

MAHARASHTRA STATE BOARD OF VOCATIONAL EDUCATION EXAMINATION, MUMBAI

1	Name of syllabus	C.C.IN cage culture fisheries technician (2019-2020)						
2	Course Code	305143						
3	Max. Nos. of student	25 student						
4	Duration	6 month						
5	Types	Part time						
6	Nos. of days/ week	6 Days						
7	Nos. of Hours/days	7 hrs.						
8	Space requirement	1) Fish pond of ½ acer or minimum -12 cages at any reservoir plus Boat, Platform, etc. 2) Class room – 200 sq ft 3) Lab-200 sq ft						
9	Entry qualification	12 th pass						
10	Objective of syllabus/ introduction	1) To understand and adopt culture practice of fish in cage culture 2) To learn installation and fabrication of cages 3) To learn feeding schedule 4) To understand disease in fishes 5) To learn harvesting and marketing of live fishes of cages						
11	Employment opportunity	- As a cage culture supervisor at any cage culture unit - Self employment and state/central govn. Given 40% subsidy to open category and 60% to SC/ST category for cage culture business						
12	Teacher's Qualification	- M.F.Sc (Master in Fisheries Science) - B.F.Sc (Bachelor in Fisheries Science)						
13	Training system	Sr. No	Paper Code	Name of Subject	TH / PR	Hours	Max Marks	Min Marks
		1	30514311	Cage fish farming	TH-I	3 hrs.	100	35
		2	30514312	Pre-stocking/post-harvesting	TH - II	3 hrs.	100	35
		3	30514321	Water analysis and disease control	TH- III	3 hrs.	100	35
		4	30514322	Sampling feeding and cage management	PR-I	3 hrs.	100	50
				TOTAL			600	255

Theory syllabus for cage culture course	
Sr. no	Chapter
A	Cage fish farming
1	Concept of fisheries
2	Aquaculture system
3	Cage culture system
4	Advantages of cage culture
5	Type of cages
6	Types of net
7	Cage fabrication
8	Site selection
9	Economics of cage culture
10	Anchoring of cages
11	Type of feed and feeding management
12	Sampling and importance of sampling
13	Disease control/ prevention measures
B	Pre-stocking and post harvesting
1	Indemnification of fish seed
2	Pre-stocking of seed / planning and medication
3	Transportation of seed
4	Stocking of seed/ counting and grading etc.
5	Nursery management
6	Water chemistry / analysis etc.
7	Harvesting planning
8	Post harvesting (icing, packing and grading, marketing etc.)

Practical syllabus for cage culture	
Sr. no	Practical's
A	Water analysis and disease control
1	DO
2	pH
3	Salinity
4	Hardness
5	Alkalinity
6	Ammonia etc.
7	Water transparency
B	Control measures in water quality management
C	Disease in fish and control measures
D	Cage fabrication and installation
B	Sampling feeding and cage measurement
1	Stocking of fish
2	Identification of good quality seed
3	Feed types and protein content
4	Sampling
5	Feeding and calculation of feeding
6	Record keeping
7	Harvesting and packaging etc.

1) Infrastructure required for cage culture course

Sr. no	Name	Quantity	Rate	Amount INR
A	Infrastructure			
1	Class room	1		
2	Projector	1	12000	12000
3	Computer	4	18000	72000
4	Chai sitting desk	30	1500	45000
5	White board and markers	2	2000	4000
6	Printer	1	15000	15000
7	A/C	2	28000	56000
8	Table / chairs	3	6000	18000
9	Life jackets	30	900	27000
B	Machinery			
1	Boat with engine	1	-	110000
2	Platform 6*6 meter	1	-	111600
3	12 cages	12	100000	1200000
C	Lab equipments			
1	Water test kits DO, Alkalinity, pH, Hardness, Ammonia, Nitrate, Nitrites, Phosphate, Co2 etc.	5 kit	8000	40000
2	Microscope normal	2	4000	8000
3	Glass thermometer 110°C	10	200	2000
4	Glass beaker 250 ml	30	130	3900
5	Amber glass bottle 500 ml	10	580	5800
6	Conical Flask 250 ml	30	135	4050
7	Pepette 5ml/10ml	30	110	3300
8	Buret and Stand 50ml	30	240+485	7200+14550
9	Secchi disk	2	530	1060
10	Pro-biotic and medicine	LS	-	10000
	TOTAL			1770300