

±0X]fY_hY; YgdfÀWXY'ni f'K UZZYbfi \Y'nk]gWXYb'=gfUY`i bX < Ua Ug']b'?U]fcžk À\fYbX'5b[f]ZZY'Ui Z'N]j]`]ghYb']b'; UnU ZcfhgYhnYb"

 $8]Y `Ub \setminus U`hYbXYb `?cbZ]_hY`]a `BU \setminus Yb`CghYbž']bgVYgcbXYfY`]a ; UnUghfY]ZYbž'Vf]b[Yb`b]WXh'bi f`NYfghÒfi b[`i bX`@Y]X`a]h'g]WXž gcbXYfb`Ui WX`Y]bYb`ghÀbX][Yb`8 fi W_Ui Z'X]Y`N]j]`VYj Ò`_Yfi b[žX]Y`nk]gWXYb`XYb`: fcbhYb`[YZUb[Yb`]gh"`8]YgY`G]hi Uh]cb`\Uh]bhYfbUh]cbU`Y`5i Za Yf_gUa _Y]h'YffY[hž'X]Y`ni bY\a YbX`Ui Z'X]Y \i a Ub]hÀfYb`: c`[Yb`XYf`a]`]hÀf]gWXYb`5i gY]bUbXYfgYhni b[Yb [Yf]WXhYh`]gh"$

: cfhXUi YfbXY'; YZYWXhY'i bX'XYfYb
5i gk]f_i b[Yb'Ui Z'X]Y'N]j]`VYj Ò`_Yfi b[

A]h'XYb'U_hi Y``Yb'5b[f]ZZYb'XYf']gfUY`]gWXYb'5fa YY']a; UnUghfY]ZYb'k]fX'XUg'9`YbX'XYf'N]j]`]ghYb'XYi h`]WX'g]WXhVUf"6Yf]WXhYb'ni Zc`[Y'k i fXYb'VY]'Y]bYa '@ ZhUb[f]ZZ'Ui Z'Y]b'U`g:`ØWXh`]b[gi bhYf_i bZh'[Ybi hnhYg'GWXi`[YVÀi XY']b'XYf'GhUXh'; UnUa Y\fYfY'8i hnYbX'A YbgWXYb'[YhÒhYh"'8]YgY'A Y`Xi b[Yb'\UVYb]bhYfbUh]cbU`'ZØf'9bhgYhnYb'[Ygcf[h"

8 Ugʻ]gfUY`]gWXY`A]`]hÀf'VY\Ui dhYh'\]b[Y[Ybž'X]Y'; Y[YbX'gY]'Y]bY?ca a UbXcnYbhfU`Y'XYf'< Ua Ugʻ[Yk YgYbž'k Yg\U`V'X]Y'\c\Y`NU\`XYf'CdZYf'U`gʻi bj Yfa Y]X`]WX 'VYhfUWX hYh'k]fX"'8]Y'k]YXYf\c`hYb5b[f]ZZY'Ui Z'GWXi `Yb'i bX'UbXYfY'@YVYbgfÀi a Y'XYfN]j]`VYj Ò`_Yfi b['k YfZYb'Yfbgh\UZhY': fU[Yb'ni f'FYWXha À»][_Y]hX]YgYf'9]bgÀhnY'Ui Z''8]Y'XYi hgWXY'5i »Yba]b]ghYf]b'5bbU`YbU6UYfVcW_'\Uh'g]WX'_`Uf'[YÀi »Yfh' 8]Y'6Yf]WXhY'Ui g'; UnU'g]bX

 $gWk fYW_`]Wk "`8 Ugg`N]j]`]ghYb`[YhÒhYh`k YfXYbž`X]Y`GWki hn`gi WkYbž]gh`b]Wkh`\]bbY\a VUf"$

