DEPARTMENT OF B. SC. MATHEMATICS, STATISTICS & COMPUTER SCIENCE

DEPARTMENTAL ACTIVITIES REPORT

ACADEMIC YEAR 2020-21

I. National Seminar on "Mathematical modelling -A Comprehensive Approach"

Department of Mathematics, Statistics and Computer science organized a two day online national seminar **"Mathematical modelling -A Comprehensive Approach" on 11th-12th May 2021 from 2pm to 5pm.**

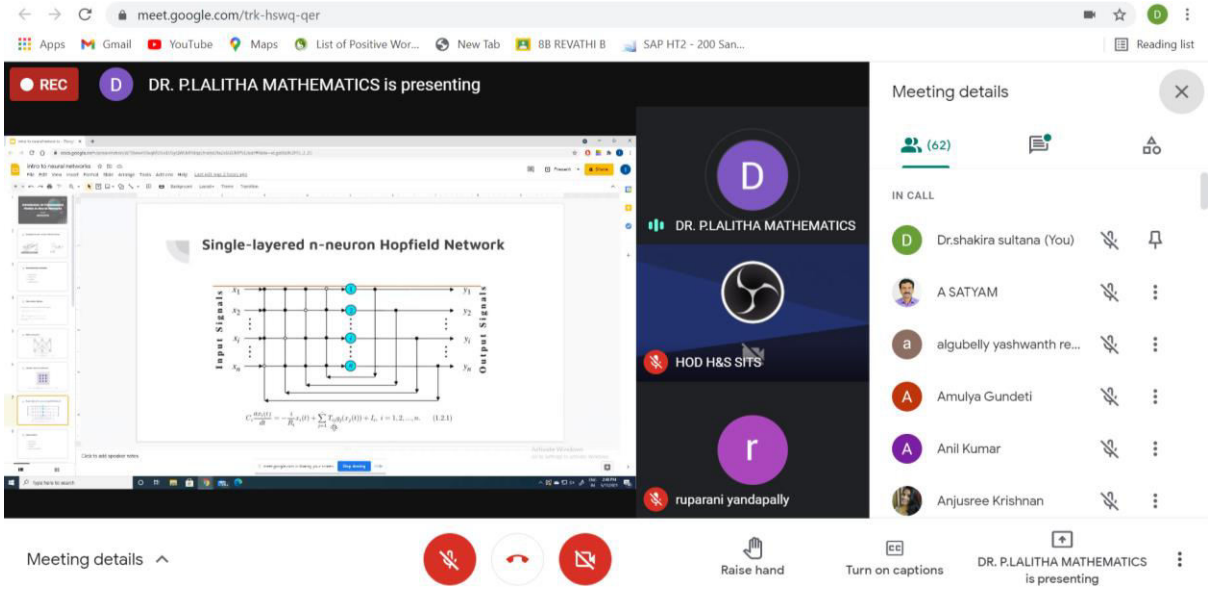
OBJECTIVE

The main objective of Seminar is to comprehend and investigate the application of mathematics. This seminar focuses on all aspects of mathematical modelling, including the development, analysis, refinement, and validation of mathematical models in a wide variety of applications.

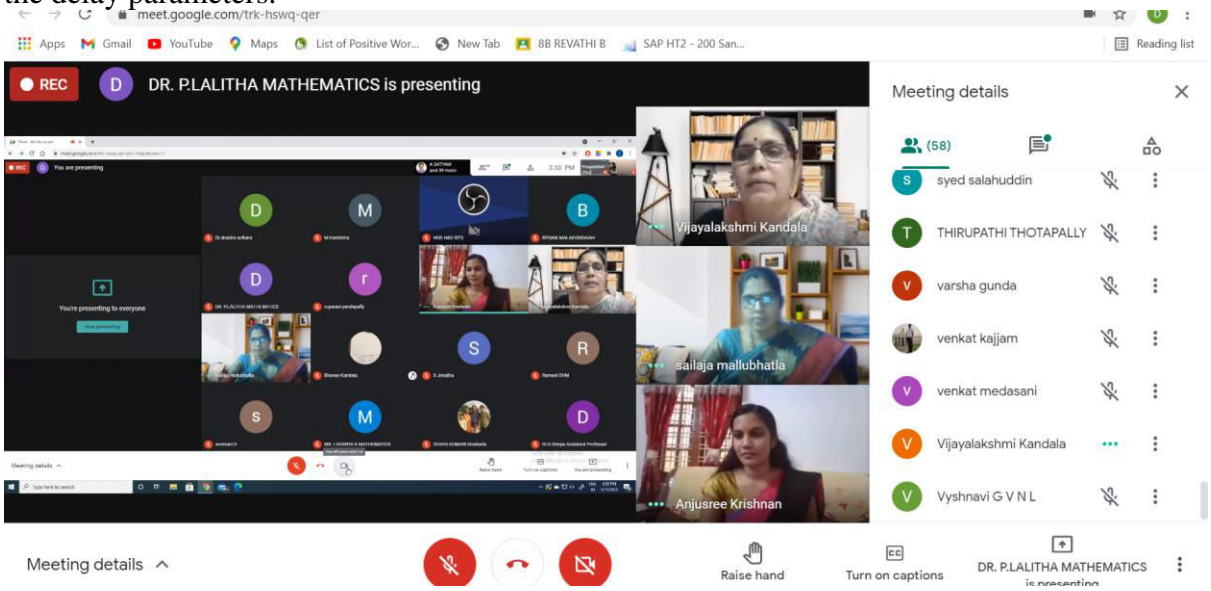
About the Programme:

Mathematical modelling is the art of translating problems from an application area into tractable mathematical formulations whose theoretical and numerical analysis provides insight, answers, and guidance useful for the originating application. This seminar mainly focuses on mathematical modelling in different fields.

