<u>Gujarat Technological University</u> <u>Graduate School of Engineering and Technology</u>

A Report on

Skill Enhancement Program: Curricular Activity

Applications of Z-transforms to solve difference equations in discrete mathematics

Date: 16.1.2021 Time: 10.00 am to 11.00 am Expert: Dr. Jyotindra C. Prajapati, Associate Professor, SP University Session Coordinator: Ms. Rutika Ghariya, Assistant Professor.

The objective of the event:

- To understand importance of discrete mathematics and Z- transforms
- To apply Z transform to solve differential equations.

Participants Statistics:

- Total 54 number of students have attended the event.
- Participant are from first semester CS and PG-Data Science program students and faculties.

Glimpse of the Expert Talk:



- Geometric Series.
- Definition of Z- transforms and inverse Z-transforms.
- Examples on Z-transform
- Correlation
- Series manipulation techniques
- Correlation theorem and examples
- Solutions of difference equations