

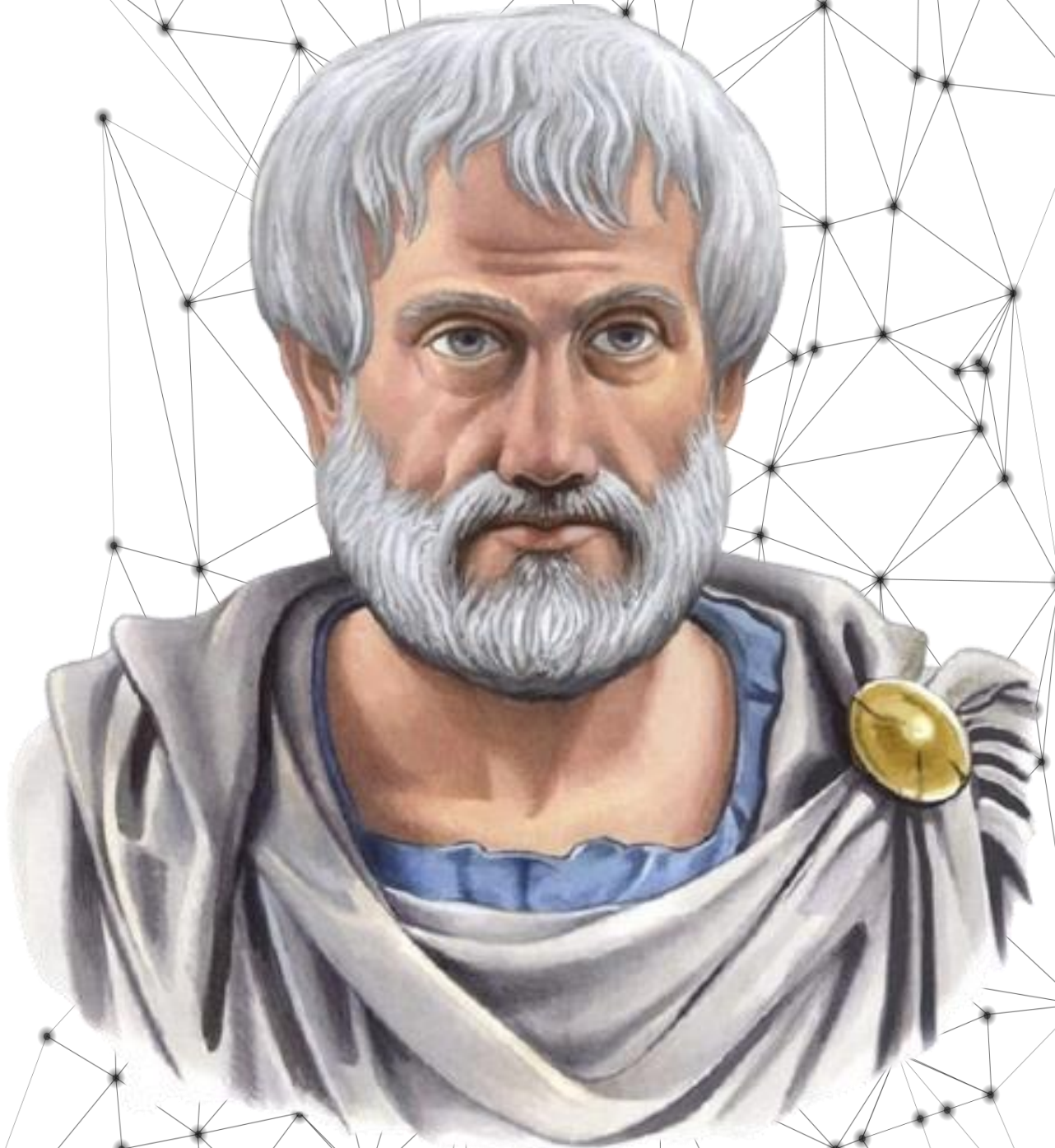
# ZOOLOGY DEPARTMENT



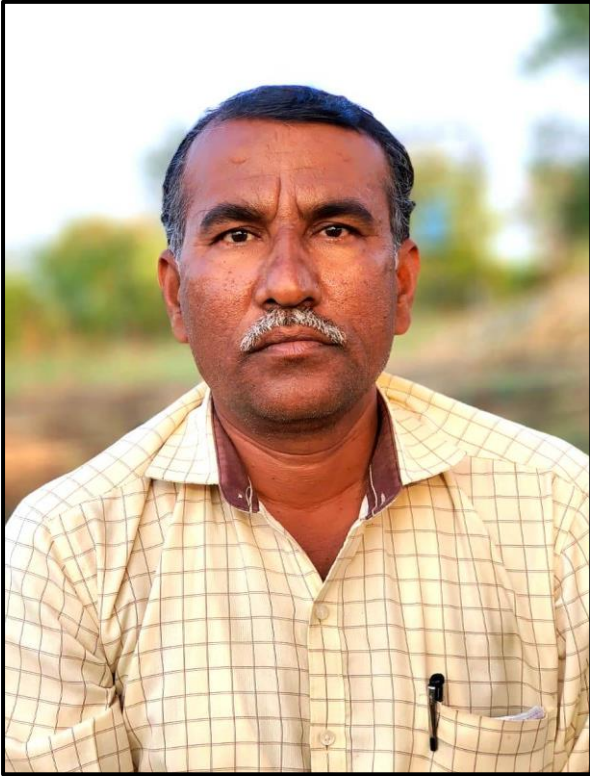
*Ashti talika shikshan prasarak mandal's*  
**Adv. B.D. Hambarde Mahavidyalaya,**  
**Ashti Tal. Ashti Dist. Beed**



**Father of Zoology**



**Aristotle**



**Prof. Madake C.D.**  
**Department of Zoology**

**Prof. Khose A.B.**  
**Department of Zoology**



# DEPARTMENTAL PROFILE

## DEPARTMENT OF ZOOLOGY

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### **1.A) SCOPE AND IMPORTANCE OF ZOOLOGY:**

Zoology is the branch of life science deals with the study of animals.

Zoology, a complex science with number of problems yet to solve, is a challenge to an enquiring mind. There are other motives for Zoological study also.

Man, the product of biological heritage, is a part of animal kingdom and a product of the evolutionary process. No group of animals stands alone and isolated from other groups in the long evolutionary process. Such information about man can only be obtained by zoological study of other animals because there is underlying unity and similarities of structure and function throughout the animal kingdom.

The study of zoology is necessary for pre professional work in medicine, dentistry, nursing, veterinary science, dietetics, agriculture, fishery, poultry, sericulture, apiculture, conservation of wildlife, sanitary engineering and many other fields. Medical sciences have profited from zoological discoveries.

Zoology is a branch of Science with lots of economic and practical importance because of our dependence upon animals for many products and uses, such as food, clothing, sources of drugs, subjects of experimentation etc.

Genetics, one of the branches of zoology, has been a factor in producing better domestic animals. Animal and plants parasites influence man's welfare in harmful ways. Many parasites injure man and his domestic animals. Many animals carry disease as vectors and other themselves as disease agents, such as those causing malaria.