; Y]gY`bU\a Y`i bX`]\fY`Ya ch]cbU`Yb 5i gk]f_i b[Yb

9]b k Y]hYfYf hfU[]gWkYf 5gdY_h XYg ? cbZ]_hg]gh X]Y ; Y]gY `bU\a Y" 8]Y < Ua Ug `\ À `h ``Ui h `]gfUY `]gWk Yb `GWk Àhni b[Yb `bcWk `]a a Yf Yhk U %%) ; Y]gY `b `]a ; UnUghfY]ZYb Ž j cb `XYbYb `j]Y `Y `U `g `hch j Yfa i hYh k YfXYb " \Rightarrow a]hhYb `X]YgYf `XØghYfYb `6Yf]Wk hY `\ Uh Y]b Y : Ua]`]Y _Øfn `]Wk Y]b `@Y VYbgnY]Wk Yb 'j cb ']\ fYf `Hc Wk hYf `Yf\ U`hYb Ž X]Y `U`g Gc `XUh]b `YbhZØ\ fh `k i fXY " 8]Yg `Vf]b[h `nk Uf `< c ZZb i b[`Ui Z Y]b Y dcg]h]j Y `9bhk]W_`i b[Ž XYbbc Wk `V`Y]Vh `i b[Yk]ggž `]b `k Y`Wk Ya Ni ghUb X `g]Wk `X]Y `9bhZØ\ fhY `VYZ]b XYh `i b X `k c `g]Y `ZYgh[Y\U`hYb k]fX"

⇒bhYfbUh]cbU`Y J Yfa]hh`i b[gVYa Ø\i b[Yb

8]Y Fc``Y j cb < i a Ub]hÀh]a '?cbZ`]_h

8]Y'G]hi Uh]cb'XYf'N]j]`]ghYb']a ; UnUghfY]ZYb'YfZcfXYfh'Y]bY
Xf]b[YbXY'\i a Ub]hÀfY'=bhYfj Ybh]cb"'J]Y`Y'A YbgWXYbž'XUfi bhYf
: fUi Yb'i bX'?]bXYfž'\UVYb']\fY'<Y]a Uh'j Yf`cfYb'i bX'`YVYb']b
ghÀbX][Yf'5b[gh'j cf'XYb'bÀWXh`]WXYb'5b[f]ZZYb"'8]Y'Gcf[Y
XUfØVYfž'XUgg'X]Y'<Ua Ug'X]Y'N]j]`VYj Ò`_Yfi b['U`g'a YbgWX`]WXY
GWXi hngWX]`XY'Y]bgYhnhž'j YfghÀf_h'X]Y'?ca d`YI]hÀh'XYf'G]hi Uh]cb"

8]YgʻZØ\fhʻXUni žʻXUggʻX]YʻGc`]XUf]hÀhʻi bXʻl bhYfghØhni b[ʻZØfʻX]Y N]j]`VYj Ò`_Yfi b[ʻ]bʻXYbʻJcfXYf[fi bXʻ[YXfÀb[h'k YfXYbʻVY]ʻXYb]bhYfbUh]cbU`Ybʻ8]q_i fqYb"

5VgWX`]Y» YbX``Àggh`g]W\`ZYgh\U`hYbž`XUgg`XYf`Ub\U`hYbXY`?cbZ]_h
]a ; UnUghfY]ZYb`b]W\h'bi f`dc`]h]gW\Y`8]a Ybg]cbYb`\Uhž`gcbXYfb
Ui W\`h]YZ[fY]ZYbXY`\i a Ub]hÀfY`?cbgYei YbnYbž`X]Y`b]W\h'][bcf]Yfh
k YfXYb`XØfZYb"`8]Y`Bchk YbX][_Y]h`ZØf`: f]YXYb`i bX`Y]b`9bXY`XYf
; Yk U`h`]gh`Xf]b[`]W\Yf`XYbb`Y"`9g`]gh`Ub`XYf`NY]hž`XUgg`X]Y
]bhYfbUh]cbU`Y`; Ya Y]bgW\UZh`[Ya Y]bgUa `bUW\`@Ògi b[Yb`gi W\hž
i a `XUg`@YVYb`XYf`N]j]`]ghYb`ni 'j YfVYggYfb`i bX`ni 'gW\ØhnYb"

8 YhU]`g

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