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**DOC NO: 1426** 

## A Report on

One day seminar

on

"Mathematical Modelling and Applications of Mathematics in Engineering-2022 (MMAME-2022)"

Organized by

Mathematics & Humanities Department &

Internal Quality Assurance Cell (IQAC)

on

01/10/2022

Gandhinagar Institute of Technology

Academic Year 2022-23



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Level: - College

**Category: - Seminar** 

Date: - 01/10/2022 (One Day)

No. of Resource Person: 3

No. of Participants: -100

Coordinator and Co-coordinator name:

Dr Mihir Suthar (M&H) and Prof. Madhuri Chopade (IT)

Mode: -Offline Objective:

The mathematical model is a structure that can be used to describe and study a real situation. The behavior of precise mathematical models can be analyzed using mathematical methods and computer simulations. Mathematical Applications focuses on extending the mathematical skills and knowledge of students in new contexts such as financial modelling, matrices, network analysis, route and project planning, decision making, and discrete growth and decay. The main objective of the seminar is to learn how real-world problems can be transformed to mathematical equations using different mathematical models and understand the importance of mathematics in engineering field.

#### **About Seminar:**

The seminar was organized by the Internal Quality Assurance Cell (IQAC) and Mathematics & Humanities Department, Gandhinagar Institute of Technology, Gandhinagar University on 1<sup>st</sup> October,2022, Saturday. The seminar was very interesting and participants actively interacted with experts.

An inaugural function was held at A-105 Seminar Hall of Gandhinagar University on Saturday at 10:00 AM, 1<sup>st</sup> October,2022. The prime focus of the seminar was role of differential equations in mathematical modelling and algebra in decision making. Total 100 participants had participated in this seminar.

In the first Session, speaker Dr Ravi Gor, Head, AI & ML and Data Science Department, School of Emerging Science and Technology, Gujarat University, Ahmedabad delivered his talk on introduction of mathematical modelling. He gave the information to participants about importance of Mathematical modelling and supply chain management. He focused especially on mathematical modelling rather than subject specialization to all the participants. Dr Aakash Singh, AI & ML and Data Science Department, School of Emerging Science and Technology, Gujarat University, Ahmedabad discussed concepts and classification of mathematical modelling and also shared the information about various mathematical models of real-world problems.



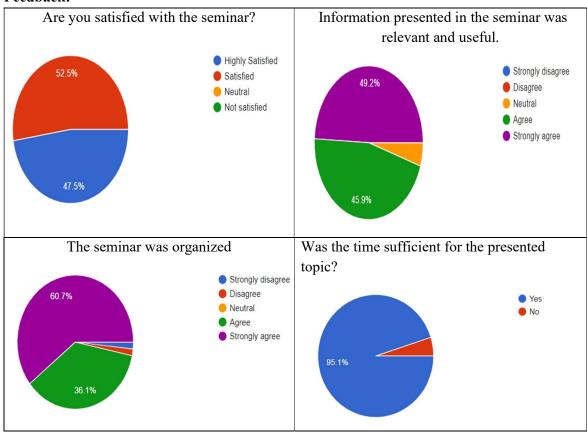
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In the second session after lunch, Dr Kunal Shukla, Assistant Professor, Vishwakarma Government Engineering College, Gujarat Technological University, Chandkheda, Ahmedabad delivered a talk about algebra in decision making. He explained geometrical interpretation of Eigen values and Eigen vectors and concepts of graph theory to participants. Participants learnt rotational axis concepts with activity and enjoyed the session. At the end of the session, participants shared their views about the seminar by filling feedback forms. The seminar was accomplished under the guidance of Trustees and Director -GIT and supported by Faculties and Staff members.

#### Outcome: -

The participants learnt how mathematical modelling plays an important role in solving real world problems specially by using differential equations that can enhance the ability of the participants to deal with the real-life problems that arise in nature. Participants also had received the information about the Eigen values and Eigen vectors in details and understood the concepts of algebra in making of decision.

#### Feedback: -



**Conclusion:** Out of 100 participants, 61 participants have given their feedback and all participants were satisfied with the seminar.

The seminar was successfully concluded with a formal vote of thanks to all the participants and present the dignitaries.

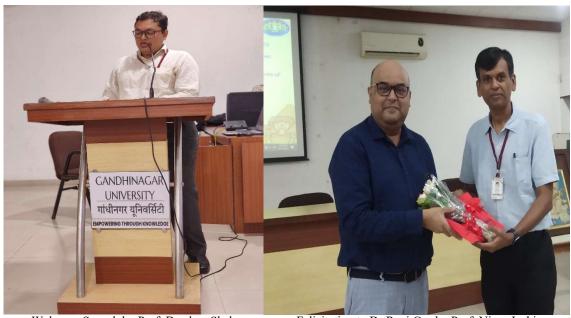


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### Photo Gallery: -



Sarasvati Vandana



Welcome Speech by Prof. Darshan Shah

Felicitation to Dr Ravi Gor by Prof. Nirav Joshi



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Expert talk delivered by Dr Ravi Gor

Expert talk delivered by Dr Aakash Singh



Felicitation to Dr Aakash Singh by Dr Mihir Suthar

Felicitation to Dr Kunal Shukla by Dr Gautam Patel



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Expert talk delivered by Dr Kunal Shukla

Vote of Thanks by Dr Sneha Patel



Activity performed by Participants with Dr Kunal Shukla



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Group Photo with present Dignitaries