Destruction of crops and fruits by insect pests is a problem for agriculture. All animals, including man, fit into a balance of nature. This is the web of life in which all plant and animal life fits into a pattern of environmental relationship.

The study of Zoology is an excellent discipline that has a unique role in man's cultural pattern. Animal sociology is rapidly becoming a branch of zoology in its own right.

Biological concepts influence your thinking in every realm of human interest. For instance, the concepts of evolution or the transformation of organism from one type to another during geological eras, has affected concepts in philosophy, psychology, sociology, and many other disciplines. One of the fascinating facts of biological study is the ever changing nature of its concepts. Much biological investigation may be done with practical objectives in mind, but a greater amount is motivated by curiosity and an urge to explain what lies beyond our present knowledge of life process.

## **B) VISION OF THE DEPARTMENT:**

- To make dedicated efforts to provide quality education to the students from Rural and Tribal areas. (Backward areas)
- To provide latest Bio instruments the students and increase their knowledge.
- To arrange lectures of renowned persons on syllabus and personality development of students.
- The students run programmers organized by the department.

## **C) HIGHLIGHTS OF THE DEPARTMENT:**

- 1) Department organizes and celebrates 'Science Day'.
- 2) Department organizes Guest lecturers of eminent scholars.
- 3) Department organizes certificate course.
- 4) Department organizes Guest lectures on personality development for the students.
- 5) Department organizes Birth Anniversaries and festivals for the student participant
- 6) Department organizes industrial visits for student.
- 7) Students of the department regularly participate in tests, tutorials and extra lectures.
- 8) Department organizes Welcome function for the students of first year and Fare - well function for the student of third year.
- 9) Publication of Wall Poster by Students.

