



Government City College (A) Nayapul, Hyderabad

Affiliated to Osmania University
Accredited with B++ Grade & CGPA 2.76
<https://gdcts.cgg.gov.in/charminar.edu>



DEPARTMENT OF MATHEMATICS AND STATISTICS PROFILE

Brief History of the Department:

The Department of Mathematics in Government City College, Nayapul, Hyderabad established in the year 1965 with different combination at UG level keeping in view the need for strengthening its Physical Sciences Wing and in the decades of 1990s to cater to growing competition in the IT and Science fields. Dr. L. Nagarajan, Sri. K. Rama Mohan, made a remarkable and tremendous contribution in bringing up the Department of Mathematics

With the passage of time, a Post Graduate Course in Mathematics was introduced on Semester Model, in the year 2003-04 in the year 2015, the college introduced Department of Statistics with different combinations at UG level and in the year 2023 Applied Statistics was introduced at PG Level with ever increasing demand for admissions.

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
- To develop students' ability to approach and solve complex problems logically and creatively
- To develop students' ability to work with abstract ideas, generalize concepts, and understand mathematical structures.
- To equip students with the knowledge, skills, and mindset needed to tackle real-world problems, pursue further study, and contribute to the advancement of mathematical knowledge and its applications.

Courses Offered:

Mathematics

Under Graduate Level :	B.Sc. (MPC,MPCS, MPE, MPCS, MECS, MSCS, MSDS, MDSCS, MPS, MCCA, MEPA) & B.A. (EMS)
Post Graduate Level :	M.Sc. (Pure Mathematics)

Statistics

Under Graduate Level :	B.Sc. (MSCS, MSDS) B.A. (EMS)
Post Graduate Level :	M.Sc. (Applied Statistics)

Present Faculty:

Name	Qualification	Designation	Specialization	No. of Years of Experience
<u>Dr.V.Padma Anu Radha</u>	M.Sc., M.Phil., Ph.D. CSIR-NET Qualified	Assistant Professor	Applied Mathematics	23
<u>Dr.K.Sarada</u>	M.Sc., M.Phil., Ph.D. CSIR-NET Qualified	Associate Professor	Applicable Mathematics	23
<u>Dr.C.Srinivas Reddy</u>	M.Sc., Ph.D. CSIR-NET Qualified	Assistant Professor	Applied Mathematics	12
<u>Smt.K.M.Swarna Latha</u>	M.Sc. , M.Phil.	Assistant Professor	Pure Mathematics	21
<u>Smt.T.Vedavathi</u>	M.Sc.	Associate Professor	Statistics	34
<u>Mr.Jaydev Rathod</u>	M.Sc. , B.Ed.	Guest Lecturer	Pure Mathematics	7
<u>Ms.G.Sai Manasa</u>	M.Sc.	Guest Lecturer	Applied Statistics	6
<u>Dr.G.Saritha</u>	M.Sc., Ph.D. CSIR-NET Qualified	Guest Lecturer	Pure Mathematics	1
<u>A.Ruchitha</u>	M.Sc., SET	Guest Lecturer	Pure Mathematics	1
<u>L.Devi Priya</u>	M.Sc., SET	Guest Lecturer	Pure Mathematics	1
<u>P.Kranthi Kishore</u>	M.Sc., SET	Guest Lecturer	Pure Mathematics	1
<u>N.Sindhuja</u>	M.Sc	Guest Lecturer	Statistics	1

