

Gokhale Education Society's
H.P.T. Arts & R.Y.K. Science College,
Nashik.

Department of Mathematics

WELCOMES

NAAC Peer Team

Department of Mathematics

History

- The College established in **24th June 1924.**
- Department of Mathematics Started in **1950.**
- Mathematics was introduced as the principle subject at T.Y.B.Sc. from the academic year **1980-81.**
(6th August 1980)
- Eminent lecturers contributed in the development of the Department.

Department of Mathematics

Mission

- Become Knowledge centre and a centre of excellence in teaching, learning and extension activities.
- Emphasizes the ability to express mathematical ideas clearly.
- Highlights the relevance of mathematics in solving real-world challenges.

Department of Mathematics

Objectives

- To transform the raw students into multidimensional personality having professional and personal competency.
- Provide students with a strong foundation in core areas of Mathematics, including calculus, algebra, geometry and applied mathematics.
- Equip students with the ability to think critically, analyse problems, and develop effective solutions using mathematical reasoning.
- Encourage students to apply mathematical concepts and techniques to real-world problems in various fields such as engineering, physics, finance, and computer science.

Department of Mathematics

Course Outcomes (CO)

❖ F.Y. B.Sc. Mathematics

- Demonstrate and understanding of basic concepts in Calculus , Algebra, Geometry, and Applied Mathematics, Maxima Software as well Practical on these topics.

❖ S.Y. B.Sc. Mathematics

- Demonstrate and understanding of basic concepts in Multivariable Calculus, Vector Calculus, Numerical Methods, Linear Algebra, Maxima Software and Practical on these topics.

Department of Mathematics

Course Outcomes (CO)

❖ T.Y. B.Sc. Mathematics

- Demonstrate and understanding of basic and advance concepts in

Metric Spaces	Complex Analysis
Real Analysis	Ring Theory
Ordinary Differential Equations	Partial Differential Equations ..\CO Mapping Doc\CO mapping Dept. of Maths_Signed.pdf
Group Theory	Optimization Techniques
Operations Research	Computational Geometry
Laplace Transformation and Fourier Series	Python
Latex	Practical

Department of Mathematics

Program Specific Outcomes (PSO)

➤ **B.Sc. (Mathematics):**

- A student should be able to recall basic concepts of mathematics.
- Knowledge of conventions such as notations, terminology.
- Understanding of mathematical concepts and mathematical reasoning.
- Adequate exposure to global and local concerns that explore those many aspects of Mathematical Sciences.
- Apply skills and knowledge, that is, translate information presented verbally into mathematical form, select and use appropriate mathematical formulae or techniques in order to process the information and draw the relevant conclusion.
- A student should be made aware of history of mathematics and hence of its past, present and future role as part of our culture.



Department of Mathematics

Faculty Members

Sr. No.	Name of Faculty	Designation (Experience)	Qualification
1	Mr. P. S. Mistry 	HOD Asst. Prof. (27 years)	M. Sc., B. Ed., NET.
2	Mr. R. B. Baviskar 	Asst. Prof. (31 years)	M. Sc., B.Ed.
3	Smt. U. P. Beldar 	Asst. Prof. (5 years)	M.Sc. SET
4	Ms. M. Y. Paradhi 	Asst. Prof. (1 years)	M.Sc. NET

Department of Mathematics

Faculty Members

Sr. No.	Name of Faculty	Designation (Experience)	Qualification
1	Mr. J.P. Jadhav 	HOD Associate Professor (37 years)	M. Sc. (Retired in April 2024)
2	Mr. B.B. Divate 	Associate Professor (29 years)	M. Sc., NET (2), SET. (Transfer in June 2021)

Department of Mathematics

Physical Facilities & Instruments

- Class Rooms: 01.
- Department Office cum Staff room: 01



Department of Mathematics

Physical Facilities & Instruments

- Computer Lab with Internet Facility : 01
- Equipment:- Computers:17 (15+02)
Printer:01.



