



**Bharatiya Jain Sanghatana's  
Arts, Science and Commerce College**



**Wagholi, Pune – 412207**

**ISO 9001 – 2015 Certified**

**Reaccredited by NAAC with B Grade (Score 2.56)**

**Acedemic Calendar 2022-2023**

**Vision**

**“Exaploring Youth Capabilities for Social Service”**

**Mission**

**“ Presuasion of studies in Arts, Science & Commerce with vocational training based on the concept of earn –as- you- learn principles and plethora of extracurricular activities to ensure allround growth”**

## August 2022

<b>Day</b>	<b>Date</b>	<b>Activity</b>
Wednesday	10	Har Ghar Tiranga
Thursday	11	Sending Activity News to News Paper
Tuesday	23	Exhibition of weapons of Shiva period
Wednesday	24	Sending Activity to News Paper
Monday	29	National Sports Day
Tuesday	30	Sending Activity News to News Paper

## September 2022

Day	Date	Activity
Friday	9	Red Cross Society
		First aid and free drinking Water service
Saturday	10	Sending Activity News to News Paper
Tuesday	13	National Baseball Tournament
Thursday	15	BJS under Pune University Innovation research in college Organization of Project Competition-2022
Friday	16	World Ozone Day
Saturday	11	Sending Activity News to News Paper

## October 2022

Day	Date	Activity
Sunday	2	Mahatma Gandhi and Lal Bahadur Shastri Jayanti celebrated on 02 October 2022
Monday	3	Sending Activity News to News Paper
Thursday	13	Selected in Kabaddi team of Pune district
Saturday	15	15 October 2022 in college Celebrating Reading Inspiration Day
Sunday	16	Students of BJS College started Diwali by collecting e-waste and plastic.
Monday	17	Sending Activity News to News Paper
Thursday	20	Selected Inter College Mallakhamba Rope Competition

## November 2022

<b>Day</b>	<b>Date</b>	<b>Activity</b>
Sunday	6	National Cadets Trekking up Sunrise Hill
Saturday	12	Industrial tours under Commerce Department
Monday	14	Establishment of the Club
		Establishment of the Knowledge Leader
Tuesday	15	one-day workshop - First Aid Training
Wednesday	16	Three days Soft Skill Training Program under Soft Skill Development Committee and Placement Cell
Thursday	17	Sending Activity News to News Paper
Friday	18	Swayasiddha is a three-day residential workshop
Saturday	19	Celebrating National Goodwill Foundation Week Organizing healthy cactus competition under the Department of Botany
Sunday	20	Sending Activity News to News Paper
Monday	21	MoU between College Chemistry Department and MAGS Company
Tuesday	22	Gold Medal in Inter College Judo Competition
Wednesday	23	Sending Activity News to News Paper
Saturday	2	26 November Constitution Day celebrated Campus Interview
Sunday	27	One Day Heritage Walk
		Tree plantation on behalf of NCC Day
		Sending Activity News to News Paper
Monday	28	Campus Interview
Tuesday	29	Gold medal in boxing competition
Wednesday	30	Sending Activity News to News Paper

## December 2022

<b>Day</b>	<b>Date</b>	<b>Activity</b>
Friday	2	Agreement regarding skill development scheme course
Saturday	3	Sending Activity News to News Paper
Monday	5	University Level Central Youth Festival
Sunday	11	Bronze Medal in Half Marathon Competition
Monday	12	Sending Activity News to News Paper
Tuesday	13	Quiz Competition Cochin
Saturday	17	State Level Inter College Elocution Competition in Commemoration of Late PC Nahar
Sunday	18	Sending Activity News to News Paper
Monday	19	Participation in disaster management training camp

## January 2023

Day	Date	Activity
Monday	2	NSS Camp
Tuesday	3	Sending Activity News to News Paper
Friday	6	Gold Medal in Power Lifting Competition
Monday	9	The college was honored by the Pune Municipal Corporation.
		Gold Medal in Mini Olympics
Tuesday	10	Sending Activity News to News Paper
Wednesday	18	Workshop on NEP-2020
Thursday	19	Sending Activity News to News Paper
Friday	20	Workshop on Nirbhay Kanya Abhiyan
		LED Bulb Workshop
		Workshop on Parliament

## February 2023

Day	Date	Activity
Friday	3	Students' research papers published
Thursday	16	Nirbhay Kanya Abhiyan
Friday	17	Popular Science Lecture Series
Saturday	18	Sending Activity News to News Paper
Sunday	19	Shiv Jayanti Celebrate
Monday	20	Sending Activity News to News Paper
Friday	24	National Level Seminar on NEP 2020
Saturday	25	150 Tree Plantation
		Sending Activity News to News Paper
Monday	27	Marathi official language pride day
Tuesday	28	Celebrating National Science Day
		Sending Activity News to News Paper



## March 2023

Day	Date	Activity
Tuesday	7	Lecture on Scientific Writing
Wednesday	8	Celebrated International women's Day
Friday	10	Sending Activity News to News Paper
Sunday	12	Yashwantrao Chavan Jayanti
		National Level Trekking Camp
Saturday	18	Gate Exam Qualified
Monday	20	Workshop on Intellectual Property Rights
Wednesday	22	Sending Activity News to News Paper
Tuesday	28	Sketch Competition
		Konkan Study Trip
Wednesday	29	Blood Donation Camp
		Career Mentorship
		Lecture on Current trends in Industry
Thursday	30	State Level Online Quiz
		Skill based Courses

