

**Bharatiya Jain Sanghatana's
Arts, Science and Commerce College,
Wagholi, Pune 412207.**

INFORMATION FOR ACADEMIC AUDIT OF THE DEPARTMENT

1. Name of the Department: Zoology

2. Name of Subject: Zoology

Course Object:

1. To inculcate sense of job responsibilities, while maintaining social and environment awareness.
2. To promote the possibility of self-employment after B.Sc.

3. Profile (departmental faculties):

Sr.No	Faculty Name	Designation	Duration	E-mail-id
1	Dr. Madhuri V. Deshmukh	Head Of Department	Since 1996	madhurdes10@gmail.com
2	Mr. Vishad Waghmare	Asst. Professor	Since July 2019	amit007wagmare@gmail.com
3	Pavan Shinde	Lab Attendant	Since 2019	pavanshinde9800@gmail.com

4. Courses Conducted by this department:

Sr.No	Courses Name	Student Strength 2014-15	Student Strength 2015-16	Student Strength 2016-17	Student Strength 2017-18	Student Strength 2018-19	Student Strength 2019-20
1	F.Y.B.Sc.	93	83	93	103	87	77
2	S.Y.B.Sc	39	62	44	81	62	32

5. Syllabus: (link to university site)

6. Results: (for last 3 years)

Year	Class Name	(%) College result
2014-15	F.Y.B.Sc.	82
	S.Y.B.Sc.	100

Year	Class Name	(%) College result
2015-16	F.Y.B.Sc.	74.12
	S.Y.B.Sc.	93.33

Year	Class Name	(%) College result
2016-17	F.Y.B.Sc.	92.56
	S.Y.B.Sc.	96.33

Year	Class Name	(%) College result
2017-18	F.Y.B.Sc.	89.97
	S.Y.B.Sc.	97.66

Year	Class Name	(%) College result
2018-19	F.Y.B.Sc.	96
	S.Y.B.Sc.	96

7. Achievements: Students

Year	Class	Name of the Student	Details of Award	Venue
2014-15	SYB Sc	Baliram Patil	Participation in poster competition State Level Workshop on Bee Keeping	Sinhagad College of Science,Pune
2015-16	SYBSc	Ruchika Sathe	1 st Prize in Rangoli Competition	Zoospardha – Abeda Inamdar College.
	SYBSc	Ruchika Sathe Swati Borude	1 st Prize in Rangoli Competition	Zooplanet – Nowrosjee Wadia College
	SYBSc	Ramesh Katkar Vishakha Surwanshi	2 nd Prize in Rangoli Competition	Zooplanet – Nowrosjee Wadia College
	FYBSc	Kiran Narke Snehal Dhamdhare	3 rd Prize in Poster Competition	Zooplanet – Nowrosjee Wadia College
	SYBSc	Nawale Shekhar	Consolation Prize	Zooplanet – Nowrosjee Wadia College
2016-17	FYBSc SYBSc	Saurabh Harel Komal Bhambe	special appreciation by expert committee with 8 points	Avishkar – Zonal level
	FYBSc SYBSc	Saurabh Harel Komal Bhambe	2 nd Prize in Poster competition	Zooplanet – Nowrosjee Wadia College
	SYBSc SYBA	Prakash Walke Saurabh Harel Ravi Wawhal Akash Shingade Prasad Parhad Vikas Talole	1 st Prize in Skit Competition	Zooplanet – Nowrosjee Wadia College
	FYBSc	Shreyali Lunkad Bhairavi Todmal	2 nd Prize in Rangoli Competition	Zooplanet – Nowrosjee Wadia College
	FYBSc	Pragati Ghenand Prajakta Pholane	3 rd Prize in Rangoli Competition	Zooplanet – Nowrosjee Wadia College
	SYBSc	Namarata Shinde	2 nd Prize in Seminar Competition	Zooplanet – Nowrosjee Wadia College
	FYBSc SYBSc	Saurabh Harel Komal Bhambe	special appreciation by expert committee with 8 points	Avishkar – Zonal level
2017-18	FYBSc	Nikhil Rathod	Participation	Avishkar- College Level
	FYBSc	Shrutika Kale	Participation	Avishkar- College Level
	FYBSc SYBSc	Vaishnavi Asalkar Prajakta Khedkar	Participation	Avishkar- College Level

