

Department of Mathematics

ANNUAL REPORT 2020-21

International Webinar Series

DOCTRINA -03

The Department Of Mathematics, and IQAC Sir Syed College, Taliparamba, jointly organized on day International Webinar entitled “Scheduling Problems with resource constraints” on 20th may 2020(10 am to 11.30 am) .

Total number of Registration: 309

Total Number of Participants: 169

From Kerala

Out of States

قل رب زدني علما : 125
: 44

SIR SYED COLLEGE



SIR SYED COLLEGE

(Affiliated to Kannur University,
Re-accredited by NAAC with A Grade)
Taliparamba, Kannur, Kerala, India

INTERNATIONAL WEBINAR SERIES

DOCTRINA-03

20 May, 2020

Wednesday, 10.00 - 11.30 am

Topic: **Scheduling Problems with resource Constraints**

RESOURCE PERSON



Dr. Jobish Vallikavungal

Department of Industrial Engineering and Systems,
School of Engineering and Sciences,
Tecnológico de Monterrey, Nuevo Leon, Mexico.

Organized by

DEPARTMENT OF MATHEMATICS & IQAC

For More Details

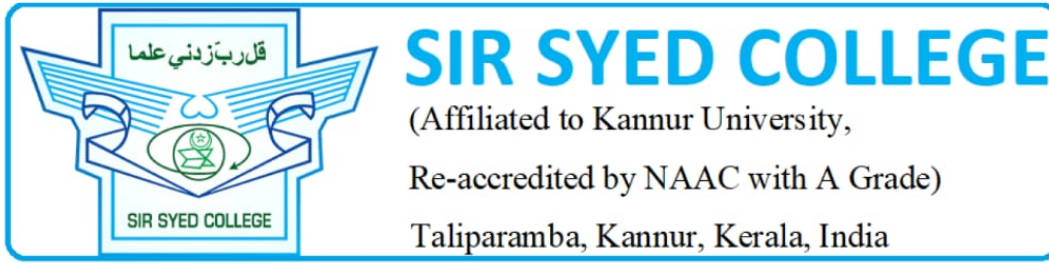
www.sirsyedcollege.ac.in

Email: nafeesababy@sirsyedcollege.ac.in

sirajmp@sirsyedcollege.ac.in

Contact: 9496928404; 9645995755

ALL ARE INVITED



ONE DAY INTERNATIONAL WEBINAR DOCTRINA-03

(MATHEMATICS)

20th May 2020

Time: 10.00AM-11.30AM

Scheduling Problems with Resource Constraints

PROGRAMME

- Inaugural Session: 10AM
- Welcome Speech: Mr. Sirajudheen M P (Asst. Professor and HOD, Dept. of Mathematics)
- In the presents of: Lt. Dr. Mohamed Asraf Vazhapully (Principal, Sir Syed College)
Dr. Nafeesa Baby (IQAC Coordinator)
Dr. Abdussalam (Convenor, International Webinar Series Doctrina)
- Introducing Resource Person: Dr. Bajeel P N (Asst. Professor, Dept. of Mathematics)
- **Invited Talk: Dr. Jobish Vallikavungal**
Department of Industrial Engineering and Systems
School of Engineering and Sciences
Tecnológico de Monterrey
Nuevo Leon, Mexico
- Vote of Thanks: Mr. Siddique P C (Asst. Professor, Dept. of Mathematics)

Two week International Virtual Workshop

Mathematics: Some concept and Application”

REPORT

The Department Of Mathematics, and IQAC Sir Syed College, Taliparamba, jointly organized Two week International Virtual work shop entitled “**Mathematics :Some concept and Application**”. From 01-07-2020 to 15-07-2020.


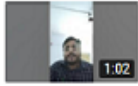


Covid-19 outbreak has led to the adoption of digital tools in various fields, including education, which has forced us to switch to e-learning techniques for an uninterrupted flow of knowledge. This has created a massive shift to our teaching-learning process. During this challenging phase, Sir Syed College Department of Mathematics came up with a program to help graduate students by conducting introductory session in various areas of Mathematics. The main objective of this workshop was intended to create an awareness of the diverse areas in mathematics through sessions on basic mathematical concepts and their real world applications.

The Description of the Virtual Workshop was as follows

1. The class was by providing link of pre-recorded videos through Moodle (videos was Uploaded to YouTube)
2. The registered students can access the classes until the exam begins
3. Two sessions daily. (Total 26 sessions).
4. Each day there was an assignment on each session
5. Objective type exam was conducted based on these 26 sessions.