## **2. INTRODUCTION OF DEPARTMENT:**

A.T.S.P. Mandal's, Arts & Commerce College, Ashti established in 1972. The branch of science faculty established in June 1992 at the junior level. The under graduate education has been started from June 2006. The Zoology dept. is established at the same time and started the education to first year students. The first graduation batch came out in 2009. It is the one of the best department in science faculty.

## **3. OBJECTIVES OF THE DEPARTMENT:**

1. To impart basic education in Zoology.
2. To develop experimental skills of the students in the subject
3. To develop scientific temperament
4. To prepare the students for admission to higher studies.
5. To prepare the students for employment in small scale industries.
6. To motivate the students for self-employment.

#### 4. Papers taught in the Department (U.G) :

Class & Year	Semester	Paper No.	Name of the Paper
<b>B.Sc.I</b>  <b>2013-14</b>	Sem-I	Paper- I	Protozoa to Annelid
		Paper- II	Cell Biology
	Sem-II	Paper- IV	Arthropod to Echinodermata
		Paper-V	Genetics-I
		Practical- III + VI	Practical
<b>B.Sc.II</b>  <b>2014-15</b>	Sem-III	Paper-VII	Vertebrate Zoology
		Paper- VIII	Genetics-II
	Sem-IV	Paper- XI	Animal physiology
		Paper- XII	Biochemistry & Endocrinology
		Practical-IX & XIII	Practical
		Practical-X & XIV	Practical
<b>B.Sc.III</b>  <b>2015-16</b>	Sem-V	Paper- XV	Ecology
		Paper- XVI	Fishery Science-I
	Sem-VI	Paper- XIX	Evolution
		Paper- XX	Fishery Science-II
		Practical-XVII + XXI	Practical
		Practical-XVIII + XXII	Practical

#### 5. Subject Books in Central Library:

Sr. No.	Medium	No. of Books
1)	English	<b>503</b>
		<b>Total- 503</b>

#### 6. Subject Books in the Department:

(Personal books of the faculty kept in department)

Sr. No.	Medium	No. of Books
1)	English	10
		<b>Total- 10</b>

## 7. Periodicals in the Central Library:

Sr. No.	Medium	No. of Books
1)	English	
		Total-

## 8. ESTABLISHMENT OF THE DEPARTMENT:

Sr. No.	Department	Particulars	Date of Establishment
1	UG	F.Y.B.Sc. Zoology	2006 – 2007
2		S.Y.B.Sc. Zoology	2007 - 2008
3		T.Y.B.Sc. Zoology	2008 - 2009

## PRESENT HEAD:

Sr. No.	Name of the Heads	Tenure
1	Prof. Madake C.D.	2007 to till date
2	Prof. Khose A.B.	2017 to till date

## 9. ACHIEVEMENT OF DEPARTMENT:

It is one of the biggest departments in the college so plays leadership role in many activities like organizing the seminars, workshop etc. Every year results of UG classes are much better than University results. Every year this department is participating in examination conducted by BAMU University for first year students to develop interest in Zoology. Many times our students have good ranking in this competitive examination

## 10. HONOURS / AWARDS / PRIZES RECEIVED: Nil

### 10. Time-Table 2021-2022 (Dept. of Zoology)

Sr. No.	Time	Mon			Tue			Wed			Thu			Fri			Sat		
		I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
2	08.50 TO 09.40	CDM		ABK	CDM			CDM		ABK	CDM		ABK	CDM		ABK	CDM		ABK
3	09.40 TO 10.30		ABK	CDM		ABK	CDM		ABK	CDM		ABK	CDM		ABK	CDM		ABK	CDM
4	10.30 TO 11.20	ABK			ABK			ABK				CDM			CDM			CDM	
5	11.20 TO 11.30	INTERVAL																	
6	11.30 TO 12.20		CDM			CDM			CDM		ABK			ABK			ABK		
7	12.20 TO 01.10																		
8	01.10 TO 02.00																		
9	02.00 TO 05:00	Practical																	

