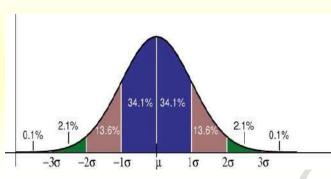
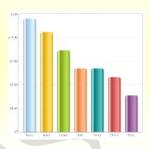
DEPARTMENT OF STATISTICS







Departmental Profile

VISION:

To produce Statisticians who are excellent in scientific data collection, data management, methods, and data analysis for contribution of society.

MISSION:

To Develop the department as reputed centre for quality teaching, Research, & consultancy in Statistics.

OBJECTIVES:

- To disseminate the knowledge of statistics to the students at undergraduate level.
- To provide intense introduction to fundamental concepts in statistics for the syllabus prescribed by university of Mumbai.
- To provide academic facilities to the students aspiring career in statistics and information technology.
- To provide essential computer education to use various statistical tools.
- To provide proper guidance for appearing PG and ISI entrance examinations, as well as to prepare them for MPSC and UPSC examinations in statistics.
- To train the students to understand significance of statistical concepts to apply in real life situations.

GENERAL INFORMATION ABOUT DEPARTMENT:

Anandibai Raorane Arts, Commerce and Science College was established in the year 1992 with the vision of providing education for educationally backward places & rural students. This is one of the College in Sindhudurg, Ratnagiri, and Raigad district which provide Statistics subject for T.Y.B.Sc. class.

Department of Statistics was established in the year 2012-13. Statistics is the science that deals with the methods of handling data, including the organization and analysis of numerical information. The philosophy is to concentrate learning and training activities on the art of probabilistic reasoning, that is, the logic and principles that should guide rational decision making under conditions of limited information and uncertainty. Department of Statistics is having well equipped laboratory attached with computers, calculators, and statistical tables. In the department, Internet is available to the students with free access.

FACULTY PROFILE:

Sr No.		Name of Faculty	Designation	Qualification	Experience					
	Teaching Faculty									
1		Prof. Dr. C. S. Kakade	Principal & Head	M.Sc. Ph.D. D.C.O.	36					
2		Mr S. S. Bhaskar	Assistant Professor	M.Sc. SET	07					
3		Mr. K. P. Patil	Assistant Professor	M.Sc., SET, GATE, Ph.D.	06					
		Non- T	Ceaching Fac	ulty						

4	Mr. M. G. Raorane	Lab. Assistant	M.Com.	
5	Miss. M. S. Pedanekar	Lab. Attendant	H.S.C.	

LABORATORY INSTRUMENTS/ EQUIPMENTS:

Statistics department has well equipped laboratory combined with classroom. Departmental laboratory contains following instruments.

Sr. No.	Name of equipment	Quantity
1	Computers	07
2	Printer + Scanner	01
3	LCD Projector	01
4	Calculators	28
5	Statistical tables	10
6	EBooks	22

DEPARTMENT DIMENSIONS AREA:

Department classroom room plus Computer Lab area: 20×20= 400 Sq. Ft.

DEPARTMENTAL WORKLOAD:

Class	Paper No	Theory	Practical/tutorials	Total
F.Y.B.Sc.	I	03	03	06
F.Y.B.Sc.	II	03	03	06
S.Y.B.Sc.	I	03	03	06
S.Y.B.Sc.	II	03	03	06
S.Y.B.Sc.	III	03	03	06
T.Y.B.Sc.	I	04	04	08
T.Y.B.Sc.	II	04	04	08
T.Y.B.Sc.	III	04	04	08

T.Y.B.Sc.	IV	04	04	08
T.Y.B.Sc.	V (AC)	04	04	08
T.Y.B.Com.	O.R.	03	00	03
T.Y.B.Com.	C.S.	03	03	06
Total		41	38	79

YEARWISE STRENGTH OF THE DEPARTMENT:

Sr. No.	Academic Year	F.Y.B.Sc.	S.Y.B.Sc.	T.Y.B.Sc.	Total	Student Teacher Ratio
1	2013-14	20	12	-	32	16:01
2	2014-15	29	19	07	55	27:01
3	2015-16	26	17	12	55	27:01
4	2016-17	27	02	08	37	18:01
5	2017-18	25	13	02	40	13:01
6	2018-19	34	11	11	56	18:01
7	2019-20	23	11	09	43	21:01
8	2020-21	19	09	07	35	18:01
9	2021-22	26	11	05	42	21:01
10	2022-23	31	10	06	47	24:01
11	2023-24	36	10	06	52	26:01

T.Y.B.Sc. RESULTS ANALYSIS: (LAST FOUR YEARS)

Academic Year	Class	No. of Students Appeared	Semester	Semester Result Analysis						Percentage of Result	
2015-16	T.Y.B.Sc.	12	V	O 01	A 08	B 01	C 02	D 0	E	F 00	100%
		12	VI	00	01	05	01	00	00	08	46.66%
2016-17	T.Y.B.Sc.	08	V	00	02	05	00	00	00	01	87.5%

		08	VI	00	02	03	02	00	00	01	87.5%
2017-18	T.Y.B.Sc.	02	V	00	02	00	00	00	00	00	100%
2017 10	1.1.5.50.	02	VI	00	02	00	00	00	00	00	100%

Academic Year	Class	No. of Students Appeared	Semester			R	esult A	Anal	ysis				Percentage of Result
				0	A +	A	В+	В	С	D	F	Ab	
2018-19	T.Y.B.Sc	11	V	-	03	03	04	-	-	•	-	1	100%
2018-19	T.Y.B.Sc	11	VI	-	02	02	01	03	-	-	03	00	72%
2019-20	T.Y.B.Sc	09	V	-	05	04	_	-	-	-	-)	-	100%
2019-20	T.Y.B.Sc	09	VI	04	05	-	-	-	-	-	-	-	100%
2020-21	T.Y.B.Sc	07	V	02	05	-	-	-	-	/ -	-	-	100%
2020-21	T.Y.B.Sc	07	VI	06	01	-	-	-	-	-	-	-	100%
2021-22	T.Y.B.Sc	05	V	- (04	1	-	-	-	-	-	-	100%
2021-22	T.Y.B.Sc	05	VI	03	02	-	-	-	-	-	-	-	100%
2022-23	T.Y.B.Sc	06	V	-	01	00	03	01	-	-	01	-	83.34%
2022-23	T.Y.B.Sc	06	VI	-	01	01	01	02	-	-	01	-	83.34%

YEARWISE T.Y.B.Sc. RANK HOLDERS:

Academic Year	Sr. No.	Name of the student	Departmental Rank	Percentage/ CGPA
	1	Gurav Kiran Chandrakant	1 st	77.87%
2015-16	2	Jaadhav Prashant Rajendra	2 nd	75.75%
	3	Raut Santosh Sakharam	3 rd	75.75%
	4	Sarvankar Tejaswini hitendra	3 rd	75.75%
	1	Mr. Pahuja Chandresh V.	1 st	75.00%
2016-17	2	Mr. BhaganVikas A.	2 nd	69.12%
	3	Mr. Panchal Suprasad S.	3 rd	67.75%
2017-18	1	Miss. Chavan Rasika S.	1 st	78.18%

	2	Miss. Malavade Kasturi S.	2 nd	71.56%
	1	Miss Patil Shweta Dipak	1 st	9.38 (A+)
2018-19	2	Mr. Kadam Nikhil Nitin	2 nd	9.00(A+)
	3	Miss. Narsale Pooja Anand	3 rd	8.30(A)
	1	Miss Dhuri Vrushali Madan	1st	08.86(A)
2019-20	2	Miss Kudalkar Yogita Namdev	2nd	08.85(A)
	3	Mr. Phonde Vijay Eknath	3rd	08.45(A)
	1	Miss Hariyan Akshata Shantaram	1st	09.75 (A+)
2020-21	2	Mr. Jadhav Aditya Prakash	2nd	09.63 (A+)
	3	Mr Kadam Shailesh Keshav	3rd	09.50 (A+)
	1	Mr. Sapale Shubham Avinash	1st	08.72(A)
2021-22	2	Miss. More Shrutika Suresh	2nd	08.48(A)
	3	Miss. More Siddhi Subhash	3rd	08.39(A)
	1	Miss Patil Mrunali Shashikant	1st	09.77 (A+)
2022-23	2	Mr Kadam Sanman Milind	2nd	09.15 (A+)
	3	Miss Patil Prachi Vinayak	3rd	08.32 (A)