2018-19	SYBSc	Nikita Pokharna Shraddha Kale	Participation	Avishkar- College Level
	SYBSc	Jyoti Gaingade & Harshada Kand	3 nd Prize in Model Competition	Zoo planet Competition organized by Nowrosjee Wadia College, Pune
Shrutika Kale & Vaishnavi Asalkar		2 nd Prize in Rangoli Competition		
2019-20	FYBSc	Ms. Gauri Raut	2 nd Prize in PowerPoint Competition	Nowrosjee Wadia College

Faculty Achievements

Sr.No	Years	Faculty Name	Achievements
1	2015-16	Madhuri Deshmukh	Member of Animal Ethical Committee of Smt. Kashibai Navale Pharmacy College, Kondhwa, Pune.
2	2016-17	Dhanashri Udavant	completed training of Bird Monitoring Course
3	2017-18	Madhuri Deshmukh	Rewarded Ph.D

8. Prominent Alumni's: NA

Sr.No	Years	Alumni's
1		

9. Future plan:

Sr.No	Dates/Years	Plans
1	August 2019	Visit to Fishery Center, Manjari
2	September 2019	Visit to Sanjay Gandhi National Park Guest lecture
3	October 2019	Participation in Inter collegiate competition
4	February 2020	Internal Assessment Test for FY and SYBSc.

10. Activities:

Departmental Activities (2017-18)

Activity	Duration / Time	Co ordinator / Guest Speaker	Particulars	Student Strength
Bird Monitoring Course Inauguration & Visit to Kavadiapat	29 September 2017	Mr. Nandakishor Dudhe, Research Assistant, BNHS	Certificate course under COP	25
Participation of Zoology students in Avishkar 2017	19 September 2017	--	Participation of 4 teams in Avishkar Project Competition 2017 guided by Zoology Dept.	08
Guest Lecture	23 February 2018	Dr. Swapnil Supekar	Lecture on Genetic Engineering and Human Genetics	40
Excursion Tour.	26 September 2017	Dr. M.V. Deshmukh, Dr. D.N. Patil	Visit to Apiculture, Sericulture Center in Mahabaleshwar.	50
Field Visit.	5 August 2017	Dr. M.V. Deshmukh, Prof. Udavant D.S.	Visit to Fishery Center, Hadapsar	34

Field Visit	8 December 2017	Dr. M.V. Deshmukh, Prof. Udavant D.S.	Visit to Kumbhar Gaon, Bhigwan for Bird Watching.	25
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Departmental projects funded by BCUD SPPU, Pune and UGC

Name of the Faculty	Title of Project	Name of Funding Agency	Grant Received (Rs)	Status (Minor/Major)
Dr. Madhuri Deshmukh	Effect of hyperglycemic condition on cataract formation & Protective effect of certain plants on diabetes mellitus.	BCUD	296000/-	Major Completed
	Evaluation of Diabetic Wound healing activity of some indigenous plants	UGC	4,20000/-	Minor Ongoing

Career oriented Courses organized by Department

Sr. No.	Course Name	Start Year	Duration (Years)	Type	Intake Capacity
1	Certificate course in Vermiculture	2014-15	3 months	Self-funding course	25
2	Certificate course in Vermiculture and Gardening, Nursery Course	2016-17	3 months	Self-funding course	25
3	Tally	2016-17	3 months	Self-funding course	19
4	Paper Bags Making	2016-17	One day	Self-funding course	15
5	Chinese cooking course	2016-17	One Day	Self-funding course	24
6	Certificate Course in Bird Monitoring	2017-18	3 Months	Self-funding course	25
7	Certificate course in Vermiculture	2018-19	8 Days	Self-funding course	30