DEPARTMENT ACADEMIC/RESEARCH PROFILE

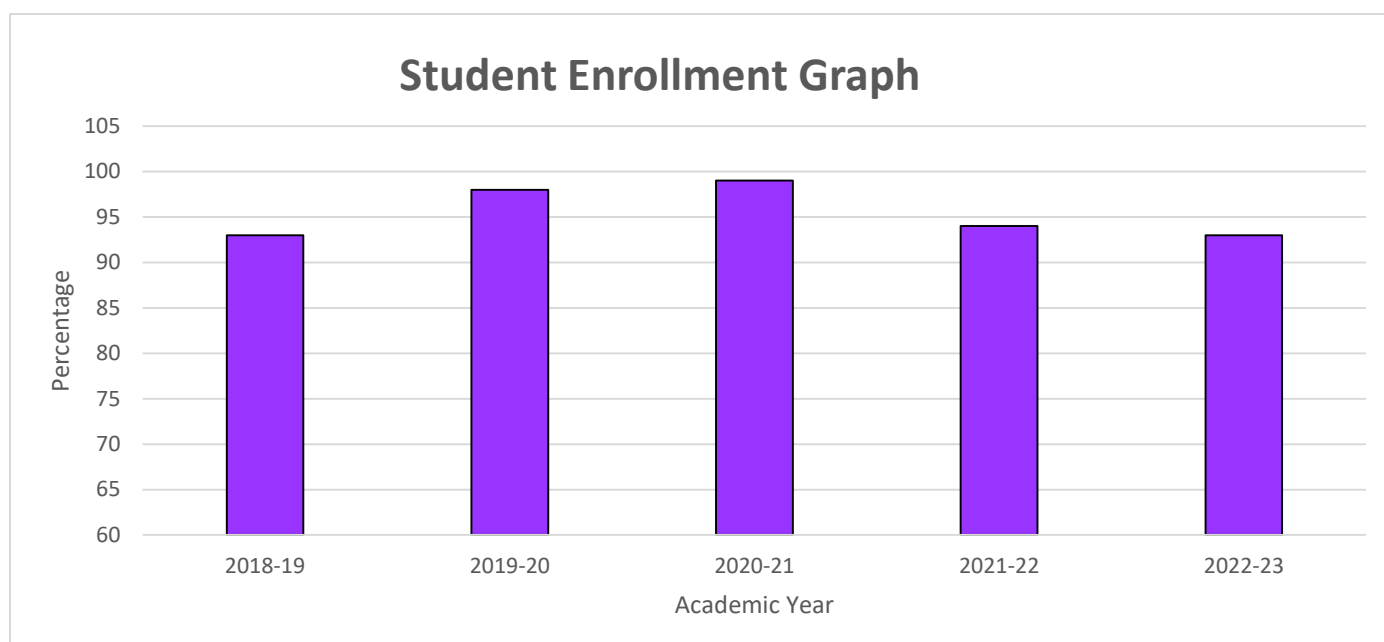
Books/ Chapters Published	Papers Published	Members in Academic Bodies of other institutions	Papers Presented in Seminars	Invited Talks	Patents
<u>4</u>	<u>38</u>	<u>32</u>	<u>11</u>	<u>7</u>	<u>3</u>

AWARDS & RECOGNITION

Faculty	Students
<u>4</u>	<u>14</u>

STUDENT ENROLLMENT 2018-19 to 2022-23

Academic Year	Year	Courses / Programs	Total	%
2018-19	I	B.SC PS	335	93
2019-20	I	B.SC PS	353	98
2020-21	I	B.SC PS	357	99
2021-22	I	B.SC PS	340	94
2022-23	I	B.SC PS	278	93