HONORS, AWARDS, REWARDS AND PRIZES:

Teachers Achievement:



- 1. Prof. Dr. C. S. Kakade (M.Sc. Ph.D.)
 Principal & Head of Dept.
- > Selected in the board of studies, University of Mumbai in year 2017-18.

- ➤ Published a Work Book in Mathematical and Statistical Technique for F.Y.B.Com. Class in each year from 2008-09 to 2015-16.
- Appointed as a member of the committee of Development of SUB-CENTRE, Ratnagiri by Mumbai University.
- ➤ Working as a Vice-president of Sindhudurg Districts for Office Bearer of Association of Non-Government Colleges.
- ➤ Nominated as Member of N.S.S. Advisory Committee for Two Years 2015-16-17 by Hon'ble Vice Chancellor, Mumbai University.
- > Selected in the board of studies, University of Mumbai in year 2017-18.
- Appointed as the District Co-ordinator for OSM by University of Mumbai.
- ➤ Worked as a member of Board of Studies in Statistics & framed the syllabus of M.Sc. (Statistics) Part- I & II.
- Appointed as nominee of the Vice Chancellor (subject expert) by Mumbai University for the selection of Principal in S.M. Arts, Commerce & Science College, Poladpur, Raigad.
- Appointed as the Chairman on local inquiry committee (LIC) by Mumbai University for starting new programmes in B.N. Arts Commerce, Science College, Pen, Raigad.
- Appointed as a member if LIC by Mumbai University for starting new programmes in Devrukh, Savarde, Kharepatan & Talere Colleges.
- ➤ Organized International Multidisciplinary Conference on "Recent Trends in Library, Science & Technology, Humanities and Commerce & Management" on 21st December 2018.
- ➤ Published a research paper on "testing and confidence interval for parameters of Exponentiated Exponential Distribution in International E-journal Research Journey (Peer Reviewed & Indexed) Dec. 2018, Special Issue.
- Awarded as a best Principal award of University of Mumbai 2021



2. Mr S. S. Bhaskar (M.Sc., SET) Assistant Professor in Statistics

- > Qualified SET EXAM-2015 Organized by Savitribai Phule Pune University, Pune.
- ➤ Completed & Submitted the **Minor Research Project** to the Mumbai University, entitled "Introduction to Radial basis function networks and its applications in 2018"

- ➤ Published a research paper entitled "Association Rule Development for Market-Basket Dataset" in International Journal of Computer Applications on June 2018. ISSN-2250-1797, Volume 180-No. 50.
- ➤ Participated in district level Avishkar Research Convention in year 2017-18 to 2023-24.
- ➤ Published a chapter in a book of "Analysing and Visualization Data using free open-source software Python Programming with Case studies" with ISBN 978-93-80788-93-7.
- ➤ Worked as a resource person and delivered a Guest lecture in Two-Week Capacity Building Program on Research Methodology organized by ARACS College, Vaibhavwadi. On date: 02/12/2022.
- ➤ Participated and attended training "'program on "Ethics and Values in higher Education" in IofC Panchgani, Organized by MSFDA, Pune on date: 09-13/01/2023.
- Appointed as a paper setter by Mumbai University in following subjects,
 - F.Y.B.Com. sem I- 80910- Mathematical & Statistical Techniques I
 - T.Y.B.Sc. sem V- 24266- Statistical Data Analysis using Python.
 - T.Y.B.Sc. Sem V- 24221-Theory of Estimation
 - T.Y.B.Sc. sem VI-88657- Introduction to six sigma.
 - T.Y.B.Sc. Sem VI- 88619 Testing of Hypothesis



3. Mr. K. P. Patil (M.Sc. SET, GET, Ph.D.)

Research Interest:

Reliability and Survival Analysis, Statistical Inference, Time Series Modelling, Big-Data Analytics.

