

9]b a mghYf]ÒgYg @c W\]a ; UfhYb. K Yf c XYf k Ug ghY W_h XU\]bhYf3

9fZU\fYb'G]Yž'k c\Yf'%\$'Wa'[fc»Y'@ÒW\Yf']a'; UfhYb _ca a Ybž'k Y`W\Y'H]YfY'XUZØf'j YfUbhk cfh`]W\'g]bX'i bX'k]Y G]Y'fYU[]YfYb'_ÒbbYb"



; UfhYbž'8Yi hgWk`UbX'! =a ; UfhYb'k i fXYb'_Øfn`]Wk'@OWkYf'a]h Y]bYa '8i fWka YggYf'j cb'Yhk U'nY\b'NYbh]a YhYfb'YbhXYW_h"'8]YgY ca]bÒgYb'@ÒWkYf'_ObbYb'j cb'j YfgWk]YXYbYb'H]YfUfhYb j Yfi fgUWkh'k YfXYb" I a 'X]Y'j YfUbhk cfn`]WkYb'H]YfV'ni]XYbh]Z]n]YfYbž']gh'Yg'k]Wkh][ž'X]Y'Gdi fYb'f]Wkh]['ni 'XYi hYb" 6YgcbXYfg'Ui ZZÀ``][']ghž'k Ybb'Y]b'@cWk'ØVYf'BUWkh'YfgWkY]bhž XYbb']b'X]YgYa : U```g]bX'a Y]gh']a '6cXYb'`YVYbXY'cXYf'bUWk : i hhYf'gi WkYbXY'H]YfY'Ua 'K Yf_"'I a '\YfUi gni Z]bXYbž'cV'Yg'g]Wk i a 'Y]bYb'Y]ba U`][Yb'J cfZU```cXYf'i a 'fY[Y`a À»][Y'@ÒWkYf \UbXY`hž'Ya dZ]Y\`h'Yg'g]Wkž'X]Y'I a [YVi b['ni 'VYcVUWkhYb"'9]bY K]`Xh]Yf_Ua YfU'_ObbhY'\]YfVY]'\]'ZfY]Wk'gY]bž'i a 'X]Y'H]YfY'ni]XYbh]Z]n]YfYbž'X]Y'ZØf'XUg'@cWk'j YfUbhk cfn`]Wk'g]bX"'

BUWXXYa 'X]Y'I fgUWXY'ZØf'X]Y'@ÒWXYf'Yfa]hhY`h'k i fXYž'gc``hY'XUg @cWX'a]h'9fXY'ni [YgWXØhhYh'k YfXYbž'i a 'Ghc`dYfZU``Yb'ni j Yfa Y]XYb"'8]Y'a Y]ghYb'H]YfYž'X]Y'@ÒWXYf'[fUVYbž'g]bX'\Ufa `cg" \(\forall X\cWX'_\ObbYb'FUhhYbž'X]Y'YVYbZU``g'@OWXYf'j Yfi fgUWXYbž ?fUb_\Y]hYb'ØVYfhfU[Yb"'6Y]'Y]bYa 'FUhhYbVYZU``']gh'Yg'fUhgUa ž XUg'CfXbi b[gUa h'ni ']bZcfa]YfYb"'I a 'FUhhYb'UVni \U'hYbž _\ObbYb'gdYn]Y``Y'A U\(\rightarrow\ \rightar

