

## NOTATIONS

Unless otherwise stated, the following notations have been used in this thesis.

$W$  = deflection normal to the middle surface

$u, v$  = in-plane displacements

$E, E_{11}, E_{22}$  = Young's moduli

$\rho$  = density of the Plate or Shell material

$h$  = thickness

$\alpha_t, \beta_{11}, \beta_{22}$  = Co-efficients of thermal expansion

$\nabla^2$  = Laplacian operator

$\nu$  = Poisson's ratio

$a, R$  = radii

$F(t)$  = function of time  $t$

$C_{ij}$  = elastic constants

$T^*$  = nonlinear time-period

$T$  = linear time-period

$A$  = amplitude

$(x, y)$  = Cartesian Co-ordinates

$$D = \frac{Eh^3}{12(1-\nu^2)} = \text{flexural rigidity}$$

$r$  = radial co-ordinate

$E$  = error function

$(z, \bar{z})$  = complex co-ordinates

$M_T$  = thermal moment defined after eqn. (2)

$N_T$  = thermal stress resultant

$C_0, C_1, C_2, C_3, \frac{\lambda}{\lambda}$  = Constants.

$\alpha, \beta, \gamma, \delta, K, \lambda$