

TEACHING PLAN

Mehr Chand Mahajan DAV College for Women, Sector – 36A, Chandigarh

Name of the Teacher: Dr. Sandeep Kaur
Department: Department of Food Science
Class: BSc.(MFT)-III year ; ODD semester; Semester - V
Subject: BMF-5001, Environmental Microbiology
Session : 2022-23

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
1.	25.08.2022	24.09.2022	<ul style="list-style-type: none">• Introduction to Soil composition, role of microbes in soli quality, Rhizosphere effect• Soil enrichment techniques, soil enzymes as bio-indicators of fertility.• Isolation of Soil microbes and their characterization Biological interactions (positive, negative and neutral); special emphasis on VAM, lichens, Nitrogen fixation	Lecture, powerpoint presentations, Online Videos
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
2.	26.09.2022	15.10.2022	Introduction to Bio-fertilizers, Bio-pesticides (Different classes and types), advantages of using them over chemical fertilizers Different biogeochemical cycles (N, P, K, water and carbon cycle)	Lecture, powerpoint presentations, Online Videos
3.	17.10.2022	31.10.2022	Introduction to terms: Bio-sorption, Bio-remediation, Bio-degradation, Bio-deterioration	Lecture, powerpoint presentations, Online Videos

			Degradation of different xenobiotics and role of microbes. Microbial deterioration of Wood, Textiles, Paper	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
4.	01.11.2022	15.11.2022	Biogas production pathway and their advantages, Hydrogen gas production and its applications. Solid waste management (types of solid waste and different methods)	Lecture, powerpoint presentations, Online Videos
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
5.	16.11.2022	27.11.2022	BOD, COD, sewage water treatment steps (primary, secondary, tertiary), Role of biofilms and indicator microbes for potability. Revision and Class test	Lecture, powerpoint presentations, Online Videos

*Any of these – (i) Lecture Method; (ii) PPT; (iii) Online Sources; (iv) Group Discussion; (v) Case Studies etc.
Other Methods adopted by the teacher

Name of the Teacher- Dr. Gurpreet Kaur

Department - Food Science

Class - B.Sc. III (MFT)

PAPER II: BMF 5002 - FOOD ANALYSIS AND QUALITY CONTROL

[Odd Semester; Semester - V]

S.No	Date (Monthly)		TOPICS TO BE COVERED	Academic Activity Undertaken*
	From	To		
1.	13.08.2022	20.08.2022	Introduction to Food Quality Control, Sampling techniques, and preparation of food samples	Lecture, Online videos, PPT
2.	22.08.2022	31.08.2022	Proximate analysis of Food- Moisture, Carbohydrates, Proteins, Fats,	Lecture, Online videos, PPT

Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
3.	1.09.2022	17.09.2022	Proximate analysis of Food – Crude Fiber, Ash content, Minerals, and Vitamins. Physico-chemical properties – (TS, TSS, Acidity, solubility, sedimentation)	Lecture, Online videos, PPT
4.	19.09.2022	30.09.2022	Sensory assessment of food quality – The appearance of food, Flavor of food, Texture of food – Subjective & Objective Analysis	Lecture method, online videos
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
5.	1.10.2022	8.10.2022	Sensory Tests – Difference, Rating & Sensitivity tests, Types of panels, Testing area & schedule.	Lecture, Online videos, PPT
6.	10.10.2022	15.10.2022	Adulterants and Preservatives- Common adulterants present in milk, tea, coffee, cereals, spices, oils & fats. Preservatives used in processed foods. Permissible limits of Preservatives.	Lecture, Online videos, PPT
7.	17.10.2022	22.10.2022	Food quality management – TQM, Good manufacturing practices, seven principles of HACCP & codex, Quality control methods of raw materials, manufacturing process & finished products	Lecture, Online videos, PPT
8.	24.10.2022	31.10.2022	Food Safety – Role of agencies & legal aspects, National & International food laws, Nutritional labeling requirements of foods	Lecture, Online videos, PPT
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
9.	1.11.2022	15.11.2022	Quality control of Milk & milk products, Oils & Fats, Cereal grains & flours, Fruits & vegetable products, Canned foods, Egg & egg products, Meat & Meat products	Lecture, Online videos, PPT
10.	16.11.2022	25.11.2022	Revision, Class tests, and Discussion	Lecture
Departmental Meeting to Review the Completion of Syllabus and segregate the students for further Remedial classes				

(Lesson Plan)

**MCM DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans (Even Semester; Semester - VI)
Session–(2022-23)**

Name of the Teacher: Dr. Sandeep Kaur

Department: Department of Food Science

Class: B.Sc. MFT (III)

