<u>DEPARTMENT OF MATHEMATICS & STATISTICS</u> <u>REPORT 2020 – 2021</u>

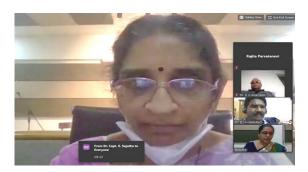
Extra Curricular & cocurricular activities assigned to the faculty in Department of Mathematics (2020-21) $\,$

Name	Designation	Activity Assigned		
Ms.S.Nagadurga	Lecturer &	Head of the Department		
	HOD	Placement Member in REDC		
		Member in Theresian Alumnae		
		Association.		
		Convener Boards of Studies of		
		Mathematics		
Mr.V.Gopinath	Lecturer	Placement member		
		Member of Boards of Studies of		
		Meeting		
		Course Co – Ordinator of Analytical		
		Skills		
Mrs.A.Jyothi	Lecturer	Member in Theresian Alumnae		
		Association.		
Mrs.G.Jyothi	Lecturer	Mentor for Analytical Skills		
Mrs.P.Poojitha	Lecturer	Member in Theresian Alumnae		
		Association		
		NSS Program Officer		
		Mentor for analytical Skills		
Ms.R.Sravani	Lecturer	Mentor for analytical Skills		
Mrs .P.Rajita	Lecturer	Mentor for analytical Skills		
Mrs. G. Kusuma	Lecturer	Mentor for analytical Skills		
Ms. B.V. Sai	Lecturer	Secretary of the Department		
Lakshmi		Mentor for Analytical Skills		

Mrs. K. Harika	Lecturer	Mentor for Analytical Skills

Due to the occurrence of Covid – 19 pandemic, it is inevitable for the World to transform itself in order to face new challenges. It is the need of the hour to face several changes in the educational sector. The pervasive situation of Covid -19 gave us an opportunity to conduct webinars through online. Even in the very crucial period, Head of the Department of Mathematics and Statistics, Dr. K.L.Saraswathi Devi Madam took an initiative to conduct a Webinar titled "The role of Personnel and Technology in higher education Post Covid – 19. With the coordination of members of the Department of Mathematics and Statistics, the Webinar was successfully conducted on 1st and 2nd June 2020.

Due to the occurrence of Covid – 19 pandemic, it is inevitable for the World to transform itself in order to face new challenges. It is the need of the hour to face several changes in the educational sector. The pervasive situation of Covid -19 gave us an opportunity to conduct webinars through online. Even in the very crucial period, Head of the Department of Mathematics and Statistics, Dr. K.L.Saraswathi Devi Madam took an initiative to conduct a Webinar titled "The role of Personnel and Technology in higher education Post Covid – 19. With the coordination of members of the Department of Mathematics and Statistics, the Webinar was successfully conducted on 1st and 2nd June 2020.



On 5th June 2020, under the guidance of Head of the Department of Mathematics and Statistics and Placement officer Dr. K.L.Saraswathi Devi Madam, another Webinar titled "Students – Skills – fit for work and fit for life Post Covid – 19" was planned and executed successfully.

On 21st June 2020, Mrs. P.Poojitha of Department of Mathematics and Statistics participated in the virtual celebrations of "International Yoga Day" as NSS Program officer.



On 29th June 2020, National Statistics day was celebrated on the eve of birth anniversary "Professor Prasanta Chandra Mahalanobis" who was known as "Father of Statistics". As a part of National Statistics day celebrations, Department of Mathematics and Statistics conducted online quiz on "Basics of Statistics" through Google forms, which consists of 20 Multiple Choice Questions where each question carries 5 marks. Around 300 members participated in the quiz and finally certificates were issued to 100 members those who scored 35% of marks.

"Success is the result of continuous hard work, determination and dedication towards work". These words are exactly suitable for our Head of the Department of Mathematics and Statistics Dr.K.L.Saraswathi Devi Madam. She always guides, motivate and inspire every one through her valuable words and actions. On 30th June 2020, she completed her 20 years of fruitful service in this prestigious institution and achieved the stage of superannuation. All the members of the Management, members of the Department of Mathematics and Statistics, all the teaching and non teaching staff honored Madam with affectionate words and



felicitations.



On 27^{th} July 2020, Department of Mathematics and Statistics conducted online survey titled "Survey on Covid -19" to access the awareness of Covid -19 disease and related infection control practices among people.