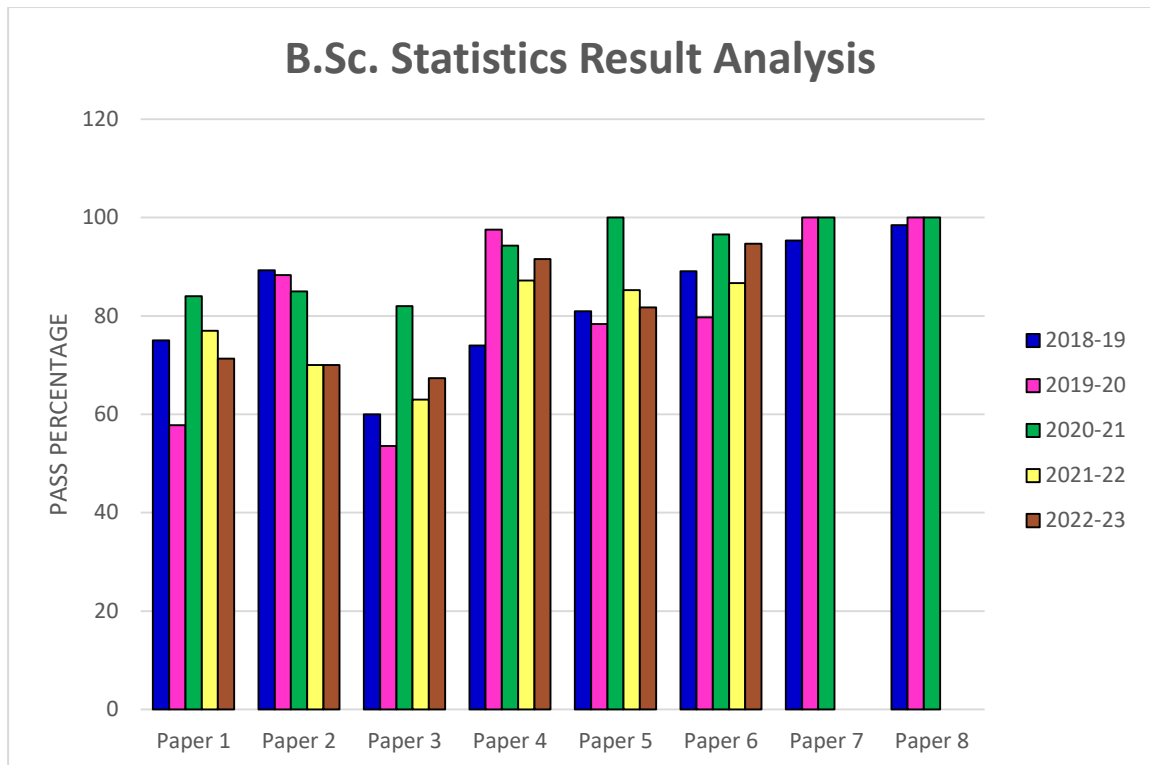
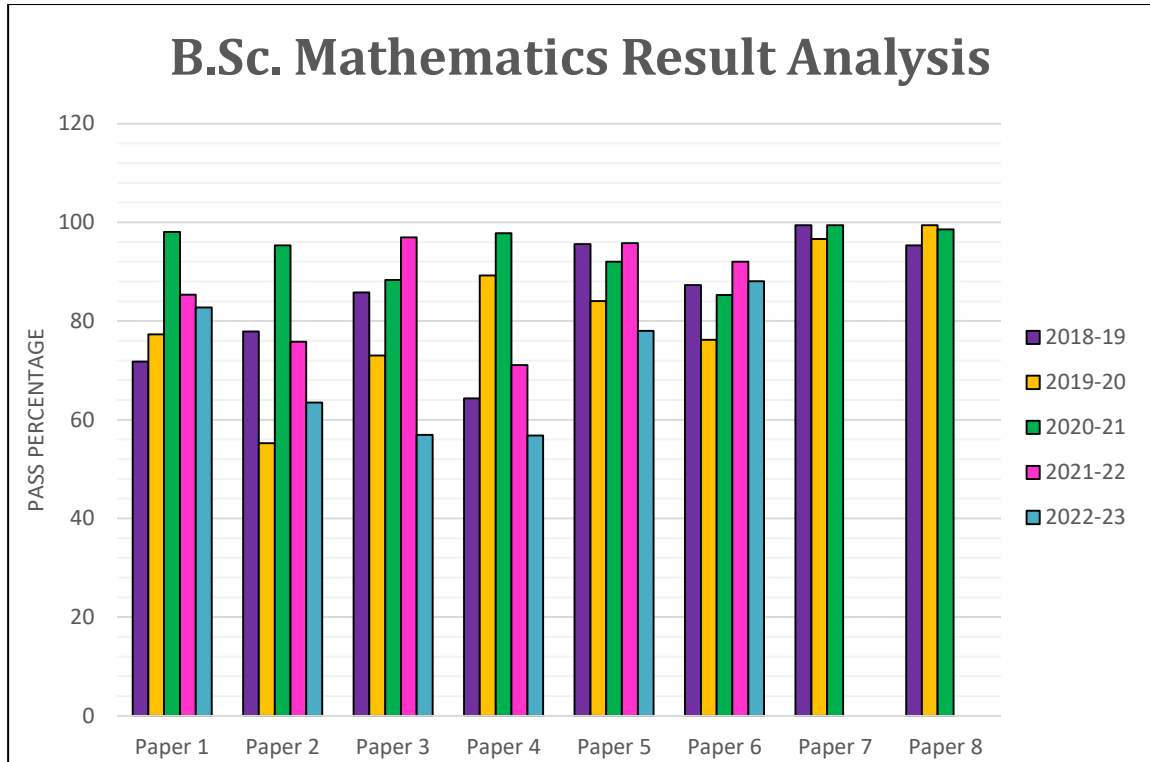
Department of Mathematics and Statistics
B.Sc. & B. A