## April 2023

Day	Date	Activity
Saturday	1	Lord Mahavir Jayanti celebrations
Monday	3	Sending Activity News to News Paper
Friday	7	Campus Interview
Tuesday	11	Mahatma Phule birth Anniversary Celebrated
Wednesday	12	Sending Activity News to News Paper
Thursday	13	13 <sup>th</sup> Dharma Maitri Vichar Vedha Samelan
Friday	14	Dr. Babasaheb Ambedkar Birth Anniversary Celebrated
		Kokan study visit
Saturday	15	Sending Activity News to News Paper
Tuesday	18	Personality Development and Competitive Examination
		Zoomania exhibition
Sunday	23	World Book Day and Intellectual Property Rights day
Monday	24	Sending Activity News to News Paper
Tuesday	25	Lecture on Cloud Computing and Cyber Security

## May 2023

Day	Date	Activity
Monday	1	Maharashtra Day and International Labour Day
Tuesday	2	Sending Activity News to News Paper
Thursday	4	Workshop on “Manufacturing and Business of AC-DC Rechargeable LED Bulbs
Monday	8	International Thalassemia day and world Red cross day
Tuesday	9	Sending Activity News to News Paper
Friday	12	Act Play in English
Saturday	13	Annual Prize Distribution
Monday	15	Sending Activity News to News Paper
Thursday	25	Training Camp in Association with Red Cross Society
Monday	29	Sending Activity News to News Paper

## **Exam Department**

- **June 2022 – Continuous Internal exam.**
- **July - September 2022 – SPPU Final exam.**
- **December 2022- Continuous Internal exam.**
- **December 2022- Practical Exam.**
- **January – March 2023- SPPU Final exam.**

**Department of Zoology**

**Teaching Plan for the Academic Year 2022-23**

**Subject: ZO: 111 Animal Diversity I**

**Class : FYBSc**

**Semester : I**

The criteria to be followed while preparing the teaching plan are:

- 70% - Actual Classroom Teaching where different pedagogy can be involved
- 10 % - Online Teaching (via. Zoom, You tube, and other such platforms)
- 10% - Teaching with the use of Experiential Learning (visits, tours, games, presentations, etc.)
- 10% - Seminar/ project work

S. N	Schedule	Topic	Learning Outcome	Approach(Visual / Auditory/ Kinesthetic)	Criteria Followed (A/B/C/D)	Methodology / pedagogy
1	2 <sup>nd</sup> 3 <sup>rd</sup> & 4 <sup>th</sup> Week of July 22 (5L)	<b>Principles of Classification:</b> Significance Taxonomy & Systematics Systematics: Concept of Species: Biological & Evolutionary Introduction to Binomial Nomenclature. Introduction to Five kingdom system.	The topics help in understanding the Animal diversity, principles of classification of animals, study the differences and similarities in the various animals, and classify them. To understand our role as a caretaker and promoter of life.	Visual Auditory Kinesthetic	A, B, C, D	Classroom teaching, Ppt, Oral, Group Discussion, Student Seminar, Study Tours and Visits Lecture-cum-demonstration Group activity with the Specimens and slides. Constructive approach: Posters, models making.
2	1 <sup>st</sup> week of August 22 (2L)	<b>General Features of kingdom Animalia</b> General characters of Kingdom Animalia, Grades of organization Symmetry.				
3	2 <sup>nd</sup> 3 <sup>rd</sup> & 4 <sup>th</sup> Week of August 22 (7L)	<b>Kingdom Protista (Phylum: Protozoa)</b> Introduction, Salient features, Classification of Phylum Protozoa up to classes Locomotion in Protozoa: <i>Paramecium caudatum</i> Economic importance				

		Harmful Protozoa, Useful Protozoa				
4	5 <sup>th</sup> Week of August 22 (1L)	Origin of Metazoa Introduction Origin and importance of Metazoa				
5	1 <sup>st</sup> 2 <sup>nd</sup> & 3 <sup>rd</sup> Week of September 22 (6L)	Phylum Porifera Introduction & Classification of Phylum Porifera up to classes Canal system in sponges: Skeleton in sponges: Regeneration in sponges. Economic importance of Phylum Porifera.	The topics help in understanding the Animal diversity, principles of classification of animals, study the differences and similarities in the various animals, and classify them. To understand our role as a caretaker and promoter of life.	Visual Auditory Kinesthetic	A, B, C, D	Classroom teaching, PPT, Oral, Group Discussion, Student Seminar, Study Tours and Visits Lecture-cum- demonstration Group activity with the Specimens and slides. Constructive approach: Posters, models making.
6	4 <sup>th</sup> & 5 <sup>th</sup> Week of September 22 (5L)	Phylum: Cnidaria Introduction & Salient features Classification of Phylum Cnidaria up to class level Polymorphism in Hydrozoa: and functions Economic importance with reference to Corals and Coral reefs.				
7	1 <sup>st</sup> , 2 <sup>nd</sup> week of October 22 (4L)	Phylum Platyhelminthes Introduction & Salient features Classification of Phylum Platyhelminthes up to classes. Parasitic adaptations in Platyhelminthes Economic importance of Platyhelminthes				
8	3 <sup>rd</sup> Week of October 22	Revision of whole syllabus and question paper discussion.				

