

From.

01/9/2021-22

The Head,

Department of Zoology,
Jawahar College of Arts, Commerce and Science College,
Anadur.

To,

The Principal,

Jawahar College of Arts, Commerce and Science College,
Anadur.

Subject: Regarding Approval for Short Term Certificate Course on Fresh Water Fish Culture.

Respected Sir.

In a departmental meeting dated 01/8/2021 the faculty members have discussed regarding the need of imparting agro-based entrepreneurial skills to students and scope for Fresh Water Fish Culture in achieving it. The meeting concluded with unanimity to conduct a short term certificate course on Fresh Water Fish Culture.

So, with reference to above mentioned subject, I request you to kindly grant us an approval for conductance of a 30 hours short term certificate course on Fresh Water Fish Culture from 01/9/2021 to 30/9/2021

Kindly do the needful.

Yours Sincerely,

Head,

Department of Zoology,
Jawahar College of Arts,
Commerce and Science
College, Anadur.



PRINCIPAL

Jawahar Arts, Science & Commerce
College, Anadur,
Tal. Tuljapur, Dist. Osmanabad.



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Shikshan Prasarak Mandal's

Founder

JAWAHAR ART'S, SCIENCE & COMMERCE COLLEGE, ANADUR

Tq. Tuljapur, Dist. Osmanabad - 413 603

NAAC - GRADE - B++ (CGPA 2.81)



Principal : **Dr. Umakant Chanshetti** (Mob.: 9420488874)
(M.Sc., B.Ed., M.Phil., Ph.D.)

President : **Shri. B. F. Kasture** Late S. N. Alure Guruji

From,

The Principal,

Jawahar College of Arts, Commerce and Science College,
Anadur

02/9/20 21

To,

The Head,

Department of Zoology,
Jawahar College of Arts, Commerce and Science College,
Anadur.

Subject: Approval for Short Term Certificate Course on Fisheries.

Respected Sir,

As per the request proposal submitted by you for the conductance of short term certificate course on Fresh Water Fish Culture, the subject was discussed in the CDC meeting dated / /20 . The CDC Committee has granted Department of Zoology permission to conduct the proposed STCC (30 Hours) on Fresh Water Fish Culture from 01/09/2021 to 30/09/2021

On behalf of Institution I ensure complete support and best wishes for the course.

Principal,

Jawahar College of Arts,
Commerce and Science
College, Anadur.

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President : Shri. B. F. Kasture

Late S. N. Alure Guruji

03/9/2021

Under the chairmanship of Principal, Jawahar Arts, Commerce and Science College, Anadur, The Department of Zoology organized a meeting for drafting the syllabus for short term certificate course on Fresh Water Fish Culture. After considering the climatic conditions, geographical location and local resources it was found important to include various distinctive points into the syllabus. Accordingly the syllabus attached herewith was designed and drafted. For this purpose the undersigned Fisheries expert, Head - Department of Zoology and other faculty members of Department of Zoology were present and contributed for the final drafting of the syllabus.

Name	Designation	Sign
Dr. U. B. Chanshetti	Principal	
Dr. H. K. Jadhav.	Fisheries Expert	
Dr. S. S. Baad	Head, Department of Zoology	
Dr. G. T. Rathod	Associate Professor, Department of Zoology	
Dr. J. B. Hattarge	Faculty, Department of Zoology	
Mr. N. B. Birajdar	Faculty, Department of Zoology	
Mr. P. C. Kandale	Faculty, Department of Zoology	

Principal,
Jawahar College of Arts,
Commerce and Science
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President : Shri. B. F. Kasture

Late S. N. Alure Guruji

(M.Sc., B.Ed., M.Phil., Ph.D.)

