	1ST 2ND 3RD 4TH		<ul style="list-style-type: none"> · Models/Techniques of Inventory management <p>c) Financial Management</p> <ul style="list-style-type: none"> · Functions of Financial management · Management of Working capital
8TH	1ST 2ND 3RD 4TH		<ul style="list-style-type: none"> · Costing (only concept) · Break even Analysis · Brief idea about Accounting Terminologies: Book Keeping, Journal entry, Petty Cash book, P&L Accounts, Balance Sheets(only Concepts)
9TH	1ST 2ND 3RD 4TH		<p>d) Marketing Management</p> <ul style="list-style-type: none"> · Concept of Marketing and Marketing Management · Marketing Techniques (only concepts) · Concept of 4P's (Price, Place, Product, Promotion)
10TH	1ST 2ND 3RD 4TH		<p>e) Human Resource Management</p> <ul style="list-style-type: none"> · Functions of Personnel Management · Manpower Planning, Recruitment, Sources of manpower, Selection process, Method of Testing, Methods of Training & Development, Payment of Wages
11TH			<p>6. Leadership and Motivation</p> <p>a) Leadership</p> <ul style="list-style-type: none"> · Definition and Need/Importance · Qualities and functions of a leader · Manager Vs Leader · Style of Leadership (Autocratic, Democratic, Participative)
12TH	1ST 2ND 3RD 4TH		<p>b) Motivation</p> <ul style="list-style-type: none"> · Definition and characteristics · Importance of motivation · Factors affecting motivation · Theories of motivation (Maslow) · Methods of Improving Motivation

		<ul style="list-style-type: none"> Importance of Communication in Business Types and Barriers of Communication 7. Work Culture, TQM & Safety Human relationship and Performance in Organization
13TH	1ST 2ND 3RD 4TH	<ul style="list-style-type: none"> Relations with Peers, Superiors and Subordinates TQM concepts: Quality Policy, Quality Management, Quality system Accidents and Safety, Cause, preventive measures, General Safety Rules , Personal Protection Equipment(PPE)
14TH	1ST 2ND 3RD 4TH	<ul style="list-style-type: none"> 8. Legislation <ul style="list-style-type: none"> a) Intellectual Property Rights(IPR), Patents, Trademarks, Copyrights b) Features of Factories Act 1948 with Amendment (only salient points) c) Features of Payment of Wages Act 1936 (only salient points) 9. Smart Technology <ul style="list-style-type: none"> Concept of IOT, How IOT works Components of IOT,
15TH	1ST 2ND 3RD 4TH	<ul style="list-style-type: none"> 9. Smart Technology <ul style="list-style-type: none"> Concept of IOT, How IOT works Components of IOT, Characteristics of IOT, Categories of IOT Applications of IOT- Smart Cities, Smart Transportation, Smart Home, Smart Healthcare, Smart Industry, Smart Agriculture, Smart Energy Management etc.



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Academic Co-ordinator

**(5th SEMESTER
FOOD TECHNOLOGY)**

DISCIPLINE:FT	SEMESTER:5th	NAME OF THE TEACHING FACULTY: MS. SRIYA SUMAN PATRA
SUBJECT: FOOD PROCESS ENGG. – II	NO. OF DAYS/ PER WEEK CLASS ALLOTTED:4	SEMESTER FROM DATE: 14.07.25 TO 15.11.25 NO. OF WEEKS: 15
WEEK	CLASS DAY	THEORY/PRACTICAL TOPICS
1ST	1ST 2ND 3RD 4TH	1.0 Size reduction & separation 1.1 Objects of size reduction 1.2 Screening, Air filter, Air separation , membrane separation . 1.3 Study sedimentation equipments(froth flotation)
2ND	1ST 2ND 3RD 4TH	1.4 Study of classifiers, separators. 1.5 Study the equipments used for grading & sizing in food industry. 1.6 State and Explain Kick's law and Rittinger's law 1.7 Explain grinding(wet and dry)
3RD	1ST 2ND 3RD 4TH	2.0 Filtration & Mixing 2.1 Theory of filtration 2.2 Types of filtration 2.3 Different types of Filters used in industry
4TH	1ST 2ND 3RD 4TH	2.4 Object of mixing, Different types of mixers used in food industry(centrifuge, batch and continuous)
5TH	1ST 2ND 3RD 4TH	3.0 Extraction 3.1 Principles of extraction 3.2 Types of Extraction(solid-liquid extraction, liquid extraction)
6TH	1ST 2ND 3RD 4TH	Study the types of equipments for extraction
7TH	1ST 2ND 3RD 4TH	4.0 Distillation & Crystallization 4.1 Principles of Distillation, types of distillation(flash, steam and differential)
8TH	1ST 2ND 3RD 4TH	4.2 Principles of Crystallization, types of Crystallization(batch, continuous)