**CDM :Madake C.D.**

**ABK: Khose A.B.**



## 12. Strength of Students [year wise]

Year 2016-17 TO 2020-21

Year	Class	Total		Open		OBC		NT		SC		ST		SBC	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F
2021-22	<b>F.Y.</b>	<b>77</b>	<b>44</b>	<b>24</b>	<b>18</b>	<b>21</b>	<b>09</b>	<b>27</b>	<b>09</b>	<b>03</b>	<b>03</b>	<b>02</b>	<b>02</b>	<b>00</b>	<b>02</b>
	<b>S.Y.</b>	<b>34</b>	<b>15</b>	<b>20</b>	<b>06</b>	<b>04</b>	<b>03</b>	<b>07</b>	<b>04</b>	<b>02</b>	<b>02</b>	<b>01</b>	<b>00</b>	<b>00</b>	<b>00</b>
	<b>T.Y.</b>	<b>28</b>	<b>16</b>	<b>12</b>	<b>07</b>	<b>06</b>	<b>03</b>	<b>05</b>	<b>03</b>	<b>03</b>	<b>02</b>	<b>02</b>	<b>01</b>	<b>00</b>	<b>00</b>
2020-21	<b>F.Y.</b>	56	39	20	21	09	05	23	11	04	02	00	00	01	<b>00</b>
	<b>S.Y.</b>	46	23	20	11	09	03	09	05	05	04	00	00	00	<b>00</b>
	<b>T.Y.</b>	39	29	22	12	07	07	04	08	06	02	00	00	00	<b>00</b>
2019-20	<b>F.Y.</b>	57	29	26	15	12	04	13	05	04	05	01	00	01	<b>00</b>
	<b>S.Y.</b>	46	30	27	15	03	04	10	07	04	04	01	00	01	<b>00</b>
	<b>T.Y.</b>	49	22	25	14	10	04	07	03	05	01	01	00	00	<b>00</b>
2018-19	<b>F.Y.</b>	65	32	33	19	10	04	15	05	05	04	01	00	01	<b>00</b>
	<b>S.Y.</b>	62	26	33	17	10	06	15	01	04	02	00	00	00	<b>00</b>
	<b>T.Y.</b>	19	17	11	10	02	02	05	05	01	00	00	00	00	<b>00</b>
2017-18	<b>F.Y.</b>	92	33	49	17	18	07	15	07	05	02	03	02	00	<b>00</b>
	<b>S.Y.</b>	39	20	20	16	04	06	09	01	01	01	01	00	00	<b>00</b>
	<b>T.Y.</b>	31	25	16	15	05	02	07	03	04	03	01	00	00	<b>00</b>
	<b>F.Y.</b>	78	29	33	15	16	06	09	06	05	01	0	01	00	<b>00</b>
2016-17	<b>S.Y.</b>	43	26	22	18	04	08	09	03	06	01	02	00	00	<b>00</b>
	<b>T.Y.</b>	<b>34</b>	<b>27</b>	<b>18</b>	<b>13</b>	<b>08</b>	<b>05</b>	<b>04</b>	<b>04</b>	<b>03</b>	<b>03</b>	<b>01</b>	<b>02</b>	<b>00</b>	<b>00</b>

## 10. QUANTITATIVE & QUALITATIVE YEAR-WISE RESULTS

Year	Class	Students Appeared	Pass Class 20-24	Second Class 25-29	First Class 30-37	Distinction 38-50	% Result
2020-21	<b>Mar/Apr. 2021 Semester</b>						
	B.Sc. I	81	32	19	07	02	74.28
	B.SC II	41	14	18	08	01	80.39
	B.Sc. III	59	26	14	03	02	76.27
	<b>Oct/Nov2020 Semester</b>						
	B.Sc. I	86	24	33	21	01	91.86
	B.Sc. II	66	21	27	09	02	89.39
B.Sc. III	68	32	22	09	02	95.68	
2019-20	<b>Mar/Apr. 2020 Semester</b>						
	B.Sc. I	88	01	06	26	52	96.59
	B.Sc. II	81	15	19	17	22	90.12
	B.Sc. III	72	03	06	18	42	95.83
	<b>Oct/Nov2019 Semester</b>						
	B.Sc. I	80	48	14	03	01	82.50
	B.Sc. II	72	51	11	01	03	91.66
B.Sc. III	69	47	13	03	01	92.75	
2018-19	<b>Mar/Apr. 2019 Semester</b>						
	B.Sc. I	86	51	14	04	01	81.39
	B.Sc. II	78	44	16	02	00	79.46
	B.Sc. III	73	46	17	03	01	91.78
	<b>Oct/Nov2018 Semester</b>						
	B.Sc. I	97	60	16	05	01	84.53
	B.Sc. II	88	43	28	01	00	81.81
B.Sc. III	36	21	09	02	00	88.88	
2017-18	<b>Oct/Nov 2017 Semester</b>						
	B.Sc. I	125	43	37	15	05	80.00
	B.Sc. II	63	21	17	09	08	87.30
	B.Sc. III	59	26	11	07	04	81.35
	<b>Mar/April 2018 Semester</b>						
	B.Sc. I	129	42	35	17	08	79.06
	B.Sc. II	66	25	11	10	05	77.27
B.Sc. III	61	29	15	07	03	88.52	
2016-2017	B.Sc. I	107	37	26	12	03	72.89
	B.Sc. II	69	23	16	11	05	79.71
	B.Sc. III	61	28	17	04	02	83.60
	B.Sc. III	61	28	17	04	02	83.60