- > Stood Third in Basic Statistics Quiz competition for B. Sc. II students organized by Shivaji University statistics teachers' association.
- ➤ Stood First in poster presentation completion at AVISHKAR-2015, in the Category of Engineering and Technology organized by Department of English, Shivaji University Kolhapur.
- ➤ Qualified SET-2016 Organized by Savitribai Phule Pune University Pune.
- ➤ Qualified GATE -2019 Organized by IIT Madras.
- Completed Ph. D from Shivaji University Kolhapur in 2022

Publications:

- 1. Investigation of process parameter variation in the memristor based resistive random-access memory: Effect of Device size variation (2015, T. D. Dongale, K. P. Patil, R. K. Kamat et.al. Material Science and Semiconductor Processing)
- 2. Investigating Conduction Mechanism and Frequency Dependency of Nanostructured Memristor Device (2015, T. D. Dongale, K. P. Patil, R. K. Kamat et.al. Material Science and Semiconductor Processing)
- 3. Investigating Conduction Mechanism and Frequency Dependency of Nanostructured Memristor Device (2015, T. D. Dongale, K. P. Patil, R. K. Kamat et.al. Material Science and Semiconductor Processing)
- 4. Modelling of Nanostructured Memristor Device Characteristics Using Artificial Neural Network (ANN), (2015, T. D. Dongale, K. P. Patil, R. K. Kamat et.al. Accepted for publication in Journal of Computational Science)
- 5. On Improved Inference on the Shape-Scale Family of distributions, (2018, K. P. Patil and H. V. Kulkarni), Journal of Statistical Computation and Simulation.
- 6. Stress-Strength Reliability Analysis for Exponentiated Family of Distributions, (2017, K. P. Patil and H. V. Kulkarni), Quality and Reliability Engineering International, Wiley.
- 7. Two sample comparisons including zero-inflated continuous data: A parametric approach with applications to microarray experiment (2018, K. P. Patil and H. V. Kulkarni), Mathematical Biosciences, Elsevier.
- 8. Participated and presented various articles in National and International Seminar and Conferences.
- 9. Participated in AVISHKAR-Research Convention.

STUDENTS ACHIEVEMENT:

- 1. **Mr. Pahuja Chandresh V.** selected for the "student of the year trophy" at college level in year 2016-17.
- 2. Research project of miss. Chavan Rasika S., Miss Malavade Kasturi S.& Asst Prof. Bhaskar Sachin S. was selected in the district level Avishkar Research Convention in year 2017-18, And got opportunity to present the project report at University of Mumbai.
- 3. Miss Raorane Minal Dilip, got admission for M.Sc. Biostatistics in MGM College, Mumbai in year 2018-19.
- 4. Miss Malavade Kasturi Sanjay got admission for M.Sc. Statistics in university of Mumbai in year 2018-19.
- 5. Research project of miss. Shruti Angavalkar & Miss. Anamika Bile & Asst Prof. K. P. Patil, was selected in the district level Avishkar Research Convention in year 2018-19 & got opportunity to present the project report in University of Mumbai.
- 6. Mr. Nikhil Nitin Kadam & Miss. Pooja Anand Narsale got admission for M.Sc. Statistics course in university of Mumbai in year 2019-20.
- 7. Mr. Patil Tanmay, Miss Dhuri Vrushali Madan, Miss Kudalkar Yogita Namdev, Mr. Phonde Vijay Eknath, got admission for M.Sc. Statistics course in university of Mumbai in year 2020-21.