Department of Zoology Short Term Certificate Course in Fresh Water Fish Culture

Syllabus (Theory)

Total Periods- 30

Marks- 50

SR NO	NAME OF TOPIC	NAME OF CHAPTER	TEACHER ALLOTTED	TOTAL PERIOD	DATE	TEACHING METHOD
1	Fish as a Food	1) Introduction	Dr. S. S. Baad	2		PowerPoint Presentation
		2) Historical background of aquaculture				
		3) Importance of fish in human diet.	Dr. G. T. Rathod	2		Theory
		4) Types of fish: edible, non-edible, commercial.	Mr. Nagesh Birajdar	2		Theory
		5) Current work and further Scope and opportunities in Local Fisheries sector	Dr. J. B. Hattarge	2		Practical

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		6) Local Fish Catching Techniques	Dr. S. S. Baad	2		Practical
		7) Advanced fish catching techniques	Mr. N. B. Birajdar	2		Hands On Training
		8) Introduction to aquaculture	Mr. N. B. Birajdar	2		Theory
2	Integrated Fresh Water Fish Culture – Spawn, Fries and Fingerlings Stages	1) Preparation of Pond	Dr. G. T. Rathod	2		Theory/practical
		2) physico-chemical parameters				
		3) Transport, acclimatization, feeding and maintainance of spawns and fries	Mr. N. B. Birajdar	2		Practical
		4) Fingerlings stage care	Dr. G. T. Rathod	2		Hands On Training
		5) Fish Food Management	Dr. J. B. Hattarge	2		PowerPoint Presentation



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3	Integrated Fresh Water Fish Culture - Maturity, adult and brood stages	1) Major Diseases, abnormalities and deficiencies in Fishes	Dr. S. S. Baad	2	Practical
		2) Feed Conversion Ratio and Optimum harvest technologies	Mr. N. B. Birajdar	2	Theory
		3) Ornamental Fisheries as a source of livelihood for rural women.	Mr. N. B. Birajdar	2	Hands On Training
4	Cultured Fish Harvest, Preservation, Marketing and Value Addition	1) Cultured Fish Harvest and Preservation techniques	Dr. J. B. Hattarge	2	Practical
		2) Marketing and Value addition in fishes	Dr. G. T. Rathod	2	Hands On Training

Reference Books – Fresh Water Fish Culture

- 1) Understanding Aquaculture – Dr Jesse Trushenski.
- 2) Aquaculture Businesses: A Practical Guide to Economics and Marketing - Dr Carole Engle
- 3) Getting Food from Water: A Guide to Backyard Aquaculture - Gene Logsdon
- 4) A Hand Book of Fish Farming - S C Agarwal


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 Tal. Tuljapur, Dist. Gadchiroli.

TEACHING AND EVALUATION SCHEMES

Sr. No.	Title of paper	Credits	Lectures	Total Marks
1	Fresh Water Fish Culture Theory	2	30	50



Head
Department of Zoology
and Coordinator



IQAC Coordinator
IQAC Co-Ordinator
Jawahar Arts, Science & Commerce College,
Anadur, Tq. - Tuljapur, Dist. - Osmanabad.



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Principal
Jawahar Arts, Science & Commerce
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Principal : Dr. Umakant Chanshetti (Mob.: 9420488874)
(M.Sc., B.Ed., M.Phil., Ph.D.)

President : Shri. B. F. Kasture Late S. N. Alure Guruji

Ref. : JMA/20

Date : 04/09/2021

(Affiliated to Dr. Babasaheb Ambedkar Marathwada University, Aurangabad)

Short Term Certificate Course in Fresh Water Fish Culture

Conducted by

Department of Zoology

Year 2021-21

NOTICE

Date: 04/09/2021

Students of B. Sc. III Year are hereby informed that a **Short Term Certificate Course in Fresh Water Fish Culture** is being organized by Department of Zoology. The interested students should enroll their names at **Department of Zoology** by 26/9/2021 Duration of course is 30 Hours.

On completion of the course, the participating students will be awarded with certificate of participation.