DAY-1- Session -1 was addressed by Dr.P. Lalitha garu, Head, Department of Mathematics, St. Francis college for women.

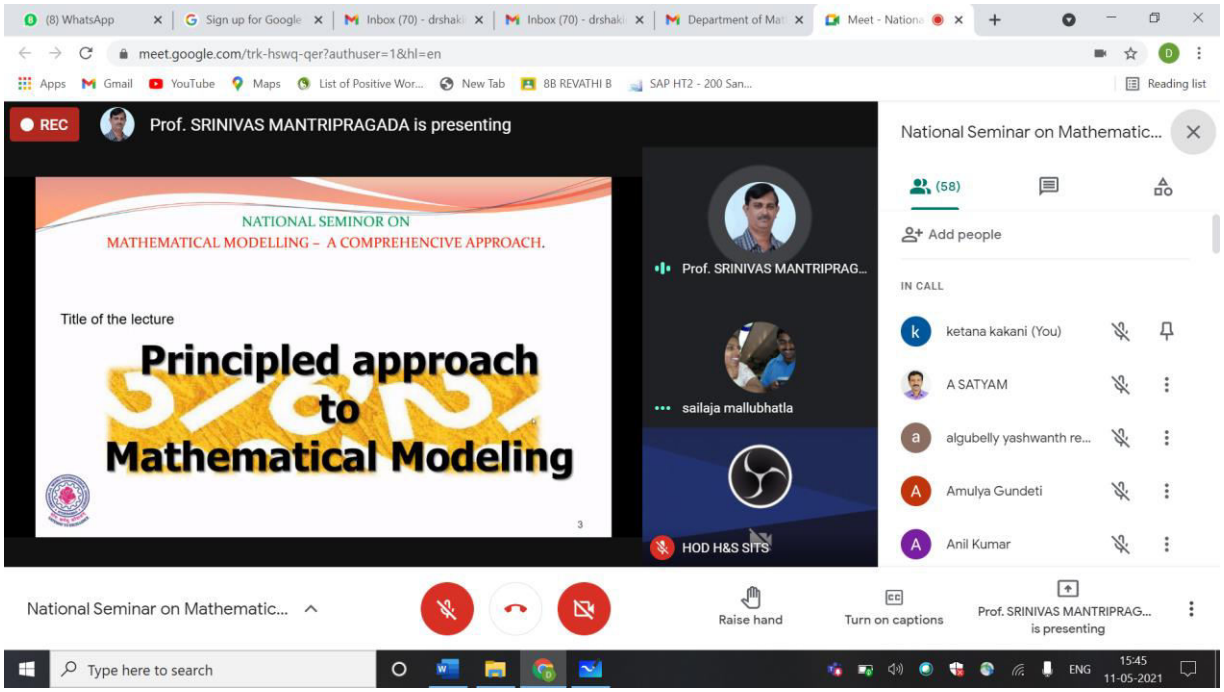


Dr. P. Lalitha has given a brief lecture about Biological and artificial neural networks, CSNN (cooperative and supportive neural networks) with real life examples and Stability based on the delay parameters.



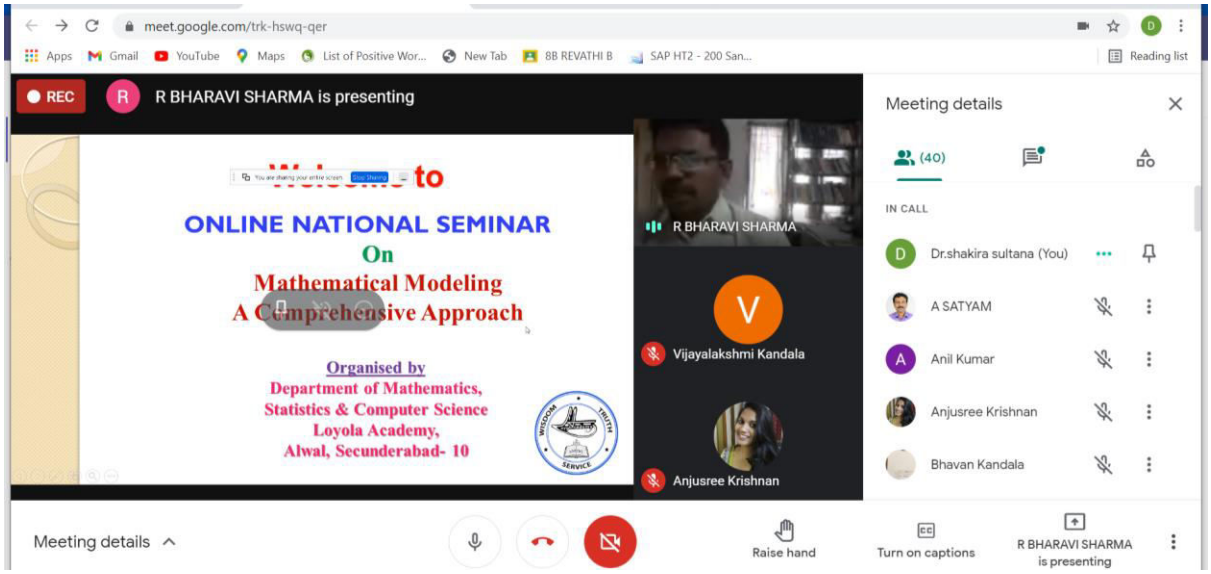
Speaker of Session -II was Prof. M. A. Srinivas, HOD, Department of Mathematics, JNTU, Hyderabad.