Madhuri.

Subject Teacher

Madhuri

Head of the Department

Dr. M. V. Deshmukh

Madhuri.

IQAC Co-ordinator

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Wagholi, Pune- 412207.

Principal

Bharatiya Jain Sanghatana's  
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**Department of Zoology**

**Teaching Plan for the Academic Year 2022-23**

**Subject: ZO: 112 Animal Ecology**

**Class : FYBSc**

**Semester : I**

The criteria to be followed while preparing the teaching plan are:

- A. 70% - Actual Classroom Teaching where different pedagogy can be involved
- B. 10 % - Online Teaching (via. Zoom, You tube, and other such platforms)
- C. 10% - Teaching with the use of Experiential Learning (visits, tours, games, presentations, etc.)
- D. 10% - Seminar/ project work

S. N	Schedule	Topic	Learning Outcome	Approach(Visual / Auditory/ Kinesthetic)	Criteria Followed (A/B/C/D)	Methodology / pedagogy
1	1 <sup>st</sup> Week of July 22 (5L)	Bridge Course				
2	2 <sup>nd</sup> week of July 22 (2L)	Introduction to Ecology Concepts of Ecology	The topics helps to in identify and critically evaluate their own beliefs, values and actions in relation to professional and societal standards of ethics and its impact on ecosystem and biosphere due to the dynamics in population.	Visual Auditory Kinesthetic	A, B, C, D	Classroom teaching, PPT, Oral, Group Discussion, Student Seminar, Study Tours and Visits Lecture-cum-demonstration Group activity with the Specimens and slides. Constructive approach: Posters, models making.
3	3 <sup>rd</sup> & 4 <sup>th</sup> Week of July 22 1 <sup>st</sup> week of August 22 (8L)	Ecosystem Types of ecosystems: Aquatic and terrestrial ecosystem. Food chain, Food web, Energy flow through the ecosystem, Ecological pyramids, Concept of Eutrophication in lakes and rivers				
4	2 <sup>nd</sup> , 3 <sup>rd</sup> , 4 <sup>th</sup> Week of August 22 (1L)	Population Characteristic of population. Methods of Populations.				

5	1 <sup>st</sup> 2 <sup>nd</sup> & 3 <sup>rd</sup> Week of September 22 (7L)	Community Community characteristics, Ecological succession with one example	The topics help in understand and appreciates of ecosystem and applies beyond the syllabi and to understand the local lifestyle and problems of the community.	Visual Auditory Kinesthetic	A, B, C, D	Classroom teaching, PPT, Oral, Group Discussion, Student Seminar, Study Tours and Visits Lecture-cum-demonstration Group activity with the Specimens and slides. Constructive approach: Posters, models making.
6	4 <sup>th</sup> & 5 <sup>th</sup> Week of September 22 and 1 <sup>st</sup> week October 22 (5L)	Animal interactions Introduction to Animal interactions, Types of Animal interactions with suitable examples, Competition, Beneficial Associations.				
7	2 <sup>nd</sup> & 3 <sup>rd</sup> week of October 22 (3L)	Revision of whole syllabus and question paper discussion.				

*G. B. Kar*

Subject Teacher

*Madhusi*

Head of the Department

*Madhusi*

IQAC Co-ordinator *offg Principal*

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*21/12/20*



**Department of Zoology**

**Teaching Plan for the Academic Year 2022-23**

Subject: ZO: 231 Animal Diversity III Class : SYBSc

Semester : III

The criteria to be followed while preparing the teaching plan are:

- 70% - Actual Classroom Teaching where different pedagogy can be involved
- 10% - Online Teaching (via. Zoom, Youtube, and other such platforms)
- 10% - Teaching with the use of Experiential Learning (visits, tours, games, presentations, etc.)
- 10% - Seminar/ project work

S. N	Schedule	Topic	Learning Outcome	Approach(Visual / Auditory/ Kinesthetic)	Criteria Followed (A/B/C/D)	Methodology / pedagogy
1	2 <sup>nd</sup> 3 <sup>rd</sup> & 4 <sup>th</sup> Week of July 22 (3L)	<b>Introduction to Phylum Chordata</b> Origin & Ancestry of Chordates. Comparative account of fundamental characters of Chordates with Non Chordates. Salient features of Phylum Chordata. Classification of Phylum Chordata upto classes – Pisces, Amphibia, Reptilia, Aves, Mammalia.	The topics help in understanding the Animal diversity, principles of classification of animals, study the differences and similarities in the various animals, and classify them. To understand our role as a	Visual Auditory Kinesthetic	A, B, C, D	Classroom teaching, PPT, Oral, Group Discussion, Student Seminar, Study Tours and Visits Lecture-cum-demonstration Group activity with the Specimens and slides. Constructive approach: Posters, models making.
2	1 <sup>st</sup> week of August 22 (3L)	<b>Introduction to Group – Protochordata</b> Salient features of Protochordata. Subphylum Hemichordata, urochordata, Cephalochordata				
3	2 <sup>nd</sup> 3 <sup>rd</sup> & 4 <sup>th</sup> Week of	<b>Introduction to subphylum – Vertebrata</b> Salient features				

