

Brief History of the Department:

The Department of Mathematics in Hindi Mahavidyalaya, Vidyanagar, Hyderabad established in the year 2016 with different combination at UG level keeping in view the need for strengthening its Physical Sciences Wing and growing competition in the IT and Science fields.

With the passage of time, a Post Graduate Course in Mathematics was introduced on Semester Model, in the year 2019 - 20. Till today, admission into PG as well as UG courses is in great demand.

Objectives:

- To inculcate the habit of independent thinking and problem solving.
- To prepare the students reach out look for various fields
- Identify and focus the students to the current issues and challenges in the field of Mathematics.
- To train the students in such a way that the knowledge acquired can be practically implemented for solving various problems encountered in the personal as-well-as professional life.

Mathematics Departmental Vision

- The Department of Mathematics, Hindi Mahavidyalaya, has always strived to be among the best Mathematics Departments in the country and has worked towards becoming a centre for advanced research in various areas of mathematics to that it can contribute to the development of the nation.
- To achieve high standards of excellence in generating and propagating knowledge in Mathematics. Department is committed to providing an education that combines rigorous academics with joy of discovery.
- To provide an environment where students can learn, become competent users of mathematics, and understand the use of mathematics in other disciplines.
- We share the vision of developing our intellectually vigorous community of students and faculty, together engaging in research, teaching, and learning that advance knowledge in diverse areas of mathematics and support current progress in science.



Mathematics Departmental Mission

- The Department of Mathematics plays a critical role in the education of every student, serving students in each college at Hindi Mahavidyalaya college. The mission of the Department of Mathematics is to:
- Prepare students for a variety of careers in the mathematical sciences and related disciplines, including secondary education, data sciences, economics and engineering.
- Prepare students to pursue advanced degrees in mathematics, statistics, math education, and related disciplines. Engage students in critical thinking and problem solving through coursework, internships, and research projects in collaboration with faculty.
- Create a supportive, equitable environment for learning that fosters appreciation of mathematics and prepares students to contribute to the quality of life locally, nationally, and globally.
- Contribute to the advancement of knowledge through mathematical and statistical research and through the application of mathematical and statistical techniques to other disciplines.
- To employ effective educational tools for our undergraduate and graduate courses, informed by the scholarship of teaching and learning of college-level mathematics.
- To prepare our undergraduate and graduate students to develop the attitude and ability to apply mathematical methods and ideas in a wide variety of careers.
- To explore applications of mathematics and statistics and engage in collaborative research in an interdisciplinary environment.
- To emerge as a global center of learning, academic excellence, and innovative research.
- To make students aware of technology to explore mathematical concepts through activities and experimentation. To produce post-graduate students with strong foundation to join research or to in industry.
- To inculcate in students the ability to apply mathematical and computational skills to model, formulate and solve real life applications.



Outcomes:

Program outcome:

Acquired the skills in handling scientific instruments planning and performing in laboratory experiments

- ❖ The skills of observations and drawing logical inferences from the scientific experiments.
- ❖ Analyzed the given scientific data critically and systematically and the ability to draw the objective conclusions
- ❖ Been able to think creatively to propose novel ideas in explaining facts and figures or Providing new solutions to the problem
- ❖ Realized how interdisciplinary approach helps in providing better solutions and new ideas for the sustainable developments

Course outcome:

- ❖ Make use of linear equations for solving any differential equations
- ❖ Understand the concepts of Matrices and Linear Equation
- ❖ Understand the concepts of abstract algebra and their applications
- ❖ Understand the concept of Real Analysis, Complex Analysis and their applications.

Courses Offered :

Under Graduate Level: B.Sc. (MPC, MPCS, MSCS)

Post Graduate Level : M.Sc. (Pure Mathematics)

Present Faculty:

Name	Qualification	Designation	Specialization	No. of Years of Experience
Smt. G.Srivani	M.Sc.(Mathematics), M.A. (Telugu), B.Ed.	Assistant Professor	Pure Mathematics	17
Smt. T. Ramadevi	M.Sc.(Mathematics)	Assistant Professor	Applied Mathematics	15
Sri. M. Sudhakar	M.Sc.(Mathematics), B.Ed.	Assistant Professor	Pure Mathematics	15
Sr. T. Thirupathaiaj	M.Sc.(Mathematics)	Associate Professor	Pure Mathematics	4



Student Profile:**Category wise Student Strength****B.Sc. Mathematics Student Strength
(2017-18 to 2021-22)**