Title: Principled approach to Mathematical Modelling"

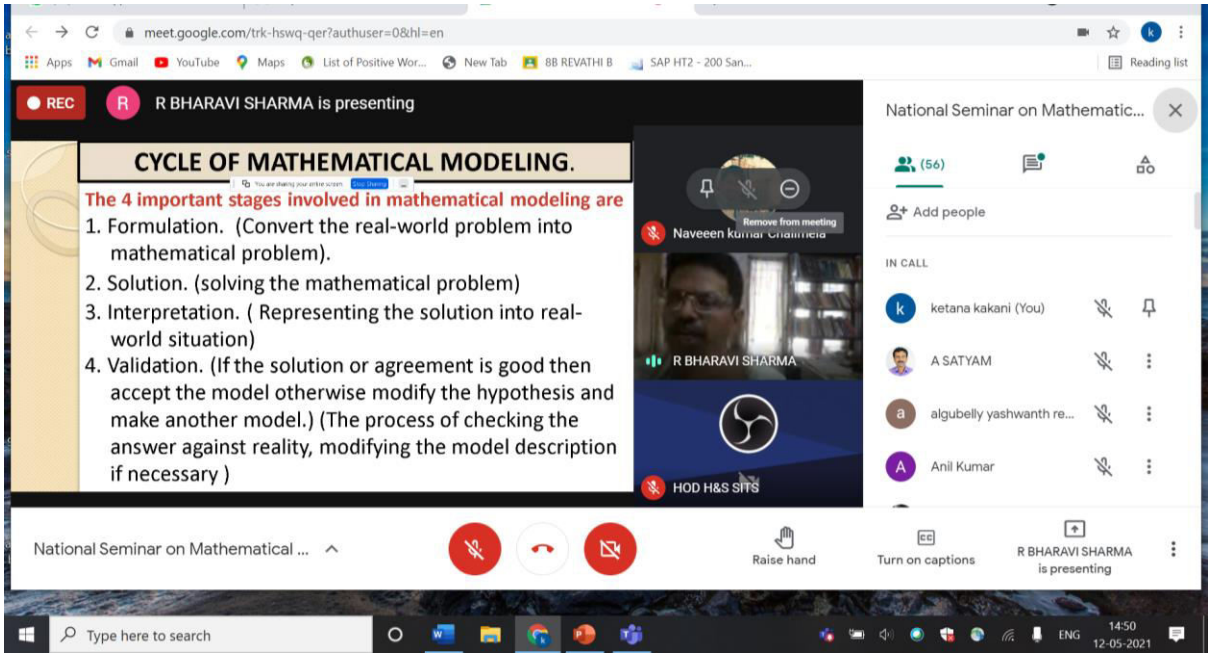


Professor gave clear concepts on Applications of Mathematical Modelling in real world problems like how to protect Fishery resource with optimum Harvesting. Also explained Methods to solve the Mathematical models.

DAY-2-Session-1 was addressed by Prof. Bharavi Sharma , Department of Mathematics, Kakatiya University, Warangal, TS.



Professor has shared comprehensive knowledge on Modelling, Techniques of Mathematical modelling, Cycle of Mathematical modelling. Kruskal's algorithm and mathematical modelling using Graph theory.



Session-2 was carried out by Dr.K.Kavitha, Associate Prof, BVRIT Hyderabad.

Topic: Mathematical modelling in Fourier series

Dr. K. Kavitha has given a presentation on Mathematical modelling in Fourier series also briefed on the role of Fourier transformation in engineering.

118 participants have registered for the seminar. All the sessions during the two day National seminar on "Mathematical modelling - A comprehensive approach" were very informative and participants have taken valuable information by interacting with the speakers.

We have received a very good feedback from the participants. Apart from the pandemic situation the seminar was conducted as a great success.