The two week program started on **01-07-2020**-th morning with the inaugural ceremony, the meeting started with a welcome note by HoD of Mathematics, Mr. Sirajudheen M P. The formal inauguration of workshop was done by Dr.Mohammed Ashraf V(Principal).Dr. Nafeesa Baby, IQAC coordinator gave felicitation. Dr.Bajeel PN, coordinator, gave a description about rules and regulations of the workshop. The inaugural session concluded with the vote of thanks by Mr

Siddique PC, Asst. Professor. Faculty member

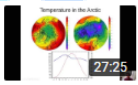

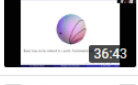

<input type="checkbox"/>		Welcome Speech: Mr. Sirajudheen M ... Add description	Private	Made for kids	Jul 1, 2020 Uploaded	133	0	100 12 li
<input type="checkbox"/>		Vote of Thanks: Mr. Siddique P C Add description	Private	Made for kids	Jul 1, 2020 Uploaded	30	0	100 2 li
<input type="checkbox"/>		Principal Message: Lt. Dr. Mohamed A... Add description	Private	None	Jul 1, 2020 Uploaded	85	0	100 2 li
<input type="checkbox"/>		Felicitation: Dr. Nafeesa Baby (IQAC C... Add description	Private	Made for kids	Jun 30, 2020 Uploaded	77	0	100 3 li

Details of academic sessions

Day -1 (02-07-2020)

Session -1(9.30 am to 11 am): In this session ,Dr. Tiju Cherian John ,Visiting Scientist ,Stat-Math Unit,Indian Statistical Institute, New Delhi India , was the resource person .He gave a detailed lecture on **“An Introduction to Real Analysis”** he discussed various results in real analysis .the lecturing was very interesting and useful for graduate students especially for final year students

Session -2(11.30 am to 1.30 pm): In this session, Dr. Reshma Menon, Graduate Assistant, Department of Mathematics ,Michigan State University ,619 Red Cedar Road ,East Lansing, MI - 48823 US , was resource person. She delivered a talk on **“Algebraic Topology”**. She discussed basic ideas in Algebraic topology .the class was vibrant and attractive.

<input type="checkbox"/>		Introduction to Arctic Climate Dr. Nuncio Murukesh Scientist-D National Centre for Polar and Ocean Research...	Private	Copyright + 1 more	Jul 2, 2020 Uploaded	239	0	100 9 li
<input type="checkbox"/>		Mathematics in Modeling the Spread ... Arsha Shery Department of Technomathematics TU Kaiserslautern...	Private	None	Jul 2, 2020 Uploaded	204	0	100 5 li
<input type="checkbox"/>		Algebraic Topology Dr. Reshma Menon Graduate Assistant Department of Mathematics Michigan...	Private	Made for kids	Jul 2, 2020 Uploaded	325	0	100 17 li
<input type="checkbox"/>		An Introduction to Real Analysis Dr. Tiju Cherian John Visiting Scientist Stat-Math Unit Indian Statistical Institute...	Private	Made for kids	Jul 2, 2020 Uploaded	339	0	100 8 li

Day-2(03-07-2020)

Session -1(9.30 am to 11 am): In this session, Arsha Sheryly ,Department of Technomathematics,TU Kaiserslautern Gottlieb-Daimler-Straße 47, 67663,Kaiserslautern ,Germany. delivered a talk on **“Mathematics in Modelling the Spread of Infectious Diseases”**. This lecture was very informative and attractive.


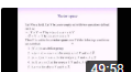


Session -2(11.30 am to 1.30 pm):In this session, Dr. K. Sudheer, Former Associate Professor, Department of Mathematics Farook College, Calicut,India,was the recourse person .he delivered

a talk on “**Vector Space**” .he discussed various type of vector spaces and their linear transformations .the talk was very usfull for biginers in linear transformations and vector spaces

Day-3(04-07-2020)

Session -1(9.30 am to 11 am): In this session Dr. Nuncio Murukesh, Scientist-D ,National Centre for Polar and Ocean Research, Head land Sada ,Vasco Da Gama,Goa-403804 India , delivered a talk on “**Introduction to Arctic Climate**”. He discussed Application of Mathematics in climate study . This lecture was very informative and attractive.