## 14. Toppers in University Examination

2016-17 to 2020-21

B.Sc T.Y	First		Second		Third	
	Name	%	Name	%	Name	%
2020-21	Kalyankar Kalyani Krushna	80.00	Bankar Kirti kalyan	76.22	Jagtap Komal Dinkar	74.18
2019-20	Veer Pradip Suryakant	71.40	Bharate Varsha Vikram	70.89	Kakade Bhushan Mahavir	69.68
2018-19	Marathe Sarika Ashok	71.50	Kulkarni Geetanjali Shamsundar	71.19	Bhavar Pritam Shriram	71.03
2017-18	Pathade Komal Ashok	70.54	Jagtap Supriya Dhananjay	69.53	Nannaware Radha Khandu	67.56
2016-17	Wandhare Kalyani Shivaji	73.51	Bhandwalkar Swapnali Pandurang	69.92	Ghodake Shital Anil	69.82

## 15. USE OF ICT:

Sr. No.	Name of the teacher	Topic	Class	Teaching Method	Date
2017-2018					
1	Prof.Khose AB	Cell Cycle, Phase G1,S,G2.M	B.Sc.I	Animation video	03/08/2017
2	Prof.Khose AB	Mutualism; Lichen, N <sub>2</sub> - Fixation, rumen microflora.	B.Sc.III	PPT	07/01/2017
3	Prof.Khose AB	Gene Expression: Transcription, Translation	B.Sc.II	Animation Video	16/08/2017
4	Prof.Khose AB	Cloning Vector: Plasmid PBR322,	B.Sc.II	PPT	12/10/2017
5	Prof.Khose AB	Darwin Theory of Evolution(Natural selection Theory)	B.Sc.III	PPT	27/12/2017

6	Prof.Madake C.D.	Tania solium: life cycle,pathogenesis,symptoms.	B.Sc.I	ppt	15/01/2018
7	Prof.Madake C.D.	Concept of Blue Revolution; Importance of fishes.	B.Sc.III	PPT	20/09/2017
8	Prof.Madake C.D.	Reptiles: Poisons and non poisons snaikes	B.Sc.II	Animation	22/08/2017
9	Prof.Madake C.D.	Design, construction and maintained of nursery, rearing and stocking pond	B.Sc.III	PPT	13/12/2017
2018-2019					
1	Prof.Khose AB	Mutualism,comensalism,parasitism;c oncept and examples	B.Sc.III	PPT	01/07/2018
2	Prof.Madake C.D	Plasmodium vivax: structure, life cycle,pathogenesis,prevention.	B.Sc.II	Animation Video	30/07/2018
3	Prof.Khose AB	Excretory system in human	B.SC.II	Animation	11/07/2018
4	Prof.Khose AB	Cell Cycle: Mitosis,meiosis	B.Sc.I	Animation	01/07/2018
5	Prof.Khose AB	Transformation:defination.Discovery	B.Sc.II	PPT	28/09/2018
6	Prof.Khose AB	Structure,Function of Mitochondia,Ribosome	B.Sc.I	PPT	28/09/2018
7	Prof.Khose AB	Evolution:evidance of Evolution	BSc.III	PPT	30/01/2019
8	Prof.Khose AB	Pituitary Gland:histological structure,Hormones ,difficiency	B.ScII	PPT	30/01/2019
9	Prof.Khose AB	Mutation: types of mutation.	B.Sc.I	PPT	30/01/2019
10	Prof.Khose AB	Evolution:Types of fossil.formation of fossil,Carbon Dating	B.SC.III	Animation	26/02/2019
11	Prof.Madake C.D.	Berg classification of fishes	B.SC.III	PPT	30/07/2018
12	Prof.Madake C.D.	Scoliodon- Digestive system	B.SC.I	Animation	30/07/2018
13	Prof.Madake C.D.	Fish Diseases; protozoan,Bacterial,viral disease	B.SC.III	PPT	30/12/2018