	2017 - 18			2018 - 19			2019 - 20			2020 - 21			2021 - 22		
Category	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
SC				2	0	2	4	0	4	4	2	6	9	2	11
ST				4	0	4	5	0	5	1	0	1	4	0	4
BC				25	9	34	49	11	60	28	4	32	32	4	36
GENERAL				6	4	10	8	4	12	12	1	13	11	1	12
MINORITY				1	0	1	0	0	0	0	1	1	0	0	0
TOTAL	36	10	46	38	13	51	66	15	81	45	8	53	56	7	63

**Student Strength of B.Sc. Mathematics
Category wise Student Strength
(2018 – 19 to 2021 – 22)****BSC MATHEMATICS I YEAR 2018- 19**

Group	SC				ST				BC				Minority				Gen			
	M	F	M%	F%	M	F	M%	F%	M	F	M%	F%	M	F	M%	F%	M	F	M%	F%
MPCS	1	0	3.84	0	2	0	7.69	0	15	3	57.69	11.53	1	0	3.84	0	2	2	7.69	7.69
MSCS	4	1	13.79	3.44	2	0	6.89	0	10	6	34.48	20.68	0	0	0	0	4	2	13.79	6.89



BSC MATHEMATICS I YEAR 2019- 20

Group	SC				ST				BC				Minority				Gen			
	M	F	M%	F%	M	F	M%	F%	M	F	M%	F%	M	F	M%	F%	M	F	M%	F%
MPC	0	0	0	0	3	0	17.6	0	12	0	70.5	0	0	0	0	0	2	0	11.7	0
MPCS	2	0	5.26	0	1	0	2.63	0	25	3	65.7	7.89	0	0	0	0	4	3	10.5	7.89
MSCS	2	0	7.69	0	1	0	3.8	0	12	8	46.15	30.7	0	0	0	0	2	1	7.69	3.84

