

Coimbatore - 641 107



## **TUTORIAL-1**

## **Problems based on Formation of partial differential equations**

- 1. Eliminate the arbitrary constants a&b from  $z=(x^2+a^2)(y^2+b^2)$
- 2. Eliminate f from z=f(xy/z)
- 3. Form the PDE by eliminating f from  $f(x^2+y^2+z^2, x+y+z)$
- 4. Form the differential equation by eliminating the arbitrary functions f and g in  $z=x^2f(y)+y^2g(x)$