Schedule of Course:

Date of Commencement: 01/09/2021

Time: 3.30 PM to 5.30 PM

Handwritten signature

Head,
Dept. of Zoology & Coordinator

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Course Work TIME-TABLE 2021-22


Class – III Year

Subject: Zoology

Day- Date/Time	3.30 pm to 5.30 pm
01/09/21 To 02/09/21	Dr. S. S. Baad Feed Plant Sapling Procurement, Transplantation and Incubation.
03/09/21 To 04/09/21	Dr. G. T. Rathod Feed Plant Training and Pruning.
05/09/21 To 06/09/21	Mr. Nagesh Birajdar Fertilizer Management and Water Management in Feed Plant.
07/09/21 To 08/09/21	Dr. J. B. Hattarge Feed Plant Diseases, Preventive Measures and Curative Measures.
09/09/21 To 10/09/21	Dr. S. S. Baad Leaf Cutting And Feed Management

TIME TABLE COMMITTEE


IQAC
IQAC Co-ordinator
Jawahar Arts, Science & Commerce College,
Anadur, Tq.- Tuljapur, Dist.- Osmanabad.


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College, Anadur,
Tal. Tuljapur, Dist. Osmanabad.

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Course Work TIME-TABLE 2021-22

Class – III Year

Subject: Zoology

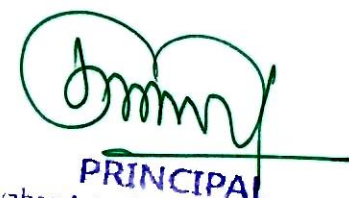
11/09/21 50 12/09/21	Mr. N. B. Birajdar Feed Plant Integrated Pest Management
13/09/21 70 14/09/21	Mr. N. B. Birajdar Leaf Cutting And Feed Management
15/09/21 90 16/09/21	Dr. G. T. Rathod Silkworms Eggs Procurement And Incubation
17/09/21 70 18/09/21	Mr. N. B. Birajdar 2)Chawki Rearing And Maintenance
19/09/21 50 20/09/21	Dr. G. T. Rathod Management Of 3rd, 4th And 5th Instar Of Silkworms
21/09/21 70 22/09/21	Dr. J. B. Hattarge Silkworm Diseases and their Integrated Health Management
23/09/21 90 24/09/21	Dr. S. S. Baad Cocoon Spinning, Cocoon Harvest.

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Course Work TIME-TABLE 2021-22

Class – III Year

Subject: Zoology

25/09/21 to 26/09/21	Mr. N. B. Birajdar Cocoon Transport and marketing Techniques
27/09/21 to 28/09/21	Mr. N. B. Birajdar Cocoon open markets and Cocoon marketing techniques
29/09/21 to 30/09/21	Dr. J. B. Hattarge Spinning instruments and spinning technology
30/09/21	Dr. G. T. Rathod Value Added Products

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President : Shri. B. F. Kasture

Late S. N. Akure Guruji

(Affiliated to Dr. Babasaheb Ambedkar Marathwada University, Aurangabad)

Value Added Certificate Course in Fresh

Water Fish Culture

Conducted by

Department of Zoology

Start Date - 01/10/2021.

Enrolled Students List

2021-2022


Sr. No.	Roll No.	Name of Student and Address	Class
01	AC01	Adake Anjali Vilas	B.Sc. - II
02	AC02	Alange Padmanjali	B.Sc. - II
03	AC03	Badole Sanket Baburao	B.Sc. - II
04	AC04	Bansode Tejas Manohar	B.Sc. - II
05	AC05	Basavantbagade Vishwas Vijay	B.Sc. - II
06	AC06	Birajdar Mahesh Shivshankar	B.Sc. - II
07	AC07	Bodhane Nagraj Ramesh	B.Sc. - II
08	AC08	Chaugale Arpita Prakash	B.Sc. - II
09	AC09	Chavan Amit Annarao	B.Sc. - II
10	AC10	Chavan Dinesh Baburao	B.Sc. - II
11	AC11	Chavan Yuvraj Sanjay	B.Sc. - II
12	AC12	Dalve Jagruti Ramdas	B.Sc. - II
13	AC13	Dhabale Sagar Nagnath	B.Sc. - II
14	AC14	Dharme Shruti Pradip	B.Sc. - II
15	AC15	Dhotre Nikita Somnath	B.Sc. - II


