

Arts, Science and Commerce College, Indapur, Dist. Pune
TEACHING AND EVALUATION PLAN

Name of the teacher: Prof .Jamdade S.P.	Year: 2021-22	Semester: III
Subject: Animal Diversity III	Paper: I	Class: S Y B Sc

Part I : Teaching Plan						Part II : Evaluation of Plan			
1	2	3	4	5	6	7	8	9	10
Sr. No.	Month	Week	No. of working days	No. of periods available		No. of periods engaged	Topics taught	Deviation in periods	Rem
1	Aug 2021	3&4	9	8	1. Introduction to Phylum Chordata – (03) 1.1 Origin & Ancestry of Chordates. 1.2 Comparative account of fundamental characters of Chordates with Non Chordates. 1.3 Salient features of Phylum Chordata. 1.4 Classification of Phylum Chordata upto classes – Pisces, Amphibia, Reptilia, Aves, Mammalia. 2. Introduction to Group – Protochordata. (03) 2.1 Salient features of Protochordata. 2.2 Salient features of subphylum with two example each - Names only. Hemichordata –		1. Introduction to Phylum Chordata – (03) 1.1 Origin & Ancestry of Chordates. 1.2 Comparative account of fundamental characters of Chordates with Non Chordates. 1.3 Salient features of Phylum Chordata. 1.4 Classification of Phylum Chordata upto classes – Pisces, Amphibia, Reptilia, Aves, Mammalia. 2. Introduction to Group – Protochordata. (03) 2.1 Salient features of Protochordata. 2.2 Salient features of subphylum with two example each - Names only. Hemichordata –	Nil	---

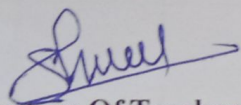
2	Sept 2021	1&2	12	8	Balanoglossus and Rhabdopleura, Urochordata - Herdmania and Salpa, Cephalochordata – Branchiostoma (Amphioxus) and Asymmetron. 3. Introduction to subphylum – Vertebrata (02) 3.1 Salient features of Vertebrata. 3.2 Introduction and General characters of sections with two examples - Names only. Agnatha – Petromyzon & Myxine & Gnathostomata – Frog & Labeo.	Balanoglossus and Rhabdopleura, Urochordata - Herdmania and Salpa, Cephalochordata – Branchiostoma (Amphioxus) and Asymmetron. 3. Introduction to subphylum – Vertebrata (02) 3.1 Salient features of Vertebrata. 3.2 Introduction and General characters of sections with two examples - Names only. Agnatha – Petromyzon & Myxine & Gnathostomata – Frog & Labeo.	1	Extra was
	Octo 2021	3&4	11	7	4. Introduction to Class – Pisces (04) 4.1 Salient features of Class – Pisces. 4.2 Introduction and Salient features of sections with two examples - Names only. Class – Chondrichthyes – Scoliodon and Chimaera & Osteichthyes – Labeo and Catla 4.3 Types of Scales in Fishes. 4.4 Types of Fins in Fishes. 5. Introduction to Class – Amphibia (03) 5.1 Salient features of Class – Amphibia. 5.2 Introduction to order – Apoda – Ichthyophis, Urodela – Salamandra (Salamander) and Annura - Rana. 5.3 Parental care in Amphibia	4. Introduction to Class – Pisces (04) 4.1 Salient features of Class – Pisces. 4.2 Introduction and Salient features of sections with two examples - Names only. Class – Chondrichthyes – Scoliodon and Chimaera & Osteichthyes – Labeo and Catla 4.3 Types of Scales in Fishes. 4.4 Types of Fins in Fishes. 5. Introduction to Class – Amphibia (03) 5.1 Salient features of Class – Amphibia. 5.2 Introduction to order – Apoda – Ichthyophis, Urodela – Salamandra (Salamander) and Annura - Rana. 5.3 Parental care in Amphibia	Nil	---
4	Octo 2021	1 & 2	11	8	6. Study of Scoliodon (15) Scoliodon – 6.1 - Systematic position, Geographical distribution, Habit, Habitat 01 6.2 - External characters 01 6.3 - Digestive System, Food and feeding mechanism. 02 6.4 - Respiratory System – Structure of Holobranch only. 02	6. Study of Scoliodon (15) Scoliodon – 6.1 - Systematic position, Geographical distribution, Habit, Habitat 01 6.2 - External characters 01 6.3 - Digestive System, Food and feeding mechanism. 02 6.4 - Respiratory System – Structure of Holobranch only. 02	Nil	---