Session -2 (11.30 am to 1.30 pm) In this session Dr.Shija Gangadharan ,Department of Information Technology (Math Section),Shinas College of Technology ,Al-qur, Shinas, Sultanate of Oman, was the recourse person .he delivered a talk on “**Insurance Risk and Ruin**”. This talk was very informative and attractive

<input type="checkbox"/>		Introduction to Non-linear Differential ... Dr. Bipin Balaram Assistant Professor Department of Mechanical Engineering...	Private	Made for kids	Jul 7, 2020 Uploaded	230	0	100 11 li
<input type="checkbox"/>		Rings and Modules Dr. Harikrishnan P K Associate Professor Department of Mathematics Manipal...	Private	Made for kids	Jul 5, 2020 Uploaded	213	0	100 7 li
<input type="checkbox"/>		Vector Spaces Dr. K. Sudheer Former Associate Professor Department of Mathematics...	Private	Made for kids	Jul 2, 2020 Uploaded	275	0	87 7 li
<input type="checkbox"/>		Insurance Risk and Ruin Dr.Shija Gangadharan Department of Information Technology (Math Section)...	Private	Made for kids	Jul 2, 2020 Uploaded	196	0	100 8 li

Day-4(05-072020):Sunday holiday

Day-5(06-07-2020)

Session -1(930am to 11am): In this session , Dr. Harikrishnan PK, Associate Professor ,Department of Mathematics , Manipal Institute of Technology ,Manipal Academy of Higher Education (Deemed University),Manipal, Karnataka,India delivered a talk on “Rings and module”. He discussed classification theorems about Rings and module. He also discussed some research problems in this area .this session was very useful for MSc students





Session -2: Gave an assignment to participants based on previous days sessions

Day-6(07-06-2020)

Session -1(9.30 am to 11am): In this session Dr. Vinod Kumar Assistant Professor of Mathematics , T.M.Govt. College, Tirur ,Malappuram, Kerala, delivered a talk on “**Topology of R**”. He discussed basic ideas in topology like open sets, closed sets, isolated points etc. This class was very useful for under graduate students especially final year students.

Session -2(11.30m to .30 pm): In this session Dr. Bipin Balaram, Assistant Professor, Department of Mechanical Engineering ,Amrita School of Engineering ,India delivered a talk on

“Introduction to Non-linear Differential Equations”. he discussed basic ideas and Applications in Non-linear Differential Equations

<input type="checkbox"/>		Laplace Transform and Fourier Series Dr. Minirani S Associate Professor Basic Sciences and Humanities MPSTME...	Private	Made for kids	Jul 8, 2020 Uploaded	232	0	100 9 li
<input type="checkbox"/>		Generalized Set Theory Dr. Babitha K V Assistant Professor Department of Mathematics Govt Colleg...	Private	Made for kids	Jul 8, 2020 Uploaded	241	0	100 8 li
<input type="checkbox"/>		Application of Differential Equations I... Prajesh T Scientists/Engineer Leo and Interplanetary Orbit Dynamics Section...	Private	Copyright + 1 more	Jul 8, 2020 Uploaded	252	0	100 9 li
<input type="checkbox"/>		Topology of R Dr. Vinod Kumar P Assistant Professor of Mathematics T.M.Govt. College, Tirur,...	Private	Made for kids	Jul 7, 2020 Uploaded	246	0	90 10 li



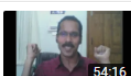

Day-7(08-07-2020)

Session -1(9.30am to 11 am): In this session Prajesh T ,Scientists/Engineer, Leo and Interplanetary Orbit Dynamics Section, Orbit Dynamics Division, Flight Dynamics Group R Rao Satellite Centre, Bangalore India, delivered a talk on **“Application of Differential Equations in Planetary Science”**. This lecture was very informative and attractive.

Session -2(11 .30am to 1.30pm):In this session, Dr. Babitha K V, Assistant Professor ,Department of Mathematics , Govt College Kasaragode ,Kerala ,India ,was the recourse person .She delivered a talk on **“Generalized Set Theory”** .She discussed various examples and results in Generalized Set Theory and compared with crisp set (classical set theory).

Day-8(09-07-2020)

Session -1(9 .30am to 11am): In this session Dr. Minirani S, Associate Professor ,Basic Sciences and Humanities ,MPSTME NMIMS Deemed to be University , Mumbai, India delivered a talk on **“Laplace Transform and Fourier Series”**. She discussed method of finding Laplace transform, Fourier series and application of them .this class was very useful for final year under graduate students.

