

Lesson Plan
TH: 1- CEREAL TECHNOLOGY

5TH Semester FT-Winter 2026

Name of the Faculty- Sriya Suman Patro

Date- 1st July 2026

Unit I (9 Classes)	
1	Introduction
2	Introduction
3	Major cereals in India
4	Major cereals in India
5	Major cereals in India
6	Nutritive value of cereals
7	Nutritive value of cereals
8	Nutritive value of cereals
9	Nutritive value of cereals
Unit II (9 Classes)	
10	Structure
11	Study of structure, varieties
12	classification of cereal grain such as rice, wheat
13	classification of cereal grain such as rice, wheat
14	classification of cereal grain such as sorghum, ragi
15	classification of cereal grain such as sorghum, ragi
16	classification of cereal grain such as barley, bajra etc.
17	classification of cereal grain such as barley, bajra etc.
18	classification of cereal grain such as barley, bajra etc.
Unit III (9 Classes)	
19	Milling of cereal grains
20	Milling process such as cleaning, de husking
21	Milling process such as cleaning, de husking
22	polishing, grading glazing, rice parboiling of rice milling
23	Wheat milling, Dry milling of corn into grits, coarse mill & flour

24	Wet milling of corn into starch, gluten, germ oil cake corn steep liquor, yellow
25	white dextrin, corn syrup, dextrose powder and high fructose corn syrup
26	Milling of barley, malting
27	production of syrup, alcohol, beer etc.
Unit IV (9 Classes)	
28	Technology of bakery products
29	Function of different ingredients for production of bread, cake, biscuits
30	Function of different ingredients for production of bread, cake, biscuits
31	Mixing, dough development, sheeting
32	rounding, proofing, fermentation, baking of bread
33	Mixing and baking of cake Mixing
34	Mixing and baking of cake Mixing
35	sheeting, baking of biscuit
36	sheeting, baking of biscuit
Unit V (3 Classes)	
37	Technology of confectionery products
38	Production of confectionery products
39	Production of confectionery products
Unit VI (6 Classes)	
40	Snacks food processing
41	Recent trends in snack food processing
42	Production of extruded cereal foods
43	Production of breakfast cereal foods
44	Production of cereal based baby foods
45	Processed foods, convenience foods

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Lesson Plan
TH:2- DAIRY TECHNOLOGY
5TH Semester FT-Winter 2026

Name of the Faculty- Anima Mishra

Date- 1st July 2026

Unit I (9 Classes)	
1	Introduction
2	Objective and development of milk processing industries in India
3	Objective and development of milk processing industries in India
4	Objective and development of milk processing industries in India
5	Objective and development of milk processing industries in India
6	Present status and future scope
7	Present status and future scope
8	Present status and future scope
9	Present status and future scope
Unit II (9 Classes)	
10	Secretion
11	Theories of milk secretion
12	Theories of milk secretion
13	Theories of milk secretion
14	Function of hormones and their influence on milk secretion
15	Function of hormones and their influence on milk secretion
16	Function of hormones and their influence on milk secretion
17	Hygienic milk production
18	Hygienic milk production
Unit III (6 Classes)	
19	Constitution and composition of milk
20	Major and minor constituents of milk
21	Physico-chemical properties of liquid milk
22	Factors effecting the composition of milk
23	Nutritive value milk
24	milk products Microbiology of milk

Unit IV (6 Classes)	
25	Processing, distribution and storage of liquid milk
26	Processing of milk-Straining, filtration, clarification, cream separation
27	Heat treatment of milk-boiling, pasteurization, homogenization
28	Standardization of milk Preparation of butter, ghee
29	condensed milk, evaporated milk,
30	dried milk, ice- cream
Unit V (6 Classes)	
31	Technology of indigenous milk products
32	Technology of indigenous milk products
33	khoa, rabri, kheer
34	khoa, rabri, kheer
35	lassie, panner, channa, dahi, cheese
36	lassie, panner, channa, dahi, cheese
Unit VI (6 Classes)	
37	Fermented milk products
38	Preparation of different method of cheese (cheddar, cottage,processed Swiss, Roquefort, camembert)
39	Preparation of different method of cheese (cheddar, cottage,processed Swiss, Roquefort, camembert)
40	Preparation of different method of cheese (cheddar, cottage,processed Swiss, Roquefort, camembert)
41	Physical, chemical and microbiological changes Fortification of milk products
42	Physical, chemical and microbiological changes Fortification of milk products
Unit VII (3 Classes)	
43	Production of infant milk food
44	Production of infant milk food
45	Production of infant milk food

