

Shri Gajanan Shikshan Prasarak Mandal's

**Toshniwal Arts, Commerce & Science College,**

Sengaon, Tq. Sengaon Dist. Hingoli

**DEPARTMENT OF FISHERY SCIENCE**

Date: 30/08/2018

To,

**The Principal**

**Toshniwal Arts, Commerce & Science College, Sengaon**

**Subject:** Regarding permission for starting certificate course...

Respected sir,

With reference to subject cited above, faculty members of Department of Fishery Science are interested to start self-finance certificate course on "**Aquarium fish keeping and management**". This course will be helpful for participants to earn their livelihood by employing different activities of ornamental fish industry. Syllabus proposed under the course is enclosed herewith along with course outcomes for your approval please. Kindly approve the same and oblige.

Thanking you,

**Mr. Patil D. W.**

**Department of Fishery Science  
Toshniwal College, Sengaon**

**Mr. Markad S. S.**

**Encl:**

1. Course Proposal
2. Course syllabus

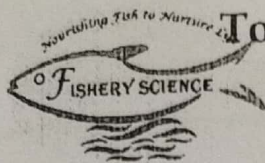
2017-18

TD  
The Coordinator  
IOZAC

to the member

30/08/18





Shri Gajanan Shikshan Prasarak Mandal's

**Toshniwal Arts, Commerce & Science College,**  
Sengaon, Tq. Sengaon Dist. Hingoli

## **DEPARTMENT OF FISHERY SCIENCE**

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*[Signature]*  
Mr. Patil D. W.

Department of Fishery Science  
Toshniwal College, Sengaon

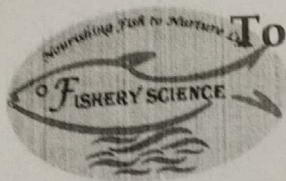
*[Signature]*  
Mr. Maskad S.S.

**Encl:**

1. Course Proposal
2. Course syllabus

TO  
The HOD  
Dept of Fishery Sci  
do the needful & return  
*[Signature]*  
30/08/18





Shri Gajanan Shikshan Prasarak Mandal's

**Toshniwal Arts, Commerce & Science College,**

Sengaon, Tq. Sengaon Dist.Hingoli

## **DEPARTMENT OF FISHERY SCIENCE**

Certificate Course

In

### **“Aquarium fish keeping and management”**

#### **Introduction:**

The course is designed with the aim to create expertise in the aquarium fish industry. The course will focus on different aspects of the ornamental fish industry. The course is designed giving maximum weightage to the practical hours so that the participants will become technically sound with thorough practical hand in different aspects of aquarium fish keeping and management.

The course will empower participant to identify different valuable aquarium fish and plant species, to carry out breeding and seed production of different ornamental fish and plant species, aquarium feed preparation and management, setting of aquarium tanks, care and maintenance of aquarium tanks, etc. This will open ocean of opportunities for the participant to earn sustainable income and explore the new avenues of the ornamental fish sector including export of the ornamental fishes. Moreover, highly valued and endangered local species can also be conserved by application of the technical knowhow gained through this course.

**Course Duration:** 45 Teaching Hours

**Assessment:** Internal Continuous Assessment (20%) + Written Examination ( 80%)

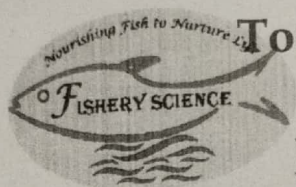
**Eligibility:** 10+2

#### **Proposed outcome:**

The said course will enable participant to earn sustainable revenues by starting following activities separately or in combination:

1. Large outlet supplying all material and services for aquarium
2. Ornamental fish and plant sale
3. Breeding of ornamental fishes and plants
4. Sale of aquarium accessories
5. Providing services for care and maintenance of aquarium tanks
6. Preparation and sale of fish feed
7. Setup of aquarium display unit for recreational purpose
8. Identification and capture of local ornamental fish and plant species
9. Maintaining of biodiversity by conservation
10. Setup of single window solution centre with respect to aquarium sector
11. As a Hobby