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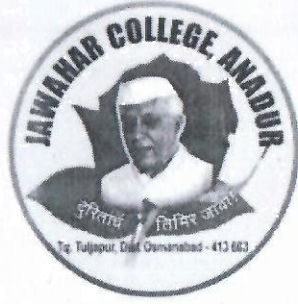
16	AC16	Dindore Pournima Kedarnath	B.Sc. - II
17	AC17	Gade Kajal Tanaji	B.Sc. - II
18	AC18	Gaikwad Deepali Madhukar	B.Sc. - II
19	AC19	Gaikwad Sagar Shivaji	B.Sc. - II
20	AC20	Ghatte Archana Vaijinath	B.Sc. - II
21	AC21	Giram Swati Dayanand	B.Sc. - II
22	AC22	Gore Ranjeet Kishor	B.Sc. - II
23	AC23	Gurav Kalavati Datta	B.Sc. - II
24	AC24	Hagalinde Laxman Sadashiv	B.Sc. - II
25	AC25	Halde Arpita Hanmant	B.Sc. - II
26	AC26	Jalkote Shubham Nagnath	B.Sc. - II
27	AC27	Kabade Namrata Nurundappa	B.Sc. - II
28	AC28	Kage Ganesh Ashok	B.Sc. - II
29	AC29	Kalake Saroja Ganpati	B.Sc. - II
30	AC30	Kalantre Pratiksha	B.Sc. - II

Sr. No.	Male/Female	Total No. of Students
1	Male	15
2	Female	15
	Total	30


Head,
Department of Zoology
and Co-coordinator


IQAC Coordinator
IQAC Co-Ordinator
Jawahar Arts, Science & Commerce College,
Anadur, Tq. - Tuljapur, Dist. - Osmanabad


Principal
PRINCIPAL
Jawahar Arts, Science & Commerce
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Late S. N. Alure Guruji

Value Added Certificate Course in Fresh Water Fish Culture

Organized by

Department of Zoology


B. Sc. III Year Students

Attendance Sheet - Year 2021-22. *17/7 to 30/7/21*

Sr. No	Name of Student															
1	Adake Anjali Vilas	P	P	P	A	P	P	P	P	P	P	P	A	P	P	P
2	Alange Padmanjali	P	P	P	P	P	P	A	P	P	A	P	P	P	P	P
3	Badole Sanket Baburao	P	P	P	P	A	P	P	P	P	P	A	P	P	P	A

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4	Bansode Tejas Manohar	P	P	P	P	P	P	P	A	P	P	P	P	A	P	P	P
5	Basavantbagade Vishwas Vijay	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	A
6	Birajdar Mahesh Shivshankar	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P
7	Bodhane Nagraj Ramesh	P	P	P	P	A	P	P	P	P	P	P	A	P	P	P	P
8	Chaugale Arpita Prakash	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P
9	Chavan Amit Annarao	A	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P
10	Chavan Dinesh Baburao	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P
11	Chavan Yuvraj Sanjay	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P
12	Dalve Jagruti Ramdas	P	P	P	A	P	P	P	P	P	A	P	P	P	P	P	P
13	Dhabale Sagar Nagnath	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P
14	Dharne Shruti Pradip	P	A	P	P	P	P	P	P	P	A	P	P				

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15	Dhotre Nikita Somnath	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P
16	Dindore Pournima Kedarnath	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P
17	Gade Kajal Tanaji	P	P	A	P	P	P	P	P	P	A	P	P	P	A	P
18	Gaikwad Deepali Madhukar	P	P	P	P	P	P	A	P	P	P	P	A	P	P	P
19	Gaikwad Sagar Shivaji	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P
20	Ghatte Archana Vaijinath	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
21	Giram Swati Dayanand	A	P	P	P	P	P	A	P	P	P	P	A	P	P	P
22	Gore Ranjeet Kishor	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P
23	Gurav Kalavati Datta	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P
24	Hagalinde Laxman Sadashiv	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P