Seminars/ Conferences/Workshops organized by the Department

Title of Seminars/ Conferences/Workshops	National/ International	Funding Agency	Year	Sanctioned Amount in Rs.
Doctor's perspectives about diseases under medical zoology	state	BCUD	2004	--
Recent Trends in Life sciences	State	BCUD	2014-15	89,304/---

11. Placements: NA

Class Name	Months/Year	Student Name	Organization/Field Name	Profile/Job Name
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12. **Academics Calendar:** (Soft Copy) send email on (bjsbbaca@gmail.com) pls mention department name

13. **Examination Nature(semester/Annual) :**

Sr.No	Date	Paper Name	Examination	Time
1	September 2018	FYBSc Paper I FYBSc Paper II SYBSc Paper I SYBSc Paper II	Internal Assessment Test	30 min./Paper
2	October & November 2018	SYBSc I SYBSc II	Semester I University Examination	2 hrs
3	March 2019	FYBSc Paper I FYBSc Paper II FYBSc Paper III	Annual Annual Annual Practical	3 hrs. One Day
4	February 2019	FYBSc Paper I FYBSc Paper II SYBSc Paper I SYBSc Paper II	Internal Assessment Test	30 min./Paper
5	March 2019	SYBSc I SYBSc II SYBSc III	Semester University Examination Annual Practical	2 hrs One Day

15. **Gallery :** Separate folder is attached with it.

Information about Research/Publication

(Over all)

1) Seminars, Workshops, Conferences at national and international levels.(participant, presented paper, chaired the session) by faculty.

Sr. No.	Name of Faculty	Date and Whether International / National/ state/ University/ local Level	Title of the Conference / Seminar	Attended / Presented/ resource person/ chairperson/ expert	Title of the Paper Presented	Organized by	Venue
		29 & 30 th Jan 2015 National	Prospectus and opportunities in chemical	Participated	-----	Chemistry Dept.	BJS College, Wagholi

1	DR. Madhuri Deshmukh	seminar	Sciences				
		24 th & 25 th February 2016 National seminar	Current Trends in Biodiversity Conservation and Climatic Changes	Participated	-----	Zoology Dept.	Y.M. college, Pune
2	Prof. Vishad Waghmare	22 nd & 23 rd December 2017 National	Two day National Conference on Industry, Academia and Environmental Challenges” NCIAEC -2017	Presented a paper	Assessment of wetland Birds from <i>Kavdipath</i> and <i>Rahu</i> area along the river <i>Mula-Mutha</i>	Chemistry, Botany and Zoology Dept.	Radhabai Kale Mahila Mahavidyalaya Ahmednagar
		19 th to 23 rd March, 2019 National workshop	Teaching and Learning Biology: Problem Solving Approach	Participated	-----	Department Of Microbiology, Savitribai Phule Pune University	Department Of Microbiology, Savitribai Phule Pune University
		15-16 February 2019 International Conference	New Frontiers in Environment & Allied Sciences	Presented paper	Antifungal potential of <i>Parthenium hysterophorus</i> , <i>Catharanthus roseus</i> and <i>Achyranthes aspera</i> on <i>Aspergillus sp.</i> , <i>Candida Sp.</i> and <i>Penicillium sp.</i> of aquarium fishes.	Prof. Ramkrishna More ACS College, Akurdi, Pune	YASHADA, Baner Road, Pune
		February 2018 International Conference	Frontiers In Life Sciences And Earth Sciences	Published the research paper	Antifungal potential of <i>Parthenium hysterophorus</i> and <i>Catharanthus roseus</i> against <i>Aspergillus sp.</i> , <i>Candida sp.</i> and <i>Penicillium sp.</i> of aquarium fish	Prof. Ramkrishna More ACS College, Akurdi, Pune	YASHADA, Baner Road, Pune
		9-10 February 2016	International Conference on	Organizing committee	-----	Annsaheb Magar	Annsaheb Magar Mahavidyalaya,