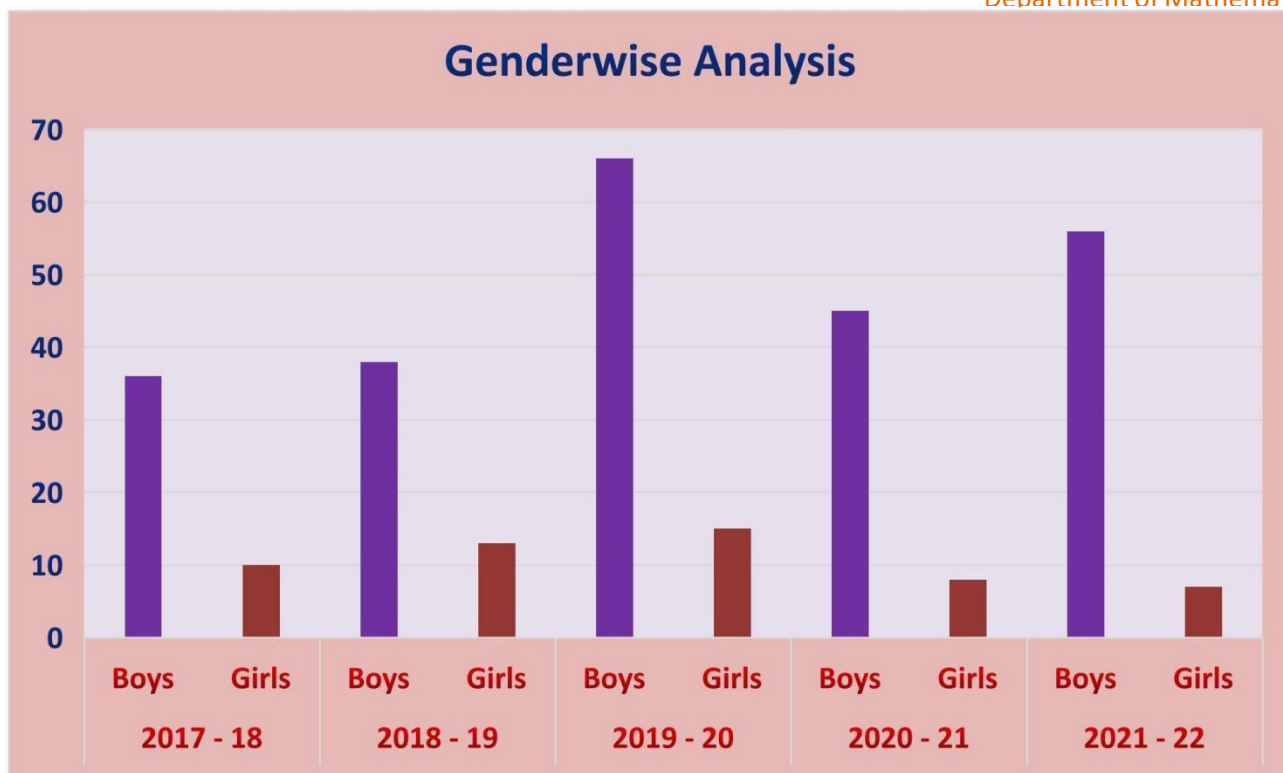
BSC MATHEMATICS I YEAR 2020- 21

Group	SC				ST				BC				Minority				Gen			
	M	F	M%	F%	M	F	M%	F%	M	F	M%	F%	M	F	M%	F%	M	F	M%	F%
MPC	1	0	14.2	0	0	0	0	0	3	2	42.85	28.57	0	0	0	0	1	0	14.2	0
MPCS	2	2	10	10	1	0	5	0	8	1	40	5	0	0	0	0	5	1	25	5
MSCS	1	0	3.84	0	0	0	0	0	17	1	65.38	3.84	0	1	0	3.84	6	0	23.0	0

BSC MATHEMATICS I YEAR 2021- 22

Group	SC				ST				BC				Minority				Gen			
	M	F	M%	F%	M	F	M%	F%	M	F	M%	F%	M	F	M%	F%	M	F	M%	F%
MPC	2	1	16.66	8.33	1	0	8.33	0	4	0	33.33	0	0	0	0	0	4	0	33.3	0
MPCS	5	1	15.15	3.03	3	0	9.09	0	17	2	51.51	6.06	0	0	0	0	4	1	12.1	3.03
MSCS	2	0	8.00	0	0	0	0	0	14	2	56.00	8.00	1	2	4.0	8	3	0	12.0	0





STUDENT STRENGTH OF M.SC. MATHEMATICS
Category wise Student Strength & GENDER WISE
(2017 – 18 TO 2021 – 22)

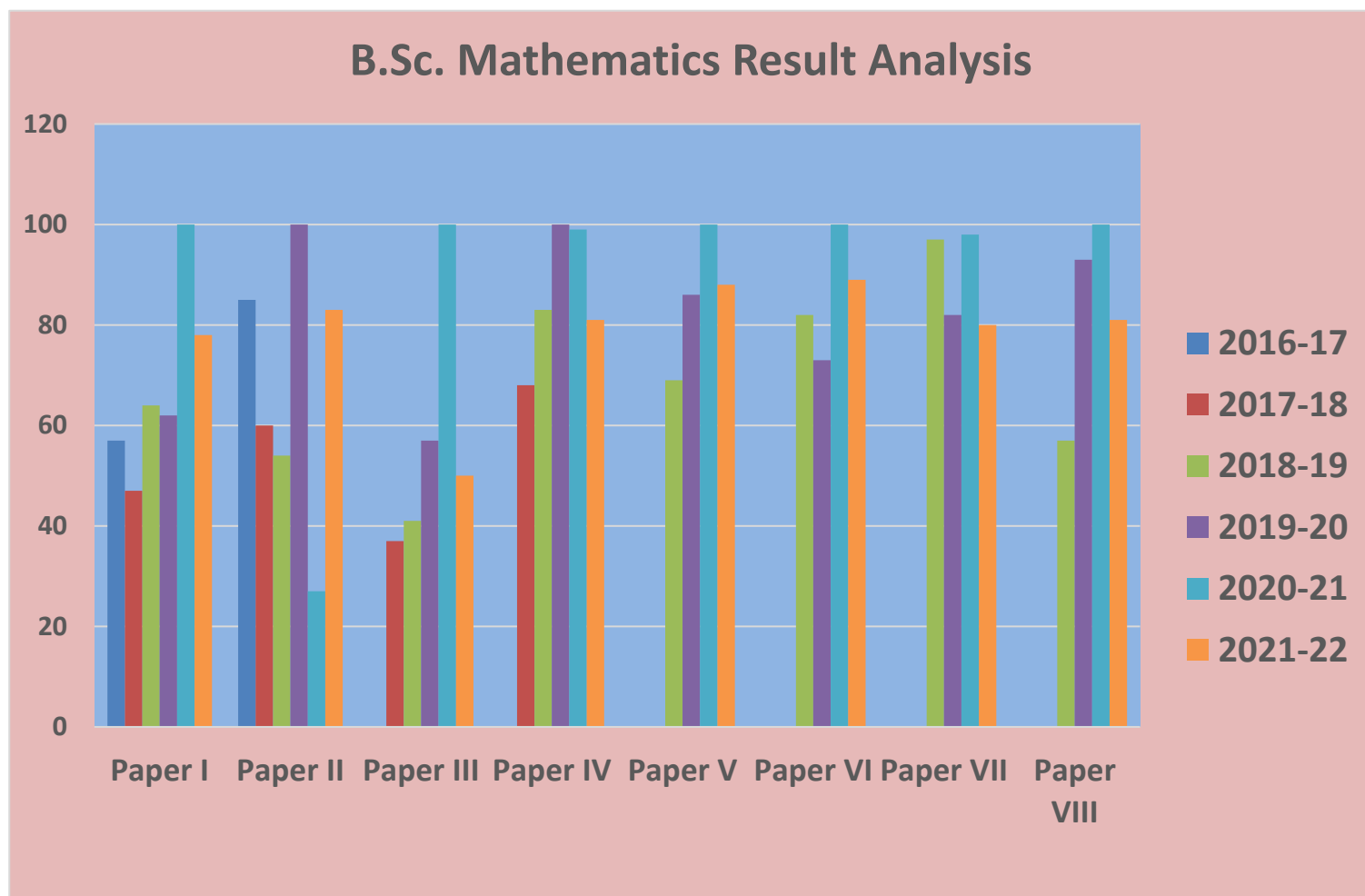
Group	SC				ST				BC				Minority				Gen			
	M	F	M%	F%	M	F	M%	F%	M	F	M%	F%	M	F	M%	F%	M	F	M%	F%
2019 – 20	2	4	6.25	12.5	3	0	9.3	0	9	13	28.12	40.6	0	1	0	3.1	0	0	0	0
2020 – 21	2	1	9	4.5	1	1	4.5	4.5	7	9	31.8	40.9	1	0	4.5	0	0	0	0	0
2021 – 22	3	2	25	16.6	1	0	8.33	0	2	3	16.6	25	0	1	0	8.33	0	0	0	0



