No.	Information of the subject	
1.	Unit name:	Aquaculture Biotechnology
2.	Code:	BioT 41063
3.	Classification:	Core subject
4.	Credit value:	3.5
5.	Semester/Year Offered:	1/4
6.	Pre-requisite:	NA
7.	Mode of delivery:	Presentations, Lectures
8.	Assessment system and breakdown of marks:	Classwork, Practical
	Practical	30%
	Mid-term exam	35%
	Final exam	35%
9.	Academic staff teaching unit:	Department of Biotechnology
10.	Course outcome of unit: After completion of this course, students will be able to 1. Identify the role of aquaculture biotechnology in society 2. Identify seawater and freshwater animals and plants 3. Examine the relationship between science and biotechnology 4. Apply scientific knowledge of aquaculture biotechnology 5. Apply scientific knowledge of aquaculture biotechnology to industry	
11.	Synopsis of unit: The giant freshwater prawn, Macrobrachium rosenbergii is commercially important for its value as a food source. They are distributed throughout the tropical and subtropical zones of the world. The black tiger shrimp, Penaeus monodon is distributed throughout the Myanmar waters from Maung Daw township in the North (Rakhine state) to Kawthaung in the South (Thaninthayi division). The success of shrimp or prawn hatchery depends on: the choice of a suitable site; the choice of a right species; the effectiveness of a hatchery design; the efficiency of the hatchery design; Hatchery technology and experience of hatchery technicians and efficiency of operational management. In growout culture system, pond construction and pond preparation are very important. The production yield in pond culture can be increased by applying modern farming technologies, namely, intensification of culture operation through regularization of pond size, increase stocking density, employment of aeration, application of formulated pellet feeds, etc. Some economically important freshwater finfishes are grass carp, silver carp, bighead carp, common carp, catla, Rohu and mrigal. Some economically important	

	seawater finfishes are grouper and seabass (the giant perch).
12.	Topics 1. Freshwater prawn 2. Seawater shrimp 3. Hatchery operation and post larval technology 4.Growout culture system 5. Economically important some freshwater and seawater finfishes
13.	Main reference: • Aquaculture: The Farming and Husbandry of Freshwater and Marine Organisms; John E. Bardach, John H. Ryther, and William O. McLarney
14.	Additional references: • Aquaculture Biotechnology: Garth.L.Fletcher and Matthew. L. Rise., Wiley-Blackwell