

Meeting - 1

22-11-2021

The department meeting was held in the principal's chamber on 22-11-2021. After discussing with the principal & faculty of the department of sciences and the students of B.Sc, it is resolved to enrich the curriculum by initiating a certificate course in "Ornamental fishes and Maintenance of Aquarium" for the benefit of students in this academic year 2021-22. A proposal seeking permission to start the course should be submitted to the principal within two days.

Course Duration : 40 days



Student intake : 20 to 30

Formative Assessment : 15 marks (objective)

Summative Assessment : 25 marks (objective)

Muparaju
22/11/21
course coordinator

Principal
PRINCIPAL (F.A.C)
S.CH.V.P.M.R. Govt. Degree College
Accredited "B" by NAAC
GANAPAVARAM (W.G.Dt.)

- 1) Sri. N. V. N. B. Srinivasa Rao 
Lec. in Chemistry
 - 2) Dr. Ch. Chaitanya - 
Lec. in Botany
- Students representatives

- 1) J. Sai Meghana - J. Sai Meghana
- 2) N. Dhana Surekha - N. Dhana Surekha



SRI CHINTALAPATI VARA PRASADA MURTHY RAJU
GOVERNMENT DEGREE COLLEGE

GANAPAVARAM-534 198

ESTD. 1972 • AFFILIATED TO ADIRAVI NANNAYA UNIVERSITY • ACCREDITED NAAC 'B'



DEPARTMENT OF ZOOLOGY

Date. 22.11.2021

From

Sk.Parveen

In-charge, Dept. of Zoology

SCHVPMR Govt. Degree College

Ganapavaram

To

The Principal

SCHVPMR Govt. Degree College

Ganapavaram

Sub: Curriculum Enrichment for 2021-22 - Dept. of Zoology - proposal for starting a Certificate Course in Ornamental fishes & Maintenance of Aquarium - Request for permission - Reg.

This is to submit that the Dept. of Zoology is proposing to start a Certificate Course in “**Ornamental fishes & Maintenance of Aquarium**” during the academic year 2021-22 so as to enrich the existing curriculum for the benefit of the students. Hence, this proposal is submitted seeking your permission.

Course duration:	30 to 40 days
Student intake:	20 to 30
Name of Faculty:	Sk. Parveen
Formative Assessment	15 marks (objective type)
Summative Assessment	25 marks (objective type)
Qualifying mark	15

Objectives:

- ❖ To enrich the curriculum for the development of students
- ❖ To impart hands on training on setting up of aquaria and maintenance

Sk. Parveen
In-charge, Dept. of Zoology 22/11/2021



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Proceedings of the Principal (FAC), SCHVPMR Govt. Degree College, Ganapavaram

Present: Dr M. Syambab, M.Sc., Ph. D.,

Rc.No.23/14/CC-21-22

Dated 23.11.2021

Sub: Dept. of Zoology - Proposal for Certificate Course in Ornamental fishes & Maintenance of Aquarium – India for the academic year 2021- 22-Permission granted - Orders issued - Reg.

The Principal, SCHVPMR Govt. Degree College, Ganapavaram is pleased to grant permission to launch a Certificate Course in **“Ornamental fishes & Maintenance of Aquarium”** by the Department of Zoology during the academic year 2021-22. The In-charge, Department of Zoology is requested to follow the due procedure for conducting the said course and submit a report thereof.

PRINCIPAL 23/11/21
S.CH.V.P.M.R.Govt.Degree College
GANAPAVARAM-534198. (W.G.Dist)

23-11-2021

Circular-1

Greetings from the Department of Zoology
 All the Students of B.A., B.Sc., B.Z.C.
 informed that the department of zoology of our
 college is going to start a certificate course in
 "Ornamental fishes & Maintenance of Aquarium"
 from 30-11-2021.

Hence, you are suggested to enroll for the
 course and make use of it.

→ Enrollment forms will be shared with you soon.

→ A copy of course syllabus is enclosed herewith.

Course Design

Name of the course - "Ornamental fishes & Maintenance of
 Aquarium".