B.S.C. MATHEMATICS RESULT ANALYSIS 2017 – 18 TO 2021 – 22

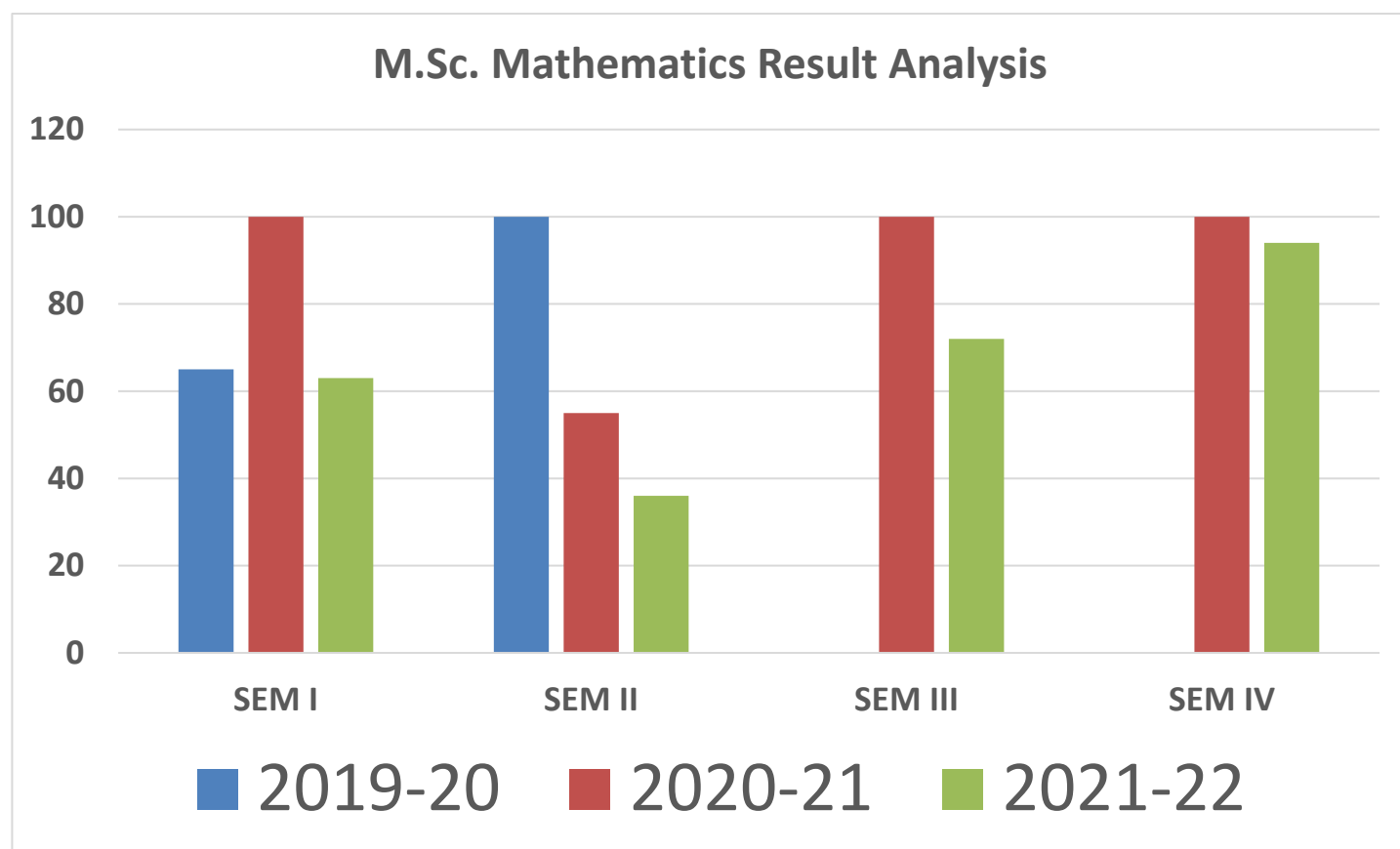
Papers	Paper I			Paper II			Paper III			Paper IV			Paper V			Paper VI			Paper VII			Paper VII		
Academic year	Appeared	Passed	Percentage	Appeared	Passed	Percentage	Appeared	Passed	Percentage	Appeared	Passed	Percentage	Appeared	Passed	Percentage	Appeared	Passed	Percentage	Appeared	Passed	Percentage	Appeared	Passed	Percentage
2016-17	44	25	57	41	35	85																		
2017-18	53	36	47	55	33	60	44	16	37	41	28	68												
2018-19	56	36	64	56	30	54	46	19	41	46	38	83	39	27	69	38	31	82	37	36	97	37	21	57
2019-20	82	51	62	78	78	100	54	31	57	53	53	100	44	38	86	44	32	73	44	36	82	44	41	93
2020-21	52	52	100	51	14	27	78	78	100	78	77	99	53	53	100	53	53	100	52	51	98	52	52	100
2021-22	67	52	78	69	57	83	50	25	50	55	45	81	77	68	88	75	67	89	86	69	80	86	70	81

