

Shri R.L.T. College of Science, Akola
Department of Mathematics
Annual Departmental Report (2021-22)

Department of Mathematics is one of the major departments of Shri R.L.T. College of Science and is having granted PG course. Some of the important educational activities and achievements of students and faculty members of the department during the session 2021-22 are highlighted as below.

- Departmental staff:
 - (i) Dr. S.B. Tadam (H.O.D. & Asst. Prof.)
 - (ii) Dr. S. L. Munde (Assistant Prof.)
 - (iii) Mr. Gautam Ingole (Non-teaching)

- Students strength of the department:

Sr. No.	Class	No. of Students
1	B.Sc.I	153
2	B.Sc.II	130
3	B.Sc.III	151
4	M.Sc.I	98
5	M.Sc.II	113
	Total	645

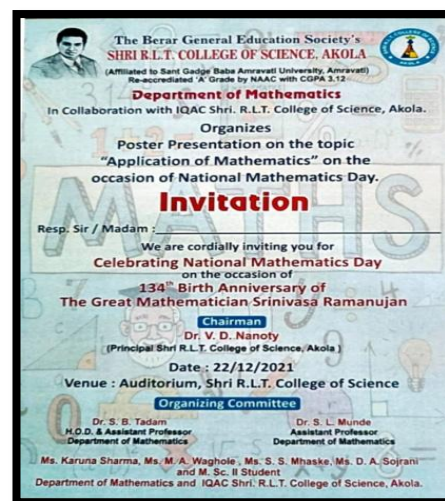
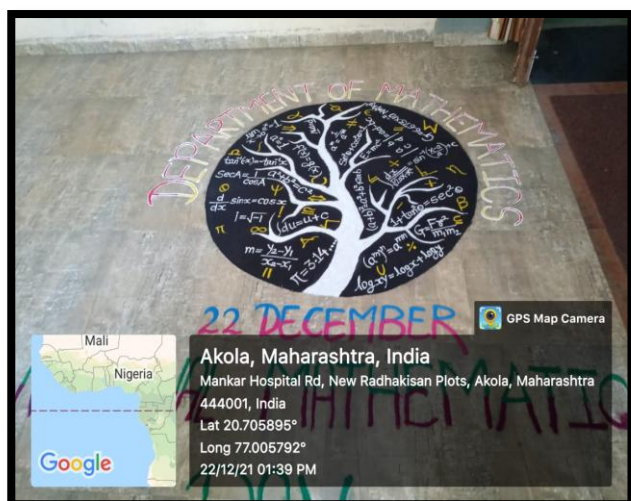
- Academic activities like Online Maths Quiz, Project Assignment and Group discussions were conducted for B.Sc. I, II & III, M.Sc. I & II students in the month of December 2021 and April & May 2022.



Test series was taken for students of M.Sc. I and II. All students were participated in test series. Departmental faculty collect the answer papers and distribute it among the students randomly to evaluate. After the evaluation of answer papers by students, corresponding teachers and students were discussed on evaluation. In this test series students solved the test, evaluate the test and discuss the topic related the test. Thus students were understanding the topic thoroughly and the purpose of the test series were successes.

- **Celebration of National mathematics Day:**

December 22 was designated as ‘National Mathematics Day’ by government of India in 2012. This day is celebrated every year to mark the birth anniversary of legendary Indian mathematician, Srinivasa Ramanujan. All over India this day was celebrated by taking various activities like Poster Presentation, Workshops, Mathematics quiz etc. Department of Mathematics in collaboration with IQAC, Shri R. L. T. College of Science Akola organized a poster presentation on the topic “Application of Mathematics”.



