

DEPARTMENT OF INDUSTRIAL FISH AND FISHERIES
LESSION PLAN
SESSION 2023-24
SEMESTER – VI

NAME OF TEACHER: TINKEY ACHARYA

PAPER ALLOTTED: IFFACOR13T, IFFACOR13P, IFFACOR14T, IFFACOR14P

Month	Paper	Topic	No of classes
March 2024 (02.03.2024)	IFFACOR13T	<p style="text-align: center;">Principles of economics and marketing Definition, subject matter and scope of economics. Law of diminishing returns, laws of increasing, constant and decreasing utility returns. Law of equimarginal returns. Importance of economics in aquaculture development. Markets and their kinds. Law of demand and supply, price determination, problems of fish marketing in India. Exports of fish and fishery products, trends and problems therein.</p> <p style="text-align: center;">Economy of fishermen Fishermen populations, GDP from fisheries sector, foreign exchange earnings and employment potential of fishing industry.</p> <p style="text-align: center;">Socio-Economic impact & Rural Development Resource use and development, Socio-economic analysis, Socio-demographic profile, work contribution, household expenditure, income contribution, decision making, female headed household, impact of different age groups, socio- economic condition of fisherman.</p>	10
	IFFACOR14T	<p style="text-align: center;">Entrepreneurship Development Definitions and approaches, Scope and importance of Management, Management as an art of Science- Comparative Management. Functions of Managers- Environment Impact management. Planning, Organizing, Staffing, Directing and Controlling. Contributions of Henry Fayol to the Scientific</p> <p style="text-align: center;">Techniques of management.</p> <p style="text-align: center;">Human resource Management Manpower planning and recruitment- Organizational Development- Training, Motivation, Morale and Productivity, Leadership, Organizational communication, Conflicts and Decision making. Important Institutions involved in human resource development in Fisheries sector.</p>	8

	IFFACOR13P	Market Survey Report	
April 2024	IFFACOR13T	<p>Fishery Livelihood</p> <p>Modes of fisheries management - Open access, regulated, advisory; participatory, user rights; International fishery regulations, treaties and instruments; Input control measures such as access control, size, type, number and power of boats, duration of fishing; Output control measures such as Total Allowable Catch, Catch Quotas, Licensing. Technical control measures such as size limitations, closed fishing areas, closed seasons, size of nets and mesh size regulations, limited entry; Impediments to fisheries governance; UNCLOS, India's commitment to international treaties and resolutions.</p> <p>Vulnerability of fishers to changes in resource availability, exploitation and utilization patterns; Marginalization of fishermen, small scale processors and traders due to changing scenarios of product diversification, markets and trade</p>	10
	IFFACOR14T	<p>Processing Sector Management & Project formulation</p> <p>Organizational setup in processing Industries, State Fisheries Department. Role of EIA, MPEDA and CIFT in the processing Industry. India's share In the International trade of sea foods.</p> <p>Project formulation, Process identification, Pre feasibility-technical, Economical and Social feasibility. Concept of capital budgeting and Its importance. Socially and financially viable indicators- CI, EG, RoR, DCF, NPV, IRR, and sensitivity analysis. CPM, PERT and Decision making.</p> <p>Fisheries Acts</p> <p>Indian fisheries Act, National Institutions of Governance in Marine affairs of India-Criteria for regulation of Fishing effort. Code of conduct for responsible fisheries, WTO, Important acts pertaining to fisheries in Kerala - Kerala Marine Fisheries Act.</p>	10
	IFFACOR14P	On Job Training	
May 2024	IFFACOR13T	<p>Impact of dams, river linking, CRZ, Biodiversity Bill, protected/closed area, fishing bans, closed seasons, protected areas, mangroves, sanctuaries and parks on the fisher communities. Land and water body use issues in fisheries. Role of extension in fisheries, mechanisms and modes of extension and their impact on capture fisheries and fisher's livelihood, alternative livelihood options; Management of conflicts within sub-sectors in fisheries; Women in fisheries, status, role, impact, future; Vulnerability of fishers to natural disasters and coping mechanisms in disaster management.</p>	8

	IFFACOR14T	<p align="center">Marketing management</p> <p align="center">Market management- Concepts of Marketing- Market Mix, Market segmentation, Factor determining the buying decisions, Channels of distribution. Determining the selling price- Price spread, advertising and sales promotion.</p> <p align="center">Cooperatives and Agencies in Fisheries</p> <p align="center">Definition, Principles of co-operatives, Role of National Cooperative development Corporation (NCDC), Matsyafed, National Federation of Fishermen cooperatives, FFDA, BFFDA, ADAK, FIRMA, BENFISH, SFDC. Problems of Fishery Cooperatives. Cooperatives and their importance in fish production and marketing. Role of NABARD and SIDBI.</p>	10
May 2024		Internal Examination & Class for Slow Learners	
June 2024		END SEMESTER EXAMINATION	
Total Classes			56

NAME OF TEACHER: DR. NANDITA MUKHERJEE

PAPER ALLOTTED: IFFADSE05T, IFFADSE05P

Month	Paper	Topic	No of classes
March 2024 (02.03.2024)	IFFADSE05T	Candidate species of phytoplankton and zoo-plankton as live food organisms of freshwater and marine species. Tropic potentials- proximate composition of live feed.	5
	IFFADSE05P	Methods of isolation and identification of different live food organism.	4
April 2024	IFFADSE05T	Biology and culture requirements of important live food organisms. Green algae, blue-green algae, spirulina, diatoms, infusoria, rotifers, cladocerons, tubifex, brine shrimp, chironomids.	10
	IFFADSE05P	Laboratory scale culture of selected live food organisms. Evaluation of live food organisms.	4
May 2024	IFFADSE05T	Culture of earthworms, bait fish and forage fish.	4
	IFFADSE05P	Decapsulation technique and hatching method of brine shrimp cysts.	3
May 2024		Internal Examination & Class for Slow Learners	

June 2024		END SEMESTER EXAMINATION	
Total Classes			30

NAME OF TEACHER: DR. DIBYENDU DUTTA

PAPER ALLOTTED: IFFADSE04T, IFFADSE04P

Month	Paper	Topic	No of classes
March 2024 (02.03.2024)	IFFADSE04T	Fish meal. Dry reduction and wet reduction methods – specification – packaging and storage. Fish oil – body oil – liver oil – extraction – purification – preservation – storage – application. Shrimp wastes – chitin – chitosan - production – uses.	10
	IFFADSE04P	Preparation of fish meal, fish body oil, fish liver oil, fish maws, isinglass, fish silage, ensilage.	10
April 2024	IFFADSE04T	Fish protein concentrate. Fish hydrolysate, partially hydrolyzed and deodorized fish meat, functional fish protein concentrate and the reincorporation to various products. Fish silage – acid silage – fermented silage – application.	8
	IFFADSE04P	Fish glue, fish gelatin, pearl essence, chitin, chitosan and fish manure Preparation of acid and fermented silage.	8
May 2024	IFFADSE04T	Fish maws, shark leather, fish glue, fish gelatin, isinglass, pearl essence, shark fin rays, beach - de - mer. Biochemical and pharmaceutical products. Utilization of seaweeds: agar agar, algin, carrageenan.	6
	IFFADSE04P	Preparation of fish protein concentrate and fish hydrolysate.	6
May 2024		Internal Examination & Class for Slow Learners	
June 2024		END SEMESTER EXAMINATION	
Total Classes			48