<input type="checkbox"/>		Matrices in Engineering Simulations Dr. Abhilash Edacherian Assistant Professor (Coordinator Academic...	Private	Made for kids	Jul 11, 2020 Uploaded	213	0	100 5 li
<input type="checkbox"/>		Data Envelopment Analysis: A Tool for... Dr. Shinto K.G Assistant Professor Christ College Irinjalakuda Kerala India	Private	Made for kids	Jul 9, 2020 Uploaded	184	0	100 6 li
<input type="checkbox"/>		Time Series in Nature Dr. Lineesh M.C, Assistant Professor Department of Mathematics, National...	Private	Made for kids	Jul 9, 2020 Uploaded	218	0	100 12 li
<input type="checkbox"/>		Multiset Theory Dr. Shijina. V Assistant Professor Department of Mathematics Co-operativ...	Private	Made for kids	Jul 8, 2020 Uploaded	182	0	100 6 li

Session -2(11.30 am to 1.30 pm): In this session, Dr. Shijina. V, Assistant Professor, Department of Mathematics, Co-operative Arts and Science College, Madayi, Kannur, Kerala, India, was the recourse person .she delivered a talk on **“Multiset Theory”** . She discussed various examples and results in Multiset Theory and compared with crisp set (classical set theory).

Day-9(10-07-2020)

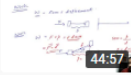



Session -1(9.30 am to 11 am): In this session Dr. Lineesh M.C, Assistant Professor ,Department of Mathematics, National Institute of Technology Calicut, Kerala, India delivered a talk on “Time Series in Nature”. This lecture was very informative and attractive.

Session -2(11.30 am to 1.30 pm):In this session, Dr. Shinto K.G, Assistant Professor ,Christ College Irinjalakuda ,Kerala India ,was the recourse person .He delivered a talk on “Data Envelopment Analysis: A Tool for Performance Evaluation”. This lecture was very informative and attractive.

Day-10(11-07-2020)

Session -1(9.30 am to 11am):In this session, Dr. Abhilash Edacherian ,Assistant Professor ,(Coordinator Academic Development and Quality),Department of Mechanical Engineering ,College of Engineering ,King Khalid University ,Abha, Saudi Arabia ,was resource person .he delivered talk on “**Matrices in Engineering Simulations**”.

Session -2(11am to 1.30pm): In this session, Dr. Shafeeq Rahman Thottoli ,Assistant Professor ,Department of physics Uni: Jazan University , Kingdom of Saudi Arabia, was recourse person . he delivered talk on “Mathematical Perspectives of Quantum Field Theory”. He discussed some theories and mathematical problem related to Quantum Field Theory.

<input type="checkbox"/>	 Vector Calculus	Private	Made for kids	Jul 13, 2020 Uploaded	172	0	100 7 li
<input type="checkbox"/>	 Numerical Methods for the Design an... Deepak P Scientist/Engineer, "SF" and Section Head Structural software...	Private	Made for kids	Jul 13, 2020 Uploaded	152	0	100 2 li
<input type="checkbox"/>	 Numerical Methods for the Design an... Deepak P Scientist/Engineer, "SF" and Section Head Structural software...	Private	Made for kids	Jul 13, 2020 Uploaded	214	0	100 2 li
<input type="checkbox"/>	 Mathematical Perspectives of Quantu... Dr. Shafeeq Rahman Thottoli Assistant Professor Department of physics Uni...	Private	Made for kids	Jul 11, 2020 Uploaded	233	0	100 5 li

Day-11 (12-07-2020): Assignment Based on previous session

Day-12(13-07-2020)

Session -1(9.30 to 11 am) :In this session, Deepak P ,Scientist/Engineer, "SF" and Section Head ,Structural software Development Team, Structural Engineering ,Vikram Sarabhai Space Centre , Indian Space Research Organization, Thiruvananthapuram, Kerala ,India was recourse person .he delivered a talk on “Numerical Methods for the Design and Analysis of Aerospace structures”.in this session he discussed basic concepts I numerical methods for Design and analysis of Aerospace structures by the help of simple examples .

Session-2(11.30am 1.30pm): In this session,Dr. Anoop N Nair,Assistant Professor ,Dept. Of Mathematics, College OF Engineering and Management Punnapra. ,(Under CAPE, Govt. Of

Kerala), India, was resource person His topic was “vector Calculus”. He discussed fundamental concepts in vector calculus like vector derivatives, gradient, Tangent vectors, directional derivatives etc. he also discussed some application to Physics and other area of science

Day-13(14-07-2020)

Session -1(9.30 to 11 am): In this session, Dr. P. Shanas Babu . Gvhss Koppam, Palakkad ,India, delivered a talk on “Mathematical Aspects of Psychology”.in this session ,he discussed applications of mathematics in Psychology with examples .

