



Important  
Notes

## DSE-3. Theory of Equation

Record the list of things  
you might want to do.

\* Answer any three question:-

- Q1. Discuss application of Sturm's theorem.
- Q2. Give general properties of polynomials.
- Q3. Derive Descartes's rule of signs?
- Q4. Discuss relation between the roots and the co-efficients of equations?

## DSE-4. Mathematical Modeling

\* Answer any two question:-

- Q1. Give introduction to mathematical modeling?
- Q2. Discuss need, techniques and classification of mathematical modeling?
- Q3. Derive mathematical models on environmental pollution, air and water pollution?