Duration - 40 days

Student intake - 20 to 30 (First come - First serve)

Course starts on - 30-11-2021 Timings: 9:00 to 10:00 AM

Formative Assessment - 15 marks (Objective) (Conducted
 in the middle of the course)

Summative Assessment - 25 marks (Objective) (Conducted
 at the end of the course)

75% of attendance is mandatory to give the final test.

Qualifying mark is 15 out of 25 (Summative)

Students who scores 15 (or) above will be given
 course completion certificates.

Muparum
 23/11/21
 course co-ordinator

Principal
 PRINCIPAL (F.A.C)
 S.Ch.V.P.H.R. Govt. Degree College
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 GANAPAVARAM (W.G.D.)

MPC - 1st



DEPARTMENT OF ZOOLOGY

Certificate Course on Ornamental fishes & Maintenance of Aquarium”

Academic Year 2021-22

Total Instructional Hours: 40

Syllabus

Unit 1

Basics of aquaculture definition and scope. History of aquaculture: Present global and national scenario. World trade of ornamental fish and export potential. Different varieties of exotic and indigenous fishes. **(6 hours)**

Unit 2

Introduction to aquarium and aquarium accessories. Design and construction of fresh water aquarium. Introduction to Aquarium plants and their export potential. Profiles of some selected aquarium plants. **(8 hours)**

Unit 3

Breeding of ornamental fish with reference to live bearer species. Breeding of Guppies, Mollies, Sword tail fish and Platy fish. Introduction hatchery management system for live bearers. Construction, settings and maintenance of aquarium. **(8 hours)**

Unit 4

Breeding of ornamental fish with reference to selected egg layer species. Introduction to Breeding of Angel fish, Gold fish and Neon tetra. Introduction hatchery management system for egg layers. Feeding for breeding and maintenance of ornamental fish. **(8 hours)**

Unit 5

Ornamental Fish-diseases and their management.

Preparation of an aquarium tank of suitable size. Setting of aquarium. Maintenance of an aquarium. **(10 hours)**


Sk. Parveen

Course Coordinator



SRI CHINTALAPATI VARA PRASADA MURTHY RAJU
GOVERNMENT DEGREE COLLEGE

GANAPAVARAM-534 198

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Department of Zoology

Certificate Course on "Ornamental Fishes & Maintenance of Aquarium"

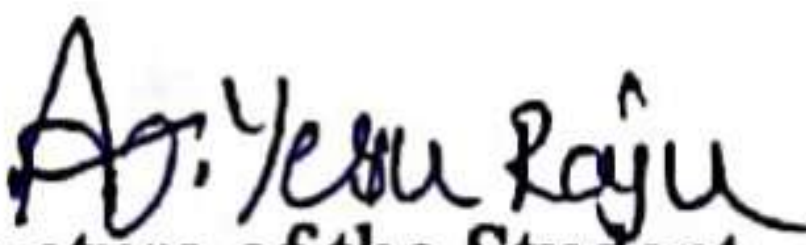
Course Outline


Course Duration	40 days
Course Fee	Nil
Target Group	BSC
Student intake	20 to 30 (First Come-First Serve)
Start Date	30.11.2021
No. of Modules	5
Formative Assessment	15 marks (objective type)
Summative Assessment	25 marks (objective type)
Qualifying Mark	15
Name of the Course Coordinator	Sk.Parveen

Student Registration Form

Date: 30/11/2021

Name of the Student : A. Yesu Raju
Admission Number : 6929
Batch : I
Year and Program studying : II HPC
Semester : III Semester


Signature of the Student


Signature of the Course Coordinator



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Department of Zoology

Certificate Course on "Ornamental Fishes & Maintenance of Aquarium"

Course Outline

Course Duration	40 days
Course Fee	Nil
Target Group	BSC
Student intake	20 to 30 (First Come-First Serve)
Start Date	30.11.2021
No. of Modules	5
Formative Assessment	15 marks (objective type)
Summative Assessment	25 marks (objective type)
Qualifying Mark	15
Name of the Course Coordinator	Sk.Parveen

Student Registration Form

Date: 30/11/2021

Name of the Student : B. Baby Saroja
Admission Number : 6850
Batch : I
Year and Program studying : II Mpc
Semester : III Semester

B. Baby Saroja
Signature of the Student

Sk. Parveen
Signature of the Course Coordinator



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(Affiliated to Adikavi Nannaya University, Rajamahendravaram, A.P.)

