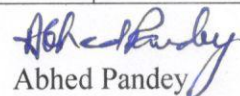


Course: Freshwater Aquaculture Production Systems (AQC 501) (2+ 1)

Theory Lecture Schedule

S. No.	Topic	Lectures
1.	Present status, hindrances / problems / constraints and prospects for fish and prawn farming in global and Indian perspective	2
2.	Development process, different supports and driving factors for production enhancement	2
3.	Aquaculture systems: Extensive, semi-intensive and intensive culture of fish and prawn	2
4.	Partitioned aquaculture systems: raceways, tanks, flow-through systems, polyculture, and composite fish culture	2
5.	Cages and enclosure	1
6.	Peri-urban aquaculture systems: aquaponics, RAS, flow- through systems	2
7.	Bio-floc technology and land-based aquaculture systems	2
8.	Aquaculture practices for cultivable species: Carps, Catfish, Snakeheads, Featherbacks, Tilapia, Mahseer, Trouts and freshwater Prawn. Grow out practices: pre stocking, post stocking management, harvesting and BMP	5
9.	Other alternative species for high production. Species selection and crop planning	1
10.	Economics of different fish farming systems	1
11.	Freshwater prawn farming: Monoculture practice of prawn in ponds, all-male culture and its advantages, polyculture with carps, prawn farming in inland saline soils	2
12.	Nursery rearing, sex segregation, pond preparation, stocking, feeding and water quality management, disease prevention and treatment; Harvesting methods, handling and BMP	2
13.	Integrated farming systems: Design, farming practices, constraints and economics of IFS of fish with vegetables, fodder, paddy, cattle, pig, poultry, duck, rabbit and quail	2
14.	IMTA, Freshwater pearl culture, multi- level integrated system. Resource utilization and conversion of waste to wealth	2
15.	Wastewater-fed aquaculture: Water treatment methods, species selection, culture practices, harvesting and depuration process	2
16.	Merits and demerits of wastewater fed aquaculture systems. Pre-requisites and precautions to be taken in the technology adoption	2
	Total	32

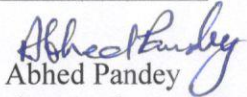

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Course: Freshwater Aquaculture Production Systems (AQC 501) (2+ 1)

Practical Lecture Schedule

S. No.	Topic	Lectures
1.	Identification of commercially important cultivable finfish and shellfish species	2
2.	Assessment of seed quality- stress test	1
3.	Pre-stocking factors evaluation and observation	2
4.	Calculating carrying capacity of pond and stocking density	1
5.	Check tray assessment and feed ration calculation	2
6.	Sampling process and species wise growth estimation	1
7.	Farm feed production and feeding	2
8.	Lime and fertilizer requirement calculations	1
9.	Farm visits and observation, records keeping and data analysis	2
10.	Modelling of different culture systems	2
	Total	16


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