**Algebra Resources**

**Study Plan Overview**

* **Duration:** 4 Weeks
* **Daily Commitment:** 3-4 hours
* **Materials:** YouTube videos, articles, books

**Week 1: Unit 1 - Complex Numbers and Theory of Equations**

* **Polar Representation & Complex Numbers**
  + [Polar Representation of Complex Numbers in Hindi](https://www.youtube.com/results?search_query=polar+representation+complex+numbers+hindi)
* **De Moivre’s Theorem**
  + [De Moivre’s Theorem Explained in Hindi](https://www.youtube.com/results?search_query=de+moivre%27s+theorem+hindi)
* **Theory of Equations**
  + [Relation Between Roots and Coefficients](https://www.youtube.com/results?search_query=relation+between+roots+and+coefficients+hindi)
* [Complex Numbers - Basics in Hindi](https://www.example.com/)
* [Theory of Equations - Simple Formulas in Hindi](https://www.example.com/)
* **"Higher Algebra" by Hall and Knight** (Focus on Theory of Equations)

**Week 2: Unit 2 - Relations, Functions, and Induction**

* **Equivalence Relations**
  + [Equivalence Relations in Hindi](https://www.youtube.com/results?search_query=equivalence+relations+hindi)
* **Functions and Invertibility**
  + [Functions and Their Properties](https://www.youtube.com/results?search_query=functions+hindi)
* **Mathematical Induction**
  + [Fundamental Theorem of Arithmetic](https://www.youtube.com/results?search_query=mathematical+induction+hindi)
* [Understanding Functions and Relations](https://www.example.com/)
* [Mathematical Induction Basics](https://www.example.com/)
* **"Discrete Mathematics" by Rosen** (Focus on Functions and Induction)

**Week 3: Unit 3 - Systems of Linear Equations**

* **Linear Equations**
  + [Systems of Linear Equations](https://www.youtube.com/results?search_query=linear+equations+hindi)
* **Row Reduction and Echelon Forms**
  + [Row Reduction Methods](https://www.youtube.com/results?search_query=row+reduction+hindi)
* [Introduction to Linear Systems](https://www.example.com/)
* [Linear Independence Explained](https://www.example.com/)
* **"Linear Algebra" by Lay** (Focus on Linear Systems)

**Week 4: Unit 4 - Linear Transformations and Matrices**

* **Linear Transformations**
  + [Introduction to Linear Transformations](https://www.youtube.com/results?search_query=linear+transformations+hindi)
* **Matrices and Eigen Values**
  + [Matrices and Their Properties](https://www.youtube.com/results?search_query=matrices+hindi)
* [Understanding Linear Transformations](https://www.example.com/)
* [Eigenvalues and Eigenvectors in Hindi](https://www.example.com/)
* **"Linear Algebra and Its Applications" by Gilbert Strang** (Focus on Matrices and Linear Transformations)

**Additional Resources**

* **Websites**
  + [Khan Academy (Hindi)](https://www.khanacademy.org/)
  + [GeeksforGeeks (Hindi Section)](https://www.geeksforgeeks.org/)
* **Practice**
  + Solve example problems and past papers related to each unit after reviewing videos and articles.

**Final Tips**

* **Daily Review:** Spend 30 minutes revising previous material each day.
* **Practice Problems:** Allocate time on weekends for problem-solving.
* **Group Study:** Consider discussing topics with peers for deeper understanding.

By following this plan diligently, you should be well-prepared for your paper. Good luck!