

**COLLEGE OF FISHERIES, KISHANGANJ
BIHAR ANIMAL SCIENCES UNIVERSITY, PATNA**

Lecture plan for course AQC-223 (Fish Nutrition and Feed Technology)

Credit – 3(2+1)

Batch- 2021

Semester- 4th

Sl. No.	Topic	No. of classes
THEORY		
1	Fundamentals of fish nutrition and growth in fish.	1
2	Principal nutrients and nutritional requirements of cultivable fish and shellfish.	4
3	Nutritional energetics: definition and forms of energy partitioning.	3
4	Methods of feed formulation and manufacturing.	2
5	Forms of feeds: wet feeds, moist feeds, dry feeds, mash, pelleted feeds, floating and sinking pellets.	3
6	Feed additives: binders, antioxidants, enzymes, pigments, growth promoters, feed stimulants.	2
7	Feed storage: use of preservatives and antioxidants.	2
8	Feed evaluation: feed conversion ratio, feed efficiency ratio, protein efficiency ratio, net protein utilization and biological value.	3
9	Feeding devices and methods.	4
10	Non-conventional feed ingredients and antinutritional factors.	4
11	Digestive enzymes, feed digestibility. Factors affecting digestibility.	3
12	Nutritional deficiency diseases.	2
Total number of classes (Theory)		33
PRACTICAL		
1	Proximate composition analysis of feed ingredients and feeds.	7
2	Preparation of artificial feeds using locally available feed ingredients.	2
3	Determination of sinking rate and stability of feeds.	2
3	Effect of storage on feed quality.	2
4	Types of feed, common methods of feeding on farms.	2
5	Farm feed budgeting and economic analysis.	1
Total number of classes (Practical)		16
Total number of classes (Theory+ Practical)		49

(Rajesh Kumar)