	August 22 (2L)	of Vertebrata. Introduction and General characters of Agnatha & Gnathostomata	caretaker and promoter of life.			
4	5 <sup>th</sup> Week of August 22 (4L)	Introduction & Salient features of Class Pisces. Introduction, & Salient features of Class Pisces, Chondrichthyes Osteichthyes. Types of Scales in Fishes. Types of Fins in Fishes.				
5	1 <sup>st</sup> 2 <sup>nd</sup> & 3 <sup>rd</sup> Week of September 22 (3L)	Introduction & Salient features of Class Amphibia Introduction to order – Apoda, Urodela, and Annura. Parental care in Amphibia.	The topics help in understanding the Animal diversity, principles of classification of animals, study the differences and similarities in the various animals, and classify them. To understand our role as a caretaker and promoter of life.	Visual Auditory Kinesthetic	A, B, C, D	Classroom teaching, PPT, Oral, Group Discussion, Student Seminar, Study Tours and Visits Lecture-cum-demonstration Group activity with the Specimens and slides. Constructive approach: Posters, models making.
6	4 <sup>th</sup> & 5 <sup>th</sup> Week of September 22 (15L)	Study of <i>Scoliodon</i> Systematic position, Geographical distribution, Habit, Habitat External characters Digestive System, Food and feeding mechanism. Respiratory System – Structure of Holobranch only. External & Internal Structure of heart, Working of heart. Nervous System – Brain only. Male urinogenital system & Female reproductive System. Yolk sac placenta.				
7	1 <sup>st</sup> , 2 <sup>nd</sup> week of October 22 (3L)	Revision and question paper discussion				

Madhusi

Subject Teacher

Madhusi

Head of the Department

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IQAC Co-ordinator

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Principals

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**Department of Zoology**

**Teaching Plan for the Academic Year 2022-23**

Subject: ZO: 232 Applied Zoology I

Class : SYBSc

Semester : III

The criteria to be followed while preparing the teaching plan are:

- A. 70% - Actual Classroom Teaching where different pedagogy can be involved
- B. 10% - Online Teaching (via. Zoom, You tube, and other such platforms)
- C. 10% - Teaching with the use of Experiential Learning (visits, tours, games, presentations, etc.)
- D. 10% - Seminar/ project work

S. N	Schedule	Topic	Learning Outcome	Approach(Visual / Auditory/ Kinesthetic)	Criteria Followed (A/B /C/D )	Methodology / pedagogy
1	2 <sup>nd</sup> Week of July To 3 <sup>rd</sup> August 22 (14L)	1) Sericulture: 1.1 An introduction to Sericulture, classification of varieties of silkworms External Morphology and life cycle of <i>Bombyx mori</i> . Cultivation of mulberry Varieties for cultivation, Harvesting of mulberry Silk worm rearing Important diseases and pests. Preparation of cocoons for marketing. Post-harvest processing of cocoons Biotechnological and biomedical applications of silk.	The students will understand the biology, varieties of silkworms and the basic techniques of silk production and harvesting of cocoons.	Visual Auditory Kinesthetic	A, B, C, D	Classroom teaching, Ppt, Oral, Group Discussion, Student Seminar, Study Tours and Visits Lecture-cum-demonstration Group activity with the Specimens and slides. Constructive approach: Posters, models making.

2	4 <sup>th</sup> Week of August To 3 <sup>rd</sup> Week of September 22 (16 L)	<p>2) Agricultural Pests and their control:  An introduction to Agricultural Pests, types of pests.  Major insect pests of agricultural importance a) Jowar stem borer, b) Red cotton bug, c) Brinjal fruit borer, d) Mango stem borer, e) Blister beetle, f) Rice weevil, g) Pulse beetle, h) Tick.  Non insect pests: Rats, Crabs, Snails, and Squirrels  Pest control practices in brief  Plant protection appliances</p>	The students will study types of agricultural pests and Major insect pests of agricultural importance and Pest control practices.	Visual Auditory Kinesthetic	A, B, C, D	Classroom teaching, PPT, Oral, Group Discussion, Student Seminar, Study Tours and Visits Lecture-cum-demonstration Group activity with the Specimens and slides. Constructive approach: Posters, models making.
3	1 <sup>st</sup> , 2 <sup>nd</sup> week of October 22 (3L)	Revision and question paper discussion				

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Subject Teacher

Madhusi  
Head of the Department

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**IQAC Co-ordinator**  
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**Department of Zoology**

**Teaching Plan for the Academic Year 2022-23**

**Subject: ZO: 121 Animal Diversity II**

**Class : FYBSc**

**Semester : II**

The criteria to be followed while preparing the teaching plan are:

- A. 70% - Actual Classroom Teaching where different pedagogy can be involved
- B. 10 % - Online Teaching (via. Zoom, Youtube, and other such platforms)
- C. 10% - Teaching with the use of Experiential Learning (visits, tours, games, presentations, etc.)
- D. 10% - Seminar/ project work