K Y]hYfY GWX AX`]b[Y']a ; UfhYb

K Å\fYbX'@ÒW\Yf']a ; UfhYb'cZh'Ui Z'H]YfY'\]bk Y]gYbž_ÒbbYb'Ui W j YfgW\]YXYbY'GW\ÂX\]b[Y'ni 'DfcV'Ya Yb'ZØ\fYbž'X]Y < UbX'i b[gVYXUfZ'YfZcfXYfb"'GW\ÂX\]b[Y'k]Y'6'Uhh'Ài gY'g]bX VYgcbXYfg'[YZØfW\hYhž'XU'g]Y'JYf_fØddY'i b[Yb'i bX'XUg JYfhfcW_bYb'j cb'6'AhhYfb'j Yfi fgUW\Yb'_ObbYb"'G]Y'dfcXi n]YfYb < cb][hUi ž'k Y'W\Yf'X]Y'DZUbnYb'a]h'_YVf][Ya 'GY_fYh j YfgW\a i hnh'i bX'Fi » hUi d]'nY'Ubn]Y\h"I a 'DZUbnYb'ni 'gh\Af_Yb\Zg]bX'fY[Y'a \And N]['Y'K UggYfj Yfgcf[i b['i bX'Y]bY'Ui g[Yk c[YbY 8 Øb[i b['k]W\h]["'6Y]'ZfØ\Ya '6YZU``'_ObbYb'6'Uhh'\Ai gY'\\AbX]gW\Ybh\ZYfbh'cXYf'a]h'K UggYf'UV[Ygdf]hnh'k YfXYb"'Ni XYa '_ObbYb DZUbnYb'a]h'U'hYfbUh]j Yb'A]hhY'b'k]Y'6fYbbbYggY'gi X'cXYf GY]ZYb`Ui [Y'VY\UbXY'h'k YfXYb"'7\Ya]gW\Y'\DgY_h]n]XY'gc``hYb\]YfVY]'bi f']a 'BchZU``'Y]b[YgYhnh'k YfXYb"'BUhØf']W\Y': Y]bXY'k]Y A Uf]Yb_\AZYf'i bX': `cfZ]Y[Yb`Ufj Yb'_ObbYb'YVYbZU``g'ni f 6Y_\Aa dZ\b['j cb'6'Uhh'\Ai gYb'VY]hfU[Yb"

B]Wk h'bi f'6`Uhh`Ài gY'ghY``Yb'; YZU\f'ZØf'XYb'; UfhYb'XUf" BUW_hgWk bYW_Yb'g]bX'VY]'ZYi Wk hYf'K]hhYfi b['\Ài Z]['Ubni hfYZZYb i bX'_ÒbbYb'j]Y'Y'DZ'UbnYb'nYfghÒfYb"'I a ''\ b[Y'DZ'UbnYb'ni gWk ØhnYbž'Ya dZ]Y\`h'Yg'g]Wk ž'GWk bYW_YbnÀi bY'ni ']bghU``]YfYb'i bX Y]bYb'K U``'Ui g'GÀ[Ya Y\``cXYf'GhY]ba Y\``i a '6YYhY'ni 'Yff]Wk hYb" BUhØf`]Wk Y': Y]bXY'j cb'GWk bYW_Yb'g]bX'i bhYf'UbXYfYa ' \neq Y'ž @Ui Z_ÀZYf'i bX'?fÒhYb"'=a ': U``Y'Y]bYg'ghUf_Yb'6YZU``g'_ÒbbYb

GW. bYW_Yb 'bUW. hg 'a]h'Y]bYa 'GdUhYb'i bX'Y]bYa '9]a Yf
Y]b[YgUa a Y`h'k YfXYb"'7\Ya]gW. Yg 'GW. bYW_Yb_cfb'gc``hY
U``YfX]b[g'U`g'`YhnhY'A Ò[`]W_Y]h']b'6YhfUW. h'[Ync[Yb'k YfXYbž'XU
Yg'Ui W. '< Ui gh]YfY'[YZÀ\fXYb'_Ubb"'I a 'ni _ØbZh][Yb'GW. ÀXYb
j cfni VYi [Ybž'_ÒbbYb'gW. bYW_YbZYghY'GhUi XYb'k]Y'9]gYb\i hž
GdcfbV`i a Yb'i bX'GW.Y]bqcbbYb\i h'[YdZ'Ubnh'k YfXYb"