II. **GUEST LECTURE**: ON "EFFECTIVE PROJECT WRITING AND USAGE OF RESEARCH TOOLS"

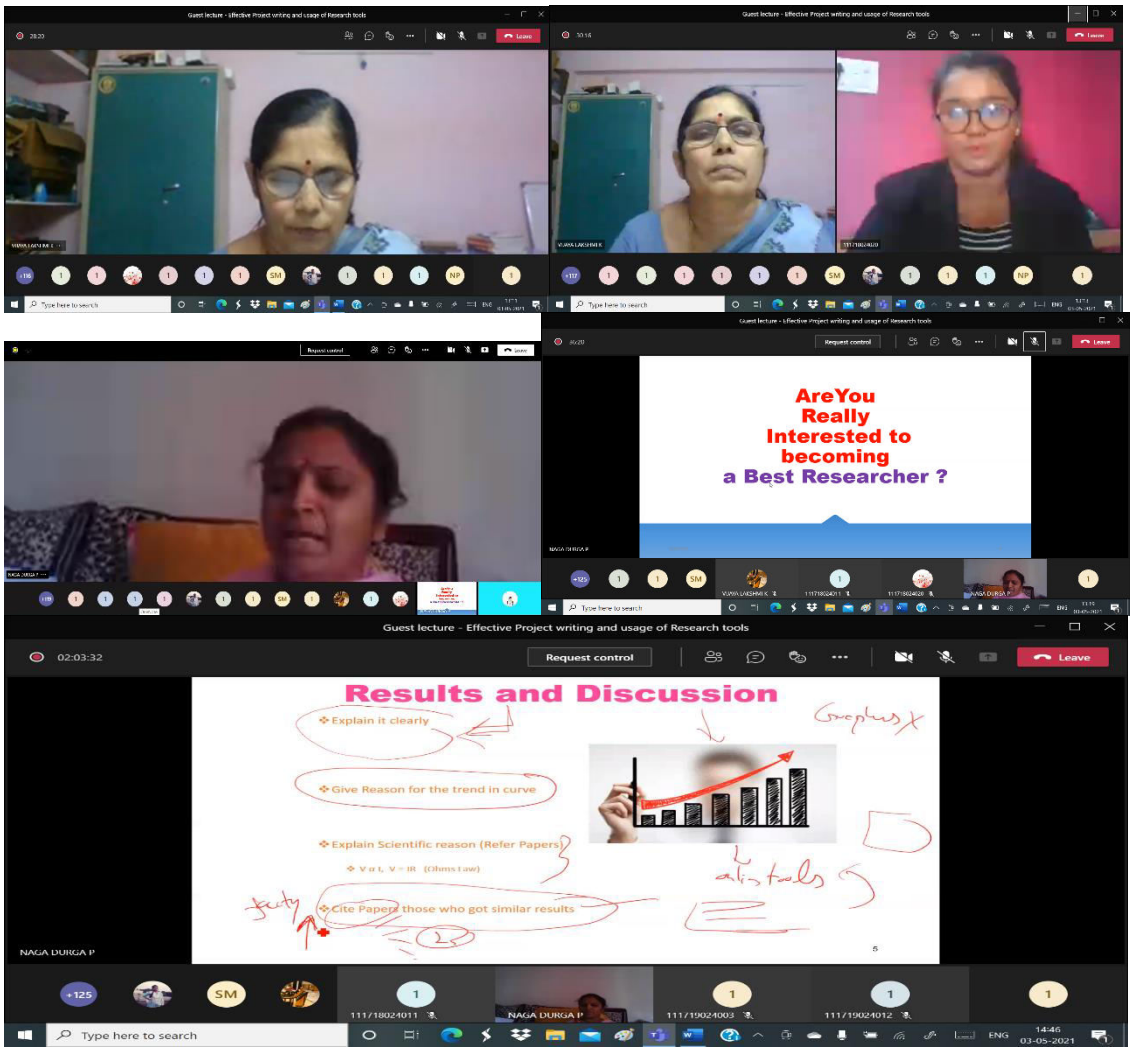
The Department of Mathematics, Statistics and Computer Science, Loyola Academy Degree & PG College organized A Guest Lecture on "**Effective Project Writing and Usage of Research Tools" on** 3rd May 2021 for all the three-year students of B.Sc. (MSCS) which was held online through the Virtual Platform "**Microsoft Teams**", from 1:00 pm to 3:00 pm. The Guest speaker was **Dr. K. Kavita M.Sc., M.Phil.., Ph.D., M. Tech, Associate Professor, Department of Mathematics, BVRIT Hyderabad College of Engineering for Women, Hyderabad.**

The Guest speaker was welcomed by **Dr. K. Vijayalakshmi** Head, Department of mathematics, Loyola Academy and she also emphasized the importance of Project Writing. The master of ceremony for the event was **Joy Joanna (3rd year)** who then took over and requested R Pallavi **(3rd year)** to read out the portfolio of the speaker. The lecture started around 1:20 pm and ended around 3:20 pm. The speaker gave an Introduction about Project Writing. Also, the speaker gave a lot of importance of Idealisation, some basic insights of Project Writing and later she spoke about the Research Tools and how effective they are. The lecture received admiration by the students, and they also found the slides knowledgeable. The speaker also provided few examples related to Project and spoke about Project Papers and Plagiarism. The lecture was very interactive. At the end, the speaker gave useful tools for Project Writing like paraphrasing tool and the topic was discussed deeply. She gave the students an overall insight as to how to go about their projects effectively and in an organised manner.

A total of 135 students were participated in this guest lecture.

After the lecture there was a Question & Answer session, and The Event ended with honorarium to the Guest Speaker and vote of thanks was given by our Head Boy (UG) **Roshan Mathew (3rd year).** Later feedback was taken from all the students of MSCS Department by **A Aaron Nicholas (3rd year)**. The feedback form was submitted by all the students.