S.N	Schedule	Topic	Learning Outcome	Approach(Visual / Auditory/ Kinesthetic)	Criteria Followed (A/B/C/D)	Methodology / pedagogy
1	1 <sup>st</sup> 2 <sup>nd</sup> Week of December 22 (04)	<b>Phylum Aschelminthes</b> Introduction to phylum Aschelminthes Salient features of Phylum Aschelminthes Classification of Phylum Aschelminthes Class Nematoda Economic importance of class Nematoda.	The topics help in understanding the Animal diversity, principles of classification of animals, study the differences and similarities in the various animals, and classify them.	Visual Auditory Kinesthetic	A, B, C, D	Classroom teaching, PPT, Oral, Group Discussion, Student Seminar, Study Tours and Visits Lecture-cum-demonstration Group activity with the Specimens and slides. Constructive approach: Posters, models making.
2	3 <sup>rd</sup> & 4 <sup>th</sup> week of December 22 (6L)	<b>Phylum Annelida</b> Introduction to Phylum Annelida Salient features of Phylum Annelida. Classification of Phylum Annelida Class Polychaeta, Class Oligochaeta, Class Hirudinea Economic importance of Annelida earthworms as friends of farmers and in	To understand our role as a caretaker and promoter of life.			

		their role in Vermicomposting.				
3	1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> & 4 <sup>th</sup> Week of January & 23 (6L)	<b>Kingdom Protista (Phylum: Protozoa)</b> Introduction, Salient features Classification of Phylum Protozoa up to classes Locomotion in Protozoa: <i>Paramecium caudatum</i> Economic importance Harmful Protozoa, Useful Protozoa				
4	5 <sup>th</sup> Week of January 23 & 1 <sup>st</sup> Week of February 23 (06L)	<b>Phylum Arthropoda</b> Introduction & salient features of Phylum Arthropoda Classification of Phylum Arthropoda Class: Crustacea, Class: Chilopoda, Class: Diplopoda: Class Insecta, Class: Arachnida. Mouth parts in insects: Economic importance of Arthropoda Useful Insects: Honey bee, Lac insect, Silkworm. Harmful insects: Female Anopheles mosquito, Red cotton bug, Rice weevil				
5	2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> Week of February 23 (06L)	<b>Phylum Mollusca</b> Introduction & Salient features of Phylum Mollusca Classification of Phylum Mollusca Class Gastropoda, Class Pelecypoda, Class Polyplacophora Class: Cephalopoda Economic importance of Mollusca.	The topics help in understanding the Animal diversity, principles of classification of animals, study the differences	Visual Auditory Kinesthetic	A, B, C, D	Classroom teaching, PPT, Oral, Group Discussion, Student Seminar, Study Tours and Visits

6	4 <sup>th</sup> Week of February 24 & 1 <sup>st</sup> , 2 <sup>nd</sup> 3 <sup>rd</sup> week of March (08L)	<p><b>Study of Phylum Echinodermata</b>  Introduction Salient features of Phylum Echinodermata  Classification of Phylum Echinodermata  Class Asterozoa Class: Holothurozoa, Class: Echinozoa, Class: Crinozoa</p> <p>Type study: <i>Asterias rubens</i> (Sea Star): Classification, Habit Habitat, External Morphology, Digestive system, Water vascular System and autotomy and regeneration  Pedicellaria in Echinodermata: straight, crossed, valvate, tridactylous globigerous.  Economic importance of Echinodermata.</p>	and similarities in the various animals, and classify them. To understand our role as a caretaker and promoter of life.			Lecture-cum-demonstration Group activity with the Specimens and slides. Constructive approach: Posters, models making.
7	4th Week of March 23 (3L)	Revision of whole syllabus and question paper discussion.				

Madhusi  
Subject Teacher

Madhusi  
Head of the Department

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**IOAC Coordinator offg Principal**  
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**Department of Zoology**

**Teaching Plan for the Academic Year 2022-23**

**Subject: ZO: 122 Cell Biology**

**Class : FYBSc**

**Semester : II**

The criteria to be followed while preparing the teaching plan are:

- A. 70% - Actual Classroom Teaching where different pedagogy can be involved
- B. 10% - Online Teaching (via. Zoom, You tube, and other such platforms)
- C. 10% - Teaching with the use of Experiential Learning (visits, tours, games, presentations, etc.)
- D. 10% - Seminar/ project work

S. N	Schedule	Topic	Learning Outcome	Approach(Visual / Auditory/ Kinesthetic)	Criteria Follo wed (A/B/ C/D)	Methodology / pedagogy
1	1 <sup>st</sup> 2 <sup>nd</sup> Week of Decemb er 22  (4 L)	<b>Introduction:</b> Introduction cell biology, Cell as basic unit of life. Importance of Cell Biology and its applications in industry. <b>Overview of Cells</b> Structure and function of Prokaryotic ( <i>E. coli</i> ). Structure and function of Eukaryotic cells.	The students will understand the important of cell as a structural nd functional unit of life. The students will understand the compare between prokaryotic nd eukaryotic systems and extrapolate the life to the aspect of development. The cellular mechanism and its functioning depends on endomembrane and structures. They are best study in microscopy.	Visual Auditory Kinesthetic	A, B, C, D	Classroom teaching, PPT, Oral, Group Discussion, Student Seminar, Study Tours and Visits Lecture-cum-demonstration Group activity with the Specimens and slides. Constructive approach: Posters, models making.
2	3 <sup>rd</sup> & 4 <sup>th</sup> week of Decemb er 22  (4L)	<b>Techniques in Cell Biology:</b> 3.1 Introduction 3.2 Microscopy: Basic Principle. Simple, Compound and applications of Electron Microscope 3.3 Stains and dyes: Types of Stain nd Dyes.				



