TEACHER'S ACTIVITY REPORT 2021-22.

FACULTY: SCIENCE   **DEPARTMENT/ COMMITTEE: MATHEMATICS**   **IQAC ACTIVITY NO.: SVC/2021-22/MATH/SS/1**

NAME OF THE ACTIVITY: SCUDEM VI

DATE	FACULTY	DEPARTMENT/COMMITTEE	COORDINATOR NAME
23 October - 14 November 2021	Science	Mathematics	Prof. Swarn Singh
TIME	**VENUE**	**NUMBER OF PARTICIPANTS**	**NATURE: Outdoor/Indoor**
	Online	08	Indoor
SUPPORT/ASSISTANCE:	Sri Venkateswara College, DU		

BRIEF INFORMATION ABOUT THE ACTIVITY (**CRITERION NO. III and VII-**):

TOPIC/SUBJECT OF THE ACTIVITY	SCUDEM VI (SIMIODE Challenge Using Differential Equations Modeling)
OBJECTIVES	Differential equations is a field of mathematics which helps solve real life problems by modelling them mathematically. This competition offer students such opportunities and help them apply practice modelling skills and apply mathematics to their daily life.
METHODOLOGY	Once the registrations for SCUDEM VI were done, 3 modelling problems were released and a time limit of 3 weeks was given to choose and solve any of these problems.
OUTCOMES	The students were enthusiastically engaged with their team mates and their respective coaches. It was a great learning experience for them.

PROOFS & DOCUMENTS ATTACHED (Tick mark the proofs attached):

Notice &Letters	**Student list of participation** √	**Activity report** √	Photos	Feedback form

Feedback analysis	News clip with details	Certificate √	**Any other (Links) √**	

IQAC Document No:		Criterion No: III and VII	Metric No:
Departmental file no		IQAC file No;	

NAME OF TEACHER & SIGNATURE	NAME OF HEAD/ COMMITTEE INCHARGE & SIGNATURE	IQAC COORDINATOR (SEAL & SIGNATURE)
Prof. Swarn Singh	Dr. Deepti jain	

For Reference

Criterion I	Curricular Aspects (planning &Implementation)		Criterion V	Student Support & Progression
Criterion II	Teaching Learning & Evaluation		Criterion VI	Governance
Criterion III	Research, Innovations & Extension		Criterion VII	Institutional Values & Best Practices
Criterion IV	Learning Resources and Infrastructure			

ACTIVITY REPORT

Due to the pandemic, this time the Student Competition Using Differential Equations Modelling, SCUDEM (in association with SIMIODE- Systemic Initiative for Modelling Investigations & Opportunities with Differential Equations) USA was held online. This challenge is usually taken up by students from all over the world. The students in a team of 3 engage with a team coach, with the objective of improving their modelling skills and to be able to visualize the applicability of differential equations in day-to-day life. It is an equal learning experience for coaches (faculty members) to incorporate such techniques in their classrooms.

TEAMS

The following students along with their coaches took part in the challenge:

1) **Dr. Neelesh Kumar (Coach and Judge)**

Team No.: 1009

Team Members:

1. Anant Narayanan, mkanant17@gmail.com, Sri Venkateswara College, University of Delhi

2. Rishabh Banerjee, rishabh.banerjee.108@gmail.com, Sri Venkateswara College, University of Delhi

3. Siddhi Agarwal, siddhiagarwal001@gmail.com, Sri Venkateswara College, University of Delhi

Problem on which team worked and presented:

Problem A: Hair Pulling To Line Your Nest

Problems judged: Problem B: Throw The Bike Or Throw The Race

Link for complete model problem:

https://qubeshub.org/files/MTRjZGIzZDFkMzI4NjdhNjg4ZDFjM2E4OGFiYzIyMDMxM2VkYWMzMTk3OThiODFkYTUwNTIwNTEwNTQwMzU1MjovdmFyL3d3dy9xdWJlc2h1Yi9hcHAvc2l0ZS9mb3J1bS8xMzAxMC8xMzAxMC9TSU1JT0RFLVZJLTIwMjEtUFJPQkxFTVMucGRm