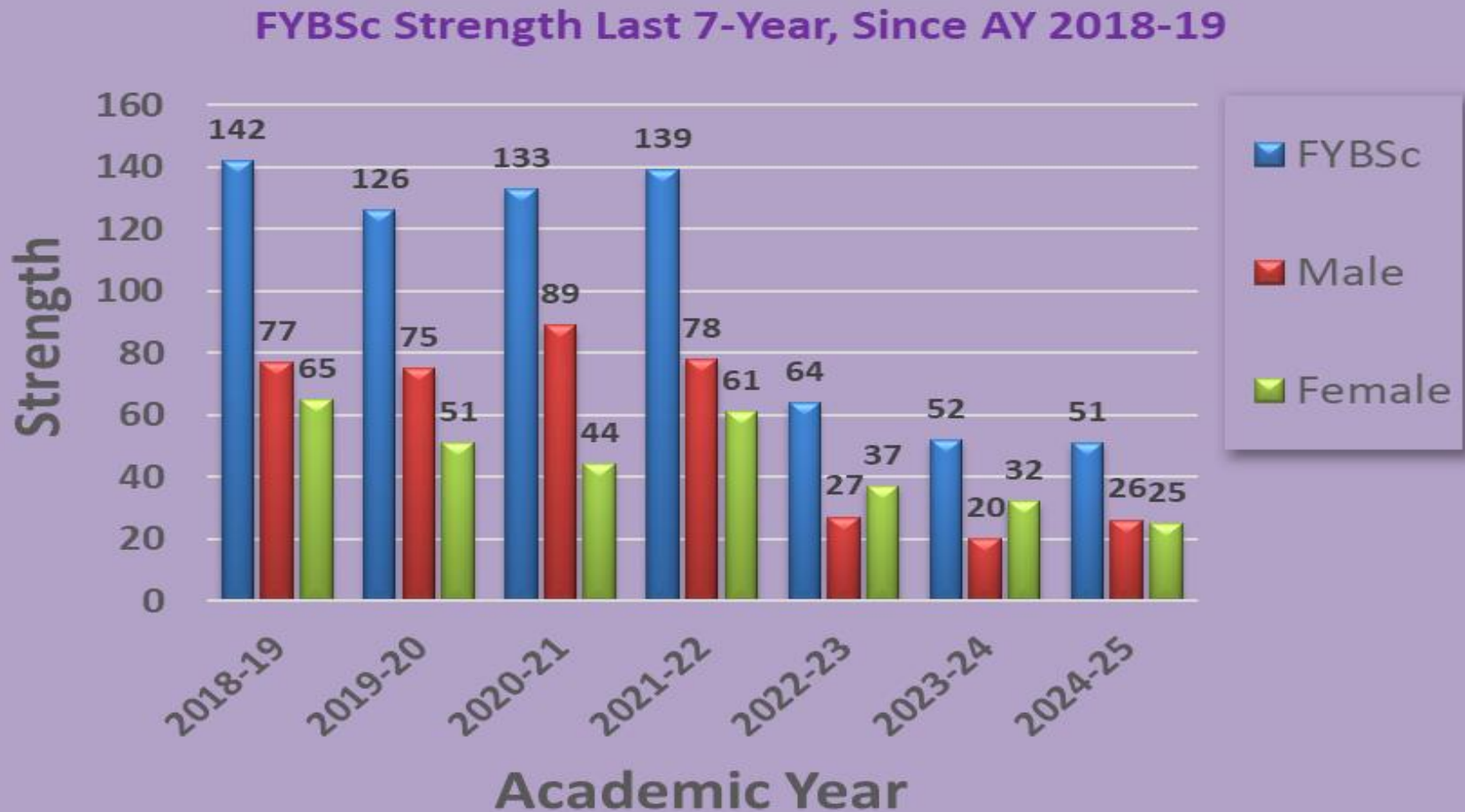
Department of Mathematics

Enrollment from 2018 To 2024

Academic Year	F.Y.B.Sc.		S.Y.B.Sc.		T.Y.B.Sc.	
	M	F	M	F	M	F
2018-19	142		90		21	
	77	61	44	46	07	14
2019-20	127		93		20	
	75	52	37	56	06	14
2020-21	132		83		25	
	89	43	56	27	06	19
2021-22	139		78		19	
	78	61	45	33	11	08
2022-23	64		66		17	
	27	37	29	37	05	12
2023-24	52		17		13	
	20	32	05	12	07	06
2024-25	51		07		02	
	26	25	02	05	00	02