The event was inaugurated by laying a wreath on the photo of Srinivasa Ramanujan. At this time Ms. Vaishnavi Deshmukh performed Ganesh Vandana in her melodious voice. The introductory speech of the program was delivered by the organizing committee student member Ms. Vaishnavi Vyawahare. In her introductory speech, Ms. Vaishnavi explained the purpose of the program and outline of the program. After that the students Ms. Aarti katore, Ms. Vijaya Tekade, Ms. Laxmi Paraskar expressed their thoughts on the importance of mathematics in daily life and Shrinivas Ramanujan’s contribution in mathematics. Then Head of the Mathematics Department, Dr. Tadam explained the purpose of the celebration of National Mathematics Day. Assistant Professor Dr. Munde sheds light on the biography of Srinivasa Ramanujan and his work in Mathematics.

In his presidential address, Dr. Nanoty appreciate all the students and wished them a happy National Mathematics Day. He also hoped that all the students would take in-depth knowledge of mathematics and make every effort to get their name in the merit list of the university. The program was conducted by student of M.Sc.II, Mr. Pranav kadu & the vote of thanks was given by the student of M.Sc.II, Ms. Chaitali Deshmukh



After this, the poster presentations on the topic 'Application of Mathematics' was inaugurated by the Hon'ble Principal and eleven poster were presented in this poster presentation. These poster presentations were open to all students until the 24.12.21. This poster presentation were visited by almost all the students of B.Sc. as well as M.Sc. Dr. R. D. Chaudhari, Mr. S.R. Jaiswal and Dr. S. L. Munde acted as the judges for this poster presentation. President of B.G.E. Society, Adv. Motisinghji Mohta, H.O.D. of Education department, S.G.B.A.U. Amravati, Prof. Dr. Gajanan Gulhane, Govt. of India Shaurya Chakra Awardees Mr. Dnyaneshwar Shriram Sable and former H.O.D. Dr. Padhye visited this poster presentation.

In this poster presentation, first prize went to Group-5, second prize went to group-11 and third prize went to group-10. All the winners were felicitated by giving them certificates.



Felicitations of Winners



Following is the list of participants along with their posters.

Sr. No.	Name of Student	Name of Group	Topic of the poster
1	Mr. Suraj Ramsing Jakhade	Group-I	Maths in Astronomy
2	Mr. Pratik Anil Kale		
3	Mr. Gaurav Gajanan Shinde		
4	Mr. Pranav Gajanan Kadu		
5	Mr. Dnyaneshwar Balkisan Jamunkar		
6	Mr. Rushikesh Satish Barabde		
7	Uma Prakash Daware	Group-II	Mathematics in Music
8	Komal Rajabhau Dhote		
9	Gautmi Gajanan Bhimte		
10	Samiksha Rajesh Ghogare	Group-III	Use of Mathematics in Photography
11	Dhanashri Rajendra Dhore		
12	Renuka Pralhadrao Akhare		
13	Pallavi Dinesh Akhare	Group-IV	Maths in Nature
14	Harsha A Sachwani		
15	Nikita Onkarappa Burkhande		
16	Bharti Mohanappa Burkhande		
17	Trupti Sandip Davhale	Group-V	Mathematical Applications in Agriculture
18	Shital Krishnarao Suryawanshi		
19	Sonal Bharatkumar Rathod		
20	Chaitali Subhash Deshmukh	Group-VI	Maths in Tourism
21	Vijaya Ramdas Tekade		
22	Shruti Nagorao Kalmegh		
23	Prachi Anil Ingale		
24	Aartee Murlidhar Joshi		
25	Pooja Najukrao Pawasale		
26	Vaishnavi Santosh Matode	Group-VII	Use of Mathematics in Calender
27	Ashwini Santosh Shegokar		
28	Varsha Vilas Chavhan		
29	Komal Mahadeo Khond	Group-VIII	Application of Mathematics in Hospital
30	Vaishnavi Vyawahare		
31	Prachi Sanjay Ubale		
32	Fatema Shaikh		
33	Shivanand Kaduji Junghare	Group-IX	Mathematics in Architecture
34	Saurabh Kailas Punde		
35	Mayur Gautam Chakranarayan		
36	Shubham Pralhad Nawle		
37	Deval Rajesh Baghe		
38	Bhavana Sharadrao Deshmukh	Group-X	Application of Mathematics in Cricket
39	Prajakta Mohan Rahate		
40	Vaishnavi Ananta Virokar		
41	Vaishnavi Ankush Deshmukh		
42	Laxmi Santosh Paraskar	Group-XI	Mathematics in everyday life
43	Rajeshri Ravindra Lanjudkar		
44	Yogita Dnyaneshwar Shelke		
45	Pallavi Bhashkar Janokar		