Few snapshots of the event



STAFF ACHIEVEMENTS

1. Mrs. P. Naga Durga is an organising committee member of two days seminar on "Mathematical Modelling – A Comprehensive approach" at Loyola Academy, Secundearbad during 10th & 11th May 2021.
2. Ms. Parothidil Anjusree Krishnan is an organising committee member of two days seminar on "Mathematical Modelling – A Comprehensive approach" at Loyola Academy, Secundearbad during 10th & 11th May 2021.
3. Mrs. P. Naga Durga participated in the two-day FDP on "Optimizing & reporting for better decisions" during 16th – 17th November organised by Aurora's Degree & PG College, Hyderabad.
4. Mrs. M. Sailaja participated in the webinar on "Data Connecting the World" on the occasion of World Statistics Day held on 20th October 2020 at Aurora's Degree & PG College, Hyderabad.
5. Mrs. P. Naga Durga participated in the webinar on "Data Connecting the World" on the occasion of World Statistics Day held on 20th October 2020 at Aurora's Degree & PG College, Hyderabad.
6. Mrs. M. Sailaja participated in the webinar on "Impact of Covid – 19 on Food Industry – our actions are our future" on 20th October 2020 organised by the department of Food Technology and Management, Loyola Academy.
7. Mrs. M. Sailaja participated in the national webinar on "Significance of Statistics in Population Health Research" organised by the department of Statistics, Kasturba Gandhi Degree & PG College for Women, Secunderabad, on 10th September 2020.
8. Mrs. P. Naga Durga participated in the international webinar "Statistics and Chance" on the occasion of Centenary Birthday Celebrations of Prof. C.R. Rao on 10th September 2020 organised by Aurora's Degree & PG College, Hyderabad.
9. Dr. K. Vijayalakshmi participated in a one-week (online) Faculty Development Program on 'Real Analysis' organised by the department of Mathematics, Kakatiya University, Warangal during 5th – 10th September 2020.
10. Dr. K. Vijayalakshmi participated in a two-day Faculty Development Program on 'Implementation of Designing, Development & Evaluation of online courses' organised by Aurora's Degree & PG College, Hyderabad on 5th & 6th September 2020.
11. Mrs. P. Naga Durga participated in a national webinar on "Issues and Concerns of National Education Policy – 2020" organised by the department of Education and Education Technology, School of Social Sciences, university of Hyderabad, on 29th August 2020.
12. Mrs. P. Naga Durga participated in a national webinar on 'National Educational Policy 2020 (Policy Vision and Higher Education) held on 25th August 2020, organised by St. Aloysius College, in association with Centre for Educational and Social Studies, Benguluru.
13. Mrs. M. Sailaja participated in the webinar on "Statistical Analysis as an inference in Engineering Problems" organised by the department of Mathematics, CBIT, on 13th July 2020.
14. Dr. K. Vijayalakshmi participated in a one-day national seminar on "Applications of Number Theory and Cryptography" organised by the department of Mathematics, CBIT, Hyderabad on 8th July 2020.

15. Mrs. M. Sailaja participated in the webinar on "Emerging trends in Current Industry" held at Aurora's Degree & PG College, Hyderabad on 5th July 2020.
16. Mrs. M. Sailaja participated in a two – day national webinar on "Applications of Mathematics for Engineers" organised by the department of Science & Humanities, Bharat Institute of Engineering & Technology, from 4th July 2020 to 5th July 2020.
17. Mrs. M. Sailaja participated in the webinar on "Applications of Dynamic Programming" held at Aurora's Degree & PG College, Hyderabad on 3rd July 2020.
18. Mrs. M. Sailaja participated in the webinar on "Natural Language Processing using R" held at Aurora's Degree & PG College, Hyderabad on 2nd July 2020.
19. Ms. Parothidil Anjusree Krishnan participated in the webinar on "Natural Language Processing using R" held at Aurora's Degree & PG College, Hyderabad on 2nd July 2020.
20. Mrs. M. Sailaja participated in the webinar on the occasion of 14th National Statistics Day celebrations – 2020 held on 29th June 2020 at Aurora's Degree & PG College, Hyderabad.
21. Dr. K. Vijayalakshmi participated in a webinar on "Data Science & Artificial Intelligence" organised by the department of Computer Data Science & Data Analytics Engineering, Loyola Academy, Hyderabad in association with Data Computing on 12th June 2020.
22. Mrs. P. Naga Durga participated in a webinar on "Data Science & Artificial Intelligence" organised by the department of Computer Data Science & Data Analytics Engineering, Loyola Academy, Hyderabad in association with Data Computing on 12th June 2020.
23. Mrs. P. Naga Durga participated in the webinar "How to build strong immunity through diet and lifestyle" on 12 June 2020 organised by Aurora's Degree & PG College, Hyderabad.
24. Mrs. M. Sailaja participated in the national webinar on "Mathematical Modelling and its applications" held at Aurora's Degree & PG College, Hyderabad on 17th June 2020.
25. Dr. K. Vijayalakshmi participated in the one-day webinar on "How to course and course activities in open-source online learning" organized by the department of Mathematics, Hindu College, Guntur on 14th June 2020.
26. Ms. Parothidil Anjusree Krishnan completed online Quiz competition conducted by the department of Mathematics, D. N. R. College, Bhimavaram on 7th June 2021 and secured 95%.
27. Mrs. M. Sailaja participated in the national webinar on "Career path with Government of India" held on 1st June 2020 at Aurora's Degree & PG College, Hyderabad.
28. Mrs. P. Naga Durga participated in national webinar on "Maintaining Quality Online teaching – opportunities and challenges" organised by IQAC, St. Francis College for Women, Hyderabad, on 1st June 2020.