Department of Mathematics

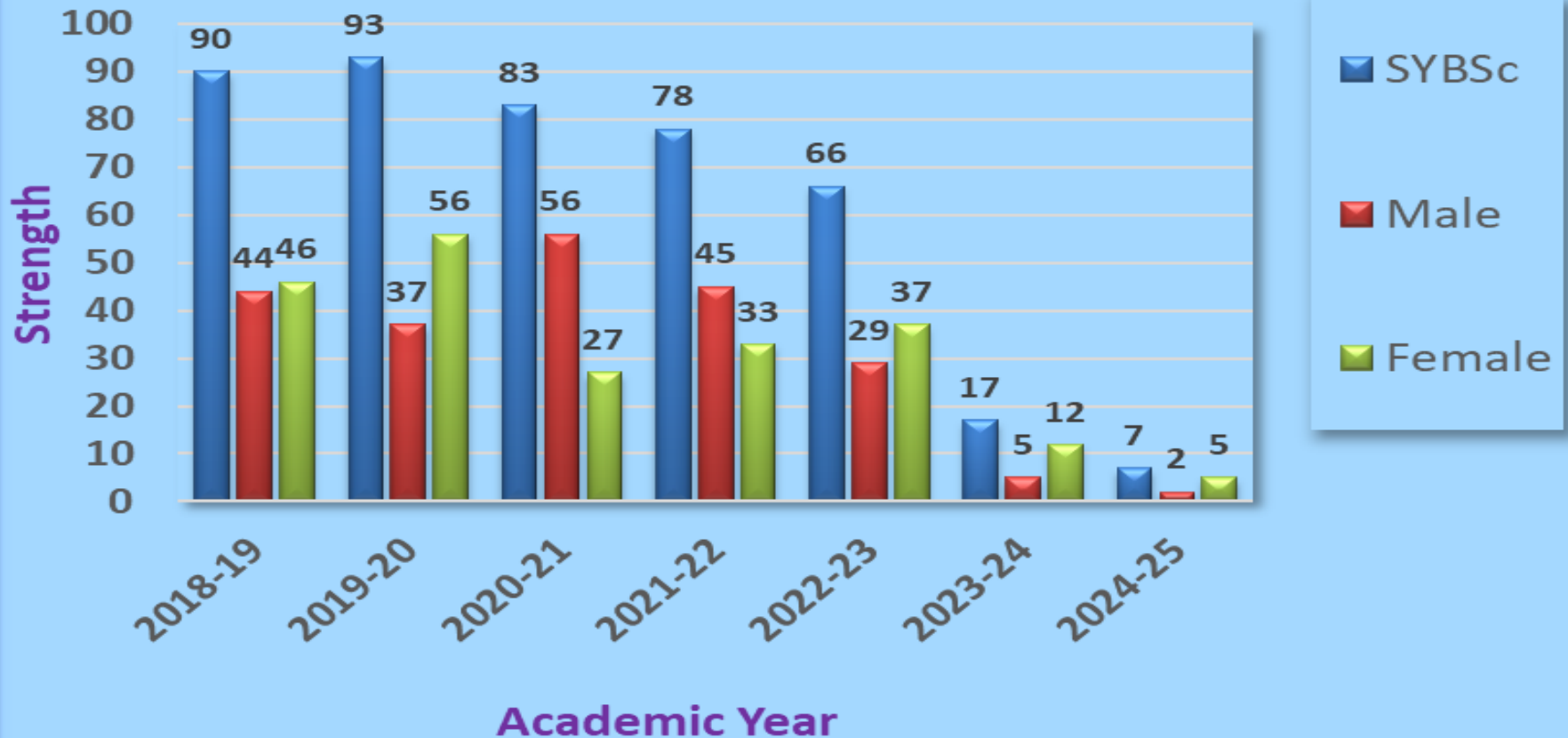
FYBSc Strength



Department of Mathematics

SYBSc Strength

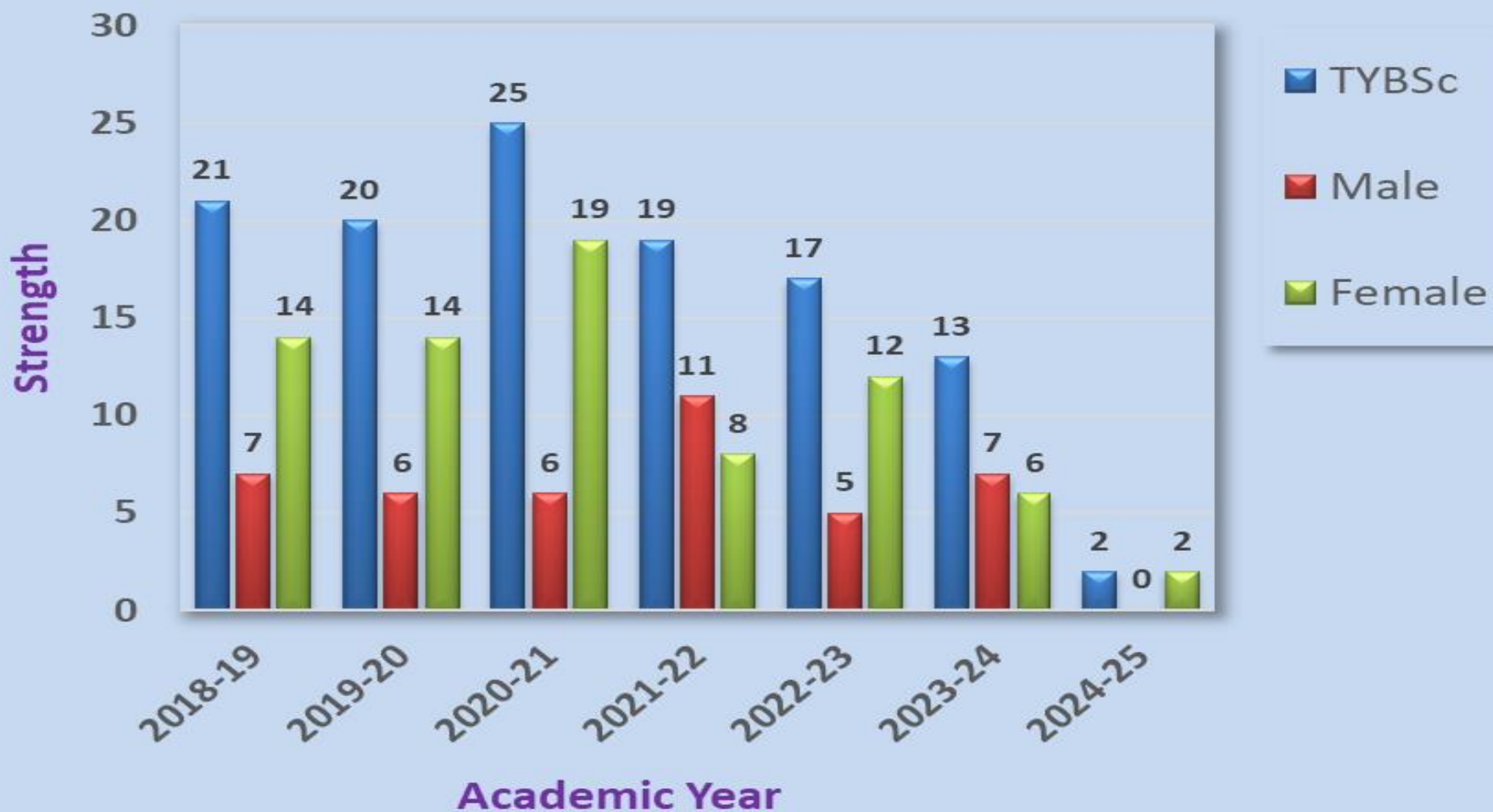
SYBSc Strength Last 7-Year, Since AY 2018-19



Department of Mathematics

TYBSc Strength

TYBSc Strength Last 7-Year, Since AY 2018-19



Department of Mathematics

Teaching Learning Methods

➤ Lecture

➤ Practical

➤ Guest Lecture

➤ Problem Solving sessions

➤ LCD projector and Open Source software

Department of Mathematics

Assessment and Evaluation

College / Internal Evaluation

- Class Test
- Home Assignment
- Internal Examination
- Practical Examination
- Viva Voce