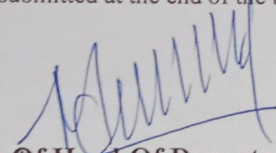
5	Nov 2021	3 & 4	12	8	6.5- External & Internal Structure of heart, Working of heart. 02 6.6 - Nervous System – Brain only. 03 6.7 - Male urinogenital system & Female reproductive System. 03 6.8- Yolk sac placenta.	8	6.5- External & Internal Structure of heart, Working of heart. 02 6.6 - Nervous System – Brain only. 03 6.7 - Male urinogenital system & Female reproductive System. 03 6.8- Yolk sac placenta.	Nil	---
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1. The plan should be prepared in duplicate.

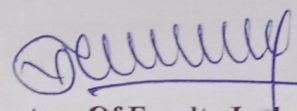
2. One copy of the plan should be submitted at the beginning of the term after filling up columns 1 to 6.

3. The second copy must be retained by the teacher and submitted at the end of the term. Part second of the plan i. e. columns 7 to 10 must be filled up progressively at the end of

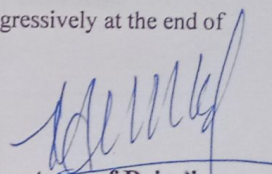

Signature Of Teacher


Signature Of Head Of Department

Dr. J. P. Sarwade
M.Sc., Ph.D., FZSI
Head
Department of Zoology,
Arts, Science & Commerce College,
Indapur, Dist. Pune - 413106


Signature Of Faculty Incharge

Incharge
Science Faculty
Arts, Science & Commerce
College, Indapur, Dist. Pune


Signature of Principal

PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE

Name of the teacher: Prof Gunvare K.D.

Year: 2021-22

Semester: III

Subject: Applied Zoology I

Paper: II

Class: S Y B Sc

Part I : Teaching Plan						Part II : Evaluation of Plan			
1	2	3	4	5	6	7	8	9	10
Sr. No.	Month	Week	No. of working days	No. of periods available	Topics to be taught	No. of periods engaged	Topics taught	Deviation in periods	Remarks
1	Aug 2021	3 & 4	9	8	Sericulture: 16 1.1 An introduction to Sericulture, Study of different types of silk moths, their distribution, Taxonomic position and varieties of silk produced in India : Mulberry, Tassar, Eri and Muga silk moths. 02 1.2 External Morphology and life cycle of Bombyx mori. 02 1.3 Cultivation of mulberry : a) Varieties for cultivation, b) Rain fed and irrigated mulberry cultivation- Fertilizer schedule	8	Sericulture: 16 1.1 An introduction to Sericulture, Study of different types of silk moths, their distribution, Taxonomic position and varieties of silk produced in India : Mulberry, Tassar, Eri and Muga silk moths. 02 1.2 External Morphology and life cycle of Bombyx mori. 02 1.3 Cultivation of mulberry : a) Varieties for cultivation, b) Rain fed and irrigated mulberry cultivation- Fertilizer schedule	Nil	---
2	Sept 2021	1 & 2	12	8	Pruning methods and leaf yield. 02 1.4 Harvesting of mulberry : a) Leaf plucking, b) Branch cutting, c) Whole shoot cutting. 1.5 Silk worm rearing : a) Varieties	10	Pruning methods and leaf yield. 02 1.4 Harvesting of mulberry : a) Leaf plucking, b) Branch cutting, c) Whole shoot cutting. 1.5 Silk worm rearing : a) Varieties for rearing, b)	Nil	---