Due to the Pandemic situation of Covid-19, it was decided to celebrate Independence day virtually in our College. All the ward tutors in the Department of Mathematics and Statistics motivated students to came out with their innovative ideas. With proper planning and implementation, the celebration of 74^{th} Independence day became grand success on 15^{th} August 2020.





On 17th August 2020, with new hopes and aspirations Department of Mathematics and Statistics took a new dimension under the headship of Mrs.S. Naga Durga Madam. All the members of the Department congratulated Madam on her achievement.

On 18th August2020, as a part of the celebrations of the event "Jagananna Pacha Thoranam" which was announced by the Government, plantation was done in the College campus. From the Department of Mathematics and Statistics, Head of the department Mrs.S.Naga



Durga Madam and NSS Program Officer Mrs.P.Poojitha Madam took part in the Plantation program.





Due to the outbreak of Covid – 19 pandemic, it is the need of the hour for all the teaching faculty to redefine their teaching, learning strategies and to create active learning environment. On 28th August 2020, Respected Principal Dr. Sr.MariettaD'melloinaugurated the new Academic year 2020-21 with online classes. All the members of the Department of Mathematics and Statistics created Google class rooms and started online classes for second and final year students.

Online Materials (Video Lessons) created by the Department of Mathematics and Statistics:

Members of the Department of Mathematics and Statistics prepared video lessons for the second and final year B.Sc students and uploaded in Youtube. After that created Google classroom for each section individually and links of video lessons shared in Google classroom.

Name of the Lecturer	Created Video Lessons
Mrs. S.Naga Durga	13
Mr. V.Gopinath	18
Mrs. A.Jyothi	05
Mrs.G.Jyothi	05
Mrs. P.Poojitha	08
Mrs. P.Rajita	04
Ms. B.Venkata Sai Lakshmi	05
Mrs. K.Harika	04
Mrs. G.Kusuma	10
Mrs. R.Sravani	10

On 28th August 2020, Mr.V.Gopinath Sir attended Boards of Studies meeting as a Subject expert which was conducted by St.Joseph College for Women (A), Visakhapatnam through Google meet.

On 16th September 2020, Mrs. P.Poojitha, lecturer in Mathematics attended a webinar on "Creating Awareness about National Education Policy, 2020 through NSS/ NCC/ NYKS/ UBA Volunteers" which was organized by Ministry of Defence, Ministry of Education and Ministry of Youth Affairs and Sports as a part of Shikshakparv.

On 19th September 2020, Mrs. P.Poojitha, lecturer in Mathematics attended a workshop on "Resurgence Planning for academic continuity (NEP – 2020)" virtually through Youtube, which was organized by National Service Scheme (NSS), AdikaviNannaya University, Rajamahendravaram.



On 2nd October 2020, at 9:00 am, Mrs. P.Poojitha, Lecturer in Mathematics and NSS Program Officer attended a Virtual talk on "Gandhian Principles and ideology" through Zoom, which was organized by the Department of National Service Scheme (NSS), Ch.S.D.St.Theresa's College for Women (A), Eluru on the eve of 150th Birthday celebrations of Gandhiji.

On 2nd October 2020, at 11:00 am, on the eve of 150th Birthday celebrations of Gandhiji, Mrs. P.Poojitha, Lecturer in Mathematics and NSS Program Officer attended a Webinar on "Relevance of Gandhianism in today's youth" through Zoom, which was organized by the Department of National Service Scheme (NSS), AdikaviNannaya University, Rajamahendravaram.



On 8th October 2020, Mrs. P.Poojitha, Lecturer in Mathematics and NSS Program Officer attended "Covid -19 prevention Pledge" through Zoom, which was organized by the Department of National Service Scheme (NSS), AdikaviNannaya University, Rajamahendravaram.



Mrs.S.Naga Durga, Head of the Department of Mathematics and Statistics and Mrs.P.Poojitha, Lecturer in Mathematics and NSS Program Officer took part in "Covid -19 prevention Pledge" on 16th October 2020 which was conducted in the college campus by the Department of NSS.

Mrs. A. SreeLekha newly appointed as Assistant Professor in Mathematics in the Department of Mathematics and Statistics in the Month of October.

Ms. V. Sai Lalitha newly appointed as Assistant Professor in Mathematics in the Department of Mathematics and Statistics in the Month of November.