University / External Evaluation

- Semester Examinations
- Practical Examinations
- Viva Voce

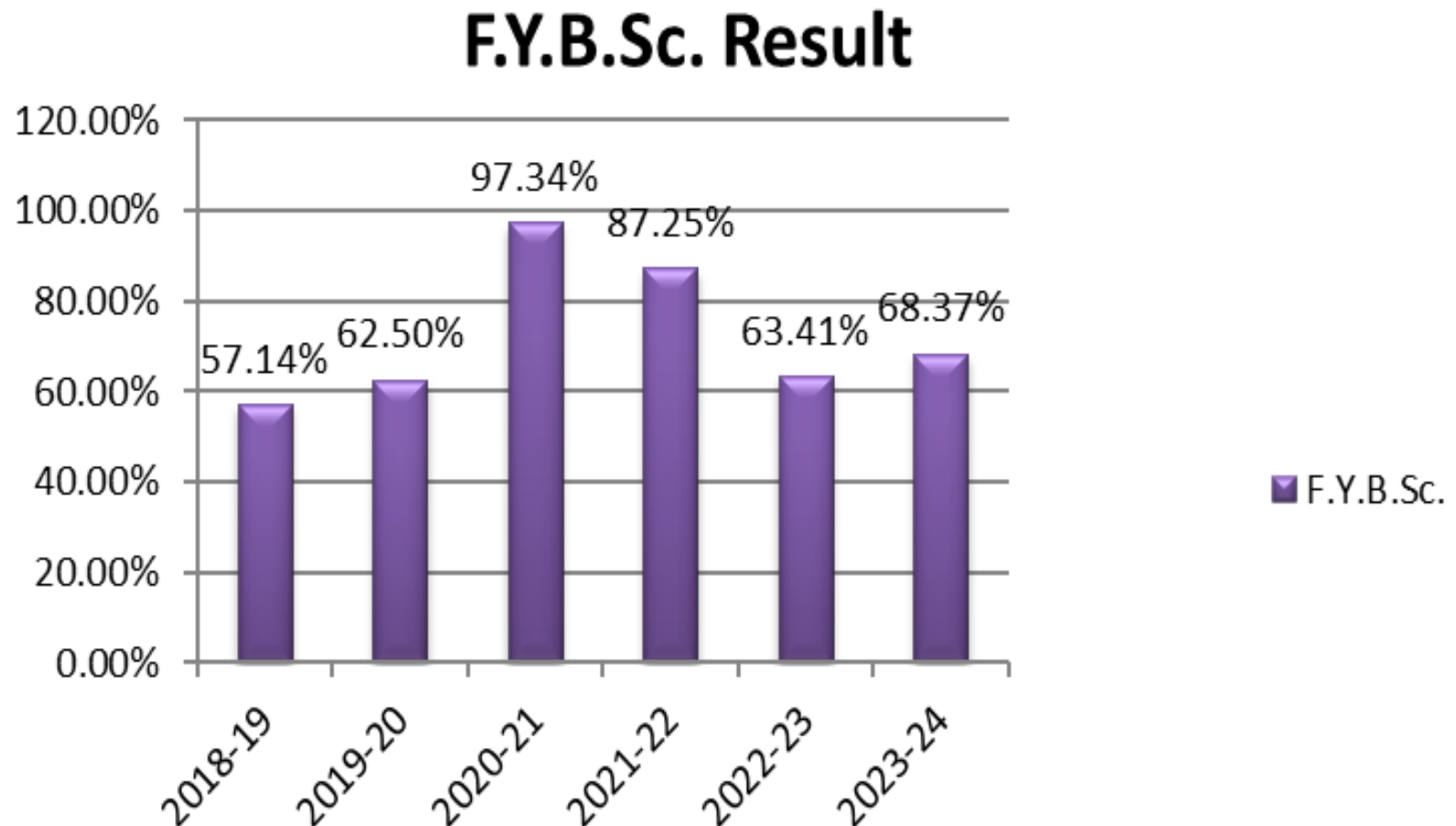
Department of Mathematics

Result Analysis

Academic Year	Result		
	F.Y.B.Sc.	S.Y.B.Sc.	T.Y.B.Sc.
2018-19	57.14%	78.26%	65.00 %
2019-20	62.50%	87.21%	100 %
2020-21	97.34%	100%	91.67 %
2021-22	87.25%	90.12%	70.59 %
2022-23	63.41%	85.24%	76.47 %
2023-24	68.37%	82.35%	69.23%

