

## : U`gWX [ Y`X YbhXYW\_h. 6i bXYgdc`]nY] Yfa ]hhY`h'[ Y[ Yb'; | YbX`]WXY']b' < Ua a

<Ua a ` '5a `GUa ghU[ UVYbXž'XYa `' %"'5i [ i ghž'k i fXY'X]Y
6i bXYgdc`]nY] ]b' < Ua a `ni `Y]bYa `i bYfZfYi`]WXYb `Nk ]gWXYbZU``
[ Yfi ZYbž'XYf'X]Y `G]WXYf\Y]h']a ` < Ui dhVU\b\cZ'VYhfUZ" `6Y] `Y]bYf
?cbhfc``Y `YffY[ hYb `nk Y] '\$ [ YbX`]WXY'X]Y '5i Za Yf\_gUa \_Y]h'XYf
6YUa hYb'i bX'Yfk ]YgYb'g]WX `U`g'HfÀ[ Yf'Y]bYf'VYXYb\_`]WXYb
@UXi b[ "'8Yf'%) ! 'À\f][ Y'i bX'XYf'%\*! 'À\f][ Y'\$ b[ Y'k UfYb']a
6U\b\cZ'i bhYfk Y[ gž'U`g'X]Y '6i bXYgdc`]n]ghYb'VYa Yf\_hYbž'XUgg
XYf'À`hYfY'XYf'VY]XYb'Y]b'j YfVchYhYg'6i hhYfZ'ma YggYf'VY] 'g]WX
hfi [ "</pre>

 $8 ]Y ?? cbhfc``Y `nY][ hY `gWX bY```h]Y ZY fY `DfcV`Ya Y `Ui Zž`U`g`X]Y \\ Dc`]n]ghY b `]b `XY f`6Ui WX hUgWX Y `XY g`%*! <math>\stackrel{.}{A}$  \ f][ Yb `Ui WX `bcWX `Y]bY \\ VY UWX h`]WX Y `A Yb[ Y `Ub `[ YZÀ`gWX hYa '; Y`X `YbhXY W\_hYb"'  $\stackrel{.}{\Rightarrow}$  g[ YgUa h +\* `ZU`gWX Y `%\$!9i fc!GWX Y]bY `k i fXYb `g]WX Yf[ YghY``hž`k Ug`ZØf`X]Y 6Y Ua hYb `Y]b `5b`Ugg`k Ufž`b]WX h`bi f`X]Y  $\stackrel{.}{\Rightarrow}$  [ YbX`]WX Yb ž`gcbXY fb Ui WX `X]Y `fY WX h`]WX Yb  $\stackrel{.}{\Rightarrow}$  a `]\_Uh]cbYb `X]YgYf`9bhXY W\_i b[ `[ fØbX`]WX ni `i bhYfqi WX Yb"

## $8]Y^8YhU]^gXYf^9bhXYW_ib[$

6Y] XYf [YbUi YfYb 8i fW gi W i b[ XYf VY] XYb \$\frac{1}{2} b[ Yb k i fXY XUg 6i hhYfZ ma YggYf 'U `g `Y]b k Y]hYfYg F]g]\_c `Yf\_Ubbh" `Gc `W Y K UZZYb g]b X `]b `8 Yi hg W `Ub X `ghfYb[ '[ YfY[ Y `hž i b X `XYf `6 Yg]hn `\_Ubb `YfbghY fYW h`]W Y ? cbgYei YbnYb `b UW `g]W `n]Y \ Yb " 8i fW `X]YgY ?ca V]b Uh]cb `Ui g `K UZZYb[ Yk U`h i b X : U`gW [ Y`Xdfc Xi \_h]cb `ghY``h g]W X]Y : fU[ Yž k ]Y `k Y]h `gc `W Y `DfU\_h]\_Yb `j YfVfY]hYh `g]b X `i b X

 $8 \ Ug`[\ YZA`gWk\ hY';\ Y`X`k\ Uf`]b`Y]bYa\ ``Ni\ ghUbXž`XYf`Yg`gWk\ Yf$   $a \ UWk\ hYž`Yg`Ui\ Z`XYb`YfghYb`6`]W\_`ni\ `Yf\_YbbYb"`8]Y`$$i [\ YbX`]Wk\ Yb\_cbbhYb`U``YfX]b[\ g`\_Y]bY`5b[\ UVYb`ni\ f`< Yf\_i\ bZh`XYf`6Ub\_bchYb a \ UWk\ Ybž`k\ Ug`X]Y`9fa ]hh`Yf`]b`5`Ufa \ VYfY]hgWk\ UZh`j\ YfgYhnhY"`$0 gc`Wk\ Yb`: \A```Yb`ghY``h`g]Wk`cZh`X]Y`: fU[\ Yž`cV`X]Y`$i [\ YbX`]Wk\ Yb`gY`Vgh\ HY]``Y]bYg`[fÒ»\ YfYb`BYhnk\ Yf\_g`g]bX`cXYf`cV`g]Y``YX][`]Wk`U`g\ 9]bnY`U_hYi\ fY`\ UbXY`b"$ 

8]Y'6i bXYgdc`]n]ghYb`\UVYb`XUg`[YZÀ`gW\hY'; Y`X'ni gUa a Yb`a ]h
XYa 'A YggYf'g]W\Yf[YghY``hi bX'Y]b'9fa ]hh`i b[gj YfZU\fYb'[Y[Yb
VY]XY'\$\[ YbX`]W\Yb'Y]b[Y`Y]hYh"'Gc`W\Y'5\_h]cbYb'g]bX'HY]`'Y]bYg
[fo`>YfYb'6Ya Ø\Ybg'XYf'6Y\OfXYbž'[Y[Yb'X]Y'N]f\_i `Uh]cb'j cb
: U`gW\[Y`X'i bX']``Y[U`Yb'K UZZYb']a 'OZZYbh`]W\Yb'FUi a
j cfni [Y\Yb"'8Yf'JcfZU```k]fZh': fU[Yb'ØVYf'X]Y'JYfUbhk cfhi b['j cb
A]bXYf'A\f][Yb'Ui Z'i bX'k Ug'[YhUb'k YfXYb'\_Ubbž'i a 'g]Y'j cf'XYa
5V[`Y]hYb']b'X]Y'?f]a]bU`]hAh'ni 'VYk U\fYb"

± X]YgYa 'gdYn]Y``Yb': U``'k i fXYb'[ `ØW\_`]W\Yfk Y]gY'fYW\hnY]h][
A U» bU\a Yb'Yf[ f]ZZYbž'i a 'GW\`]a a YfYg'ni 'j Yf\]bXYfb"'9g'V`Y]Vh
UVni k UfhYbž'k ]Y'X]Y'k Y]hYfYb'9fa ]hh`i b[ Yb'j Yf`Ui ZYb'i bX'k Ug
X]Yg'ZØf'X]Y'VY]XYb'¾ [ YbX`]W\Yb'VYXYi hYh''5i W\'k Ybb'Yg'g]W\
i a 'Y]bYb'9]bnY`ZU```\UbXY`hž'\_ÒbbhY'Yf'U`g'NY]W\Yb'ZØf'Y]b
[ fÒ» YfYg'DfcV`Ya '[ Y`hYb'i bX'X]Y'5i Za Yf\_gUa \_Y]h'XYf

² ZZYbh`]W\\_Y]h'i bX'XYf'; YgYhn[ YVYf'Ui Z'X]Y'G]W\Yf\Y]hg`U[ Y']b
ÒZZYbh`]W\Yb'J Yf\_Y\fga ]hhY`b'`Yb\_Yb"

8 Y hU]`a

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