Department of Zoology

Certificate course on "Ornamental fishes & Maintenance of Aquarium"

Academic Year: 2021-22

List of Students Enrolled

Sl.No.	Admn.No.	Class	Name of the Student	Signature of the Student
1	6929	II MPC	Achanta. Yesu Raju	A. Yesu Raju
2	6850	II MPC	Bontha. Baby Saroja	B. Baby Saroja
3	6851	II MPC	Chittabattula. Divyasri	Ch. Divya-sri
4	6852	II MPC	Digamarthi. Rathna Manikyam	D. Rathna manikyam
5	6853	II MPC	Eeli. Vasanth	E. Vasanth
6	6854	II MPC	Gorripati. Sandhya	G. Sandhya
7	6855	II MPC	Jami. Venkata Vallika	J. Venkatesavallika
8	6856	II MPC	Jonnada. Sai Meghana	J. Sai Meghana
9	6858	II MPC	Nagiseti. Saim Raju	N. Saim Raju
10	6859	II MPC	Neelam. Sai	N. Sai
11	6960	II MPC	Nidamanuri. Dinesh Kumar	N. Dinesh Kumar
12	6861	II MPC	Nimmala. Dhana Surekha	N. Dhana Surekha
13	6862	II MPC	Salimatti. Hadasya	S. Hadasya
14	6863	II MPC	Singidi. Sravanthi	S. Sravanthi
15	6864	II MPC	Vanapalli. Bhagya Priya	V. Bhagya Priya
16	6865	II MPC	Varlothu. Vijay Kumar	V. Vijay Kumar
17	6866	II MPC	Vippartti. David Raju	V. David Raju
18	6902	II BZC	Bandreddy. Chiranjeevi Saikumar	B. C. Sai Kumar
19	6903	II BZC	Bocha. Tirumala Sai	B. Tirumala Sai
20	6922	II BZC	Bodasingi. Vineetha	B. Vineetha

[Handwritten signature]

PRINCIPAL

S.CH.V.P.M.R.Govt.Degree College
GANAPAVARAM-534198. (W.G.C.::)

30-12-2021

Circular - 2

Dear Students,

We will conduct a formative assessment test in "Ornamental fishes & maintenance of Aquarium" - Certificate course on 06-01-2022

Attendance is mandatory.

Prepare well for the test. & the syllabus for test is

- Basics of Aquaculture
- world trade of ornament fish & export potential
- Introduction to Aquarium
- Breeding of Ornamental fishes
- Introduction to Aquarium accessories

II

MPC - 10thSuparman
30/12/21
course co-ordinator



DEPARTMENT OF ZOOLOGY

12

Certificate Course on Ornamental fishes & Maintenance of Aquarium

FORMATIVE ASSESSMENT Test- 06-01-2022

Name of the Student: A. Yesu Raja

Max. Marks: 15

Class : II MPC

Time : 30 minutes

Admn No : 6929

1. Which of the following is required for setting up of an Aquarium.
 A. Glass tank B. Bebbles C. Plants D. Aretor
2. This fish is known as being an effective insectivore in areas known for disease spread by mosquitoes. In fact many people who don't even own an aquarium know of it.
A. Sword fish B. Molly C. Guppy D. Gold fish
3. Which nitrogen waste is the most harmful.
A. Ammonia B. Nitrite C. Nitrate D. PH
4. What device is used to add or remove water to an aquarium.
 A. Siphon B. Heater C. Hydrometer D. Filter
5. The management and rearing of aquatic animals is called as
A. Pisciculture B. Sericulture C. Aquaculture D. Fishery
6. Where plants and animals live in aquatic ecosystems.
 A. Water B. Land C. Air D. Fire
7. Which is the indigenous ornamental fish
A. Gold fish B. Platy C. Glass fish D. Morala
8. Setting of aquarium is also known as
A. Aqua setting B. Aqua scaping C. Aquarium Culture D. Aquariculture
9. Which collective word refers to a group of fish
A. A collection B. A school C. An Army D. Group
10. What is the most common colour of Gold fish
A. Yellow B. Blue C. Orange D. Green
11. All the following species are fish, except which one?

