

## BchZÀ``Y`]b`CVYf\UjY`.`K]W\h][Y`=bZcg`ni IbZÀ``Yb`ibX`FYhhib[°

5\_hi Y``Y`Dc`]nY]a Y`Xi b[Yb'Ui g'CVYf\Uj Y`.`I bZÀ``Yž 9]bVfØWXY'i bX'k]WXh][Y'Bchfi Z]bZcfa Uh]cbYb'ZØf'XYb'%) "'>i `] &\$&) "



CVYf\UjY`ž'8Yi hgWX`UbX`!`K Ugʻhi hʻg]WX`]b`CVYf\UjY`3'<Yi hYž
Ua`%) "'\$`]'&\$&) ž'VYf]WXhYh`X]Y`a Un!cb`]bY"XY`ØVYf`U\_hi Y``Y
; YgWXY\b]ggY`]b`XYf`FY[]cbž`XUfi bhYf`I bZÀ``Yž'9]bVfØWXY`i bX
UbXYfY`JYfVfYWXYb"'8]Y`Dc`]nY]']gh`Ui WX`]b`X]YgYf`NY]h`U\_h]j žii a
ZØf`G]WXYf\Y]h`ni 'gcf[Yb`i bX`X]Y`6Yj Ò`\_Yfi b['ØVYf`k]WXh][Y
BchZU``jYf\U`hYb`Ui Zni \_`ÀfYb"

; YfUXY ]b GhfYggg]hi Uh]cbYb ]ghYg k ]Wkh][ ž fi \ ][ ni 'V`Y]VYb i bX f]Wkh][ ni '\UbXY`b" 8 ]Y nYbhfU`Y Bchfi Zbi a a Yf ]b 8 Yi hgWk `UbXž X]Y ZØf Dc`]nY]ž: Yi Yfk Y\f'i bX F Yhhi b[ gX]YbghY [ Ybi hnh k ]fXž ]gh %%&" 'J cf 5 bfi ZYb ]ghYg Ya dZY\`Ybgk Yfhž Y]b][ Y k YgYbh`]WkY  $\pm$ bZcfa Uh]cbYb 'VYfY]hni \U`hYb. 'K c']gh`XUg'; YgWkY\Yb3'K ]Y'j ]Y`Y DYfgcbYb 'g]bX 'VYhfc ZZYb3'K Y`WkY 5 fh'j cb'JYf`Yhni b[ Yb'cXYf

## $8 Ug^{f}Wh][Y^{B}chZU^{j}YfhU^{h}Yb]$

=a :: U``Y 'Y]bYg'Bchfi Zg'gc``hY 'a Ub'Ua 'C fh'XYg'; YgW\Y\Ybg
V`Y]VYbž'i a '=bZcfa Uh]cbYb'ni f'J YfZØ[i b['ni 'ghY``Yb"'9g']gh
fUhgUa ž'X]Y '5bnU\``XYf'6YhfcZZYbYb'i bX'X]Y '5fh'XYf'J Yf`Yhni b[Yb
ni 'bch]YfYb"'K Ybb'a Ò[`]W\ž'\]`Zh'a Ub'k Y]hYfYb'6YhfcZZYbYb'j cf
Cfhž'k À\fYbX'a Ub'Ui Z'X]Y '5bk Y]gi b[Yb'XYf'FYhhi b[g\_fÀZhY
k UfhYh"'8]YgY'\_ÒbbYb'Ui W\k ]W\h][Y'hY`YZcb]gW\Y'<]`ZYghY``i b[Yb
[YVYbži a 'X]Y'G]hi Uh]cb'VYggYfY]bgW\AhnYb'ni '\_ÒbbYbž'k]Y'XUg'
Xf\_!VfUbXYbVi f["XY'VYgW\fY]Vh"

