

NAME : MM MUSTAFA KHAN

ID : 7753

APPLICATION OF ODE'S:

- 1) Newton law of cooling
- 2) Beam
- 3) Physical Application
- 4) Radio Active element.
- 5) Electric Circuits
- 6) Modelling free mechanical oscillation
- 7) No damping
- 8) light damping
- 9) Heavy damping
- 10) Modelling forced mechanical oscillation.

11) Computer exercise or activity.

12) Modelling with first order equations,

APPLICATION OF

PDE:

in many engineering or science problems, such as heat transfer, elasticity, quantum mechanics, water flow and other problems are governed by partial differential equation, by nature, these types of problems are complicated than the previous ordinary differential equation.

Method for PDE:

- 1) separation of variable.
- 2) method of characteristics
- 3) Integral transform.

- 4) Super position principle.
- 5) change in variable
- 6) Lie group method.
- 7) as well as various numerical methods.