- A. Lion fish B. Puffer fish C. Angel fish **(D) Jelly fish**
12. Eggs of gold fish are--- in nature
A. Floating **(B) Adhesive** C. Semi- adhesive D. None
13. Nursery ponds are used for growing
A. Spawn to Fry **(B) Brooders** C. Fry to Fingerlings D. Marketable fishes
14. Hydrilla is a type of weed
A. Algal weed B. Submerged weed **(C) Marginal weed** D. Floating weed
15. Which chemical is used to control aquatic insect
(A) Hi-Oxide B. Bleaching powder C. Lime D. Formalin



12

DEPARTMENT OF ZOOLOGY

Certificate Course on Ornamental fishes & Maintenance of Aquarium

FORMATIVE ASSESSMENT Test- 06-01-2022

Name of the Student: B. Baby saroja

Max. Marks: 15

Class : LI MPC

Time : 30 minutes

Admn No : 6850

1. Which of the following is required for setting up of an Aquarium.
 A. Glass tank B. Bebbles C. Plants D. Aretor ✓
2. This fish is known as being an effective insectivore in areas known for disease spread by mosquitoes. In fact many people who don't even own an aquarium know of it. ✓
A. Sword fish B. Molly C. Guppy D. Gold fish
3. Which nitrogen waste is the most harmful. ✓
 A. Ammonia B. Nitrite C. Nitrate D. PH
4. What device is used to add or remove water to an aquarium. ✓
A. Siphon B. Heater C. Hydrometer D. Filter
5. The management and rearing of aquatic animals is called as ✓
A. Pisciculture B. Sericulture C. Aquaculture D. Fishery
6. Where plants and animals live in aquatic ecosystems. ✓
 A. Water B. Land C. Air D. Fire
7. Which is the indigenous ornamental fish ✓
A. Gold fish B. Platy C. Glass fish D. Morala
8. Setting of aquarium is also known as ✓
A. Aqua setting B. Aqua scaping C. Aquarium Culture D. Aquariculture
9. Which collective word refers to a group of fish ✓
A. A collection B. A school C. An Army D. Group
10. What is the most common colour of Gold fish ✓
A. Yellow B. Blue C. Orange D. Green
11. All the following species are fish, except which one? ✓

- A. Lion fish B. Puffer fish C. Angel fish D. Jelly fish
12. Eggs of gold fish are--- in nature
A. Floating B. Adhesive C. Semi- adhesive D. None
13. Nursery ponds are used for growing
A. Spawn to Fry B. Brooders C. Fry to Fingerlings D. Marketable fishes
14. Hydrilla is a type of weed
A. Algal weed B. Submerged weed C. Marginal weed D. Floating weed
15. Which chemical is used to control aquatic insect
 A. Hi-Oxide B. Bleaching powder C. Lime D. Formalin

10-02-22

Circular-3

Dear Students

Instructional classes are concluded today for the certificate course "Ornamental fishes & maintenance of Aquarium". A summative test will be conducted on 16-02-22 covering the Entire Syllabus.

Please remind that

- the qualifying mark is 15 out of 25 for course completion.
- Students with the less than 75% of attendance are not eligible to give this test.