9TH	1ST 2ND 3RD 4TH	5.0 Drying 5.1 Study the engineering aspects of Drying(Roller drier, spray drier fluidised bed drier, freeze drier, solar dryer
10TH	1ST 2ND 3RD 4TH	fluidised bed drier, freeze drier, solar dryer
11TH	1ST 2ND 3RD 4TH	6.0 Evaporator 6.1 Different types of evaporators used in food industries
12TH	1ST 2ND 3RD 4TH	7.0 Canning & Freezing 7.1 Principles of canning, study of canning machine & other accessories used in canning industry.
13TH	1ST 2ND 3RD 4TH	7.2. Principles of freezing, study of different types of freezer
14TH	1ST 2ND 3RD 4TH	plate freezer, blast freezer, cryogenic freezer, vacuum freezer, refrigerator vans & wagons.
15TH	1ST 2ND 3RD 4TH	7.3 Study of different equipments used for processing of food.

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**(5th SEMESTER
FOOD TECHNOLOGY)**

DISCIPLINE:FT	SEMESTER:5th	NAME OF THE TEACHING FACULTY:MS. Sriya suman Patra
SUBJECT: Instrumentation & Process Control	NO. OF DAYS/ PER WEEK CLASS ALLOTTED:4	SEMESTER FROM DATE: 14.07.25 TO 15.11.25 NO. OF WEEKS: 15
WEEK	CLASS DAY	THEORY/PRACTICAL TOPICS
1ST	1ST 2ND 3RD 4TH	2. 1.0 INSTRUMENT 3. 1.1 Instruments and its importance 4. 1.2 Standards of measurement
2ND	1ST 2ND 3RD 4TH	5. 1.3 Functional elements of instruments 6. 1.4 Performance characteristics of an instrument 7.
3RD	1ST 2ND 3RD 4TH	8. 2.0 MEASUREMENTS OF CHARACTERISTICS 9. 2.1 Measurement of viscosity by Red Wood Viscometer, Falling Sphere Viscometer, Continuous Viscometer 10.
4TH	1ST 2ND 3RD 4TH	11. 2.2 Principle and uses of spectrophotometer 12. 2.3 Principle and uses of polarimeter 13.
5TH	1ST 2ND 3RD 4TH	14. 2.4 Measurement of refractive index by Refractometer 15.
6TH	1ST 2ND 3RD 4TH	16. 3.0 pH & CONDUCTIVITY MEASUREMENT 17. 3.1 Measurement of pH
7TH	1ST 2ND 3RD 4TH	18. 3.2 Measurement of electrical conductivity 19.
8TH	1ST 2ND 3RD 4TH	20. 4.0 TEMPERATURE MEASUREMENT 21. 4.1 Different temperature scales. 22. 4.2 Different methods of temperature measurement.
9TH	1ST 2ND 3RD 4TH	23. 4.3 Temperature measurement by liquid in glass thermometer 24. 4.4 Describe temperature measurement on electrical phenomena – like thermocouple,

10TH	1ST 2ND 3RD 4TH	25. resistance thermometer, optical pyrometer, radiation pyrometer. 26.
11TH	1ST 2ND 3RD 4TH	27. 5.0 PRESSURE MEASUREMENT 28. 5.1 Different types of pressure 29. 5.2 Different methods of measurement of pressure.
12TH	1ST 2ND 3RD 4TH	30. 5.3 Pressure measurement by Bourdon tube, Bellows 31. 5.4 Maintenance and repair of pressure measuring instruments. 32.
13TH	1ST 2ND 3RD 4TH	33. 6.0 AUTOMATIC CONTROL 34. 6.1 Automatic control system and explain the application with example. 35. 6.2 Elementary idea about transfer functions for a first order system and time constant.
14TH	1ST 2ND 3RD 4TH	36. 6.3 Block diagram and components of Process Control system 37. 6.4 Types of process control system, advantages and disadvantages 38.
15TH	1ST 2ND 3RD 4TH	39. 6.5 Elementary idea about different types of automatic controllers. 40. 6.6 Principle of PLC, computer Aided measurement and control 41.