Mathematics Result Analysis 2018- 23

S.No.	2018-19	2019-20	2020-21	2021-22	2022-23
	Pass %	Pass %	Pass %	Pass %	Pass %
Paper 1	71.76	77.31	98.08	85.35	82.78
Paper 2	77.9	55.22	95.34	75.8	63.49
Paper 3	85.78	73.03	88.34	96.95	56.96
Paper 4	64.35	89.23	97.82	71.06	56.79
Paper 5	95.6	84.05	92.06	95.78	78
Paper 6	87.29	76.21	85.3	92	88.08
Paper 7	99.43	96.64	99.43		
Paper 8	95.32	99.43	98.58		

Statistics Result Analysis 2018- 23

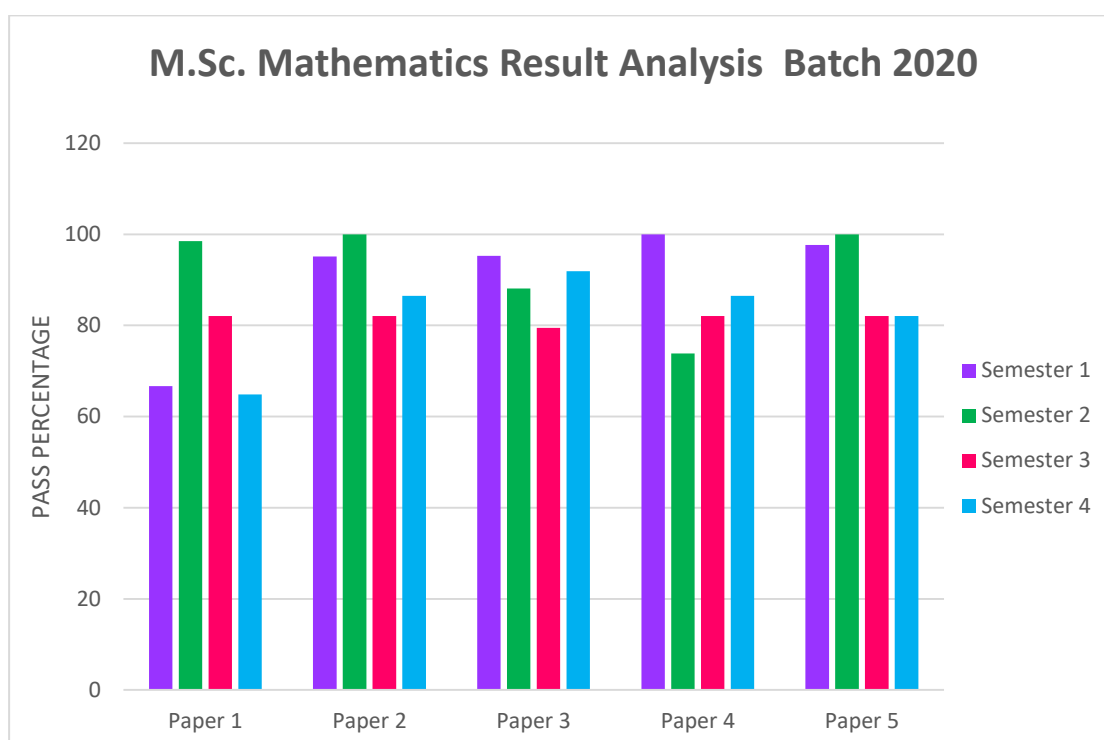
S.NO	2018-19	2019-20	2020-21	2021-22	2022-23
Paper	Pass %	Pass %	Pass %	Pass %	Pass %
Paper 1	75	57.77	84	77	71.3
Paper 2	89.28	88.28	85	70	70
Paper 3	60	53.57	82	63	67.32
Paper 4	73.97	97.56	94.26	87.2	91.56
Paper 5	80.95	78.37	100	85.25	81.76
Paper 6	89.06	79.72	96.55	86.67	94.67
Paper 7	95.31	100	100		
Paper 8	98.43	100	100		