By celebrating this National Mathematics Day, the students got to know about the contribution of Srinivasa Ramanujan in Mathematics. Also the interest of the students in mathematics increased and students understood the importance of mathematics in their daily life. Thus the purpose of celebrating National Mathematics Day was achieved.

On the occasion of National Mathematics Day and Late Principal Shri M.G.Joshi memorial day, a tree plantation was done on 24th December 2021 by the hands of honourable President of B.G.E. Society, Adv. Motisinghji Mohta, H.O.D. of Education department, S.G.B.A.U. Amravati, Prof. Dr. Gajanan Gulhane, Govt. of India Shaurya Chakra Awardees Mr. Dnyaneshwar Shriram Sable.




- **Test of knowledge on “Science in Competitive Examination”:**

Competitive exams are central exams where many of the students of our college attend the exams every year. Considering the importance of these exams for the future careers of the students, The Berar General Education Society's Shri R.L.T. College of Science, Akola, department of Mathematics in collaboration with department of Electronics was organized Test of knowledge on “**Science in Competitive Examination**” on 28th February 2022.

The platform used for this Online Quiz was Google form. In first section of the quiz personal details of the participant was asked. After fulfilling the details of first section, second section is opened which contains 50 questions, each question carrying one mark. All questions were made compulsory. At 3 o'clock on 28th February, the link of the Quiz was opened and the link was closed at 03.50pm. A total of 135 UG students had participated in this quiz. In this quiz, first prize went to Ms. Karishma Panjawani, second prize went to Ms. Shraddha Dongare and third prize went to Ms. Kruti Koradia. All the winners were felicitated by giving them certificates and books on Competitive Exams.

The link of the quiz: <https://forms.gle/JTJ78qtGE9oUTmix7>

The Berar General Education Society's
Shri R. L. T. College of Science, Akola
(Re-accredited with 'A' Grade by NAAC with CGPA 3.12)
Department of Electronics and Mathematics
Organizes



Test of Knowledge on
“Science in Competitive Examination ”
On the Occasion of Science Day , 28 Feb. 2022

Date 28/02/2022
Time :- 3.00 p.m. to 3.50 p.m.
Quiz consist of 50 questions
Eligibility :- All B.Sc. II and III
Students

Exam Link Open at 3.00 P.M.:-
<https://forms.gle/JTJ78qtGE9oUTmix7>

Prize :- First Three winners will get Books on Competitive Examination
Sponsored by Alumni

Organizing Members
 Mr.R.G.Chavan
 Mr. R.D.Chaudhari
 Dr. Sujata Tadam
 Dr.Samadhan Munde
 Ku. Karuna Sharma

Dr. V. D. Nanoty
 Principal
 Shri R. L. T. College of Science
 Akola



Felicitation of winners by the Hands of President of B.G.E. society,
Adv. Motisinghji Mohta sir

● **Maths Horizon (The knowledge beyond the curriculum...):**

Department of Mathematics was decided to create a Mathematics News Bulletin with the objective of informing the students in addition to curriculum, about the current developments in the world of Mathematics, history of Mathematics, important days of Mathematics, research in Mathematics, job opportunities after M.Sc. Mathematics and curious/amusing part in Mathematics and were created by the student themselves under the guidance of teachers. As this news bulletin provides information in addition to the curriculum so that the students were connected to the outside world of Mathematics. Therefore we named it as Maths Horizon(The knowledge beyond the curriculum...) (Because horizon means line connecting earth and sky so here news bulletin does the same work).

