N O T A T I O N

The following symbols are used in this thesis :

ε , γ	=	strain components of Sandwich plate
I_1^m, I_2^m	=	first and second invariants of average face strains of Sandwich plate
M_x, M_y	=	bending moments of Sandwich plate
λ	=	constant depending on Poisson's ratio
f, f_o	=	temperature difference on each face of sandwich plate.
ν	=	Poisson's ratio
α	=	thermal expansion co-efficient of Sandwich plate.
G	=	shear modulus of Sandwich plate
u, v, w	=	displacement in x, y and z direction respectively.
$( )^c$	=	core variable of Sandwich plate
$( )^f$	=	face variable of Sandwich plate.
$( )^u$	=	upper face variable of Sandwich plate.
$( )^l$	=	lower face variable of Sandwich plate
$( )^m$	=	average value of Sandwich plate.
α_t	=	thermal expansion co-efficient of shell.
e, e_2	=	first and second strain invariants of the middle surface of shell.
ϵ_x , ϵ_y, γ_{xy}	=	components of the inplane strain of shell.
L_1	=	Lagrangian function.
q	=	normal load.

w_1^*, w_1 = non linear and linear frequency of shell respectively.

$w_o(t)$ = unspecified function of time.

S_1 = membrane temperature parameter of shell.

$\bar{e}_{xx}, \bar{e}_{yy}, \bar{e}_{xy}$ = components of inplane strains of orthotropic cylindrical shell.

$\bar{e}_1$ = first strain invariant of orthotropic cylindrical shell.

e_{xx}, e_{yy} = thermal strain invariant of orthotropic cylindrical shell.

$\bar{e}_2$ = second strain invariant of orthotropic cylindrical shell.

α_1, α_2 = co-efficients of thermal expansion of orthotropic cylindrical shell.

$E'_x, E'_y, E'', G, S_{ij}, \lambda_1$ = elastic constants of orthotropic cylindrical shell.

h_o = central thickness of spherical shell of variable thickness.

ρ = density of the shell material.