8]Y'Dc`]nY]]bgdY\_h]cb'CVYf\UjY`']gh'i bhYf'XYf'HY`YZcbbi a a Yf Ž (-'''\$%',)'%\$'YffY]W\VUfž'k À\fYbX'XUg'Dc`]nY]fYj]Yf'; fUbgYY i bhYf'Ž (-'''\$\*'&\$'','!\$'Zi b[]Yfh''': Øf''YbYž'X]Y'k Y]hYfYb'6YXUfZ Ub'=bZcfa Uh]cbYb'\UVYb'cXYf'XYb'Bchfi Z'UVgYhnYb'a ØggYbž qhY\Yb'X]j YfgY'8]YbghghY``Yb']b'XYf'I a [YVi b['VYfY]h

Dc`]nY]ghUh]cb	5 X f Y g g Y	HY`YZcbbi a a Yf
Dc`]nY]]bgdY_h]cb	; Yfa YbXcfZYf <sup>·</sup> 5``YY	Ž ( - '' ' \$%', ) '%\$
CVYf\UjY`	%+ ž˙%* ) %)	
	CVYf\UjY`	
Dc`]nY]fYj ]Yf	CfUb]YbVif[Yf	Ž ( - '' ' \$*'&\$' , '!\$
; fUbgYY	GhfU» Y '' %Už'%* ++)	
	; fUbgYY	
FYj ]Yfdc`]nY]	A Uf_h') ž'%* +- ,	Ž ( - '' ' \$*'&\$',
: ØfghYbVYf[ ₩ Uj Y`	: ØfghYbVYf[ #< Uj Y`	!%\$()
FYj ]Yfdc`]nY]	5`hY'GW\i`ghfU»Y')ž	Ž ( - '' ' \$*'&\$',
@Òk YbVYf[ Yf @UbX	%* ++)	!%\$('
	@UbX"CH"@ÒkYbVYf[	
FYj ]Yfdc`]nY]	5a 'A Uf_h'%ž'%* +- &	Ž ( - '' ' \$*'&\$',
NY\XYb]W_	NY\XYb]W_	!%\$((

: Øf'U``Yž'X]Y']a 'BchZU``'b]W\h'g]W\Yf'g]bXž'k Y`W\Y'<]`ZY'Y]bhfYZZYb a i ggž'gY]Yb'X]Y'nYbhfU`Yb'Bchfi Zbi a a Yfb'XYf'FY[]cb'Y]bY k Yfhj c``Y'FYggci fW\"'JYfhfUi Yb'G]Y'XUfUi Zž'XUgg'ei U`]Z]n]YfhYg

 $\label{eq:def:DYfgcbU} \ \, \text{DYfgcbU} \ \, \text{UbXYfYb} \ \, \text{9bXY} \ \, \text{XYg} \ \, \text{HY} \ \, \text{YZcbg} \ \, \Rightarrow \ \, \text{bYb} \ \, \text{\chi} \ \, \text{Y} \ \, \text{ZYb} \ \, \text{\_Ubb} \ \, \text{ZX} \ \, \text{Y} \ \, \text{G} \ \, \text{hi} \ \, \text{Uh} \ \, \text{cb} \ \, \text{VYgha} \ \, \text{O}[\ \, \, \, \, \, \text{O}[\ \, \, \, \, \, \, \text{Y}] \ \, \text{W} \ \, \text{ni} \ \, \, \text{VYk} \ \, \text{A} \ \, \text{h}][\ \, \text{Yb} \ \, \, \text{9f}[\ \, \text{cbca} \ \, \, \, \, \, \text{gWW} \ \, \text{Yg} \ \, \text{J} \ \, \text{Yf} \ \, \text{U} \ \, \text{hYb} \ \, \text{hYb} \ \, \text{hYb} \ \, \text{hYb} \ \, \text{Y} \ \, \text{hYb} \ \, \text{Yb} \ \, \text{Yb$ 

8 YhU]`g	
Cfh	CVYf\UjY`ž'8Yi hgW\`UbX
EiY``Yb	• k k k "a Un!cb`]bY"XY
	<ul><li>k k k "cfhgX]Ybgh"XY</li></ul>
	• k k k "Xf_!VfUbXYbVi f[ "XY

6Ygi WXYb G]Y i bg Ui Z. b!U[ "bYh