B.S.C. MATHEMATICS RESULT ANALYSIS 2017 – 18 TO 2021 – 22



M.SC. MATHEMATICS RESULT ANALYSIS 2019 – 20 TO 2021 – 22

Papers	SEM I			SEM II			SEM III			SEM IV		
Academic year	Appear ed	Passe d	Percent age	Appear ed	Passe d	Percent age	Appear ed	Passe d	Percent age	Appear ed	Passe d	Percent age
2019-20	32	21	65	30	30	100						
2020-21	20	20	100	20	11	55	30	30	100	30	30	100
2021-22	11	7	63	11	4	36	18	13	72	18	17	94



CURRICULAR ASPECTS:

- ❖ In order to student abilities of the area of National Level Examinations like IIT (JAM), HCU, CU CET etc, our department has made an attempt to bring in changes in the curriculum by choosing the elective in semester V and VI.
- ❖ In order to expose the student to practical Knowledge & Project Work is included in the curriculum.
- ❖ In order to expose the students to competitive exams like Bank Exams, TSPSC etc for job placements we have introduce Quantitative Aptitude for Semester V & VI as General Elective for Non Mathematics Students.

Curriculum Enrichment Program:

To enrich the curriculum, the department has taken the following initiatives

- Guest / Extension Lectures are arranged by the experts in various fields so that the students enrich their knowledge in the concerned subject.
- To focus the students on various topics project works are given.
- Training in soft skills, Analytical skills through Job Oriented Programmes are given to the students with an objective of inculcating human values and ethics, students are taught “Value Education and Professional Ethics” apart from their regular subjects.