Section: A

Subject: BMF 6001- Entrepreneurship and Intellectual Property Rights

S.No.	Date (Monthly)		Topics to be Covered	Academic Activity Undertaken*
	From	To		
1.	16.01.2023	31.01.2023	Introduction to Intellectual Property, IPR and types of IPR Significance of different types of IPR, Treaties, WIPO and WTO, TRIPS agreement	Lecture, Powerpoint presentations, Online Videos
2.	01.02.2023	14.02.2023	Patents-definition, significance, types, prior art, patentability and non-patentable inventions Role of country patent office, Process of patent filing in India and PCT-International Filing, types of patent applications	Lecture, Powerpoint presentations, Online Videos
3.	16.02.2023	28.02.2023	Patent infringement- meaning, scope, litigation Rights and duties of patent owner, Case studies and Discussions	Lecture, Powerpoint presentations, Online Videos
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
4.	01.03.2023	15.03.2023	Concept of Entrepreneurship, Entrepreneurship characteristics, Entrepreneurship motivation and barrier, Principles of entrepreneurial development, Qualities of an entrepreneur,	Lecture, Powerpoint presentations, Online Videos

			Functions and types of entrepreneur.	
5.	16.03.2023	31.03.2023	Demand-supply-pricing, Business ethics, Industrial laws, Women entrepreneurs -Role, issues, types	Lecture, Powerpoint presentations, Online Videos
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
6.	01.04.2023	29.04.2023	Project Management Formulation, Identification and selection based on size, Technological assessment, Project cost and market potential and marketing concepts Technical reports and feasibility reports with commercial viability, Break-even analysis, Depreciation, Sources of funding. Class test and Revision Assignments	Lecture, Powerpoint presentations, Online Videos

*Any of these – (i) Lecture Method; (ii) PPT; (iii) Online Sources; (iv) Group Discussion; (v) Case Studies etc.
Other Methods adopted by the teacher – Please write the specific teaching method
– Please write the specific teaching method

Monthly Teaching Plans - Even semester (Semester - VI)

Session – 2022-23

Name of the Teacher- Dr. Gurpreet Kaur

Department - Food Science

Class - B.Sc. III (MFT)

PAPER II: BMF-6002 - FOOD ENGINEERING

S.No.	Date (Monthly)		TOPICS TO BE COVERED	Academic Activity Undertaken*
	From	To		
1.	16.01.2023	21.01.2023	Units and Dimensions: Concept of Unit operation, Mass Energy balance, Dimensions and Units, Unit Conversion, Dimensional Analysis Psychrometric chart: Dry and wet bulb temperature, humidity & relative humidity, adiabatic saturation temperature, Dew point	Lecture, Online videos, PPT
2.	23.01.2023	4.02.2023	Refrigeration: Reverse Carnot's cycle, Pressure enthalpy chart, refrigeration system, equipment's C.O.P., Refrigeration load Freezing: Principles and methods, Different types of Freezers	Lecture, Online videos, PPT
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
3.	6.02.2023	18.02.2023	Heat Transfer: Heat Transfer, modes of heat transfer, conduction through a flat wall, conduction through hollow cylinder, convective heat transfer, radiation heat transfer Heat transfer Equipment and Design Logarithmic mean temperature difference, heat transfer coefficient, heat exchanger design, concept of black body, Emissivity, and Absorptivity	Lecture, Online videos, PPT

4.	20.02.2023	28.02.2023	Flow of fluids: Types of fluids and fluid flows, viscosity, Bernoulli's equation, Different types of pumps Size Reduction: Principles and methods	Lecture, Online videos, PPT
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
5.	1.03.2023	11.03.2023	Evaporation: Mechanisms of vaporization, Boiling Point elevation, Different types of evaporators	Lecture, PPT, Online videos
6.	13.03.2023	18.03.2023	Mixing: Theory of mixing, mixing, types of mixers, power calculation in mixing. Homogenization	Lecture, PPT, Online videos
7.	20.03.2023	31.03.2023	Separation processes: Principles and methods of gas absorption, Distillation, Extraction and washing,	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans				
8.	1.04.2023	8.04.2023	Separation processes: Principles and methods of Filtration, sedimentation, sieving, centrifugation	Lecture, PPT, Online videos
9.	10.04.2023	22.04.2023	Membrane Separation Processes: Microfiltration, Reverse Osmosis, Nano filtration and Ultra filtration	Lecture, Online videos, PPT
10.	24.04.2023	29.04.2023	Revision, Class tests, and Discussion	Lectures
Departmental Meeting to Review the Completion of Syllabus and segregate the students for further Remedial classes				