



SRI Y.N. COLLEGE (Autonomous), Narsapur

Affiliated to Adikavi Nannayya University
Thrice Accredited by NAAC with 'A' Grade
Recognized by UGC as 'College with potential for Excellence'

CURRICULAR PLAN - 2018-19

DEPARTMENT OF ZOOLOGY & FISHERIES

I B.Sc. Aquaculture Technology; Paper-I, Semester –I

BASIC PRINCIPLES OF AQUACULTURE

(Dr. N.H.K Durga Prasad , Kum. K.S.S.V.N Lakshmi)

S.No	Month	Week	Syllabus	Additional input/ Value addition	Curricular Activity		Co-Curricular Activity	
					Activity	Hours Allotted	Activity	Hours Allotted
1.	June	IV week	Concept of Blue Revolution – History and definition of Aquaculture.	Seminar	Teaching	08	Assignment	1
		V week	Fresh Water Aquaculture, Brackish Water Aqua Culture and Mari Culture.					
2.	July	I week	Different aquaculture system. Pond, Cage, Pen, Running Water	Quiz	Teaching	16	Assignment	1
		II week	Poly Culture and Mono Sex Culture Systems and					
		III week	Food chains and Food Web					
		IV week	Lotic and lentic system, Streams and Springs					
3.	August	I week	Importance of plankton and Benthos in culture ponds		Teaching	20	Slip test	1

		II week	Functional classification of Pond	Seminar			Assignmen	1
		III week	Hatchery design – Fish Hatchery					
		IVweek	Construction of an ideal fish Pond					
		V week	Lay out and arrangements of Ponds in a Fish Farm					
4.	September	I week	Manure application in culture ponds	Seminar	Teaching	16	Slip test Assignment	1
		II week	Physico - chemical conditions of soil and water					1
		III week	Eradication of Predators and weed control					
		IVweek	Weed plants in culture ponds, aquatic weeds, weed Fish,					
5.	October	I week	Revision	Quiz	Teaching	4	Slip test	1



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CURRICULAR PLAN 2018-19

DEPARTMENT OF ZOOLOGY & FISHERIES

I B.Sc. Aquaculture Technology ; Paper-II, Semester –II

BIOLOGY OF FIN FISH & SHELL FISH

(Dr. N.H.K Durga Prasad , Kum. K.S.S.V.N Lakshmi)

S.No	Month	Week	Syllabus	Additional input Value addition	Curricular Activities		Co-Curricular Activities	
					Activity	Hours Allotted	Activity	Hours Allotted
1.	Nov	IV week	General characters and classification of fishes up to classes.	Seminar	Teaching	08	Assignment	1
		V week	Fish, crustaceans and molluscs of commercial importance					
2.	Dec	I week	Sense organs of Fishes.	Quiz	Teaching	16	Assignment	1
		II week	Specialized organs in Fishes – electric Organ					
		III week	Buoyancy in Fishes – Swim bladder or air bladder					
		IV week	Natural Fish Food, Feeding habits					
3.	Jan	I week	Principles of age and growth determination	Seminar	Teaching	20	Slip test Assignment	1 1
		II week	Length – weight relationship, condition factor					
		III week	Breeding in Fishes, breeding places, breeding habits					
		IV week	Induced breeding in fishes					
		V week	Parental care in Fishes					
4.	Feb	I week	Embryonic and larval development of Fish.	Seminar	Teaching	16	Slip test Assignment	1 1

		II week	Embryonic and larval development of Shrimp.					1
		III week	Environmental factors affecting reproduction and development of cultivable fishes					
		IV week	Endocrine system in fishes.					
5.	March	I week	Chromatophores & Molting in crustacean shell fish	Seminar	Teaching	08		
		II week	Molting in crustacean shell fish.	Seminar	Teaching		Slip test Assignment	1 1



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CURRICULAR PLAN 2018-19

DEPARTMENT OF ZOOLOGY & FISHERIES

II B.Sc. Aquaculture Technology ; Paper-II, Semester –III

FISH NUTRITION & FEED TECHNOLOGY

(Dr. N.H.K Durga Prasad ,Smt. G. Sunitha)

S.No	Month	Week	Syllabus	Additional input Value addition	Curricular Activity		Co-Curricular Activity	
					Activity	Hours Allotted	Activity	Hours Allotted
1.	June	III week	Requirement for protein, carbohydrates, lipids, fiber different of cultivable fish.	Seminar	Teaching	8	Assignment	1
		IV week	Essential Amino acid and fatty acids					
2.	July	I week	Feed conversion efficiency, feed conversion ratio	Quiz	Teaching	16	Assignment	1
		II week	Wet feeds, Moist feeds, dry feeds, mashes, pelleted feeds					
		III week	Floating and sinking pellets, advantage of Pelletization.					
		IV week	Manuel feeding, automatic feeders, surface spraying Bag feeding and tray feeding.					
3.	August	I week	Feed ingredients and their selection	Field Visit	Teaching	20	Slip test Assignment	1 1

		II week	Feed formulation – Steam pelleting, grinding, mixing, Drying, pelleting and packing					
		III week	Water stability of feeds, farm made aqua feeds					
		IV week	Micro-Coated feeds, Micro-Encapsulated feeds and micro – bund diets.					
		V week	Microbial, insect and rodent damage of feed chemical spoilage during storage period and proper storage methods					
4.	September	I week	Binders, anti-oxidants, probiotics.	Guest Lecture	Teaching	20	Slip test Assignment	1 1
		II week	Feed attractants and feed stimulants					
		III week	Enzymes, hormones, growth promoters and pigments					
		IV week	Protein deficiency, Vitamin and Mineral deficiency Symptoms.					
		V week	Nutritional pathology and Anti Nutrients					
5.	October	I week	Importance of Natural and supplementary feeds, balanced diet	Seminar	Teaching	4	Slip test Assignment	1 1



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DEPARTMENT OF ZOOLOGY & FISHERIES

II B.Sc. Aquaculture Technology ; Paper-II, Semester –IV

FRESH WATER & BRACKISH WATER AQUACULTURE

(Dr. N.H.K Durga Prasad ,Smt. G. Sunitha)

S.No	Month	Week	Syllabus	Additional input/ Value addition	Curricular Activities		Co-Curricular Activities	
					Activity	Hours Allotted	Activity	Hours Allotted
1.	Nov	IV week	Status, scope and prospects of fresh water aquaculture	Guest Lecturer	Teaching	4	Assignment	1
		V week	Different fresh water Aquaculture systems					
2.	Dec	I week	Major cultivable Indian carps & Minor carps	Seminar	Teaching	16	Assignment	1
		II week	Exotic fish species introduced to India					
		III week	Composite fish culture (fish) system of Indian and exotic carps					
		IV week	Recent developments in the culture of clarius, anabas, murels.					

3.	Jan	I week	Advantages and constraints in the culture of air breathing	Quiz	Teaching	16	Slip test Assignment	1 1
		II week	Cold water fishes – seed resources, feeding, management and production.					
		III week	Special systems of Aqua culture					
		IV week	Fresh Water prawns of India – Commercial value					
4.	Feb	I week	Macrobrachium rosenbergii - biology, seed production, pond preparation	Student Seminar	Teaching	16	Slip test Assignment	1 1 1
		II week	M. Malcomsoni- biology, seed production, pond preparation					
		III week	Culture of P.Mondon					
		IV week	Culture of I-vannamei					
5.	March	I week	Mixed culture of fish and prawns	Seminar	Teaching	08	Slip test Assignment	1 1
		II week	Revision					