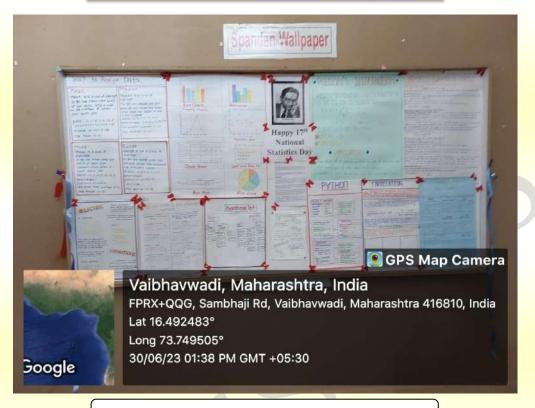
- 8. Mr. Shubham Sapale got admission for M.Sc. Statistics course in university of Mumbai in year 2021-22.
- Research project of Miss Patil Mrunali Shashikant & Miss Patil Prachi Vinayak & Asst Prof. O. D. Patil, was selected in the district level Avishkar Research Convention in year 2022-23 & got opportunity to present the project report in University of Mumbai.
- 10. Miss Patil Mrunali Shashikant & Mr Kadam Sanman Milind got admission for M.Sc. Statistics course in university of Mumbai in year 2023-24.

DEPARTMENTAL ACTIVITY:

Department of Statistics Organizes Various functions & Activity:

- National Statistics Day. 29th June.
- Fisher's Birth Anniversary. 17th Feb.
- Certificate Course on "Data Analysis Using MS Excel".
- Certificate Course on "Data Analysis Using My SQL".
- Research Projects for Avishkar Convention.
- Bridge Course for F.Y.B.Sc. Class.
- Remedial Coaching Classes.
- Seminars on PowerPoint Presentation.
- Guest Lectures/ Seminar/ Workshops.
- Poster Presentation / Exhibition.
- Coaching for preparation of entrance examination of P.G. courses.
- Coaching for preparation of competitive examination (IES and ISS).
- welfare for outgoing students.

Departmental Activities 2023-24



Poster Exhibition on statistical Tools



Celebration of National Statistics Day



Celebration of National Statistics Day



Birth Anniversary of Shri Vinodji Tavade Saheb- Poster Exhibition

Departmental Activities 2022-23



Poster Exhibition on R-Software



Celebration of National Statistics Day



Celebration of National Statistics Day



Birth Anniversary of Shri Vinodji Tavade Saheb- Poster Exhibition



Birth Anniversary of Shri Vinodji Tavade Saheb- Poster Exhibition



Guest Lecture of Alumni Miss. Yogita Kudalkar (M.Sc.)



Guest Lecture of Asst. Prof. D. M. Kshirsagar, Lanja College, Lanja



Hon. Vinodji Tawade

Ex. Education Minister, Maharashtra President, MPSS, Mumbai

Hon. V. R. Raorane

Hon. R. F. Raorane

Hon. D. P. Raorane Secretary, MPSS, Mumbai

Hon, S. V. Raorane President, MPSS, Local Comm

Hon, P. P. Raorane

Organizing Committee

Chairman

Hon. Prin. Dr. C. S. Kakade Principal, ARACS College, Vaibhavwadi

Dr. K. P. Patil Dr. R. M. Gulde Treasurer Shri, S. S. Raorane Dr. D. M. Sirsat

Members

Mr. S. S. Bhaskar Mr. S. N. Patil Dr. B. D. Ingawale Mr. S. R. Raje Dr. S. C, Rade Mr. R. B. Patil Mr. S. B. Patil Mr. P. M. Dhere Dr. V. B. Gopula Dr. D. S. Korgaonkar Mr. V. V. Shinde Mr. K. M. Waghmare Mr. O. D. Patil

Maharana Pratapsinh Shikshan Sanstha Mumbai Anandibai Raorane Arts, Commerce and

Science College, Vaibhavwadi

Tal – Vaibhavwadi, Dist.- Sindhudurg, 416810, Maharashtra Email – <u>araescollege@gmail.com</u> Website – www.anandivaibhav.co.in NAAC Reaccredited with 'A' Grade (CGPA - 3.08). ISO 9001:2015 Certified, "Best College Award" by University of Mu

Department of Statistics, Internal Quality Assurance Cell, and Social Science Association

Organizes

Two Week Capacity Building Program on "Research Methodology"

Sponsored by

Western Regional Center of Indian Council of Social Science Research (ICSSR), Mumbai In the Period

From 28th Nov. 2022 to 10th Dec. 2022



Contact Details Dr. K. P. Patil-7588576970, Dr. D. M. Sirsat-9403867293 Email ID: aracs.icssr.cbp.2022@gmail.com

Who Can Participate

Academicians, Research Students, PG Students from Science, Social Science, Humanities, Commerce and Management Discipline.