Mufarrem
16/02/22
Course Co-ordinator

MPC - ~~10~~
11

Dec 2021

Pupils Attendance Register

1	2	3	4	5												
				1	2	3	4	5	6	7	8	9	10	11	12	13
6929	1	Achanta. Yesu Raju		P	P	a	P		P	a	P	P	a		P	P
6850	2	Boraha. Baby Saroja		P	P	P		P	a	P	P	P		a	P	
6851	3	Chittabathula. Divyavri		a	P	P	a		a	a	P	P	P		P	P
6852	4	Digamathi. Ratna Hanikya		P	P	P		P	P	P	P	P		P	a	
6853	5	Eeli. Vasanth		P	a	P	P		P	P	P	P	P		P	P
6854	6	Gandipati. Sandhya		a	P	P	P		P	P	P	P	a		P	P
6855	7	Jami. Venkata Vallika		P	P	P		P	P	a	P	P		P	P	
6856	8	Jonnada. Sai. Heghana		P	P	P	a		P	a	P	P	P		a	P
6858	9	Nagiseti. Saim Raju		a	a	a	a		a	a	a	a	a		a	a
6859	10	Neelam. Sai		a	P	P	P		P	P	P	P	P		P	P
6860	11	Nidamanuri. Dinesh Kumar		P	P	a	P		a	P	P	P	P		P	P
6861	12	Nimmala. Dhana Subekha		P	P	a	P		P	P	a	P	P		P	P
6862	13	Salimatti. Hadasya		a	P	P	P		P	P	a	P		P	P	
6863	14	Singidi. Sravanthi		P	a	P	P		P	P	P	a	P		P	a
6864	15	Vana Palli. Bhagya Priya		P	P	P	a		P	P	a	P	P		P	P
6865	16	Varathu. Vijay Kumar		P	P	P	P		a	P	a	P	P		P	P
6866	17	Vipparthi. David Raju		a	P	P	P		P	P	a	P	P		P	P
6902	18	Bandreddy. Chiranjeevi Sai Kumar		a	a	a	a		a	a	a	a	a		a	a
6903	19	Bocha. Tirumala Sai		a	a	a	a		a	a	a	a	a		a	a
6922	20	Bodasingi. Vineetha		P	P	a	P		P	P	P	P	P		P	P

విల్లల హాజరుపట్టి

రోజుల సంఖ్య
వగలు హాజరు

తరగతి
సెక్షన్

5													6		7	8	9			
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	హాజరైన దినములు	ప్రమాదన లేక	రిమార్కులు
													హాజరు	Consolidated	అవసరమైన తేదీ	పా	పా			
P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	23	19	82%
P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	23	20	86%
P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	23	18	78%
P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	23	21	91%
P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	23	20	86%
P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	23	21	91%
a	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	23	20	86%
a	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	23	20	86%
a	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	23	17	73%
a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	23	0	0%
P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	23	20	86%
P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	23	19	82%
P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	23	18	78%
P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	23	18	78%
P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	23	19	82%
P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	23	18	78%
P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	23	20	86%
a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	23	0	0%
a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	23	0	0%
P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	23	21	91%

Principal
Course Coordinator

Principal
PRINCIPAL (F.A.C)
S.CH.V.P.M.R. Govt. Degree College
Accredited "B" by NAAC
GANAPAVARAM. (W.G.Pt.)

ఉదయము హాజరు : బాలురు బాలికలు

(3.A.1) (A.1) ఉపాధ్యాయుని సంతకం.

ఉపాధ్యాయుని హాజరు : బాలురు బాలికలు

ఉపాధ్యాయుని సంతకం.



19

DEPARTMENT OF ZOOLOGY

Certificate Course on Ornamental fishes & Maintenance of Aquarium

SUMMATIVE ASSESSMENT Test- 16-02-2022

Name of the Student: A. Yesu Raju

Max. Marks: 25

Class : II MPC

Time: 50 minutes

Admn No : 6929

1. Which one is a floating aquatic weed
A. Water lilly B. Lotus C. Water hyacinth D. Hydrilla
2. Which one is mainly responsible for growth in fishes
A. Starch B. Amino acid C. Vitamins D. Fatty acid
3. Which is the sign of diseased fish
 A. Eroded skin B. Normal swimming C. Absence of spots D. Bright colouration
4. Fish species likely to be in danger of extinction in the near future are called as
 A. Endangered B. Rare C. Vulnerable D. None
5. Pituitary extract is preserved with ----
A. Absolute alcohol B. Glycerine C. Acetone D. Freezing
6. Free swimming larvae of ----- feed on mucous of their parents.
A. Angel B. Severum C. Gold fish D. Discus
7. Pistia is a type of weed
 A. Floating B. Sub-merged C. Marginal D. Algal weed
8. Fishes feeding on single type of feed are known as
 A. Stenophagic B. Monophagic C. Euryphagic D. Carnivorous
9. ---- is a leading country in export of ornamental fishes.
A. USA B. UK C. Singapore D. India

10. $\text{Ca}(\text{Mg})\text{CO}_3$ is commonly known as _____.

