

**MEHR CHAND Mahajan DAV College for Women**  
**P. G. Department of Mathematics**  
**Course e-content for B.Sc 5<sup>th</sup> Semester and B. A 5<sup>th</sup> Semester (Mathematics)**

**Subject:** Modern Algebra

**Teacher's Name:** Ms. Chitra

**Designation:** Assistant Professor

**Contents:** Recorded lectures and Practice Questions

#### RECORDED LECTURES

1. Groups and its examples

<https://drive.google.com/file/d/1AcHhnTihHUG2-rmXVIL1D0jphoFMeD9B/view?usp=sharing>

2. Subgroups and its examples

<https://drive.google.com/file/d/13QuO1B3vq1772vrTRq98RC7wn0xQwRWk/view?usp=sharing>

3. Cosets and Lagrange Theorem

<https://drive.google.com/file/d/1D-I5INetsCUrOlV1Kya5cSBIzTcmCpY8/view?usp=sharing>

4. Centre of a Group

<https://drive.google.com/file/d/1vVv1iSWi5weBd2rfUUNfkLZf5CHW6XqG/view?usp=sharing>

5. Cyclic Groups and its examples

<https://drive.google.com/file/d/16mMx3bCV8mpLbWBDjOPUC2CWA0PUBne/view?usp=sharing>

6. Normal Subgroups and its examples

<https://drive.google.com/file/d/1FCeHT4sWXFeSuQAN5DkxzCu2MYsA6az/view?usp=sharing>

#### PRACTICE QUESTIONS LINK

1. <https://www2.math.upenn.edu/~qze/math314s18/algebraex.pdf>

2. <https://engineeringinterviewquestions.com/mcqs-on-group-theory-answers/>

#### REFERENCES

1. M. Artin, Algebra, Prentice Hall of India, New Delhi (1994).
2. I. N. Herstein, Topics in Algebra, Wiley Eastern Ltd., New Delhi.
3. J. A. Gallian, Contemporary Abstract Algebra, Narosa Publication House, New Delhi.
4. S. Singh and Q. Zameerudin, Modern Algebra, 8<sup>th</sup> Edition, Vikas Publication, New Delhi.