After Lockdown, on 2^{nd} November 2020, College was reopened for all the staff and 2^{nd} and 3^{rd} year Degree Students.

From 2nd to 5th November 2020, III and V Semester Periodical examinations were conducted for all the second and final year Degree students.

From 6th November 2020 onwards members of the Department of Mathematics and Statistics started offline Practical classes and online theory

classes at alternative days for their concerned II and III year B.Sc Students as planned earlier.

Ms.V.Sai Lalitha and Mrs.R.Sravani from the Department of Mathematics and Statistics took active role in conducting Library Week Celebrations which were organized by the Department of Library Science from 14th to 21st November 2020.









On 26th November 2020, Mrs. P.Poojitha, Lecturer in Mathematics and NSS Program Officer attended "Virtual Constitution Day Celebrations" through Zoom which were organized by the Department of NSS, AdikaviNannaya University, Rajamahendravaram.



Members of the Department of Mathematics and Statistics attended Virtual Hands-on Training Programme on "Artificial Intelligence with Data Science" which was organized by the EXCELR Solutions, USA from 4th to 30th November 2020.

From 25th to 30th November 2020, members of the Department of Mathematics and Statistics attended online Internship Program on "Digital Marketing" which was organized by the Department of Computer Science, Ch.S.D.St.Theresa's College for Women (A), Eluru in association with Spectrum Solutions, Pondicherry.

From 30th November 2020 to 5th December 2020, members of the Department of Mathematics and Statistics attended online Internship Program on "MATLAB – A Mathematical Tool for Advanced Mathematical Calculations" which was organized by the Department of Mathematics, Ch.S.D.St.Theresa's College for Women (A), Eluru.The Resource person was Dr. K. Srinivasa Rao, Professor and Head, Department of Mathematics, Sri Chandrasekharendra Saraswathi ViswaMahavidyalaya, Tamilnadu.All the members were benefitted and gained knowledge through this program.

Results of even Semesters II, IV & VI for the academic year 2019 -20 were released. The obtained results are as follows.

From the Department of Mathematics and Statistics, Mrs. P.Rajita, Ms. B.V.Sai Lakshmi, Mrs.K.Harika,Mrs. A.SreeLekha, Ms.V.Sai Lalitha, Ms. K.Madhavi and Ms. G.Kusuma attended Orientation program titled "Professional

Ethics and Etiquette in Teaching" on 1st December 2020, which was arranged for all the new recruits and Junior faculty.



On 1st December 2020, Mrs.P.Poojitha, Lecturer in Mathematics and NSS Program Officer took part in rally along with the NSS Students as a part of World AIDS Day. In that rally, all the participants held placards to create awareness among people to prevent AIDS disease.



On 2^{nd} December 2020, Department of Mathematics virtually Inaugurated the Mathematics Association – Knowledgefor the academic year 2020 - 2021. All the Second and final year B.Sc Mathematics Combination students attended the Program. Mrs.S.Naga Durga, Head of the Department of Mathematics and Statistics explained about the Aims and Objectives of the Association. For the academic year 2020 - 21, the following members are elected as:

Post	Student Name	Group
President	Ms. Jahirunnisa Begum	III B.ScM.P.Computers

Secretary	Ms. Ch.Ramya	II B.ScM.P.Computers
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College was opened and classes were started for all the 1st year Degree Students on 4th December 2020.

All members of the Department of Mathematics & Statistics joyfully attended the Virtual Alumnae meet on 12th December 2020 through Google meet. The meet became very colorful and cheerful with the affectionate get together of all the Theresian family members. All the members felt very happy as they met their dear ones. They shared their sweet memories with one another and recollected the strong bond with the prestigious institution.

On 15th December 2020 Mrs.P.Poojitha, Lecturer in Mathematics and NSS Program Officer attended an awareness program on "Cancer Prevention and Healthy Life style" virtually through Zoom which wasorganized by the NSS unit

Andhra

of AdikaviNannaya Pradesh.



From 14th to23rd December 2020, III and V Semester end Practical examinations were conducted for all the second and final year Degree students.

Mrs.S.Naga Durga, Head of the Department of Mathematics and Statistics attended 68th Union Inaugural Ceremony on 19th December 2020. Mrs. E.Rajya LakshmiGaru, Former Head and Additional Controller of Examinations was Chief guest for the ceremony. A felicitation was organized by the members of the management, Heads of various Departments and Home Department to honor her dedicated service towards this prestigious institution.