DEPARTMENTAL ACTIVITIES
From the Academic Year 2017 – 18 TO 2021 – 22

S.No.	Date	Name of the Activity	Title of the Activity	Details of the Resource Person (Name, Designation etc.)	No. of students Participa ted
1	21-12-2019	Extension lecture	Srinivasa Ramanujan efforts on Number theory	Smt. L. Vishnupriya, Department of Mathematics, GDC Vidyanagar, Hyderabad	55
2	03/03/2021	Extension Activity	Participating in Science Exhibition with Maths Models	Smt. L. Vishnupriya, Department of Mathematics, GDC Vidyanagar, Hyderabad	32
3	18/09/2021	Webinar	Applications of Number Theory	Prof. V Srinivas, Department of Mathematics, University College of Science, Saifabad, Hyderabad	85
4	18/12/2021	Extension Activity on Occasion of National Mathematics Day Dec 2021	Life and Works of Srinivasa Ramanujan	Mrs. P. Sarada HOD, Department of Mathematics, Andhra Mahila Sabha College , Hyderabad	54
5	28-04-2022	Extension lecture PI DAY	celebrations (Importance of Pi)	Smt. L. Vishnupriya, Department of Mathematics, GDC Vidyanagar, Hyderabad	32
6	30/06/2022	Extension lecture	Solution of System of Linear Equations on Geometrical Method & Vector Method	Mrs. ARUN JYOTHI Associative Professor, Department of Mathematics, Andhra Mahila Sabha College , Hyderabad	72
7	30/09/2022	Extension Activity	Traditional day (Bathukamma)	Mr. SREENIVAS, KACHIGUDA ACP. Mrs. AMRUTHA , ADIKMET CORPORATOR.	120
8	22/12/2022	Extension Activity on Occasion of National Mathematics Day Dec2021	Sir Srinivasa Ramanujan “ The Man Who knew Infinity” on his Birth Anniversary National Mathematics Day	Srinivasa Ramanujan Biography, Phi Chart Explanation, Ramanujan Number, Infinite Series , Partition Formula Presented by Students	83



Departmental Activity Photos

Extension lecture on
Srinivasa Ramanujan efforts on Number theory
 by
Smt. L. Vishnupriya,
 Department of Mathematics,
 GDC Vidyanagar, Hyderabad

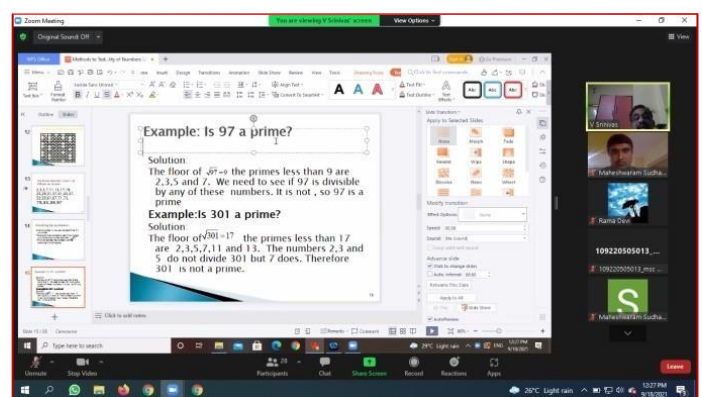
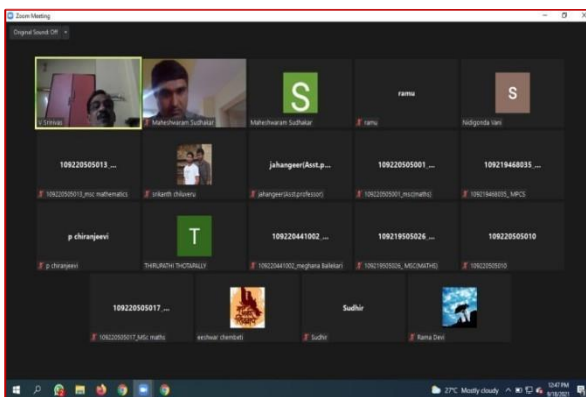


Participating students in Science Exhibition
with Maths Models on 03/03/202





Webinar on
Applications of Number Theory
by
Prof. V Srinivas
 Department of Mathematics,
 University College of Science, Saifabad, Hyderabad
 On 18/09/2021