		International Conference	Innovative Trends In Chemical, Physical And Biosciences (ITCPB)	and participant		Mahavidyalaya, Manjri, Hadapsar, Pune	Manjri, Hadapsar, Pune
		4-5 February 2015 State Level Seminar	State Level Seminar on Recent Advances In Life Sciences	Participant	-----	BJS College, Wagholi, Pune	BJS College, Wagholi, Pune
		2014-15 National Conference	National Conference on Advances In Life Sciences	Participant	-----	Prof. Ramkrishna More ACS College, Akurdi, Pune	Prof. Ramkrishna More ACS College, Akurdi, Pune
		6th February 2014 District level	District level workshop on SET/NET Preparation	Participant	-----	Baburaoji Gholap College, Pune	Baburaoji Gholap College, Pune

Summary: International = 3, National = 5, State/ University = 2

1) Total no. of Publications by Department:

A) Published Papers in Referred Journals:

Sr. No	Name of Faculty	Title	Journal with Vol., Issue & Page No	ISSN No.	Whether peer reviewed/ Impact Factor, if any	Sole /Main/co-author
1	Dr. Madhuri Deshmukh	Portable Vermicompost unit for the Treatment of Kitchen/Office Organic Solid Wastes and for Vermiculture	IJMR Vol. II, Issue 7(V) October 2013	2277-9302	-----	Co-author
2		Survey of Pests And Parasites Of Potato (Kharip) Crop In Ambegaon Thashil, Dist-Pune, (Maharashtra)	IJMR Vol. II, Issue 7(V) October 2013	2277-9302	-----	Co-author
3		Insect pests of potato crop in the North West Pune District Maharashtra	2014-15 State Level B.J.S's ASC College, Wagholi	ISBN-978-93-84916-59-6	-----	Co-author
4		Effect of certain plants on sugar cataract in organ culture	2014-15 State Level	ISBN-978-93-	-----	Main Author

		B.J.S's ASC College, Wagholi	84916- 59-6			
5		Crow: The most adapted bird to the urban life of Pune city	International conference on innovations in Energy, polymer and Environmental Sciences10-12 January 2014	-----	-----	Co-author
6		Role of wetlands in the Ambegaon Tahsil of Pune District in the conservation of bird diversity	Environmental issues and sustainable development Proceedings 18- 20 October2014	ISBN: 978-81- 930154 -07	-----	Co-author
7		Anti-cataract effect of aqueous extract of <i>Catharanthus roseus</i> on diabetic goat lenses. International conference	International E publication www.isca.co.in Innovative Trends In Chemical, Physical and Biosciences 2016 (Online Journal)	ISBN- 978-93- 84659- 28-8	-----	Main Author
8		Assessment of wetland Birds from <i>Kavdipath</i> and <i>Rahu</i> area along the river <i>Mula-Mutha</i>	Flora and Fauna An International research Journal of Biological sciences NAAS Rating 4.55	ISBN 0971- 6920	NAAS Rating 4.55	Main Author
9	Prof. Vishad Waghmare	Antifungal potential of <i>Parthenium hysterophorus</i> and <i>Catharanthus roseus</i> against <i>Aspergillus sp.</i> , <i>Candida sp.</i> and <i>Penicillium sp.</i> of aquarium fish	International Journal of Scientific Research in Science and Technology	ISSN : 2395- 602X		Author

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(B) Full Papers in Conference Proceedings

Sr. No	Name of Faculty	Title	Details of Conference publication	ISSN/ ISBN No.	Whether peer reviewed/ Impact Factor, if any	No. of co-authors
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(C) Books published as an author or an editor:

Name of Faculty	Title	Publisher	ISBN No.	Chapters / all in edited books	No. of co-authors
Dr. Madhuri Deshmukh	A textbook of cell biology	Aruta publications	ISBN ISBN 81-902648-3-4 (2007)	3	3
	Career Orient Programs short term courses	Career oriented programs short term courses	Success Publication	Sole	Sole
	Souvenir –State level Seminar on recent Advances in Life sciences	Success Publication	ISBN: 978-93-84916-59-6	Sole	Sole
	Cell Biology and Genetics	Success Publication	ISBN: 978-93-84916-96-1	3	4
	Cell Biology (Paper – VI) T.Y.B.Sc. Zoology Page Nos. 1.1 to 4.11	Success publication	ISBN No. 978-93-5158-386-8	3	4
	Mammalian Histology T. Y.B.Sc. (Sem III) Page No.- 1.1 to 2.27	Success publication	ISBN NO. - 978-93-5158-388-2	3	3