Shri Gajanan Shikshan Prasarak Mandal's

**Toshniwal Arts, Commerce & Science College,**

Sengaon, Tq. Sengaon Dist. Hingoli

## DEPARTMENT OF FISHERY SCIENCE

Certificate Course

In

**"Aquarium fish keeping and management"**

### Syllabus

Syllabus			
SN	Particulars	No of Periods	
		Theory	Practical
	Unit I		
1	Introduction	01	
2	Status & importance of aquarium industry		
3	Aquarium tank	03	02
	a. Introduction		
	b. Types of aquarium		
	c. Different shape & sizes of aquarium		
	d. Aquarium Accessories		
	e. Fabrication of aquarium		
	Unit II		
4	Aquarium Fishes	06	03
	a. Introduction		
	b. Types		
	c. Different Species		
	d. Breeding & larval rearing		
	i. Egg-scatterers		
	ii. Egg-depositors		
	iii. Egg-buriers		
	iv. Nest-builders		
	v. Live-bearers		
	Unit III		
5	Aquarium plants	02	02
	a. Introduction		
	b. Types		
	c. Different Species		
	d. Propagation		
	Unit IV		
6	Aquarium feed and feeding management	01	01
7	Setting of aquarium	01	01
8	Maintenance of aquarium	01	01
	Total	15	10

Total hours: 45; Theory: 1 teaching hour; Practical : 3 teaching hours

**Mr. Markad S. S.**

Assistant professor

Department of Fishery Science

Toshniwal College, Sengaon

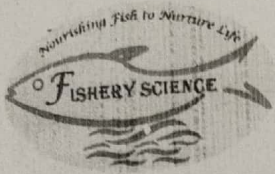
**Mr. Patil D. W.**

Assistant professor & Head

Department of Fishery Science

Toshniwal College, Sengaon





Shri Gajanan Shikshan Prasarak Mandal's  
**Toshniwal Arts, Commerce & Science College,**  
Sengaon, Tq. Sengaon Dist. Hingoli  
**DEPARTMENT OF FISHERY SCIENCE**

Report on  
Certificate Course In "Aquarium fish keeping and management"  
(Academic Year 2017-18)

**Introduction:**

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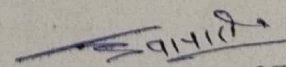
**Course Duration:** 45 Teaching Hours

**Assessment:** Internal Continuous Assessment (20%) + Written Examination (80%)

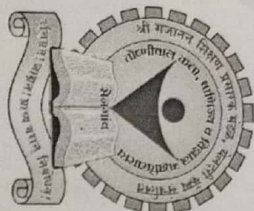
**Eligibility:** 10+2

Following student successfully completed the certificate course:

Sr. No	Student's Name	Gender	Class
1	Kalbande Vishnu Ashokrao	M	B.Sc. T. Y.
2	Tonde Swati Uttam	F	B.Sc. T. Y.
3	Pawar Umesh Rameshwer	M	B.Sc. T. Y.
4	Kotkar Durga Shesharao	F	B.Sc. T. Y.
5	Tidke Muktabai Padmakar	F	B.Sc. T. Y.

  
Head, Department of Fishery Science  
( Padma D. W. )





*Shri Gajanan Shikshan Prasarak Mandal, Yeldari Camp*  
(Linguistic (Marwadi) Minority Institute)  
Re-accredited by NAAC with 'B' Grade

Tq: Sengaoon, Dist. Hingoli-431542 (MS)



**Toshniwal Arts, Commerce & Science College**

**DEPARTMENT OF FISHERY SCIENCE**

*Certificate Course in*  
**Aquarium fish keeping and management**

*Certificate*

This is to certify that, .....of .....Class has  
successfully completed Certificate Course in Aquarium fish keeping and management (45 Hrs  
Teaching) organized by the Department of Fishery Science, Toshniwal Arts, Commerce and  
Science College, Sengaoon, Dist. Hingoli, Maharashtra, India during academic year 2017-18.

Mr. Markad S. S.  
*Course Coordinator*

Mr. Patil D. W.  
*Head*  
*Department of Fishery Science*

*Principal*



# श्री गजानन शिक्षण तोणीवाल कला, वाणिज्य

हजेरी पुस्तिका

हजेरी क्रमांक

विद्यार्थ्याचे नांव

महाविद्यालयाचा पवेश  
घेतल्याचा दिनांक

दिनांक

शिकवलेला पाठ

सही

ज्ञालेल्या तासिका

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01 Kalbande Nharu Adikarao

02 Tonde Suah Utham

03 Pavae Umeh Kameshwar

04 Karkare Bungar Shoharao.

05 Tildike Mahabalkai Padmakar

प्रसारक मंडळ, शेळवरी (कॅम्प)

विज्ञान महाविद्यालय, शे

महिना

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विज्ञान महाविद्यालय,

# हजेरी पुस्तिका

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