		Micrometry.				
3	1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> & 4 <sup>th</sup> Week of January & 23  (6L)	<p><b>Plasma Membrane:</b> Introduction Structure of plasma membrane: Fluid mosaic model. Transport across membranes: Active and Passive transport, Facilitated transport, exocytosis, endocytosis, phagocytosis – vesicles and their importance in transport. Other functions of Cell membrane in brief Protection, cell recognition, shape, storage, cell signalling. Cell Junctions: Tight junctions, gap junctions, Desmosomes.</p>	<p>The students will understand the important of cell as a structural nd functional unit of life. The students will understand the compare between prokaryotic nd eukaryotic systems and extrapolate the life to the aspect of development. The cellular mechanism and its functioning depends on endomembrane and structures. They are best study in microscopy.</p>			
4	5 <sup>th</sup> Week of January 23 & 1 <sup>st</sup> Week of February 23  (04L)	<p><b>Nucleus: Structure and function</b> Introduction to Nucleus Structure of Nucleus: Chromatin: Euchromatin and Hetrochromati n, nature and differences. Functions of nueleus</p>				
5	2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> Week of February	<p><b>Endomembrane System</b> Introduction</p>	<p>The students will understand the</p>			

23 (06L)	Structure, location and Functions: Endoplasmic Reticulum, Golgi apparatus, Lysosomes and vacuoles.	important of cell as a structural and functional unit of life. The students will understand the compare between prokaryotic and eukaryotic systems and extrapolate the life to the aspect of development. The cellular mechanism and its functioning depends on endomembrane and structures. They are best study in microscopy.	Visual Auditory Kinesthetic	A, B, C, D	Classroom teaching, PPT, Oral, Group Discussion, Student Seminar, Study Tours and Visits Lecture-cum-demonstration Group activity with the Specimens and slides. Constructive approach: Posters, models making.
6 4 <sup>th</sup> Week of February 23 & 1 <sup>st</sup> , 2 <sup>nd</sup> 3 <sup>rd</sup> week of March 23 (08L)	Mitochondria and Peroxisomes. Introduction Mitochondria: ultrastructure and function of mitochondrion. Peroxisomes <b>Cell Division</b> Introduction Cell cycle (G1, S, G2, M phases), Mitosis and Meiosis.				
7 4 <sup>th</sup> Week of March 23 (3L)	Revision of whole syllabus and question paper discussion.				

Gadkar

Subject Teacher

Madhus

Head of the Department

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IQAC Coordinator

Medhane

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Bharatiya Jain Sanghatana's  
Art, Science & Commerce College  
Wagholi Pune-412207

Dr. Madhus IQAC Coordinator

Bharatiya Jain Sanghatana's  
Arts, Science & Commerce College,  
Wagholi, Pune- 412207.

**Department of Zoology**

**Teaching Plan for the Academic Year 2022-23**

**Subject: ZO: 241 Animal Diversity IV Class : SYBSc**

**Semester : IV**

The criteria to be followed while preparing the teaching plan are:

- A. 70% - Actual Classroom Teaching where different pedagogy can be involved
- B. 10 % - Online Teaching (via. Zoom, Youtube, and other such platforms)
- C. 10% - Teaching with the use of Experiential Learning (visits, tours, games, presentations, etc.)
- D. 10% - Seminar/ project work

S · N	Schedule	Topic	Learning Outcome	Approach(Visual / Auditory/ Kinesthetic)	Criteria Followed (A/B/C/D)	Methodology / pedagogy
1	1 <sup>st</sup> 2 <sup>nd</sup> Week of December 22 (04)	<b>1. Introduction to class – Reptilia (04)</b> 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.	The topics help in understanding the Animal diversity, principles of classification of animals, study the differences and similarities in the various animals, and classify them. To understand our role as a caretaker and promoter of life.	Visual Auditory Kinesthetic	A, B, C, D	Classroom teaching, PPT, Oral, Group Discussion, Student Seminar, Study Tours and Visits Lecture-cum-demonstration Group activity with the Specimens and slides. Constructive approach: Posters, models making.
2	3 <sup>rd</sup> & 4 <sup>th</sup> week of December 22 (5L)	<b>2. Introduction to class – Aves (05)</b> 2.1 Salient features of class Aves with two examples Parrot 2.2 Flight adaptations in birds 2.3 Types of Beaks and feet				