On the eve of 133rd Birth Anniversary of great Indian MathematicianSrinivasa Ramanujan on 22nd December, Department of Mathematics Organized National Mathematics Day Celebrations from 22nd to 31st December 2020. As a part of it, Various Competitions were conducted for all the students such as Poster Presentation, Essay Writing and Quiz through Online.

On 30th December 2020 Mrs.S.Naga Durga, Head of the Department of Mathematics and Statistics and Mrs.P.Poojitha, Lecturer in Mathematics and NSS Program Officer took part Mrin "Joy of giving celebrations" which were arranged in the college campusfor the school children residing in the adopted village by the Department of NSS. As a part of it, various games were conducted for those children. After that they were served with delicious lunch and finally new garments were distributed. About 50 children were benefitted through this program. All the children felt very happy and they enjoyed the Christmas celebrations.





From 28th December 2020to 8th January 2021, III and V Semester end theory examinations were conducted for all the second and final year Degree students.

On 8th January 2021, members of the Department of Mathematics and Statistics attended LMS training program. The training was given by Shariff Sir to all the faculty members in the college campus.





To develop Application oriented learning, Research skills, Logical thinking and Confidence in the Students, Project Work is introduced as a part of Curriculum. In the present Academic year 2020 - 21,54 students are opt to do the Project work in Mathematics and 10 students are opt to do the Project work in Statistics. These students are divided into groups and guided by the faculty members in collecting the relevant information for the selected topics, in interpreting the concept and in presentation of the results.On 9th January 2021, Project viva was conducted under the supervision of 3 Practical boards where each practical board consists of two subject experts. Students successfully submitted their project works to the concerned subject experts.









The details of the submitted projects are as follows.

S.N	Title of the Project / Subject	Name of the Project	Names of Students who
0		Guide	did the Project
1	Applications of Linea Algebra (Mathematics)	r Mrs.S.Naga Durga	L. Kavitha 181250 T.B.V.Priyanka 181251 Y. Lavanya 181252 P. Venkata Ramana

			D.Naga Sai Sri Ramya 181254 P. Sri Venkateswari 181255
2	Matrices and its Applications (Mathematics)	Mr.V.Gopinath	B. Amulya 181256 T.Sailaja 181257 Y. Naga Rani Mounika 181258 M. Pavani Ramya Sri 181259 K. Sai Prasanna 181260 G. Teja Sri 171235 P. Poorna Prathibha 171254
3	Mathematics of Design (Mathematics)	Mrs.A.Gyothi	K.Chaitanya Sravani 181242 Sk. Nagulbhee 181243 D. Mavya Sri 181246 Sk. Haneema 181247

			P. Sneha Latha 181248 S. Lokeswari 181249
4	Numerical Weather Prediction (Mathematics)	Mrs.P.Poojitha	T. Prasanna Latha 181226 Ch. Kezia 181227 G. Chandrika 181228 L.Naga Lakshmi 181229 M. Naga Rani 181230
5	Role of Mathematics in Number theory (Mathematics)	Mrs.G.Gyothi	B.Yamuna 181231 Ch. Pavani 181232 R. Megha Vardhini 181233 D. Mounika 181234 G. Pravallika 181235
6	Applications of Set theory (Mathematics)	Mrs.P.Rajita	D. Durga Bhavani 181236 P. Kavya 181237 P. Meghana 181238 G. Geethanjali 181239 G. Purnima 181240

			G. Indu sri 181241
7	Applications of Graph theory in Real World (Mathematics)	Ms.B.V.Sai lakshmi	S. Sai Tulasi 181220 P. Aparna 181222 P. Sahitya 181224 G. Kusuma 181225
8	Travelling Salesman Problem by using Operation Research (Mathematics)	Mrs. M.Durga Devi	V. S. Priya Darshini 181521 K. Jhaneswari 181522 K. Sowmya Sri 181528 J. Sravanthi 181530
9	Shortest path in Public transport (Mathematics)	Mrs. M.Durga Devi	J. Chandana 181520 S. Bhavani 181523 L.S.Pravallika 181524 P. Mani Deepika 181531
10	Applications of Differential equations in our daily life (Mathematics)	Ms. V.Sai Lalitha	Md. Asrah Jabeen 181516 Ch. Teja Sri 181517 A. Renuka 181518

