

Lecture plan for M.F. Sc 2nd semester
Department of Fish Physiology and Biochemistry
Course: Nutritional Requirements and Feeding Management FPB 519 (2+1)

Sl. No.	Lecture Topic	No of lecture
01.	Introduction to fish nutrition and nutritional requirements of finfish and shellfish	1
02.	Nutritional requirements of larvae, fry, fingerlings, grow-out fish and broodstock	3
03.	Nutritional requirements of commercially important shellfish (shrimp and prawns)	1
04.	Methods of studying nutrient requirements: Qualitative and quantitative methods	1
05.	Digestibility	1
05.	Nutritive value of live foods: Algae, Rotifers and Copepods	2
06.	Nutritive value of Artemia, Cladocerans and Ostracods	2
07.	Bio-enrichment of zooplankton; Experimental diets, Reference diets, Purified and Semi-purified diets	2
08.	Growth response indices: Weight Gain, SGR	2
09.	Feed utilisation indices: FCR, PER, NPU and Biological Value (BV)	2
10.	Physiometabolic parameters, dose-response curves and Gonadosomatic Index	1
11.	Body composition of fish and shellfish; Influence of nutrients on flesh quality	1
12.	Effect of feeding and nutrition on fecundity and egg quality	1
13.	Feeding methods and devices	2
14.	Feeding rate, feeding frequency, restricted feeding, mixed feeding and feeding management	1
15.	Feeding management	1
Total No of lectures		24
Practical		
01.	Proximate composition of feed/ingredient	1
02.	Preparation and formulation of feed	1
03.	Determination of Feed Intake in Fry and Fingerlings	1
04.	Calculation of Weight Gain (WG), Specific Growth Rate (SGR)	1
05.	Calculation of Feed Conversion Ratio (FCR)	1
06.	Estimation of Protein Efficiency Ratio (PER)	1

07.	Estimation of Net Protein Utilisation (NPU) and Biological Value	1
08.	Analysis and Interpretation of Experimental Growth Data	1
Total No of Practical		8



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