		in birds. 2.4 Migration in birds – Altitudinal, Latitudinal			
3	1 <sup>st</sup> 2 <sup>nd</sup> Week of January & 23 (4L)	<b>3. Introduction to class - Mammalia. (11)</b> 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	The topics help in understanding the Animal diversity, principles of classification of animals, study the differences and similarities in the various animals, and classify them. To understand our role as a caretaker and promoter of life.	Visual Auditory Kinesthetic	A, B, C, D
4	3 <sup>rd</sup> & 4 <sup>th</sup> 5 <sup>th</sup> Week of January 23 & 1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> Week of February 23 (17L)	<b>4. Study of Rat (17)</b> 4.1 Systematic position, habit and habitat. 4.2 External characters. 4.3 Digestive system, food and feeding. 4.4 Respiratory system. 4.5 Blood vascular system – Structure of Heart. 4.6 Nervous system – Central Nervous system only. 4.7 Sense organs – Structure and functions of Eye & Ear. 4.8 Reproductive system.			Classroom teaching, PPT, Oral, Group Discussion, Student Seminar, Study Tours and Visits Lecture-cum- demonstration Group activity with the Specimens and slides. Constructive approach: Posters, models making.
7	1 <sup>st</sup> , 2 <sup>nd</sup> week of March 23 (3L)	Revision and question paper discussion			

Madhusi  
Subject Teacher

Madhusi  
Head of the Department

Madhusi

Principals

**IQAC Co-ordinator offg Principal**  
Bharatiya Jain Sanghatana's  
Bharatiya Jain Sanghatana's  
Arts, Science & Commerce College  
Wagholi Pune-412207  
Wagholi Pune-412207

**Department of Zoology**

**Teaching Plan for the Academic Year 2022-23**

Subject: ZO: 242 Applied Zoology II

Class : SYBSc

Semester : IV

The criteria to be followed while preparing the teaching plan are:

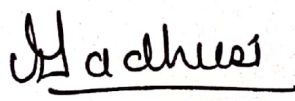
- A. 70% - Actual Classroom Teaching where different pedagogy can be involved
- B. 10 % - Online Teaching (via. Zoom, You tube, and other such platforms)
- C. 10% - Teaching with the use of Experiential Learning (visits, tours, games, presentations, etc.)
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S · N	Schedule	Topic	Learning Outcome	Approach(Vis ual / Auditory/ Kinesthetic)	Criteria Follo wed (A/B/ C/D)	Methodology / pedagogy
1	1 <sup>st</sup> 2 <sup>nd</sup> Week of December 22 to 2 <sup>nd</sup> Week of January 23  (16 L)	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> . Life cycle, Colony organization and Division of labour. Bee behaviour and communication Bee keeping equipments. Bee keeping and seasonal management. Bee products (composition and uses) : Diseases and enemies of Bees : a) Bee diseases - Protozoan (Nosema), Bacterial and Viral (Sac brood), Fungal (Chalk brood). b) Bee pests - Wax moth	The topic help to understands the basics about beekeeping tools, equipment and managing beehives.	Visual Auditory Kinesthetic	A, B, C, D	Classroom teaching, Ppt, Oral, Group Discussion, Student Seminar, Study Tours and Visits Lecture-cum-demonstration Group activity with the Specimens and slides. Constructive approach: Posters, models making.

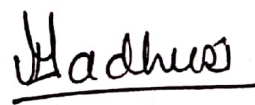
		(Greater and Lesser), Wax beetle. e) Bee predators - Green Bee eater, King crow, Wasp, Lizard. Bee pollination and management of bee colonies for pollination.				
2	3 <sup>rd</sup> & 4 <sup>th</sup> 5 <sup>th</sup> Week of January 23 & 1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>th</sup> Week of February 23 (14L)	An introduction to fisheries and its types (in brief) : Freshwater fisheries, Marine fisheries, Brackish water fisheries. Habit, habitat and culture methods of following freshwater forms : a) Rohu ( <i>Labeo rohita</i> ), b) Catla ( <i>Catla catla</i> ), c) Mrigal ( <i>Cirrhinus mrigala</i> ). 2.3 Harvesting methods of following marine forms: a) Harpodon. b) Mackerel. c) Pearl oyster. Crafts and Gears in Indian Fishery net, Rampani net, Cast net. Fishery byproducts : Fish preservation technique.	The topic helps to understand the basic information about fishery, cultural and harvesting methods of fishes and fish preservation technique.	Visual Auditory Kinesthetic	A, B, C, D	Classroom teaching, PPT, Oral, Group Discussion, Student Seminar, Study Tours and Visits Lecture-cum-demonstration Group activity with the Specimens and slides. Constructive approach: Posters, models making.
7	1 <sup>st</sup> , 2 <sup>nd</sup> week of March 23 (3L)	Revision and question paper discussion				