This bulletin covered five topics:

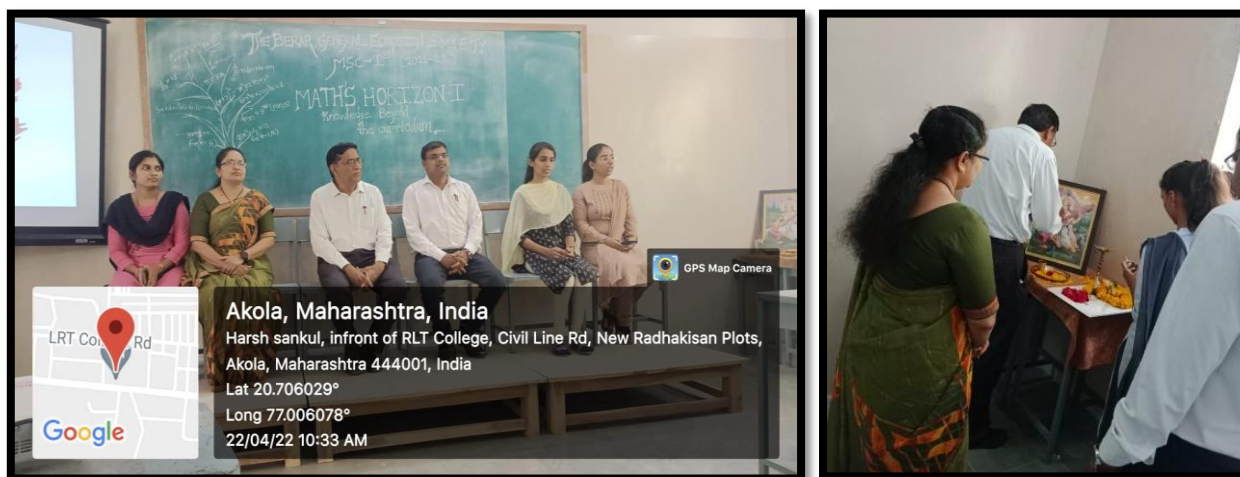
- Current affairs in mathematics.
- Monthly events in mathematics.
- History in mathematics.
- Twisted parts in mathematics.
- Career opportunities after M.Sc. Mathematics.

This helps each and every student to become updated in recent trends, review of mathematics or mathematicians history, learn some interesting facts about mathematics, and aware of career opportunity.

Each group was given a topic to gather information on. Some students were given the task of editing and formatting the news bulletin. After all the endeavors by the students and teachers the math's horizon was ready for publication.

In session 2021-22, two editions of the Math's Bulletin were published. Inaugural ceremony of Math's Bulletin and publication of first edition of the Math's Bulletin was held on 22nd April 2022.

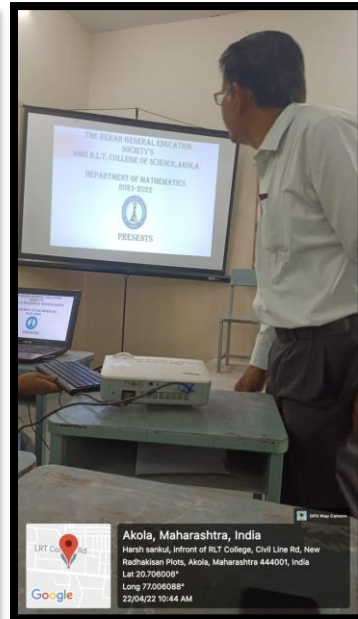
- Inaugural ceremony of Math's Bulletin:



The inaugural ceremony of publication of math's news bulletin MATHS HORIZON (The knowledge beyond the curriculum...) commenced with the lightening of lamp by our Chief Guest Dr. V. D. Nanoty, Principal, Shri R.L.T. College of Science, Akola, Dr. S. B. Tadam, Head of the Department(Coordinator of Maths Horizon), Assistant Professor Dr. S. L. Munde (Organizing Secretary of Maths Horizon), Staff members Ms. S. S. Mhaske , Ms. K. R. Sharma, Ms. D. A. Sojrani & Ms. M. A. Waghole (Editors of Maths Horizon).