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Lesson Plan
TH:3(A)- INSTRUMENTATION AND CHEMICAL ANALYSIS
5TH Semester F.T. Winter 2026

Name of the Faculty- Sriya Suman Patro

Date- 1st July 2026

Unit I – INSTRUMENT: (9 Classes)	
1	Instruments and its importance
2	Standards of measurement
3	Standards of measurement
4	Functional elements of instruments
5	Functional elements of instruments
6	Functional elements of instruments
7	Performance characteristics of an instrument
8	Performance characteristics of an instrument
9	Performance characteristics of an instrument
Unit II – MEASUREMENTS OF CHARACTERISTICS: (9 Classes)	
10	Measurement of viscosity by Red Wood Viscometer
11	Measurement of viscosity by Red Wood Viscometer
12	Falling Sphere Viscometer, Continuous Viscometer
13	Falling Sphere Viscometer, Continuous Viscometer
14	Principle and uses of spectrophotometer
15	Principle and uses of spectrophotometer
16	Principle and uses of polarimeter
17	Measurement of refractive index by Refractometer
18	Measurement of refractive index by Refractometer
Unit III – pH & CONDUCTIVITY MEASUREMENT: (9 Classes)	
19	Measurement of pH
20	Measurement of pH
21	Measurement of pH
22	Measurement of pH
23	Measurement of electrical conductivity
24	Measurement of electrical conductivity

25	Measurement of electrical conductivity
26	Measurement of electrical conductivity
27	Measurement of electrical conductivity
Unit IV – TEMPERATURE MEASUREMENT: (9 Classes)	
28	Different temperature scales
29	Different methods of temperature measurement
30	Different methods of temperature measurement
31	Temperature measurement by liquid in glass thermometer
32	Temperature measurement by liquid in glass thermometer
33	Describe temperature measurement on electrical phenomena –like thermocouple, resistance thermometer, optical pyrometer, radiation pyrometer
34	Describe temperature measurement on electrical phenomena –like thermocouple, resistance thermometer, optical pyrometer, radiation pyrometer
35	Describe temperature measurement on electrical phenomena –like thermocouple, resistance thermometer, optical pyrometer, radiation pyrometer
36	Describe temperature measurement on electrical phenomena –like thermocouple, resistance thermometer, optical pyrometer, radiation pyrometer
Unit V – PRESSURE MEASUREMENT: (5 Classes)	
37	Different types of pressure
38	Different methods of measurement of pressure
39	Pressure measurement by Bourdon tube, Bellows
40	Maintenance and repair of pressure measuring instruments.
41	Maintenance and repair of pressure measuring instruments.
Unit VI – : AUTOMATIC CONTROL: (4 Classes)	
42	Automatic controls system and explain the application with example. Elementary idea about transfer functions for a first order system and time constant.
43	Block diagram and components of Process Control system. Types of process control system
44	advantages and disadvantages Elementary idea about different types of automatic controllers.
45	Principle of PLC, computer Aided measurement and control

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Lesson Plan
TH:4(A)- MEAT & POULTRY TECHNOLOGY
5TH Semester - Winter 2026

