#### **DST-GUJCOST**



#### Sponsored

### One Day National Seminar on



# "Role of Mathematics in Engineering & Technology"

(As a part of Silver Jubilee Celebration of SCET)



# Mathematics Section, ASH Department Sarvajanik College of Engineering & Technology



Date & Day: February 01, 2020 (Saturday)
Time: 08:30 am to 05:00 pm

Venue: N. J. Seminar Hall, 1st Floor, Admin Building, Administrative Block, SCET

#### Objectives of the Seminar:

- To understand and discuss the role of Mathematics in the real world problems by mean of applications of Mathematics in Engineering and Technology.
- To provide a better understanding and clarity about the importance of Mathematics in every discipline of science, Engineering and technology.

#### Speakers:

- Dr. Jayesh Dhodiya, Associate Professor, SVNIT, Surat
- Dr. Meghal Desai, Associate Professor, SVNIT, Surat
- Dr. Amit Parikh, Principal and Dean of Science Faculty, Ganapat University, Mehsana

#### Participants:

55 faculty members, research scholars and students (UG/PG) from science and engineering disciplines, were participated in the seminar. They were from various colleges and universities across the Gujarat.

#### Coordinators:

Dr. Rajesh Darji, Dr. Jigisha Pandya, Mathematics Section, Applied Science and Humanities Department.

#### Members of Organizing Committee:

- 1. Dr. Shama Mulla
- 2. Dr. Hitesh Desai
- 3. Dr. Ashish Desai
- 4. Dr. Hema Surati
- 5. Dr. Manisha Patel

- 6. Dr. Niket Shastry
- 7. Dr. Prathmesh Vyas
- 8. Dr. Mahesh Trivedi
- 9. Prof. Shruti Sheth

#### Summary:

Mathematics section of Applied Science and Humanities Department of Sarvajanik College of Engineering and Technology organized DST-GUJCOST sponsored 1-day national seminar on "Role of Mathematics in Engineering and Technology" on February 01, 2020 as a part of silver jubilee celebration of SCET.

The seminar was aimed to guide the students and faculty members to excel the role of mathematics in engineering and technology by mean of application in Real World Problems. The lectures of the seminar were conducted by eminent speakers from different disciplines of academia. The following table summarizes the various speaker's sessions of the seminar.

# Sr. No. Name & Session Title

# Session Details

Dr. Jayesh Dhodiya
 Solution of Real World Problem
 by Mathematical Modeling and
 Simulation

Dr. Jayesh Dhodiya explained the most current real world problem like traffic and water pollution. He had shown the horrible situations in traffic sense and discussed possible solution by mean of simulation. In another problem he took the situation of polluted river Ganga water, and tried to sort out the problem by forming Mathematical model for a sample of polluted water.

Dr. Meghal Desai
 Design of Experiments using
 Taguchi Method

In this session speaker explained how DOE lets experimenters to develop a mathematical model that predict show output variables or responses in a process or system. In detail he explained by using DOE, we can

- Learn about the process we are investigating
- Build a mathematical model
- Obtain prediction equations
- Optimize the response

3. Dr. Amit Parikh
Advanced Numerical Techniques

Dr. Amit Parikh introduced various types of advanced numerical techniques to the participant. He illustrated each method by considering a particular example, and explore the possible applications of numerical techniques in the analysis of the real world problem.

We would like to extend our sincere gratitude to Sarvajanik Education Society and Sarvajanik College of Engineering and Technology for permitting us to submit seminar proposal to GUJCOST and subsequently providing necessary infrastructure for conducting the seminar after receiving seminar approval from GUJCOST. We are thankful to our honorable principal Sir Dr. Hiren Patel for his continuous guidance and support. We extend our gratitude to Mr. Bhaskar Cheruku, Registrar for his continuous positive and prompt support. I also thank Dr. Mayank Dalal, HOD-ASH. We extend our earnest gratitude to all the eminent speakers (Dr. Jayesh Dhodiya, Dr. Meghal Desai, and Dr. Amit Parikh) who accept our invitation with short notice of time and spare their valuable time. All the sessions were highly educative and with deep insights. We would like to express my deep gratefulness to members of organizing committee for their relentless help and support without which it would have been difficult to conduct the seminar smoothly. We deeply appreciate the support extended by Parth Gajjar and Parin Chovatiya, (Sem 4, EL Shift 2) for their assistance in capturing photos. Our sincere thanks to all staff members of ASH department for their help in all the possible ways whenever required. I am also thankful to attendants for being always ready for any kind of work. Last but not the least, we are very thankful to all the participants for their kind presence during the seminar.

#### Some Glimpses of the Seminar:







































Thank you...!