					forrearing, b) Rearing house, c) Rearing techniques, d) Important diseases and pests. 03 1.6 Preparation of cocoons for marketing.		Rearing house, c) Rearing techniques, d) Important diseases and pests. 03 1.6 Preparation of cocoons for marketing.		
3	Octo2021	3 & 4	11	7	1.7 Post harvest processing of cocoons : a) Stiffing, sorting, storage, deflossing and riddling, b) Cocoon cooking, reeling equipment and rereeling, washing and polishing. 03 1.8 Biotechnological and	8	1.7 Post harvest processing of cocoons : a) Stiffing, sorting, storage, deflossing and riddling, b) Cocoon cooking, reeling equipment and rereeling, washing and polishing. 03 1.8 Biotechnological and	1	Extra Lecture was conducted
4	Octo2021	1 & 2	11	8	Biotechnological and biomedical applications of silk. 02 2) Agricultural Pests and their control: 14 2.1 An introduction to Agricultural Pests, types of pests (agricultural, store grain, veterinary). 01 2.1 Major insect pests of agricultural importance (Marks of identification	8	Biotechnological and biomedical applications of silk. 02 2) Agricultural Pests and their control: 14 2.1 An introduction to Agricultural Pests, types of pests (agricultural, store grain, veterinary). 01 2.1 Major insect pests of agricultural importance (Marks of identification	Nil	---

5	Nov 2021	3 & 4	12	8	life cycle, nature of damage and control measures). 06 a) Jowar stem borer, b) Red cotton bug, c) Brinjal fruit borer, d) Mango stem borer, e) Blister beetle, f) Rice weevil,	8	life cycle, nature of damage and control measures). 06 a) Jowar stem borer, b) Red cotton bug, c) Brinjal fruit borer, d) Mango stem borer, e) Blister beetle, f) Rice weevil,	Nil	---
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Arts, Science and Commerce College, Indapur, Dist. Pune
TEACHING AND EVALUATION PLAN

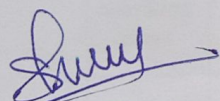
Name of the teacher: Prof .Jamdade S.P.	Year: 2021-22	Semester: VI
Subject: Animal Diversity IV	Paper: I	Class: S Y B Sc

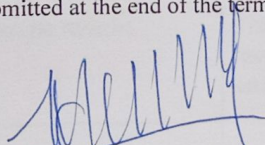
Part I : Teaching Plan						Part II : Evaluation of Plan		
1 Sr. No.	2 Month	3 Week	4 No. of working days	5 No. of periods available	6 Topics to be taught	7 No. of periods engaged	8 Topics taught	9 Deviation in periods
1	Nov2021	3 & 4	9	8	1. Introduction to class – Reptilia (04) 1.1 Salient features of class Reptilia with one example (name only) – <i>Chelone</i> , <i>Calotes</i> . 1.2 Venomous and Non-venomous snakes – Cobra, Russell’s viper, Rat snake, Grass snake. 1.3 Snake venom, symptoms, effect and cure of snake bite, first aid treatment of snakebite.	8	1. Introduction to class – Reptilia (04) 1.1 Salient features of class Reptilia with one example (name only) – <i>Chelone</i> , <i>Calotes</i> . 1.2 Venomous and Non-venomous snakes – Cobra, Russell’s viper, Rat snake, Grass snake. 1.3 Snake venom, symptoms, effect and cure of snake bite, first aid treatment of snakebite. 1.4 Desert adaptations in reptiles in brief.	Nil