			P. Thriveni 181519 G.N.D.Mallika 181256 K. Harika 181527 G.P.Manjusha 181529
11	A Study on Social media users (Statistics)	Mrs. R.Sravani	Ch. Vasanthi 180903 S. Karuna Kumari 180904 G.E.Sherly 180905 B. Naga Valli 180908 K. Divya 180910
12	An analysis on the effect of crude oil price on Exchange rate of INR against USD (Statistics)	Mrs. G.Kusuma	G. Swetha Sree 180900 S.R.S.D.N.V. Lakshmi 180902 G. Rupa Sree 180906 R. Jaya Sri 180907 D. Anusha 180909

From 11th January 2021 onwards IV and VI Semester classes were started for all the second and final year Degree Students.

Members of the Department of Mathematics and Statistics joyfully took part in "Sankranthi Sambaralu" which were organized in the College campus on 12th January 2021. Sri Bandaru Kiran Kumar Garu, Ex – Corporator and Floor Leader was the Chief Guest for the program.





On 26th January 2021, all the members of the Department took part in Republic day celebrations which were organized in the college campus.





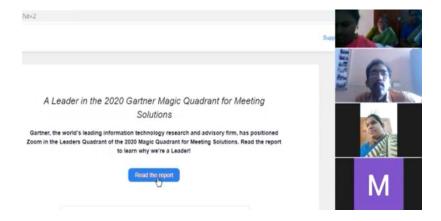




All the members of the Department of Mathematics and Statistics took part in "68th College Day –Sesquicentennial Celebration" on 19th February 2021. Dr. Mrs. P.Subba Lakshmi, Inner Wheel District Chairperson, Former HOD, Department of Physics and Electronics was the Chief Guest and Rev.Fr.Ravi Thanaiah Marineni was the Guest Honor for the Program.

From 22nd to 25th February 2021, I Periodical Exams of I, IV, VI Semesters were conducted for all the I, II & III year Degree students.

On 23rd February 2021, a Virtual BOS meeting was organized by the Department of Mathematics and Statistics through the Zoom platform for the approval of UG Statistics syllabus for the academic year 2021 – 22. In the meeting, there was a thorough discussion about the design of curriculum, setting of Question papers, evaluation pattern, student projects and Assignments. Dr. N. Madhavi, University Nominee, Government Degree College, Rajahmundry; Mr. K. Ashok, Head of the Department of Statistics, P.R. Government College, Kakinada; Dr. D. Madhu Malathi, Head of the Department of PG Economics; Mrs. S. Naga Durga, Head of the Department of Mathematics and Statistics; Mrs G. Kusuma, Assistant Professor in Statistics and Mrs R. Sravani, Assistant Professor in Statistics from Ch.S.D.St.Theresa's College for Women (A), Eluru were attended the meeting.

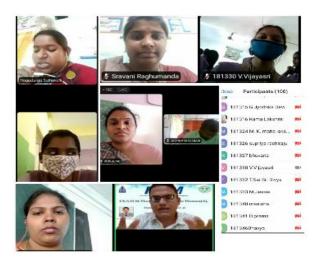


On 24th February 2021, a Virtual BOS meeting was organized by the Department of Mathematics and Statistics through the Zoom platform for the approval of UG Mathematics syllabus for the academic year 2021 – 22. In the meeting, there was a thorough discussion about the design of curriculum, APSCHE Syllabus, setting of Question papers, evaluation pattern, student projects and Assignments.Mr.P.N.V.Prasad Rao, University Nominee, Senior Lecturer in Mathematics, Sir C.R.Reddy College, Eluru; Mr. V. Hari Krishna, Head of the Department of Mathematics, Government Degree College, Eluru; Mrs. S. Naga Durga, Head of the Department of Mathematics and Statistics; Mr.V.Gopinath, Senior Lecturer in Mathematics; all the faculty members of the Department of Mathematics from Ch.S.D.St.Theresa's College for Women (A), Eluru and Student

Representative V.Sai Mallika from III B.Sc M.S.Computers were present for the meeting.

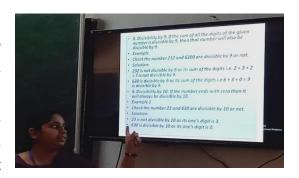


On 1st March 2021, Department of Mathematics and Statistics organized a Webinar titled 'A Career in Actuarial Science' in collaboration with Institute of Insurance and Risk Management (IIRM), Hyderabad. All the members of the Department and final year Mathematics students attended the Webinar. In the Webinar, students were enlightened about the variety of opportunities in pursuing one-year Diploma courses in Actuarial Science after the completion of Under graduate course.