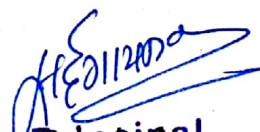
Subject Teacher



Head of the Department



IQAC Coordinator



offg Principal

Bharatiya Jain Sanghatana's  
Science & Commerce College  
Wagholi Pune-412207

Dr. Madhuri Deshmukh

**Bharatiya Jain Sanghatana's ASC College Wagholi, Pune 412207**

**Departmental Budget for the Academic Year 2022-2023**

Sr.No.	Name of the Department	Name of Coordinator	Budget for 2022-2023	Sanctioned	Remarks	Sign
1	BBA(CA)	Dr.Landge B.B.	50000	30000		
2	English	Dr.Jain M.G.	20000	10000		
3	Matematics	Prof.Avhad Pradip	30000	20000		
4	Chemistry	Dr.Gulalkari Rupali	1800000	1000000		
5	Geography	Dr.More J.C.	30000	20000		
6	Commerce	Dr.Landge B.B.	150000	100000		
7	Marathi	Dr.Sahadev Chavan	20000	10000		
8	History	Dr.Bhushan Phadatare	25000	15000		
9	Botany	Dr.Patil D.N.	150000	50000		
10	BCA(Sci)	Dr.Bora Manisha.	145000	45000		
11	Zoology	Dr.Deshmukh M.V.	200000	50000		
12	Political Science	Mr.Sangole S.M.	20000	10000		
13	Statistics	Mr.Shelke C.G.	10000	10000		
14	Hindi	Dr.Gaikwad S.V.	15000	10000		
15	Physics	Prof.Sonawane S.M.	75000	50000		
16	Economics	Prof.Shinde S.B.	30000	10000		
17	Libarary	Mr.More S.P.	500000	400000		
18	Physical Education	Dr.Gaikwad R.A.	300000	200000		
		Total	3570000	2040000		

Madhusi

**IQAC Co-ordinator**  
Bharatiya Jain Sanghatana's  
Arts, Science & Commerce College,  
Wagholi, Pune- 412207.

Dr. E. S. Jaisankar  
**offg. Principal**  
Bharatiya Jain Sanghatana's  
Art, Science & Commerce College  
Wagholi, Pune-412207

**Department of Commerce**  
**Agenda of the Meeting**

Date: 28/02/2023

<b>Meeting Name: Departmental meeting for the Academic Year 2022-23</b>				
<b>Date of meeting</b>	<b>27/02/2023</b>	<b>Time</b>	<b>11.30a.m.</b>	<b>Meeting No. 2</b>
<b>Meeting Co-ordinator</b>	<b>Dr. B.B. Landge</b>	<b>venue</b>	<b>Room No.16A</b>	

**Meeting Objective: Routine Meeting for Academic Year 2022-23**

Sr.no.	Topic	Presenter
1	Subject Allocation	Dr. B.B. Landge
2	Timetable	Prof. S.R. Patwa
3	Departmental Activity	Dr. B.B. Landge
4	Overview of Paper Checking	Dr. B.B. Landge
5	Research paper publication	All Staff
6	Internship record and reports	Dr. B.B. Landge
7	Any other Topics & Issues	All Staff

Attendees					
S.N	Name	Signature	S.N	Name	Signature
1	Dr. Desarda K.S.		8	Prof. Gaikwad J.R.	
2	Dr. Landge B.B.		9	Prof. Gawaree P.S.	
3	Prof. Jamdade R.N.		10	Dr. Wakhare P.B.	
4	Dr. Thorat J.D.		11	Prof. Sakhare A.S	
5	Prof. Patwa S.R.		12	Prof. Khedkar V.V.	
6	Prof. Tayade A.P.		13	Prof. Borhade B.S.	
7	Prof. Sonawane R.K.				

Co-Ordinator

Submitted To

Incharge

Approved by



**Department of Commerce  
Minutes of the Meeting**

Date: 03/03/2023

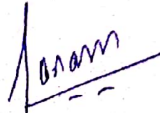
Meeting Name : Departmental meeting for the Academic Year 2021-22					
Date of meeting	27/02/2023	Time	11.30 am	Meeting No.	2
Meeting Co-ordinator	Dr.B.B. Landge	venue	Room No.16A	Minutes prepared by	Prof. Patwa S.R.

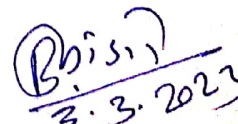
Sr.No	Meeting Agenda	Decision	Person Responsible
1	Subject allocation	It was decided that M.com subjects should be allocated to respected staff.	Prof.(Dr.)B.B. Landge
2	Timetable	It was decided that timetable should be prepared and send to all students on whatsapp group.	Prof. Sonam Patwa
3.	Dept. Activity	It was decided that each staff should conduct minimum two activities for students during the academic year for that prepared separate IC sheet for activities.	Prof.A.P.Tayade Prof.A.S.Sakhare
4.	Overview of Paper checking (F.Y.Bcom)	It was decided that F.Y.B.com papers should be check till 6 <sup>th</sup> March 2023 (Monday) and maintain the records of marks of all subject	Prof.B.S.Borhade
5.	Research paper publication	It was decided that each staff member should prepare & published minimum 2 research paper every year.	Prof. A.S.Sakhare
6.	Internship records & Reports	It was decided that maintain the all records of internship program and allocate certificate to students for internship.	Dr. J.D.Thorat
7.	Any other topics and issues	1.It was decided that make the arrangement of computer and English teachers for F.Y.Bcom 2. Arrange different days for students.	Prof.(Dr.)B.B. Landge

**Next Meeting:**

Date	31/03/2023	Time	11.30 am	Venue	Room No. 16A
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Objective:	Routine meeting/work discussion/Review of work/Decisions and Discussion
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Co-Ordinator

  
3.3.2023  
Incharge