Ph. D. Enrolment of Faculty:

1. Ms. Parothidil Anjusree Krishnan is pursuing part – time Ph. D in Mathematics from the department of Mathematics, BITS Pilani Hyderabad Campus from August 2020.

STUDENT ACTIVITIES & ACHIEVEMENTS

ONLINE CERTIFICATION COURSES

1. Mr. Joseph Anurag from NMSCS bearing the UID Number 111719024039 successfully completed "Python Data Structures" an online course offered through Coursera during - December 2020.
2. Mr. Joseph Anurag from NMSCS bearing the UID Number 111719024039 successfully completed "Cloud Computing Basics" an online course offered through Coursera during – December 2020.
3. Ms. Akula Bhavana from NMSCS bearing the UID Number 111719024001 successfully completed Internshala Online certification training in 'Programming with python' during - April 2021 (6 weekscourse).
4. Ms. A.R. Lakshmi from NMSCS bearing UID Number 111719024003 successfully completed Internshala Online Certification training in 'Web Development' during – April 2021(6 weeks).
5. Ms. Balekar Shruthi from NMSCS bearing the UID Number 111719024004 successfully completed Internshala Online certification training in 'Programming with python' during - April 2021 (6 weeks course).
6. Ms. Pavithra Naga Sai from NMSCS bearing the UID Number 111719024005 successfully completed Internshala Online certification training in 'Programming with python' during - April 2021 (6 weeks course).
7. Ms. Sravani Reddy from NMSCS bearing the UID Number 111719024007 successfully completed Internshala Online Certification training in 'Programming with Python' during – April 2021(6 weeks).
8. Ms. G V N L Vyshnavi from NMSCS bearing the UID Number 111719024008 successfully completed Internshala Online certification training in 'Programming with python' during - April 2021 (6 weeks course).
9. Ms. Singari Blessy from NMSCS bearing UID Number 111719024030 successfully completed Internshala Online certification training in 'Programming with Python' during – Apr 2021(6 weeks course).
10. Ms. Sofiya Jabeen from NMSCS bearing UID Number 111719024031 successfully completed Internshala Online certification training in 'Advanced Excel' during – Apr 2021(4 weeks course).
11. Ms. Sakeena Banu from NMSCS bearing UID Number 111719024028 successfully completed Internshala Online certification training in 'Advanced Excel' during – Apr 2021(4 weeks course).Ms. Meghana Reddy from NMSCS bearing UID Number 111719024024 successfully completed Internshala Online certification training in 'Programming with Python' during – Apr 2021(6 weeks course).
12. Ms. Priyanka Balabantaray from NMSCS bearing UID Number 111719024025 successfully completed Internshala Online certification training in 'Advanced Excel' during – Apr 2021(4 weeks course).
13. Ms. Meghana Reddy from NMSCS bearing UID Number 111719024024 successfully completed Internshala Online certification training in 'Programming with Python' during – Apr 2021(6 weeks course).

14. Ms. Priyanka Balabantaray from NMSCS bearing UID Number 111719024025 successfully completed Internshala Online certification training in 'Advanced Excel' during – Apr 2021(4 weeks course).
15. Ms. G. Varsha from NMSCS bearing UID Number 111719024009 successfully completed Internshala Online certification training in 'Programming with Python' during – Apr 2021(6 weeks course).
16. Ms. Sravani Chowdary from NMSCS bearing UID Number 111719024010 successfully completed Udemy online certificate course in 'The Data Science Course 2021: Complete Data Science Bootcamp' during – April 2021.
17. Ms. Katta Keerthana from NMSCS bearing UID Number 111719024011 successfully completed Internshala Online certification training in 'Programming with Python' during – Apr 2021(6 weeks course).
18. Ms. Anjitha Anil Kumar from NMSCS bearing UID Number 111719024002 successfully completed Coursera Online certification course in 'Buliding Modern Python Applications on AWS' during – May 2021
19. Ms. Shivani Burma from NMSCS bearing the UID Number 111719024006 successfully completed Udemy Online certification course in 'The Complete 2021 Web Development Bootcamp' during – May 2021(55 hours).
20. Ms. Sofiya Jabeen from NMSCS bearing the UID Number 111719024031 successfully completed "Building Modern Python Applications on Aws" an online course offered through Coursera during – May 2021.
21. Mr. Joseph Anurag from NMSCS bearing the UID Number 111719024039 successfully completed "Service Oriented Architechture" an online course offered through Coursera during - May 2021.
22. Ms. Sofiya Jabeen from NMSCS bearing the UID Number 111719024031 successfully completed "Build Your First Android App" an online course offered through Coursera during - May 2021.
23. Ms. Madiha Farhana from NMSCS bearing UID Number 111719024018 successfully completed Internshala Online certification training in 'Internship & Job Preparation' during – May 2021(4 weeks course).
24. Ms. Madiha Farhana from NMSCS bearing UID Number 111719024018 successfully completed Internshala Online certification training in 'French Language' during – May 2021(6 weeks course).
25. Ms. Paka Chandana from NMSCS bearing UID Number 111719024022 successfully completed Internshala Online certification training in 'Programming with Python' during – May 2021(6 weeks course).