Session-2(11.30 to 1.30pm):In this session , Rosna Paul,Research Assistant ,Institute of Software Technology,T U Graz ,Austria was resource person .she delivered a talk on “Simple Drawings of a Graph”. She discussed basic concepts about graph, weakly isomorphic graphs

The two week International Virtual Workshop **Mathematics: Some concept and Applications** came to an end with a short valedictory function (through google meet). The students gave their feedbacks. The two week International Virtual Workshop was concluded by 5.00pm, 15 July, 2020.

The two week International Virtual Workshop Mathematics: Some concept and Applications	
Date	01-07-2020 to 15-07-2020
Venue	Pre-recorded videos through Moodle (videos was Uploaded to YouTube)
Number of Invited Talks	26
Number of Resource person from outside of India	5
Total number of Registration	176
Total Number of Participants (with 100% attendance)	85
Number of participants from Kerala	73
Number of participants from other states	12
Total Expense	1000

Dr.Bajeel P N
Coordinator

Sirajudheen M P
HoD

	Debit	Credit
TA and remuneration For resource persons	Nil	
Certificates , Broacher design	600	
Stationary items	400	
Sponsorship(Department teachers)		1000
Total	1000	1000

Account of Statement.

SIR SYED COLLEGE

Department of Mathematics

Pi Day Celebration

Total Number of Participation: 90

Platform: Google meet,

The Department Of Mathematics, Sir Syed College, Taliparamba, organized one day webinar entitled “Approximation” on 16-03-2021 as part of Pi day celebration. The webinar started with a welcome note by Faculty member of Mathematics, Dr.Bajeel PN at 7 pm , The formal inauguration of “Approximation was done by Mr Sirajudheen MP, HoD, Mathematics, Sir Syed College.

In the Webinar, Dr.Jill K Mathew, Assistant Professor, Department of Mathematics, Mar Ivanios College (Autonomous), Thiruvananthapuram, was resource person .he discussed various approximation of P which was done by Indian ancient Mathematicians ,like Aryabhata, Madhava etc .After talk ,Resource person interacted with students .the webinr was concluded by 10 pm ,March 16, 2021



Department of Mathematics

Sir Syed College, Thaliparamba

cordially invites you for an invited talk on

"Approximations"

As a part of 'Pi-day' celebration

Dr. Jill K. Mathew

Assistant Professor

Department of Mathematics

Mar Ivanios (Autonomous College)

Nananchira, Trivandrum



16 MARCH 2021

@7.00P.M

-GOOGLE MEET

Orientation Program For First Semester B.Sc Mathematics Students.

Date: 18.01.2021

Venue: College Auditorium, Sir Syed College, Taliparamba

Total number of students attended: 33

Total number of Parents attended: 4

The programme started at 10:00 a.m. with the welcome speech of Mr. Sirajudheen M.P., Asst Professor and Head of the Department of Mathematics. The list of faculties and office bearers attended the event and the topics discussed are given below.

Dr. Mohammed Asraf Vazhappully	Principal in Charge	General interaction with students and parents
Dr. T. P. Nafeesa Baby	IQAC Co-ordinator	About college, Students support activities in the college, SAFE, LASS etc.
Dr. Sreeja P	Co-ordinator, Tutorial scheme	Tutorial system, role of tutors and parents in identifying the difficulties in online learning.
Mr. Sirajudheen M.P.,	Head of the Department (Mathematics)	About the department, facilities available, library etc.
Mr. Bajeel P.N.	Assistant Professor (Mathematics)	About scope of B.Sc. Mathematics, Institutions which offers higher studies in mathematics, and other inspiring talks.
Mr. Muneer C.P.	Assistant Professor (Physics)	General instructions about Course and text books
Ms. Mashuda Kouser	Assistant Professor(Statistics)	General instructions about Course and text books
Mr. Mohammed Saleem PM	Assistant Professor (Functional English)	About English common course, text books, additional spoken English class for the students
Ms. Meenu Stephen	Guest lecturer (Mathematics)	General instructions about Course and text books

The students and the parents shared their feedbacks about the ongoing online teaching-learning process. An English proficiency test was conducted as per the guidelines of academic committee. The programme concluded at 2:00 PM after the English proficiency test