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**(5th SEMESTER
FOOD TECHNOLOGY)**

DISCIPLINE:FT	SEMESTER:5th	NAME OF THE TEACHING FACULTY: MS. SRIYA SUMAN PATRO
SUBJECT: FISH PROCESSING TECHNOLOGY	NO. OF DAYS/ PER WEEK CLASS ALLOTTED:4	SEMESTER FROM DATE: 14.07.25 TO 15.11.25 NO. OF WEEKS: 15
WEEK	CLASS DAY	THEORY/PRACTICAL TOPICS
1ST	1ST 2ND 3RD 4TH	1.0 Introduction 1.1. Study the development of fisheries in India.
2ND	1ST 2ND 3RD 4TH	1.2 Structure of fish 1.3 Fish quality
3RD	1ST 2ND 3RD 4TH	1.4 Fish processing 1.5 Composition & Nutritive value
4TH	1ST 2ND 3RD 4TH	2.0 Quality of fresh fish : 2.1 Factors affecting quality.
5TH	1ST 2ND 3RD 4TH	2.2 Criteria to access quality.
6TH	1ST 2ND 3RD 4TH	2.3 Bio-chemical changes in fish after catching.
7TH	1ST 2ND 3RD 4TH	3.0 Spoilage & Preservation : 3.1 Contamination & spoilage in general
8TH	1ST 2ND 3RD 4TH	3.2 Method of preservation of fish by different method.
9TH	1ST 2ND 3RD 4TH	4.0 Fish Products: 4.1 Manufacture of fish protein,
10TH	1ST 2ND 3RD 4TH	4.0 Fish Products: 4.1 Manufacture of fish protein,

11TH	1ST 2ND 3RD 4TH	Fish Concentrate
12TH	1ST 2ND 3RD 4TH	Fish Concentrate
13TH	1ST 2ND 3RD 4TH	Fish Sauce
14TH	1ST 2ND 3RD 4TH	4.2. Quality aspects of processed fish
15TH	1ST 2ND 3RD 4TH	4.2. Quality aspects of processed fish

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**(5th SEMESTER
FOOD TECHNOLOGY)**

DISCIPLINE:FT	SEMESTER:5th	NAME OF THE TEACHING FACULTY: MS. ANIMA MISHRA
SUBJECT:DAIRY TECHNOLOGY	NO. OF DAYS/ PER WEEK CLASS ALLOTTED:4	SEMESTER FROM DATE: 14.07.25 TO 15.11.25 NO. OF WEEKS: 15
WEEK	CLASS DAY	THEORY/PRACTICAL TOPICS
1ST	1ST 2ND 3RD 4TH	1.0 Introduction 1.1 Objective and development of milk processing industries in India
2ND	1ST 2ND 3RD 4TH	1.2 Present status and future scope
3RD	1ST 2ND 3RD 4TH	2.0 Secretion 2.1 Theories of milk secretion 2.2 Function of hormones and their influence on milk secretion
4TH	1ST 2ND 3RD 4TH	2.3 Hygienic milk production 3.0 Constitution and composition of milk 3.1 Major and minor constituents of milk 3.2 Physico-chemical properties of liquid milk
5TH	1ST 2ND 3RD 4TH	3.3 Factors affecting the composition of milk 3.4 Nutritive value of milk and milk products 3.5 Microbiology of milk
6TH	1ST 2ND 3RD 4TH	4.0 Processing, distribution and storage of liquid milk 4.1 Processing of milk- Straining, filtration, clarification, cream separation 4.2 Heat treatment of milk- boiling, pasteurization, homogenization
7TH	1ST 2ND 3RD 4TH	4.3 Standardization of milk 4.4 Preparation of butter, ghee, condensed milk, evaporated milk, dried milk, ice cream
8TH	1ST 2ND 3RD 4TH	5.0 Technology of indigenous milk products 5.1 khoa, rabri, kheer, lassie
9TH	1ST 2ND 3RD 4TH	pannier, channa, dahi, cheese