					1.4 Desert adaptations in reptiles in brief.) .) .		
2	Dec 2021	1 & 2	12	8	2. Introduction to class –Aves (05) 2.1 Salient features of class Aves with two examples (names only) – Sparrow, Parrot. 2.2 Flight adaptations in birds. 2.3 Types of Beaks and feet in birds. 2.4 Migration in birds – Altitudinal, Latitudinal	10	2. Introduction to class –Aves (05) 2.1 Salient features of class Aves with two examples (names only) – Sparrow, Parrot. 2.2 Flight adaptations in birds. 2.3 Types of Beaks and feet in birds. 2.4 Migration in birds – Altitudinal, Latitudinal	1	F l v c
3	Dec 2021	3 & 4	11	7	3. Introduction to class - Mammalia. (04) 3.1 Salient features of class Mammalia with two examples (names only) – Rat, Rabbit. 3.2 Egg laying mammals. 3.3 Aquatic adaptations in mammals. 3.4 Flying adaptations in mammals. 3.5 Cursorial and fossorial adaptation in mammals	8	3. Introduction to class - Mammalia. (04) 3.1 Salient features of class Mammalia with two examples (names only) – Rat, Rabbit. 3.2 Egg laying mammals. 3.3 Aquatic adaptations in mammals. 3.4 Flying adaptations in mammals. 3.5 Cursorial and fossorial adaptation in mammals	Nil	-
4	January 2022	1 & 2	11	8	4. Study of Rat (17) 4.1 Systematic position, habit and habitat. 01 4.2 External characters. 01	8	4. Study of Rat (17) 4.1 Systematic position, habit and habitat. 01 4.2 External characters. 01	Nil	-

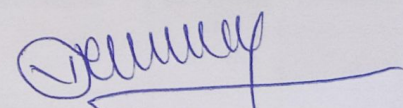
					4.3 Digestive system, food and feeding. 02 4.4 Respiratory system. 02		4.3 Digestive system, food and feeding. 02 4.4 Respiratory system. 02	
5	January 2022	3 & 4	12	8	4.5 Blood vascular system – Structure of Heart. 02 4.6 Nervous system – Central Nervous system only. 03 4.7 Sense organs – Structure and functions of Eye & Ear. 03 4.8 Reproductive system. INTERNAL EXAM	8	4.5 Blood vascular system – Structure of Heart. 02 4.6 Nervous system – Central Nervous system only. 03 4.7 Sense organs – Structure and functions of Eye & Ear. 03 4.8 Reproductive system. INTERNAL EXAM	Nil

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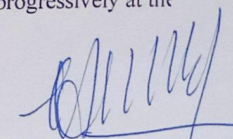

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Name of the teacher: Prof Gunvare K.D.

Year: 2021-22

Semester: VI

Subject: Applied Zoology II

Paper: II

Class: S Y B Sc

Part I : Teaching Plan						Part II : Evaluation of Plan			
1 Sr. No.	2 Month	3 Week	4 No. of working days	5 No. of periods available	6 Topics to be taught	7 No. of periods engaged	8 Topics taught	9 Deviation in periods	10 Remarks
1	Nov2021	3 & 4	9	8	<p>Apiculture:</p> <p>1.1 An introduction to Apiculture, Systematic position, Study of habit, habitat and nesting behaviour of <i>Apis dorsata</i>, <i>Apis indica</i>, <i>Apis florea</i> and <i>Apis mellifera</i>.</p> <p>1.2 Life cycle, Colony organization and Division of labour.</p>	8	<p>. Apiculture:</p> <p>1.1 An introduction to Apiculture, Systematic position, Study of habit, habitat and nesting behaviour of <i>Apis dorsata</i>, <i>Apis indica</i>, <i>Apis florea</i> and <i>Apis mellifera</i>.</p> <p>1.2 Life cycle, Colony</p>	Nil	---

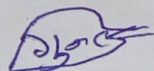
					1.3 Bee behaviour and communication (Round Dance and Wag-Tail Dance) .		organization and Division of labour. 1.3 Bee behaviour and communication (Round Dance and Wag-Tail Dance) .		
2	Dec 2021	1 & 2	12	8	1.4 Bee keeping equipments : a) Bee box (Langstroth type), b) Honey extractor, c) Smoker, d) Bee-veil, e) Gloves, f) Hive tool, g) Bee Brush, h) Queen excluder.	10	1.4 Bee keeping equipments : a) Bee box (Langstroth type), b) Honey extractor, c) Smoker, d) Bee-veil, e) Gloves, f) Hive tool, g) Bee Brush, h) Queen excluder.	Nil	---
3	Dec 2021	3 & 4	11	7	1.5 Bee keeping and seasonal management. 1.6 Bee products (composition and uses) : a) Honey, b) Wax, c) Bee Venom, d) Propolis, e) Royal jelly, f) Pollen. 1.7 Diseases and enemies of Bees :	8	1.5 Bee keeping and seasonal management. 1.6 Bee products (composition and uses) : a) Honey, b) Wax, c) Bee Venom, d)	1	Extra lecture was conducted