25	Halde Arpita Hanmant	P	P	P	A	P	P	P	P	P	A	P	P	P	A	P
26	Jalkote Shubham Nagnath	P	A	P	P	P	P	P	P	A	P	P	P	P	P	P
27	Kabade Namrata Nurundappa	P	P	P	P	P	A	P	P	P	P	P	P	A	P	P
28	Kage Ganesh Ashok	A	P	P	P	P	P	P	P	P	P	P	A	P	P	P
29	Kalake Saroja Ganpati	P	P	A	P	P	P	A	P	P	P	P	P	P	P	A
30	Kalantre Pratiksha	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P



Head of Department


Co-ordinator



IQAC
IQAC Co-ordinator

Jawahar Arts, Science & Commerce College,
Anadur, Tq.- Tuljapur, Dist.- Osmanabad.



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Shikshan Prasarak Mandal's
Jawahar Arts, Science and Commerce College,
Anadur. Dist. Osmanabad.
Department of Zoology
Short Term Certificate Course in
Fresh Water Fish Culture
Examination

Subject: Short Term Certificate Course in Fresh Water Fish Culture

Time: 1: 00 hour

Marks: 50

- Notes: 1. Attempt all questions.
2. All questions carry equal marks.
3. Each questions are two marks
4. Tick Mark (✓) the correct option/answer

Attempt the Following Multiple Choice Questions:

1. **How many days are required for a fry to grow up to fingerling size?**
 - (a) 40 to 60 days
 - (b) 30 to 60 days
 - (c) 25 to 50 days
 - (d) 50 to 65 days

2. **Which of the following oil cake is used to kill all the fishes within few hours?**
 - (a) Mahua
 - (b) Castor
 - (c) Mustard
 - (d) Peanut

3. **What is the required area for fish rearing ponds?**
 - a) 0.02 to 0.06 ha.
 - b) 0.10 to 0.15 ha.
 - c) 0.08 to 0.012 ha.
 - d) 0.06 to 0.10 ha.

4. **Aquaculture is the farming of..**
 - (a). Fishes and crustaceans.
 - (b). Mollusks.
 - (c). Aquatic plants.
 - (d). All of the above



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5. What is the share of fresh water fish culture in total fish production?

- (a). 40%.
- (b). 50%.
- (c). 55%.
- (d). 45%

6. Central Institute of Freshwater Aquaculture....

- (a). Bhubaneswar, Odisha.
- (b). Tiruvanathapuram, Kerala.
- (c). Puducherry, Tamil Nadu.
- (d). Kozhikode, Kerala.

7. Which type of aquaculture is based on the waterreplacement?

- (a). Seepage water farms.
- (b). Ground water fed farms.
- (c). Coastal fish farms.
- (d). Running water farms.

8. Which of the following is not a method of fish preservation?

- a) Chilling
- b) Baking
- c) Canning
- d) Salting

9. Which of the following is a surface feeder?

- a) *Catla catla*
- b) *Labeo rohita*
- c) Magur
- d) Flying fish

10. The Adult Rohu is a herbivorous..?

- a). Column feeder.
- b). Surface feeder.
- c). Deep water feeder.
- d). Bottom feeder.



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11. What is the scientific name of Mrigal?

- a). *Carila catla*.
- b). *Ictalurus fereatus*.
- c). *Ameiurus melas*.
- d). *Cirrhinus cirrhosus*.

12. In recirculation aquaculture system the use of biofiltration is required to reduce..?

- a). Methane toxicity.
- b). Excessive amount of CO₂.
- c). Ammonia toxicity.
- d). Salt.

13. Which is the true description of aquaponics?

- a). Growing plant using RAS.
- b). Rearing fish using RAS.
- c). Combining plants and fish in RAS.
- d). None of the above.

14. As of July 2021, India ranks in aquaculture and in fisheries?

- a). 2nd, 3rd.
- b). 3rd, 4th.
- c). 1st, 2nd.
- d). 4th, 5th.