Department of Mathematics and Statistics

M.Sc. Mathematics Result Analysis 2020 Batch

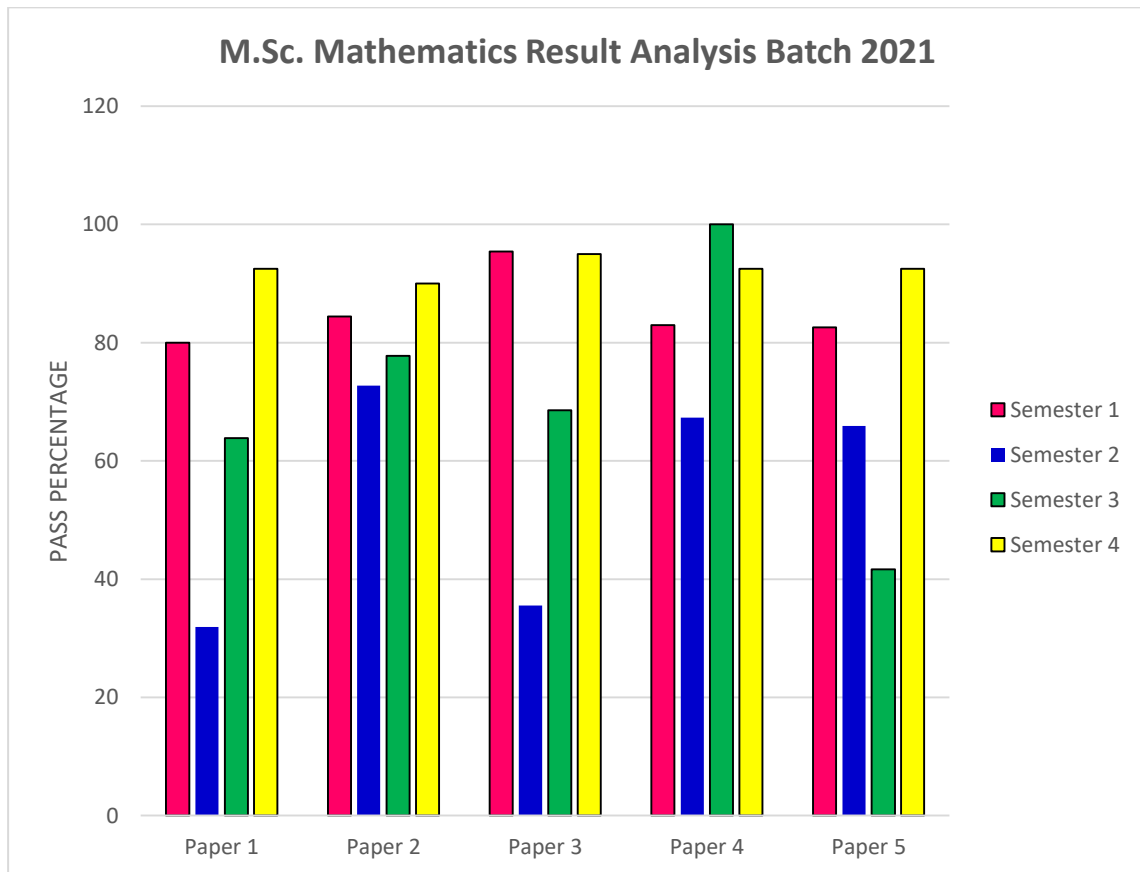
S.NO	Semester 1	Semester2	Semester3	Semester 4
Paper	Pass %	Pass %	Pass %	Pass %
Paper 1	66.67	98.48	82.05	64.86
Paper 2	95.12	100	82.05	86.49
Paper 3	95.24	88.1	79.49	91.89
Paper 4	100	73.81	82.05	86.49
Paper 5	97.62	100	82.05	82.05