					<p>a) Bee diseases - Protozoan (Nosema), Bacterial (American foul brood), Viral (Sac brood), Fungal (Chalk brood). b) Bee pests - Wax moth (Greater and Lesser), Wax beetle. c) Bee predators – Green Bee eater, King crow, Wasp, Lizard. 1.8 Bee pollination and management of bee colonies for pollination.</p>	<p>Propolis, e) Royal jelly, f) Pollen. 1.7 Diseases and enemies of Bees : a) Bee diseases - Protozoan (Nosema), Bacterial (American foul brood), Viral (Sac brood), Fungal (Chalk brood). b) Bee pests - Wax moth (Greater and Lesser), Wax beetle. c) Bee predators – Green Bee eater, King crow, Wasp, Lizard. 1.8 Bee pollination and management of bee colonies for pollination.</p>		
4	January 2022	1 & 2	11	8	<p>2. Fisheries : 2.2 An introduction to fisheries and its types (in brief) : Freshwater fisheries, Marine fisheries, Brackish water fisheries.</p>	<p>2. Fisheries : 2.2 An introduction to fisheries and its types (in brief) : Freshwater fisheries, Marine</p>	Nil	---

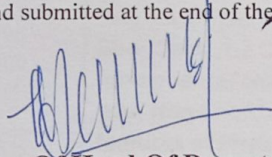
					<p>2.3 Habit, habitat and culture methods of following freshwater forms :</p> <p>a) Rohu (<i>Labeo rohita</i>) , b) Catla (<i>Catla catla</i>) , c) Mrigal (<i>Cirrhinus mrigala</i>).</p> <p>2.3 Harvesting methods of following marine form a) Harpodon, b) Mackerel, c) Pearl oyster.</p> <p>2.4 Crafts and Gears in Indian Fishery: 02</p> <p>a) Crafts – Catamaran, Machwa, Dinghi s:</p>	<p>fisheries, Brackish water fisheries.</p> <p>2.3 Habit, habitat and culture methods of following freshwater forms :</p> <p>a) Rohu (<i>Labeo rohita</i>) , b) Catla (<i>Catla catla</i>) , c) Mrigal (<i>Cirrhinus mrigala</i>).</p> <p>2.3 Harvesting methods of following marine form a) Harpodon, b) Mackerel, c) Pearl oyster.</p> <p>2.4 Crafts and Gears in Indian Fishery: 02</p> <p>a) Crafts – Catamaran, Machwa, Dinghi s:</p>		
5	January 2022	3 & 4	12	8	<p>b) Gears – Gill net, Dol net, Rampani net, Cast net.</p> <p>Fishery byproducts:</p> <p>a) Fish meal,</p> <p>b) Fish flour,</p>	<p>b) Gears – Gill net, Dol net, Rampani net, Cast net.</p> <p>Fishery byproducts:</p>	Nil	---

				c) Fish Liver oil, d) Fish manure, e) Fish fin soup. Fish preservation technique: a) Chilling, b) Freezing, c) Salting, d) Drying, e) Canning.	a) Fish meal, b) Fish flour, c) Fish Liver oil, d) Fish manure, e) Fish fin soup. Fish preservation technique: a) Chilling, b) Freezing, c) Salting, d) Drying, e) Canning.	
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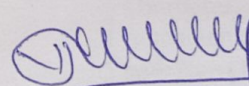
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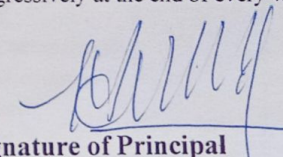
Head

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