14	Prof.Madake C.D.	Excretory system in Human	B.SC.II	Animation	31/01/2018
2019-2020					
1	Prof.Khose AB	Transcription:Initiation,elongation,termination.	BscII	Animation	17/09/2019
2	Prof.Khose AB	Structure of prokaryotic cell	B.Sc.I	PPT	17/09/2019
3	Prof.Khose AB	Ecology:abiotic and Biotic Componants	B.Sc.III	PPT	17/09/2019
4	Prof.Khose AB	Mutualism,comensalism,parasitism;concept and examples	B.Sc.III	PPT	31/07/2019
5	Prof.Khose AB	Translation:concept,role of ribosome	B.Sc.II	animation	31/07/2019
6	Prof.Khose AB	Cell Cycle: Mitosis,meiosis	B.Sc.I	Animation	31/12/2019
7	Prof.Khose AB	Glycolysis,TCA cycle,ETS	Bsc.II	PPT	31/12/2019
8	Prof.Khose AB	Darwin theory of evolution	BscIII	PPT	31/12/2019
9	Prof.Madake C.D.	Male and Female Reproductive system in Human	Bsc.II	Animation	28/01/2018
10	Prof.Madake C.D.	Pilla: male reproductive system	B.Sc.I	Animation	12/09/2018

## 16. RECORD OF GUEST LECTURERS ARRANGED:

Sr. No	Name of Faculty	Topic	Date
1	Prof. Kakde N.P.	Species and type of speciation	11/01/2020
2	Prof.Chavan L.N	Recombinant DNA technology: steps, enzyme used, application.	28/01/2020
3	Dr. Khaire B. S.	Biochemistry in Cell	28/12/2018
4	Prof. Chavan L.N	Study of Microscope: microtony, staining	11/10/2018
5	Dr. Kale M. K.	Sex determination, sex linked inheritance	14/02/2018
6.	Dr. Sirsat P. V.	Biotic & Abiotic compound in Ecosystem	14/12/2017
7.	Prof. Oval S. D.	Fresh Water fishes	05/02/2016

### 17. Values Added/ Certificate Course:

Sr.No	Name of the Course	Year of implementation	No. of student beneficiary
1	Bioinstrumentation and Biotechnology	2021-22	10
2	Bioinstrumentation	2019-20	12
3	Bioinstrumentation	2018-19	13
4	Bioinstrumentation	2017-18	15
5	Bioinstrumentation	2016-17	16

### 18. Workshop/Seminar/Conference organized

Sr. No.	Topic	Date	Level
1	Significant role of life science in pandemic like covid- 19(Seminar)	02 March 2021.	National
2	Post covid- 19 complications (Workshop)	28 May 2021	National

### 19. List of Recognized Research Guides: Nil

### 20. Minor /Major Research Projects: Nil

### 21. List of Publications: Nil

Sr. No.	Name	Title of Paper Presented	Organized	Year
01	--	--	---	--

### 22. Paper / Article Published: 01

Sr. No	Date	Univ. / College	Topic	Level
1	14 & 15 SEPT.2019	Arts commerce and Science college, Ashti.	NAAC	National

## 23. FUTURE PLAN:

Sr. No	Activity	Year	Remark
1	To increase Departmental library and Reference books.	2016-17	We run departmental Library
2	To arrange guest Lectures of eminent faculties	2017-18	We arranged guest lectures
3	To arrange Poster Presentation	2018-19	We arranged Poster Presentation
4	To Organized national conference	2019-20	We arranged National conference on dated 02 March 2021.
5	To arrange industrial tour.	2020-21	-
6	To arrange a student Projects	2020-21	-

## 24. BEST PRACTICES

- Counseling for the weak students.
- Guidance for Competitive Exams.
- Laboratory with advanced instruments.
- Organization of student seminars and Group discussion.
- Guest Lectures of eminent persons arranged.
- Departmental Library available during working hours.
- Lab with Internet access to students for theory and practical.
- Organization of Add on course on useful topics

## 25. Photographs of Activities

Dept. of Zoology & N.S.S. organized HB & WBC count of Girls;



**Hon. President Kishorji Hambarde, Secretary Atulji Meher & chief guest Dr. Laxmikant Joshi & Dr. Manjusha Firodia in program of HB detection Camp.**