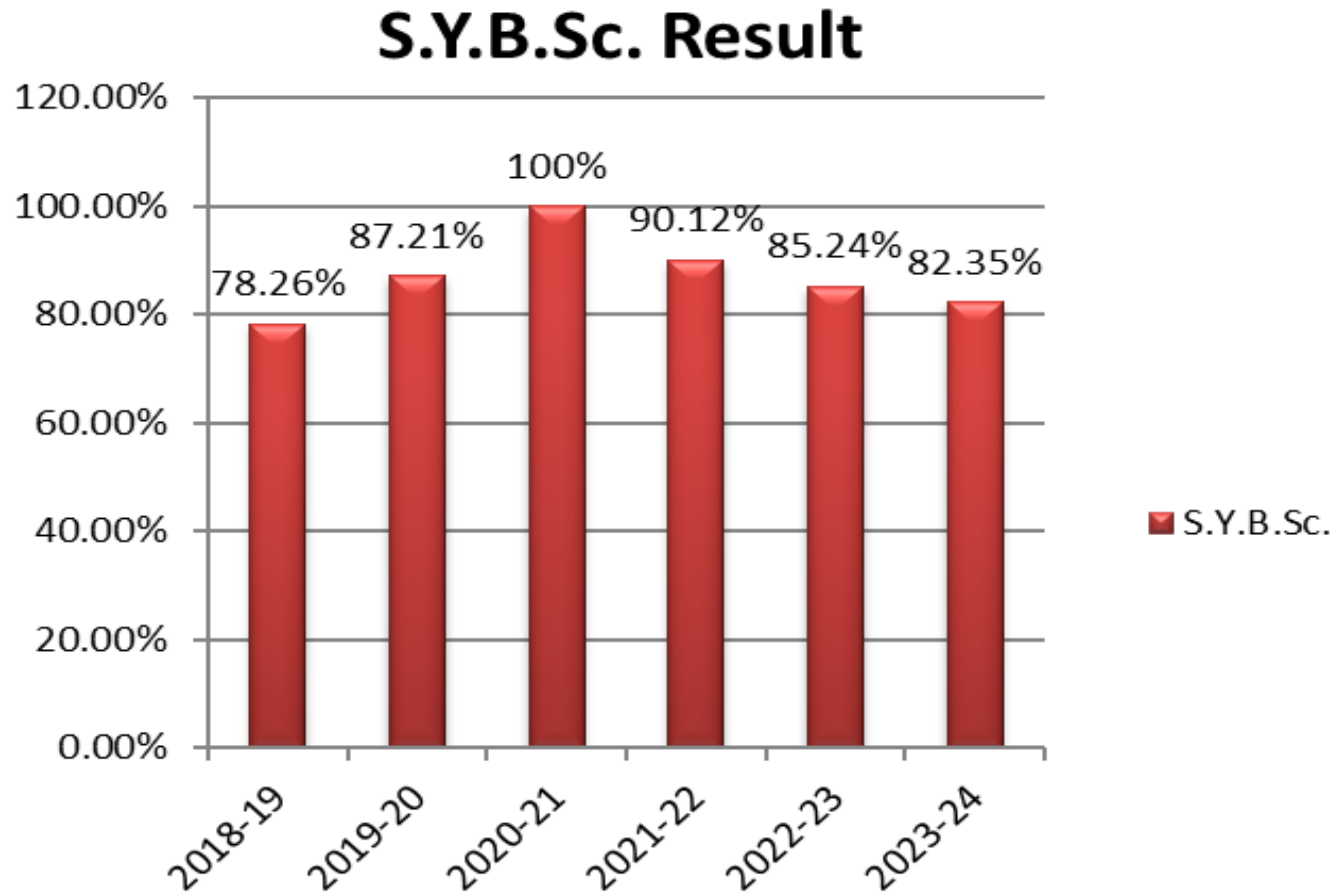
Department of Mathematics

Result Analysis



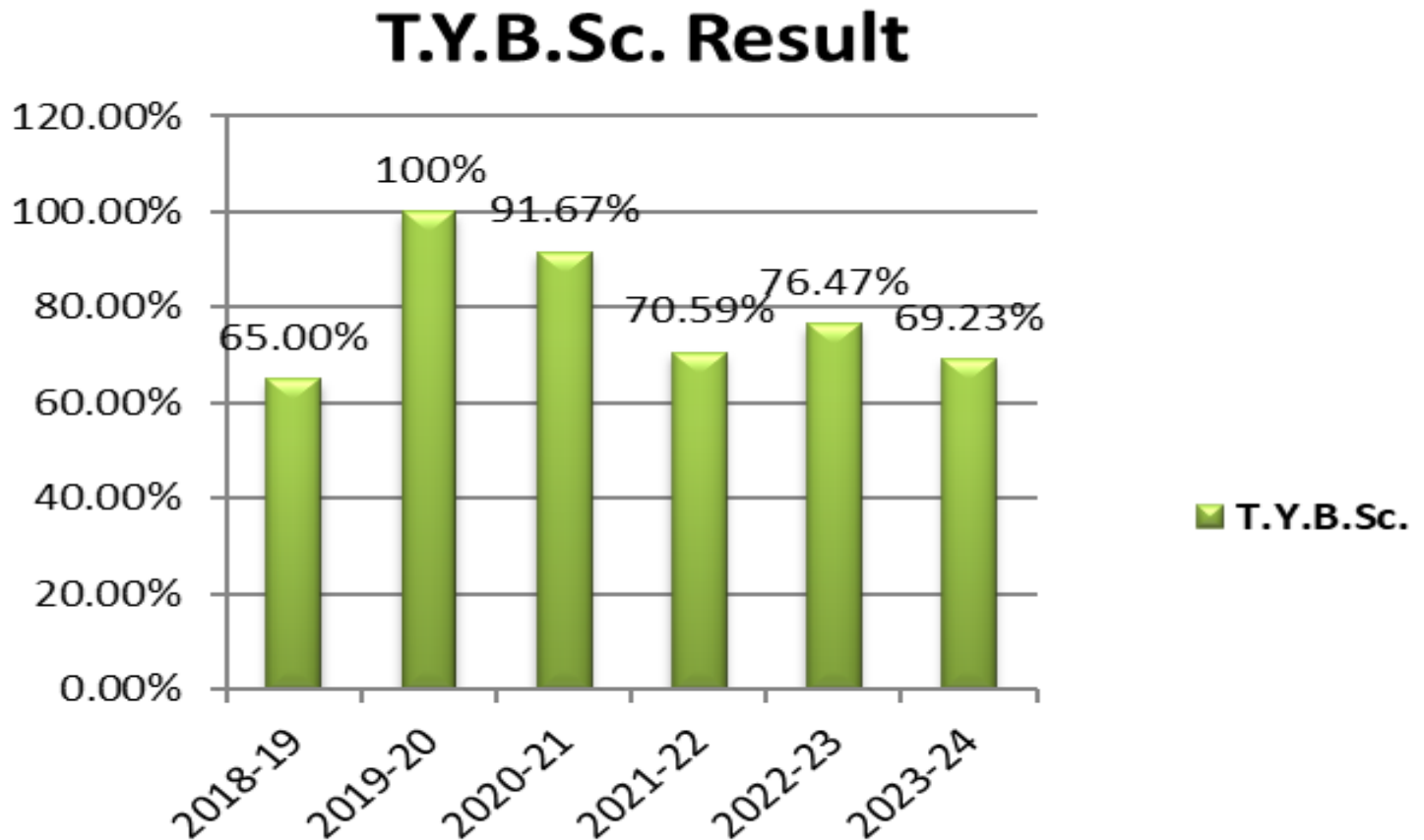
Department of Mathematics

Result Analysis



Department of Mathematics

Result Analysis



Department of Mathematics

DEPARTMENTAL ACTIVITIES

(Academic)

1. "Maxima Software and discussion on F.Y.B.Sc. / F.Y.B.Sc. (Computer Science) syllabus" for Mathematics faculty of colleges in Nashik District.

..\1. Files\5. Departmental Activity since 2018-19\4. Workshop on Maxima Software All Doc.pdf



Department of Mathematics

DEPARTMENTAL ACTIVITIES

(Academic)

1. "Maxima Software and discussion on F.Y.B.Sc. / F.Y.B.Sc. (Computer Science) syllabus" for Mathematics faculty of colleges in Nashik District.



Department of Mathematics

DEPARTMENTAL ACTIVITIES

(Academic)

2. "Foundations in Mathematics" for guiding T.Y.B.Sc. (Mathematics) students in Nashik city colleges.