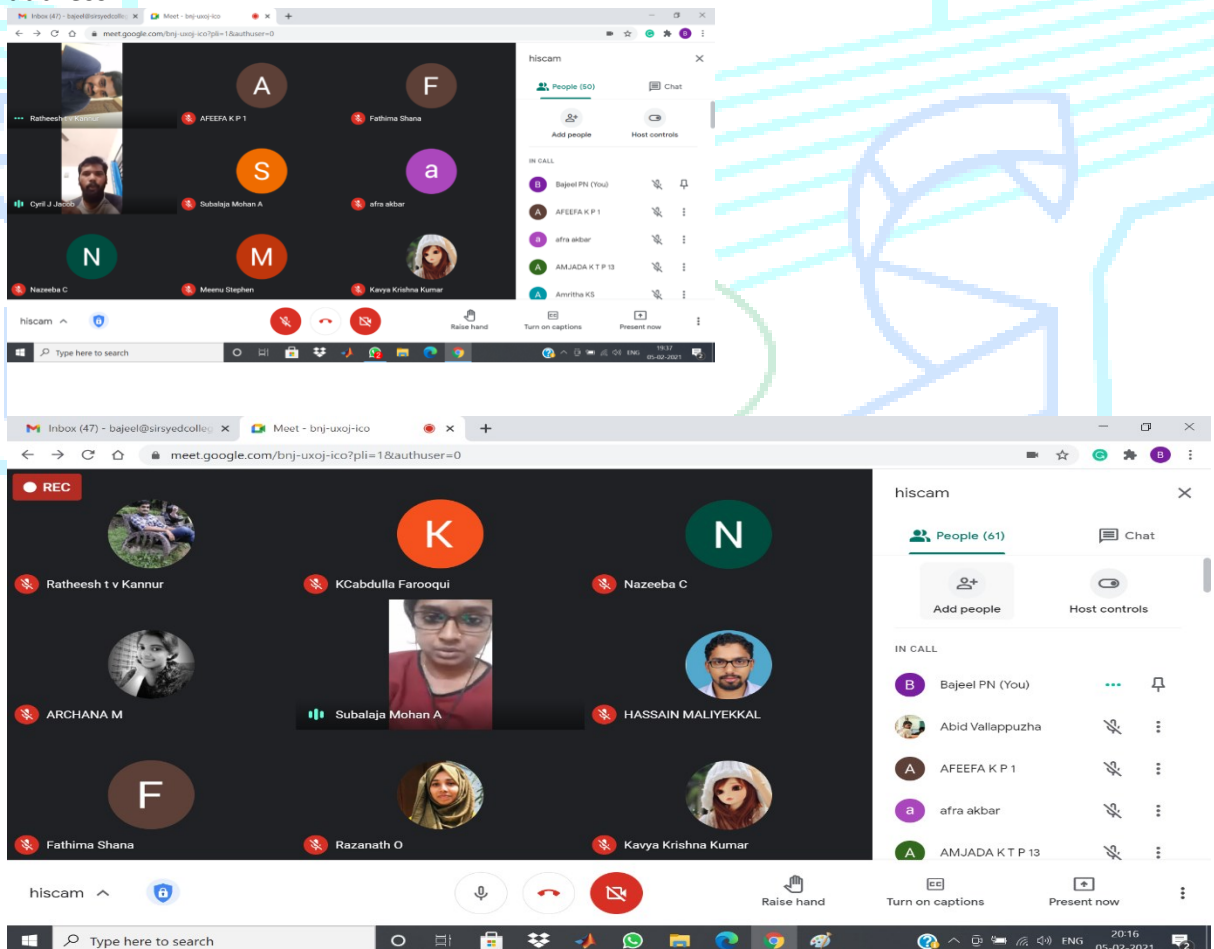




Interactive Session with Premier Institute Students

Venue :Google Meet

The mathematics fitness club under the HiScAM cell, Department of Mathematics, Sir Syed College organized an interactive session (05/02/2021 at 7.30 PM) with students from various renowned institutions of India. More than 19 students from IIT, IISc, IISER, ISI, CMI, IMSc, NIT and various central universities took part in the session. Ms. Minu Stephen gave the welcome address for the session. Mr. Sirajudheen MP(HoD, Department of Mathematics) presided over the session. Dr. Bajeel PN led the session. More than 40 students actively participated in the auspicious programme. The program aimed at clearing various doubts and concerns of students intending to pursue higher studies in Mathematics. Mr. Sidhique PC (Asst. Professor) gave the vote of thanks address.



قل رب زدني علما



SIR SYED COLLEGE