15. Fisheries contribute to of the total GDP of India?

- (a). 2%.
- (b). 0.5%.
- (c). 1.5%.
- (d). 1.07%.



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16. The fish as a food is a major source of..?

- a). Fat.
- b). Protein.
- c). Iron.
- d). Carbohydrates.

17. Which is a post-harvest technology in commercial fish farming?

- a). Salt treatment.
- b). Ice bath treatment.
- c). Sun drying.
- d). Use of condiments.

18. Which is the most ideal crop system for fish farming..?

- a). Sugarcane.
- b). Wheat.
- c). Maize.
- d). Rice.

19. Which of the following is not a bacterial disease in the carp culture?

- (a) Columnaris
- (b) Tail rot and fin rot
- (c) Vibriosis
- (d) Ich / white spot

20. Which of the following is not a parasitic disease in the carp culture?

- (a) Myxosporidiasis
- (b) Pseudomoniasis septicaemia
- (c) Trichodiniasis
- (d) Argulosis



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21. How much depth of a fish pond is ideal for fish culture?

- (a) 1 meter
- (b) 2 meters
- (c) 3 meters
- (d) 4 meters

22. Which type of fish feed is suitable for carp spawn and fries?

- (a) floating or sinking doughs
- (b) Sinking pellets
- (c) Powdered feed (Mash)
- (d) Floating pellets

23. In aquaculture FCR stands for:

- (a) Fruitlet Core Rot
- (b) First call resolution
- (c) Forwarder's Cargo Receipt
- (d) Feed Conversion Ratio

24. Which ornamental fish is most preferred, attractive and popular in India

- (a) Barbs
- (b) Loaches
- (c) Goldfish
- (d) Goby

25. The global ornamental fish market size was estimated at USD..... in 2021.

- (a) 2.4 billion
- (b) 3.4 billion
- (c) 4.4 billion
- (d) 5.4 billion



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Shikshan Prasarak Mandal's
Jawahar Arts, Science and Commerce College,
Anadur, Dist. Osmanabad.
Department of Zoology
Short Term Certificate Course
Fresh Water Fish Culture
Examination

Subject: Short Term Certificate Course in Fresh water fish culture

Time: 1: 00 hour

Marks: 50

- Notes: 1. Attempt all questions.
2. All questions carry equal marks.
3. Each questions are two marks
4. Tick Mark (✓) the correct option/answer

Attempt the Following Multiple Choice Questions:

Answer Key

Sr. No.	Ans. Key	Sr. No.	Ans. Key
1	B	16	B
2	A	17	B
3	D	18	D
4	D	19	D
5	C	20	B
6	A	21	A
7	D	22	C
8	B	23	D
9	A	24	D
10	A	25	C
11	D	---	---
12	C	---	---
13	C	---	---
14	A	---	---
15	D	---	---


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Department of Zoology
Short Term Certificate Course on
Fresh Water Fish Culture

Result - 2021-2022

Sr. No.	Name of the enrolled Student	Marks Maximum 50 / Minimum 20	Remarks
1	Adake Anjali Vilas	40	
2	Alange Padmanjali	41	
3	Badole Sanket Baburao	40	
4	Bansode Tejas Manohar	39	
5	Basavantbagade Vishwas Vijay	38	
6	Birajdar Mahesh Shivshankar	37	
7	Bodhane Nagraj Ramesh	40	
8	Chaugale Arpita Prakash	37	
9	Chavan Amit Annarao	41	
10	Chavan Dinesh Baburao	39	
11	Chavan Yuvraj Sanjay	38	
12	Dalve Jagruti Ramdas	37	
13	Dhabale Sagar Nagnath	40	
14	Dharne Shruti Pradip	41	
15	Dhotre Nikita Somnath	40	
16	Dindore Pournima Kedarnath	37	
17	Gade Kajal Tanaji	38	
18	Gaikwad Deepali Madhukar	39	


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19	Gaikwad Sagar Shivaji	40	
20	Ghatte Archana Vaijinath	41	
21	Giram Swati Dayanand	39	
22	Gore Ranjeet Kishor	41	
23	Gurav Kalavati Datta	39	
24	Hagalinde Laxman Sadashiv	38	
25	Halde Arpita Hanmant	37	
26	Jalkote Shubham Nagnath	39	
27	Kabade Namrata Nurundappa	40	
28	Kage Ganesh Ashok	41	
29	Kalake Saroja Ganpati	40	
30	Kalantre Pratiksha	39	



Head.