Registration Details

The registration procedure is online. For this, kindly

visit the webpage – https://forms.gle/m4brhXaZBkxqfdjs6

Registration fee - Rs. 500/- (Non-refundable) Last date of registration - 26th November, 2022

Account Details for Registration

Account Name: Principal Anandibai Raorane Arts, Commerce and Science College Vaibhavwadi.

Account Number: 60289499513 IFSC Code: MAHB0001634

Bank Name: Bank of Maharashtra

[Kindly use the payment methods: Google pay, Phonepe,

Social Media and Classroom Link

To receive daily notifications and various forms of informational updates, all participants must join the Google Classroom and WhatsApp groups.

Google Classroom link:

https://classroom.google.com/c/NTA0OTE2MjY4Mjc3? cjc=ojryaad

WhatsApp Group link:

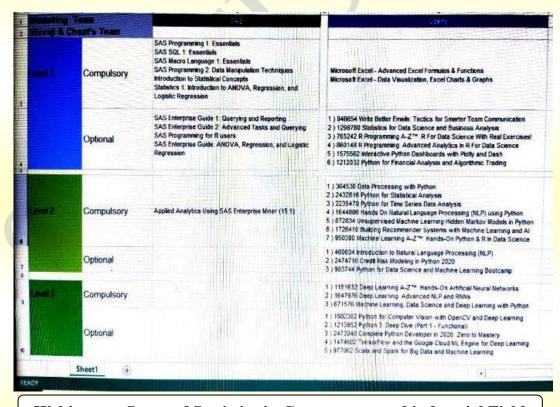
https://chat.whatsapp.com/IPfKHLxzZ9TEpiymjPV1wZ

Two-Week Capacity Building Program on Research Methodology

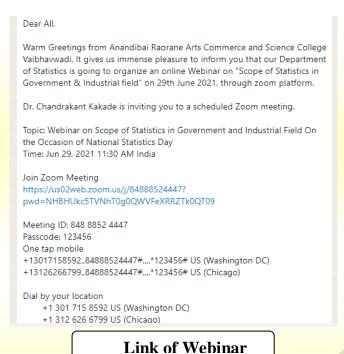
Departmental Activities in 2021-22



Celebration of National Statistics Day



Webinar on Scope of Statistics in Government and industrial Field





Participants



Seminars of Students



Seminars of Students



Poster Exhibition on Science Day

Departmental activities in 2019-20



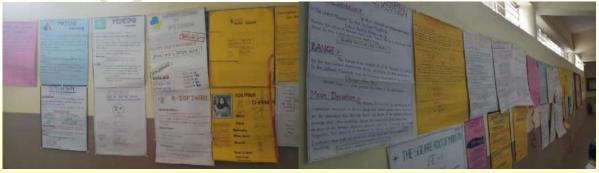
Celebration 13th National Statistics Day



Poster Presentation on different statistical tools



Field work of Data collection.



Poster exhibition of different statistical software on "National Science Day".

Departmental activities in 2018-19



Celebration of 12th National Statistics Day. Poster Presentation on statistical tools using R-software





District level Avishkar Research Convention in year 2018-19

Seminars on PowerPoint presentation



Guest lecture of Mr. S.A. Karande (Sathe College, Mumbai) on "Trinomial & multinomial distribution".



Study tour of T.Y.B.Sc. Students





Exhibition of Magical Experiments of numbers & Science.

Departmental activities in 2017-18



Celebration of 11th National Statistics Day.

Poster Presentation on various distributions in Statistics



District level Avishkar Research Convention in year 2017-18

One Day Workshop on Data Analysis Using MS-Excel in Research Methodology



Two Day study tour



Visited to Dept. of Statistics, Pune University



Presentation some scientific experiments in college

Due to sincere efforts of our Principal Dr. C.S. Kakade, our department grows onwards.