..\1. Files\5. Departmental Activity since 2018-19\5. Workshop Foundation in Mathematics All Doc.pdf



Department of Mathematics

DEPARTMENTAL ACTIVITIES

(Academic)

2. "Foundations in Mathematics" for guiding T.Y.B.Sc. (Mathematics) students in Nashik city colleges.



Department of Mathematics

DEPARTMENTAL ACTIVITIES

(Academic)

3. One-week (30Hrs) credit course on "Introduction to Scilab and Data analysis using R-studio" conducted in AY 2021-22 and 2022-23.

..\1. Files\5. Departmental Activity since 2018-19\6. Introduction to Scilab and Data Analysis All Doc 2021-22.pdf



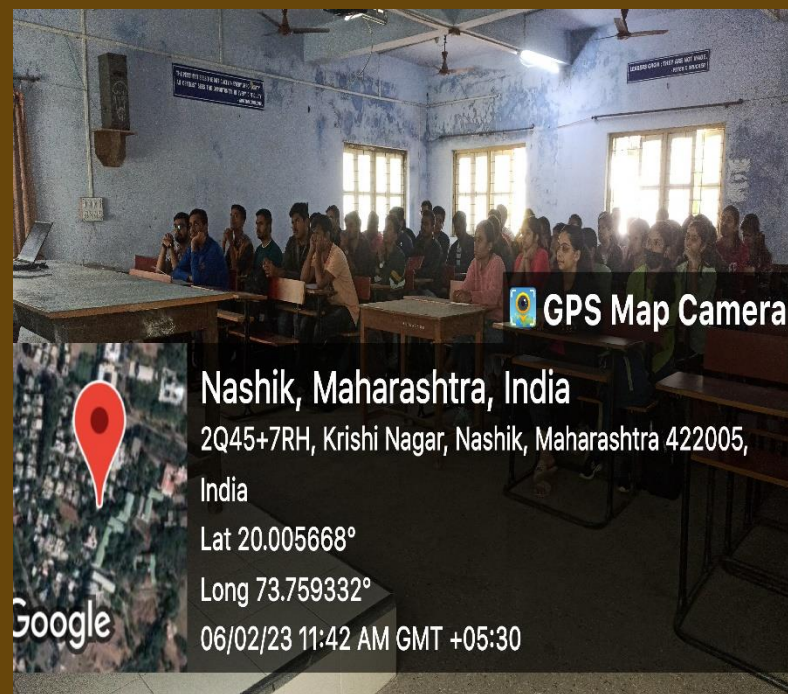
Department of Mathematics

DEPARTMENTAL ACTIVITIES

(Academic)

3. One-week (30Hrs) credit course on "Introduction to Scilab and Data analysis using R-studio" conducted in AY 2021-22 and 2022-23.

..\1. Files\5. Departmental Activity since 2018-19\8. Introduction to Scilab and Data Analysis All Doc 2022-23.pdf



Department of Mathematics

DEPARTMENTAL ACTIVITIES

(Co-curricular)

1. A guest lecture on NET/SET, Entrance Examinations of Universities and IIT for M.Sc. admission to S.Y. / T.Y. B.Sc. Mathematics students.

..\1. Files\5. Departmental Activity since 2018-19\1. Guest Lecture by Ms. Chetana Visave All Doc.pdf



Department of Mathematics

DEPARTMENTAL ACTIVITIES

(Co-curricular)

2. A guest lecture on application of Mathematics in computer / Mobile game designing for S.Y. / T.Y.B.Sc. (Mathematics) students.

..\1. Files\5. Departmental Activity since 2018-19\3. Guest Lecture by Prof Santosh Dhotre All Doc.pdf



Department of Mathematics

DEPARTMENTAL ACTIVITIES

(Co-curricular)

3. A guest lecture on the occasion of National Mathematics Day

..\1. Files\5. Departmental Activity since 2018-19\2. Guest Lecture by Prof. S. D. Majarekar All Doc.pdf



Department of Mathematics

DEPARTMENTAL ACTIVITIES

(Co-curricular)

4. A guest lecture on “Essential of Python and Application of Python in Mathematics” for S.Y. / T.Y.B.Sc. (Mathematics) students.

..\1. Files\5. Departmental Activity since 2018-19\7. Guest Lecture by Prof Kakasaheb Nikam All Doc.pdf



Department of Mathematics

DEPARTMENTAL ACTIVITIES

(Co-curricular)

5. A guest lecture on "Mathematics and Cyber Security".

..\1. Files\5. Departmental Activity since 2018-19\9. Guest Lecture by Dr. Sangeeta Choudhary All Doc.pdf



Department of Mathematics

DEPARTMENTAL ACTIVITIES

(Co-curricular)

5. A guest lecture on "Mathematics and Cyber Security".

..\1. Files\5. Departmental Activity since 2018-19\10. Guest Lecture by Mr. Sairam Patro All Doc.pdf



Department of Mathematics

DEPARTMENTAL ACTIVITIES

(Co-curricular)

6. A guest lecture "Higher Education in Mathematics in Germany".

..\1. Files\5. Departmental Activity since 2018-19\10. Guest Lecture by Mr. Sairam Patro All Doc.pdf



Department of Mathematics

The Department Organizes Guest Lectures, Seminars of Eminent resource persons and Alumni to

- Encourage,
- Motivate,
- Create Interest,
- Competency,
- Inculcate Subject Knowledge, among the Students

Department of Mathematics

List of The Toppers in The Departmental

Sr.No.	Academic Year	Name of The Student	% of Marks	Remark
1.	2018 - 19	Ms. Sriya Vijay Bhosale 1663/1900 with 87.53% 1088/1200 with 90.67%	90.67%	Stood First in the college in Mathematics subjects.
2.	2019 - 20	Ms. Manjiri Hemant Bhonde 1570/1900 with 82.63% 1049/1200 with 87.42%	87.42%	Stood First in the college in Mathematics subjects.
3.	2020 - 21	Ms. Viona Valerian D'Souza 1850/1900 with 97.37% 1182/1200 with 98.50%	98.50%	Stood First in the college in all subjects and 2 nd rank in the university.
4.	2021 - 22	Ms. Piyusha Narendra Gore 1699/1900 with 89.42% 1081/1200 with 90.08%	90.08%	Stood First in the college in Mathematics subjects.
5.	2022 - 23	Ms. Dipeeka Navnath Malode 1730/1900 with 91.05% 1132/1200 with 94.33%	94.33%	Stood First in the college in Mathematics subjects.
6.	2023 - 24	Ms. Rucha Chatur Nere CGPA = 9.85 Grade = 'O'	9.85 (97.00%)	Stood First in the college in Mathematics subjects.