- A. Agricultural lime stone B. Burnt lime C. Hydrated lime **(D) Dolomite**

11. Deficiency of ----- gives rise to scoliosis and lordosis in fish

- A. Vitamine A B. Vitamine B C. VitaminC **(D) Vitamin D**

12. Two or more species culture in the same pond is known as --

- (A) Poly culture** B. Monoculture C. Race way culture D. Pen culture

13. Ranatra is a --

- A. Back swimmer B. Water strider **(C) Water stick insect** D. Giant bug

14.

Ammonia produced in the liver of fish is converted into non toxic form in the blood called

- (A) Glutamine** B. Uric acid C. Creatine D. Creatinine

15. For breeding of neon tetra, the pH of water should be in the range of ---

- (A) 5.5-6.5** B. 4.5-5.5 C. 6.5-7.5 D. 7.5-8.0

16. For breeding of neon tetra, the pH of water should be in the range of -----

- A. Estuarine B. Oligohaline C. Steno haline **(D) Euryhaline**

17. National Fisheries Development Board is located in

- A. Hyderabad **(B) Goa** C. Mumbai D. Chennai

18. Blue revolution is related with the following

- A. Food grain production B. Oil seed production **(C) Fish production** D. Milk production

19. Biodrum refers to--

- A. Ozoniser **(B) Bio filter** C. Machine D. Weeder

20. The important food fish is

- A. Rohu **(B) Catla** C. Wallago D. Clarius

21. In India the best aquarium is located in

A. Z.S.I Calcutta B. Tarapur Bombay C. Madras D. Vishakapatnam

22. Fish is the richest source of

A. Silica B. Protein C. Magnesium D. Zinc

23. The term aquarium was coined by.

A. Tasso Tayung B. Philip Henry Gosse C. Schaefer D. None

24. Scientific name of Gold fish

A. Carissus auratus B. Labeorohita C. Catlacatla D. None

25. Which country is the largest market of the ornamental fishes

A. Singapore B. India C. USA D. Thailand



21

DEPARTMENT OF ZOOLOGY

Certificate Course on Ornamental fishes & Maintenance of Aquarium

SUMMATIVE ASSESSMENT Test- 16-02-2022

Name of the Student: B. Baby saroja

Max. Marks: 25

Class : II MPC

Time: 50 minutes

Admn No : 6850

- Which one is a floating aquatic weed
A. Water lilly B. Lotus C. Water hyacinth D. Hydrilla
- Which one is mainly responsible for growth in fishes
A. Starch B. Amino acid C. Vitamins D. Fatty acid
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- Fish species likely to be in danger of extinction in the near future are called as
A. Endangered B. Rare C. Vulnerable D. None
- Pituitary extract is preserved with -----
A. Absolute alcohol B. Glycerine C. Acetone D. Freezing
- Free swimming larvae of ----- feed on mucous of their parents.
A. Angel B. Severum C. Gold fish D. Discus
- Pistia is a type of weed
 A. Floating B. Sub-merged C. Marginal D. Algal weed
- Fishes feeding on single type of feed are known as
 A. Stenophagic B. Monophagic C. Euryphagic D. Carnivorous
- is a leading country in export of ornamental fishes.
A. USA B. UK C. Singapore D. India