Name of the Faculty- Anima Mishra

Date- 1st July 2026

Unit I – Introduction: (9 Classes)	
1	Study the development of meat and poultry industries in India
2	Study the development of meat and poultry industries in India
3	Study the development of meat and poultry industries in India
4	Study the development of meat and poultry industries in India
5	Study the development of meat and poultry industries in India
6	Study their role in national economy
7	Study their role in national economy
8	Study their role in national economy
9	Study their role in national economy
Unit II – Plant layout and slaughtering: (9 Classes)	
10	location, layout and structure of a slaughter house
11	location, layout and structure of a slaughter house
12	poultry processing plant
13	Pre-slaughter care, anti and post mortem inspection
14	kinds of animal/poultry slaughter
15	Slaughtering and dressing of animal/poultry meats
16	Slaughtering and dressing of animal/poultry meats
17	Classify meat(wholesale, retail, special cuts)
18	Classify meat(wholesale, retail, special cuts)
Unit III – Quality of fresh meat: (9 Classes)	
19	Factors affecting quality
20	Criteria to assess quality
21	Food value and chemical composition of meat
22	Food value and chemical composition of meat
23	Bio-chemical changes in meat after slaughter leading to rigormortis, aging
24	Bio-chemical changes in meat after slaughter leading to rigormortis, aging
25	tenderization of meat. Meat additives
26	Meat additives and adulterants Meat Products

27	adulterants Meat Products
Unit IV –EGG: (9 Classes)	
28	Structure and composition
29	Structure and composition
30	Egg quality
31	Egg Processing
32	Egg Processing
33	Effect of heat on egg proteins
34	Effect of heat on egg proteins
35	Egg foams Egg Products
36	Egg foams Egg Products
Unit V – Poultry: (5 Classes)	
37	Classification
38	Poultry Processing
39	Poultry Processing
40	Composition and nutritive value Poultry cooking
41	Composition and nutritive value Poultry cooking
Unit VI – : Spoilage and preservation: (4 Classes)	
42	Contamination, spoilage in general
43	Method of preservation of meat and poultry products (low temp, high temp, curing, smoking, antibiotics, radiation
44	Method of preservation of meat and poultry products (low temp, high temp, curing, smoking, antibiotics, radiation
45	Method of preservation of meat and poultry products (low temp, high temp, curing, smoking, antibiotics, radiation

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Lesson Plan
TH:5B- LEADERSHIP AND MANAGEMENT SKILLS
3rd Semester FT- Winter 2026

Name of the Faculty-

Date-

Unit 1: Leadership & Management, concept, principles. (10 Classes)	
1	• Definition of leadership, management
2	• Leadership theories
3	• Leadership characteristics
4	• Principles of management
5	• Managerial functions
6	• Leader v/s Manager, Leader/Manager traits and character
7	• Leader v/s Manager, Leader/Manager traits and character
8	• Leadership characteristics
9	• Leadership Styles
10	• Leadership Styles
Unit II –Human Resource Management in Organizations: (10 Classes)	
11	• Human Resource Management: Meaning, Nature, Objectives, Scope
12	• Job & Job analysis.
13	• Staff Development: Need and Objectives of Staff Development, Approaches
14	• Training & development
15	• Organizational Development: Components of OD process.
16	• Learning organization
17	• Training & development
18	• Job & Job analysis.
19	• Human Resource Management: Meaning, Nature, Objectives, Scope
20	• Staff Development: Need and Objectives of Staff Development, Approaches
Unit III – Personal disposition, skills & abilities of leaders: (9 Classes)	
21	• Self-awareness
22	• Leadership characteristics, traits
23	• Leadership skills & abilities
24	• Emotional intelligence & its components, importance in leadership

25	• Communication skills for effective leadership, barriers to effective communication, Active Listening, Mindful listening.
26	• Leading & Mentorship – Influencing & mentoring
27	• Communication skills for effective leadership, barriers to effective communication, Active Listening, Mindful listening
28	• Leadership skills & abilities
29	• Leadership characteristics, traits• Self-awareness
Unit IV –Leader’s role in Motivating, Inspiring and Transformative leadership, nurturing team-work: (8 Classes)	
30	• Goal setting & leadership
31	• Transformative Leadership, vision & envisioning
32	• Motivational role of leader in people management
33	• Group & team• Team dynamics
34	• Conflict management, strategies in managing conflicts
35	• Transformative Leadership, vision & envisioning
36	• Goal setting & leadership
37	• Goal setting & leadership
Unit V-Change Management & Leadershipb: (8 Classes)	
41	• Models of change
42	• Forces driving change
43	• Change Management – process, goal, importance
44	• The process of change happening in an organization
45	• Key aspects of leadership in change management – responsibilities of a change leader. • Key aspects of leadership in change management – responsibilities of a change leader.

Deviprasad Tripathy
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