Members of the Department of Mathematics and Statistics inculcated Moral values among the students during Morning assembly from 5th to 25th March 2021.

Mathematics club (THE KNOWLEDGE) activity was conducted on 6th March 2021. As a part of it, II B.Sc MPC Students gave Power point Presentation on the topic "Math Magic Tricks with Numbers". About 60 students were present and gained knowledge through this program.







On 7th March 2021, on the occasion of International Women's Day Celebrations, Mrs.P.Poojitha, Lecturer in Mathematics and NSS Program Officer participated in the "Candle Rally" along with all the NSS Students which was jointly organized by all the schools, Colleges and Police Department.





On 10th March 2021, Members of the Department of Mathematics & Statistics and final year Mathematics students attended the Webinar titled 'Career Counselling on Actuarial Science and Analytics' which was organized by the Institute of Insurance and Risk Management (IIRM), Hyderabad. In the Webinar, it was explained about variety of opportunities in pursuing Master's Degree in Actuarial Science after the completion of Under graduate course.



From 13th to 17th March 2021, II Periodical Exams of I, IV, VI Semesters were conducted for all the I, II & III year Degree students.

On 22nd March 2021, Mrs.P.Poojitha, Lecturer in Mathematics and NSS Program Officer participated in "World Water Day awareness Program" along with all the NSS Students which was organized by the Department of NSS in the College campus.

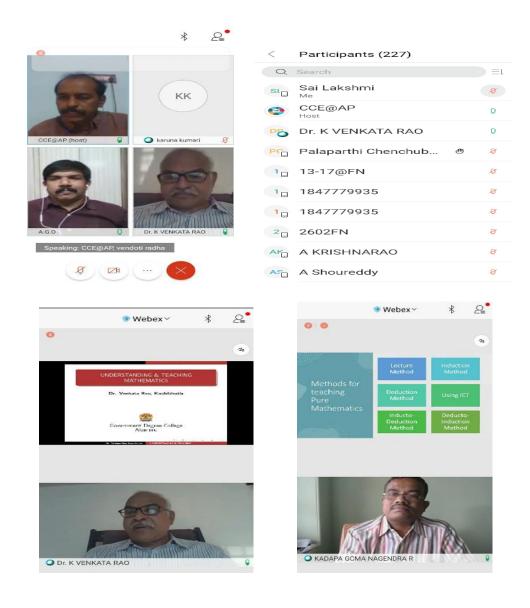




From 29th March to 9th April 2021, I Semester end Exams were conducted for all the first year Degree students.

On 9th April 2021, Members of the Department of Mathematics & Statistics attended a short meeting on "Functioning of Latest Software by Linways Technologies" which will be used for the Administrative purpose.

On 11th April 2021, from 3:45 to 6pm, Members of the Department of Mathematics & Statistics attended Online Workshop on 'Innovative Pedagogy for Mathematics Teachers'through the platform Cisco Webex which was organized by the Commissionerate of Collegiate Education (CCE), Andhra Pradesh, Vijayawada. Dr. K.Venkata Rao, Principal, Government Degree College, Alamuru and Dr. S. Nagendra, Lecturer in Mathematics, Government Degree College, Kadapa were the Resource Persons for the Work Shop. In the Workshop, they gave their presentations on the topics "Effective Pedagogy for understanding and Teaching Mathematics" & "Teaching Pedagogy for topics in Pure Mathematics" respectively.



The Academic Plan of the Department for the Year 2021-22

Month	Activity	Week/Date	Topic
June	Review of the Student Projects	2 nd week	Student Projects
	Association		

	Inaugural	3 rd week	
July	Student Seminars- final years	During Club hours	Inner product Space
August	Guest Lectures for I&III	2 nd &3 rd week	Permutations& Combinations ,Linear Differential equations
September	Quiz Competitions in the Subject for I,II&III years	Every Saturday	Differential Equations, Group theory, Vector Space
October			
November	Two day national Workshop	2 nd week	Applications of Difference Calculus
December	National Mathematics Day Celebrations	3 rd week	Activities have to be planned
January	Student Seminars-II year	During Club hours	Monotonic Sequences
February	Focus on Remedial Coaching	Every day From 4pm to 5pm	Corresponding Syllabi