

=_YU. 'J cb '`Ub[k Y]`][Yb 'GWX fÀb_Yb 'ni Y]bYa 'Ui ZfY[YbXYb 'J Yf[bØ[i b[gdUf_3

H]hY`. '8 Yf`A U[bYh]ga i g'j cb'=_YU!A ÒVY`b'/ Ua d/, & \\%\/

K Ufi a 'A]``]cbYb'j cb'A YbgW\Yb'XYb'gW\k YX]gW\Yb

A ÒVY`[][UbhYb'`]YVYb'I bhYfh]hY`. '9]bY'dYfgÒb`]W\Y

DYfgdY_h]j Y'Ui Z'X]Y': Ugn]bUh]cb'i bX'5bn]Y\i b[g_fUZh'j cb

=_YU'J]Y`Y'j cb'i bg'g]bX'a]h'=_YU!A ÒVY`b'Ui Z[Yk UW\gYb''

GW\cb'U`g'?]bXYf'k UfYb'k]f'j cb'XYb'Vi bhYb'? UhU`c[Yb

ZUgn]b]Yfh'i bX'gU\Yb'i bg']b'i bgYfYb'Y][YbYb'N]a a Yfb
]ba]hhYb'XYf'dYfZY_h'Y]b[Yf]W\hYhYb'F Ài a Y'k]YXYf'': Øf
a UbW\Y']gh'XYf'6Ygi W\'XYg'gW\k YX]gW\Yb'A ÒVY`[][UbhYb
Y]b'fY[Y`fYW\hYg'J Yf[bØ[Ybž'k À\fYbX'UbXYfY'`]YVYf'Y]bYb
[fc\same Yb'6c[Yb'i a 'XUg'A ÒVY`\Ui g'a UW\Yb''8cW\'k Ug
a UW\h'=_YU'ZØf'gc'j]Y`Y'DYfgcbYb'ni 'Y]bYa'k U\fYb
9`XcfUXc3'DYfgÒb`]W\Y'9fZU\fi b[Yb'VYgh\h][Ybž'XUgg'Y]b
6Ygi W\'VY]'=_YU'a Y\f'U`g'bi f'qW\bY``/ Ua d\Y'`]d/

H]hY`. '8 Yf'A U[bYh]ga i g'j cb'=_YU!A \grave{O} VY`b' 'K Ufi a 'A]``]cbYb'j cb A YbgWXYb'XYb'gWXk YX]gWXYb'A \grave{O} VY`[][UbhYb'`]YVYb

I bhYfh]hY`. '9]bY'dYfgÒb`]W\Y'DYfgdY_h]j Y'Ui Z'X]Y': Ugn]bUh]cb'i bX $5bn]Y\ib[g_fUZh'j cb'=_YU$

J]Y`Y`j cb`i bg`g]bX`a]h`=_YU!A ÒVY`b`Ui Z[Yk UW\gYb"`GW\cb`U`g
?]bXYf`k UfYb`k]f`j cb`XYb`Vi bhYb`?UhU`c[Yb`ZUgn]b]Yfh`i bX`gU\Yb
i bg`]b`i bgYfYb`Y][YbYb`N]a a Yfb`]ba]hhYb`XYf`dYfZY_h
Y]b[Yf]W\hYhYb`FÀi a Y`k]YXYf": Øf`a UbW\Y`]gh`XYf`6Ygi W\`XYg
gW\kYX]gW\Yb`A ÒVY`[][UbhYb`Y]b`fY[Y`fYW\hYg`JYf[bØ[Ybž
k À\fYbX`UbXYfY``]YVYf`Y]bYb`[fc»Yb`6c[Yb`i a `XUg`A ÒVY`\Ui g
a UW\Yb"`8cW\`k Ug`a UW\h`=_YU`ZØf`gc`j]Y`Y`DYfgcbYb`ni `Y]bYa
k U\fYb`9`XcfUXc3

 $DYfgOb`]WXY`9fZU\fi\ b[Yb`VYghAh][Ybž`XUgg`Y]b`6Ygi\ WX`VY]`=_YU$

a Y\f'U`g'bi f'gW\bY``X]Y'VYbÒh][hYb'A ÒVY``ni 'VYgcf[Yb VYXYi hYh"'8 Yf'A ÒVY`f]YgY'\Uh'Yg'[YgW\UZhž'XYb'9]b_Ui Z'ni 'Y]bYa 9f`YVb]g'ni 'a UW\Yb"'6Y]''YXYa 'GW\f]hh'k]fX'a Ub'j cb'XYb ZfYi bX`]W\Yb'A]hUfVY]hYfb'VY[`Y]hYhž'i bX'X]Y'dYfZY_h'[YghU`hYhYb 5i gghY``i b[gn]a a Yf'a UW\Yb'Yg'`Y]W\hž'g]W\']b'X]Y'j YfgW\]YXYbYb 9]bf]W\hi b[ggh]`Y'\]bY]bni j YfgYhnYb"'9g']ghž'U`g'k ØfXY'a Ub'Y]bYb 5i gZi [']b'Y]bY'UbXYfY'K c\bk Y`h'a UW\Yb"