**Dr. Laxmikant Joshi Guiding about 'Importance of HB & WBC'**



**Hon. President Kishorji Hambarde, Secretary Atulji Meher, Hon. Principal Dr. S. R. Nimbore & chief guest Dr. Laxmikant Joshi, Dr. Manjusha Firodia in program of HB Camp.**



**Blood Donation camp on occasion of birthday of Hon. President Kishorji Hambarde**



**Dr. Pisal G. M. at HB detection camp.**



**DR. B.A.M. University Aurangabad M.Sc. affiliation committee visits Department**



**Dr. Khaire B.S, Head of Department of Zoology Anandrao Dhonde college Kada visit to Dept. of Zoology.**



Latitude: 18.806166  
Longitude: 75.167756  
Elevation: 605.31m  
Accuracy: 9.6m  
Time: 31-01-2021 11:53  
Note: पोलिओ दिन



Latitude: 18.806167  
Longitude: 75.167761  
Elevation: 604.7m  
Accuracy: 7.5m  
Time: 31-01-2021 11:52  
Note: पोलिओ दिन

**Department of Zoology Promoting Polio Vaccination**



**College staff and student working in pani foundation at Kasewadi**



**Student working in farm pond in college**





**Department of Zoology Organized student seminar and Group Discussion**



**Student seminar**



**Dr. Pisal, Dr. Doke in Health Check Up program of college staff**

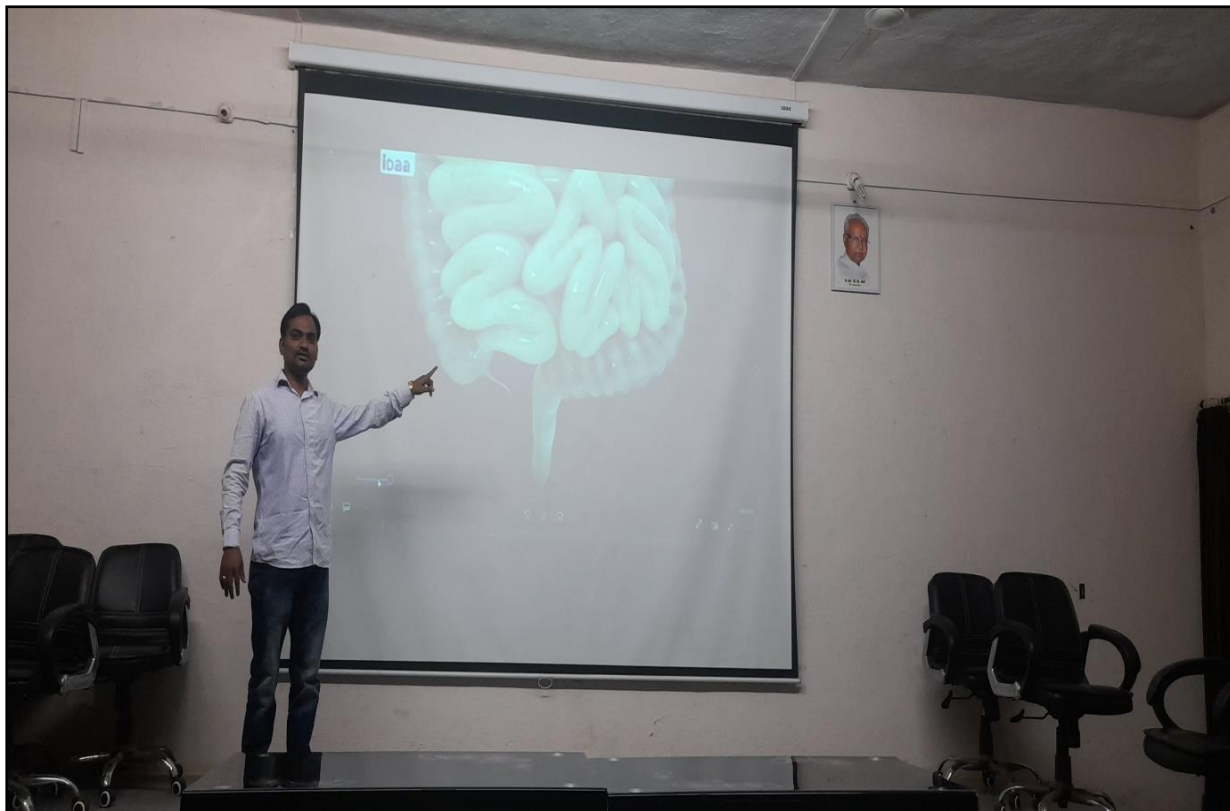


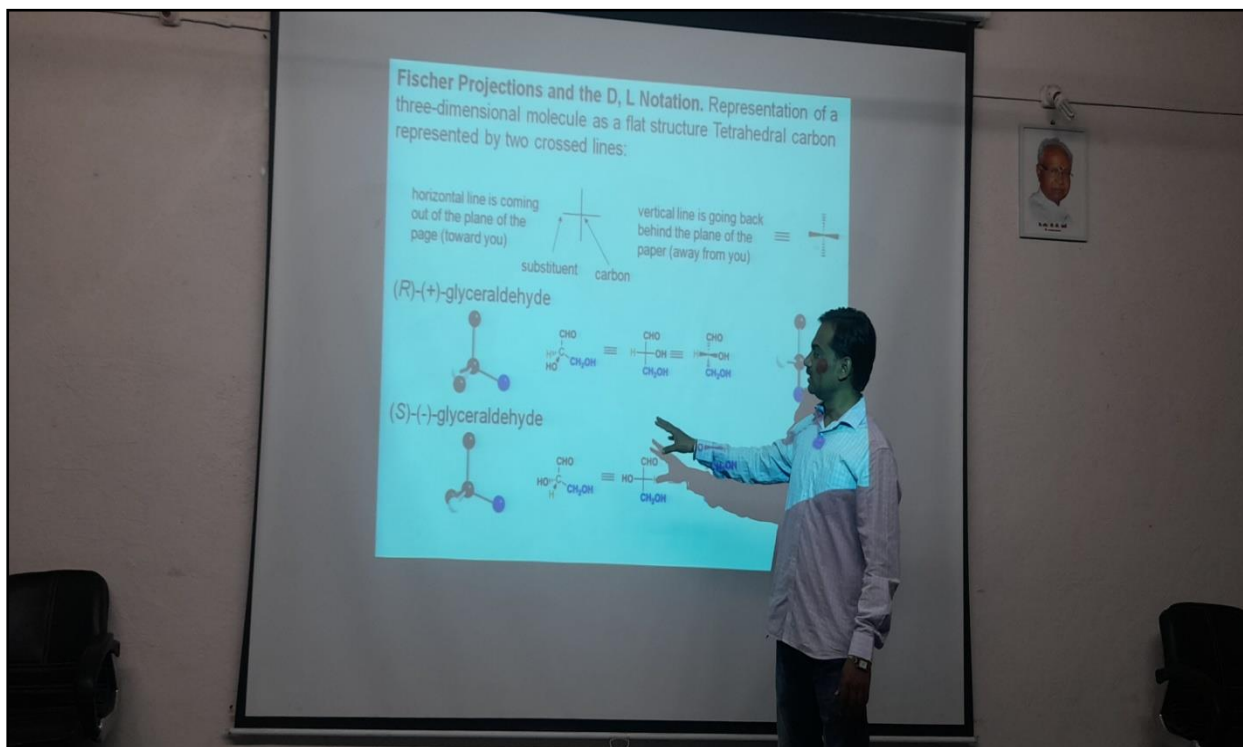
**Dr. Tekade, Health officer, Dr. Pisal sir, Dr. Garje madam at health check - up camp**



**College staff during Covid-19 antigen test**

# ICT PHOTO







**Dr. Dixit P.P Sir and Dr. Nilesh Kakade sir during one day national webinar on 'Role of life science in Pandemic like Covid -19' Organized by Department of Zoology**



Science Day celebration





## COVID VACCINATION CAMP

## **THINK ONCE**

**According to one estimate, 200 million land animals are slaughtered around the world every single day. That's 72 billion a year. In the United States alone, roughly 25 million animals are slaughtered every single day. This should be stop somewhere and we should not just consider about animal we should consider about plants, trees there are some special species of animal that we still don't know but they are because they rare and government try to protect them from hunters so please stop killing animals and protect them.**

For man, when perfected, is the best of animals, but, when separated from law and justice, he is the worst of all; since armed injustice is the more dangerous, and he is equipped at birth with the arms of intelligence and with moral qualities which he may use for the worst ends. Wherefore, if he have not virtue, he is the most unholy and the most savage of animals, and the most full of lust and gluttony. But justice is the bond of men in states, and the administration of justice, which is the determination of what is just, is the principle of order in political society.

*-Aristotle*

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ISBN 978-80-87049-09-9



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