Department of Mathematics

Activities Attended by Students

Sr. No.	Name of the student.	Class A. Year	Name of Course	Organizer Institute	Duration of Program
1.	Ms. Viona D'souza	S.Y.B.Sc. 2019-20	Mini MTTS	Visvesvaraya National Institute of Technology (VNIT), Nagpur.	27 th Jan 2020 to 1 st Feb 2020.
2.	Ms. Aditi Dabhade	S.Y.B.Sc. 2019-20	Mini MTTS	Visvesvaraya National Institute of Technology (VNIT), Nagpur.	27 th Jan 2020 to 1 st Feb 2020.
3.	Mr. Aditya Mahesh Gunjal	S.Y.B.Sc. 2023-24	OFCM*	MTTS Trust funded by NBHM (Online)	20 th Aug 2023 to 2 nd Sept 2023.
4.	All 20 Students in TYBSc Mathematics	T.Y.B.Sc. 2019-20	FM#	Mathematics Department HPT Arts and RYK Science College, Nashik	2 nd & 3 rd Aug 2019
5.	All 18 Students in TYBSc Mathematics	T.Y.B.Sc. 2021-22	Scilab & R-Studio	Mathematics & Statistics Department HPT Arts and RYK Science College, Nashik	13 th Dec 2021 to 18 th Dec 2021
6.	All 17 Students in TYBSc Mathematics	T.Y.B.Sc. 2022-23	Scilab & R-Studio	Mathematics & Statistics Department HPT Arts and RYK Science College, Nashik	6 th Feb 2023 to 13 th Feb 2023

Department of Mathematics

Students' Progression and Placement

..\Progression Maths Students 2019_2023\NAAC CRITERION - V Progression.xlsx

Sr. No.	Year	Number of Students admitted to Higher Education	Progressed to higher education
1.	2018-19	5	M.Sc. Maths
2.	2019-20	7	M.Sc. Maths
3.	2020-21	3	M.Sc. Maths
4.	2021-22	4	2-M. Sc. Maths/ 1-M.Sc. Stats/ 1-MBA
5.	2022-23	6	3-M. Sc. Maths/ 3-UPSC/MPSC Comp. Exam
6	2023-24	5	M. Sc. Maths
7.	2024-25	5	M. Sc. Maths

Department of Mathematics

Students' Progression and Placement

..\Placement Maths Students 2019_2023\NAAC CRITERION-V Placement.xlsx

Sr. No.	Year	Number of students Placed
1.	2018-19	3
2.	2019-20	4
3.	2020-21	3
4.	2021-22	4

Department of Mathematics

International, National, State Level Workshops Attended by Staff

➤ Number of workshop/Seminars

Faculty	International	National	State
Mr. J. P. Jadhav	-	1	1
Mr. B. B. Divate	-	-	1
Mr. P. S. Mistry	3	5	3
Smt U. P. Beldar	5	5	-

Department of Mathematics

RESEARCH PUBLICATIONS BY STAFF

- [..\1. Files\8. Staff Achievement since 2018-19\1.Customer-IJSRM HUMAN-22 2-21-26-02-2021.pdf](#)
- [..\1. Files\8. Staff Achievement since 2018-19\2. SMA Vol. 26 No. 3 January - June Special Issue 2022 Part - 6 26.pdf](#)

Sr. No.	Title	Journal	ISSN No.	Year	Impact factor	Citation Index
1.	Determination of Temperature in an Elliptical Cylinder with Internal Heat Source.	International Journal of Science and Research Methodology	-	2021		
2.	Stochastic Modeling & Applications	The Analysis of Thermal Stresses in Solid elliptical Cylinder Concentrically Heated	0972-3641	2022		
3.	Inverse Thermo-elastic Problem of Thin Rectangular Plates	Journal of Data Acquisition and Processing	1004-9037	2023		

Department of Mathematics

Contribution of Staff at University & College Level

- Contributed in Syllabus Restructuring in Mathematics at Under graduate Level.
- Member of LIC for Colleges.
- Member of Interview Panel for Selection Committee of University of Pune.
- Resource person in Mathematics.
- Coordinator for S.Y./T.Y.B.Sc. University Practical and Theory Examinations.
- Coordinator: Time table Committee.
- Assistant coordinator: Board of Students Development

Department of Mathematics

➤ Library as a Learning Resource :

❖ Books : 4208

❖ e-Books : N-List

❖ Journals : 03

- International Review of Pure & Applied Mathematics
- Bulletin of Pure and Applied Sciences, Sec.-E-Maths & Stats
- Mathematics Today (Junior)

Department of Mathematics

➤ PUBLICATIONS

❖ Research Paper Published : 03

❖ Book Published : 02

Department of Mathematics

Prominent Alumni

Illustrious Personality and Poet

V. V. SHIRWADKAR

offered Mathematics as one of the subjects at First year in 1931.

KUSUMAGRAJ



Department of Mathematics

Prominent Alumni

Dr. Subhash G. Pawar

HOD & Professor,

Department of Mathematics

KTHM College, Nashik



Department of Mathematics

Prominent Alumni

Dr. Ananth Narayan Hariharan

Former Asst. Prof. , Nebreska Univ, USA

Associate Professor,

Department of Mathematics

IIT Powai, Mumbai.