You tube link of team presentation:

https://www.youtube.com/watch?v=vHBYdTnzGdE

Award won by the team: Outstanding award

2) **Prof. Swarn Singh (Coach and Judge)**

Team No.: 1019

Team Members:

1. Anand Singh

2. Ankit Pandey

3. Abhishek Bhatia

Link for complete model problem:

https://qubeshub.org/files/MTRjZGIzZDFkMzI4NjdhNjg4ZDFjM2E4OGFiYzIyMDMxM2VkYWMzMTk3OThiODFkYTUwNTIwNTEwNTQwMzU1MjovdmFyL3d3dy9xdWJlc2h1Yi9hcHAvc2l0ZS9mb3J1bS8xMzAxMC8xMzAxMC9TSU1JT0RFLVZJLTIwMjEtUFJPQkxFTVMucGRm

3) **Mr. Sudhakar Yadav (Coach)**

Team No.: 1063

Team Members:

1. Khusmita Sharma, Department of Mathematics, Jesus and Mary College, University of Delhi

2. Nimish Singh, Department of statistics, Hindu College, University of Delhi

Problem Name:

Problem B: Throw The Bike Or Throw The Race

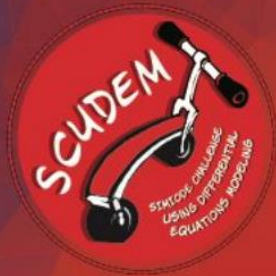**Link for complete model problem:**

https://qubeshub.org/files/MTRjZGIzZDFkMzI4NjdhNjg4ZDFjM2E4OGFiYzIyMDMxM2VkYWMzMTk3OThiODFkYTUwNTIwNTEwNTQwMzU1MjovdmFyL3d3dy9xdWJlc2h1Yi9hcHVvc2l0ZS9mb3J1bS8xMzAxMC8xMzAxMC9TSU1JT0RFLVZJLTIwMjEtUFJPQkxFTVMucGRm

You tube link of team presentation:

https://www.youtube.com/watch?v=aabEPN4ARJI

The students were asked to upload their presentation on the selected problem on YouTube.

SIMIODE

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& OPPORTUNITIES WITH DIFFERENTIAL EQUATIONS
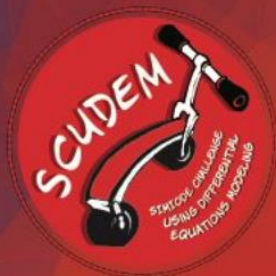
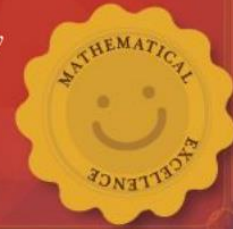SCUDEM VI 2021 - 14 November 2021

Siddhi Agarwal, Anant Narayanan, and Rishabh Banerjee
Coach Neelesh Kumar
Sri Venkateswara College, University of Delhi, New Delhi, INDIA

are hereby granted the Outstanding Award for their submission of

Problem A Nest Fur

*as determined by faculty and peer judges and given by
the Director, SIMIODE.*

SIMIODE

A SYSTEMIC INITIATIVE FOR MODELING INVESTIGATIONS
& OPPORTUNITIES WITH DIFFERENTIAL EQUATIONS

SCUDEM VI 2021 - 14 November 2021

Kushmita Sharma, Jesus and Mary College, New Delhi, INDIA
Nimish Singh, Hindu College, Delhi University, New Delhi, INDIA
Ogunranti Sikiru Abiola, Obafemi Awolowo University, Ieife, NIGERIA
Coach Sudhakar Yadav, Sri Venkateswara College, New Delhi, INDIA

are hereby granted the Successful Award for their submission of

Problem B Bike Throw

*as determined by faculty and peer judges and given by
the Director, SIMIODE.*