H]Yf]gWXY; UfhYbVYkcVbYf

9]bY'UbXYfY'\Ài Z][Y'<YfUi gZcfXYfi b['ZØf'; ÀfhbYf'g]bX

K Ø\`a Ài gY'i bX'A Ui `k ØfZY"'K Ø\`a Ài gY'ZfYggYb'[fc»Y'A Yb[Yb

Ub'DZ'UbnYbž']bgVYgcbXYfY'ZY]gW\][Y'K i fnY`b"'8Yf'GW\i hn

Ya dZ]bX`]W\Yf'DZ'UbnYb'_Ubb'Xi fW\'XUg'GYhnYb']b

A UgW\YbXfU\h_OfVY'cXYf'gdYn]Y``Y'DZ'Ubn_OfVY'[Yk À\f`Y]ghYh

k YfXYb"'5i W\'X]Y'; Àb[Y'j cb'K Ø\`a Ài gYb'g]bX'ZUW\Yf'U`g'X]Y

j cb'A Ui `k ØfZYb'i bX``]Y[Yb'bU\i bhYf'XYf'CVYfZÀW\Y"'A Ui `k ØfZY
\]b[Y[Yb'j Yfi fgUW\Yb'i bgW\ObY'< Ø[Y`ž'gW\AX][Yb'YXcW\'_Y]bY

DZUbnYb'i bX'ghY\Yb'i bhYf'BUhi fgW\i hn": Øf'X]Y'J YfhfY]Vi b['[]Vh

Yg'gW\cbYbXY'A Yh\cXYbž'X]Y'X]Y'BU\fi b[gei Y``Y'XYf'A Ui `k ØfZY

VYK U\fYb'i bX'XYfYb'@YVYbgfUi a 'b]W\h'[YZÅ\fXYb"

9]b'k Y]hYfYf'GW\ÀX`]b[ž'XYf']a 'FUgYb'GW\ÀXYb'j Yfi fgUW\Yb
_Ubbž']gh'XYf'; UfhYb`Ui V_ÀZYf"'6fUi bY'GhY``Yb']a 'FUgYb'g]bX'Y]b
<]bk Y]g'Ui Z'Y]bYb'6YZU``ž'XU'K Y]VW\Yb']\fY'9]Yf'Xcfh'UV`Y[Yb'i bX
X]Y'@Ufj Yb'Ub'XYb'; fUgk i fnY`b'ZfYggYb"'8]Y'6Y_Àa dZ b['gc``hYb
; UfhYbVYg]hnYf'nk]gW\Yb'*\`]i bX'GYdhYa VYf'UbghfYVYb"
BYa UhcXYb'fk YhYfcf\UVX]h]g'VUWhYf]cd\cfUŁ'g]bX'Y]bY
V]c`c[]gW\Y'A Yh\cXY'ni f'6Y_Àa dZ b['XYf'@Ufj Yb"

; ÀfhbYf'gc``hYb'ghYhg'Ui Z'X]Y'5bnY]WXYb'j cb'GWXÀX`]b[Yb'UWXhYbibX'fYWXhnY]h]['fYU[]YfYbž'i a ']\fY'DZUbnYb'ni 'gWXØhnYb'''9]bUWXhgUa Yf'l a [Ub['i bX'X]Y'6YUWXhi b['bUhØf`]WXYf6Y_Àa dZ b[ga Yh\cXYb'_ObbYb'XYb'; UfhYb'[Ygi bX'\U`hYb'i bXXUg'bUhØf`]WXY; 'Y]WX[Yk]WXh'kU\fYb"

J c f ZU``	I a k Y`h
Cfh	; UfhYbž8Yi hgWX`UbX
EiY``Yb	k k k "h!cb`]bY"XY
	k k k "[UfhYbZ`cfU"XY

6 Ygi WX Yb 'G]Y 'i bg 'Ui Z. 'b!U["X Y