The H.O.D. Dr. S. B. Tadam formally welcomed Chief Guest, Principal Dr. V. D. Nanoty. After welcomed of all the members present on the dais, participants and audience, Dr. Tadam gave an introductory speech giving an insight to the significance and its aim about the publication of Maths Horizon.

The program was further continued by the inauguration of the news bulletin Maths Horizon-I digitally on Power Point presentation by the hands of our chief guests Dr. V.D. Nanoty. After that he addressed the audience with an enlightening speech mentioning how small endeavours could make big difference and congratulates Dr. S.B.Tadam, all the staff of the department and students for taking initiative for such news bulletin and start the speech. He motivate everyone to actively participate in this Maths Horizon to learn and share articles through this informative maths bulletin and get as much benefit you can from this. Make some valuable suggestion for continuing this bulletin to match the level of magazine by department of mathematics.



In the end, Asst. Professor Dr. S. L. Munde (Organizing Secretary of Maths Horizon) offered vote of thanks. All the first year and second year students of M.Sc. Mathematics attended this inaugural ceremony.



Presentation of Maths Horizon-I:-

The students namely Apeksha Dhande, Ashwini Waghmare & Megha Ingle in the first group presented the topic current affairs in mathematics in which they overview the ongoing developments in mathematics currently awarded name and information of mathematician.

Students from second group particularly Bharti Sawale, Divya Mule, Isha Relkar & Neha Wakhare highlighted the topic monthly events in which they gave information about the happenings in the month of march in which they illuminated world mathematics day and the activities taking place on that day, birth and death anniversary of mathematicians.

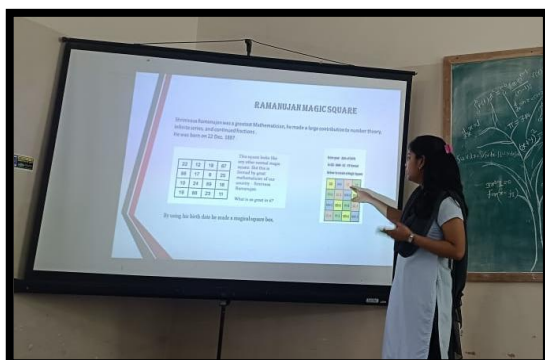
The students namely Mohini Gawande, Ankita Pawar & Vaishnavi Dhote from third group presented the origin of mathematics in which they start with number system, history of zero further they explain how mathematics got a boost from numbers.

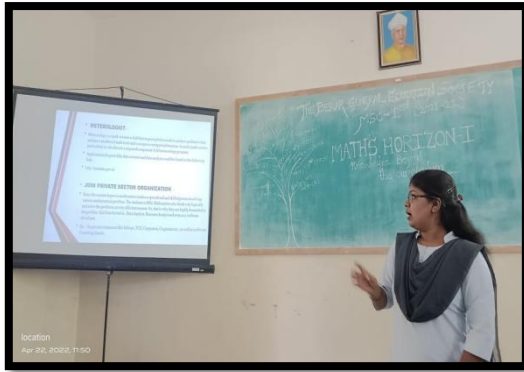
The students from fourth group specifically Hrutuja Dhore, Madhuri Bharad & Afeera Fatema presented interesting part in mathematics in which they firstly introduce pi then explain some Sanskrit sholaka, English and Marathi sentence to memorize the value of pi upto certain digits. In this section they also tell about Ramanujan Magic square, famous Ramanujan - Hardy Number [$1729 = 1^3 + 12^3 = 9^3 + 10^3$] also called as taxicab number.

The students from the fifth group namely Ashwini Katre, Samiksha Thakare, Radha Chandurkar and Siddhi Kulkarni gave information on carrier opportunities. After M.Sc. Math students can worked as online tutor ,became a math professor , can join military, worked as metrologist, join private / government sector, apply in computer and IT companies etc.