Department of Mathematics and Statistics

M.Sc. Mathematics Result Analysis 2021 Batch

Semester	Semester 1	Semester2	Semester3	Semester 4
Paper	Pass %	Pass %	Pass %	Pass %
Paper 1	80	31.91	63.88	92.5
Paper 2	84.44	72.73	77.78	90
Paper 3	95.45	35.56	68.57	95
Paper 4	82.98	67.35	100	92.5
Paper 5	82.61	65.91	41.67	92.5



Curriculum Enrichment Program:

- Guest / Extension Lectures are arranged by the experts in various fields so that the students enrich their knowledge in the concerned subject
- Conducted a one Month Certificate course on MATH MAGIC, MATLAB, PYTHON
- To focus the students on various topics project works are given
- Training in soft skills, Analytical skills through TSKC 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

Teaching – Learning Process:

As part of the teaching-learning process the department has adopted the following teaching Methodologies in addition to Lecture method to improve the student learning.

- Experiential and Participative Learning
- Flipped Classroom
- Visualization
- Problem solving
- Technology based learning

Student Centric Activities

- Student Seminars and Assignments
- Student Projects
- Field Trip
- Group discussion
- Mathematics quiz
- Remedial classes for slow learners

Evaluation Process:

- Continuous evaluation of the students is done by
- Conducting Internals
- Conducting Assignments
- Semester End Examinations
- Academic Audit

DEPARTMENTAL ACTIVITIES
From the Academic Year 2018 - 23

S.No.	Date	Title of the Activity	Details of the Resource Person (Name, Designation etc.)	No. of Students Participated
1	01-09-2018 to 20-09-2018	Civil Services Coaching	Dr.V.Padma Anuradha Assistant Professor	<u>150</u>
2	22-12-2018	Ramanujan's Birthday Celebrations	Prof.K. Satyanarayana Professor of Mathematics OU , Hyderabad	<u>140</u>
3	27-03-2019	Career Guidance	Dr. K.Venkateshwar Associate Professor, GDC, Vidyanagar, Hyderabad.	<u>60</u>
4	29-01-2020	Math Magic	E.Chandraiah , Lecturer in Magic Department of Folk Telugu University, Hyderabad	<u>178</u>
5	06-02-2020	Role of Statistic in Data Sciences	Dr. D.V. Ramana, Data Scientist, Wissen Infotech, Hyd	<u>121</u>
6	14-05-2020	Applications of Numerical Methods	B.Rajesh, Assistant Prof of Mathematics IIIT, Nuziveedu.	<u>64</u>
7	17-07-2020	introduction to Data science and its scope	Prasuna, Data Scientist and Freelance corporate Trainer	<u>88</u>
8	22-12-2020	A popular talk on Ramunujan	Prof.K.Satyanarayana Retired Professor, OU	<u>75</u>
9	05-03-2021	Financial Support for Student Progression	Dr.P.BhalBhaskar, Dr.V.Padma Anuradha, Dr.K.Sarada Dr.C.Srinivas Reddy, K.M.Swarna Latha, T.Vedavathi	<u>9</u>
10	03-9-2021	Donation of Books to Library	Dr.P.Bala Bhaskar Dr.Ravi chegoni T.Vedavathi Dr.J.Neeraja Dr.K.Sarada Dr.V.Padma Anuradha Dr.C.Srinivas Reddy	<u>8</u>

