

## **HOLY CROSS COLLEGE (AUTONOMOUS)**

Affiliated to Bharathidasan University
Nationally Accredited (4<sup>th</sup> Cycle) with 'A++' Grade (CGPA 3.75/4) by NAAC
College with Potential for Excellence
Tiruchirappalli - 620002.

#### PG AND RESEARCH DEPARTMENT OF MATHEMATICS

Webinar on "Optimization Models using Fuzzy Numbers"

Name of the activity: Webinar

**Date:** 30.06.2020

**Time:** 10.00 -11.00 a.m.

**No. of Participants:** 365

Platform: Google Meet, You tube

Resource Person: Dr. A. NAGOOR GANI

Associate Professor, PG & Research Department of Mathematics,

Jamal Mohamed College(Autonomous),

Tiruchirappalli – 620020

#### **REPORT**

The webinar commenced successfully on Google meet around 10:00 a.m. by invoking god's presence through prayer by Dr. A. Mary Priya Dharshini, Assistant Professor, PG and Research Department of Mathematics, Holy Cross College (Autonomous), Trichy.

Dr. W. Ritha, Head and Assistant Professor, PG and Research Department of Mathematics, Holy Cross College (Autonomous), Trichy, welcomed the resource person, Dr. A. Nagoor Gani, Associate Professor, PG and Research Department of Mathematics, Jamal Mohamed College (Autonomous), Trichy and the gathering. Then the webinar session was taken over by the resource person. Sir started the session by giving an introduction about optimization model. He gave an explanation about classical set and defined about the membership function of classical set with an example. He explained the shortcomings of the membership function of classical set and then he said there comes **Fuzzy**. He gave a clear explanation about fuzzy set and its membership function. Then, with some examples, he said about the accuracy and advantage of fuzzy set over the classical set.

Sir gave a few ideas about interval number, arithmetic operations on interval number and types of fuzzy numbers. He explained in detail about the triangular fuzzy number and the trapezoidal fuzzy number and also gave an example for each of it. Then he briefly explained about arithmetic operations on fuzzy number, also, he said about the defuzzification.

Sir, after giving a clear and detailed introduction about fuzzy, he defined about a fuzzy linear system of equation and he gave the idea about fuzzy linear programming problem. He gave the algorithm for Motzkin Elimination method and he gave a numerical example. Sir, said Chen operation on fuzzy numbers with function principle is used as a standard operation on a fuzzy number still now. But

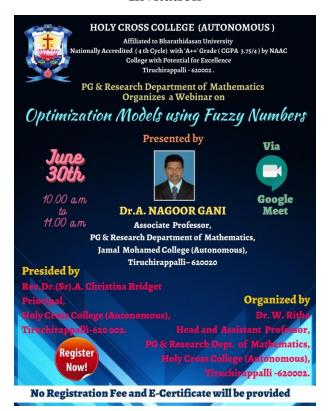
he mentioned that this type operation had a few shortcomings. So he gave an idea about New operation to overcome these shortcomings. He also said the condition of the New operation and cited a few examples to understand better. He also explained about the application of New operations.

Sir, then defined fuzzy variable linear programming problem and also thought to solve it using interior point technique. And then he gave the algorithm for interior point technique. Sir, then gave a brief idea about the fuzzy inventory model and fuzzy economic order quantity. Sir, finally gave a brief idea about fuzzy production quantity models and fuzzy supply chain model. Then, Sir thanked the organizers for conducting this Webinar successfully on Google meet even during the period of lockdown.

Dr. I. Antonitte Vinoline, Assistant Professor, PG and Research Department of Mathematics, Holy Cross College(Autonomous), Trichy, delivered the vote of thanks and the webinar successfully came to an end around 11:50 a.m.

## **Evidences for the Event**

## Invitation



## E- Certificate

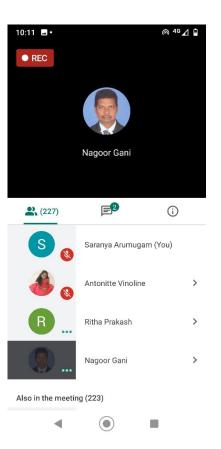


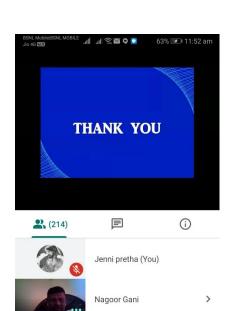
# **Registration Form**

1	Timestamp	Email Address	Name	Department	Designation	Institution Name	City
2	6/25/2020 7:08:52	francinajude@gmail.com	Dr.I.Francina Nishandhi	Mathematics	Faculty	Holy Cross College (Auto	Trichy
3	6/25/2020 7:09:14	shaibeglitz@gmail.com	AROKKIA SAIBE P	MATHEMATICS	Faculty	HOLY CROSS COLLEGE	Trichy
4	6/25/2020 7:13:46	strexlin@gmail.com	Dr.S.Rexlin Jeyakumari	Mathematics	Faculty	Holy Cross College(Autor	Trichy
5	6/25/2020 7:17:40	selvaranip@hcctrichy.ac.i	Dr.P.Selvarani	Mathematics	Faculty	Holy Cross College (Auto	Trichy
6	6/25/2020 7:19:00	lillysebastina@gmail.com	Dr.LILLY ROBERT	Mathematics	Faculty	Holy Cross College Autor	Tiruchirapalli
7	6/25/2020 7:25:53	jayasri856@gmail.com	JAYASRI. S	MATHEMATICS	Student	HOLY CROSS COLLEGE	TRICHY
8	6/25/2020 7:28:35	rajisperfect@gmail.com	Rajkumar P	Mathematics	Research Scholar	St. Joseph's College	Trichy
9	6/25/2020 7:33:35	dhanalakshmi.kannusamy	DHANALAKSHMI	Mathematics	Faculty	Holy Cross College	TIRUCHIRAPPALLI
10	6/25/2020 7:38:15	monicairudaya@gmail.co	IRUDAYA MONICA CATH	Mathematics	Faculty	Holy Cross College (Auto	Tiruchirappalli
11	6/25/2020 7:39:46	prabhaperiyasamyvgp@g	P. Praba	Mathematics	Student	Holy Cross College	Namakkal
12	6/25/2020 7:40:00	supertheresa16@gmail.co	A. Theresal Jeyaseeli	Mathematics	Faculty	Holy cross college (Auton	Tiruchirappalli
13	6/25/2020 7:46:18	aarthiauxi@gmail.com	S. Aarthi Auxilia	Mathematics	Student	Holy Cross College	Trichy
14	6/25/2020 7:47:43	jarvisvivin3@gmail.com	Jarvis Vivin J	Mathematics	Student	Holy Cross College	Trichy
15	6/25/2020 7:49:19	josesureshvasan@gmail.	Ms.Josephine Vinnarasi	Mathematics	Faculty	Holy Cross College	Trichy
16	6/25/2020 7:50:07	araish23@gmail.com	AISHWARYA R	Mathematics	Faculty	Holy Cross College (Auto	Trichy-2

# Screenshots







Others in the meeting (210)



Ritha Prakash

A.Jennie Sebasty Pritha