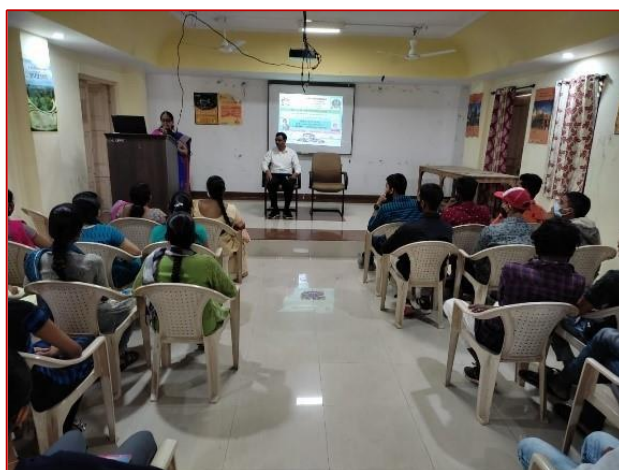


**Extension Activity on Occasion of
National Mathematics Day Dec 2021 on
Life and Works of Srinivasa Ramanujan**

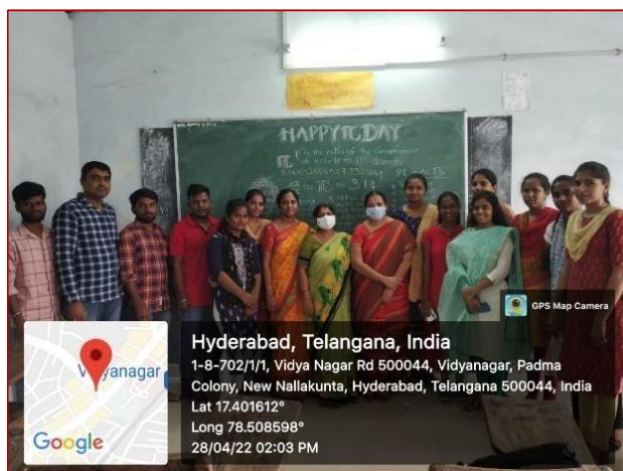
By

Mrs. P. Sarada

**HOD, Department of Mathematics,
Andhra Mahila Sabha College , Hyderabad
On 18/12/2021**



Extension lecture on
PI DAY celebrations (Importance of Pi)
by
Smt. L. Vishnupriya,
Department of Mathematics,
GDC Vidyanagar, Hyderabad
On 28-04-2022



Extension lecture on **Solution of System of Linear Equations on** **Geometrical Method & Vector Method**

By
Mrs. ARUN JYOTHI
Associative Professor,
Department of Mathematics,
Andhra Mahila Sabha College , Hyderabad
On 30/06/2022



Traditional Day Celebrations on 30/09/2022

Participating students



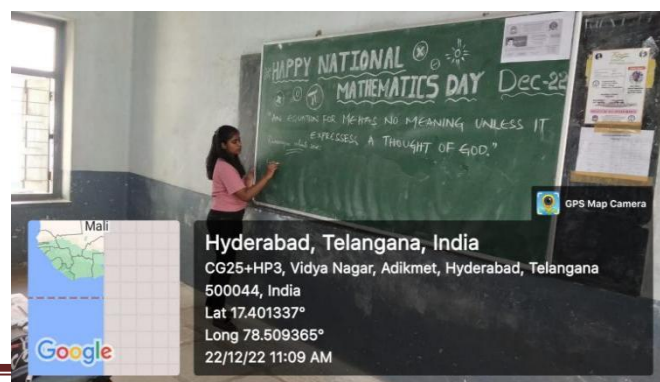
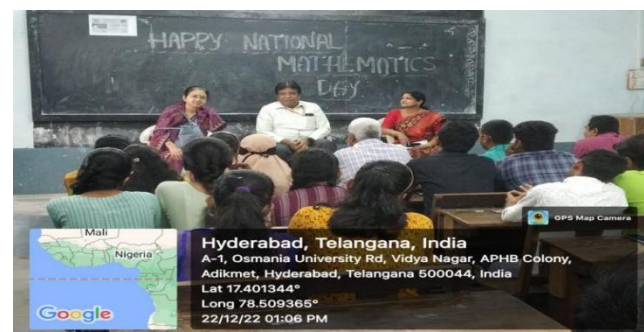
Extension Activity on Sir Srinivasa Ramanujan “The Man Who knew Infinity” on his Birth Anniversary National Mathematics Day

By

Students Presented topics on
Srinivasa Ramanujan Biography, Phi Chart Explanation,
Ramanujan Number,
Infinite Series , Partition Formula

By

Students Presented topics on
Srinivasa Ramanujan Biography, Phi Chart Explanation,
Ramanujan Number,
Infinite Series , Partition Formula



TEACHING – LEARNING PROCESS:

- ❖ In the beginning of the Academic year the department plans and organizes Teaching-Learning and Evaluation Plan of the Academic year.
- ❖ As part of the teaching-learning process the department has adopted the following Student Centric activities in addition to Lecture method to improve the student learning.

RESEARCH ACTIVITIES BY THE FACULTY:

The department has experienced and Qualified Faculty.