10. $\text{Ca}(\text{Mg})\text{CO}_3$ is commonly known as _____.
- A. Agricultural lime stone B. Burnt lime C. Hydrated lime D. Dolomite
11. Deficiency of ----- gives rise to scoliosis and lordosis in fish
- A. Vitamine A B. Vitamine B C. Vitamin C D. Vitamin D
12. Two or more species culture in the same pond is known as --
- A. Poly culture B. Monoculture C. Race way culture D. Pen culture
13. Ranatra is a --
- A. Back swimmer B. Water strider C. Water stick insect D. Giant bug
14. Ammonia produced in the liver of fish is converted into non toxic form in the blood called
- A. Glutamine B. Uric acid C. Creatine D. Creatinine
15. For breeding of neon tetra, the pH of water should be in the range of ---
- A. 5.5-6.5 B. 4.5-5.5 C. 6.5-7.5 D. 7.5-8.0
16. For breeding of neon tetra, the pH of water should be in the range of ----
- A. Estuarine B. Oligohaline C. Steno haline D. Euryhaline
17. National Fisheries Development Board is located in
- A. Hyderabad B. Goa C. Mumbai D. Chennai
18. Blue revolution is related with the following
- A. Food grain production B. Oil seed production C. Fish production D. Milk production
19. Biodrum refers to--
- A. Ozoniser B. Bio filter C. Machine D. Weeder
20. The important food fish is
- A. Rohu B. Catla C. Wallago D. Clarius
21. In India the best aquarium is located in

A. Z.S.I Calcutta B. Tarapur Bombay C. Madras D. Vishakapatnam

22. Fish is the richest source of

A. Silica B. Protein C. Magnesium D. Zinc

23. The term aquarium was coined by.

A. Tasso Tayung B. Philip Henry Gosse C. Schaefer D. None

24. Scientific name of Gold fish

A. Carissus auratus B. Labeorohita C. Catlacatla D. None

25. Which country is the largest market of the ornamental fishes

A. Singapore B. India C. USA D. Thailand



(Affiliated to Adikavi Nannaya University, Rajamahendravaram, A.P.)

Department of Zoology

Certificate course on "Ornamental fishes & Maintenance of Aquarium"

Academic Year: 2021-22

RESULT SHEET

SL.No.	Admn.No.	Class	Name of the Student	FA	SA	Total	Grade	Signature of Student
				Marks	Marks			
				15	25	40		
1	6929	IIMPC	Achanta. Yesu Raju	12	19	31	A	A. Yesu Raju
2	6850	II MPC	Bontha Baby Saroja	12	21	33	A	B.B. Saroja
3	6851	II MPC	Chittabattula Divyasri	10	18	28	B	Ch. Divyasri
4	6852	II MPC	Digamarthi Rathna Manikyam	08	14	22	C	D.R. Manikyam
5	6853	II MPC	Eeli Vasanth	09	18	27	B	E. Vasanth
6	6854	II MPC	Gorripati Sandhya	10	17	27	B	G. Sandhya
7	6855	II MPC	Jami Venkata Vallika	09	15	24	C	J. Venkata Vallika
8	6856	II MPC	Jonnada Sai Meghana	11	19	30	A	J. Sai Meghana
9	6858	II MPC	Nagiseti Sai Raju	AB	AB	AB	AB	N.S. Raju
10	6859	II MPC	Neelam Sai	08	18	26	B	N. Sai
11	6860	II MPC	Nidamanuri. Dinesh Kumar	11	21	32	A	N. Dinesh Kumar
12	6861	II MPC	Nimmala Dhana Surekha	10	15	25	C	N.D. Surekha
13	6862	II MPC	Salimatti Hadyasa	12	20	32	A	S. Hadyasa
14	6863	II MPC	Singidi Sravathi	08	13	21	C	S. Sravathi
15	6864	II MPC	Vanapalli Bhagya Priya	13	18	31	A	V.B. Priya
16	6865	II MPC	Varlothu Vijay Kumar	12	20	32	A	V.V. Kumar
17	6866	II MPC	Vipparti David Raju	12	18	30	A	V. David Raju
18	6902	II BZC	Banreddy Chiranjeevi Sai Kumar	AB	AB	AB	AB	B.ch.S. Kumar
19	6903	II BZC	Bocha Tirumala Sai	AB	AB	AB	AB	B. Tirumala Sai
20	6922	II BZC	Bodasingi Vineetha	13	21	34	A	B. Vineetha

Grade >30-A, 26 to 30 - B, 21 to 25 -C, 15 to 20 -D, <15 - F

M. Palani
Course Coordinator

S. Ch. V. P. M. R.
PRINCIPAL

S.CH.V.P.M.R. Govt. Degree College
GANAPAVARAM-534198. (W.G. Dist)