Course Outcome

F.Y.B.Sc. and S.Y.B.Sc. Paper I

- ❖ This course will provide students with an opportunity to gain information regarding animal classification and systematic, animal structure and function relationships, evolution between and within major animal groups, animal reproduction and development, animal diversity and animal ecology.
- ❖ The General Zoology course is designed to introduce students to the study of zoology at the organismal and organ function levels.
- ❖ The general zoology course provides the student with an introduction to the recent advances in zoology in the areas of systematic, evolution, reproduction, development.
- ❖ At the end of the semester, the students are expected to have:
 - ❖ Understand the interrelationship of all life forms through the knowledge of common life processes;
 - ❖ Recognize the diversity of animal life and the role played by each animal in its environment;
 - ❖ Appreciate the Maker for placing every living thing in its proper order and for the balance of nature.

F.Y.B.Sc. and S.Y.B.Sc. Paper II

- ❖ Applied zoology, cell biology and Genetics courses provide offer a broad, relevant and contemporary curriculum.
- ❖ The lecture section of the course will review the general principles of modern and applied zoological theory.
- ❖ The courses encourage in students an enthusiasm for biological sciences in general for whole animal science and conservation of the natural environment in particular.
- ❖ It develops an understanding of the ethical, economic, legal and political context of keeping captive animals, animal behavior, ecology and conservation.
- ❖ It produces graduates with the ability to apply concepts from Zoology and communicate ideas effectively in a range of contexts and communication modes.
- ❖ It produces graduates with genuine flexibility in career choice and broadly applicable skills.
- ❖ It produces graduates with the ability to become autonomous learners equipped cope with higher degree studies.
- ❖ The courses meet the need for an accessible part-time progression to an graduate degree for suitably qualified students’.

F.Y.B.Sc. and S.Y.B.Sc. Paper III

- ❖ The practical courses provide opportunities for practical work practical skills in laboratory-based and field zoology and experiential learning in aspects of Applied Zoology.

- ❖ The specific learning goals for General Zoology are to provide students with a working knowledge of fundamental principles in zoology that will provide a foundation for their later advanced course work in more specific biological subjects.
- ❖ As General Zoology is a basic course, students will become familiar with animal classification schemes and associated taxonomic group diagnostic characteristics as well as developing an understanding of and ability to apply basic zoological principles.
- ❖ The laboratory and lecture sections of the course are highly integrated and directed toward teaching students the principles of animal evolution, classification, form and function.
- ❖ It promotes students' ability to critically think about, assess and evaluate data gathered both in the field and through scientific literature.

Program Specific Outcome

- ❖ To provide thorough knowledge about various animal sciences from primitive to highly evolved animal groups
- ❖ To make the students aware of applications of Zoology subject in various industries
- ❖ To highlight the potential of various branches to become an entrepreneur
- ❖ To equipped the students with skills related to laboratory as well as field based studies
- ❖ To make the students aware about conservation and sustainable use of biodiversity
- ❖ To inculcates interest and foundation for further studies in Zoology
- ❖ To address the socio-economic challenges related to animal sciences
- ❖ To facilitate students for taking up and shaping a successful career in Zoology
- ❖ To bridge up the gap between knowledge based conventional education and market demands and to provide an alternative to those pursuing higher education.
- ❖ To enrich students' training and knowledge to practices of Applied zoology in Cottage industry
- ❖ To introduce the various techniques of rearing of useful animals.
- ❖ To inculcate sense of job responsibilities, while maintaining social and environment awareness
- ❖ To help students build-up a progressive and successful career in industries with a biochemical perspective
- To promote the possibility of self-employment after B.Sc.