The inaugural program comes to an end with the words of the coordinator of maths horizon Dr. S. B. Tadam for remaining students to explore much more things in the next coming math horizon II

On the same day the full report of Math Horizon I was displayed on notice board for rest of the students not present for inaugural ceremony.





All Participants of Math Horizon -I

Presentation of Maths Horizon-II:-

In the same way students participated with great energy in the maths horizon II and that was again displayed on notice board on 27th May 2022.

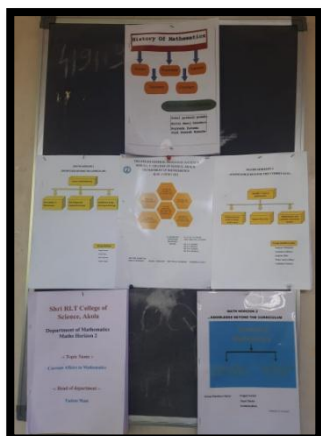
The students namely Sakshi Bhaskar, Shabdashri Murhe, Prajakta Torkadi, Shraddha Ghatre & Vidya Bhagat in the first group presented the topic current affairs in mathematics in which they overview the ongoing developments in mathematics currently awarded name and information of mathematician. Also they gave the information about the ongoing summer workout in Mathematics.

Students from second group particularly Sanjana Mundada, Vaishnavi Mishra, Sanjana Bais, Nisha Amravatkar & Vaishnavi Sonune highlighted the topic monthly events in which they gave information about the happenings in the month of April in which they illuminated Mathematics and Statistics Awareness Month and the activities taking place on that day, birth and death anniversary of mathematicians.

The students namely Komal Pudake, Shital Khandare, Sayyeda Fatema & Jaya Nemade from third group presented the history of Axiom, Postulates, Lemma, Theorem and Corollary. Also student explain the difference between these terms.

The students from fourth group specifically Pragati Kankal, Payal Deoke, & Pratiksha Bhad presented interesting mathematics in which they explain numeric palindrome with 1, Age calculation tricks, easy squaring puzzles.

The students from the fifth group namely Ragini Karale, Puja Tawar, Sima Kharate and Diptini Ingole gave information on carrier opportunities. After M.Sc. Math students can worked as Data Scientist, became a Block chain developer, worked as Statistician etc.



- During the session 2021-22 the achievements of the department are shown in the following table.

Sr. No.	Name of Faculty / Students	Designation / Class	Achievements
1.	Dr. S. B. Tadam	Assistant Prof. & H.O.D.	Delivered a Guest lecture on the topic “Topological Spaces” in Shri. Dr. R.G. Rathod Arts and Science College, Murtizapur, dist-Akola on 30 th March 2022
2.	Dr. Samadhan L. Munde	Assistant Prof.	Worked as a Subject Expert in “State Level Seminar Competition on Graduate Level Calculus” on 22 nd December 2021 at Shri Dnyaneshwar Maskuji Burungale Science and Arts College, Shegaon.
3	Ms. Karuna R. Sharma	CHB Teacher and Student of NET-SET Class	Qualified the State Eligibility Test (SET) held on 26 th September 2021 in the subject Mathematical Sciences
4	Mr. Dattatray Rustum Kale	PG Student and Student of NET-SET Class	Qualified the State Eligibility Test (SET) held on 26 th September 2021 in the subject Mathematical Sciences
5.	Ms. Sayali Kalmegh	PG Student	10 th Merit in M.Sc. Mathematics S.G.B. A.U. Amravati



Ms. Karuna R. Sharma,
Qualified the State Eligibility Test (SET)



Mr. Dattatray R. Kale,
Qualified the State Eligibility Test (SET)



Ms. Sayali Kalmegh, 10th Merit in M.Sc.
Mathematics S.G.B. A.U. Amravati



A guest lecture delivered by Dr. Tadam

Date: 30.05.22

Dr. S. B. Tadam
H.O.D.
Dept. Of Mathematics