8]Y'8Y`]_UhYggYb'Ui g'XYf'?Ubh]bY'g]bX'Y]b'k Y]hYfYg'<][\`][\hž'XUg j]Y`Y'6Ygi W\Yf'b]W\h'a]ggYb'a ÒW\hYb"'GW\k YX]gW\Y ?Ògh`]W_Y]hYb'k]Y': `Y]gW\VÀ``W\Yb'i bX'@UW\g'`cW_Yb'a]h']\fYa Y]bn][Ufh][Yb'; YgW\a UW_ii bX'`UggYb'XUg'9]b_Ui ZgYf`YVb]g'ni Y]bYa '_i `]bUf]gW\Yb'9f`YVb]g'k YfXYb"'K Yf'\ÀhhY'[YXUW\hž'XUgg A ÒVY`_Ui Z'gc'\i b[f]['a UW\Yb'_Ubb3

 $: \varnothing f'XYb'5i \ hcf'X]YgYg'5fh]_Y`gž'XYf'V]g`Ub[`=_YU'g_Ydh]gWX\\ [Y[Yb\varnothing VYfghUbXž'k Uf'Yg'Y]b'gdcbhUbYf'A ca Ybhž'XYf'gY]bY\\ AY]bi b[`AbXYfhY'''5`g'Yf'j cf'_i fnYa 'a]h'XYa 'Ni ['Ub'Y]bYa 'XYff]Yg][Yb'=_YU!; YVÀi XY'j cfVY]Z\fž'k Uf'X]Y'BYi []YfXY'ni '[fc\'''9]b'_i fnYf'6`]_']bg'\DbYfY'g\W\UXYh'\U'b]\W\hž'XU\W\hY'Yf'g]\W\'''I bXgc'VYhfUh'Yf'X]Y'\Y]`][Yb'<U``Yb'XYg'A ÒVY`\]a a Y`g''$

K Ugʻ]\b`Ui Zʻ5b\]YV`VY[Y]ghYfhYž'k UfʻX]Y`J Uf]UV]`]hÀh`XYf`A ÒVY`"

9[U``cV'_`Y]bYgʻ5dUfha Ybh`cXYf'[YfÀi a][Y`J]``Už'=_YU`V]YhYh`ZØf

YXYb`K c\bfUi a `X]Y`dUggYbXYb`@Ògi b[Yb"`I bX`XUgʻni

VYnU\`VUfYb`DfY]gYb"`8]Y`ZUWXYb`DU_YhY``UggYb`g]WX``Y]WXh

hfUbgdcfh]YfYb`i bX`X]Y`a]h[Y`]YZYfhY`5b`Y]hi b[`Yfa Ò[`]WXh`Y]bY

dfcV`Ya `cgY`A cbhU[Y"

9]b k Y]hYfYf D`i gdi b_h`]gh'X]Y B UWX \ U`h][_Y]hž'Ui Z'X]Y =_YU'[fc > Yb K Yfh``Y[h"'F YWmW]b[i b X i a k Y`hZfYi b X`]WX Y A UhYf]U`]Yb 'g]b X ZYghY '6 YghUb XhY]`Y 'XYf I b hYfb Y\a Ybgd\]`cgcd\]Y "'9g`]gh VYfi \][Yb X ni 'k]ggYb ž' XUgg a Ub 'a]h'Y]b Ya '=_YU!A OVY`'b]WX h'bi f gY]b Y 'Y][Yb Yb 'j]Yf 'K Ab XY 'j YfgWX Ob Yfhž'gcb XYfb 'Ui WX 'Y]b Yb 6Y]hfU['ni f I a k Y`h``Y]ghYh"

 $Gc gh]Y \gg XYf 5i hcf VY]gY]bYa YfghYb = YU!6Ygi WX Ui ZX]Y U``[Y[Ybk Afh][Y: Ugn]bUh]cbžX]YA]``]cbYb'j cbAYbgWXYb$

 $\begin{array}{l} k\ Y\ hk\ Y\]h\]b\ X\]Y\ A\ OVY\ \lambda i\ gYf\ cW_h"\ 8\]Y\ gWk\ k\ YX\]gWk\ Y\ A\ Uf_Y\ V\ Uh\ Yg \\ [\ YgWk\ UZZhz\ 9\]bf]Wk\ hYb\ ni\ Y\]bYf\ YfgWk\ k\]b[\ `]Wk\ Yb\ i\ bX\ ni\ [\ `Y]Wk \\]bgd\]f\]YfYbXYb\ 9fZU\ fi\ b[\ ni\ a\ UWk\ Yb\ "A\]h\ Y\]bYa\ a\]bX]j\]Xi\ Y\ Yb \\ Hci\ Wk\ i\ bX\ Y\]bYf\ i\ bj\ Yfk\ YWk\ gY\ VUfYb\ "gh\ Yh]_\ Vf]b\ [\ h\ =_YU\ XYb\ g_UbX]bUj\]gWk\ Yb\ @YVYbggh]\ `]b\ K\ c\ bi\ b[\ Yb\ Ui\ Z\ XYf\ [\ UbnYb\ K\ Y\ h"\]$

8 YhU]`g

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