



OFFICE, PRINCIPAL GOVERNMENT TULSI COLLEGE, ANUPPUR

Affiliated to Awadhesh Pratap Singh University Rewa (MP)

Registered Under Section 2 (F) & 12 (B) of UGC Act

E-mail: hegtdcano@mp.gov.in

9893076404

Certificate Course On (Aquaculture)

Final report

Certificate Course on Aquaculture

(hybrid Mode)

Organised by dept of zoology

Govt Tulsi College Anuppur(M.P)

Date 8-24 may 2023

General aspects

Participation

Overview of certificate program

Evaluation

General aspects

The Certificate course on Aquaculture aimed at improving skills and knowledge of participants. The course provides basic knowledge about the breeding, rearing, feeding and harvesting of fish, shellfish, plants, algae, and other organisms in all aquatic environments — and explore ways to make this growing and rapidly expanding industry more sustainable. This certificate course also enhanced skills of participants towards commercial fish farming and aquarium construction. This certificate is employment oriented. It's designed for students who are looking to gain additional industry expertise, and individuals trying to break into the aquaculture industry who want to hone their skills and add a certification to their résumé. With an Aquaculture Certificate, participants can work in both the private and commercial sectors as an oyster farmer, seaweed cultivator, or processor, or they could do fish farming or start aquaculture business.

Participation

The certificate course was designed for the PG students of College. The participants also expressed high interest. It gave an opportunity for the students to interact with Resource persons from different universities. The syllabus of Certificate course was relevant to their subject.

Overview of the certificate course outcome

The course was conducted both in online and offline mode. Online session was conducted through Google Meet. Participants had a good perception of the course in general, they evaluated the course and the material provided as "very good". Lectures are conducted both through online and offline mode. All participants were pleased to have involved expert from different universities. Experts were from Botany, zoology and Fisheries discipline. Experts talked about various aspects of certificate course.

Evaluation-Evaluation of certificate course is done throughout the program. Various mode of evaluation were adapted. Google form were given to students to check their knowledge. Assignment were also given to participants.

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Syllabus & Schedule of Certificate Course
Department of Zoology
Government Tulsi College Anuppur (M.P.)
Certificate course (Aquaculture)
32 hours

COURSE OBJECTIVES

- To provide basic Knowledge of aquaculture
- To provide knowledge about food materials for fishes at different growth stage
- Enhancing skills of youth towards commercial fish farming
- To provide basic knowledge about construction of aquarium
- To provide ground level knowledge of fish farming through field visit
- To provide training on aquaculture

Course Outcome

- Get employment in specific area
- Get knowledge of different types of aquaculture practices
- Get skills in aquaculture

COURSE CONTENT

Unit 1 : Definition & Principle

5hrs

Date	Day	Course	Timing	Faculty	Mode of Teaching
08/05/2023	Monday	(a) Definition & Scope	12:30 – 1:30 pm	Mr. Gangesh kumar	Offline
09/05/2023	Tuesday	(B) Present global & national scenario	12:30 – 1:30 pm	Mr. Satyendra Singh	Offline
10/05/2023	Wednesday	(c) System of culture -	12:30 – 1:30 pm	Dr. Sunaina chaudhary	Offline
11/05/2023	Thursday 1 st Session	(i) Pond culture	12:30 – 2:30 pm	Mr. Gangesh kumar	Offline
		(ii) Pen culture		Mrs. Sangita basrani	Offline
		(iii) Cage culture		Mr. Anupam Gautam	
		(iv) Running water culture			
		(v) Zero Water Exchange system			
		(d) Semi intensive, intensive & Super intensive aquaculture in different types of water bodies			

Unit 2 Standard physicochemical properties of water and soil required for fresh water aquaculture 2 hrs

Date	Day	Course	Timing	Faculty	Mode of Teaching
11/05/2023	Thursday 2 nd Session	Unit 2 Standard physicochemical properties of water and soil required for fresh water aquaculture	2:30 – 4:30 pm	Mrs. Sangita basrani	https://meet.google.com/o yg- pksq-wty