11	1-11-2021 to 1-2-2022	IIT Jam coaching for Mathematics and Statistics	Dr.K.Sarada B.Rajesh D.Suresh Venkata Krishna	80
12	22-12-2021	Extension Lecture On Contribution of Ramanujan in Number theory	Dr.K. Sarada Former Principal Reddy Women's College	200
13	08-07-2022	Distribution of Sarees and vitamin supplements to Contingent staff	Dr.P.Bala Bhaskar Dr.K.Sarada	25
14	24-11-2022	Webinar on Python Certificate Course	CH.M.V.Naidu, Assistant Professor, IIIT, NUZIVEDU	100
15	12-01-2023	Distribution of Sarees to the Contingent Staff	K.M.Swarna Latha	15
16	24-3-2023	Carrier Opportunities in Statistics	Ankamma Rao Lecturer in Statistics, Spoorthy Degree College, Hyderabad	80
17	02-05-2023	Extension Lecture on Guidance to Higher studies and career opportunities in Mathematics.	Dr.S.Upendhar, Associate Professor, Tara College, Sangareddy.	80
18	27-12-2023	Distribution of Sarees to Contingent staff	T.Vedavathi	15
19	28-12-2023	Donation of books to the Library	Dr.K.Sarada	15
20	20-01-2024	Embark on a Promising Journey after B.Sc (Mathematics)	Prof. V. Dhana Lakshmi BOS Chairperson, Osmania University	100
21	20-01-2024	Relationship between Ethics and Philosophy	Professor M. Sudhakar. Osmania University	80
22	01-03-2024	Remote Sensing for Societal Benefits	Dr. N. Aparna, Deputy Director,ISRO.	201

STUDENT ACTIVITIES

S.No.	Date	Name of the Activity Title of the Activity	Details of the Organizing Teacher	No. of students participated
1	02-07-2020 to 07-07-2020	National Level Online Math Quiz 2K20	Dr.K. Sarada ,Assistant Professor of Mathematics, Govt City College	591
2.	9-3-2021	Orientation Program For I year Students	Dr.V.Padma Anuradha, Dr.K.Sarada Dr.C.Srinivas Reddy,K.M.Swarna Latha, ,Jayadev Rathod	120
3.	12-11-2021	Field Trip to SP Accure Labs	Dr.K.Sarada T.Vedavathi KM.Swarna Latha	25
4.	13-21 December 2021	Math Fest 1.Essaywriting 2.Just a minute,3.Poster Presentation 4.Quiz 5.Math Icon test	Dr.J.Neeraja Dr.V.Padma anuradha Dr.Srinivas Dusi T.Vedavathi Dr.C.Srinivas reddy KM.Swarna Latha	267
5.	17-6-2022	Field trip to IIT Hyderabad	Dr.C.Srinavas reddy Dr.K.Sarada KM.Swarna Latha	8
6.	2-7-2022	Haritha Haram	Dr.P.Bala Bhaskar, Dr.J.Neeraja, Dr.K.Sarada, T.Vedavathi and Faculty , Students of Mathematics department	30
7.	11-7-2022	Swatch Bharat	Dr.J.Ratna Prabhakar Dr.JVN.Mallikarjun Dr.Jaya kagada and NCC students, Faculty of Department of Mathematics and Statistics	50
8.	8-7-2023	Free Online Mock Test on TS-CPGET	B.Rajesh Dr.K.Sarada	169
9.	10-9-2023	Free online mock test on TSPSC-JL Examinations	B.Rajesh Dr.K.Sarada	280

STUDENT SUPPORT: ↪

- ❖ Majority of the students are covered under scholarship scheme by the state government.
- ❖ Financial support to Under privileged students to study Post Graduation in reputed institutes
- ❖ The students are provided with sets of previous year's question papers
- ❖ Students are given Library books for all the subjects, which aids in their learning process.
- ❖ Providing study material to the students.
- ❖ Soft skills, Communication skills, Analytical skills through TSKC
- ❖ Concessional bus pass and train pass facility
- ❖ IIT JAM coaching

STUDENT PROGRESSION

Student progression in Higher education and placements

Academic Year	Number of Students
2018-19	<u>25</u>
2019-20	<u>16</u>
2020-21	<u>29</u>
2021-22	<u>17</u>
2022-23	<u>68</u>

BEST PRACTICES:

- ❖ **Best Practice I:** Celebrating Srinivasa Ramanujan Birthday on December 22 every year
- ❖ **Best Practice II:** IIT JAM Coaching
- ❖ **Best Practice III :** Faculty Support and Outreach Initiative

FUTURE PLAN OF THE DEPARTMENT

- ❖ To organize a National level seminar.
- ❖ To apply for Research Project.
- ❖ To Establish a Computer Lab to conduct certificate courses in MATH LAB, Python and conduct Practical's for M.sc Applied statistics students
- ❖ Invite eminent scientists and industry experts for guest lectures.
- ❖ Field trip.