

K. T. S. P. Mandal's  
Hudatma Rajguru Mahavidyalaya  
Syllabus completion Report (A.Y.2021 – 2022)

Department of Zoology

T. Y. B. Sc. Zoology

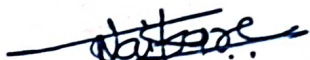
Course Code: ZO – 3510

Course Title: Aquarium management

Sr. no.	Month	Topic	Teacher
1.	Oct	<b>1.Introduction to Aquarium Fish Keeping:</b> 1.1 The potential scope of Aquarium Fish Industry as a Cottage Industry. 1.2 Exotic and Endemic species of Aquarium Fishes. 1.3 Nutritional value of fish	SSN
2.	Oct	<b>2.Introduction to Aquarium Fish Keeping:</b> 1.1 The potential scope of Aquarium Fish Industry as a Cottage Industry. 1.2 Exotic and Endemic species of Aquarium Fishes. 1.3 Nutritional value of fish	SSN
3.	Nov	<b>3.Food and feeding of Aquarium Fishes:</b> 3.1 Use of live fish feed organisms. 3.2 Preparation and composition of formulated fish feeds. 3.3 Overview on types of fish food.	SSN
4.	Nov & Dec	<b>4.Fish Transportation:</b> 4.1 Live fish transport: a) Fish handling. b) Fish packing. c) Fish forwarding techniques. 4.2 Causes of mortality in transport.	SSN
5.	Dec	<b>5.Maintenance of Aquarium:</b> 5.1 General Aquarium Maintenance - budget for setting up an Aquarium. 5.2 Fish Farm as a Cottage Industry, Rules & regulations of fish rearing. 5.3 Common diseases of Aquarium fish.	SSN

6.	Jan	<b>6. Physico-chemical parameters of water for fish culture:</b> 6.1 Acidity, Alkalinity, Calcium, Nitrate, Ammonia, Total hardness <b>7. Fish preservation:</b> 7.1 Fish preservation and processing.	SSN
7.	Feb	<b>8. Fish breeding:</b> 8.1 Types of fish breeding - a) Natural fish breeding. b) Induced fish breeding	SSN

As per above mention theory syllabus of Semester I completed successfully. For completion of this syllabus 38 lectures are conducted.

  
Prof S.S. Naikare



**K.T. S. P. Mandal's**  
**Hutatma Rajguru Mahavidyalaya, Rajgurunagar.**

Department of Zoology

**Syllabus Completion report**

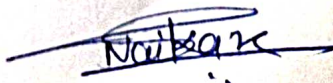
**A.Y.-2021-2022(Semester VI)**

**T.Y. B. Sc.**

**Course Title: Animal Physiology**

**Course Code: ZO-362**

Month	Title	Teacher Name
<b>April 2022</b>	<b>1.Nutrition and digestion:</b> 1.1 Nutritional requirement & balanced diet. 1.2 Digestion and absorption of carbohydrates, proteins and lipids. 1.3 Vitamins - outline of fat soluble and water-soluble vitamins; Sources, deficiency and diseases.	<b>SSN</b>
<b>April 2022</b>	<b>2.Respiration:</b> 2.1 Mechanism of respiration: Regulation of ventilation in lungs, exchange of gases at respiratory surface. 2.2 Respiratory pigments in animals: Haemoglobin, Hemocyanin, Hemerythrin, Chlorocruorin. 2.3 Transport of gases : O <sub>2</sub> and CO <sub>2</sub> transport. <b>3.Circulation:</b> 3.1 Blood: Definition and its constituents, functions of blood. 3.2 Heart: Structure of human heart, Pace maker, Cardiac Cycle. 3.3 Origin and conduction of heart beat.	<b>SSN</b>
<b>May 2022</b>	<b>4. Excretion:</b> 4.1 Structure of Uriniferous tubule. 4.2 Mechanism of urine formation. 4.3 Normal and abnormal constituents of urine, Elementary idea of dialysis.	<b>SSN</b>
<b>May 2022</b>	<b>5.Muscles:</b> 5.1 Structure of smooth, skeletal and cardiac muscles. 5.2 Mechanism of muscle contraction by Sliding filament theory.	<b>SSN</b>
<b>June 2022</b>	<b>6.Reproduction and Endocrine Glands:</b> 6.1 Physiology of male reproduction, hormonal control of spermatogenesis. 6.2 Physiology of female reproduction, hormonal control of menstrual cycle. Structure and functions of pituitary, thyroid, parathyroid, pancreas and adrenal glands.	<b>SSN</b>

  
**Prof. S.S. Naikale**



Course Title: Evolutionary Biology

Course Code: ZO 366

Semester: VI

Month	Title	Teacher Name
March 2022	<b>1.Introduction:</b> 1.1 Concept of Evolution. 1.2 Origin of life. 1.3 Origin of eukaryotic cell (Origin of mitochondria, plastids & symbionts). <b>2. Evidences of Evolution:</b> 2.1 Analogy and Homology. 2.2 Embryological Evidences of Evolution. 2.3 Evolutionary & Paleontological Evidences.	SSN
April 2022	<b>3. Historical Review of Evolutionary Concept:</b> 3.1 Theories of Evolution. 3.2 Lamarckism. 3.3 Darwinism and Neo Darwinism. 3.4 Mutation Theory. 3.5 Modern Synthetic theory. <b>4. Sources of Variations:</b> 4.1 Variation and Mutations.	SSN
May 2022	<b>5. Isolation</b>	SSN
May 2022	<b>6.Speciation:</b> 6.1 Types of speciation (Allopatric & Sympatric). 6.2 Mechanism of speciation. 6.3 Patterns of speciation. 6.4 Factors influencing speciation.	SSN
May 2022	<b>7.Population Genetics:</b> 7.1 Hardy-Weinberg Law & Genetic Drift. 7.2 Types of Natural Selection.	SSN
May 2022	<b>8.Origin of Man:</b> 8.1 Evolution of Man (Evolution of anthropoids including man) - Kenyapithecus to Homo sapiens.	SSN
June 2022	<b>9.Zoogeographical Realms With reference to fauna:</b>	SSN
June 2022	<b>10.Extinctions:</b> 10.1 Extinction - An Overview.	SSN

As per mention above 75% syllabus is completed and remaining will be complete in first week of June.



Prof. S.S. Naikade