Unit 3 Culture of various food materials required for different growth stages

5 hrs

Date	Day	Course	Timing	Faculty	Mode of Teaching
12/05/2023	Friday 1 st Session	(a) Nutritional requirement of cultivable fish & shellfish form of feeds- wet feeds, moist feeds, dry feeds, mash, pelleted feeds, floating & sinking pellets (b) Food additives- binders, antioxidants, enzymes pigments, growth promoters, feed stimulants, feed storage use of preservatives and antioxidants.	12:30 – 2:30 pm	Mr. Gangesh kumar Mrs. Sangita Basrani Mr. Anupam Gautam	Offline
12/05/2023	Friday 2 nd Session	(c) 1 Feeding devices and methods Non -conventional feed ingredients and anti nutritional factors	2:30 – 4:30 pm	Dr. Sangita basrani	https://meet.google.com/o yg- pksq-wty
23/05/2023	Tuesday	2 Digestive enzymes, feed digestibility, factors affecting digestibility- (d) Nutritional deficiency diseases	7:00 pm-8 pm	Expert lecture Dr Sudha srivastava	https://meet.google.com/rkj-nifb-fkh

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Unit 4 Culture			4hrs		
Date	Day	Course	Timing	Faculty	
20/05/2023	Saturday 1 st Session	Sea weeds	12:30 – 2:30 pm	Botany department Faculty- Dr Shaily Agarwal	https://meet.google.com/got-jovi-yhj
	Saturday 2 nd Session	Common cultivated fish species	2:30 – 4:30 pm	Mr. Gangesh kumar Mr. Satyendra Singh	offline

Unit 5 Design and construction of fresh water aquarium on commercial scale					5hrs
Date	day	Course	Timing	faculty	
15/05/2023	Monday	Aquarium-aquarium maintenance &management	12:30 pm- 1:30pm	Mr Gangeshku mar	Offline
16/05/2023	Tuesday	Aquarium-aquarium maintenance &management	12:30 pm- 1:30pm	Mr Anupam Gautam	Offline
17/05/2023	Wednesday	Aquarium-aquarium maintenance &management	12:30 pm- 1:30pm	Mrs. Sangita basrani	Offline
18/05/2023	Thursday	b) Fresh water aquaria c) Commercial scale of fish (aquarium or culture marketing)	2:30 pm-4:30pm	Mrs. Sangita basrani	https://meet.google.com/hhs-rceh-wzc

Unit 6					6 hrs
	Day	Course	Timing	Faculty	
18/05/2023	Thursday	(a) Fish landing center	7:20 pm-9:20pm	Mr. Satyendra Singh	https://meet.google.com/hhs-rceh-wzc
19/05/2023	Friday	(b) Fish market	7:15– 9:15 pm		https://meet.google.com/pah-xqza-eme
20/05/2023	saturday	(c) Processing Industry (d) Fish Pond	7:15– 9:15 pm		https://meet.google.com/got-jovi-yhj

Unit 7					5 hrs
	Day	Course	Timing	Faculty	Mode of Teaching
20/05/2023	Saturday 1 st Session	(a) Artificial pond culture	12:30 – 2:15pm	Mrs. Sangita Basrani	Offline
20/05/2023	Saturday 2 nd Session	(b) Aquarium construction	2:30 – 3:45 pm	Dr. Sunaina Chaudhary Mr. Anupam Gautam Mr. Gangesh kumar Mr. Satyendra Singh	Offline
23/05/2023	Tuesday	(c) Concepts for fish marketing	12:30 – 1:15 pm	Dr. Sunaina Chaudhary	Offline
24/05/2023	Wednesday	Aquaculture-an overview	12:30 PM-1:15 PM	Expert lecture Dr. Vandana ram	offline


Mrs Sangita basrani
Certificate course Coordinator


Mr. Ajay raj singh rathour
H.O.D.
Department of Zoology


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