

## **Mathematics**

### **1. Differential equations:**

Differential equation of the first order and second order and their coefficients , constant , Applications.

### **2. Fourier series:**

Fourier series for odd and even functions

### **3. Matrices:**

Definition and property of Matrices , Eigen value and Eigen vector , set of Linear equation

### **4. Laplace transforms.**

### **5. The inverse of Laplace transforms.**

### **6. Compact sets and the variables:**

Introduction , compact sets with one-dimension mathematical expression , examples for using compact sets , compact sets with multi-dimension ,input and out put compact sets and partial Do rings.