26. Mr. Kaushal Sambrani from NMSCS bearing UID Number 111719024040 successfully completed Udemy online certificate course in 'Microsoft Excel - Excel from Beginner to Advanced' during – May 2021.
27. Mr. Koushik Repalli from NMSCS bearing UID Number 111719024044 successfully completed Udemy online certificate course in 'Complete Python Bootcamp from Zero to Hero in Python' during – May 2021.
28. Ms. Sai Sindhu from NMSCS bearing UID Number 111719024013 successfully completed Udemy online certificate course in 'The Data Science Course 2021: Complete Data Science Bootcamp' during – May 2021.

29. Mr. Bala Sumanth from NMSCS bearing UID Number 111719024050 successfully completed Udemy online certificate course in 'The Complete 2021 Web Development Bootcamp' during – May 2021.

30. Mr. Abhijit George from NMSCS bearing UID Number 111719024035 successfully completed Udemy online certificate course in 'Microsoft Excel - Excel from Beginner to Advanced' during – May 2021.

31. Mr. Pramith from NMSCS bearing UID Number 111719024036 successfully completed Udemy online certificate course in 'Microsoft Excel - Excel from Beginner to Advanced' during – May 2021.

32. Mr. Joseph Anurag from NMSCS bearing the UID Number 111719024039 successfully completed "Ask Questions to Make Data Driven Decisions" an online course offered through Coursera during- June 2021.

33. Mr. Joseph Anurag from NMSCS bearing the UID Number 111719024039 successfully completed "Foundations: Data, Data, everywhere" an online course offered through Coursera during- June 2021.

34. Mr. Joseph Anurag from NMSCS bearing the UID Number 111719024039 successfully completed "Process Data from Dirty to Clean" an online course offered through Coursera during – JUNE 2021.

35. Mr. Joseph Anurag from NMSCS bearing the UID Number 111719024039 successfully completed "Prepare Data for Explanation" an online course offered through Coursera during- June 2021.

36. Ms. Sakina Banu from NMSCS bearing the UID Number 111719024028 successfully completed "Develop and Deploy Windows Applications on Google Cloud Platform" an online course offered through Coursera during- June 2021.

37. Mr. Abdul Mannan from NMSCS bearing UID Number 111719024046 successfully completed Udemy online certificate course in 'Photography Masterclass: A Complete Guide to Photography' during – June 2021.

38. Mr. Leela Krishna from NMSCS bearing UID Number 111719024047 successfully completed Udemy online certificate course in 'Microsoft Excel - Excel from Beginner to Advanced' during – June 2021.

39. Mr. Sai Kasyap Vedantam from NMSCS bearing UID Number 111719024051 successfully completed Udemy online certificate course in 'Python for Data Science and Machine Learning Bootcamp' during – June 2021

40. Mr. Sai Krishna Raju Vaddaraju from NMSCS bearing UID Number 111719024049 successfully completed Udemy online certificate course in 'Machine Learning A-Z$^{TM:}$ Hands on python & R in Data Science' during – June 2021

41. Ms.Mandava Pragna from NMSCS bearing UID Number 111719024014 successfully completed Udemy online certificate course in 'Complete Python Bootcamp From Zero to Hero in Python' during – June 2021.

42. Mr. V. Abhishek from NMSCS bearing UID Number 111719024048 successfully completed Udemy online certificate course in 'Machine Learning A-Z$^{TM:}$ Hands on python & R in Data Science' during – June 2021

43. Mr. Kothakonda Ganesh from NMSCS bearing UID Number 1111719024041 successfully completed Udemy online certificate course in 'Learn Ethical Hacking from Scratch' - during June 2021

44. Mr. Sakilam Sai Shiva from NMSCS bearing UID Number 1111719024045 successfully completed Udemy online certificate course in 'Learn Ethical Hacking from Scratch' - during June 2021

45. Mr. Kodepudi Satish from NMSCS bearing UID Number 111719024042 successfully completed Udemy online certificate course in 'Complete Python Bootcamp from Zero to Hero in Python' during – June 2021.
46. Mr. Manoranjan Kumar Sharma from NMSCS bearing UID Number 111719024043 successfully completed Udemy online certificate course in 'Complete Python Bootcamp from Zero to Hero in Python' during – June 2021.
47. Ms. Harshitha Masula from NMSCS bearing UID Number 111719024016 successfully completed Udemy online certificate course in 'Learn Python Programming Master Class' during – June 2021.
48. Ms. Priyanka Balabantaray from NMSCS bearing the UID Number 111719024025 successfully completed "Mindshift: Break Through Obstacles to Learning and Discover Your Hidden Potential" an online course offered through Coursera during - July 2021.