Dept. of Zoology
& Coordinator



Principal

PRINCIPAL
Lawahar Arts, Science & Commerce
College, Anadur,
Tal. Tuljapur, Dist. Osmanabad.



दुरितांचे तिमिर जावो !
Shikshan Prasarak Mandal's

JAWAHAR ART'S, SCIENCE & COMMERCE COLLEGE, ANADUR

Tq. Tuljapur, Dist. Osmanabad - 413 603

NAAC - GRADE - B++ (CGPA 2.81)

Founder



DEPARTMENT OF ZOOLOGY

SHORT TERM CERTIFICATE COURSE ON _____

This is to certify that Mr./Mrs. _____

Has participated and successfully passed a short term certificate course

on _____, held at Department of Zoology, Jawahar Arts, Science

and Commerce College, Anadur during ___/___/___ to ___/___/___.

[Signature]
Convener

[Signature]
Head

[Signature]
PRINCIPAL
Principal
Jawahar Arts, Science & Commerce
College, Anadur,
Tal. Tuljapur, Dist. Osmanabad.

Shikshan Prasarak Mandal's

**Jawahar Arts, Science and Commerce College, Anadur.
Dist. Osmanabad.**

Short Term Certificate Course in Fresh Water Fish Culture

Conducted by

Department of Zoology

Student Feed Back Form- Year 2021-22

1) Was the overall course satisfactory to meet your learning needs?
.....

2) What innovative concepts did you learnt from this course?
.....

3) What improvements did you expect in this course?
.....

4) After this course are you interested to take fish culture as an income source
and work in fisheries sector?
.....

5) How will this course help you with respect to your all-round development?
.....

Signature of Student



Head,
Dept. of Zoology
&Coordinator



Principal
PRINCIPAL
Jawahar Arts, Science & Commerce
College, Anadur,
Tal. Tugapur, Dist. Osmanabad.

Shikshan Prasarak Mandal's

**Jawahar Arts, Science and Commerce College, Anadur
Dist. Osmanabad.**

Department of Zoology

Report of

Short Term Certificate Course

Fresh Water Fish Culture

Submitted

To

**The Principal
Jawahar Arts, Science and Commerce College, Anadur.**

By

**Department of Zoology
Jawahar Arts, Science and Commerce College, Anadur**

Academic Year - 2021-22

(18/09/22) 2022-2023

Report of
Value Added Certificate Course
Fresh Water Fish Culture
Academic Year-2021-22

Submitted to

The Principal,
Jawahar Arts, Science and Commerce College,
Anadur. Dist. Osmanabad.

Respected Sir,

As per the directions of the Principal, Jawahar Arts, Science and Commerce College, Anadur and resolution in the Departmental meeting held on / /20 . The Department of Zoology conducted a 30 hours value added certificate course for the under-graduate students of B. Sc. III Year Zoology Students of Jawahar Arts, Science and Commerce College, Anadur. The course was entitled as "***Fresh Water Fish Culture***".

The Principal objectives of the courses were as follows:

- ➔ *To inculcate importance of fresh water fish culture in relation with entrepreneurship development.*
- ➔ *To teach techniques related to Integrated Fish Farming.*
- ➔ *Familiarize and create interest in rural girls and women regarding opportunities in fishery sector with focus on women empowerment in rural areas.*
- ➔ *Increasing the employment opportunity in rural sector and thus enhancing the allied income of the farmers especially the rural women.*

The course was held from / /20 to / /20 . Total 30 Students were enrolled and attended the course. A Timetable of the same was prepared and the course was conducted accordingly.


Head

Department of Zoology and
Program Coordinator


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