- Research articles published by the Faculty Members

Smt. G. Sreevani

S.No.	Title of the Article	Name of the Journal	Bibliographic information Year of Publication
1	APPLICATIONS OF EXPONENTIAL FUNCTION	IJAEM	
2	APPLICATIONS OF MELLIN TRANSFORMS	IJRSR JOURNAL	

Seminars/ Workshops/Conference /Symposium/ Webinars attended by the faculty

Smt. G. Srivani

S.no	Name of the Seminar /Conference /Symposia/Workshop/ Webinars	Name of the Sponsoring agency	Place and Date
1	NATIONAL YOGA DAY	HMV COLLEGE	Online, jan21/2021
2	MATHEMATICAL MODELING	LOYOLA ACADEMY UG AND PG COLLEGE	Online may11,12
3	NATIONAL TOURISM DAY	HMV COLLEGE	Online
4	FACULTY DEVELOPMENT PROGRAMME	HMV COLLEGE	Online
5	INTERNATIONAL E- SYMPOSIUM ON MODERN MATHEMATICS	RBVRR WOMEN'S COLLEGE	Online 23/5/2022 to28/05/2022



Mr. M. Sudhakar

S.no	Name of the Seminar /Conference /Symposia/Workshop/ Webinars	Name of the Sponsoring agency	Place and Date
1	Financial Planning & Wealth Management	MC Gupta College of Management , Nallakunta	22/03/2021
2	“Dimensionality Reduction By Feature Projection And Its Effect on The Classification Accuracy	Aurora's Degree & PG College, Chikkadpally, Hyderabad	12/06/2021
3	Orientation Program for Re-Accreditation of Autonomous Colleges	The National College, Jayanagar , Bangalore	03/06/2021
4	Online National Seminar on “Mathematical Modeling- A Comprehensive Approach”	Loyola Academy Degree And Pg , Alwal, Hyderabad	11/05/2021 & 12/05/2021
5	National Workshop on Entrepreneurship	HMV College	Online, 25/02/2021
6	National Yoga Day	HMV College	Online 21/01/2021
7	National Science Day	HMV College	Online ,03/03/2021
8	Faculty Development Programme	HMV College	10/07/2021
9	National Tourism Day	HMV College	Online

Mr. T. Thirupathaiah

S.no	Name of the Seminar /Conference /Symposia/Workshop/ Webinars	Name of the Sponsoring agency	Place and Date
1	National Workshop On Entrepreneurship	HMV College	Online, 25/02/2021
2	National Yoga Day	HMV College	Online 21/01/2021
3	National Science Day	HMV College	Online ,03/03/2021
4	Faculty Development Programme	HMV College	10/07/2021
5	National Tourism Day	HMV College	Online
6	Mathematical Modelling	Layola Academy Degree & Pg College	Online, 11/05/2021 To 12/05/2021

Smt. T. Ramadevi

S.no	Name of the Seminar /Conference /Symposia/Workshop/ Webinars	Name of the Sponsoring agency	Place and Date
1	National Workshop On Entrepreneurship	HMV College	Online, 25/02/2021
2	National Yoga Day	HMV College	Online 21/01/2021
3	National Science Day	HMV College	Online ,03/03/2021
4	Faculty Development Programme	HMV College	10/07/2021
5	National Tourism Day	HMV College	Online



STUDENT CENTRIC ACTIVITIES

- ❖ Student seminars and Assignments
- ❖ Student projects
- ❖ ICT Based Teaching like PPT's and MANA TV lectures
- ❖ Study tours
- ❖ Group discussion
- ❖ Mathematics quiz

EVALUATION PROCESS:

Continuous evaluation of the students is done by

- ❖ Assignments
- ❖ Internal Assessments
- ❖ Conducting Students Seminars
- ❖ Semester Examinations
- ❖ Academic Audit

STUDENT SUPPORT AND PROGRESSION: –

- ❖ Majority of the students are covered under scholarship scheme by the state government.
- ❖ The students are provided with sets of previous year's question papers
- ❖ Our alumni members are working in different organizations in various positions and some are engaged in the self employment.
- ❖ Students are given Library books for all the subjects, which aids in their learning process.
- ❖ Students are provided with access to N-List facility
- ❖ Providing study material to the students.
- ❖ Live telecast of lectures in various subjects is facilitated to the students through TSAT.
- ❖ Soft skills, Communication skills, Analytical skills through TSKC
- ❖ Concessional bus pass and train pass facility



INNOVATIONS AND BEST PRACTICES:

- ❖ Celebrating Srinivasa Ramanujan Birthday on December 22 every year

FUTURE PLAN OF THE DEPARTMENT

- ❖ To organize a National level seminar.
- ❖ To apply for Minor Research Project.
- ❖ To organize more number of Guest lectures.
- ❖ Invite eminent scientists and industry experts for guest lectures.
- ❖ Field trip.
- ❖ PG entrance coaching.
- ❖ Coaching for Civil and TSPC examinations.