DEPARTMENT OF ZOOLOGY

Certificate Course on Ornamental fishes & Maintenance of Aquarium

REPORT

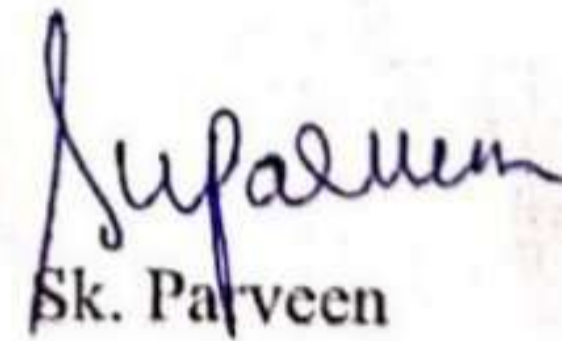
The Department of Zoology has started a certificate course on "Ornamental Fishes & Maintenance of Aquarium" on 30-11-2021. Twenty students from II BSc Joined and completed the course successfully. The certificate course was specially designed to enhance awareness and skill among the students on the advantages of studying Aquarium Fish Keeping as a Skill Enhancement Course. The participants were taught the different methods for fabricating aquariums with advantages and disadvantages of each method. The importance of selecting the right material with proper dimensions were explained. Apart from the material, the information on the right choice of the position was illustrated. The essential components required in a closed aquatic system were explained. The importance of maintaining optimum temperature, dissolved oxygen and other parameters of water were explained. The role of each component was dealt with by the functional correlation to maintain the aquarium.

Learning outcomes :

- ❖ Student enables to set aquarium
- ❖ Student enables to manage the home as well as commercial aquariums
- ❖ Students will learn to handle different aquarium equipments
- ❖ Students will learn Decorations of aquarium


PRINCIPAL

S.CH.V.P.M.R.Govt.Degree Co
GANAPAVARAM-534198. (W.G.D.)



Sk. Parveen
Course Co-ordinator



SRI CHINTALAPATI VARA PRASADA MURTHY RAJU
GOVERNMENT DEGREE COLLEGE

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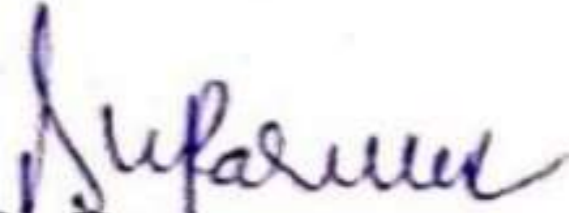
CERTIFICATE

This is to certify that

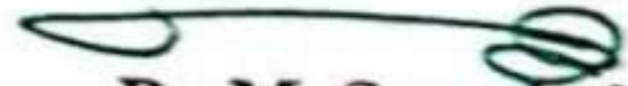
ACHANTA YESU RAJU, II MPC (Admission No. 6929)

of

SCHVPMR GOVERNMENT DEGREE COLLEGE, WEST GODAVARI, ANDHRA PRADESH
has successfully completed the certificate course in "ORNAMENTAL FISHES & MAINTENANCE
OF AQUARIUM" conducted from 30 November to 15 February, 2022 offered by the **Department of
Zoology** with grade "A".


Sk. Parveen
Course Co-ordinator


Dr T. Akki Raju
IQAC Co-ordinator


Dr M. Syambab
Principal



SRI CHINTALAPATI VARA PRASADA MURTHY RAJU
GOVERNMENT DEGREE COLLEGE

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CERTIFICATE

This is to certify that

BONTHA BABY SAROJA, II MPC (Admission No. 6850)

of

SCHVPMR GOVERNMENT DEGREE COLLEGE, WEST GODAVARI, ANDHRA PRADESH
has successfully completed the certificate course in "ORNAMENTAL FISHES & MAINTENANCE
OF AQUARIUM" conducted from 30 November to 15 February, 2022 offered by the **Department of
Zoology** with grade "A".



Sk. Parveen

Course Co-ordinator



Dr T. Akki Raju

IQAC Co-ordinator


Dr M. Syambab

Principal