

**MEHR CHAND MAHAJAN DAV COLLEGE FOR WOMEN,
CHANDIGARH
P.G. Department of Mathematics
Course e-content for B.A./B.Sc. 1st Semester (Mathematics)**

Subject: Trigonometry and Matrices

Teacher's Name: Dr. Ekta Jain

Designation: Assistant Professor

Contents: Recorded lectures, study material and practice questions.

Recorded Lectures

1. Eigen Values and Eigen Vectors of a Matrix-Introduction and Results

<https://drive.google.com/file/d/1z0AikabkiU2msPQ1z6d4XEf3bTGyTjP/view?usp=sharing>

2. On finding Eigen values and Eigen vectors for a Matrix

<https://drive.google.com/file/d/1pfPEXVZRtvAv1Mutz9yvdeeoGS3K-5Ru/view?usp=sharing>

3. Diagonalizability of a Matrix

https://drive.google.com/file/d/19Rs8PDqGFlw7xO_cCxy-5A6Hd8gmi4P2/view?usp=sharing

4. Cayley-Hamilton Theorem

<https://drive.google.com/file/d/13vhbcq6uTrkgfYm34h5vmrUxpog5gkFZ/view?usp=sharing>

Study Material and Practice questions

1. <D:/Editors/Kishor/LaTeX/Linear Algebra/ila4/ila4new.dvi> (mit.edu)

2. <https://www.sathyabama.ac.in/sites/default/files/course-material/2020-10/lunit.pdf>

Suggested Readings

1. K.B. Datta: Matrix and Linear Algebra, Prentice Hall of India Pvt. Ltd., New Delhi, 2000.

2. S.R. Knight and H.S. Hall: Higher Algebra, H.M. Publications, 1994.

3. Shanti Narayan and P.K. Mittal: A Text Book of Matrices, S. Chand & Co. New Delhi, Revised Edition, 2007.