ONLINE WORSHOP CERTIFICATES

1. Mr. Sai Krishna Raju Vaddaraju from NMSCs bearing UID Number 111719024049 participated in a '5 days Workshop on Python' hosted by Learnbay during 17 May 2021 to 21 May 2021.

ONLINE PARTICIPATION CERTIFICATES

1. Ms. Shivani Burma from NMSCS bearing the UID Number 111719024006 participated in '7 Days Bootcamp on Basic Web-Dev with Bootstrap' organised by CHARUSAT (Charotar University of Science and Technology) during – April 2021.
2. Ms. G V N L Vyshnavi from NMSCS bearing the UID Number 111719024008 participated in '7 Days Bootcamp on Basic Web-Dev with Node.js Bootcamp with SHAPEAI' organised by CHARUSAT (Charotar University of Science and Technology) during – April 2021.
3. Ms. G. Varsha from NMSCS bearing the UID Number 111719024009 participated in '7 Days Bootcamp on Basic Web-Dev with Bootstrap' organised by CHARUSAT(Charotar University of Science and Technology) - during April 2021.
4. Ms. G. Varsha from NMSCS bearing the UID Number 111719024009 participated in '7 Days Backend Web-Dev bootcamp with Node.js, Bootcamp with ShapeAI' organised by SHAPEAI - during April 2021.
5. Ms. G. Varsha from NMSCS bearing the UID Number 111719024009 participated in '7 Days BASIC Web Development Bootcamp with ShapeAI' organised by SHAPEAI - during April 2021.
6. Ms. G.V.N.L. Vyshnavi from NMSCS bearing the UID Number 111719024008 participated in '7 Days Backend Web-Dev bootcamp with Node.js, Bootcamp with ShapeAI' organised by SHAPEAI - during April 2021.
7. Ms. G. Varsha from NMSCS bearing the UID Number 111719024009 participated in '7 Days Backend Web-Dev bootcamp with Node.js, Bootcamp with ShapeAI' organised by GDS RANCHI Google Developers - during April 2021.
8. Ms. G. Varsha from NMSCS bearing the UID Number 111719024009 participated in '7 Days Javascript and ReactJS Bootcamp with ShapeAI' organised by SHAPEAI - during May2021.
9. Ms. G. Varsha from NMSCS bearing the UID Number 111719024009 participated in '7 Days Backend Web-Dev bootcamp with Node.js, Bootcamp with ShapeAI'

organised by ShapeAI in collaboration with Developer Student Clubs - during April 2021.

10. Ms. G. Varsha from NMSCS bearing the UID Number 111719024009 participated in '7 Days long Bootcamp with JavaScript and React.js, Bootcamp with ShapeAI' organised by GDS RANCHI Google Developers - during May 2021.
11. Ms. G. Varsha from NMSCS bearing the UID Number 111719024009 participated in '7 Days long Bootcamp with JavaScript and React.js, Bootcamp with ShapeAI' organised by ShapeAI in collaboration with Developer Student Clubs - during May 2021.

MTTS

1. Ms. A. R. Lakshmi from NMSCS bearing UID number 111719024003 participated in "Online Foundation Course in Mathematics" held during 04 October 2020 to 24 October 2021 organised by 'Online Foundation Course in Mathematics OFCM 2020, MTTS trust funded by National Board of Higher Mathematics.
2. Ms. Gunda Varsha from NMSCS bearing UID Number 111719024009 participated in 'Level 0 of the Mathematics Training and Talent Search Programme' held during 11 June 2021 to 5 July 2021 organised by MTTS trust funded by National Board of Higher Mathematics.

INTRA COLLEGE COMPETITIONS:

1. Ms. Gunda Varsha from NMSCS bearing the UID Number 111719024009 participated in the online quiz on "COVID-19- The world on pause" organized by Department of B.Com Advertising, sales Promotion & sales Management/Marketing at Loyola Academy Alwal, Secunderabad on 28th and 29th February 2020.

2. Ms. G.V.N.L. Vyshnavi from NMSCS bearing the UID Number 111719024008 participated in the online quiz on "COVID-19- The world on pause" organized by Department of B. Com Advertising, sales Promotion & sales Management/Marketing at Loyola Academy Alwal, Secunderabad on 28th and 29th February 2020

3. Mr. Sai Krishna Raju Vaddaraju from NMSCS bearing the UID Number 111719024049 participated in the online quiz on "COVID-19- The world on pause" organized by Department of B. Com Advertising, sales Promotion & sales Management/Marketing at Loyola Academy Alwal, Secunderabad on 28th and 29th February 2020.

4. Mr. Sukumaran Ganesh from NMSCs bearing UID Number 111720024047 participated in 'Let's Cycle Loyola' conducted by Magic Youth on 9th January 2021.

INTER-COLLEGE PARTICIPATIONS:

1. Mr. Sai Krishna Raju Vaddaraju from NMSCS bearing the UID 111719024049 participated in the national webinar on "Significance of Statistics in Population Health Research" organized by Department of Statistics, Kasturba Gandhi Degree & PG College for Women held on 10th September 2020.

2. Ms. G.V.N.L. Vyshnavi from NMSCS bearing the UID 111719024008 participated in E-Quiz conducted on the occasion of GANDHI JAYANTI by Department of History, HINDU COLLEGE GUNTUR held on 2nd October 2020.