Department of Mathematics

Prominent Alumni

Dr. Jatin Majithiya

Assistant Professor,

Department of Mathematics

Government College of Engineering, Pune,



Department of Mathematics

Prominent Alumni

Mr. Tushar P. Khairnar

HOD and Assistant Professor,

Department of Mathematics

MVPS's

K.A.A.N. M. Sonawane Arts, Commerce & Science
College, Satana Dist Nashik.



Department of Mathematics

Prominent Alumni

Mr. Chittarajan V. Pawar

Assistant Professor,

Department of Mathematics

CHME Society's Bhonsala Arts, Science &
Commerce College, Nashik



Department of Mathematics

Prominent Alumni

Mr. Chaitanya B. Kumbharde

Assistant Professor,

Department of Mathematics

K.K.H. Abad Arts & S.M.G. Lodha Commerce
& S.P.H. Jain College, Chandwad.



Department of Mathematics

Prominent Alumni

Dr. Sangeeta Choudhary

First in University of Pune in Mathematics,
Received Gold Medal for her Ph. D. Thesis.



Department of Mathematics

Prominent Alumni

Dr. Priyanka Rao

Data Scientist in Microsoft

Redmond, Washington, USA

Department of Mathematics

Progression: NET/SET/GATE/ Ph. D. QUALIFIED ALUMNI
(2018 – 2023)

Sr. No.	Name	NET/SET/Ph. D. Qualified Alumni
1.	Dr. Sangeeta Choudhari	NET, SET, Ph.D.
2.	Dr. Jatin Majethia	NET-JRF., Ph. D.
3.	Dr. Priyanka Rao	Ph.D.
4.	Ms. Archana Satish Shirsat	SET
5.	Mr. Nitin Bhagwat Bhoknal	SET
6.	Mr. Bhushan Astik Shirwadkar	SET, GATE
7.	Mr. Ajinkya Girish Kulkarni	NET-JRF
8.	Ms. Darshana Ravindra Sonje	NET, SET
9.	Ms. Gauri Nandkishor Phad	SET
10.	Ms. Farhat Shaikh	SET
11.	Mr. Arun Bhausahab Shinde	SET
12.	Ms. Viona Valerian Dsouza	NET-JRF, GATE
13.	Ms. Kalyani Nandu Vable	SET
14.	Ms. Savita Shankar Waje	SET

Department of Mathematics

Alumni Placements “We are Proud of You”

Sr. No.	Name of The Alumna	Placement
1.	Dr. Ananth Narayan Hariharan	Associate Professor in Maths, IIT Powai, Mumbai.
2.	Mr. Sadashiv Puranik	HoD & Assistant Professor in Maths, T. C. College, Baramati.
3.	Ms. Vrushali Kadam	Assistant Professor in Maths, Sinhgad Institute, Pune
4.	Ms. Sandhya Tapadia	Assistant Professor in Maths, Raysoni College ,Pune
5.	Mr. Chitanya Kumbharde	Assistant Professor in Maths, Neminath Jain College, Chandwad.
6.	Mr. Sunil Kadam	Assistant Professor in Maths, College of Engineering,
7.	Ms. Shilpa Kesharwani	Assistant Professor in Maths, Matoshri polytechnic, Eklahare.
8.	Mr. Tushar Khairnar	HoD & Assistant Professor in Maths, Arts, Commerce & Science College, Satana.
9.	Mr. Jatin Majithia	Assistant Professor in Maths, College of Engineering, Pune.
10.	Mr. Chetan Pawar	Assistant Professor in Maths, Bhonsala Military College, Nashik.
11.	Ms. Priyanka Rao	Data Scientist in Microsoft Redmond, Washington, USA
12.	Mr. Arun Shinde	Assistant Professor in Maths, KKW College of Engineering, Nashik.
13.	Ms. Sneha Pekhale	Assistant Professor in Maths, KKW College of Engineering, Nashik.
14.	Ms. Archana Shirsath	Assistant Professor in Maths, MET College of Engineering, Nahik.
15.	Ms. Monali Kshirsagar	Assistant Professor in Maths, KKW College of Engineering, Nashik.

Department of Mathematics

Best Practices

❖ "Techno-Math: Elevating Mathematical Techniques"

..\1. Files\9. Best Practices Innovative Practices since 2018-19\Best Practice 1 TechnoMath Final.pdf

- We encourage students to utilize mathematical software, tools and techniques for their studies.
 - i. Foundations in Mathematics
 - ii. Introduction to Scilab and Data Analysis using R-Studio.

Department of Mathematics

Best Practices

❖ “Math Talks in Mathematics”:

..\1. Files\9. Best Practices Innovative Practices since 2018-19\Best Practice_2_Math Talks in Mathematics.pdf

- Through the activity, we aim to develop skills among the students to face problems and challenges in the future, making them competitive in their lives.
 - i) Guest lecture on NET / SET Examinations.
 - ii) Guest lecture on Work and Life of Ramanujan.
 - iii) Guest lecture on Application of Mathematics in Computer / Mobile game design.
 - iv) Guest lecture on Python in Mathematics.
 - v) Guest lecture on Mathematics and Cyber Security.
 - vi) Guest lecture on Higher Education and Scope for B. Sc. Mathematics students in Germany.

Department of Mathematics

ISO Certification

- ISO 9001:2008 Certified College.
- Preparing Academic Calendar.
- Preparing Teaching Plans.
- Executing the plans for Teaching and Learning process.
- Feedbacks from students regarding teaching, learning and facilities for students.

Department of Mathematics

Extension Activities

- Conducting M.A., M.Sc., M.Sc. (Tech) Entrance Examination of University of Pune.
- Conducting Madhava Mathematics Competition organized by TIFR and S. P. College, Pune.
- To start certificate course DBMS for Mathematics Students.

Department of Mathematics

Future Plan

- ❖ To start P.G. Course in Mathematics.
- ❖ To start course in Mathematics for Computer Science Students and Arts Faculty Students.
- ❖ To start certificate course DBMS for Mathematics Students.

Department of Mathematics

