



# P.B. SIDDHARTHA COLLEGE OF ARTS & SCIENCE

Siddhartha Nagar, Vijayawada – 520 010

*Autonomous -ISO 9001 - 2015 Certified*

**Title of the Paper: AQUARIUM MAINTENANCE AND FISH KEEPING (SDC)**

**Offered to: BSc.BZC with Program code US03**

**Course Type: Core (TH)**

**COURSE CODE- SDCZOO01**

**Year of Introduction: 2021 -2022**

**Year of Revision:**

**Percentage of Revision:**

**Semester: VI**

**Credits: 2**

**Hours Taught: 30**

**Max.Time: 3 Hours**

**Course Prerequisites:**

Basic knowledge about aquarium fish keeping and maintenance.

**DESCRIPTION:**

Biology, chemistry, ecology, and physics are just a few of the sciences involved in aquarium keeping. A classroom aquarium can be used to teach students about specific topics such as fish anatomy or more complex topics such as the food chain, the water cycle, or the nitrogen cycle.

**Objectives**

1. To understand the industry trends opportunities.
2. To impart the skill of fabricating an aquarium.
3. To understand health aspects of aquarium fish.
4. To understand the nutritional requirements of fish.
5. To gain knowledge of various water parameters and their control

CO1	Ability to achieve competence to identify the fish of ornamental importance	
CO2	Ability to plan for aquarium making as a small scale industry	
CO3	Ability to exhibit the knowledge to design and fabricate an aquarium	
CO4	Ability to develop aquarium fish keeping as a hobby and a source of livelihood.	
CO5	Ability to learn common diseases and their controlling methods of aquarium fishes.	

**Syllabus:**

1	<b>Unit 1.</b>	
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	The potential scope of aquarium fish industry as a cottage industry, Types of fish keeping systems- Fresh water	
2	<b>Unit 2.</b> <b>Freshwater Aquarium: Preparation and Maintenance</b> –Purpose, Preparation and Maintenance of Aquarium, Construction of an Aquarium, Aquarium and its Size, Aquatic Plants and Aquatic Animals ,Important aquarium fishes &Food for Aquarium Fishes	
3	<b>Unit 3.</b> Equipment Used in the Maintenance of Aquarium, Essential Equipment ,Aerator or Air-Pumps and Diffuser Stones,Aquarium Heaters and Thermostats, Various types of filters,conditions for an Ideal Aquarium	
4	<b>Unit 4.</b> Aquarium Maintenance Tips And Fish Care Guidelines- Aquarium Water Changes, Testing the Aquarium water, Filter maintenance.	
5	<b>Unit 5.</b> Common diseases of aquarium fishes- diagnosis and treatment	

### **Suggested Reading**

1. Ornamental Fish Culture and Aquarium Mangamen, A.D.Dholakia, DayaPublishinh house
2. Fresh water Aquarium Models, John Tullock, Turner Publishing company
3. Setting up a Tropical Aquarium. By Stuart Thraves, Firefly Books Publication
4. Fresh water Aquarium Fish, Greg Gennings, Firefly Books Publication
5. Aquarium Fish, Mary Bailey and Gina Sandford, Anness publishing

PARVATHANENI BRAHMAIAH SIDDHARTHA COLLEGE OF ARTS AND SCIENCE; VIJAYAWADA  
(An autonomous college in the jurisdiction of Krishna University)

Department of Zoology

TITLE OF THE PAPER: Aquarium Fish keeping and Maintenance

### **Practical Syllabus:**

1. Preparation and fabrication of aquarium
2. Identification of aquarium accessories
3. Collection and identification of fresh water aquarium plants
4. Identification of common fresh water aquarium fishes
5. Collection and identification of aquarium fish food
6. Field visit to ornamental fish farm

### **Scheme of Evaluation (External)**

I. Answer the following questions

1. Define the Aquarium. Describe the Equipment's Used in the Maintenance of Aquarium 10M
2. Preparation of Aquarium – Write the procedure and preparation 15M  
    Procedure – 5M  
    Preparation – 10M
3. Identify and Comment on 5X2= 10M
4. Viva voce 05M

### **Scheme of Evaluation (Internal)**

1. Field visit : 5M
2. Field notes : 5M

**Grand Total (External 40 Marks + Internal 10 Marks) = 50 Marks**

## BOS NOMINEES

### 1. Chairman

Ch.venkateswarlu  
HOD Zoology  
P.B.Siddhartha college of Arts and Science  
PH. 9440661930  
[chundivenkateswarlu2@gmail.com](mailto:chundivenkateswarlu2@gmail.com)

### 2. University Nominee (attended online)

Dr.L. Suseela,  
Assistant Professor Department of Biotechnology & Head (I/c) Botany, Krishna University,  
Machilipatnam.  
PH : 9866914670  
[susheelalankaku@gmail.com](mailto:susheelalankaku@gmail.com)

### 3. Subject experts

Prof. K. Veeraiah (attended online)  
Department of Zoology  
AcharyaNagarjunaUniversity  
Nagarjuna Nagar – 522 510  
Guntur, A.P.  
Mobile: 9490880831  
Mail:[kotturu@gmail.com](mailto:kotturu@gmail.com)

### Prof. S. Kishore (attended online)

Department of Zoology  
Sri Venkateswara University  
Tirupati – 517 502,  
A.P.  
Mobile: 9440773941  
Mail: [kishorecsb@gmail.com](mailto:kishorecsb@gmail.com)

### 4. Industrialist

Dr. M. Lakshmi Prasad  
Sujoy Biotech, Pvt limited

19A, 3rd Road, 3rd Phase  
Auto Nagar, Vijayawada  
9951613842  
Email : laskhmiprasad@sujaybiotech.com

5. Alumnus  
Cherukuri. Sai Krishna (attended offline)  
S/o Ch. Venkata Rao  
D.No: 4-10, Main road  
Kavuluru (p), G.Konduru (Md) -521228  
Krishna (Dt), A.P.  
Mobile: 8639718740  
Mail: [saikrishna.cherukuri01@gmail.com](mailto:saikrishna.cherukuri01@gmail.com)

6. Special invitee  
Sri.V.Babu Rao  
Director  
P.B.Siddhartha college of Arts and Science

7. Internal Member  
Dr.A.Samba Naik  
Lecturer in Zoology  
P.B.Siddhartha college of Arts and Science

### **1. Resolutions / Recommendations:**

**I.** It is resolved to recommend to change the question paper structure (70 theory and 30 internal) of “**Animal diversity – biology of chordates**” with course code **ZOOT21A in II** semester of B.Sc.(BZC) for the batch of students admitted in 2022-23 and onwards. For the syllabus and model question paper vide page No.

**II.** It is resolved to recommend to change the question paper structure (35 Practicals and 15 continuous evaluation) of “**Animal diversity – biology of chordates**” with course code **ZOOP21A in II** semester of B.Sc.(BZC) for the batch of students admitted in 2022-23 and onwards. For the syllabus and model question paper vide page No.

**III.** It is resolved to recommend and introduce semester internship in vith semester of B.Sc.(BZC) for the batch of students admitted in 2020-21 and onwards.

